AERMEC

Product Guide 2025

The company

Giordano Riello, founder of Aermec, assisted by his son Alessandro and daughter Raffaella, has solidly associated the Company name with precise values:

Respect for the environment

By using new eco-friendly refrigerants as well as innovative installations using water as the carrier fluid.

Energy saving

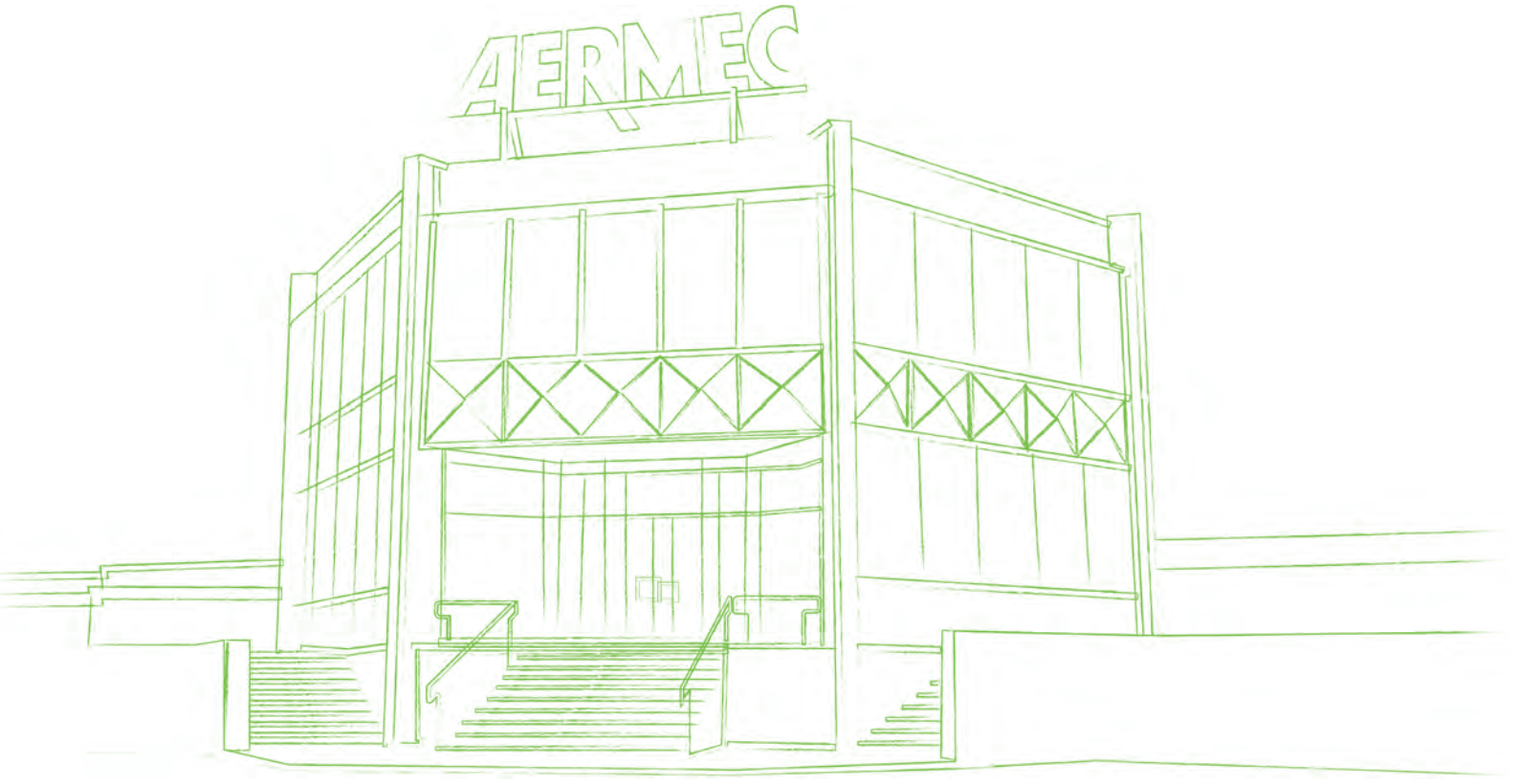
The great challenge of the Third Millennium, with the development of combined heating and air conditioning systems where appliances are used only as and when necessary.

Noise pollution control

With low-noise emission products, which undergo scrupulous testing before being put on the market.

Health care

With special filters that hold back the smallest suspension particles, the Cold Plasma Generator system that guarantees effective air purification (making for a healthier environment), and the new photocatalytic device, this air purification system is ideal for places where the highest degree of hygiene is required.



History

1961
Giordano Riello sets up Riello Condizionatori, initially producing for contractors only. The story begins.

1963
The Aermec brand is born and marks all future company products designed and manufactured on site. The brand name gains a stronghold as a major product name in Italy and throughout Europe.

1970
Aermec can already supply fresh and warm air. Aermec presents the first dual section conditioner: the first "split-system". Fancoil production starts.

1973
Aermec receives European Award Gold Mercury.

1980
The Eighties sees the development of water chillers and air handling units.

1990
The Nineties mark the definitive consolidation of the company on the market. The Aermec brand is associated with advanced technology and high quality design.

1998
The name makes the company. From 1 January Aermec becomes the company name as well as product brand.

2002
Design and technology: Aermec launched Omnia a new generation of fancoils, designed for domestic applications. OMNIA is the result of co operation with a worldwide prestigious designer.

2003
Aermec UK was acquired.

2004
The international market ask for number and Aermec answer. Giordano Riello make the producing system more technogical.

2008
Aermec responds with more and more efficient units to the world challenge of energy saving with a special attention for our environment.

2011
Aermec turns 50. The company has developed and enlarged, always willing to understand and anticipate the needs of the market. Promoter of "integrated design" between designer and architect.

2012
Aermec Polska was acquired.

2015
The news Europe's largest test facility for air conditioning applications was inaugurated.

2017
Aermec receives Innovation Award from the US Organizations ASHRAE, AHRI and AHR. Aermec receives "Prime Company" certificate for the economic strength and commercial reliability from the Dun & Bradstreet. Aermec Deutschland was acquired.

2018
Aermec awards first prize in "RAC Cooling Industry Award 2018" in London by an Internationally qualified Jury.

2019
Aermec receives the prizes:"NATIONAL ACR & HEAT PUMPS AWARDS 2019" in the category of Data Centre Rooftop Chiller installation, "H&V News Awards 2019" attributed by a HVAC technical jury the United Kingdom.

2020
For the second year in a row, Aermec receives the prize ACR NEWS AWARDS for Data Centers category in the UK.

2021
Aermec turns 60.
Aermec's 60th anniversary coincides with
the Covid 19 pandemic.
The company opens a vaccination hub available not only to its own employees but to the entire population of the area.

2022
Aermec breaks through the barrier of 300 million turnover. The Raffaello Riello Research and Training Centre was inaugurated on 12 May.

2023
Founder Giordano Riello leaves us on May 14.

2024
The Spanish companies Airlan and Airlan Industrial were acquired. The holding company Aermec North America that controls Aermec USA and Aermec Canada for the distribution of products in the North American continent was established.

LOGO INDEX:

CERTIFICATIONS:

CE marking

REFRIGERANT:

R290 refrigerant

R32 refrigerant

R1234ze refrigerant

R134a refrigerant

R410A refrigerant

XP10 refrigerant

OPERATIONAL TYPES:

Evaporating unit

Cooling and heating

Cooling only

DHW

Condensing unit

Free-Cooling

Heating only

Multipurpose

For four pipes plants

For three pipes plants

For two pipes plants

INSTALLATION TYPES:

Cassette installation

Ceiling installation

Ducted installation

Floor installation

Wall installation

Air indoor unit

Air outdoor unit

Water indoor unit

KINDS OF EXCHANGERS :

Heat recovery

Plate exchanger

Pump kit

Shell and tube exchanger

Water tank

KINDS OF COMPRESSORS:

Centrifugal compressor

Inverter centrifugal compressor

Rotary compressor

Inverter rotary compressor

Scroll compressor

Inverter scroll compressor

Twin screw compressor

Inverter twin screw compressor

KINDS OF FANS:

Axial fan

Inverter axial fan

Centrifugal fan

Inverter centrifugal fan

EC fan

Inverter EC fan

Plug fan

Inverter plug fan

EXTRA:

Inverter device

Compatible with ModBus protocol

Cold Plasma device

Touch control

Compatible with VMF system (Variable Multi Flow)

EUROVENT CERTIFIED PERFORMANCE
AHU N° 04.04.052
Range NCD
www.eurovent-certification.com

Aermec is one of the companies belonging to Giordano Riello International Group and takes part to Eurovent programme for NCD series.

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

Aermec takes part to EUROVENT Programmes: FCH - FCHP for fan coil series.
Aermec is involved in EUROVENT Programme: LCP for chiller range.
The products involved appear on the website www.eurovent-certification.com

MIX
Paper from responsible sources
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	AIR / WATER CHILLERS AND HEAT PUMPS		Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Units with scroll compressors					
	ANKI 020-080	Reversible heat pumps inverter	-	5,8-24,8	6,1-20,8	336
	HMI	Reversible air/water heat pump	-	3,0-14,5	4,0-15,5	342
new	**HMI 180T-220T**	Reversible air/water heat pump	-	17,5-21,0	18,0-22,0	349
	BHP	Air/Water split type reversible heat pump	-	3,2-11,5	4,0-16,0	354
	HMG	Reversible air/water heat pump	-	32-60	35-65	367
	HMG_P		-	33-60	36-65	
	ANLI	Reversible heat pumps inverter	-	29,0-42,3	31,4-33,3	375
	ANK 020-150	Reversible air/water heat pump optimised for use in heating mode	-	6,8-39,8	8,0-35,3	381
new	**SHW**	Heat pump water heater	-	-	-	388
	MIC	Air-water chiller	-	3	-	391
	ANL 021-202	Air-water chiller	-	5,7-43,3	-	396
	ANL 021H-203H	Reversible air/water heat pump	-	5,7-49,1	6,2-43,3	402
	NRK 0090-0150	Reversible air/water heat pump optimised for use in heating mode	-	18,4-31,0	20,8-34,4	410
	NRK 0200-0700	Reversible air/water heat pump optimised for use in heating mode	-	35,5-148,0	42,3-175,0	414
	NRV 0550	Air-water chiller	-	108,3	-	420
new	**PRM 0504**	Air-cooled reversible modular heat pump	-	95,6	101,7	425
new	**PRG-0282H-0654H**	Reversible air/water heat pump	-	49-143	51-143	432
	NRB 0282-0754	Air-water chiller	-	56-202	-	441
	NRB 0282H-0754H	Reversible air/water heat pump		52-261	57-193	451
	NRG 0282-0804	Air-water chiller	-	55,8-224,6	-	459
	NRG 0282H-0804H	Reversible air/water heat pump	-	52,5-212,0	56,6-214,4	468
	NRGI 151-602	Air-water chiller	-	31,0-132,2	-	476
	NRGI 151H-602H	Reversible air/water heat pump	-	28,9-123,7	31,6-133,9	481
	NRL 0280-0350	Air-water chiller	-	56,0-82,0	-	487
	NRL 0280H-0350H	Reversible air/water heat pump	-	51,0-76,0	58,0-86,0	492
	NRG 0800-3600	Air-water chiller	-	225,7-725,0	-	497
	NRG 0800H-3600H	Reversible air/water heat pump	-	194,9-962,3	209,6-991,9	506
	NRB 0800-2406	Air-water chiller (plate heat exchanger)	-	216,9-716,9	-	515
	NRB 0800-2406 Q	Air-water chiller (shell and tube heat exchanger)	-	216,9-716,9	-	524
	NRB 0800H-2406H	Reversible air/water heat pump (plate heat exchanger)	-	196,4-647,7	209,8-683,9	533
	NRB 0800W-2406W	Reversible air/water heat pump (shell and tube heat exchanger)	-	196,4-647,7	209,8-683,9	542
	CL 025-200	Air-water chiller with Plug Fan	-	5,8-41,0	-	550
	CL 025H-200H	Reversible air/water heat pump with Plug Fan	-	6,5-50,9	7,7-44,8	555
	NLC 0280-1250	Air-water chiller with Plug Fan	-	53-322	-	561
	NLC 0280H-1250H	Reversible air/water heat pump with Plug Fan	-	53-322	55-342	568
	Units with screw compressors					
	NSM 1402-9603	Air-water chiller	-	302-2100	-	573
	NSMI 1251-6102	Chiller with Inverter screw compressors	-	285,6-1342,6	-	587
	NSH	Reversible air/water heat pump	-	251-731	281-786	591
	NSG	Air-water chiller (with R1234ze)	-	228-1580	-	597
	Units with centrifugal compressors					
	TBA 1300-4325	Air-water chiller	-	328-1404	-	609
	TBG 1230-4310	Air-water chiller	-	200-1165	-	614

AIR / WATER CHILLERS WITH FREECOOLING

		Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
Units with scroll compressors					
NRG 0282-0754 F	Air-water chiller with free-cooling	-	58-190	-	622
NRG 0800-2400-F	Air-water chiller with free-cooling	-	224-717	-	627
NRG 0800-2400-B	Air-water chiller with free-cooling glycol free	-	224-717	-	634
NRB 0800-2406 F	Air-water chiller with free-cooling	-	211-680	-	641
NRB 0800-2406 B	Air-water chiller with free-cooling glycol free		211-680	-	649
NRV 0550 F	Air-water chiller with free-cooling	-	99,9-105,4	-	656
Units with screw compressors					
NSM 1402-9603 F	Air-water chiller with free-cooling	-	306-2028	-	660
NSM 1402-9603 B	Air-water chiller with free-cooling glycol free	-	305,8-2028,1	-	673
NSM-HWT-1402-9603-F	Air-water chiller with free-cooling	-	306-2001	-	684
NSM-HWT-1402-9603-B	Air-water chiller with free-cooling glycol free	-	306-1991	-	693
NSMI 1251-6102 F	Air-water chiller with free-cooling and Inverter screw compressors	-	286-1280	-	702
TBA 1300-3350 F	Air-water chiller with free-cooling	-	317,2-1223,6	-	707
TBG 1230-4310 F	Air-water chiller with free-cooling	-	238-1110	-	712

WATER / WATER CHILLERS AND HEAT PUMPS

			Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Units with scroll compressors					
	VENICE-H	Reversible water-cooled heat pump, gas side	-	6,9-,9,7	8,3-11,7	720
	WRL 026H-161H	Reversible water-cooled heat pump, gas side	-	6,0-40,0	8,0-48,0	723
	WRL 026-161	Water cooled heat pump reversible water side	-	6,6-44,2	7,5-48,0	730
	WRL 180H-650H	Reversible water-cooled heat pump, gas side	-	44,9-157,4	53,0-183,3	736
	WRL 180-650	Water cooled heat pump reversible water side	-	49,0-174,0	55,0-192,0	740
	WRK	Reversible water-cooled heat pump, gas side	-	38,9-165,9	48,5-207,7	745
	WWB 0300-0900	Water-water heat pumps only	-	-	56,7-265,9	753
new	**WWBG**	Water-water heat pumps only	-	-	77,2-,138,2	758
	WWM	Water cooled heat pump reversible water side	-	96	110	763
	NXW 0503-1654	Water cooled heat pump reversible water side	-	111-511	127-582	769
	NXW 0503H - 1654H	Reversible water-cooled heat pump, gas side	-	106-477	125-565	774
new	**NGW-0500-2600**	Water cooled heat pump reversible water side	-	116,3-790,2	131,3-904,6	779
new	**NGW-0350H-2600H**	Reversible water-cooled heat pump, gas side	-	107,0-746,4	126,3-879,3	784
	Units with screw compressors					
	WS 0601-2802	Water cooled heat pump reversible water side	-	147-700	164-778	790
	HWS 0601 - 2802	Water cooled heat pump reversible water side	-	147-369	165-778	794
	HWSG	Water cooled heat pump reversible water side	-	110-396	122-595	799
	WSH	Reversible water-cooled heat pump, gas side	-	165,8-269,7	183,3-300,3	803
	WFGI	Water cooled heat pump reversible water side	-	217-1765	243-1960	807
	WFGN	Water cooled heat pump reversible water side	-	136-1727	153-1921	817
	WFI	Water cooled heat pump reversible water side	-	291-2406	326-2664	824
	WFN	Water cooled heat pump reversible water side	-	182-2349	205-2610	833
	Units with centrifugal compressors					
	WMX	Water/water chiller (with R134a)	-	280,1-324,2	-	841
	WMG	Water/water chiller (with R1234ze)	-	282,3-312,4	-	844
	WTX	Water/water chiller	-	222,9-1958,4	-	847
	WTG	Water/water chiller (with R1234ze)	-	246,6-1959,4	-	852

BIM

Building Information Modeling

3D digital information system

- **Easy and intuitive downloading**
- **RFA (Autodesk Revit Family File) format**



DESCRIPTION

Aermec BIM models contain information that is useful in the MEP plant design phase. BIM technology offers multiple advantages such as: greater efficiency and productivity, fewer errors, lower costs, greater interoperability, maximum sharing of information, more timely and consistent control of units, overcoming the inefficiencies and inaccuracies of the design method that traditionally characterises conventional professional practices, allowing for full integration between the design and execution phases.
Search and download HVAC products for heating, ventilation and air conditioning. Browse the library of BIM families to select the products to be used in your project.

FEATURES

Aermec BIM models contain the following information:
— Performance in heating and cooling mode data
— Energy data
— Electrical data
— Sound data
— Features of the hydraulic connections
— Construction features
— Dimensional data

COMPATIBILITY

Aermec BIM models are downloadable in rfa (Autodesk Revit Family File) format and on request also in .ifc interchange format to ensure maximum compatibility with all BIM software.

MODELS AVAILABLE

— Fan coils
— Recovery units
— Air treatment units
— Air-to-water chillers and heat pumps
— Freecooling air/water chillers
— Water-to-water chillers and heat pumps
— Multipurpose
— Rooftop

By scanning the QR code below you can access the AERMEC download area where you can select and download the desired unit:

AIR/WATER CHILLERS AND HEAT PUMPS

Aermec plant engineering really comes into its own in the field of machines and technology for centralised systems. Aermec offer a full range of chillers and heat pumps from the small domestic system up to that of the large size for the service industry.

The cooling capacity range is extremely wide, and the fittings solutions are equally diverse, for scroll, screw or centrifugal compressor applications.

The careful selection of materials and the close attention paid to every detail of assembly coupled with the huge selection of accessories complete the industry-leading products designed for use in this sector, making Aermec units a real "must" in the world of Italian and European climate control.

AIR / WATER CHILLERS AND HEAT PUMPS

			Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Units with scroll compressors					
	ANKI 020-080	Reversible heat pumps inverter	-	5,8-24,8	6,1-20,8	336
	HMI	Reversible air/water heat pump	-	3,0-14,5	4,0-15,5	342
new	**HMI 180T-220T**	Reversible air/water heat pump	-	17,5-21,0	18,0-22,0	349
	BHP	Air/Water split type reversible heat pump	-	3,2-11,5	4,0-16,0	354
	HMG	Reversible air/water heat pump	-	32-60	35-65	367
	HMG_P		-	33-60	36-65	
	ANLI	Reversible heat pumps inverter	-	29,0-42,3	31,4-33,3	375
	ANK 020-150	Reversible air/water heat pump optimised for use in heating mode	-	6,8-39,8	8,0-35,3	381
new	**SHW**	Heat pump water heater	-	-	-	388
	MIC	Air-water chiller	-	3	-	391
	ANL 021-202	Air-water chiller	-	5,7-43,3	-	396
	ANL 021H-203H	Reversible air/water heat pump	-	5,7-49,1	6,2-43,3	402
	NRK 0090-0150	Reversible air/water heat pump optimised for use in heating mode	-	18,4-31,0	20,8-34,4	410
	NRK 0200-0700	Reversible air/water heat pump optimised for use in heating mode	-	35,5-148,0	42,3-175,0	414
	NRV 0550	Air-water chiller	-	108,3	-	420
new	**PRM 0504**	Air-cooled reversible modular heat pump	-	95,6	101,7	425
new	**PRG-0282H-0654H**	Reversible air/water heat pump	-	49-143	51-143	432
	NRB 0282-0754	Air-water chiller	-	56-202	-	441
	NRB 0282H-0754H	Reversible air/water heat pump		52-261	57-193	451
	NRG 0282-0804	Air-water chiller	-	55,8-224,6	-	459
	NRG 0282H-0804H	Reversible air/water heat pump	-	52,5-212,0	56,6-214,4	468
	NRGI 151-602	Air-water chiller	-	31,0-132,2	-	476
	NRGI 151H-602H	Reversible air/water heat pump	-	28,9-123,7	31,6-133,9	481
	NRL 0280-0350	Air-water chiller	-	56,0-82,0	-	487
	NRL 0280H-0350H	Reversible air/water heat pump	-	51,0-76,0	58,0-86,0	492
	NRG 0800-3600	Air-water chiller	-	225,7-725,0	-	497
	NRG 0800H-3600H	Reversible air/water heat pump	-	194,9-962,3	209,6-991,9	506
	NRB 0800-2406	Air-water chiller (plate heat exchanger)	-	216,9-716,9	-	515
	NRB 0800-2406 Q	Air-water chiller (shell and tube heat exchanger)	-	216,9-716,9	-	524
	NRB 0800H-2406H	Reversible air/water heat pump (plate heat exchanger)	-	196,4-647,7	209,8-683,9	533
	NRB 0800W-2406W	Reversible air/water heat pump (shell and tube heat exchanger)	-	196,4-647,7	209,8-683,9	542
	CL 025-200	Air-water chiller with Plug Fan	-	5,8-41,0	-	550
	CL 025H-200H	Reversible air/water heat pump with Plug Fan	-	6,5-50,9	7,7-44,8	555
	NLC 0280-1250	Air-water chiller with Plug Fan	-	53-322	-	561
	NLC 0280H-1250H	Reversible air/water heat pump with Plug Fan	-	53-322	55-342	568
	Units with screw compressors					
	NSM 1402-9603	Air-water chiller	-	302-2100	-	573
	NSMI 1251-6102	Chiller with Inverter screw compressors	-	285,6-1342,6	-	587
	NSH	Reversible air/water heat pump	-	251-731	281-786	591
	NSG	Air-water chiller (with R1234ze)	-	228-1580	-	597
	Units with centrifugal compressors					
	TBA 1300-4325	Air-water chiller	-	328-1404	-	609
	TBG 1230-4310	Air-water chiller	-	200-1165	-	614

ANKI 020-080

Reversible air/water heat pump

Cooling capacity 5,8 ÷ 24,8 kW – Heating capacity 6,1 ÷ 20,8 kW

- **Production of hot water up to 60 °C**
- **Production of hot domestic water with outside temperatures from –20 °C up to 42 °C**
- **Quick & easy installation**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.
It's optimised for use in heating mode, and can be combined not only with low-temperature emission systems such as floor heating or fan coils, but also conventional radiators.
All the units are equipped with inverter scroll compressors, axial fans, external coils with aluminium louvers, a plate heat exchanger on the side.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
X With inverter pump

FEATURES

Operating field

Working at full load up to -20°C outside air temperature in winter, and up to 46°C in summer. Possibility production technical hot water production up to 60°C (for more information see the technical documentation).

Version with Integrated hydronic kit

If a plug&play solution is required, there's also a version with an integrated hydronic unit containing the main hydraulic components including the water filter (supplied).

■ *The water filter must be installed to validate the warranty.*

CONTROL PCO

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Adjustment includes complete management of the alarms and their log.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.

ACCESSORIES

AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
MOD485K: RS-485 simplified interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PGD1: Allows you to control the unit at a distance.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SAF: Thermal buffer tank kit with instantaneous Domestic Hot Water production. For more information about SAF refer to the dedicated documentation.
SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *For the installation of the PR4 remote panel, the MOD485K communication interface is indispensable.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
VT: Anti-vibration supports.
BDX: Condensate drip.

BSKW: Electric heaters kit with IP44 panel for remote mounting in a sheltered area.

FACTORY FITTED ACCESSORIES

KR: Anti-freeze electric heater for the plate heat exchanger.
KRB: Electric anti-freeze resistance kit for base.

ACCESSORIES COMPATIBILITY

Model	Ver	020	025	040	045	070	075	080
AERLINK	°,X	•	•	•	•	•	•	•
MOD485K	°,X	•	•	•	•	•	•	•
MULTICONTROL	°,X	•	•	•	•	•	•	•
PGD1	°,X	•	•	•	•	•	•	•
PR3	°,X	•	•	•	•	•	•	•
SAF (1)	°,X	•	•	•	•	•	•	•
SDHW (2)	°,X	•	•	•	•	•	•	•
SGD	°,X	•	•	•	•	•	•	•
SPLW (3)	°,X	•	•	•	•	•	•	•

(1) For more information about SAF refer to the dedicated documentation.
(2) Probe required for MULTICONTROL for managing the domestic hot water system.
(3) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	020	025	040	045	070	075	080
PR4	°,X	•	•	•	•	•	•	•

For the installation of the PR4 remote panel, the MOD485K communication interface is indispensable.

Condensation control temperature

Ver	020	025	040	045	070	075	080
°, X	DCPX71	DCPX71	DCPX71	DCPX71	DCPX71	DCPX71	DCPX71

Antivibration

Ver	020	025	040	045	070	075	080
°, X	VT9	VT9	VT9	VT9	VT9	VT9	VT9

Condensate drip

Ver	020	025	040	045	070	075	080
°, X	BDX30	BDX30	BDX30	BDX30	BDX50	BDX50	BDX50

Heater exchanger

Ver	020	025	040	045	070	075	080
°, X	KR2	KR2	KR2	KR2	KR2	KR2	KR2

A grey background indicates the accessory must be assembled in the factory

Electric heater kit for the base

Ver	020	025	040	045	070	075	080
°, X	KRB1	KRB1	KRB1	KRB1	KRB2	KRB2	KRB2

CONFIGURATOR

Field		Description
1,2,3,4		**ANKI**
5,6,7		**Size** 020, 025, 040, 045, 070, 075, 080
8		**Model**
	H	Heat pump
9		**Version**
	°	Standard
	X	With inverter pump
10		**Heat recovery**
	°	Without heat recovery
11		**Coils**
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
12		**Fans**
	F	Phase cut
	J	Inverter
	°	Standard
13		**Operating field**
	°	Electronic thermostatic expansion valve
14		**Evaporator**
	°	Standard - PED
15		**Power supply**
	M	230V ~ 50Hz (1)
	T	400V ~ 3N 50Hz (2)
16		**Field for future development**
	°	Future developments

(1) For sizes from 020 ÷ 045
(2) For sizes from 070 ÷ 080

PERFORMANCE SPECIFICATIONS

Version without pump

ANKI - 230V-1-50Hz

Size		020	025	040	045
Power supply: M					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	5,8	7,3	9,4	11,8
Input power	kW	2,0	2,6	3,2	4,2
Cooling total input current	A	8,3	11,0	14,0	18,0
EER	W/W	2,98	2,80	2,98	2,79
Water flow rate system side	l/h	1005	1256	1613	2024
Pressure drop system side	kPa	16	22	13	19
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	6,2	7,7	9,3	12,3
Input power	kW	1,9	2,4	3,0	4,0
Heating total input current	A	8,2	10,0	13,0	18,0
COP	W/W	3,26	3,22	3,08	3,03
Water flow rate system side	l/h	1077	1345	1619	2131
Pressure drop system side	kPa	14	21	10	17
Power supply					
Power supply		230-1-50	230-1-50	230-1-50	230-1-50

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANKI - 400V-3N-50Hz

Size		070	075	080
Power supply: T				
Cooling performance 12 °C / 7 °C (1)				
Cooling capacity	kW	13,7	16,4	18,6
Input power	kW	4,8	6,2	7,6
Cooling total input current	A	7,3	9,4	11,0
EER	W/W	2,85	2,67	2,44
Water flow rate system side	l/h	2354	2818	3196
Pressure drop system side	kPa	17	25	31
Heating performance 40 °C / 45 °C (2)				
Heating capacity	kW	15,3	17,7	20,2
Input power	kW	4,8	6,0	7,1
Heating total input current	A	7,3	9,1	11,0
COP	W/W	3,21	2,97	2,83
Water flow rate system side	l/h	2660	3072	3507
Pressure drop system side	kPa	17	23	30
Power supply				
Power supply		400-3N-50	400-3N-50	400-3N-50

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Version with pump

ANKI - 230V-1-50Hz

Size		020	025	040	045
Power supply: M					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	5,8	7,3	9,4	11,8
Input power	kW	2,0	2,7	3,2	4,3
Cooling total input current	A	8,9	12,0	14,0	19,0
EER	W/W	2,88	2,72	2,90	2,73
Water flow rate system side	l/h	1005	1256	1613	2024
Useful head system side	kPa	75	68	73	60
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	6,2	7,7	9,3	12,3
Input power	kW	2,0	2,5	3,1	4,1
Heating total input current	A	8,7	11,0	14,0	18,0
COP	W/W	3,14	3,11	3,00	2,96
Water flow rate system side	l/h	1077	1345	1619	2131
Useful head system side	kPa	76	67	74	59
Power supply					
Power supply		230-1-50	230-1-50	230-1-50	230-1-50

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANKI - 400V-3N-50Hz

Size		070	075	080
Power supply: T				
Cooling performance 12 °C / 7 °C (1)				
Cooling capacity	kW	13,8	16,5	18,7
Input power	kW	4,8	6,2	7,7
Cooling total input current	A	8,3	10,0	12,0
EER	W/W	2,88	2,68	2,44
Water flow rate system side	l/h	2354	2818	3196
Useful head system side	kPa	82	62	43
Heating performance 40 °C / 45 °C (2)				
Heating capacity	kW	15,2	17,6	20,1
Input power	kW	4,8	6,0	7,2
Heating total input current	A	8,3	10,0	12,0
COP	W/W	3,19	2,95	2,80
Water flow rate system side	l/h	2660	3072	3507
Useful head system side	kPa	73	55	33
Power supply				
Power supply		400-3N-50	400-3N-50	400-3N-50

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			020	025	040	045
Power supply: M						
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)						
Efficiency energy class	°		A+	A+	A+	A+
	X		A++	A++	A+	A+
Pdesignh	°,X	kW	6,00	7,00	9,00	12,00
ηsh	°	%	140,00	139,00	133,00	125,00
	X	%	150,00	150,00	141,00	131,00
SCOP	°	W/W	3,58	3,55	3,40	3,20
	X	W/W	3,83	3,83	3,60	3,35
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)						
Efficiency energy class	°,X		A+	A+	-	-
Pdesignh	°	kW	6,00	7,00	-	-
	X	kW	5,00	7,00	-	-
ηsh	°	%	112,00	113,00	-	-
	X	%	113,00	115,00	-	-
SCOP	°	W/W	2,88	2,90	-	-
	X	W/W	2,90	2,95	-	-
SEER - 12/7 (EN14825: 2018) (3)						
SEER	°	W/W	3,50	3,54	3,76	3,77
	X	W/W	4,12	4,25	4,38	4,37
Seasonal efficiency	°	%	137,10	138,40	147,30	147,70
	X	%	161,70	167,00	172,30	171,90

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)
(3) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

Size			070	075	080
Power supply: T					
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)					
Efficiency energy class	°,X		A+	A+	A+
Pdesignh	°	kW	14,00	17,00	19,00
	X	kW	14,00	16,00	19,00
ηsh	°	%	137,00	130,00	129,00
	X	%	141,00	134,00	133,00
SCOP	°	W/W	3,50	3,33	3,30
	X	W/W	3,50	3,43	3,40
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)					
Efficiency energy class	°,X		A+	A+	A+
Pdesignh	°	kW	14,00	16,00	19,00
	X	kW	13,00	16,00	18,00
ηsh	°	%	113,00	112,00	110,00
	X	%	112,00	112,00	110,00
SCOP	°	W/W	2,90	2,88	2,83
	X	W/W	2,88	2,88	2,83
SEER - 12/7 (EN14825: 2018) (3)					
SEER	°	W/W	3,49	3,47	3,44
	X	W/W	3,78	3,81	3,77
Seasonal efficiency	°	%	136,70	135,60	134,40
	X	%	148,00	149,40	147,80

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)
(3) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

ELECTRIC DATA

Size			020	025	040	045	070	075	080
Electric data									
Maximum current (FLA)	°	A	12,1	14,1	20,0	23,6	12,5	13,5	15,0
	X	A	12,9	14,9	20,8	24,4	13,6	14,6	16,1
Peak current (LRA)	°	A	8,0	8,0	10,0	10,0	15,0	15,0	15,0
	X	A	8,8	8,8	10,8	10,8	16,1	16,1	16,1
Power supply									
Power supply	°,X		230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	400V ~ 3N 50Hz	400V ~ 3N 50Hz	400V ~ 3N 50Hz

GENERAL TECHNICAL DATA

Size			020	025	040	045	070	075	080
Compressor									
Type	°,X	type	Rotary	Rotary	Rotary	Rotary	Scroll	Scroll	Scroll
Compressor regulation	°,X	Type				Inverter			
Number	°,X	no.	1	1	1	1	1	1	1

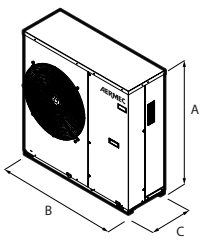
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			020	025	040	045	070	075	080
Circuits	°,X	no.	1	1	1	1	1	1	1
Refrigerant	°,X	type				R410A			
Refrigerant charge (1)	°,X	kg	1,4	1,4	2,3	2,3	3,5	3,5	3,5
System side heat exchanger									
Type	°,X	type				Brazed plate			
Number	°,X	no.	1	1	1	1	1	1	1
Hydraulic connections									
Connections (in/out)	°,X	Type				Gas-M			
Size (in)	°,X	Ø				1"			
Size (out)	°,X	Ø				1"			
Fan									
Type	°,X	type				Axial			
Fan motor	°,X	type				Asynchronous			
Number	°,X	no.	1	1	2	2	2	2	2
Air flow rate	°,X	m^3/h	3590	3590	7480	7480	7400	7400	7400
Sound data calculated in cooling mode (2)									
Sound power level	°,X	dB(A)	64,0	65,4	66,7	67,7	67,7	69,0	69,0
Sound pressure level (10 m)	°,X	dB(A)	32,7	34,1	35,4	36,3	36,3	37,6	37,6

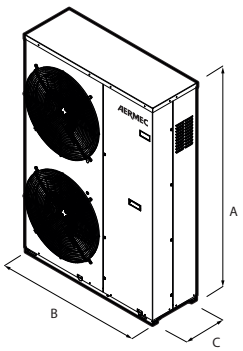
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(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

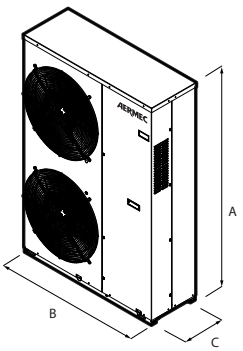
ANKI020
ANKI025



ANKI040
ANKI045



ANKI070
ANKI075
ANKI080



Size			020	025	040	045	070	075	080
Dimensions and weights									
A	°,X	mm	1028	1028	1481	1481	1481	1481	1481
B	°,X	mm	1000	1000	1000	1000	1000	1000	1000
C	°,X	mm	346	346	346	346	450	450	450
Empty weight	°	kg	80	80	113	113	174	174	174
	X	kg	82	82	115	115	178	178	178

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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HMI

Reversible air/water heat pump

Cooling capacity 3,0 ÷ 14,5 kW – Heating capacity 4,0 ÷ 15,5 kW

- **New R32 ecological refrigerant gas**
- **Production of hot water up to 60 °C**
- **Production of hot domestic water with external temperatures from -25 °C to 45 °C**
- **Quick & easy installation**



EUROVENT LCP

DESCRIPTION

Reversible outdoor heat pump for air-conditioning systems where, in addition to cooling rooms, high-temperature hot water is required for heating or for the production of domestic hot water. **For the production of DHW it is mandatory to combine it with the Aermec compatible domestic hot water storage tank.**

HMI is designed to meet the needs of both the new constructions market and the renovation market, **replacing or working alongside conventional boilers**.

It can be combined with low-temperature emission systems such as floor heating or fan coils, and also with more traditional radiators, **and comes supplied with the main hydraulic components needed, thereby facilitating the final installation**.

FEATURES

Operating limits

Working at full load up to -25 °C outside air temperature in winter, and up to 48 °C in summer. Maximum temperature of water produced in heating mode 60 °C.

— Refrigerant circuit with economizer.
— Inverter rotary compressor.
— DC brushless axial flow fans designed for aerodynamic optimisation, reducing the noise level whilst at the same time increasing the efficiency and air flow rate.
— Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
— Electronic expansion valve.

Main hydraulic components

— Inverter pump.
— Plate heat exchanger.
— Expansion tank
— Safety valve.
— Flow switch.
— Water filter supplied **(mandatory installation)**.

Regulation

Adjustment via **a multi-language touch-screen control panel:**

— Management of a 3 way diverting valve (not supplied) for the production of domestic hot water.
— Management of a 2 way valve (not supplied) for shutting off part of the system.
— Weekly programming in time periods.
— **Auto-restart** function.
— Emergency operation (a supplementary heat source may be activated).
— **Quick hot water** function, for quickly heating domestic hot water.
— **Weather dependent mode** function for climate control.
— **Quiet** function for reduced noise operation (programmable with a timer).
— Condensation check
— When the anti-legionella cycle is activated (it's easily set via the control panel), the whole tank is heated once a week to a temperature (max. 70 °C) that weakens the bacteria responsible for the infection.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



Smart APP Ewpe

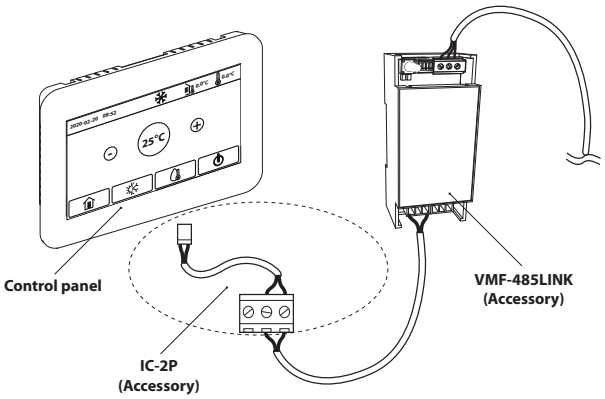
The system is equipped standard with the Wi-Fi module; using this module and the app for iOS and Android devices (available free on Apple Store and Google Play, the system can be directly controlled from a distance on your smartphone or tablet. Remote control is possible via Cloud, using a wireless router connected to the Internet.



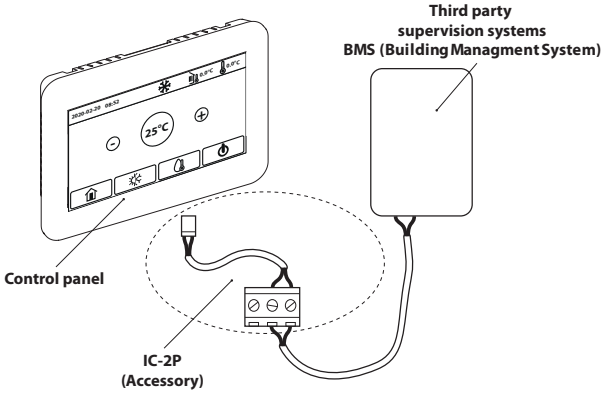
ACCESSORIES

HMICB15: Connection cable for the control panel. Cable length 15m.
IC-2P: Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.
VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.
VMF-E5: Black recessed panel with backlit graphic LCD display and capacitive keyboard, it allows the centralised command/control of a complete hydronic system consisting of Fan coils: up to 64 fan coil zones consisting of 1 master + up to 5 slaves; Chiller/heat pump (accessory required for RS 485 interface), pumps: up to 12 configurable zone pumps; boiler: boiler hook-up management for hot water production; heat recovery units: up to 3 hook-ups per programmable recovery units based on time periods and/or by measuring air quality with the VMF-VOC accessory; domestic water module: complete management of the domestic hot water production through the control of: diverter valve/pump, integrated heating element, storage tank temperature sensor, anti-legionella circuit system. The panel is available in both white (VMF-E5B) and black (VMF-E5N).
VMF-E6: White flush-mounting panel with 4.3 inch colour touchscreen. For the centralised command/control of a complete hydronic/aeraulic system consisting of: fan coils (up to 64 fan coil zones formed of 1 master + max. 5 slaves), heat pumps (up to 4), MZC accessories (up to 5) for the management of radiant panels (using a suitable number of VMF-REB accessories, up to 64 radiant panels associated with the fan coil zones and up to 32 radiant panels associated with the zones served by MZC), the complete management of DHW production, control of the RAS heater and/or the boiler, management of digital I/Os, control of heat recovery units and VOC probes (up to 4).
LOGATW: Diagnostic tool for air-water heat pumps.
DHWT300S: (220-240V~50Hz) DHW storage tank in enamelled steel. Single-phase power supply, tank capacity 300 litres with main and secondary coils and 3 kW back-up electric heater. Magnesium sacrificial anode. Indoor installation.

Connection with VMF-485LINK



Connection with third party supervision systems



Accessories compatibility

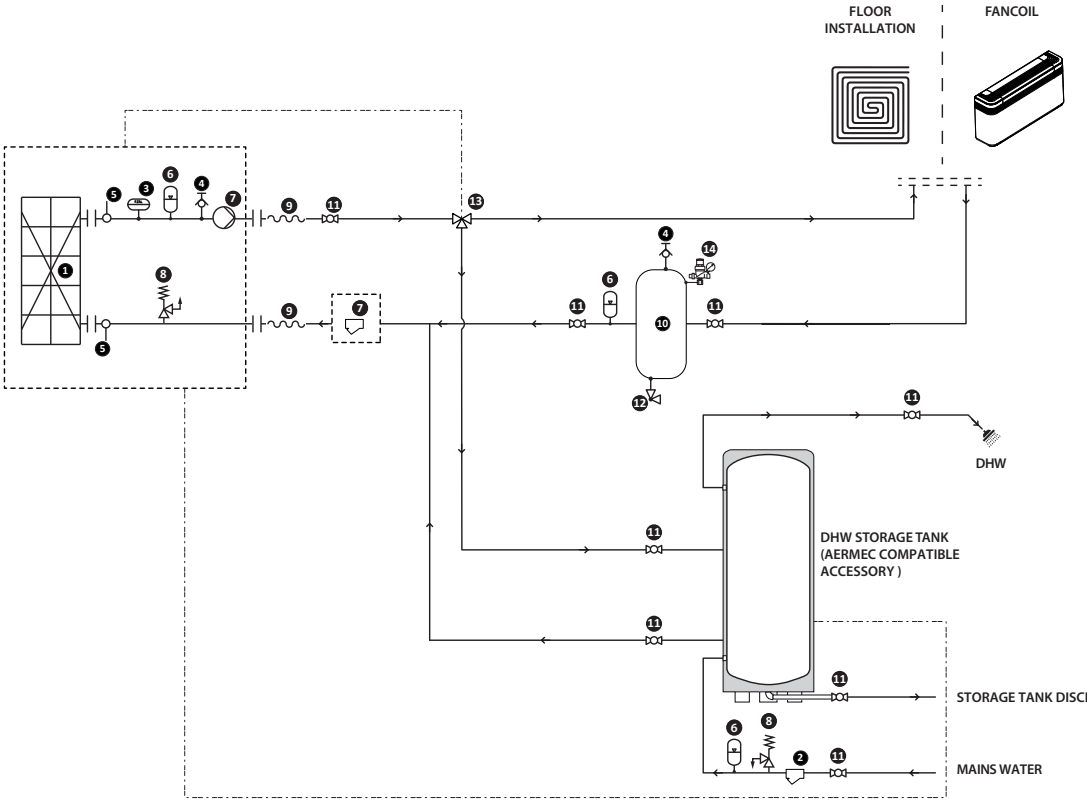
For more information about VMF system, refer to the dedicated documentation.

Accessory	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
LOGATW	•	•	•	•	•	•	•	•	•	•

Accessory	HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
HMICB15	•	•	•	•	•	•	•	•	•	•	•

Accessory	HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120	HMI120T	HMI140	HMI140T	HMI160	HMI160T
IC-2P	•	•	•	•	•	•	•	•	•	•	•
VMF-485LINK	•	•	•	•	•	•	•	•	•	•	•
VMF-E5	•	•	•	•	•	•	•	•	•	•	•
VMF-E6	•	•	•	•	•	•	•	•	•	•	•

FLOOR SYSTEM + DHW



COMPONENTS AS STANDARD

1 Plate heat exchanger
2 Water filter (as standard)
3 Flow switch
4 Air drain valve
5 Water temperature sensor (IN/OUT)
6 Expansion vessel
7 Pump
8 Pressure relief valve

HYDRAULIC COMPONENTS RECOMMENDED OUTSIDE THE UNIT (AT THE INSTALLER'S RESPONSIBILITY)

4 Air drain valve
9 Anti-vibration joints
10 System storage tank (recommended installation if the system water content is lower than that indicated in the technical manual).
11 Flow shut-off valves
6 Expansion vessel
12 Drain valve
13 3 way valve
14 Loading unit

In case of a free-standing system, the bypass valve must be installed to ensure the circulation of a minimum amount of water to the system.

PERFORMANCE SPECIFICATIONS

EUROVENT TECHNICAL DATA EN 14511:2022

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120
Cooling performance 12 °C / 7 °C (1)							
Cooling capacity	kW	2,98	3,97	4,96	7,75	7,75	9,45
Input power	kW	0,94	1,29	1,61	2,48	2,64	3,20
Input current	A	4,7	6,4	7,9	12,0	4,6	15,0
EER	W/W	3,17	3,08	3,08	3,12	2,94	2,95
Water flow rate	l/h	504	673	842	1318	1318	1609
Useful head	kPa	74,0	74,0	74,0	69,0	69,0	64,0
Heating performance 40 °C / 45 °C (2)							
Heating capacity	kW	4,03	6,04	7,55	10,06	10,06	12,06
Input power	kW	1,00	1,58	2,00	2,70	2,70	3,48
Input current	A	5,1	7,8	9,7	13,0	4,7	17,0
COP	W/W	4,03	3,83	3,78	3,72	3,72	3,46
Water flow rate	l/h	710	1062	1326	1762	1762	2110
Useful head	kPa	74,0	73,0	71,0	60,0	60,0	50,0

		HMI120T	HMI140	HMI140T	HMI160	HMI160T
Cooling performance 12 °C / 7 °C (1)						
Cooling capacity	kW	9,45	11,94	11,94	12,95	12,95
Input power	kW	3,11	4,14	4,38	4,96	4,91
Input current	A	5,3	20,0	7,3	23,0	8,1
EER	W/W	3,04	2,88	2,73	2,61	2,64
Water flow rate	l/h	1609	2038	2038	2210	2210
Useful head	kPa	64,0	52,0	52,0	47,0	47,0
Heating performance 40 °C / 45 °C (2)						
Heating capacity	kW	12,06	14,05	14,05	15,54	15,54
Input power	kW	3,48	4,18	4,18	4,70	4,70
Input current	A	5,9	20,0	6,9	22,0	7,7
COP	W/W	3,46	3,36	3,36	3,31	3,31
Water flow rate	l/h	2110	2456	2456	2714	2714
Useful head	kPa	50,0	39,0	39,0	29,0	29,0

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120
Cooling performance 23 °C / 18 °C (1)							
Cooling capacity	kW	3,77	5,76	6,75	8,75	8,75	10,94
Input power	kW	0,82	1,32	1,55	1,96	1,96	2,56
Input current	A	4,2	6,6	7,6	9,5	3,6	12,0
EER	W/W	4,60	4,36	4,36	4,46	4,46	4,27
Water flow rate	l/h	641	982	1152	1495	1495	1873
Useful head	kPa	74,0	74,0	73,0	66,0	66,0	57,0
Heating performance 30 °C / 35 °C (2)							
Heating capacity	kW	4,03	6,04	7,55	10,06	10,06	12,06
Input power	kW	0,79	1,20	1,63	2,17	2,17	2,64
Input current	A	4,1	6,0	8,0	11,0	3,9	13,0
COP	W/W	5,10	5,04	4,63	4,63	4,63	4,57
Water flow rate	l/h	708	1058	1321	1756	1756	2102
Useful head	kPa	74,0	73,0	71,0	60,0	60,0	50,0

		HMI120T	HMI140	HMI140T	HMI160	HMI160T
Cooling performance 23 °C / 18 °C (1)						
Cooling capacity	kW	10,94	12,44	12,44	14,45	14,45
Input power	kW	2,56	3,05	3,05	3,82	3,82
Input current	A	4,5	15,0	5,2	18,0	6,4
EER	W/W	4,27	4,08	4,08	3,78	3,78
Water flow rate	l/h	1873	2132	2132	2478	2478
Useful head	kPa	57,0	50,0	50,0	38,0	38,0
Heating performance 30 °C / 35 °C (2)						
Heating capacity	kW	12,06	14,05	14,05	15,54	15,54
Input power	kW	2,64	3,22	3,22	3,60	3,60
Input current	A	4,6	15,0	5,5	17,0	6,1
COP	W/W	4,57	4,36	4,36	4,32	4,32
Water flow rate	l/h	2102	2447	2447	2704	2704
Useful head	kPa	50,0	39,0	39,0	30,0	30,0

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

GENERAL TECHNICAL DATA

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120
Electric data							
Rated current input (1)	A	10,4	10,4	10,4	23,0	12,0	25,0
Compressor							
Type	type	Rotary DC Inverter					
Number	no.	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1
Refrigerant	type	R32					
Potential global heating	GWP	675 $kgCO_2eq$					
Refrigerant charge (2)	kg	0,9	0,9	0,9	2,2	2,2	2,2
Oil	Type	FW68DA					
Total oil charge	kg	0,5	0,5	0,5	1,1	1,1	1,1
System side heat exchanger							
Type	type	Brazed plate					
Number	no.	1	1	1	1	1	1
Connections (in/out)	Type	Gas Maschio					
Size (in)	Ø	1″					
Size (out)	Ø	1″					
Fan							
Type	type	Axial					
Fan motor	type	Inverter					
Number	no.	1	1	1	1	1	1
Air flow rate	m^3/h	2600	2600	2600	4500	4500	4500
Sound data calculated in cooling mode (3)							
Sound pressure level (1 m)	dB(A)	51,0	52,0	53,0	56,0	56,0	56,0
Sound data calculated in heating mode (3)							
Sound power level	dB(A)	64,0	64,0	65,0	69,0	69,0	69,0
Sound pressure level (1 m)	dB(A)	50,0	50,0	51,0	54,0	54,0	54,0
Power supply							
Power supply		220-240V ~ 50Hz				380-415V 3N ~ 50Hz	220-240V ~ 50Hz

		HMI120T	HMI140	HMI140T	HMI160	HMI160T
Electric data						
Rated current input (1)	A	12,0	29,0	12,0	29,0	12,0
Compressor						
Type	type	Rotary DC Inverter				
Number	no.	1	1	1	1	1
Circuits	no.	1	1	1	1	1
Refrigerant	type	R32				
Potential global heating	GWP	675 $kgCO_2eq$				
Refrigerant charge (2)	kg	2,2	2,2	2,2	2,2	2,2
Oil	Type	FW68DA				
Total oil charge	kg	1,1	1,1	1,1	1,1	1,1
System side heat exchanger						
Type	type	Brazed plate				
Number	no.	1	1	1	1	1
Connections (in/out)	Type	Gas Maschio				
Size (in)	Ø	1″				
Size (out)	Ø	1″				
Fan						
Type	type	Axial				
Fan motor	type	Inverter				
Number	no.	1	1	1	1	1
Air flow rate	m^3/h	4500	4500	4500	4500	4500
Sound data calculated in cooling mode (3)						
Sound pressure level (1 m)	dB(A)	56,0	57,0	57,0	59,0	59,0
Sound data calculated in heating mode (3)						
Sound power level	dB(A)	69,0	70,0	70,0	72,0	72,0
Sound pressure level (1 m)	dB(A)	54,0	55,0	55,0	57,0	57,0
Power supply						
Power supply		380-415V 3N ~ 50Hz	220-240V ~ 50Hz	380-415V 3N ~ 50Hz	220-240V ~ 50Hz	380-415V 3N ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(3) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

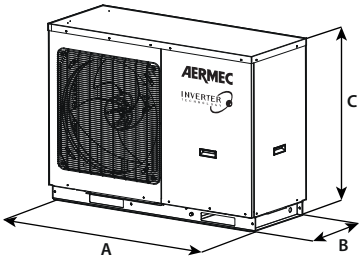
ENERGY DATA

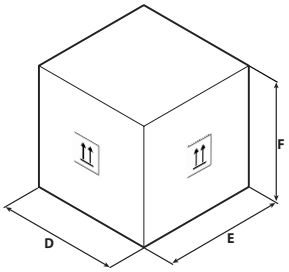
		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)							
Pdesignh	kW	5	5	6	9	9	11
ηsh	%	185,00	185,00	183,00	176,00	176,00	175,00
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)							
Pdesignh	kW	6	6	7	8	8	10
ηsh	%	126,00	126,00	127,00	128,00	128,00	126,00
Efficiency energy class		A++	A++	A++	A++	A++	A++

		HMI120T	HMI140	HMI140T	HMI160	HMI160T
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)						
Pdesignh	kW	11	11	11	13	13
ηsh	%	175,00	168,00	168,00	164,00	164,00
Efficiency energy class		A+++	A++	A++	A++	A++
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)						
Pdesignh	kW	10	11	11	13	13
ηsh	%	126,00	125,00	125,00	125,00	125,00
Efficiency energy class		A++	A++	A++	A++	A++

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

DIMENSIONS





Carton Box Example

		HMI040	HMI060	HMI080	HMI100	HMI100T	HMI120
Dimensions and weights							
A	mm	1150	1150	1150	1200	1200	1200
B	mm	345	345	345	460	460	460
C	mm	758	758	758	878	878	878
D	mm	1260	1260	1260	1295	1295	1295
E	mm	490	490	490	595	595	595
F	mm	900	900	900	1020	1020	1020
Net weight	kg	96,0	96,0	96,0	151,0	151,0	151,0
Weight for transport	kg	109,0	109,0	109,0	166,0	166,0	166,0

		HMI120T	HMI140	HMI140T	HMI160	HMI160T
Dimensions and weights						
A	mm	1200	1200	1200	1200	1200
B	mm	460	460	460	460	460
C	mm	878	878	878	878	878
D	mm	1295	1295	1295	1295	1295
E	mm	595	595	595	595	595
F	mm	1020	1020	1020	1020	1020
Net weight	kg	151,0	151,0	151,0	151,0	151,0
Weight for transport	kg	166,0	166,0	166,0	166,0	166,0

Aermec reserves the right to make any modiÿcations deemed necessary.
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responsibility or liability for errors or omissions.

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HMI 180T - 220T

Reversible air/water heat pump

Cooling capacity 17,5 ÷ 21,0 kW
Heating capacity 18,0 ÷ 22,0 kW

- **R32 ecological refrigerant gas.**
- **Quick & easy installation**
- **Production of hot domestic water with external temperatures from -25 °C to 45 °C**
- **Hermetically sealed equipment**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

HMI is a reversible outdoor heat pump for air-conditioning systems where, in addition to cooling rooms, high-temperature hot water is required for heating or for the production of domestic hot water.
For the production of DHW it is mandatory to combine it with a domestic hot water storage tank Aermec compatibile.

HMI is designed to meet the needs of both the new constructions market and the renovation market, **replacing or working alongside conventional boilers.**
It can be combined with low-temperature emission systems such as floor heating or fan coils, and also with more traditional radiators, **and comes supplied with the main hydraulic components needed, thereby facilitating the final installation**.

FEATURES

Operating limits

Full load operation down to -25°C (outside air temperature in winter), and up to 48°C in summer.
Maximum processed water temperature in heating mode 65°C.
Production of domestic hot water up to 80°C with electric heater.
— Refrigerant circuit with economizer.
— Inverter rotary compressor.
— DC brushless axial flow fans designed for aerodynamic optimisation, reducing the noise level whilst at the same time increasing the efficiency and air flow rate.
— Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.
— Electronic expansion valve.

Main hydraulic components

— Inverter pump.
— Plate heat exchanger.
— Expansion tank
— Safety valve.
— Flow switch.
— Water filter supplied **(mandatory installation)**.

Regulation

Adjustment via **a multi-language touch-screen control panel:**
— Management of a 3 way diverting valve (not supplied) for the production of domestic hot water.
— Management of a 2 way valve (not supplied) for shutting off part of the system.
— Weekly programming in time periods.
— **Auto-restart** function.
— Emergency operation (a supplementary heat source may be activated).
— **Quick hot water** function, for quickly heating domestic hot water.
— **Weather dependent mode** function for climate control.
— **Quiet** function for reduced noise operation (programmable with a timer).
— Condensation check
— When the anti-legionella cycle is activated (it's easily set via the control panel), the whole tank is heated once a week to a temperature (max. 70 °C) that weakens the bacteria responsible for the infection.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



Smart APP Ewpe

The system is equipped standard with the Wi-Fi module; using this module and the app for iOS and Android devices (available free on Apple Store and Google Play, the system can be directly controlled from a distance on your smartphone or tablet. Remote control is possible via Cloud, using a wireless router connected to the Internet.

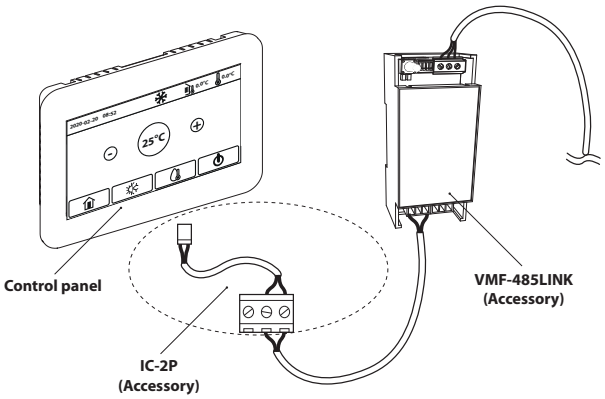


ACCESSORIES

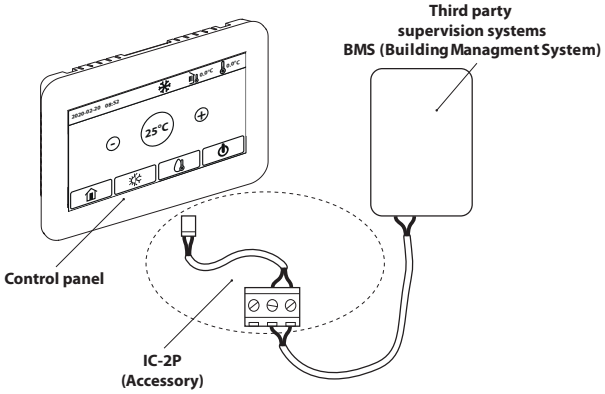
HMICB15: Connection cable for the control panel. Cable length 15m.
IC-2P: Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.
VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.
VMF-E5: Black recessed panel with backlit graphic LCD display and capacitive keyboard, it allows the centralised command/control of a complete hydronic system consisting of Fan coils: up to 64 fan coil zones consisting of 1 master + up to 5 slaves; Chiller/heat pump (accessory required for RS 485 interface), pumps: up to 12 configurable zone pumps; boiler: boiler hook-up management for hot water production; heat recovery units: up to 3 hook-ups per programmable recovery units based on time periods and/or by measuring air quality with the VMF-VOC accessory; domestic water module: complete management of the domestic hot water production through the control of: diverter valve/pump, integrated heating element, storage tank temperature sensor, anti-legionella circuit system. The panel is available in both white (VMF-E5B) and black (VMF-E5N).
VMF-E6: White flush-mounting panel with 4.3 inch colour touchscreen. For the centralised command/control of a complete hydronic/aeraulic system consisting of: fan coils (up to 64 fan coil zones formed of 1 master + max. 5 slaves), heat pumps (up to 4), MZC accessories (up to 5) for the management of radiant panels (using a suitable number of VMF-REB accessories, up to 64 radiant panels associated with the fan coil zones and up to 32 radiant panels associated with the zones served by MZC), the complete management of DHW production, control of the RAS heater and/or the boiler, management of digital I/Os, control of heat recovery units and VOC probes (up to 4).
LOGATW: Diagnostic tool for air-water heat pumps.
DHWT300S: (220-240V~50Hz) DHW storage tank in enamelled steel. Single-phase power supply, tank capacity 300 litres with main and secondary coils and 3 kW back-up electric heater. Magnesium sacrificial anode. Indoor installation.

For more information about VMF system, refer to the dedicated documentation.

Connection with VMF-485LINK



Connection with third party supervision systems



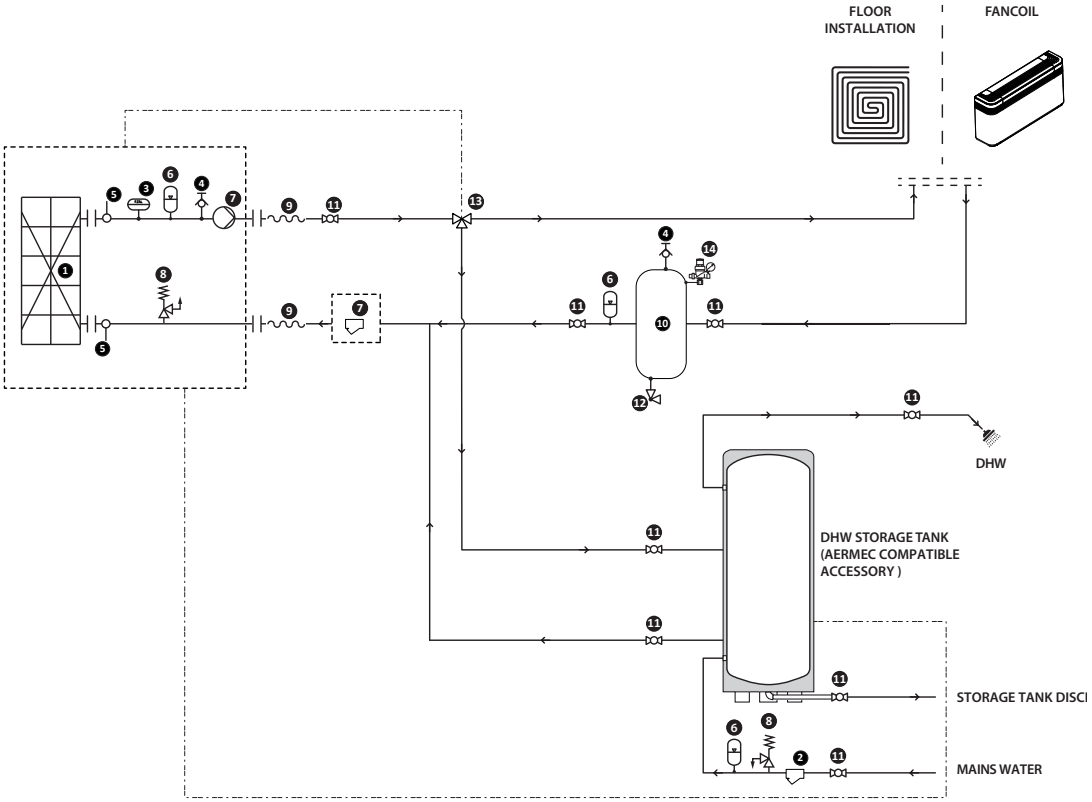
Accessories compatibility

Accessory	HMI180T	HMI220T
LOGATW	•	•

Accessory	HMI180T	HMI220T
HMICB15	•	•

Accessory	HMI180T	HMI220T
IC-2P	•	•
VMF-485LINK	•	•
VMF-E5	•	•
VMF-E6	•	•

FLOOR SYSTEM + DHW



COMPONENTS AS STANDARD

1 Plate heat exchanger
2 Water filter (as standard)
3 Flow switch
4 Air drain valve
5 Water temperature sensor (IN/OUT)
6 Expansion vessel
7 Pump
8 Pressure relief valve

HYDRAULIC COMPONENTS RECOMMENDED OUTSIDE THE UNIT (AT THE INSTALLER'S RESPONSIBILITY)

4 Air drain valve
9 Anti-vibration joints
10 System storage tank (recommended installation if the system water content is lower than that indicated in the technical manual).
11 Flow shut-off valves
6 Expansion vessel
12 Drain valve
13 3 way valve
14 Loading unit

In case of a free-standing system, the bypass valve must be installed to ensure the circulation of a minimum amount of water to the system.

PERFORMANCE SPECIFICATIONS

		HMI180T	HMI220T
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	kW	17,50	21,00
Input power	kW	5,65	7,00
EER	W/W	3,10	3,00
Water flow rate	l/h	3010	3612
Useful head	kPa	59,1	55,2
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	18,00	22,00
Input power	kW	5,00	6,29
COP	W/W	3,60	3,50
Water flow rate	l/h	3096	3784
Useful head	kPa	62,4	57,9

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

		HMI180T	HMI220T
Cooling performance 23 °C / 18 °C (1)			
Cooling capacity	kW	18,50	23,00
Input power	kW	3,85	4,89
EER	W/W	4,80	4,70
Water flow rate	l/h	3182	3956
Useful head	kPa	56,1	53,5
Heating performance 30 °C / 35 °C (2)			
Heating capacity	kW	18,00	22,00
Input power	kW	3,75	4,89
COP	W/W	4,80	4,50
Water flow rate	l/h	3096	3784
Useful head	kPa	62,2	58,0

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

GENERAL TECHNICAL DATA

		HMI180T	HMI220T
Electric data			
Rated power input	W	10000	10800
Compressor			
Type	type	Rotativo Inverter	Rotativo Inverter
Number	no.	1	1
Circuits	no.	1	1
Refrigerant	type	R32	R32
Potential global heating	GWP	675 kgCO_2eq	675 kgCO_2eq
Refrigerant charge	kg	4,0	4,0
Oil	Type	FW68S	FW68S
Total oil charge	l	1,9	1,9
System side heat exchanger			
Type	type	Brazed plate	Brazed plate
Number	no.	1	1
Connections (in/out)	Type	Gas Maschio	Gas Maschio
Size (in)	Ø	1"1/4	1"1/4
Size (out)	Ø	1"1/4	1"1/4
Fan			
Type	type	Axial	Axial
Fan motor	type	Inverter	Inverter
Number	no.	2	2
Air flow rate	m^3/h	9700	9700
Sound data calculated in cooling mode			
Sound pressure level (1 m)	dB(A)	57,0	58,0
Sound data calculated in heating mode			
Sound power level	dB(A)	65,0	65,0
Sound pressure level (1 m)	dB(A)	56,0	57,0
Sound power by centre octave band dB(A)			
63 Hz	dB(A)	42,1	42,6
125 Hz	dB(A)	52,8	54,9
250 Hz	dB(A)	59,2	54,1
500 Hz	dB(A)	60,4	56,6
1000 Hz	dB(A)	58,0	55,8
4000 Hz	dB(A)	48,6	50,2
8000 Hz	dB(A)	42,7	45,2
Power supply			
Power supply		380-415V 3N ~ 50Hz	380-415V 3N ~ 50Hz

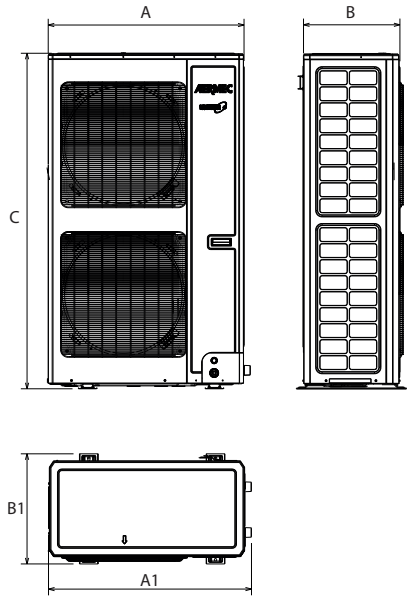
— The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
— The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
— Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.
— Sound pressure measured in semi anechoic chamber at a distance of 1 m from the source.

ENERGY DATA

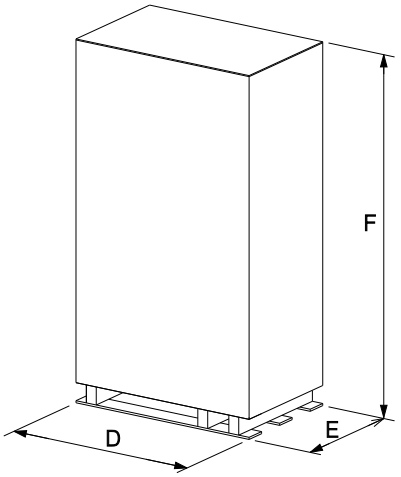
		HMI180T	HMI220T
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)			
Pdesignh	kW	19	22
ηsh	%	181,00	180,00
Efficiency energy class		A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)			
Pdesignh	kW	18	20
ηsh	%	127,00	127,00
Efficiency energy class		A++	A++

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

DIMENSIONS



HMI180T-HMI220T



Example of packaging

		HMI180T	HMI220T
Dimensions and weights			
A	mm	943	943
A1	mm	977	977
B	mm	464	464
B1	mm	530	530
C	mm	1615	1615
D	mm	1073	1073
E	mm	593	593
F	mm	1760	1760
Net weight	kg	205,0	205,0
Weight for transport	kg	221,0	221,0

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BHP

Reversible air/water split heat pump

Cooling capacity 3,2 ÷ 11,5 kW – Heating capacity 4,0 ÷ 16,0 kW

- **Indoor unit available in two versions, with and without DHW**
- **New R32 ecological refrigerant gas**
- **Production of hot water up to 60 °C**
- **Anti-legionella function**
- **Multi-language touch-screen control panel**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

BHP It's the new "split" type inverter heat pump system, more efficient than standard boiler systems as it guarantees sustainable, efficient heating, cooling and domestic hot water supply in every season.
BHP is designed to meet the needs of both the new constructions market and the renovation market, replacing or working alongside conventional boilers.
The system can be installed in systems with any hydronic terminal, and is already supplied with the main hydraulic components, thus facilitating final installation.
The indoor unit comes in two versions:

— **BHP_W wall-mounting**, without DHW storage tank but complete with a 3-way DHW-system diverting valve. **For the production of DHW it is mandatory to combine it with a domestic hot water storage tank Aermec compatibile.**
— **BHP_F with base**, complete with DHW storage tank.

FEATURES

Main hydraulic components

BHP outdoor unit

— inverter compressor,
— finned pack heat exchanger with copper pipes and aluminium louvers, with protective golden fin treatment,
— economizer,
— electronic valve,
— DC axial brushless fan,
— electric heater for the base.

BHP_W wall indoor unit

— plate heat exchanger,
— flow switch,
— inverter pump,
— expansion tank,
— drain valve,
— safety valve,
— Electric resistance system side,
— 3 way valve,
— DHW-system connections,
— water filter supplied **(mandatory installation)**.

BHP_F indoor base unit

— plate heat exchanger,
— flow switch,
— inverter pump,
— expansion tank,
— drain valve,
— safety valve,
— Electric resistance system side,
— 3 way valve,
— DHW-system connections,
— water filter supplied **(mandatory installation)**,
— DHW storage tank of 185 litres with coil and supplementary electric heater, and anti-legionella function,
— **tank with Titanium electronic sacrificial anode.**

The indoor and outdoor units are connected by means of suitably sized cooling lines (supplied by the installer).
Cooling circuit use R32 (A2L) refrigerant with low GWP.

Operating limits

Full load operation down to -25°C (outside air temperature in winter), and up to 48°C in summer.

Regulations

Adjustment via **multi-language touch-screen control panel**:

— ganagement of a 3-way diverting valve for the production of domestic hot water,
— management of a 2 way valve (not supplied) for shutting off part of the system,
— weekly programming in time periods,
— **auto-restart** function,
— emergency operation,
— function **quick water heating** for a quick heating of domestic hot water
— forced operating **mode**,
— intelligent operation **based on weather conditions** for climate adjustment,
— **quiet** function for reduced noise operation (programmable with a timer),
— **Anti-freeze** function,
— condensation check,

— when the **anti-legionella cycle** is activated (it's easily set via the control panel), the whole tank is heated once a week to a temperature (max. 70 °C) that weakens the bacteria responsible for the infection,
— pre heating **function of the floor** to pre-heat the floor system before unit commissioning.



Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



Smart APP Ewpe

The system is equipped standard with the Wi-Fi module; using this module and the app for iOS and Android devices (available free on Apple Store and Google Play, the system can be directly controlled from a distance on your smartphone or tablet. Remote control is possible via Cloud, using a wireless router connected to the Internet.



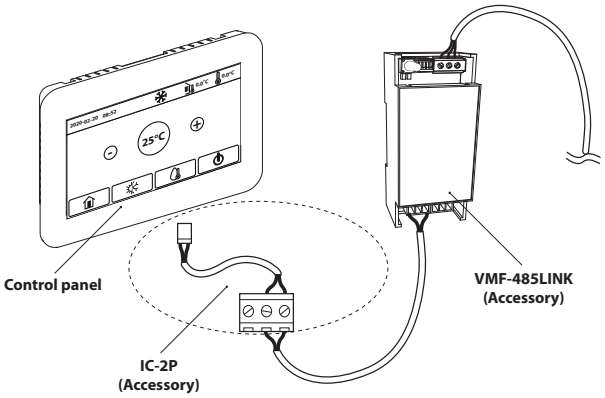
ACCESSORIES

IC-2P: Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.
VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.
LOGATW: Diagnostic tool for air-water heat pumps.
DHWT300S: (220-240V~50Hz) DHW storage tank in enamelled steel. Single-phase power supply, tank capacity 300 litres with main and secondary coils and 3 kW back-up electric heater. Magnesium sacrificial anode. Indoor installation.
For the production of DHW it is mandatory to combine it with BHP_W.

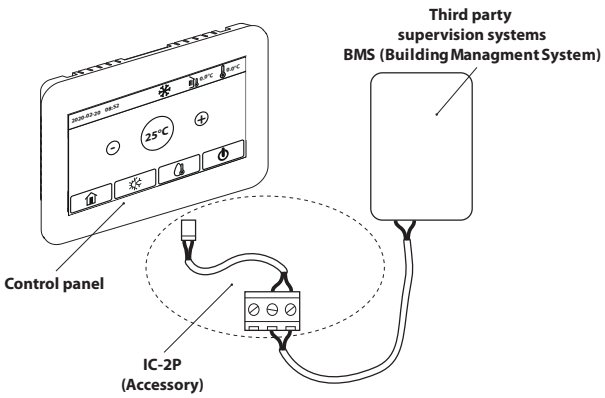
Compatibility with VMF system

For more information about VMF system, refer to the dedicated documentation.

Connection with VMF-485LINK



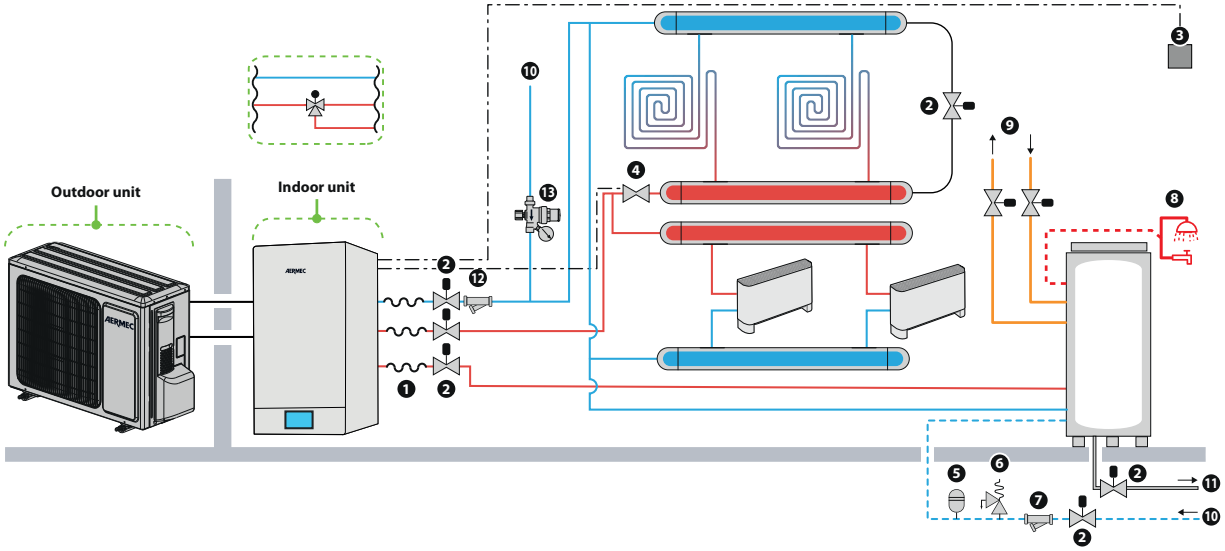
Connection with third party supervision systems



Compatibility with DHW storage tank

	BHP060W	BHP100W	BHP100WT	BHP160W	BHP160WT
DHWT300S	•	•	•	•	•

BHP_W: DOMESTIC HOT WATER STORAGE TANK CONNECTION AND CONNECTION TO THE FLOOR SYSTEM AND FCU



HYDRAULIC COMPONENTS SUPPLIED AS STANDARD IN THE INDOOR UNIT

— Plate heat exchanger
— Flow switch
— Inverter circulator
— Expansion vessel
— Drain valve
— Pressure relief valve
— Electric resistance system side
— 3 way valve
— DHW-system connections

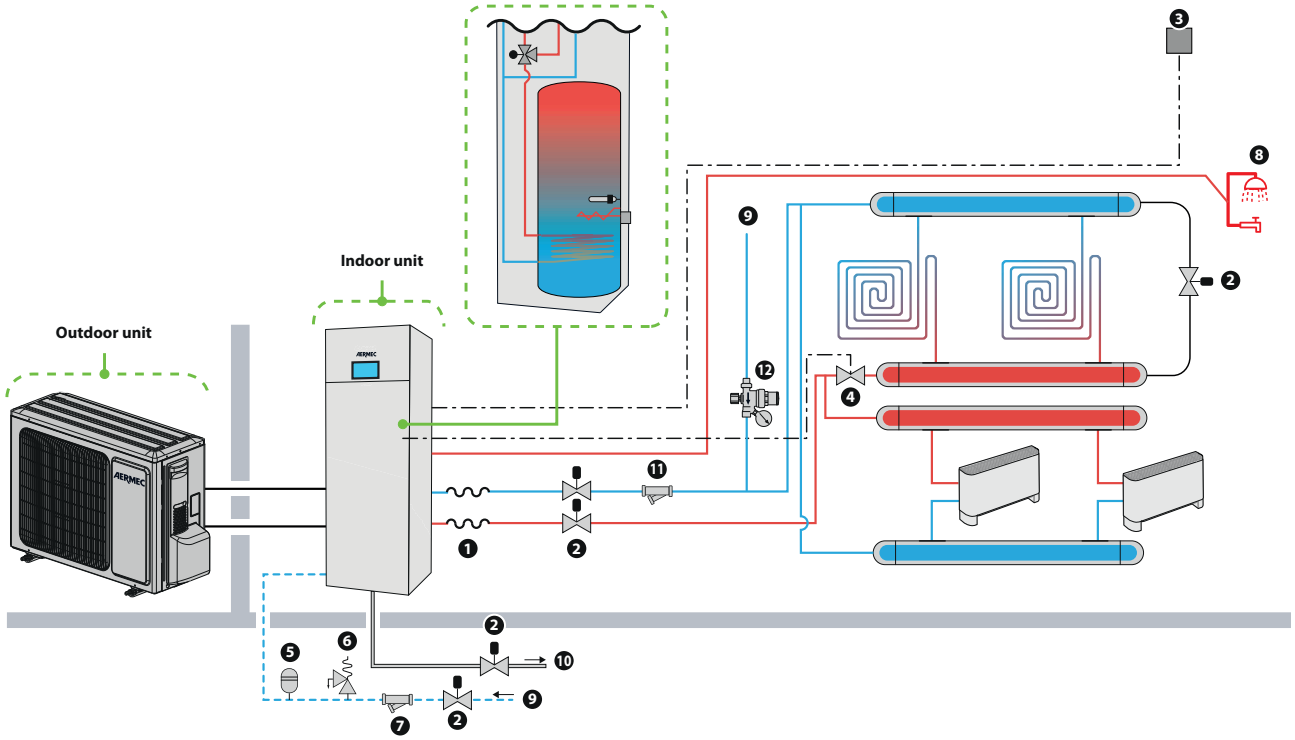
SUPPLIED HYDRAULIC COMPONENTS

12. Water filter supplied **(mandatory installation)**

HYDRAULIC COMPONENTS RECOMMENDED OUTSIDE THE UNIT (AT THE INSTALLER'S RESPONSIBILITY)

1. Anti-vibration joints
2. Shut-off tap
3. Ambient thermostat
4. 2 way valve
5. Expansion tank **NOT supplied**
6. Safety valve **supplied with Aermec ACS storage system compatible (installation is mandatory)**
7. Water filter **NOT supplied (installation is mandatory)**
8. Hot domestic water
9. Auxiliary heat sources
10. Aqueduct
11. Storage discharge
13. Loading unit

BHP_F: CONNECTION TO THE FLOOR SYSTEM AND FCU



HYDRAULIC COMPONENTS SUPPLIED AS STANDARD IN THE INDOOR UNIT

— Plate heat exchanger
— Flow switch
— Inverter pump
— Expansion vessel
— Drain valve
— Pressure relief valve
— Electric resistance system side
— 3 way valve
— DHW-system connections

SUPPLIED HYDRAULIC COMPONENTS

11. Water filter supplied **(mandatory installation)**

HYDRAULIC COMPONENTS RECOMMENDED OUTSIDE THE UNIT (AT THE INSTALLER'S RESPONSIBILITY)

1. Anti-vibration joints
2. Shut-off tap
3. Ambient thermostat
4. 2 way valve
5. Expansion tank **NOT supplied**
6. Safety valve **NOT supplied (installation is mandatory)**
7. Water filter **NOT supplied (installation is mandatory)**
8. Hot domestic water
9. Aqueduct
10. Storage discharge
12. Loading unit

PERFORMANCE SPECIFICATIONS

Technical data Wall unit

Indoor unit		BHP060W	BHP060W	BHP100W	BHP100W	BHP160W	BHP160W	BHP160W
Outdoor unit		**BHP040**	**BHP060**	**BHP080**	**BHP100**	**BHP120**	**BHP140**	**BHP160**
Cooling performance 12 °C / 7 °C (1)								
Cooling capacity	kW	3,20	4,09	5,30	6,50	10,07	11,30	11,60
Input power	kW	0,94	1,28	1,73	2,27	3,65	4,04	4,38
EER	W/W	3,42	3,20	3,06	2,86	2,93	2,80	2,65
Water flow rate system side	l/h	550	703	912	1118	1840	1944	1995
Useful head system side	kPa	76	74	70	63	56	54	48
Heating performance 40 °C / 45 °C (2)								
Heating capacity	kW	4,00	5,90	8,00	9,50	12,40	14,50	16,10
Input power	kW	1,02	1,51	2,14	2,64	3,22	3,87	4,41
COP	W/W	3,92	3,91	3,74	3,60	3,85	3,75	3,65
Water flow rate system side	l/h	688	1015	1376	1634	2133	2494	2769
Useful head system side	kPa	74	67	51	36	45	26	11
Cooling performance 23 °C / 18 °C (3)								
Cooling capacity	kW	3,80	5,80	7,00	8,52	11,00	12,60	13,00
Input power	kW	0,82	1,32	1,75	2,25	2,50	3,41	3,60
EER	W/W	4,63	4,40	4,00	3,79	4,40	3,70	3,61
Water flow rate system side	l/h	655	992	1204	1465	1892	2167	2236
Useful head system side	kPa	74	67	60	46	54	40	34
Heating performance 30 °C / 35 °C (4)								
Heating capacity	kW	4,00	6,00	8,00	9,50	12,00	14,00	15,50
Input power	kW	0,78	1,20	1,70	2,07	2,40	2,98	3,44
COP	W/W	5,13	5,00	4,71	4,59	5,00	4,70	4,50
Water flow rate system side	l/h	688	1032	1376	1634	2064	2408	2666
Useful head system side	kPa	74	66	51	36	45	26	15
Heating performance 47 °C / 55 °C (5)								
Heating capacity	kW	3,60	5,40	7,20	8,55	12,00	14,00	16,00
Input power	kW	1,40	2,16	3,05	3,72	3,81	4,52	5,42
COP	W/W	2,57	2,50	2,36	2,30	3,15	3,10	2,95
Useful head system side	kPa	27	19	19	12	65	60	53

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.
(5) Data EN 14511:2022; System side water heat exchanger 47 °C / 55 °C; External air 7 °C d.b. / 6 °C w.b.

Three-phase Wall unit technical data

Indoor unit		BHP100WT	BHP100WT	BHP160WT	BHP160WT	BHP160WT
Outdoor unit		**BHP080T**	**BHP100T**	**BHP120T**	**BHP140T**	**BHP160T**
Cooling performance 12 °C / 7 °C (1)						
Cooling capacity	kW	7,60	8,20	10,07	11,30	11,60
Input power	kW	2,35	2,73	3,65	4,04	4,38
EER	W/W	3,23	3,00	2,93	2,80	2,65
Water flow rate system side	l/h	1307	1410	1840	1944	1995
Useful head system side	kPa	66	58	56	54	48
Heating performance 40 °C / 45 °C (2)						
Heating capacity	kW	8,00	10,20	12,40	14,50	16,13
Input power	kW	1,93	2,55	3,22	3,87	4,42
COP	W/W	4,15	4,00	3,85	3,75	3,65
Water flow rate system side	l/h	1376	1720	2133	2494	2774
Useful head system side	kPa	60	45	45	26	11
Cooling performance 23 °C / 18 °C (3)						
Cooling capacity	kW	8,50	10,00	11,00	12,60	13,00
Input power	kW	1,74	2,33	2,50	3,41	3,60
EER	W/W	4,89	4,29	4,40	3,70	3,61
Water flow rate system side	l/h	1462	1720	1892	2167	2236
Useful head system side	kPa	54	41	54	40	34
Heating performance 30 °C / 35 °C (4)						
Heating capacity	kW	8,00	10,00	12,00	14,00	15,54
Input power	kW	1,63	2,15	2,40	2,98	3,45
COP	W/W	4,91	4,65	5,00	4,70	4,50
Water flow rate system side	l/h	1376	1754	2064	2408	2673
Useful head system side	kPa	60	46	46	26	14
Heating performance 47 °C / 55 °C (5)						
Heating capacity	kW	8,00	10,00	12,00	14,00	16,00
Input power	kW	2,78	3,80	3,81	4,52	5,42
COP	W/W	2,88	2,63	3,15	3,10	2,95
Useful head system side	kPa	74	70	65	60	53

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.
(5) Data EN 14511:2022; System side water heat exchanger 47 °C / 55 °C; External air 7 °C d.b. / 6 °C w.b.

Technical data base unit

Indoor unit		BHP060F	BHP060F	BHP100F	BHP100F
Outdoor unit		**BHP040**	**BHP060**	**BHP080**	**BHP100**
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	3,20	4,09	5,30	6,50
Input power	kW	0,94	1,28	1,73	2,27
EER	W/W	3,42	3,20	3,06	2,86
Water flow rate system side	l/h	550	703	912	1118
Useful head system side	kPa	76	74	70	63
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	4,00	5,90	8,00	9,50
Input power	kW	1,02	1,51	2,14	2,64
COP	W/W	3,92	3,91	3,74	3,60
Water flow rate system side	l/h	688	1015	1376	1634
Useful head system side	kPa	74	67	51	36
Cooling performance 23 °C / 18 °C (3)					
Cooling capacity	kW	3,80	5,80	7,00	8,52
Input power	kW	0,82	1,32	1,75	2,25
EER	W/W	4,63	4,40	4,00	3,79
Water flow rate system side	l/h	655	992	1204	1465
Useful head system side	kPa	74	69	60	46
Heating performance 30 °C / 35 °C (4)					
Heating capacity	kW	4,00	6,00	8,00	9,50
Input power	kW	0,78	1,20	1,70	2,07
COP	W/W	5,13	5,00	4,71	4,59
Water flow rate system side	l/h	688	1032	1376	1634
Useful head system side	kPa	74	66	51	36
Heating performance 47 °C / 55 °C (5)					
Heating capacity	kW	3,60	5,40	7,20	8,55
Input power	kW	1,40	2,16	3,05	3,72
COP	W/W	2,57	2,50	2,36	2,30
Useful head system side	kPa	27	19	19	12

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.
(5) Data EN 14511:2022; System side water heat exchanger 47 °C / 55 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Energy data Wall unit

Indoor unit		BHP060W	BHP060W	BHP100W	BHP100W	BHP160W	BHP160W	BHP160W
Outdoor unit		**BHP040**	**BHP060**	**BHP080**	**BHP100**	**BHP120**	**BHP140**	**BHP160**
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)								
Pdesignh	kW	5	6	7	9	11	12	13
SCOP	W/W	4,66	4,54	4,60	4,60	4,63	4,65	4,61
ηsh	%	183,50	178,70	181,00	181,00	182,00	183,00	181,20
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)								
Pdesignh	kW	5	5	7	8	11	13	13
SCOP	W/W	3,27	3,25	3,30	3,25	3,24	3,50	3,50
ηsh	%	128,10	127,40	129,00	127,00	126,40	137,00	137,00
Efficiency energy class		A++	A++	A++	A++	A++	A++	A++
Performance as combined heat generator								
Bleeding profile		XL	XL	XL	XL	XL	XL	XL
Efficiency energy class		A	A	A	A	A	A	A

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Indoor unit		BHP060W	BHP060W	BHP100W	BHP100W	BHP160W	BHP160W	BHP160W
Outdoor unit		**BHP040**	**BHP060**	**BHP080**	**BHP100**	**BHP120**	**BHP140**	**BHP160**
Indoor unit quantity		**1**	**1**	**1**	**1**	**1**	**1**	**1**
Outdoor unit quantity		**1**	**1**	**1**	**1**	**1**	**1**	**1**
Cooling capacity with low leaving water temp (UE n° 2016/2281)								
SEER	W/W	4,21	4,12	4,11	4,12	4,90	4,91	4,78
ηsc	%	165,00	162,00	161,00	162,00	193,00	193,00	188,00

Three-phase Wall unit energy data

Indoor unit		BHP100WT	BHP100WT	BHP160WT	BHP160WT	BHP160WT
Outdoor unit		**BHP080T**	**BHP100T**	**BHP120T**	**BHP140T**	**BHP160T**
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)						
Pdesignh	kW	8	9	11	12	13
SCOP	W/W	4,53	4,70	4,48	4,48	4,45
ηsh	%	178,10	185,20	176,00	176,00	175,00
Efficiency energy class		A+++	A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)						
Pdesignh	kW	9	10	11	13	13
SCOP	W/W	3,48	3,49	3,23	3,38	3,38
ηsh	%	136,10	136,70	126,00	132,00	132,00
Efficiency energy class		A++	A++	A++	A++	A++
Performance as combined heat generator						
Bleeding profile		XL	XL	XL	XL	XL
Efficiency energy class		A	A	A	A	A

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Indoor unit		BHP100WT	BHP100WT	BHP160WT	BHP160WT	BHP160WT
Outdoor unit		**BHP080T**	**BHP100T**	**BHP120T**	**BHP140T**	**BHP160T**
Cooling capacity with low leaving water temp (UE n° 2016/2281)						
SEER	W/W	4,11	4,12	4,74	4,76	4,64
ηsc	%	161,00	162,00	187,00	187,00	183,00

Energy data base unit

Indoor unit		BHP060F	BHP060F	BHP100F	BHP100F
Outdoor unit		**BHP040**	**BHP060**	**BHP080**	**BHP100**
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)					
Pdesignh	kW	5	6	7	9
SCOP	W/W	4,66	4,54	4,60	4,60
ηsh	%	183,50	178,70	181,00	181,00
Efficiency energy class		A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)					
Pdesignh	kW	5	5	7	8
SCOP	W/W	3,28	3,26	3,30	3,25
ηsh	%	128,10	127,40	129,00	127,00
Efficiency energy class		A++	A++	A++	A++
Performance as combined heat generator					
Bleeding profile		L	L	L	L
Efficiency energy class		A	A	A	A

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Indoor unit		BHP060F	BHP060F	BHP100F	BHP100F
Outdoor unit		**BHP040**	**BHP060**	**BHP080**	**BHP100**
Cooling capacity with low leaving water temp (UE n° 2016/2281)					
SEER	W/W	4,21	4,12	4,11	4,12
ηsc	%	165,00	162,00	161,00	162,00

INDOOR UNIT

BHP_W indoor wall unit

		BHP060W	BHP100W	BHP160W
Electric data				
Rated power input (1)	kW	3,10	6,10	6,10
Electric heater				
Number	no.	2	2	2
Power of the single heater	kW	1,50	3,00	3,00
System side heat exchanger				
Type	type		Brazed plate	
Number	no.	1	1	1
Unit / system input	type		G1 male	
Unit / system output	type		G1 male	
DHW output	type		G1 male	
Circulator				
Quantity	no.	1	1	1
Motor	type		DC brushless	
Expansion vessel				
Number	no.	1	1	1
Volume	l	10,0	10,0	10,0
Maximum pressure	bar	2,5	2,5	2,5
Sound data calculated in cooling mode (2)				
Sound power level	dB(A)	42,0	42,0	42,0
Sound pressure level	dB(A)	14,0	14,0	14,0
Power supply				
Power supply			230V ~ 50Hz	

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Three-phase wall unit BHP_WT

		BHP100WT	BHP160WT
Electric data			
Rated power input (1)	kW	6,10	6,10
Electric heater			
Number	no.	2	2
Power of the single heater	kW	3,00	3,00
System side heat exchanger			
Type	type	Brazed plate	
Number	no.	1	1
Unit / system input	type	G1 male	
Unit / system output	type	G1 male	
DHW output	type	G1 male	
Circulator			
Quantity	no.	1	1
Motor	type	DC brushless	
Expansion vessel			
Number	no.	1	1
Volume	l	10,0	10,0
Maximum pressure	bar	2,5	2,5
Sound data calculated in cooling mode (2)			
Sound power level	dB(A)	42,0	42,0
Sound pressure level	dB(A)	14,0	14,0
Power supply			
Power supply		400V ~ 3N 50Hz	

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

BHP_F indoor base unit

		BHP060F	BHP100F
Electric data			
Rated power input (1)	kW	3,10	6,10
Electric heater			
Number	no.	2	2
Power of the single heater	kW	1,50	3,00
System side heat exchanger			
Type	type	Brazed plate	
Number	no.	1	1
Unit / system input	type	G1 male	
Mains water input	type	G1 male	
Unit / system output	type	G1 male	
DHW output	type	G1 male	
Circulator			
Quantity	no.	1	1
Motor	type	DC brushless	
Expansion vessel			
Number	no.	1	1
Volume	l	10,0	10,0
Maximum pressure	bar	2,5	2,5
Storage tank (DHW)			
Volume	l	185	185
Sound data calculated in cooling mode (2)			
Sound power level	dB(A)	42,0	42,0
Sound pressure level	dB(A)	14,0	14,0
Power supply			
Power supply		230V ~ 50Hz	

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

OUTDOOR UNIT

		BHP040	BHP060	BHP080	BHP080T	BHP100	BHP100T
Electric data							
Rated current input (1)	A	10,0	10,0	19,0	7,5	22,0	7,5
Compressor							
Type	type	Rotativo doppio stadio inverter					
Number	no.	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1
Refrigerant	type	R32					
Refrigerant charge	kg	1,00	1,00	1,60	1,84	1,60	1,84
Potential global heating	GWP	675kgCO_2eq					
Oil							
Type	type	FW68DA					
Quantity	l	0,47	0,47	0,84	0,84	0,84	0,84
Refrigeration pipework							
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")					
Diameter of refrigerant gas connections	mm (inch)	12,7 (1/2")					
Exchanger							
Type	type	Finned coil					
Louvers type	type	Golden fin					
Number	no.	1	1	1	1	1	1
Expansion vessel							
Type	type	Electronic expansion valve					
Number	no.	1	1	1	1	1	1
Fan							
Type	type	Inverter axial					
Fan motor	type	DC brushless					
Number	no.	1	1	1	1	1	1
Air flow rate	m^3/h	3200	3200	3300	3300	3300	3300
Sound data calculated in cooling mode (2)							
Sound power level	dB(A)	62,0	62,0	67,0	68,0	68,0	68,0
Sound pressure level (1 m)	dB(A)	52,0	52,0	55,0	55,0	55,0	55,0
Sound pressure level (10 m)	dB(A)	34,0	34,0	39,0	40,0	40,0	40,0
Power supply							
Power supply		230V ~ 50Hz			400V 3N ~ 50Hz	230V ~ 50Hz	400V 3N ~ 50Hz

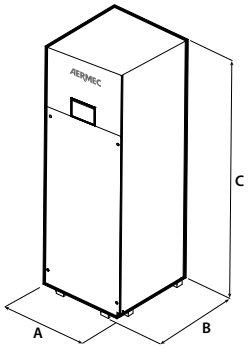
		BHP120	BHP120T	BHP140	BHP140T	BHP160	BHP160T
Electric data							
Rated current input (1)	A	25,6	9,2	28,7	11,5	30,3	11,5
Compressor							
Type	type	Rotativo doppio stadio inverter					
Number	no.	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1
Refrigerant	type	R32					
Refrigerant charge	kg	1,84	1,84	1,84	1,84	1,84	1,84
Potential global heating	GWP	675kgCO_2eq					
Oil							
Type	type	FW68DA					
Quantity	l	1,05	1,05	1,05	1,05	1,05	1,05
Refrigeration pipework							
Diameter of liquid refrigerant connections	mm (inch)	6,35 (1/4")					
Diameter of refrigerant gas connections	mm (inch)	12,7 (1/2")			15,87 (5/8")		
Exchanger							
Type	type	Finned coil					
Louvers type	type	Golden fin					
Number	no.	1	1	1	1	1	1
Expansion vessel							
Type	type	Electronic expansion valve					
Number	no.	1	1	1	1	1	1
Fan							
Type	type	Inverter axial					
Fan motor	type	DC brushless					
Number	no.	1	1	1	1	1	1
Air flow rate	m^3/h	5044	5044	5044	5044	5044	5044
Sound data calculated in cooling mode (2)							
Sound power level	dB(A)	68,0	68,0	68,0	68,0	68,0	68,0
Sound pressure level (1 m)	dB(A)	60,0	60,0	61,0	61,0	61,0	61,0
Sound pressure level (10 m)	dB(A)	40,0	40,0	40,0	40,0	40,0	40,0
Power supply							
Power supply		230V ~ 50Hz	400V 3N ~ 50Hz	230V ~ 50Hz	400V 3N ~ 50Hz	230V ~ 50Hz	400V 3N ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

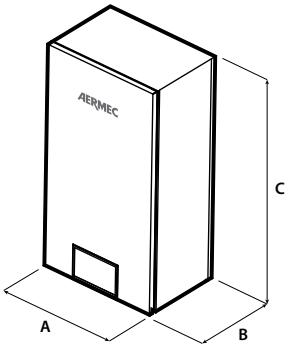
DIMENSIONS AND WEIGHTS

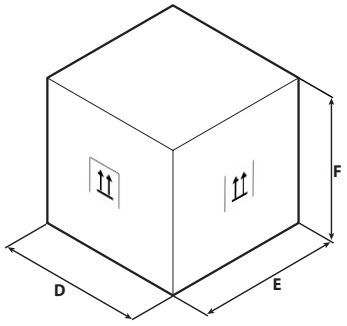
Indoor units

BHP_F



BHP_W





Carton Box Example

BHP_W

		BHP060W	BHP100W	BHP160W
Indoor unit				
A	mm	460	460	460
B	mm	318	318	318
C	mm	860	860	860
D	mm	568	568	568
E	mm	390	390	390
F	mm	1133	1133	1133
Net weight	kg	62,0	62,0	58,0
Weight for transport	kg	71,0	71,0	71,0

BHP_WT

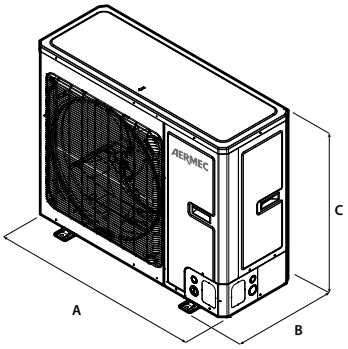
		BHP100WT	BHP160WT
Indoor unit			
A	mm	460	460
B	mm	318	318
C	mm	860	860
D	mm	568	568
E	mm	390	390
F	mm	1133	1133
Net weight	kg	60,0	60,0
Weight for transport	kg	71,0	71,0

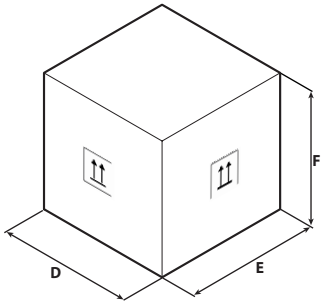
BHP_F

		BHP060F	BHP100F
Indoor unit			
A	mm	600	600
B	mm	600	600
C	mm	1756	1756
D	mm	803	803
E	mm	683	683
F	mm	2000	2000
Net weight	kg	210,0	210,0
Weight for transport	kg	233,0	233,0

Outdoor units

BHP





Carton Box Example

BHP

		BHP040	BHP060	BHP080	BHP080T	BHP100	BHP100T
Outdoor unit							
A	mm	975	975	982	982	982	982
B	mm	396	396	427	360	427	360
C	mm	702	702	787	787	787	787
D	mm	1028	1028	1097	1097	1097	1097
E	mm	458	458	478	478	478	478
F	mm	830	830	937	937	937	937
Net weight	kg	55,0	55,0	82,0	88,0	82,0	88,0
Weight for transport	kg	65,0	65,0	92,0	98,0	92,0	98,0

		BHP120	BHP120T	BHP140	BHP140T	BHP160	BHP160T
Outdoor unit							
A	mm	940	940	940	940	940	940
B	mm	460	460	460	460	460	460
C	mm	820	820	820	820	820	820
D	mm	1103	1103	1103	1103	1103	1103
E	mm	573	573	573	573	573	573
F	mm	973	973	973	973	973	973
Net weight	kg	104,0	110,0	104,0	110,0	104,0	110,0
Weight for transport	kg	114,0	121,0	114,0	121,0	114,0	121,0

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responsibility or liability for errors or omissions.

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www.aermec.com

HMG – HMG_P

Reversible air/water heat pump

HMG: Cooling capacity 32 ÷ 60 kW – Heating capacity 35 ÷ 65 kW
HMG_P: Cooling capacity 33 ÷ 60 kW – Heating capacity 36 ÷ 65 kW

- **R32 ecological refrigerant gas.**
- **Touch-screen control panel**
- **Easy and quick to install**
- **Reliability and compactness**
- **Hermetically sealed equipment**
- **Modularity**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

HMG and HMG_P are the new outdoor reversible inverter heat pump system for producing chilled and heated water.
These units are designed to meet the plant engineering needs of residential or commercial contexts, or industrial applications.
HMG and HMG_P Are designed to meet the needs of both the new constructions market and the renovation market, replacing or working alongside conventional boilers.
They can be combined with low-temperature emission systems such as floor heating or fan coils.
They are formed of fully independent modules that can be linked together to create a modular system.
The base, the structure and the panels are made of galvanized steel treated with polyester paint.
HMG_P comes supplied with the main hydraulic components needed, thereby facilitating the final installation and is supplied with Integrated hydronic kit

FEATURES

Operating limits

Operation from -20°C outside air temperature (winter) to 52°C (summer).
Production of hot water up to 50 °C.
For more information about the operating limits of these units, refer to the specific paragraph on this product data sheet.

Modularity

HMG and HMG_P unit can be installed in a modular system of reversible inverter heat pumps for producing hot and chilled water, with connectable base modules purposely designed to minimise the overall dimensions.

For HMG units it is possible to connect units with different capacity.

For HMG_P units, connection is only possible between units of the same capacity.
Modularity allows the installation of these units to be adapted to the real system development requirements, so the installed power can be increased over time in a simple and cost effective manner.
On the basis of these requirements, the user can choose either: **homogeneous modularity** or **sequential modularity**.

Homogeneous modularity

Made possible with the use of a control panel **TCP** (mandatory accessory) to be connected to the master unit of the system.
This type of modularity allows the modules to work with a homogeneous capacity control logic whilst still guaranteeing delay switch-on and switch-off to avoid power consumption peaks and intelligent defrosting (the simultaneous defrosting of up to 1/3 of the modules installed).
Up to 16 modules for HMG also of different capacity., and 3 modules for HMG_P modules of equal capacity, can be linked together with this operating mode.

For HMG
To take full advantage of the characteristics of this working mode, you are advised to use it in systems with a pump (or a group of pumps) that serves all the units. The control logic manages the switch-on and switch-off of the pump(s) on the basis of the operating conditions of the generation system.

Sequential modularity

Made possible with the use of accessories **TCP** (mandatory accessory), **IC-2P, VMF-485LINK** and **VMF-E6.**
This type of modularity allows the HMG and HMG_P units to be added to the control system of the whole hydraulic/aeraulic system, so DHW can also be managed.
Unit switch-on and switch-off is managed in a sequential manner, according to a selected control logic (free regulation, regulation by load or regulation by temperature difference).
For more information about VMF system, refer to the dedicated documentation.
Up to 4 modules for HMG also of different capacity., and 3 modules for HMG_P modules of equal capacity, can be linked together with this operating mode.
Management is optimised for systems where each unit HMG commands its own pump.

Main components

HMG

— Flow switch.
— DC brushless axial flow fans designed for aerodynamic optimisation, reducing the noise level whilst at the same time increasing the efficiency and air flow rate.
— Compressor twin rotary inverter.
— Special coil with fin golden coating.
— High-efficiency shell & tube heat exchanger (system side) for excellent reliability and a long lifespan.
— Electronic expansion valve.
— Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.

HMG_P

— DC brushless axial flow fans designed for aerodynamic optimisation, reducing the noise level whilst at the same time increasing the efficiency and air flow rate.
— Compressor twin rotary inverter.
— Special coil with fin golden coating.
— High-efficiency plate heat exchanger (system side) for excellent reliability and a long lifespan.
— Electronic expansion valve.
— Fitted with a electrical anti-freeze heater (in unit base) to avoid the formation of ice and encourage the drainage of condensate during heating operation.

Main hydraulic components HMG_P

— Flow switch.
— Inverter pump.
— Expansion tank.
— Drain valve.
— Safety valve.
— Water filter supplied (mandatory installation).

Regulation

Adjustment via **touch-screen control panel (TCP accessory compulsory)**::

— **Only for HMG**: management of (up to) two pumps (not supplied) that can work alternately, boosting the reliability of the system,
— management of (up to) two auxiliary electric resistors (not supplied),
— **Quiet** function for reduced noise operation,
— climatic regulation function,
— unit anti-freeze protection at low temperatures,
— weekly programming in time periods,
— high and low pressure protection,
— smart compressor control, extending the lifespan of the unit and enhancing its reliability,
— alarm history.

Special golden fin coil

Unlike normal batteries, this special golden epoxy coating silicon free is able to protect the heat exchanger against rust and corrosion, in areas where the air has a high salt content.



ACCESSORIES

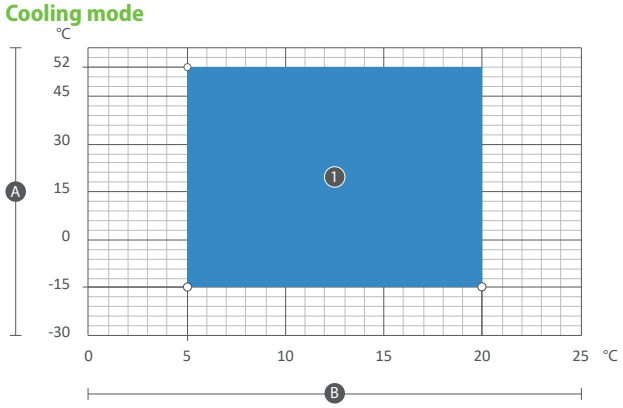
TCP: Touch-screen control panel. (Accessory compulsory).
IC-2P: Connector for communication via Mod Bus or VMF -485LINK. Accessory compulsory if combined with VMF-485LINK, or for third party supervision systems.
VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.
VMF-E6: White flush-mounting panel with 4.3 inch colour touchscreen. For the centralised command/control of a complete hydronic/aeraulic system consisting of: fan coils (up to 64 fan coil zones formed of 1 master + max. 5 slaves), heat pumps (up to 4), MZC accessories (up to 5) for the management of radiant panels (using a suitable number of VMF-REB accessories, up to 64 radiant panels associated with the fan coil zones and up to 32 radiant panels associated with the zones served by MZC), the complete management of DHW production, control of the RAS heater and/or the boiler, management of digital I/Os, control of heat recovery units and VOC probes (up to 4).
LOGATW: Diagnostic tool for air-water heat pumps.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

OPERATING LIMITS

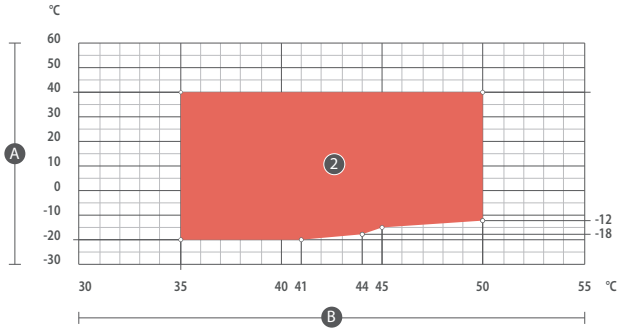
Cooling mode



KEY

1	cooling mode
A	outdoor air temperature (°C)
B	water produced temperature (°C)

Heating mode range



KEY

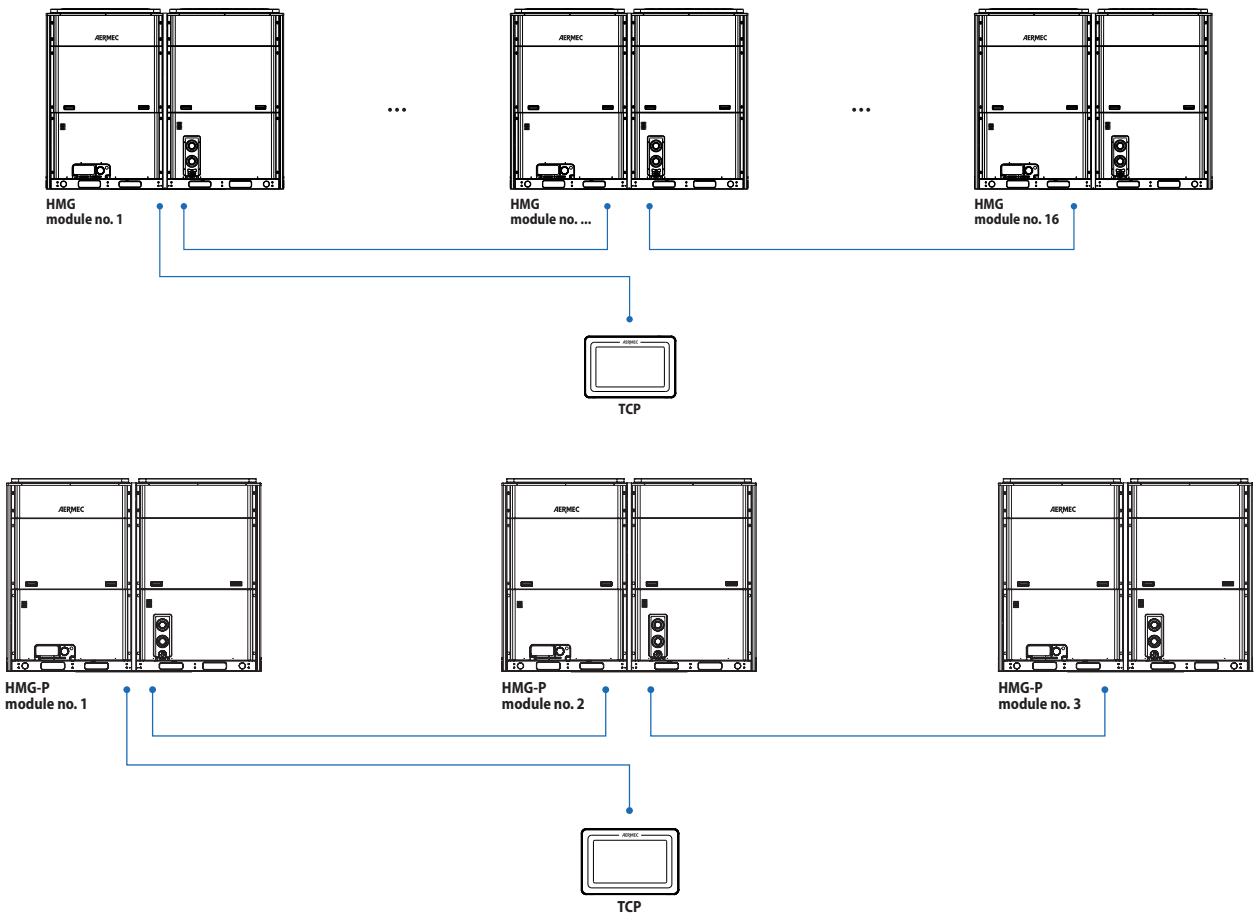
2	heating mode
A	outdoor air temperature (°C)
B	water produced temperature (°C)

MODULARITY

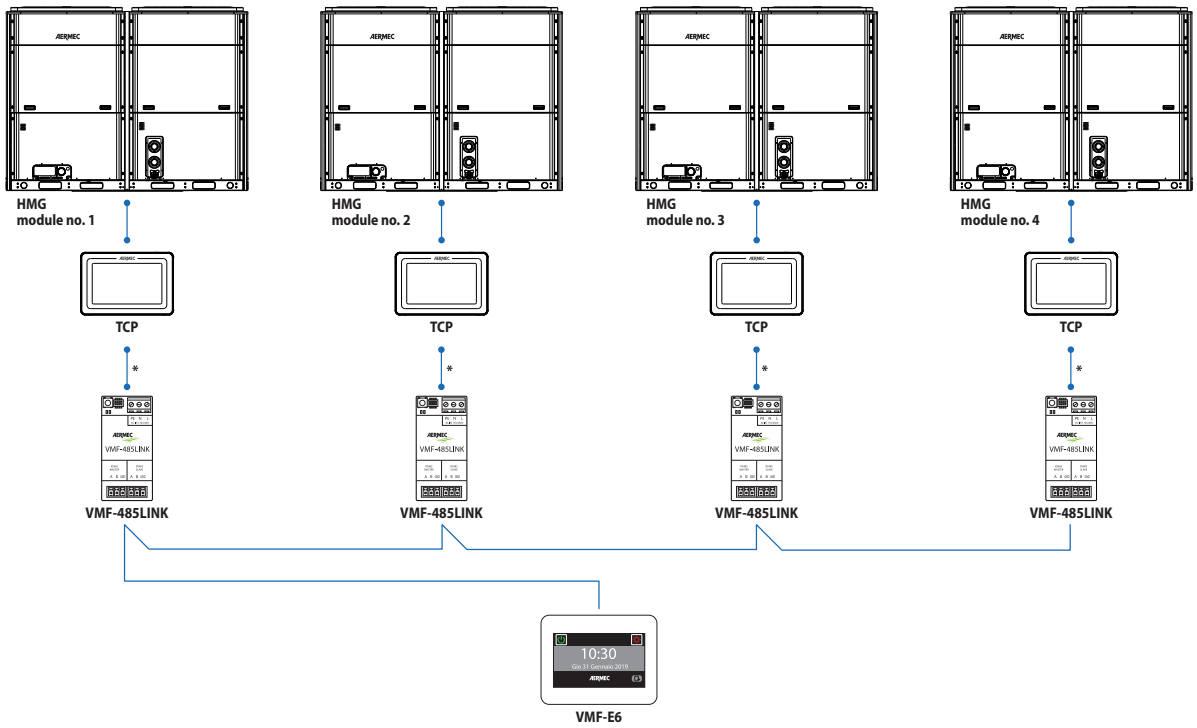
For HMG units it is possible to connect units with different capacity.

For HMG_P units, connection is only possible between units of the same capacity.

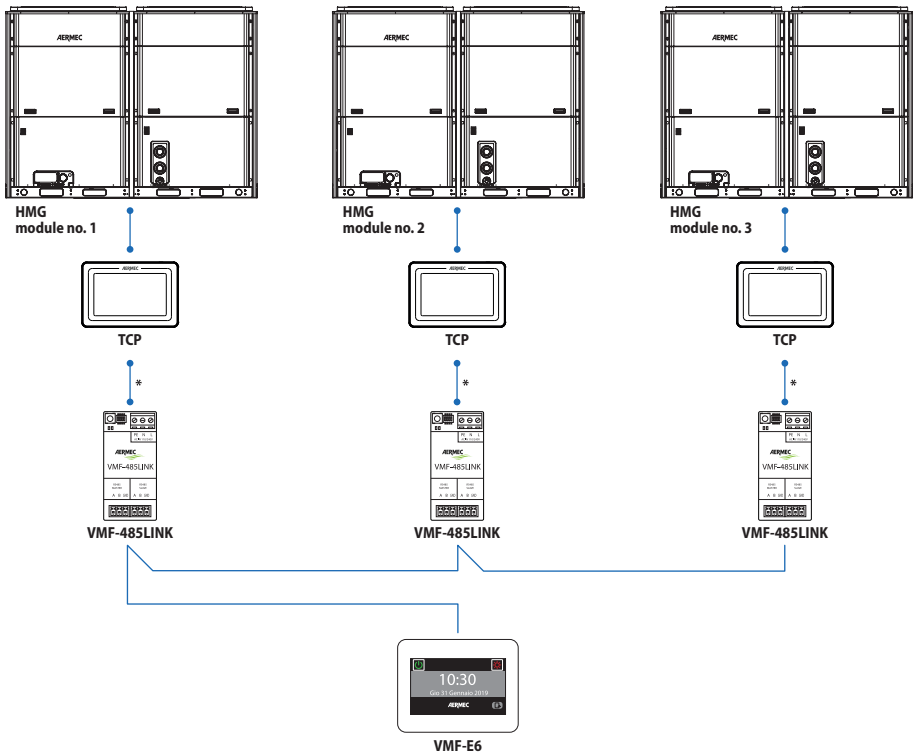
Homogeneous modularity - connection diagram



Sequential modularity - connection diagram



* Connection to be made with the aid of the accessory IC-2P.



* Connection to be made with the aid of the accessory IC-2P.

PERFORMANCE SPECIFICATIONS

		HMG0350	HMG0600
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	kW	32,0	60,0
Input power	kW	11,7	20,8
Water flow rate system side	l/h	5528	10346
Pressure drop system side	kPa	80	55
Cooling total input current	A	19,2	32,9
EER	W/W	2,74	2,88
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	35,0	65,0
Input power	kW	10,6	19,9
Water flow rate system side	l/h	6039	11249
Heating total input current	A	17,5	30,7
COP	W/W	3,30	3,27
Cooling performance 23 °C / 18 °C (3)			
Cooling capacity	kW	41,4	72,5
Input power	kW	10,5	19,1
Water flow rate system side	l/h	7198	12574
Cooling total input current	A	16,2	31,0
EER	W/W	3,94	3,80
Heating performance 30 °C / 35 °C (4)			
Heating capacity	kW	36,0	62,6
Input power	kW	8,8	15,1
Water flow rate system side	l/h	6191	10798
Heating total input current	A	12,4	24,2
COP	W/W	4,09	4,15

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

		HMG0350P	HMG0600P
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	kW	33,0	60,0
Input power	kW	11,4	21,1
Water flow rate system side	l/h	5680	10320
Useful head	kPa	203,0	210,0
Cooling total input current	A	18,7	33,2
EER	W/W	2,89	2,84
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	36,0	65,0
Input power	kW	10,9	19,7
Water flow rate system side	l/h	6190	11180
Useful head	kPa	180,0	200,0
Heating total input current	A	18,1	32,3
COP	W/W	3,30	3,30
Cooling performance 23 °C / 18 °C (3)			
Cooling capacity	kW	32,8	64,0
Input power	kW	8,0	18,0
Water flow rate system side	l/h	5648	11015
Cooling total input current	A	13,3	28,4
EER	W/W	4,10	3,57
Heating performance 30 °C / 35 °C (4)			
Heating capacity	kW	33,4	61,6
Input power	kW	8,4	16,0
Water flow rate system side	l/h	5729	10650
Heating total input current	A	13,8	25,4
COP	W/W	4,00	3,86

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.
(3) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(4) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

		HMG0350	HMG0600
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)			
Pdesignh	kW	24	51
SCOP	W/W	3,90	3,90
ηsh	%	153,00	153,00
Efficiency energy class		A++	A++
Cooling capacity with low leaving water temp (UE n° 2016/2281)			
ηsc	%	173,00	181,00
SEER	W/W	4,40	4,60

(1) Efficiencies for low temperature applications (35 °C)

		HMG0350P	HMG0600P
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)			
Pdesignh	kW	24	52
SCOP	W/W	4,00	4,01
ηsh	%	157,00	157,50
Efficiency energy class		A++	A++
Cooling capacity with low leaving water temp (UE n° 2016/2281)			
ηsc	%	183,00	186,60
SEER	W/W	4,65	4,74

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

		HMG0350	HMG0600
Electric data			
Rated current input (1)	A	22,0	52,0
Power supply			
Power supply		380-415V 3N ~ 50Hz	380-415V 3N ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

		HMG0350P	HMG0600P
Electric data			
Rated power input (1)	kW	13,40	25,60
Power supply			
Power supply		380-415V 3N ~ 50Hz	380-415V 3N ~ 50Hz

(1) The rated power input (rated current input) is the maximum input electrical power (maximum current input) from the system, in accordance with the Standards EN 60335-1 and EN 60335-2-40.

GENERAL TECHNICAL DATA

		HMG0350	HMG0600
Compressor			
Type	type	Inverter rotary	
Number	no.	1	2
Circuits	no.	1	2
Refrigerant	type	R32	
Refrigerant load circuit 1 (1)	kg	5,5	5,5
Refrigerant load circuit 2 (1)	kg	-	5,5
System side heat exchanger			
Type	type	Shell and tube	
Number	no.	1	1
Connections (in/out)	Type	G1" 1/2 (male)	G2" (male)
Fan			
Type	type	Axial	
Fan motor	type	Inverter	
Number	no.	2	2
Air flow rate	m^3/h	12600	24000
Sound data calculated in cooling mode (2)			
Sound power level	dB(A)	81,0	86,0
Sound pressure level (10 m)	dB(A)	49,5	54,3
Sound pressure level (1 m)	dB(A)	65,0	69,0

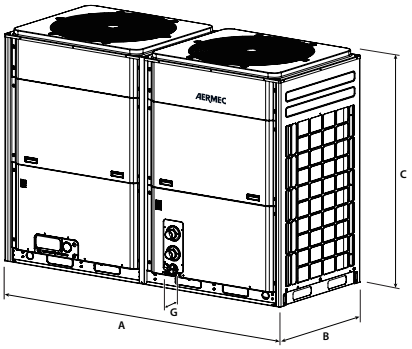
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

		HMG0350P	HMG0600P
Compressor			
Type	type	Inverter rotary	
Number	no.	1	2
Circuits	no.	1	2
Refrigerant	type	R32	
Compressor			
Refrigerant load circuit 1	kg	5,20	5,35
Refrigerant load circuit 2	kg	-	5,35
System side heat exchanger			
Type	type	Brazed plate	
Number	no.	1	1
Connections (in/out)	Type	Gas maschio	
Fan			
Type	type	Axial	
Fan motor	type	Inverter	
Number	no.	2	2
Air flow rate	m^3/h	12600	24000
Sound data calculated in cooling mode (1)			
Sound power level	dB(A)	81,0	86,0
Sound pressure level (10 m)	dB(A)	-	-
Sound pressure level (1 m)	dB(A)	-	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

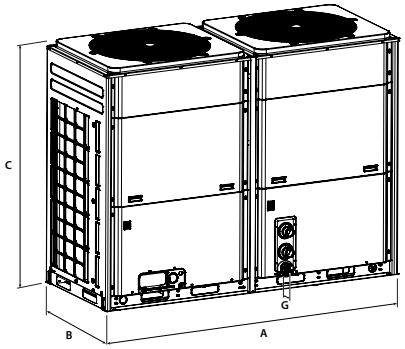
HMG



		HMG0350	HMG0600
Dimensions and weights			
A	mm	1340	2200
B	mm	765	880
C	mm	1605	1675
G	mm	80	85
D	mm	1420	2267
E	mm	920	1030
F	mm	1775	1867
Net weight	kg	405,0	686,0
Weight for transport	kg	422,0	722,0

G: tap protrusion

HMG_P



		HMG0350P	HMG0600P
Dimensions and weights			
A	mm	1340	2200
B	mm	765	880
C	mm	1605	1675
G	mm	37	57
D	mm	1775	1867
E	mm	1420	2267
F	mm	905	1030
Net weight	kg	323,0	609,0
Weight for transport	kg	340,0	645,0

G: tap protrusion

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ANLI

Reversible air/water heat pump

Cooling capacity 29,0 ÷ 42,3 kW – Heating capacity 31,4 ÷ 33,3 kW

- **Version with built-in hydronic kit inverter**
- **High efficiency also at partial loads**
- **Production of hot domestic water (d.H.W.)**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible inverter heat pump for outdoor use suitable for responding to heating / cooling requests and the production of domestic hot water. Equipped with inverter compressor, axial fans, external copper coils with aluminum fins, plate heat exchanger on the system side.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
It can be combined in systems with hydronic terminals or even with traditional radiators and perfectly meets the needs of the residential market: low noise, easy installation.

VERSIONS

° Standard
P With on/off pump
X With inverter pump

FEATURES

Operating field

Work at full load up to 42 °C outside air temperature in the summer season with the possibility of producing hot water up to 60 °C (for more details refer to the technical documentation).

Components

— High efficiency scroll and Twin rotary compressors with permanent magnet DC motors of "high side" type (with high pressure casing), designed for variable speed operation
— Differential pressure switch / flow switch as standard
— Water filter
— High efficiency heat exchangers
— Axial flow fan units for extremely quiet operation
— Fitted with EMC filters

Integrated hydronic kit

The built-in hydraulic kit includes:
— Expansion vessel
— Safety valve water side
— Air vent valve

Inverter pumps variable speed pump with water side pressure transducer installed and unit mounted microprocessor, capable of controlling various operating modes:
— ΔP constant: the differential pressure between pump inlet and outlet is kept constant, the number of revolutions is reduced with the progressive closing of the terminals;
— ΔP variable: the differential pressure is reduced as the flow rate decreases, to take into account the lower pressure drops along the supply pipes to the terminals (recommended if the development of these pipes is high).

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.
— Capable of variable water flow rates on primary circuit (terminals with 2-way valves);
— Perfect water temperature control even in systems with low water content;
— Suitable for heat pump mode summer operation to provide domestic hot water (DHW) with the DCPX fan speed controller accessory (when provided).

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.

AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SAF: Thermal buffer tank kit with instantaneous Domestic Hot Water production. For more information about SAF refer to the dedicated documentation.
SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
VT: Anti-vibration supports.
BSKW: Electric heaters kit with IP44 panel for remote mounting in a sheltered area.

NB: if the SAF thermo-accumulator is used, the MOD485-BL accessory is not required.

FACTORY FITTED ACCESSORIES

KR: Anti-freeze electric heater for the plate heat exchanger.
KRB: Electric anti-freeze resistance kit for base.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	101
AERBAC-MODU	°,P,X	•
AERLINK	°,P,X	•
AERSET	°,P,X	•
MODU-485BL	°,P,X	•
MULTICONTROL	°,P,X	•
PR3	°,P,X	•
SAF (1)	°,P,X	•
SDHW (2)	°,P,X	•
SGD	°,P,X	•
SPLW (3)	°,P,X	•
VMF-CRP	°,P,X	•

(1) For more information about SAF refer to the dedicated documentation.
(2) Probe required for MULTICONTROL for managing the domestic hot water system.
(3) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	101
PR4	°,P,X	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

BSKW: Electric heater kit

Model	Ver	101
BS6KW400T	°,P,X	•
BS9KW400T	°,P,X	•

DCPX: Condensation control temperature

Ver	101
°, P, X	DCPX53

VT: Antivibration

Ver	101
°, P, X	VT15

KR: electric heater for the heat exchanger

Ver	101
°, P, X	KR100

A grey background indicates the accessory must be assembled in the factory

KRB: Electric heater for the base

Ver	101
°, P, X	KRB3 (1)

(1) Incompatible with the condensate collection basin accessory with integrated resistance.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3,4	**ANLI**
5,6,7	**Size** 101
8	**Model**
H	Heat pump
9	**Version**
°	Standard
P	With on/off pump
X	With inverter pump
10	**Heat recovery**
°	Without heat recovery
11	**Coils**
R	Copper pipes-copper fins
S	Tinned copper
V	Copper pieps-Coated aluminium fins
°	Alluminium
12	**Operating field (1)**
°	Electronic thermostatic expansion valve
13	**Evaporator**
°	Standard
14	**Power supply**
T	400V 3N ~ 50Hz

(1) Water produced up to +4 °C. For different temperature please contact the factory.

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

ANLI - (H°)

Size		101
Cooling performance 12 °C / 7 °C (1)		
Cooling capacity	kW	28,9
Input power	kW	11,7
Cooling total input current	A	16,0
EER	W/W	2,48
Water flow rate system side	l/h	4986
Pressure drop system side	kPa	50
Heating performance 40 °C / 45 °C (2)		
Heating capacity	kW	31,5
Input power	kW	11,3
Heating total input current	A	16,0
COP	W/W	2,78
Water flow rate system side	l/h	5458
Pressure drop system side	kPa	59

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANLI - (HX)

Size		101
Cooling performance 12 °C / 7 °C (1)		
Cooling capacity	kW	29,3
Input power	kW	11,9
Cooling total input current	A	18,0
EER	W/W	2,47
Water flow rate system side	l/h	4986
Useful head system side	kPa	175
Heating performance 40 °C / 45 °C (2)		
Heating capacity	kW	31,2
Input power	kW	11,5
Heating total input current	A	17,0
COP	W/W	2,70
Water flow rate system side	l/h	5458
Useful head system side	kPa	158

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANLI - (HP)

Size		101
Cooling performance 12 °C / 7 °C (1)		
Cooling capacity	kW	29,2
Input power	kW	11,7
Cooling total input current	A	17,0
EER	W/W	2,49
Water flow rate system side	l/h	4986
Useful head system side	kPa	92
Heating performance 40 °C / 45 °C (2)		
Heating capacity	kW	31,2
Input power	kW	11,4
Heating total input current	A	17,0
COP	W/W	2,74
Water flow rate system side	l/h	5458
Useful head system side	kPa	76

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

ANLI - (H°)

Size		101
Cooling performance 23 °C / 18 °C (1)		
Cooling capacity	kW	42,3
Input power	kW	13,1
Cooling total input current	A	19,0
EER	W/W	3,22
Water flow rate system side	l/h	7301
Pressure drop system side	kPa	107
Heating performance 30 °C / 35 °C (2)		
Heating capacity	kW	33,3
Input power	kW	9,5
Heating total input current	A	13,0
COP	W/W	3,51
Water flow rate system side	l/h	5763
Pressure drop system side	kPa	66

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANLI - (HX)

Size		101
Cooling performance 23 °C / 18 °C (1)		
Cooling capacity	kW	42,3
Input power	kW	14,3
Cooling total input current	A	21,0
EER	W/W	2,96
Water flow rate system side	l/h	7301
Useful head system side	kPa	81
Heating performance 30 °C / 35 °C (2)		
Heating capacity	kW	33,3
Input power	kW	10,5
Heating total input current	A	15,0
COP	W/W	3,17
Water flow rate system side	l/h	5763
Useful head system side	kPa	147

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANLI - (HP)

Size		101
Cooling performance 23 °C / 18 °C (1)		
Cooling capacity	kW	42,3
Input power	kW	14,3
Cooling total input current	A	21,0
EER	W/W	2,96
Water flow rate system side	l/h	7301
Useful head system side	kPa	81
Heating performance 30 °C / 35 °C (2)		
Heating capacity	kW	33,3
Input power	kW	10,5
Heating total input current	A	15,0
COP	W/W	3,17
Water flow rate system side	l/h	5763
Useful head system side	kPa	147

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			101
Cooling capacity with low leaving water temp (UE n° 2016/2281)			
SEER	°	W/W	3,81
	P,X	W/W	3,57
ηsc	°	%	149,20
	P,X	%	139,80
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)			
Pdesignh	°,P,X	kW	-
SCOP	°,X	W/W	3,23
	P	W/W	3,25
ηsh	°,X	%	126,00
	P	%	127,00
Efficiency energy class	°,P,X		A+

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

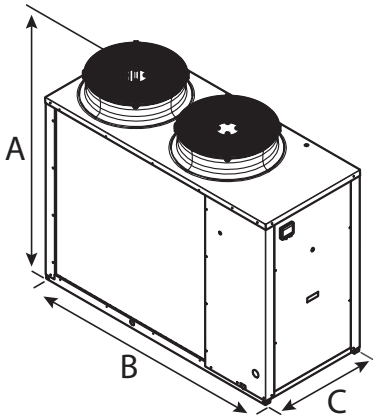
Size			101
Electric data			
Maximum current (FLA)	°	A	21,0
	P	A	24,4
	X	A	25,5
Peak current (LRA)	°,P,X	A	-

GENERAL TECHNICAL DATA

Size			101
Compressor			
Type	°,P,X	type	Scroll
Number	°,P,X	no.	1
Compressor regulation	°,P,X	Type	Inverter
Circuits	°,P,X	no.	1
Refrigerant	°,P,X	type	R410A
Refrigerant charge (1)	°,P,X	kg	4,5
System side heat exchanger			
Type	°,P,X	type	Brazed plate
Number	°,P,X	no.	1
Hydraulic connections			
Connections (in/out)	°,P,X	Type	Gas - F
Sizes (in/out)	°,P,X	Ø	1"1/4
Fan			
Type	°,P,X	type	Axial
Fan motor	°,P,X	type	On/Off
Number	°,P,X	no.	2
Air flow rate	°,P,X	m^3/h	13200
Sound data calculated in cooling mode (2)			
Sound power level	°,P,X	dB(A)	76,0
Sound pressure level (10 m)	°,P,X	dB(A)	44,5

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			101
Dimensions and weights			
A	°,P,X	mm	1450
B	°,P,X	mm	1750
C	°,P,X	mm	750
Empty weight	°	kg	293
	P,X	kg	308

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume
responsibility or liability for errors or omissions.

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ANK 020-150

Reversible air/water heat pump

Cooling capacity 6,8 ÷ 39,8 kW – Heating capacity 8,0 ÷ 35,3 kW

- **Production of hot water up to 60 °C**
- **Production of hot domestic water with external temperatures from –20 °C up to 42 °C**
- **Compact dimensions**
- **Quick & easy installation**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.
It's optimised for use in heating mode, and can be combined not only with low-temperature emission systems such as floor heating or fan coils, but also conventional radiators.
Equipped with scroll compressors, axial fans, external coil with aluminium louvers, plate heat exchanger on the side.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A With storage tank and pump
P With pump

FEATURES

Operating field

Working at full load up to -20°C outside air temperature in winter, and up to 46°C in summer. Possibility production technical hot water production up to 60°C (for more information see the technical documentation).

Soft-start

Version with Integrated hydronic kit

To have a Plug & Play solution is also available the version with the integrated Hydronic group that contains the main hydraulic components including the water filter.

Inverter fan

Inverter fans as standard in size up 020 to 085 in all versions.

■ *The DCPX accessory is not required for these sizes.*

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring
VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the

VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
VT: Anti-vibration supports.

BSKW: Electric heaters kit with IP44 panel for remote mounting in a sheltered area.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
KRB: Electric anti-freeze resistance kit for base.
BDX: Condensate drip with resistance

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	020	030	040	045	050	085	100	150
AERBAC-MODU	°,A,P	•	•	•	•	•	•	•	•
AERLINK	°,A,P	•	•	•	•	•	•	•	•
AERSET	°,A,P	•	•	•	•	•	•	•	•
MODU-485BL	°,A,P	•	•	•	•	•	•	•	•
MULTICONTROL	°,A,P	•	•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	•
SDHW (1)	°,A,P	•	•	•	•	•	•	•	•
SGD	°,A,P	•	•	•	•	•	•	•	•
SPLW (2)	°,A,P	•	•	•	•	•	•	•	•
VMF-CRP	°,A,P	•	•	•	•	•	•	•	•

(1) Probe required for MULTICONTROL for managing the domestic hot water system.
(2) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	020	030	040	045	050	085	100	150
PR4	°,A,P	•	•	•	•	•	•	•	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

Condensation control temperature

Ver	020	030	040	045	050	085	100	150
°, A, P	-	-	-	-	-	-	DCPX53	DCPX53

The accessory cannot be fitted on the configurations indicated with -

Electric heater kit with case IP44

Ver	020	030	040	045	050	085	100	150
Power supply: M								
°, A, P	BS4KW230M, BS6KW230M	BS4KW230M, BS6KW230M	BS4KW230M, BS6KW230M	-	-	-	-	-
Power supply: °								
°, A, P	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T

Antivibration

Ver	020	030	040	045	050	085	100	150
°, P	VT9	VT9	VT9	VT9	VT9	VT9	VT15	VT15
A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15	VT15

Device for peak current reduction.

Ver	020	030	040	045	050	085	100	150
°, A, P	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Electric heater for the base.

Ver	020	030	040	045	050	085	100	150
°, A, P	KRB1 (1)	KRB2 (1)	KRB2 (1)	KRB2 (1)	KRB2 (1)	KRB2 (1)	KRB3 (1)	KRB3 (1)

(1) Incompatible with the condensate collection basin accessory with integrated resistance.
A grey background indicates the accessory must be assembled in the factory

Condensate drip

Ver	020	030	040	045	050	085	100	150
°, A, P	BDX8	BDX9	BDX9	BDX9	BDX9	BDX9	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**ANK**
4,5,6		**Size** 020, 030, 040, 045, 050, 085, 100, 150
7		**Model**
	H	Heat pump
8		**Version**
	°	Standard
	A	With storage tank and pump
	P	With pump
9		**Execution**
	°	Standard
10		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
11		**Operating field**
	Y	Low temperature mechanic thermostatic valve (1)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (3)
12		**Evaporator**
	°	Standard
13		**Power supply**
	M	230V ~ 50Hz (4)
	°	400V 3N ~ 50Hz (5)

(1) Water produced from 0 °C ÷ -8 °C
(2) Water produced from +4 °C up to +0 °C
(3) Water produced up to +4 °C
(4) Only for ANK 020 ÷ 045 sizes
(5) For ANK 020 ÷ 045 sizes

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

ANK - (°) / 12/7 °C - 40/45 °C

Size		020	030	040	045	050	085	100	150
Power supply: M									
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	6,8	8,2	9,6	11,7	-	-	-	-
Input power	kW	2,3	2,8	3,2	3,7	-	-	-	-
Cooling total input current	A	11,0	13,0	16,0	19,0	-	-	-	-
EER	W/W	2,92	2,91	2,97	3,16	-	-	-	-
Water flow rate system side	l/h	1179	1406	1649	2018	-	-	-	-
Pressure drop system side	kPa	16	9	14	14	-	-	-	-
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	8,0	10,0	10,9	13,5	-	-	-	-
Input power	kW	2,5	3,1	3,4	3,8	-	-	-	-
Heating total input current	A	12,0	15,0	17,0	19,0	-	-	-	-
COP	W/W	3,16	3,24	3,15	3,50	-	-	-	-
Water flow rate system side	l/h	1376	1738	1881	2332	-	-	-	-
Pressure drop system side	kPa	22	14	18	19	-	-	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		020	030	040	045	050	085	100	150
Power supply: °									
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	6,8	8,2	10,5	11,6	13,1	15,5	25,3	29,3
Input power	kW	2,3	2,8	3,5	4,0	4,3	5,2	8,1	10,0
Cooling total input current	A	4,3	5,6	7,1	7,7	8,7	11,0	17,0	20,0
EER	W/W	2,93	2,91	2,98	2,93	3,03	3,00	3,12	2,92
Water flow rate system side	l/h	1169	1406	1811	1997	2253	2677	4362	5056
Pressure drop system side	kPa	16	9	16	14	18	24	32	36
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	8,0	10,0	12,2	14,0	15,3	17,4	27,1	33,3
Input power	kW	2,5	3,1	3,8	4,2	4,4	5,0	8,3	10,5
Heating total input current	A	4,7	6,2	7,6	8,0	9,0	10,0	18,0	21,0
COP	W/W	3,21	3,24	3,25	3,38	3,48	3,46	3,24	3,19
Water flow rate system side	l/h	1376	1738	2117	2430	2656	3021	4689	5774
Pressure drop system side	kPa	22	14	22	21	25	31	37	47

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANK - (A/P) / 12/7 °C - 40/45 °C

Size		020	030	040	045	050	085	100	150
Power supply: M									
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	6,9	8,2	9,7	11,8	-	-	-	-
Input power	kW	2,3	2,8	3,2	3,7	-	-	-	-
Cooling total input current	A	12,0	14,0	16,0	20,0	-	-	-	-
EER	W/W	2,99	2,96	3,02	3,17	-	-	-	-
Water flow rate system side	l/h	1179	1406	1649	2018	-	-	-	-
Useful head system side	kPa	78	71	62	70	-	-	-	-
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	7,9	9,9	10,8	13,4	-	-	-	-
Input power	kW	2,5	3,1	3,4	3,9	-	-	-	-
Heating total input current	A	13,0	15,0	18,0	20,0	-	-	-	-
COP	W/W	3,17	3,25	3,16	3,45	-	-	-	-
Water flow rate system side	l/h	1376	1738	1881	2332	-	-	-	-
Useful head system side	kPa	72	58	52	57	-	-	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		020	030	040	045	050	085	100	150
Power supply: °									
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	6,9	8,2	10,6	11,7	13,2	15,7	25,6	29,7
Input power	kW	2,3	2,8	3,5	4,0	4,3	5,2	8,2	10,4
Cooling total input current	A	4,6	6,0	7,5	8,3	9,3	11,0	18,0	22,0
EER	W/W	3,00	2,97	3,05	2,95	3,06	3,03	3,12	2,87
Water flow rate system side	l/h	1169	1406	1811	1997	2253	2677	4362	5056
Useful head system side	kPa	78	82	70	81	74	63	115	144
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	7,9	9,9	12,1	13,9	15,2	17,3	26,8	33,0
Input power	kW	2,4	3,0	3,7	4,2	4,4	5,0	8,4	10,8
Heating total input current	A	5,0	6,6	8,0	8,6	9,6	11,0	19,0	23,0
COP	W/W	3,22	3,26	3,27	3,35	3,46	3,44	3,18	3,05
Water flow rate system side	l/h	1376	1738	2117	2430	2656	3021	4689	5774
Useful head system side	kPa	72	76	61	68	59	50	105	109

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

ANK - (°) / 23/18 °C - 30/35 °C

Size		020	030	040	045	050	085	100	150
Power supply: M									
Cooling performance 23 °C / 18 °C (1)									
Cooling capacity	kW	9,5	11,4	13,3	16,3	-	-	-	-
Input power	kW	2,5	2,9	3,4	3,9	-	-	-	-
Cooling total input current	A	12,0	14,0	17,0	19,0	-	-	-	-
EER	W/W	3,86	3,86	3,94	4,19	-	-	-	-
Water flow rate system side	l/h	1652	1969	2310	2826	-	-	-	-
Pressure drop system side	kPa	31	18	27	27	-	-	-	-
Heating performance 30 °C / 35 °C (2)									
Heating capacity	kW	8,5	10,6	11,6	14,0	-	-	-	-
Input power	kW	2,2	2,6	2,8	3,3	-	-	-	-
Heating total input current	A	10,0	12,0	14,0	16,0	-	-	-	-
COP	W/W	3,96	4,04	4,08	4,30	-	-	-	-
Water flow rate system side	l/h	1473	1830	2001	2424	-	-	-	-
Pressure drop system side	kPa	25	15	21	20	-	-	-	-

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

Size		020	030	040	045	050	085	100	150
Power supply: °									
Cooling performance 23 °C / 18 °C (1)									
Cooling capacity	kW	9,5	11,4	14,7	16,2	18,2	21,7	34,0	39,4
Input power	kW	2,4	2,9	3,7	4,2	4,5	5,5	8,8	10,9
Cooling total input current	A	4,5	5,8	7,4	8,0	9,1	11,0	18,0	22,0
EER	W/W	3,88	3,86	3,95	3,89	4,02	3,96	3,86	3,61
Water flow rate system side	l/h	1637	1969	2536	2797	3155	3749	5889	6826
Pressure drop system side	kPa	31	18	31	27	35	47	58	66
Heating performance 30 °C / 35 °C (2)									
Heating capacity	kW	8,5	10,6	13,0	14,6	16,2	18,2	29,2	35,6
Input power	kW	2,1	2,6	3,1	3,5	3,8	4,3	6,9	8,8
Heating total input current	A	4,0	5,2	6,2	6,8	7,7	8,9	15,0	18,0
COP	W/W	4,03	4,04	4,20	4,15	4,31	4,18	4,21	4,07
Water flow rate system side	l/h	1473	1830	2253	2525	2799	3137	5041	6147
Pressure drop system side	kPa	25	15	25	22	28	33	43	53

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANK - (A/P) / 23/18 °C - 30/35 °C

Size		020	030	040	045	050	085	100	150
Power supply: M									
Cooling performance 23 °C / 18 °C (1)									
Cooling capacity	kW	9,6	11,5	13,4	16,4	-	-	-	-
Input power	kW	2,4	2,9	3,4	3,9	-	-	-	-
Cooling total input current	A	12,0	14,0	17,0	20,0	-	-	-	-
EER	W/W	3,99	3,93	4,00	4,18	-	-	-	-
Water flow rate system side	l/h	1652	1969	2310	2826	-	-	-	-
Useful head system side	kPa	62	47	29	32	-	-	-	-
Heating performance 30 °C / 35 °C (2)									
Heating capacity	kW	8,6	10,8	11,9	13,8	-	-	-	-
Input power	kW	2,2	2,6	2,9	3,4	-	-	-	-
Heating total input current	A	11,0	13,0	15,0	17,0	-	-	-	-
COP	W/W	3,88	4,11	4,10	4,11	-	-	-	-
Water flow rate system side	l/h	1486	1877	2061	2397	-	-	-	-
Useful head system side	kPa	58	65	58	79	-	-	-	-

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

Size		020	030	040	045	050	085	100	150
Power supply: °									
Cooling performance 23 °C / 18 °C (1)									
Cooling capacity	kW	9,5	11,5	14,8	16,3	18,4	21,8	34,3	39,8
Input power	kW	2,4	2,9	3,6	4,2	4,5	5,5	8,9	11,4
Cooling total input current	A	5,1	6,5	8,1	9,2	10,0	12,0	19,0	24,0
EER	W/W	4,00	3,98	4,06	3,92	4,05	3,99	3,85	3,48
Water flow rate system side	l/h	1637	1969	2536	2797	3155	3749	5889	6826
Useful head system side	kPa	62	70	45	55	38	16	66	51
Heating performance 30 °C / 35 °C (2)									
Heating capacity	kW	8,4	10,5	12,9	14,5	16,1	18,0	28,9	35,3
Input power	kW	2,1	2,6	3,0	3,5	3,8	4,3	7,0	9,2
Heating total input current	A	4,6	5,9	6,9	7,9	8,8	10,0	16,0	20,0
COP	W/W	4,07	4,08	4,26	4,12	4,28	4,16	4,11	3,85
Water flow rate system side	l/h	1473	1830	2253	2525	2799	3137	5041	6147
Useful head system side	kPa	69	73	56	65	54	45	95	90

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Energy index ANK - 400V

Size			020	030	040	045	050	085	100	150
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
Seasonal efficiency	°	%	119,80	124,10	129,80	129,80	135,00	135,00	149,40	142,30
	A,P	%	120,70	125,00	132,50	130,10	135,40	137,10	146,60	137,00
SEER	°	W/W	3,07	3,18	3,32	3,32	3,45	3,45	3,81	3,63
	A,P	W/W	3,09	3,20	3,59	3,33	3,46	3,50	3,74	3,50
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)										
Efficiency energy class	°		A+	A+	A+	A+	A+	A+	A++	A++
	A,P		A+	A+	A+	A+	A+	A+	A++	A+
ηsh	°	%	132,00	133,00	137,00	136,00	141,00	133,00	153,00	153,00
	A,P	%	135,00	137,00	140,00	138,00	143,00	135,00	150,00	145,00
SCOP	°	W/W	3,38	3,40	3,50	3,48	3,60	3,40	3,90	3,90
	A,P	W/W	3,45	3,50	3,58	3,53	3,65	3,45	3,83	3,70

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

Energy index ANK - 230V

Size			020	030	040	045
Power supply: M						
SEER - 12/7 (EN14825: 2018) (1)						
Seasonal efficiency	°	%	119,60	124,10	127,80	139,00
	A,P	%	121,10	125,00	130,70	138,40
SEER	°	W/W	3,07	3,18	3,27	3,55
	A,P	W/W	3,10	3,20	3,34	3,54
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)						
Efficiency energy class	°,A,P		A+	A+	A+	A+
Pdesignh	°,A,P	kW	7	9	10	12
ηsh	°	%	130,00	133,00	134,00	139,00
	A,P	%	133,00	137,00	137,00	141,00
SCOP	°	W/W	3,33	3,40	3,43	3,55
	A,P	W/W	3,40	3,50	3,50	3,60

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			020	030	040	045	050	085	100	150
Power supply: M										
Electric data										
Maximum current (FLA)	°	A	14,0	19,0	22,0	25,0	-	-	-	-
	A	A	14,6	20,1	22,9	26,3	-	-	-	-
	P	A	14,6	20,1	22,9	26,3	-	-	-	-
Peak current (LRA)	°,P	A	-	-	-	-	-	-	-	-
	A	A	-	-	-	-	-	-	-	-
Peak current with Soft-start	°	A	45,0	45,0	45,0	45,0	-	-	-	-
	A	A	45,7	45,7	45,7	46,3	-	-	-	-
	P	A	45,7	45,7	45,7	46,3	-	-	-	-

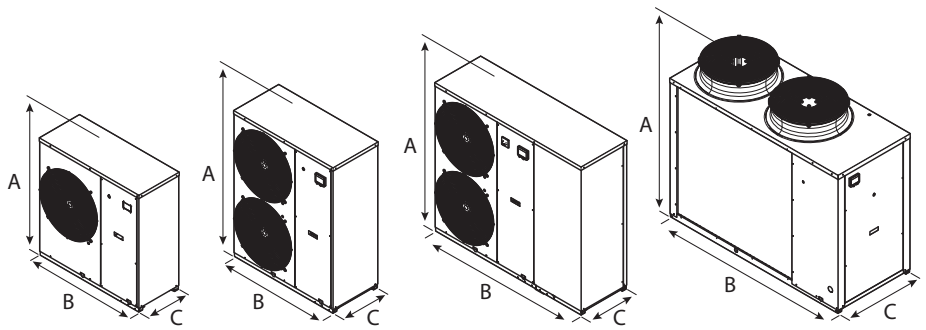
Size			020	030	040	045	050	085	100	150
Power supply: °										
Electric data										
Maximum current (FLA)	°	A	6,0	8,0	9,0	11,0	12,0	12,0	22,0	26,0
	A,P	A	6,8	8,4	9,8	11,9	13,1	13,6	23,6	28,9
Peak current (LRA)	°	A	40,0	40,0	54,0	61,0	71,0	91,0	73,0	105,0
	A,P	A	40,4	41,0	55,0	62,6	72,6	92,6	74,6	107,8
Peak current with Soft-start	°,A,P	A	-	-	-	-	-	-	-	-

GENERAL TECHNICAL DATA

Size			020	030	040	045	050	085	100	150
Compressor										
Type	°,A,P	type				Scroll				
Compressor regulation	°,A,P	Type				On-off				
Number	°,A,P	no.	1	1	1	1	1	1	2	2
Circuits	°,A,P	no.	1	1	1	1	1	1	1	1
Refrigerant	°,A,P	type				R410A				
Refrigerant charge (1)	°,A,P	kg	2,9	4,3	4,3	5,5	6,0	6,0	12,0	12,6
System side heat exchanger										
Type	°,A,P	type				Brazed plate				
Number	°,A,P	no.	1	1	1	1	1	1	1	1
Hydraulic connections										
Connections (in/out)	°,A,P	Type				Gas - F				
Size (in)	°,A,P	Ø				1"¼				
Size (out)	°,A,P	Ø				1"¼				
Fan										
Type	°,A,P	type				Axial				
Fan motor	°,A,P	type	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Asynchronous	Asynchronous
Number	°,A,P	no.	1	1	2	2	2	2	2	2
Air flow rate	°,A,P	m^3/h	3500	8000	8000	7500	7500	7500	14500	14500
Sound data calculated in cooling mode (2)										
Sound power level	°,A,P	dB(A)	68,0	70,5	70,5	70,5	70,5	70,5	77,0	78,0
Sound pressure level (10 m)	°,A,P	dB(A)	36,7	39,2	39,1	39,1	39,1	39,1	72,6	73,6

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



ANK H-HP **ANK HA** **ANK 100-150 H-HP-HA**

Size			020	030	040	045	050	085	100	150
Dimensions and weights										
A	°,A,P	mm	1028	1281	1281	1281	1281	1281	1450	1450
B	°,P	mm	1000	1000	1000	1000	1000	1000	1750	1750
	A	mm	1358	1450	1450	1450	1450	1450	1750	1750
C	°,A,P	mm	400	400	450	450	450	450	750	750
Empty weight	°	kg	118	149	152	165	172	174	296	341
	A	kg	160	211	214	232	238	241	364	412
	P	kg	123	154	157	175	182	184	314	362

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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SHW

Heat pump water heater

- **New R290 ecological refrigerant gas.**
- **Production of hot water up to 65°C (75°C with the electric heater)**
- **Full inverter system**
- **Enamelled tank**
- **Electronic anode**
- **Micro-channel exchanger**



DESCRIPTION

The heat pump water heater line Aermec represents a sustainable solution for domestic hot water production, ensuring high energy savings due to their high efficiency.
Unlike conventional water heaters, heat pump water heaters generate hot water by utilising heat in the air, thus reducing electricity costs.
The new air to water heat pump water heaters SHW feature a new natural refrigerant R290, a cutting-edge choice in domestic solutions, to provide hot water in a sustainable, environmentally friendly and comfortable manner.
R290 is a natural refrigerant with a global warming potential (GWP) of 3.
The series SHW is an innovation that perfectly combines silent operation and compact design with unrivalled efficiency. Its space-saving design lends itself to any home environment, while its advanced heat pump technology optimises energy saving, ensuring high energy performance.
The units SHW200S and SHW250S are also equipped with an additional coil that enables integration of an auxiliary heat source.

FEATURES

The heat pump water heater SHW is designed to provide the best possible experience and maximum savings by means of:
— **optimised to reduce noise and energy consumption**
— **coil for integral sources**: (only for models SHW200S and SHW250S)
— **automatic anti-legionella cycle**: to eliminate and prevent potential legionella formation
— **ductable up to 40m**: for models with wall installation and up to 11m for models with floor installation
— **standard electric heater**
— **The units SHW080 - SHW110 - SHW150 are equipped with an electric power supply cable with Schuko plug**

All units in the series SHW are equipped with a micro-channel heat exchanger. This fully covers the tank, significantly increasing the exchange surface area with respect to a classic tank with an internal coil. Furthermore, the heat exchanger is made up of high-quality materials that increase its resistance to high temperatures and corrosion.

VERSIONS

Wall-mount installation/ductable unit.
SHW080 - SHW110 - SHW150
Floor installation/ductable unit.
SHW150 - SHW200 - SHW250
Floor installation/ductable unit with solar coil.
SHW200S - SHW250S

special functions

Eco: allows the user to set time periods during which priority for DHW production is assigned to the heat pump.
Boost: this function enables to heat water faster by using both the heat pump and the electric heater simultaneously.
Holiday Mode: this function ensures hot water is available when returning home after a holiday period, preventing the tank from remaining operational during the absence period. Furthermore, the unit activates the anti-legionella cycle to obtain hot, bacteria-free water.
Quantity display: the dedicated icon on the display enables to immediately check the amount of water available in the tank
Photovoltaic Contact: when this contact is enabled, the unit's set point is increased, enabling electrical heater and compressor simultaneous operation.
External Contact: When this contact is enabled, the unit can start according to the set point.

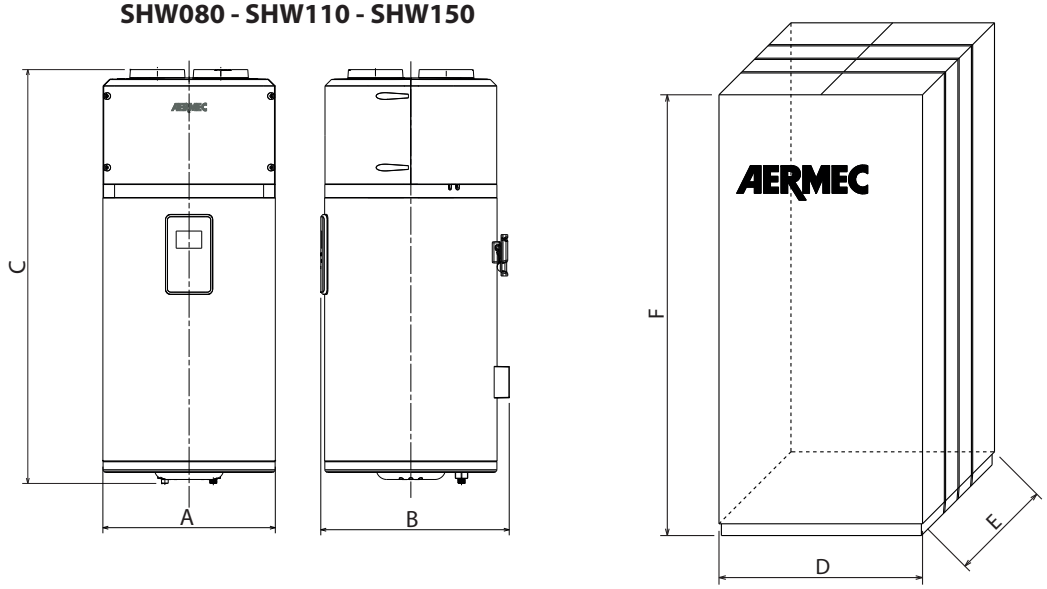
TECHNICAL DATA

		SHW080	SHW110	SHW150	SHW200	SHW200S	SHW250	SHW250S
Storage tank (DHW)								
Nominal volume of the tank	L	82	102	149	192	185	246	240
Operating range	°C	-7 ~ 45	-7 ~ 45	-7 ~ 45	-7 ~ 45	-7 ~ 45	-7 ~ 45	-7 ~ 45
Power supply		220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
Maximum operating pressure	Mpa	0,8	0,8	0,8	0,7	0,7	0,7	0,7
Solar heat exchanger		no	no	no	no	si	no	si
Anode type		Electronic anode	Electronic anode	Electronic anode	Electronic anode	Electronic anode	Electronic anode	Electronic anode
Protection rating		IPX4	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4
Insulation thickness	mm	40	40	40	50	50	50	50
Set temperature	°C	56	56	56	56	56	56	56
Rated power input (PdC)	W	370	370	370	535	535	535	535
Rated power input (electrical heater)	W	1200	1200	1200	1500	1500	1500	1500
Rated total power input	W	1570	1570	1570	2035	2035	2035	2035
DHW temperature produced (heat pump only)	°C	35 ~ 65	35 ~ 65	35 ~ 65	35 ~ 65	35 ~ 65	35 ~ 65	35 ~ 65
DHW temperature produced (heat pump only + electrical heater)	°C	35 ~ 75	35 ~ 75	35 ~ 75	35 ~ 75	35 ~ 75	35 ~ 75	35 ~ 75
Refrigerant gas								
Type	type	R290	R290	R290	R290	R290	R290	R290
Refrigerant charge	kg	0,12	0,12	0,12	0,15	0,15	0,15	0,15
GWP		3,0	3,0	3,0	3,0	3,0	3,0	3,0
Sound data								
Sound power level	dB(A)	50,0	50,0	50,0	50,0	50,0	50,0	50,0
Sound pressure level (1 m)	dB(A)	37,7	37,7	37,7	36,0	36,0	36,0	36,0
Electric data								
Type of electrical connection	type	Schuko	Schuko	Schuko	Al magnetotermico	Al magnetotermico	Al magnetotermico	Al magnetotermico
Magnet circuit breaker	A	16	16	16	16	16	16	16
Section of the power cable	mm^2	3*1.5	3*1.5	3*1.5	3*1.5	3*1.5	3*1.5	3*1.5
Performance specifications								
COP (external air 2°C)	W/W	2,38	2,55	2,65	2,80	2,43	2,67	2,81
COP (external air 7°C)	W/W	2,91	2,79	3,03	3,27	3,27	3,20	3,29
COP (external air 14°C)	W/W	3,07	3,32	3,39	3,52	3,55	3,45	3,46
Heating time (external air 7°C)	h	4h26	5h38	8h37	8h20	6h43	10h31	10h5
Heating time (external air 14°C)	h	3h48	4h47	7h11	6h55	6h07	9h02	8h42
Air flow rate	m^3/h	180	180	180	300	300	300	300
Load Profile of Water Heaters, type		M	M	L	L	L	XL	L
Input power in standby (Pes)	W	15,3	19,3	22,5	22,0	35,0	43,0	35,0
Maximum volume of usable hot water at 40°C / V40	l	103,8	133,0	190,0	221,0	229,0	314,0	313,0
Efficiency energy class		A+	A+	A+	A+	A+	A+	A+
Reference temperature of hot water (θ'WH)	°C	53,75	53,88	52,98	54,11	53,11	54,05	53,70
Connections								
Water outlet	inch	R 1/2" M	R 1/2" M	R 1/2" M	Rp 3/4	Rp 3/4	Rp 3/4	Rp 3/4
Inlet water / Condensate drainage	inch	R 1/2" M	R 1/2" M	R 1/2" M	Rp 3/4	Rp 3/4	Rp 3/4	Rp 3/4
Safety valve	inch	R 1/2" M	R 1/2" M	R 1/2" M	Rp 3/4	Rp 3/4	Rp 3/4	Rp 3/4
Maximum length of ducts (supply + exhaust) (Ø160 - PVC pipe)	m	40	40	40	11	11	11	11
Maximum length of ducts (supply + exhaust) (Ø160 - corrugated pipe)	m	22	22	22	6	6	6	6
Maximum length of ducts (supply + exhaust) (Ø180 - PVC pipe)	m	-	-	-	22	22	22	22
Maximum length of ducts (supply + exhaust) (Ø180 - corrugated pipe)	m	-	-	-	13	13	13	13
Maximum working pressure of auxiliary coil	MPa	-	-	-	-	2,0	-	2,0
Auxiliary serpentine surface	m^2	-	-	-	-	0,585	-	0,585
Dimensions and weights								
Empty weight	kg	51	54	64	87	97	99	108
Weight for transport	kg	58,0	62,0	83,0	110,0	120,0	122,0	132,0

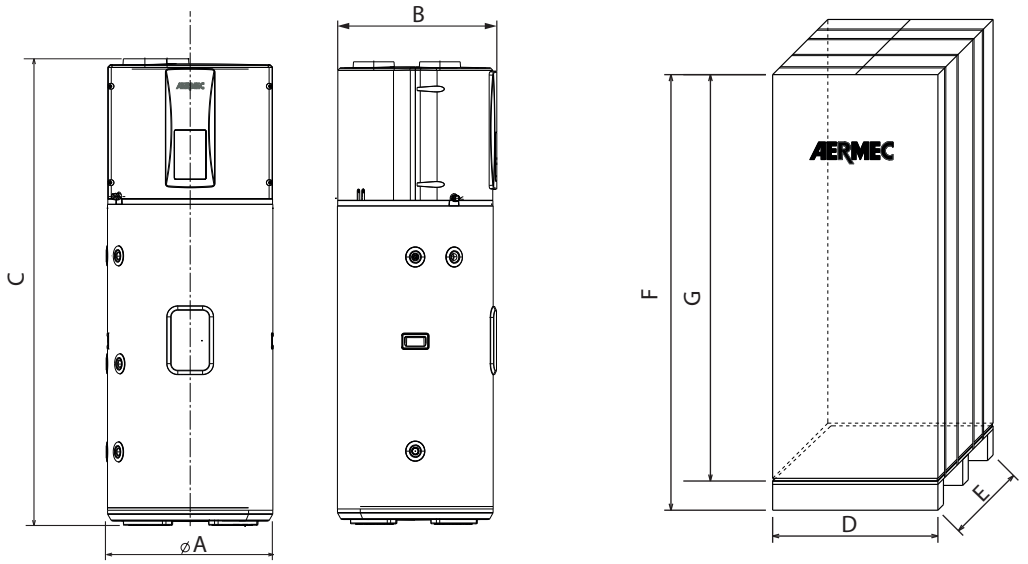
Performance specifications: in accordance EN 16147;
COP and noise data are calculated in the laboratory: The COP value is obtained with an outside air temperature of 2°C - 7°C - 14°C, inlet water temperature 10°C and the produced water set of 55°C for the (units SHW080-SHW110 according to EN 16147), inlet water temperature of 10°C and produced water set of 54°C for the (units SHW150-SHW200-SHW200S-SHW250-SHW250S).
Sound power level: measured with an outdoor air temperature of 7°C, an inlet water temperature of 10°C, and a supply water temperature setpoint of 55°C in accordance with EN12102.
In addition to the electronic anode, the unit is also equipped with a magnesium rod to protect the unit in the event of a power outage.

DIMENSIONS

SHW080 - SHW110 - SHW150



SHW200 - SHW200S - SHW250 - SHW250S



		SHW080	SHW110	SHW150	SHW200	SHW200S	SHW250	SHW250S
Dimensions and weights								
A	mm	492	492	492	600	600	600	600
B	mm	538	538	538	615	615	615	615
C	mm	1184	1334	1694	1697	1697	1985	1985
Net weight	kg	51,0	54,0	64,0	87,0	97,0	99,0	108,0
Dimensions and weights for transport								
D	mm	587	587	587	736	736	736	736
E	mm	587	587	587	695	695	695	695
F	mm	1247	1397	1894	1940	1940	2250	2250
G	mm	-	-	-	1810	1810	2120	2120
Weight for transport	kg	58,0	62,0	83,0	110,0	120,0	122,0	132,0

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MIC

Air-water chiller

Cooling capacity 3 kW

- **Easy and quick to install compact**
- **Separable hydraulic circuit and refrigerant**
- **AISI304 stainless steel tank and pump impeller**
- **R513A refrigerant gas in A1 class with low GWP**



DESCRIPTION

Air-cooled modular refrigerant to produce chilled water, designed and created to satisfy the cooling needs of industrial buildings.
Unit with alternative hermetic compressor and coaxial heat exchanger positioned in a 20-litre AISI304 stainless steel tank.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

FEATURES

Operating field

Operation at full load up to 45 °C external air temperature. Unit can produce chilled water 20 °C up to -10 °C.

Refrigerant circuit

The refrigerant circuit is in the upper part of the machine and can be lifted up to be cleaned, or completely removed if a broken module needs to be replaced, leaving the hydronic part in place to ensure the system works properly.

Hydraulic components

Standard configuration: is fitted as standard
— One differential pressure switch
— An interception tap on the heat exchanger, used to remove the upper part of the machine or to balance the load.
— An AISI304 STAINLESS steel tank
— Connection pipes made of copper
— Brass valves
— 4 STAINLESS steel grooved joints and 2 caps. The water input and output can only be defined in a unit without pumps by the client at the installation stage.

In the configuration with pumps, as well as the components supplied as standard, there is a choice between two pumps with different head.

Modularity

Thanks to its modular construction, the installation can be adapted to suit specific system development needs whilst guaranteeing improved safety and reliability.
As a result, the cooling capacity can be easily increased over time, at a limited cost.
The modules are easy to install and link together from the hydronic point of view, thanks to the connections with grooved joints.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

Modularity

There are 3 solutions for dealing with several modules:

Solution 1: no interconnection between modules
Each module works independently on its own set point.
If it is necessary to switch all the machines on or off, each module must be operated.

Solution 2: through remote ON-OFF contact (Master/Slave)
With this solution, several modules can be connected in parallel and, where necessary, the start-up and switch-off of all modules can be coordinated with a single command.
The electrical panel has a contact for remote ON/OFF, which can be used to connect several modules in parallel, so that the start-up of the first unit (Master) results in the cascade start-up of all subsequent connected units (Slaves).
Each module works independently on its own set point.

Solution 3: via an external supervisor (BMS)
The modules can be controlled with an external supervisor with this solution using a ModBus (accessory) communication module.

ACCESSORIES

ETHERNET-RS485: Gateway to change a Modbus RS485 serial into a TCP-IP serial.
FB_MIC: Air filter to protect the coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.
MIC_RUE: Swivel wheels with locking system
MODBUSMICS: This accessory allows you to manage up to multiple units, making available a serial in ModBus RTU protocol on RS485, for supervision with an external BMS.

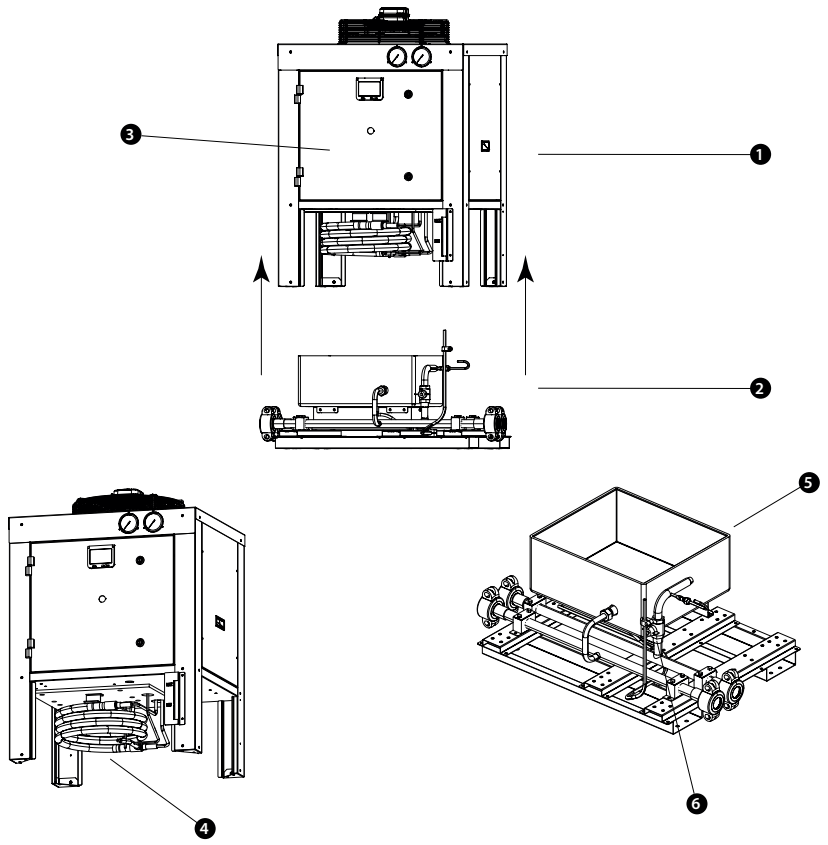
DCPXMICS: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

ACCESSORIES COMPATIBILITY

Accessory	MIC01°	MIC01P1	MIC01P2
ETHERNET-RS485	•	•	•
FB_MIC	•	•	•
MODBUSMICS	•	•	•

Accessory	MIC01°	MIC01P1	MIC01P2
DCPXMICS	•	•	•

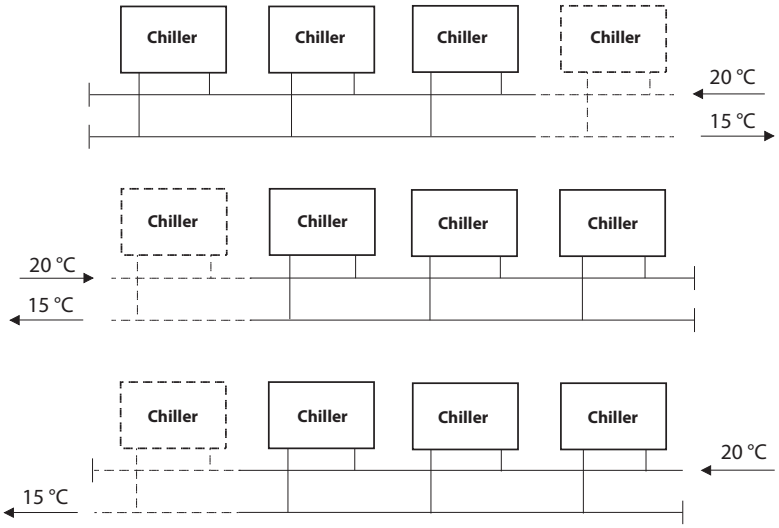
SEPARABLE HYDRAULIC CIRCUIT AND REFRIGERANT

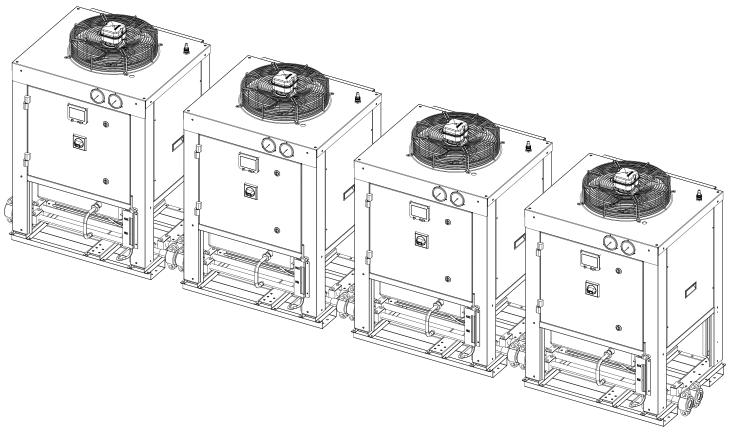


Key:
1 Refrigerant circuit
2 Hydraulic circuit
3 Electric power board
4 Conduit pipe evaporator
5 AISI304 stainless steel tank
6 Shut-off tap

MODULARITY OPTIONS

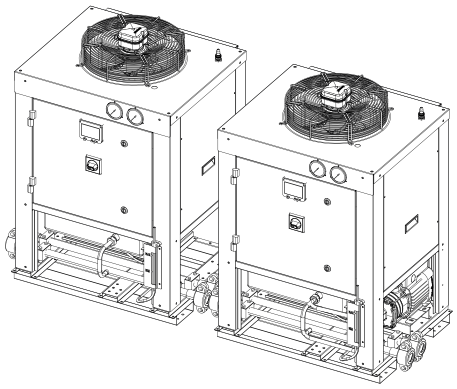
Units without pumps

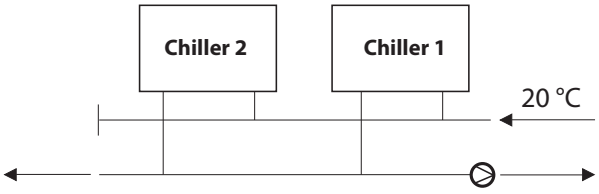




- *Each machine is supplied with 4 grooved joints and two caps (machine input and output defined by the user depending on where the caps are positioned).*

Several units and only one with a pump





- *The chiller with pump needs to be the first in the «chain» and the water entry position is secured.*

CONFIGURATOR

Field		Description
1,2,3		**MIC**
4,5		**Size** 01
6		**Version**
	°	Cooling only
7		**Coils**
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
8		**Fans**
	F	Phase cut
	°	Standard
9,10		**Integrated hydronic kit**
	00	With storage tank without pumps
	P1	With storage tank and low head pump
	P2	With storage tank and high head pump
11		**Power supply**
	M	230V ~ 50Hz (without Schuko plug)
	N	230V ~ 50Hz (with Schuko plug)

PERFORMANCE SPECIFICATIONS

		MIC01°	MIC01P1	MIC01P2
Cooling performances 20 °C / 15 °C - (14511:2022) (1)				
Cooling capacity	kW	3,0	2,9	2,9
Input power	kW	1,3	1,5	1,6
Input current	A	5,8	7,7	8,7
EER	W/W	2,31	2,01	1,83
Water flow rate system side	l/h	516	483	469
Pressure drop system side	kPa	10	-	-
Useful head system side	kPa	-	328	529

(1) Data EN 14511:2022; System side water heat exchanger 20 °C / 15 °C;; External air 32 °C

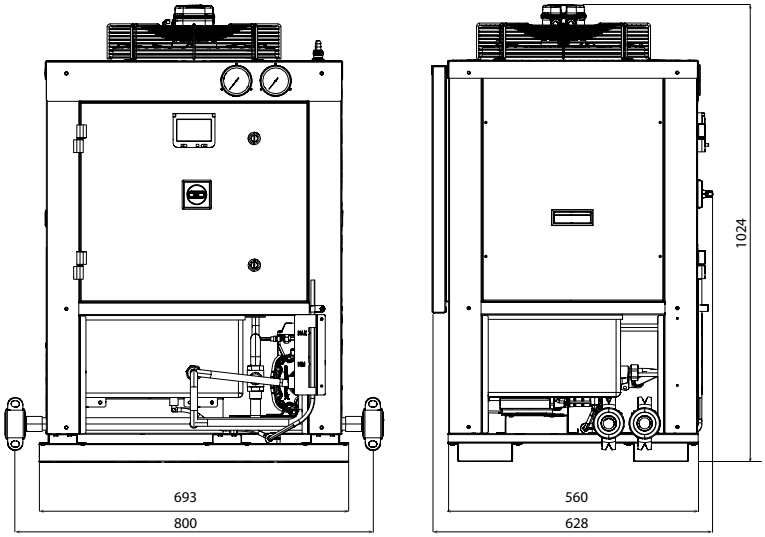
ELECTRIC DATA

		MIC01°	MIC01P1	MIC01P2
Cooling only mode				
Maximum current (FLA)	A	9,0	12,1	13,4
Peak current (LRA)	A	30,0	33,0	34,3

GENERAL TECHNICAL DATA

		MIC01°	MIC01P1	MIC01P2
System side hydraulic connections				
Sizes (in/out)	Ø		1"	
System side heat exchanger				
Type	type		Coassiale	
Number	no.	1	1	1
Water content	l	0,8	0,8	0,8
Minimum water flow rate	l/h	100	100	100
Maximum water flow rate	l/h	1200	1200	1200
Hydronic kit				
Storage tank capacity	l	20	20	20
Fan				
Type	type		Axial	
Fan motor	type		Asynchronous	
Number	no.	1	1	1
Air flow rate	m^3/h	1500	1500	1500
Total fan input power	W	120	120	120
Total fan input current	A	0,4	0,4	0,4

DIMENSIONS



		MIC01°	MIC01P1	MIC01P2
Dimensions and weights				
A	mm	1024	1024	1024
B	mm	628	628	628
C	mm	800	800	800

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ANL 021-202

Air-water chiller

Cooling capacity 5,7 ÷ 43,3 kW

- **Standard version**
- **Version with Integrated hydronic kit system side**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Chillers for external installation for chilled water production with scroll compressors, axial fans, external copper coils with aluminum louvers from size 020 to 090, microchannel from size 102 to 202.
The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A With storage tank and pump
N With increased pump
P With pump
Q With storage tank and increased pump

FEATURES

Operating field

Operation at full load up to 46°C external air temperature. Unit can produce chilled water up to -10°C.

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to facilitate installation.

Hot water production

In the configuration with desuperheater, it is also possible to produce free-hot water.

Double mechanical thermostat

On the configurator it is also possible to select the option **"W"** double mechanical thermostatic valve for low temperatures.
Using two electronic valves in parallel guarantees a precise and efficient control in a wide operating range. This allows them to produce chilled water from -10 °C to +18 °C.

■ *The option is only available for sizes from 050 to 090 in the °-A-Q versions and from size 102 to 202 in all versions.*

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RA: Anti-freeze electric heater for the buffer tank.
KR: Anti-freeze electric heater for the plate heat exchanger.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	021	026	031	041	050	070	080	090	102	152	202
AERBAC-MODU	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
AERLINK	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
MODU-485BL	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
MULTICONTROL	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
SGD	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
SPLW (1)	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
VMF-CRP	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•

(1) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	021	026	031	041	050	070	080	090	102	152	202
PR4	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

DCPX: Condensation control temperature

Ver	021	026	031	041	050	070	080	090	102	152	202
°, A, P	DCPX50	DCPX50	DCPX50	DCPX50	DCPX50	DCPX50	DCPX50	DCPX50	DCPX52	DCPX52	DCPX52
N	-	-	-	-	-	-	-	-	DCPX52	DCPX52	DCPX52
Q	-	-	-	-	DCPX50	DCPX50	DCPX50	DCPX50	DCPX52	DCPX52	DCPX52

VT: Antivibration

Ver	021	026	031	041	050	070	080	090	102	152	202
°, P	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT15	VT15	VT15
A	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15	VT15	VT15	VT15
N	-	-	-	-	-	-	-	-	VT15	VT15	VT15
Q	-	-	-	-	VT15	VT15	VT15	VT15	VT15	VT15	VT15

DRE: Device for peak current reduction

Ver	021	026	031	041	050	070	080	090	102	152	202
°, A, P, Q	-	-	-	-	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)
N	-	-	-	-	-	-	-	-	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

KR: electric heater for the plate heat exchanger

Ver	021	026	031	041	050	070	080	090	102	152	202
°, P	KR2	KR2	KR2	KR2	KR2	KR2	KR2	KR2	KR100	KR100	KR100
A, Q	-	-	-	-	KR2	KR2	KR2	KR2	KR100	KR100	KR100
N	-	-	-	-	-	-	-	-	KR100	KR100	KR100

A grey background indicates the accessory must be assembled in the factory

RA: electric heater for the buffer tank

Ver	021	026	031	041	050	070	080	090	102	152	202
A	RA	RA	RA	RA	RA	RA	RA	RA	RA100	RA100	RA100
Q	-	-	-	-	RA	RA	RA	RA	RA100	RA100	RA100

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**ANL**
4,5,6		**Size** 021, 026, 031, 041, 050, 070, 080, 090, 102, 152, 202
7		**Model**
	°	Cooling only
8		**Version**
	°	Standard
	A	With storage tank and pump
	N	With increased pump (1)
	P	With pump
	Q	With storage tank and increased pump (2)
9		**Heat recovery**
	D	With desuperheater (3)
	°	Without heat recovery
10		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium (4)
11		**Operating field**
	W	Double mechanical thermostat for low temperature (5)
	Y	Low temperature mechanic thermostatic valve (6)
	Z	Low temperatures mechanic thermostatic valve (7)
	°	Standard mechanic thermostatic valve (8)
12		**Evaporator**
	°	Standard
13		**Power supply**
	M	230V ~ 50Hz (9)
	°	400V 3N ~ 50Hz (10)

(1) Only for ANL 102 ÷ 202 sizes
(2) Only for ANL 050 ÷ 202 sizes
(3) If the unit is also fitted with one of the low temperature valves in addition to the desuperheater, it is necessary to always guarantee a water temperature of 35°C at the inlet of the heat exchanger. The desuperheater is only available in sizes from 050 to 090 in the version with storage tank "A", and from size 102 to 202 in all versions.
(4) Sizes from 102 to 202 have a micro-channel coil
(5) Water produced from -10 °C to 18 °C; Option available only for sizes starting from 050 to 090 in the °-A-Q versions and from 102 to 202 in all versions
(6) Water produced from 0 °C up to -10 °C
(7) Water produced from +4 °C up to +0 °C
(8) Water produced up to +4 °C
(9) Only for ANL 021 ÷ 041 sizes
(10) For all sizes

PERFORMANCE SPECIFICATIONS

ANL - ° (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,5	9,6	13,4	16,4	20,4	22,2	26,5	32,9	42,8
Input power	kW	1,9	2,0	2,5	3,3	4,1	4,9	6,4	6,8	8,0	10,2	13,5
Cooling total input current	A	4,0	4,0	5,0	6,0	9,0	10,0	12,0	13,0	16,0	19,0	25,0
EER	W/W	3,03	3,04	2,99	2,90	3,26	3,33	3,18	3,28	3,32	3,21	3,18
Water flow rate system side	l/h	979	1065	1288	1649	2302	2834	3522	3831	4570	5669	7387
Pressure drop system side	kPa	21	21	22	24	30	30	36	50	58	61	68

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ANL - P (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,6	9,7	13,5	16,6	20,6	22,4	26,8	33,2	43,2
Input power	kW	1,8	2,0	2,5	3,2	4,1	4,9	6,4	6,7	8,1	10,5	13,8
Cooling total input current	A	4,0	5,0	5,0	7,0	10,0	11,0	13,0	14,0	17,0	21,0	27,0
EER	W/W	3,11	3,12	3,07	2,97	3,31	3,38	3,23	3,35	3,32	3,15	3,13
Water flow rate system side	l/h	979	1065	1288	1649	2302	2834	3522	3831	4570	5669	7387
Useful head system side	kPa	73	73	71	65	76	72	57	52	84	115	91

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ANL - N (400V 3N ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	-	-	-	-	-	-	-	-	26,8	33,3	43,3
Input power	kW	-	-	-	-	-	-	-	-	8,5	10,6	13,8
Cooling total input current	A	-	-	-	-	-	-	-	-	18,0	21,0	27,0
EER	W/W	-	-	-	-	-	-	-	-	3,17	3,15	3,13
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4570	5669	7387
Useful head system side	kPa	-	-	-	-	-	-	-	-	140	185	159

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ANL - A (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,6	9,7	13,5	16,6	20,6	22,4	26,8	33,2	43,2
Input power	kW	1,8	2,0	2,5	3,2	4,1	4,9	6,4	6,7	8,1	10,5	13,8
Cooling total input current	A	4,0	5,0	5,0	7,0	10,0	11,0	13,0	14,0	17,0	21,0	27,0
EER	W/W	3,11	3,12	3,07	2,97	3,31	3,38	3,23	3,35	3,32	3,15	3,13
Water flow rate system side	l/h	979	1065	1288	1649	2302	2834	3522	3831	4570	5669	7387
Useful head system side	kPa	73	73	71	65	76	72	57	52	84	115	91

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ANL - Q (400V 3N ~ 50Hz)

Size		021	026	031	041	050	070	080	090	102	152	202
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	-	-	-	-	13,6	16,7	20,7	22,5	26,8	33,3	43,3
Input power	kW	-	-	-	-	4,2	5,0	6,5	6,8	8,5	10,6	13,8
Cooling total input current	A	-	-	-	-	10,0	11,0	13,0	14,0	18,0	21,0	27,0
EER	W/W	-	-	-	-	3,24	3,33	3,19	3,31	3,17	3,15	3,13
Water flow rate system side	l/h	-	-	-	-	2302	2834	3522	3831	4570	5669	7387
Useful head system side	kPa	-	-	-	-	160	159	144	140	140	185	159

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			021	026	031	041	050	070	080	090	102	152	202
SEER - 12/7 (EN14825:2018) with standard fans (1)													
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A,P	W/W	4,18	4,20	4,17	4,10	4,16	4,34	4,19	4,31	4,11	4,11	4,10
	N	W/W	-	-	-	-	-	-	-	-	- (2)	- (2)	- (2)
	Q	W/W	-	-	-	-	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
Seasonal efficiency	°	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A,P	%	164,00	164,80	163,60	161,00	163,40	170,70	164,60	169,40	161,30	161,20	161,10
	N	%	-	-	-	-	-	-	-	-	- (2)	- (2)	- (2)
	Q	%	-	-	-	-	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEER - 23/18 (EN14825: 2018) with standard fans (3)													
SEER	°	W/W	4,34	4,35	4,31	4,21	4,55	4,68	4,49	4,61	4,83	4,73	4,69
	A,P	W/W	4,49	4,51	4,48	4,47	4,55	4,64	4,57	4,66	4,49	4,25	4,28
	N	W/W	-	-	-	-	-	-	-	-	4,15	4,18	4,23
	Q	W/W	-	-	-	-	4,18	4,44	4,35	4,49	4,15	4,18	4,23
Seasonal efficiency	°	%	170,40	170,90	169,20	165,20	179,10	184,30	176,60	181,50	190,30	186,00	184,70
	A,P	%	176,70	177,50	176,00	175,60	179,00	182,40	179,80	183,50	176,60	167,00	168,00
	N	%	-	-	-	-	-	-	-	-	163,10	164,20	166,00
	Q	%	-	-	-	-	164,30	174,50	171,10	176,70	163,10	164,20	166,00
SEPR - (EN14825: 2018) High temperature with standard fans (3)													
SEPR	°	W/W	5,92	5,92	5,85	5,69	6,36	6,50	6,21	6,43	6,79	6,58	6,49
	A,P	W/W	6,56	6,57	6,45	6,21	6,74	6,90	6,55	6,78	6,68	6,18	6,17
	N	W/W	-	-	-	-	-	-	-	-	5,91	6,09	6,10
	Q	W/W	-	-	-	-	6,03	6,28	6,08	6,30	5,91	6,09	6,10

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			021	026	031	041	050	070	080	090	102	152	202
Electric data													
Maximum current (FLA)	°,A,N,P,Q	A	-	-	-	-	-	-	-	-	-	-	-
Peak current (LRA)	°,A,N,P,Q	A	-	-	-	-	-	-	-	-	-	-	-

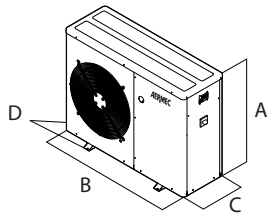
GENERAL TECHNICAL DATA

		ANL021	ANL026	ANL031	ANL041	ANL050	ANL070	ANL080	ANL090	ANL102	ANL152	ANL202
Compressor												
Type	type						Scroll					
Compressor regulation	Type						On-Off					
Number	no.	1	1	1	1	1	1	1	1	2	2	2
Circuits	no.	1	1	1	1	1	1	1	1	1	1	1
Refrigerant	type						R410A					
Refrigerant charge (1)	kg	1,2	1,2	1,2	1,3	2,8	2,8	3,0	3,9	5,9	5,9	5,9
System side heat exchanger												
Type	type						Brazed plate					
Number	no.	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections												
Sizes (in/out)	Ø						1"1/4					
Fan												
Type	type						Axial					
Fan motor	type						Asynchronous with phase cut					
Number	no.	1	1	1	1	2	2	2	2	2	2	2
Air flow rate	m^3/h	2500	2500	3500	3500	7200	7200	7300	7200	14000	13500	13500
Sound data calculated in cooling mode (2)												
Sound power level	dB(A)	61,0	61,0	68,0	68,0	69,0	69,0	69,0	68,0	76,0	77,0	78,0
Sound pressure level (1 m)	dB(A)	29,8	29,8	36,8	36,8	37,6	37,6	37,6	36,6	44,5	45,5	46,5

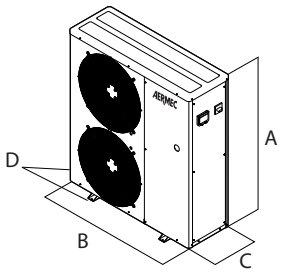
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

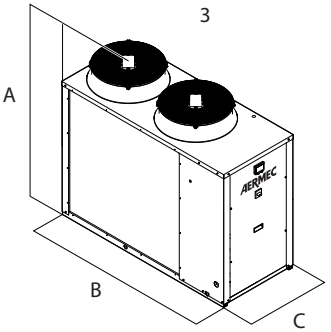
1



2



3



1 ANL 021-041
2 ANL 050-070
3 ANL 102-202

Size			021	026	031	041	050	070	080	090	102	152	202
Dimensions and weights													
A	°,P	mm	1000	1000	1000	1000	1252	1252	1252	1252	1450	1450	1450
	A	mm	1015	1015	1015	1015	1281	1281	1281	1281	1450	1450	1450
	N	mm	-	-	-	-	-	-	-	-	1450	1450	1450
	Q	mm	-	-	-	-	1281	1281	1281	1281	1450	1450	1450
B	°,P	mm	900	900	900	900	1124	1124	1124	1124	1750	1750	1750
	A	mm	1124	1124	1124	1124	1165	1165	1165	1165	1750	1750	1750
	N	mm	-	-	-	-	-	-	-	-	1750	1750	1750
	Q	mm	-	-	-	-	1165	1165	1165	1165	1750	1750	1750
C	°,P	mm	310	310	310	310	384	384	384	384	750	750	750
	A	mm	384	384	384	384	550	550	550	550	750	750	750
	N	mm	-	-	-	-	-	-	-	-	750	750	750
	Q	mm	-	-	-	-	550	550	550	550	750	750	750
D	°,P	mm	354	354	354	354	428	428	428	428	-	-	-
	A	mm	428	428	428	428	-	-	-	-	-	-	-
	N	mm	-	-	-	-	-	-	-	-	-	-	-
	Q	mm	-	-	-	-	-	-	-	-	-	-	-
Empty weight	°	kg	86	86	86	86	120	120	120	156	270	293	329
	A	kg	103	103	103	103	147	147	147	183	338	364	400
	N	kg	-	-	-	-	-	-	-	-	338	364	400
	P	kg	91	91	91	91	127	127	163	163	288	314	350
	Q	kg	-	-	-	-	151	151	151	187	338	364	400

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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www.aermec.com

ANL 021H -203H

Reversible air/water heat pump

Cooling capacity 5,7 ÷ 49,1 kW – Heating capacity 6,2 ÷ 43,3 kW

- **It is possible to produce hot domestic water**
- **Compact dimensions**
- **Quick & easy installation**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.
Equipped with scroll compressors, axial fans, external coil with aluminium louvers, plate heat exchanger on the side.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A With storage tank and pump
N With increased pump
P With pump
Q With storage tank and increased pump

FEATURES

Operating field

Full load up to 46 ° C ambient air temperature withthe possibility to produce chilled water down to -10° C in cooling mode (for more details refer to the technical documentation).

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to facilitate installation.

Inverter fans

Inverter fans from size 031 to 091 for all sizes.

■ *The DCPX accessory is not required for these sizes.*

Double mechanical thermostat

On the configurator it is also possible to select the option **"W"** double mechanical thermostatic valve for low temperatures.
Using two electronic valves in parallel guarantees a precise and efficient control in a wide operating range. This allows them to produce chilled water from -10 °C to +18 °C.

■ *The option is available only for sizes starting from 051 to 091 in the °-A-Q versions and from size 103 to 203 in all versions.*

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply

water temperature for the chillers connected to the header, or it can be used for temperature monitoring

VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

VT: Anti-vibration supports.

BDX: Condensate drip.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RA: Anti-freeze electric heater for the buffer tank.

KR: Anti-freeze electric heater for the plate heat exchanger.

KRB: Electric anti-freeze resistance kit for base.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	021	026	031	041	051	071	081	091	103	153	203
AERBAC-MODU	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
AERLINK	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
MODU-485BL	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
MULTICONTROL	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
SDHW (1)	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
SGD	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
SPLW (2)	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•
VMF-CRP	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•

(1) Probe required for MULTICONTROL for managing the domestic hot water system.
(2) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	021	026	031	041	051	071	081	091	103	153	203
PR4	°,A,P	•	•	•	•	•	•	•	•	•	•	•
	N									•	•	•
	Q					•	•	•	•	•	•	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

DCPX: Condensation control temperature

Ver	021	026	031	041	051	071	081	091	103	153	203
°, A, P	DCPX51	DCPX51	-	-	-	-	-	-	DCPX53	DCPX53	DCPX53
Q	-	-	-	-	-	-	-	-	DCPX53	DCPX53	DCPX53

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	021	026	031	041	051	071	081	091	103	153	203
°, P	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT15	VT15	VT15
A	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15	VT15	VT15	VT15
N	-	-	-	-	-	-	-	-	VT15	VT15	VT15
Q	-	-	-	-	VT15	VT15	VT15	VT15	VT15	VT15	VT15

Condensate drip

Ver	021	026	031	041	051	071	081	091	103	153	203
°, P	BDX5	BDX5	BDX5	BDX5	BDX5	BDX5	BDX5	BDX5	-	-	-
A	BDX5	BDX5	BDX5	BDX5	BDX6	BDX6	BDX6	BDX6	-	-	-
Q	-	-	-	-	BDX6	BDX6	BDX6	BDX6	-	-	-

The accessory cannot be fitted on the configurations indicated with -

DRE: Device for peak current reduction

Ver	021	026	031	041	051	071	081	091	103	153	203
°, A, P, Q	-	-	-	-	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)
N	-	-	-	-	-	-	-	-	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

KR: electric heater for the heat exchanger

Ver	021	026	031	041	051	071	081	091	103	153	203
°, P	KR2	KR2	KR2	KR2	KR2	KR2	KR2	KR2	KR100	KR100	KR100
A	-	-	-	-	KR2	KR2	KR2	KR2	KR100	KR100	KR100
N, Q	-	-	-	-	-	-	-	-	KR100	KR100	KR100

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

RA: Anti-freeze electric heater for the buffer tank

Ver	021	026	031	041	051	071	081	091	103	153	203
A	RA	RA	RA	RA	RA	RA	RA	RA	RA100	RA100	RA100
Q	-	-	-	-	RA	RA	RA	RA	RA100	RA100	RA100

A grey background indicates the accessory must be assembled in the factory

KRB: Electric heater for the base

Ver	021	026	031	041	051	071	081	091	103	153	203
°, A, N, P, Q	-	-	-	-	-	-	-	-	KRB3 (1)	KRB3 (1)	KRB3 (1)

(1) Incompatible with the condensate collection basin accessory with integrated resistance.
The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**ANL**
4,5,6		**Size** 021, 026, 031, 041, 051, 071, 081, 091, 103, 153, 203
7		**Model**
	H	Heat pump
8		**Version**
	°	Standard
	A	With storage tank and pump
	N	With increased pump (1)
	P	With pump
	Q	With storage tank and increased pump (2)
9		**Heat recovery**
	D	With desuperheater (3)
	°	Without heat recovery
10		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
11		**Operating field**
	W	Double mechanical thermostat for low temperature (4)
	°	Standard mechanic thermostatic valve
12		**Evaporator**
	°	Standard
13		**Power supply**
	M	230V ~ 50Hz (5)
	°	400V 3N ~ 50Hz (6)

(1) Only for ANL 103 ÷ 203 sizes
(2) Only for ANL 051 ÷ 203 sizes
(3) The desuperheater must be intercepted during heating mode. If the unit is also fitted with one of the low temperature valves in addition to the desuperheater, during cold operation, it is necessary to always guarantee a water temperature of 35°C at the inlet of the heat exchanger. It is only available in sizes from 051 to 091 in the version with storage tank "A", and from size 103 to 203 in all versions.
(4) Water produced from -10 °C to 18 °C; Option available only for sizes starting from 051 to 091 in the °-A-Q versions and from 103 to 203 in all versions
(5) Only for ANL 021 ÷ 041 sizes
(6) Only for ANL 021 ÷ 203 sizes

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

ANL - (°) / 12/7 °C - 40/45 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,5	9,6	13,4	16,3	20,1	21,6	25,6	31,8	40,3
Input power	kW	1,8	2,0	2,5	3,2	4,3	5,8	6,5	6,6	9,0	10,8	13,8
Cooling total input current	A	3,7	4,2	4,7	6,2	8,7	9,7	12,0	13,0	16,0	19,0	25,0
EER	W/W	3,10	3,10	3,05	2,95	3,12	2,82	3,07	3,30	2,85	2,94	2,92
Water flow rate system side	l/h	979	1065	1289	1649	2294	2807	3452	3713	4398	5467	6929
Pressure drop system side	kPa	30	31	32	30	34	35	44	60	55	57	62
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	6,2	7,0	8,4	9,8	13,2	17,3	20,9	22,0	26,1	35,3	41,8
Input power	kW	1,9	2,1	2,6	3,0	4,0	5,1	5,9	6,2	8,6	10,8	12,3
Heating total input current	A	3,8	4,4	5,4	6,8	9,5	10,0	13,0	14,0	17,0	19,0	25,0
COP	W/W	3,26	3,33	3,23	3,27	3,26	3,37	3,56	3,56	3,05	3,28	3,40
Water flow rate system side	l/h	1078	1217	1460	1700	2294	3007	3638	3827	4529	6137	7265
Pressure drop system side	kPa	36	40	41	37	38	39	53	72	70	70	78

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANL - (A) / 12/7 °C - 40/45 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,5	9,6	13,4	16,3	20,1	21,6	25,6	31,8	40,3
Input power	kW	1,9	2,1	2,5	3,3	4,5	6,0	6,7	6,7	9,6	11,8	14,9
Cooling total input current	A	4,0	4,5	5,0	6,6	9,3	10,0	13,0	13,0	17,0	21,0	27,0
EER	W/W	2,98	2,99	2,95	2,88	3,00	2,74	2,99	3,21	2,67	2,69	2,70
Water flow rate system side	l/h	979	1065	1289	1649	2294	2807	3452	3713	4398	5467	6929
Useful head system side	kPa	73	73	71	65	76	72	57	52	88	125	111
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	6,2	7,0	8,4	9,8	13,2	17,3	20,9	22,0	26,1	35,3	41,8
Input power	kW	2,0	2,2	2,7	3,1	4,2	5,3	6,1	6,4	9,2	11,8	13,4
Heating total input current	A	4,1	4,7	5,8	7,2	10,0	11,0	14,0	14,0	18,0	21,0	27,0
COP	W/W	3,14	3,21	3,13	3,18	3,13	3,26	3,45	3,45	2,85	2,98	3,11
Water flow rate system side	l/h	1078	1217	1460	1700	2294	3007	3638	3827	4529	6137	7265
Useful head system side	kPa	68	67	65	58	72	65	46	40	64	94	68

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANL - (P) / 12/7 °C - 40/45 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	5,7	6,2	7,5	9,6	13,4	16,3	20,1	21,6	25,6	31,8	40,3
Input power	kW	1,9	2,1	2,5	3,3	4,5	6,0	6,7	6,7	9,6	11,8	14,9
Cooling total input current	A	4,0	4,5	5,0	6,6	9,3	10,0	13,0	13,0	17,0	21,0	27,0
EER	W/W	2,98	2,99	2,95	2,88	3,00	2,74	2,99	3,21	2,67	2,69	2,70
Water flow rate system side	l/h	979	1065	1289	1649	2294	2807	3452	3713	4398	5467	6929
Useful head system side	kPa	73	73	71	65	76	72	57	52	88	125	111
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	6,2	7,0	8,4	9,8	13,2	17,3	20,9	22,0	26,1	35,3	41,8
Input power	kW	2,0	2,2	2,7	3,1	4,2	5,3	6,1	6,4	9,2	11,8	13,4
Heating total input current	A	4,1	4,7	5,8	7,2	10,0	11,0	14,0	14,0	18,0	21,0	27,0
COP	W/W	3,14	3,21	3,13	3,18	3,13	3,26	3,45	3,45	2,85	2,98	3,11
Water flow rate system side	l/h	1078	1217	1460	1700	2294	3007	3638	3827	4529	6137	7265
Useful head system side	kPa	68	67	65	58	72	65	46	40	64	94	68

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANL - (Q) / 12/7 °C - 40/45 °C (400V 3N ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	-	-	-	-	13,4	16,3	20,1	21,6	25,6	31,8	40,3
Input power	kW	-	-	-	-	4,8	6,3	7,1	7,1	10,1	12,0	15,2
Cooling total input current	A	-	-	-	-	9,7	11,0	13,0	14,0	18,0	21,0	27,0
EER	W/W	-	-	-	-	2,81	2,59	2,83	3,04	2,54	2,64	2,66
Water flow rate system side	l/h	-	-	-	-	2294	2807	3452	3713	4398	5467	6929
Useful head system side	kPa	-	-	-	-	160	159	144	140	147	192	170
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	-	-	-	-	13,2	17,3	20,9	22,0	26,1	35,3	41,8
Input power	kW	-	-	-	-	4,5	5,7	6,4	6,8	9,7	12,1	13,7
Heating total input current	A	-	-	-	-	10,0	11,0	14,0	15,0	19,0	21,0	28,0
COP	W/W	-	-	-	-	2,92	3,06	3,24	3,26	2,69	2,92	3,06
Water flow rate system side	l/h	-	-	-	-	2294	3007	3638	3827	4529	6137	7265
Useful head system side	kPa	-	-	-	-	154	151	131	126	107	169	141

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ANL - (N) / 12/7 °C - 40/45 °C (400V 3N ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	-	-	-	-	-	-	-	-	25,8	32,1	40,6
Input power	kW	-	-	-	-	-	-	-	-	9,6	11,4	14,5
Cooling total input current	A	-	-	-	-	-	-	-	-	18,0	21,0	27,0
EER	W/W	-	-	-	-	-	-	-	-	2,68	2,82	2,81
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4398	5467	6929
Useful head system side	kPa	-	-	-	-	-	-	-	-	147	192	170
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	-	-	-	-	-	-	-	-	26,1	35,3	41,8
Input power	kW	-	-	-	-	-	-	-	-	9,7	12,1	13,7
Heating total input current	A	-	-	-	-	-	-	-	-	19,0	21,0	28,0
COP	W/W	-	-	-	-	-	-	-	-	2,69	2,92	3,06
Water flow rate system side	l/h	-	-	-	-	-	-	-	-	4529	6137	7265
Useful head system side	kPa	-	-	-	-	-	-	-	-	107	169	141

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

ANL - (°) / 23/18 °C - 30/35 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	6,9	7,5	9,1	11,6	16,1	19,8	24,3	26,1	31,0	38,5	48,8
Input power	kW	1,9	2,1	2,5	3,4	4,4	6,0	6,8	6,8	9,3	11,2	14,3
Cooling total input current	A	3,8	4,3	4,9	6,4	9,0	10,0	13,0	13,0	16,0	19,0	26,0
EER	W/W	3,62	3,62	3,56	3,45	3,64	3,30	3,59	3,85	3,33	3,44	3,41
Water flow rate system side	l/h	1189	1293	1564	2002	2784	3407	4189	4506	5338	6636	8410
Pressure drop system side	kPa	44	46	47	44	50	52	65	88	81	84	92
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	6,5	7,3	8,8	10,2	13,8	18,1	21,8	23,0	27,2	36,8	43,6
Input power	kW	1,6	1,8	2,2	2,7	3,5	4,6	5,2	5,5	7,6	9,6	10,9
Heating total input current	A	3,3	3,8	4,6	6,0	8,1	9,1	11,0	12,0	15,0	17,0	22,0
COP	W/W	3,98	4,06	3,94	3,84	3,97	3,96	4,18	4,18	3,58	3,85	4,00
Water flow rate system side	l/h	1120	1265	1518	1767	2385	3126	3782	3979	4709	6381	7553
Pressure drop system side	kPa	39	43	44	40	41	42	57	78	76	76	84

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANL - (A) / 23/18 °C - 30/35 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	6,9	7,5	9,1	11,6	16,1	19,8	24,3	26,1	31,0	38,5	48,8
Input power	kW	2,0	2,2	2,6	3,5	4,6	6,2	7,0	7,0	9,9	12,3	15,5
Cooling total input current	A	4,2	4,7	5,2	6,8	9,7	11,0	13,0	14,0	17,0	21,0	28,0
EER	W/W	3,48	3,49	3,45	3,36	3,50	3,20	3,49	3,75	3,11	3,13	3,14
Water flow rate system side	l/h	1189	1293	1564	2002	2784	3407	4189	4506	5338	6636	8410
Useful head system side	kPa	63	63	60	51	60	53	31	24	47	63	41
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	6,5	7,3	8,8	10,2	13,8	18,1	21,8	23,0	27,2	36,8	43,6
Input power	kW	1,7	1,9	2,3	2,7	3,6	4,7	5,4	5,7	8,2	10,6	12,1
Heating total input current	A	3,6	4,1	5,0	6,4	8,8	9,8	12,0	13,0	16,0	19,0	24,0
COP	W/W	3,80	3,89	3,79	3,72	3,78	3,81	4,03	4,04	3,31	3,46	3,61
Water flow rate system side	l/h	1120	1265	1518	1767	2385	3126	3782	3979	4709	6381	7553
Useful head system side	kPa	67	64	62	55	69	61	41	34	55	81	53

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANL - (P) / 23/18 °C - 30/35 °C (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	6,9	7,5	9,1	11,6	16,1	19,8	24,3	26,1	31,0	38,5	48,8
Input power	kW	2,0	2,2	2,6	3,5	4,6	6,2	7,0	7,0	9,9	12,3	15,5
Cooling total input current	A	4,2	4,7	5,2	6,8	9,7	11,0	13,0	14,0	17,0	21,0	28,0
EER	W/W	3,48	3,49	3,45	3,36	3,50	3,20	3,49	3,75	3,11	3,13	3,14
Water flow rate system side	l/h	1189	1293	1564	2002	2784	3407	4189	4506	5338	6636	8410
Useful head system side	kPa	63	63	60	51	60	53	31	24	47	63	41
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	6,5	7,3	8,8	10,2	13,8	18,1	21,8	23,0	27,2	36,8	43,6
Input power	kW	1,7	1,9	2,3	2,7	3,6	4,7	5,4	5,7	8,2	10,6	12,1
Heating total input current	A	3,6	4,1	5,0	6,4	8,8	9,8	12,0	13,0	16,0	19,0	24,0
COP	W/W	3,80	3,89	3,79	3,72	3,78	3,81	4,03	4,04	3,31	3,46	3,61
Water flow rate system side	l/h	1120	1265	1518	1767	2385	3126	3782	3979	4709	6381	7553
Useful head system side	kPa	67	64	62	55	69	61	41	34	55	81	53

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANL - (Q) / 23/18 °C - 30/35 °C (400V 3N ~ 50Hz)

Size		021	026	031	041	051	071	081	091	103	153	203
Cooling performance 23 °C / 18 °C (1)												
Cooling capacity	kW	-	-	-	-	16,1	19,8	24,3	26,1	31,0	38,5	48,8
Input power	kW	-	-	-	-	4,9	6,5	7,4	7,4	10,5	12,5	15,8
Cooling total input current	A	-	-	-	-	10,0	11,0	14,0	14,0	18,0	22,0	28,0
EER	W/W	-	-	-	-	3,27	3,02	3,30	3,53	2,95	3,07	3,08
Water flow rate system side	l/h	-	-	-	-	2784	3407	4189	4506	5338	6636	8410
Useful head system side	kPa	-	-	-	-	136	135	114	108	79	146	114
Heating performance 30 °C / 35 °C (2)												
Heating capacity	kW	-	-	-	-	13,8	18,1	21,8	23,0	27,2	36,8	43,6
Input power	kW	-	-	-	-	4,0	5,1	5,8	6,1	8,7	10,9	12,3
Heating total input current	A	-	-	-	-	9,1	10,0	13,0	13,0	17,0	19,0	25,0
COP	W/W	-	-	-	-	3,49	3,55	3,77	3,78	3,11	3,38	3,54
Water flow rate system side	l/h	-	-	-	-	2385	3126	3782	3979	4709	6381	7553
Useful head system side	kPa	-	-	-	-	149	146	125	119	92	159	129

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ANL - (N) / 23/18 °C - 30/35 °C (400V 3N ~ 50Hz)

Size			021	026	031	041	051	071	081	091	103	153	203
Cooling performance 23 °C / 18 °C (1)													
Cooling capacity		kW	-	-	-	-	-	-	-	-	31,1	38,7	49,0
Input power		kW	-	-	-	-	-	-	-	-	10,2	11,9	15,2
Cooling total input current		A	-	-	-	-	-	-	-	-	18,0	22,0	28,0
EER		W/W	-	-	-	-	-	-	-	-	3,07	3,25	3,23
Water flow rate system side		l/h	-	-	-	-	-	-	-	-	5338	6636	8410
Useful head system side		kPa	-	-	-	-	-	-	-	-	79	146	114
Heating performance 30 °C / 35 °C (2)													
Heating capacity		kW	-	-	-	-	-	-	-	-	27,0	36,6	43,4
Input power		kW	-	-	-	-	-	-	-	-	8,4	10,2	11,7
Heating total input current		A	-	-	-	-	-	-	-	-	17,0	19,0	25,0
COP		W/W	-	-	-	-	-	-	-	-	3,22	3,57	3,71
Water flow rate system side		l/h	-	-	-	-	-	-	-	-	4709	6381	7553
Useful head system side		kPa	-	-	-	-	-	-	-	-	92	159	129

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			021	026	031	041	051	071	081	091	103	153	203
Cooling capacity with low leaving water temp (UE n° 2016/2281)													
SEER	°	W/W	3,13	3,19	3,28	3,34	3,76	3,49	3,80	3,91	3,58	3,74	3,73
	A,P	W/W	3,29	3,36	3,45	3,50	3,89	3,69	3,99	4,16	3,55	3,53	3,55
	N	W/W	-	-	-	-	-	-	-	-	3,14	3,48	3,53
	Q	W/W	-	-	-	-	3,30	3,24	3,53	3,75	3,14	3,48	3,53
ηsc	°	%	122,00	125,00	128,00	131,00	147,00	137,00	149,00	153,00	140,00	146,00	146,00
	A,P	%	129,00	131,00	135,00	137,00	153,00	145,00	157,00	163,00	139,00	138,00	139,00
	N	%	-	-	-	-	-	-	-	-	123,00	136,00	138,00
	Q	%	-	-	-	-	129,00	127,00	138,00	147,00	123,00	136,00	138,00
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)													
Pdesignh	°,A,N,P,Q	kW	-	-	-	-	-	-	-	-	-	-	-
SCOP	°	W/W	3,31	3,39	3,33	3,26	3,44	3,43	3,56	3,50	3,53	3,57	3,69
	A,P	W/W	3,40	3,48	3,41	3,34	3,48	3,48	3,61	3,52	3,45	3,45	3,61
	N	W/W	-	-	-	-	-	-	-	-	3,22	3,35	3,52
	Q	W/W	-	-	-	-	3,22	3,28	3,43	3,39	3,22	3,35	3,52
ηsh	°	%	129,47	132,68	130,12	127,57	134,49	134,10	139,54	137,05	138,02	139,67	144,75
	A,P	%	133,00	136,00	133,00	131,00	136,00	136,00	141,00	138,00	135,00	135,00	141,00
	N	%	-	-	-	-	-	-	-	-	126,00	131,00	138,00
	Q	%	-	-	-	-	126,00	128,00	134,00	133,00	126,00	131,00	138,00
Efficiency energy class	°		A+	A+	A+	A+	A+	A+	A+	A+	A+	A++	A++
	A,P		A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+
	N		-	-	-	-	-	-	-	-	A+	A+	A+
	Q		-	-	-	-	A+	A+	A+	A+	A+	A+	A+

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			021	026	031	041	051	071	081	091	103	153	203
Electric data													
Maximum current (FLA)	°	A	7,0	7,0	7,7	9,7	11,3	13,5	16,3	17,3	22,0	26,0	32,0
	A	A	7,7	7,7	8,4	10,4	12,6	14,8	17,6	18,6	23,9	29,1	35,1
	N	A	-	-	-	-	-	-	-	-	26,2	30,2	36,2
	P	A	69,0	67,0	65,0	63,0	12,6	14,8	17,6	18,6	83,0	194,0	182,0
	Q	A	-	-	-	-	12,8	15,1	17,8	18,8	26,2	30,2	36,2
Peak current (LRA)	°	A	27,5	33,5	36,7	49,7	65,3	75,3	102,3	96,3	76,0	87,0	117,0
	A,P	A	28,2	34,2	37,4	50,4	66,6	76,6	103,6	97,6	77,9	90,1	120,1
	N	A	-	-	-	-	-	-	-	-	80,2	91,2	121,2
	Q	A	-	-	-	-	66,8	76,8	103,8	97,8	80,2	91,2	121,2

GENERAL TECHNICAL DATA

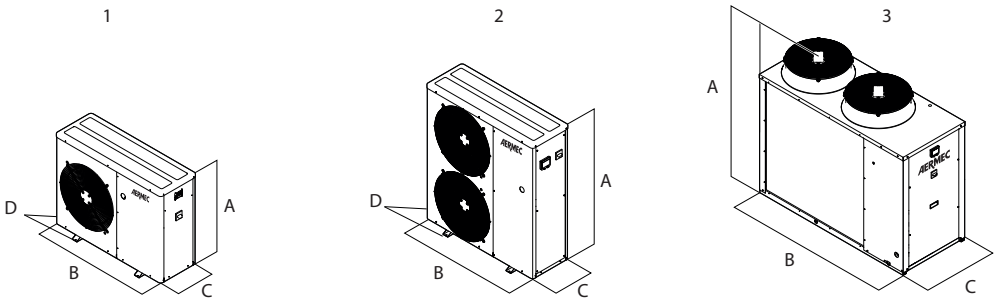
Size		021	026	031	041	051	071	081	091	103	153	203
Compressor												
Type	type						Scroll					
Compressor regulation	Type						On-Off					
Number	no.	1	1	1	1	1	1	1	1	2	2	2
Circuits	no.	1	1	1	1	1	1	1	1	1	1	1
Refrigerant	type						R410A					
Refrigerant charge (1)	kg	1,8	1,8	2,0	2,0	2,9	2,9	3,1	3,9	4,6	5,4	5,7

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size		021	026	031	041	051	071	081	091	103	153	203
System side heat exchanger												
Type	type						Brazed plate					
Number	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	Type						Gas - F					
Sizes (in/out)	Ø						1"1/4					
Fan												
Type	type						Axial					
Fan motor	type	Asynchronous	Asynchronous	Asynchronous	Inverter	Inverter	Inverter	Inverter	Inverter	Asynchronous	Asynchronous	Asynchronous
Number	no.	1	1	1	1	1	2	2	2	2	2	2
Air flow rate	m^3/h	2500	2500	3500	3500	7200	7200	7300	7200	14000	13500	13500
Sound data calculated in cooling mode (2)												
Sound power level	dB(A)	61,0	61,0	68,0	68,0	69,0	69,0	69,0	68,0	76,0	77,0	78,0
Sound pressure level (10 m)	dB(A)	29,8	29,8	36,8	36,8	37,6	37,6	37,6	36,6	44,5	45,5	46,5

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



1 ANL 021 - 041
2 ANL 051 - 091
3 ANL 103 - 203

Size			021	026	031	041	051	071	081	091	103	153	203
Dimensions and weights													
A	°,P	mm	1000	1000	1000	1000	1252	1252	1252	1252	1450	1450	1450
	A	mm	1015	1015	1015	1015	1281	1281	1281	1281	1450	1450	1450
	N	mm	-	-	-	-	-	-	-	-	1450	1450	1450
	Q	mm	-	-	-	-	1281	1281	1281	1281	1450	1450	1450
B	°,P	mm	900	900	900	900	1124	1124	1124	1124	1750	1750	1750
	A	mm	1124	1124	1124	1124	1165	1165	1165	1165	1750	1750	1750
	N	mm	-	-	-	-	-	-	-	-	1750	1750	1750
	Q	mm	-	-	-	-	1165	1165	1165	1165	1750	1750	1750
C	°,P	mm	310	310	310	310	384	384	384	384	750	750	750
	A	mm	384	384	384	384	550	550	550	550	750	750	750
	N	mm	-	-	-	-	-	-	-	-	750	750	750
	Q	mm	-	-	-	-	550	550	550	550	750	750	750
D	°,P	mm	354	354	354	354	428	428	428	428	-	-	-
	A	mm	428	428	428	428	-	-	-	-	-	-	-
	N	mm	-	-	-	-	-	-	-	-	-	-	-
	Q	mm	-	-	-	-	-	-	-	-	-	-	-
Empty weight	°	kg	86	86	86	86	120	120	120	156	270	293	329
	A	kg	103	103	103	103	147	147	183	183	338	364	400
	N	kg	-	-	-	-	-	-	-	-	338	364	400
	P	kg	91	91	91	91	127	127	163	163	288	314	350
	Q	kg	-	-	-	-	147	147	183	183	338	364	400

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NRK 0090-0150

Reversible air/water heat pump

Cooling capacity 18,4 ÷ 31,0 kW – Heating capacity 20,8 ÷ 34,4 kW

- **Cooling / heating / high-temperature water production even for DHW production.**
- **Water produced up to +65 °C**
- **Heating operations with external temperatures down to -20 °C**
- **Optimised for heating mode**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential, commercial complexes or industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° High efficiency

FEATURES

Operating field

Working at full load up to -20 °C outside air temperature in winter, and up to 48 °C in summer. Hot water production up to 65 °C.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one pumps or storage tank to obtain a solution that allows you to save money and to facilitate installation.

Components

Water filter,flow switch, low and high pressure transducers as standard supply on all units.

Hot water production

In the configuration with desuperheater, it is also possible to produce free-hot water.

DCPX as standard

Phase-cut device that regulates the fan speed to ensure optimum unit operation in all conditions.

CONTROL

MODUCONTROL control type.
The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SAF: Thermal buffer tank kit with instantaneous Domestic Hot Water production. For more information about SAF refer to the dedicated documentation.
SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating

system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring
VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

VT: Anti-vibration supports.
BSKW: Electric heaters kit with IP44 panel for remote mounting in a sheltered area.

Refer to the specific "SAF" datasheet for more information about correct system operation, and about the required or recommended accessories. Please consult the VMF system for the production of DHW with a thermal storage tank not supplied by Aermec.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0090	0100	0150
AERBAC-MODU	°	•	•	•
AERLINK	°	•	•	•
AERNET	°	•	•	•
BMConverter	°	•	•	•
MODU-485BL	°	•	•	•
MULTICONTROL	°	•	•	•
PR3	°	•	•	•
SAF (1)	°	•	•	•
SDHW (2)	°	•	•	•
SGD	°	•	•	•
SPLW (3)	°	•	•	•
VMF-CRP	°	•	•	•

(1) For more information about SAF refer to the dedicated documentation.
(2) Probe required for MULTICONTROL for managing the domestic hot water system.
(3) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	0090	0100	0150
PR4	°	•	•	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

BSKW: Electric heater kit

Model	Ver	0090	0100	0150
BS6KW400T	°	•	•	•
BS9KW400T	°	•	•	•

BS6KW400T (6kW, 400V 3); BS9KW400T (9kW, 400V 3)

VT: Antivibration

Ver	0090	0100	0150
Integrated hydronic kit: 00, 01, 03, P1, P3			
°	VT15	VT15	VT15

DRE: Device for peak current reduction

Ver	0090	0100	0150
°	DRE10 (1)	DRE10 (1)	DRE15 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRK**
4,5,6,7		**Size** 0090, 0100, 0150
8		**Operating field (1)**
	°	Standard mechanic thermostatic valve
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (2)
	°	Without heat recovery
11		**Version**
	°	High efficiency
12		**Coils**
	R	Copper pipes-copper fins

Field		Description
	S	Tinned copper
	V	Copper pieps-Coated aluminium fins
	°	Alluminium
13		**Fans**
	°	Standard
14		**Power supply**
	°	400V ~ 3N 50Hz
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
	01	Storage tank with low head pump
	03	Storage tank with high head pump
	P1	Single pump low head
	P3	Single pump high head

(1) Water produced up to +4 °C.
(2) The desuperheater can only be used with cold running.

PERFORMANCE SPECIFICATIONS

NRK - (°) / 12/7 °C - 40/45 °C

Size		0090	0100	0150
Cooling performance 12 °C / 7 °C (1)				
Cooling capacity	kW	18,4	26,4	31,0
Input power	kW	5,8	8,4	9,8
Cooling total input current	A	13,0	18,0	20,0
EER	W/W	3,19	3,15	3,15
Water flow rate system side	l/h	3172	4546	5338
Pressure drop system side	kPa	19	39	54
Heating performance 40 °C / 45 °C (2)				
Heating capacity	kW	20,8	28,7	34,4
Input power	kW	6,1	8,3	10,3
Heating total input current	A	14,0	17,0	21,0
COP	W/W	3,40	3,45	3,34
Water flow rate system side	l/h	3601	4965	5953
Pressure drop system side	kPa	24	45	65

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRK - (°) / 23/18 °C - 30/35 °C

Size		0090	0100	0150
Cooling performance 23 °C / 18 °C (1)				
Cooling capacity	kW	24,5	34,9	40,9
Input power	kW	6,1	9,0	10,6
Cooling total input current	A	14,0	18,0	22,0
EER	W/W	4,03	3,88	3,86
Water flow rate system side	l/h	4236	6040	7093
Pressure drop system side	kPa	34	69	95
Heating performance 30 °C / 35 °C (2)				
Heating capacity	kW	20,4	28,2	33,8
Input power	kW	5,0	6,7	8,3
Heating total input current	A	11,0	14,0	17,0
COP	W/W	4,11	4,22	4,09
Water flow rate system side	l/h	3521	4866	5833
Pressure drop system side	kPa	23	43	-

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			0090	0100	0150
Cooling capacity with low leaving water temp (UE n° 2016/2281)					
SEER	°	W/W	3,35	3,39	3,42
ηsc	°	%	131,10	132,60	133,80

Size			0090	0100	0150
Integrated hydronic kit: 00					
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (1)					
Efficiency energy class	°		A+	A+	A+
Pdesignh	°	kW	22,00	28,00	34,00
SCOP	°	W/W	3,03	2,98	2,90
ηsh	°	%	118,00	116,00	113,00
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)					
Efficiency energy class	°		A+	A+	A+
Pdesignh	°	kW	21,00	27,00	32,00
SCOP	°	W/W	3,70	3,68	3,60
ηsh	°	%	145,00	144,00	141,00

(1) Efficiencies for average temperature applications (55 °C)
(2) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

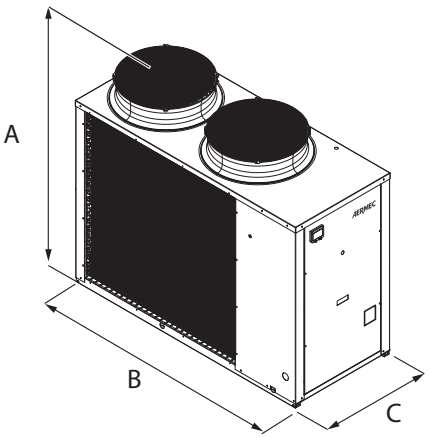
Size			0090	0100	0150
Electric data					
Maximum current (FLA)	°	A	19,1	24,6	29,5
Peak current (LRA)	°	A	104,2	121,2	143,2

GENERAL TECHNICAL DATA

Size			0090	0100	0150
Compressor					
Type	°	type		Scroll	
Compressor regulation	°	Type		On-Off	
Number	°	no.	1	1	1
Circuits	°	no.	1	1	1
Refrigerant	°	type		R410A	
Refrigerant charge (1)	°	kg	13,0	14,0	16,0
System side heat exchanger					
Type	°	type		Brazed plate	
Number	°	no.	1	1	1
Hydraulic connections					
Connections (in/out)	°	Type		Gas-F	
Size (in)	°	Ø		1½"	
Size (out)	°	Ø		1½"	
Fan					
Type	°	type		axials	
Fan motor	°	type		Asynchronous	
Number	°	no.	2	2	2
Air flow rate	°	m^3/h	14200	14200	13700
Sound data calculated in cooling mode (2)					
Sound power level	°	dB(A)	78,0	78,0	78,0
Sound pressure level (10 m)	°	dB(A)	46,5	46,5	46,5

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0090	0100	0150
Dimensions and weights					
A	°	mm	1450	1450	1450
B	°	mm	1750	1750	1750
C	°	mm	750	750	750
Empty weight	°	kg	289	328	372

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NRK 0200-0700

Reversible air/water heat pump

Cooling capacity 35,5 ÷ 148 kW
Heating capacity 42,31 ÷ 175 kW

- **Water produced up to +65 °C**
- **Heating operations with external temperatures down to -20 °C**
- **Optimized for operation in heating mode**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.
It's optimised for use in heating mode, and can be combined not only with low-temperature emission systems such as floor heating or fan coils, but also conventional radiators.
Equipped with scroll compressors, axial fans, external coil with aluminium louvers, plate heat exchanger on the side.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -20 °C outside air temperature in winter, and up to 48 °C in summer. Hot water production up to 65 °C.

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to facilitate installation.

Components

Water filter,flow switch, low and high pressure transducers as standard supply on all units.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Adjustment includes complete management of the alarms and their log.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

T6: Double safety valve with exchange cock, both on the high and low pressure branches.
PRM1: It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.
C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.
AERCALM: The aim of the accessory installed in the electric box of the unit is to provide a clean contact for commanding - on the basis of the outside air temperature - a boiler to replace the heat pump. Aercalm must be requested at the time of ordering, as it is installed in the factory.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
AER485P1	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
AERBACP	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
AERLINK	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
AERNET	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
BMConverter	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
PGD1	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•
SGD	A					•					
	E	•	•	•	•	•					

Remote panel

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
PR4	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

GP: anti-intrusion grid

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)
E	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy

VT: Antivibration

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Integrated hydronic kit: 00, P1, P2, P3, P4										
A	-	-	-	-	VT11	VT11	VT11	VT11	VT22	VT22
E	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT22	VT22
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08										
A	-	-	-	-	VT11	VT11	VT11	VT11	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT22	VT22

DRE: Device for peak current reduction

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	DRE351 (1)	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)
E	DRE201 (1)	DRE281 (1)	DRE301 (1)	DRE331 (1)	DRE351 (1)	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

RIF: Power factor correction

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	RIF65	RIF58	RIF59	RIF60	RIF61	RIF61
E	RIF55	RIF56	RIF54	RIF57	RIF65	RIF58	RIF59	RIF60	RIF61	RIF61

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	T6NRK1	T6NRK2	T6NRK3	T6NRK3	T6NRK3	T6NRK3
E	T6NRK1	T6NRK1	T6NRK1	T6NRK1	T6NRK1	T6NRK2	T6NRK3	T6NRK3	T6NRK3	T6NRK3

A grey background indicates the accessory must be assembled in the factory

PRM1: Manually reset pressure switch

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
A	-	-	-	-	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1
E	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1	PRM1

A grey background indicates the accessory must be assembled in the factory

7", touch screen keyboard

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
C-TOUCH	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•

Clean contact for controlling a boiler.

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
AERCALM	A					•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•

CONFIGURATOR

Field	Description
1,2,3	**NRK**
4,5,6,7	**Size** 0200, 0280, 0300, 0330, 0350, 0500, 0550, 0600, 0650, 0700
8	**Operating field (1)**
°	Standard mechanic thermostatic valve
9	**Model**
H	Heat pump
10	**Heat recovery**
D	With desuperheater (2)
°	Without heat recovery
11	**Version**
A	High efficiency
E	Silenced high efficiency
12	**Coils**
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Copper-aluminium
13	**Fans**
J	Inverter (3)
M	Oversized (4)
°	Standard (5)
14	**Power supply**

Field	Description
°	400V 3N ~ 50Hz
15,16	**Integrated hydronic kit**
00	Without hydronic kit
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
05	Storage tank with holes for heaters and single low head pump (6)
06	Storage tank with holes for heaters and pump low head + stand-by pump (6)
07	Storage tank with holes for heaters and single high head pump (6)
08	Storage tank with holes for heaters and pump high head + stand-by pump (6)
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump

(1) Water produced up to +4 °C
(2) The desuperheater must be isolated in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(3) Standard for size 0200÷0330, without useful static pressure. Option for size 0350÷0700 with useful static pressure.
(4) Option available only for size 0200÷0330.
(5) As standard in sizes fom 0350÷0700.
(6) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

NRK - A / 12/7 °C - 40/45 °C

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	-	-	-	-	75,4	88,8	101,6	117,4	133,4	148,1
Input power	kW	-	-	-	-	25,4	29,5	34,4	41,0	45,0	52,6
Cooling total input current	A	-	-	-	-	55,0	61,0	66,0	72,0	87,0	107,0
EER	W/W	-	-	-	-	2,97	3,01	2,95	2,86	2,97	2,82
Water flow rate system side	l/h	-	-	-	-	12983	15278	17488	20211	22975	25516
Pressure drop system side	kPa	-	-	-	-	23	26	32	28	34	42
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	-	-	-	-	87,9	103,9	118,9	136,6	155,6	174,4
Input power	kW	-	-	-	-	25,5	30,2	34,7	39,9	45,6	51,7
Heating total input current	A	-	-	-	-	54,0	59,0	64,0	70,0	85,0	106,0
COP	W/W	-	-	-	-	3,45	3,44	3,42	3,42	3,41	3,37
Water flow rate system side	l/h	-	-	-	-	15236	18010	20602	23680	26988	30254
Pressure drop system side	kPa	-	-	-	-	32	36	44	37	45	57

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRK - E / 12/7 °C - 40/45 °C

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	35,6	50,4	59,5	66,1	74,4	87,4	99,8	114,5	130,8	145,3
Input power	kW	11,7	17,4	19,5	22,3	27,6	32,4	38,1	45,8	49,5	58,1
Cooling total input current	A	28,0	38,0	42,0	49,0	60,0	67,0	73,0	72,0	95,0	119,0
EER	W/W	3,05	2,90	3,05	2,96	2,69	2,70	2,62	2,50	2,64	2,50
Water flow rate system side	l/h	6131	8670	10235	11379	12801	15035	17175	19713	22512	25033
Pressure drop system side	kPa	18	17	23	19	22	25	30	27	32	41
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	42,2	59,7	69,4	78,2	87,9	103,9	118,9	136,6	155,6	174,4
Input power	kW	12,0	17,0	19,9	22,4	25,5	30,2	34,7	39,9	45,6	51,7
COP	W/W	3,50	3,50	3,49	3,49	3,45	3,44	3,42	3,42	3,41	3,37
Heating total input current	A	24,0	34,0	38,0	44,0	54,0	59,0	64,0	70,0	85,0	106,0
Water flow rate system side	l/h	7318	10355	12032	13569	15236	18010	20602	23680	26988	30254
Pressure drop system side	kPa	24	22	30	25	32	36	44	37	45	57

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

NRK - A / 23/18 °C - 30/35 °C

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	-	-	-	-	93,2	108,2	122,7	143,0	165,0	181,0
Input power	kW	-	-	-	-	26,4	30,7	35,9	43,3	47,0	55,1
Cooling total input current	A	-	-	-	-	57,0	63,0	69,0	75,0	90,0	112,0
EER	W/W	-	-	-	-	3,54	3,53	3,42	3,30	3,51	3,28
Water flow rate system side	l/h	-	-	-	-	16111	18705	21231	24719	28513	31266
Pressure drop system side	kPa	-	-	-	-	35	39	47	42	52	63
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	-	-	-	-	86,4	101,5	114,6	132,6	150,2	170,5
Input power	kW	-	-	-	-	20,6	24,5	27,8	31,7	37,0	41,9
Heating total input current	A	-	-	-	-	44,0	48,0	51,0	55,0	68,0	85,0
COP	W/W	-	-	-	-	4,19	4,15	4,13	4,19	4,06	4,06
Water flow rate system side	l/h	-	-	-	-	14931	17533	19787	22919	25938	29467
Pressure drop system side	kPa	-	-	-	-	31	34	41	35	42	54

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

NRK - E / 23/18 °C - 30/35 °C

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	44,2	61,5	72,1	80,9	91,9	106,5	120,6	139,5	161,7	177,5
Input power	kW	12,2	18,2	20,4	23,5	28,7	33,6	39,7	48,3	51,7	60,8
Cooling total input current	A	29,0	40,0	44,0	51,0	62,0	69,0	76,0	75,0	99,0	124,0
EER	W/W	3,64	3,37	3,53	3,44	3,20	3,16	3,04	2,89	3,13	2,92
Water flow rate system side	l/h	7643	10631	12470	13977	15886	18408	20850	24110	27939	30673
Pressure drop system side	kPa	28	26	34	29	34	37	44	40	49	62
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	41,4	57,2	67,2	75,7	86,4	101,5	114,6	132,6	150,2	170,5
Input power	kW	9,4	13,3	15,8	18,1	20,6	24,5	27,8	31,7	37,0	41,9
Heating total input current	A	19,0	26,0	30,0	35,0	44,0	48,0	51,0	55,0	68,0	85,0
COP	W/W	4,41	4,31	4,26	4,18	4,19	4,15	4,13	4,19	4,06	4,06
Water flow rate system side	l/h	7156	9895	11628	13083	14931	17533	19787	22919	25938	29467
Pressure drop system side	kPa	23	20	28	23	31	34	41	35	42	54

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ELECTRIC DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Electric data												
Maximum current (FLA)	A	A	-	-	-	-	75,0	85,0	94,0	114,0	144,0	147,0
	E	A	40,0	49,0	61,0	74,0	75,0	85,0	94,0	114,0	144,0	147,0
Peak current (LRA)	A	A	-	-	-	-	216,0	226,0	191,0	228,0	285,0	288,0
	E	A	124,0	146,0	175,0	215,0	216,0	226,0	191,0	228,0	285,0	288,0

ENERGY DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling capacity with low leaving water temp (UE n° 2016/2281)												
SEER	A	W/W	-	-	-	-	3,45	3,52	3,46	3,42	3,44	3,33
	E	W/W	3,40	3,30	3,48	3,39	3,35	3,42	3,34	3,29	3,35	3,27
ηsc	A	%	-	-	-	-	134,80	137,60	135,20	133,70	134,60	130,00
	E	%	133,00	128,80	136,10	132,50	130,90	133,70	130,60	128,70	130,90	127,90

Size			0200	0280	0300
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)					
Efficiency energy class	A		-	-	-
	E		A++	A+	A+
Pdesignh	A	kW	-	-	-
	E	kW	42,00	58,00	67,00
SCOP	A	W/W	-	-	-
	E	W/W	3,88	3,75	3,70
ηsh	A	%	-	-	-
	E	%	152,00	147,00	145,00
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)					
Efficiency energy class	A		-	-	-
	E		A+	A+	A+
Pdesignh	A	kW	-	-	-
	E	kW	44,00	62,00	70,00
SCOP	A	W/W	-	-	-
	E	W/W	3,08	3,03	3,00
ηsh	A	%	-	-	-
	E	%	120,00	118,00	117,00

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Size			0330	0350	0500	0550	0600	0650	0700
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)									
Pdesignh	A	kW	-	89,00	106,00	121,00	137,00	157,00	178,00
	E	kW	80,00	89,00	106,00	121,00	137,00	157,00	178,00
SCOP	A	W/W	-	2,88	2,90	3,03	3,03	2,93	2,90
	E	W/W	3,03	2,88	2,90	3,03	3,03	2,93	2,90
ηsh	A	%	-	112,00	113,00	118,00	118,00	114,00	113,00
	E	%	118,00	112,00	113,00	118,00	118,00	114,00	113,00
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (2)									
Pdesignh	A	kW	-	84,00	99,00	113,00	131,00	149,00	168,00
	E	kW	75,00	84,00	99,00	113,00	131,00	149,00	168,00
SCOP	A	W/W	-	3,43	3,40	3,70	3,70	3,38	3,33
	E	W/W	3,68	3,43	3,40	3,70	3,70	3,38	3,33
ηsh	A	%	-	134,00	133,00	145,00	145,00	132,00	130,00
	E	%	144,00	134,00	133,00	145,00	145,00	132,00	130,00

(1) Efficiencies for average temperature applications (55 °C)
(2) Efficiencies for low temperature applications (35 °C)

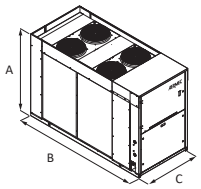
GENERAL TECHNICAL DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Compressor												
Type	A,E	type					Scroll					
Compressor regulation	A,E	Type					On-Off					
Number	A,E	no.	2	2	2	2	2	3	4	4	4	4
Circuits	A,E	no.	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type					R410A					
Refrigerant charge (1)	A	kg	-	-	-	-	23,0	28,0	29,0	29,0	39,0	40,0
	E	kg	14,0	16,0	16,0	16,0	23,0	28,0	29,0	29,0	39,0	40,0
System side heat exchanger												
Type	A,E	type					Brazed plate					
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	A,E	Type					Grooved joints					
Sizes (in/out)	A,E	Ø					2½"					
Fan												
Type	A,E	type					axials					
Number	A	no.	-	-	-	-	2	2	2	2	3	3
	E	no.	4	6	8	8	2	2	2	2	3	3
Air flow rate	A	m^3/h	-	-	-	-	37000	36500	36500	36500	58000	58000
	E	m^3/h	14000	20000	26000	26000	21100	21400	22400	22400	31900	31900
Sound data calculated in cooling mode (2)												
Sound power level	A	dB(A)	-	-	-	-	82,0	82,0	82,0	83,0	85,0	85,0
	E	dB(A)	74,0	74,0	75,0	75,0	74,0	74,0	74,0	75,0	77,0	77,0
Sound pressure level (10 m)	A	dB(A)	-	-	-	-	50,1	50,1	50,1	51,1	53,0	53,0
	E	dB(A)	42,3	42,3	43,2	43,2	42,1	42,1	42,1	43,1	45,0	45,0

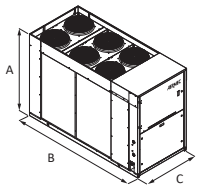
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

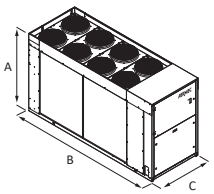
NRK 0200



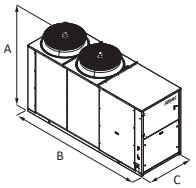
NRK 0280



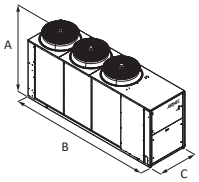
NRK 0300-0330



NRK 0350-0500-0550-0600



NRK 0650-0700



Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Dimensions and weights												
A	A	mm	-	-	-	-	1875	1875	1875	1875	1875	1875
	E	mm	1606	1606	1606	1606	1875	1875	1875	1875	1875	1875
B	A	mm	-	-	-	-	3330	3330	3330	3330	4330	4330
	E	mm	2700	2700	3200	3200	3330	3330	3330	3330	4330	4330
C	A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100
	E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Dimensions and weights for transport												
A	A	mm	-	-	-	-	2027	2027	2027	2027	2039	2039
	E	mm	1735	1735	1758	1758	2027	2027	2027	2027	2039	2039
B	A	mm	-	-	-	-	3395	3395	3395	3395	4387	4387
	E	mm	2760	2760	3260	3260	3395	3395	3395	3395	4387	4387
C	A	mm	-	-	-	-	1170	1170	1170	1170	1170	1170
	E	mm	1160	1160	1160	1160	1170	1170	1170	1170	1170	1170

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Integrated hydronic kit: 00												
Weights												
Empty weight	A	kg	-	-	-	-	1067	1213	1274	1316	1495	1530
	E	kg	761	833	913	920	1067	1213	1274	1316	1495	1530

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRV 0550

Air-water chiller

Cooling capacity 108,3 kW

- **Easy and quick to install compact**
- **Reliability and modularity**
- **Microchannel coils**



DESCRIPTION

NRV is made up of independent 108kW modules that can be connected to each other up to a power of 970kW. Every single module is an outdoor chiller to produce chilled water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 47°C external air temperature. Unit can produce chilled water up to 4 °C.
Maximum yield at full load but even partial load, thanks to the partialisation steps that increase as the number of connected modules increases this ensures continuous adaptation to the actual system requirements.

Modularity

It is possible to couple up to 9 chillers designed to reduce the overall unit dimensions to a minimum.
The combination of the various chillers allows all the strengths of the individual module to be maintained.
Modularity allows you to adapt installation to the actual development needs of the system. This way the cooling capacity can be increased over time simply and affordably.
Modularity is essential when component redundancy is required, as it allows for a safer system design and increased reliability.

Hot water production

In the configuration with desuperheater, it is also possible to produce free-hot water.

Microchannel coils

Microchannel heat exchanger that guarantees higher thermal exchange yield. Circuit that optimises the liquid distribution in the coil, which is arranged with V beam geometry with open angle.

Components

Unit is already equipped with a water filter, differential pressure switch and butterfly check valves, useful to cut off the hydraulic circuit for maintenance; for instance, to clean the filter.
In the event of variable flow rate, the motorised hydronic valves can intercept one or more modules to reduce the flow rate in low heat load conditions.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

- Adjustment includes complete management of the alarms and their log.
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
GPNYB_SIDE: kit with 2 anti-intrusion grids for the long side of the unit.
GPNY_BACK: kit with 1 anti-intrusion grid for the short side of the unit.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
KNYB: Pair of caps with grooved joints assembled on the unit manifold.
KREC: Accessory kit to remote the electric power supply input to the back
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0550
AER485P1	A,E	•
AERBACP	A,E	•
AERLINK	A,E	•
GPNYB_SIDE	A,E	•
GPNY_BACK	A,E	•
MULTICHILLER-EVO	A,E	•
PGD1	A,E	•

Condensation control temperature

Ver	0550
Fans: M	
A	DCPXNRV0550
E	As standard

DRE: electronic device for peak current reduction

Ver	0550
A, E	DRE (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

KNYB: Pair of caps with grooved joints assembled on the unit manifold

Ver	0550
A, E	KNYB

A grey background indicates the accessory must be assembled in the factory

KREC: kit to remote the electric power supply input to the back

Ver	0550
A, E	KREC

A grey background indicates the accessory must be assembled in the factory

RIF: Power factor correction

Ver	0550
A, E	RIF (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**NRV**
4,5,6,7	**Size** 0550
8	**Operating field**
X	Electronic thermostatic expansion valve
°	Standard mechanic thermostatic valve (1)
9	**Model**
°	Cooling only
10	**Heat recovery**
D	With desuperheater
°	Without heat recovery
11	**Version**
A	High efficiency
E	Silenced high efficiency
12	**Coils**
I	Copper-aluminium
O	Coated aluminium microchannel
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Aluminium microchannel
13	**Fans**
J	Inverter (2)
M	Oversized
14	**Power supply (3)**
°	400V 3 ~ 50Hz
15,16	**Integrated hydronic kit**
00	Without hydronic kit

(1) Water produced up to +4 °C
(2) With "J" fan is unnecessary DCPX accessory
(3) With magnet circuit breakers

PERFORMANCE SPECIFICATIONS

Size			0550
Fans: J, M			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	A	kW	108,3
	E	kW	103,8
Input power	A	kW	34,8
	E	kW	36,2
Cooling total input current	A,E	A	62,0
EER	A	W/W	3,11
	E	W/W	2,86
Water flow rate system side	A	l/h	18646
	E	l/h	17862
Pressure drop system side	A	kPa	32
	E	kPa	30

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0550
Fans: J			
SEER - 12/7 (EN14825: 2018) (1)			
SEER	A	W/W	4,51
	E	W/W	4,45
Seasonal efficiency	A	%	177,20
	E	%	174,80
SEPR - (EN 14825: 2018) (2)			
SEPR	A,E	W/W	5,60

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0550
Fans: M			
SEER - 12/7 (EN14825: 2018) (1)			
SEER	A	W/W	4,39
	E	W/W	4,33
Seasonal efficiency	A	%	172,60
	E	%	170,30
SEPR - (EN 14825: 2018) (2)			
SEPR	A,E	W/W	5,62

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0550
Electric data			
Maximum current (FLA)	A,E	A	95,6
Peak current (LRA)	A,E	A	280,6

GENERAL TECHNICAL DATA

Size			0550
Compressor			
Type	A,E	type	Scroll
Number	A,E	no.	2
Circuits	A,E	no.	1
Refrigerant	A,E	type	R410A
System side heat exchanger			
Type	A,E	type	Brazed plate
Number	A,E	no.	1
System side hydraulic connections			
Connections (in/out)	A,E	Type	Grooved joints
Sizes (in/out)	A,E	Ø	6"

Fan

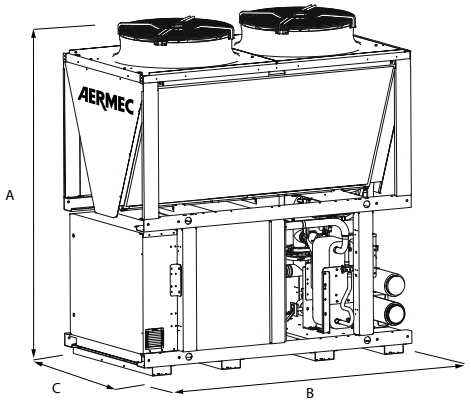
Size			0550
Fans: J			
Fan			
Type	A,E	type	axials
Fan motor	A,E	type	On-Off
Number	A,E	no.	2
Air flow rate	A	m^3/h	32000
	E	m^3/h	24000
High static pressure	A,E	Pa	0
Sound data calculated in cooling mode (1)			
Sound power level	A	dB(A)	85,0
	E	dB(A)	81,8

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			0550
Fans: M			
Fan			
Type	A,E	type	axials
Fan motor	A,E	type	Asynchronous
Number	A,E	no.	2
Air flow rate	A	m^3/h	36000
	E	m^3/h	24000
High static pressure	A,E	Pa	0
Sound data calculated in cooling mode (1)			
Sound power level	A	dB(A)	86,9
	E	dB(A)	81,8

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0550
Dimensions and weights			
A	A,E	mm	2480
B	A,E	mm	2200
C	A,E	mm	1190
Empty weight	A,E	kg	1105

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume
responsibility or liability for errors or omissions.

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PRM

Air-cooled reversible modular heat pump

Cooling capacity 95,6 kW
Heating capacity 101,7 kW

- **R290 natural refrigerant gas**
- **Low refrigerant charge**
- **Production of hot water up to 75 °C**
- **High efficiency also at partial loads**
- **Reliable and modular**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -20 °C outside air temperature in winter, and up to 48 °C in summer. Hot water production up to 75 °C.

Modularity

It is possible to couple up to 9 units designed to reduce the overall unit dimensions to a minimum.
Modularity is essential when component redundancy is required, as it allows for a safer system design and increased reliability.

Flexibility

Modularity allows you to adapt installation to the actual development needs of the system. This way the capacity can be increased over time simply and affordably.

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.
Two scroll compressors are installed in each circuit in a tandem configuration.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Refrigerant HC R290

Using the natural R290 refrigerant, classified A3 to ISO 817 (non-toxic, odourless and flammable refrigerant), the unit's environmental impact drops significantly.
Combining low refrigerant load (less than 5 kg per circuit) with ultra-low Global Warming Potential (GWP), these units boast practically negligible direct equivalent CO2 emissions.

■ *The refrigerant gas detector, the double pressure relief valve (with exchange isolation valve) and the battery protection grilles are standard.*

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The use of the electronic expansion valve offers significant benefits (especially when the unit is working with partial loads), increasing the seasonal energy efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It's available in various configurations, with storage tank or pumps.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Swing HP and LP controls:** available for all models with inverter fan or with DCPX. By continuously modulating the fans, they streamline operation of the unit at any work point both in cooling and heating mode. This results in enhanced energy efficiency of the unit at partial loads.

— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

— **"Noise Demand Limit" function**: only in non-quiet versions, this function limits the compressors within a time band to set a quiet operation profile, useful for example at night for greater acoustic comfort.
— Possibility to control two units in Master - Slave parallel mode. In this case, it is possible to use only one accessory PGD1 for both units.

CONFIGURATOR

Field		Description
1,2,3		**PRM**
4,5,6,7		**Size** 0504
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (3)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter (4)
	°	Standard with DCPX
14		**System type**
	N	Version without modular pipes
	°	Modular version
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
	09	Storage tank with double loop and intermediate heat exchanger
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump

(1) Water produced up to +4 °C
(2) Processed water temperature -10 °C
(3) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) Standard from the E version.

ACCESSORIES

■ *The units PRM must be controlled remotely through an appropriate accessory (remote control panelPGD1,,AERNET MULTICHILLER-EVO, AERLINK orPR4) to be obligatorily and separately. Only in this way is it possible to modify some basic operating parameters or view the presence of any alarms, which avoids accessing risk and restricted access areas.*

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.
VT: Anti-vibration supports.
KTUBES: Pipe kits required to connect more than one unit. Available only for modular units (unit type °).

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
KNYB: Pair of caps with grooved joints assembled on the unit manifold.
BRC1R_PRM: Condensate drip with resistance
BRC1_PRM: Condensate drip.

COMPATIBILITY WITH VMF SYSTEM

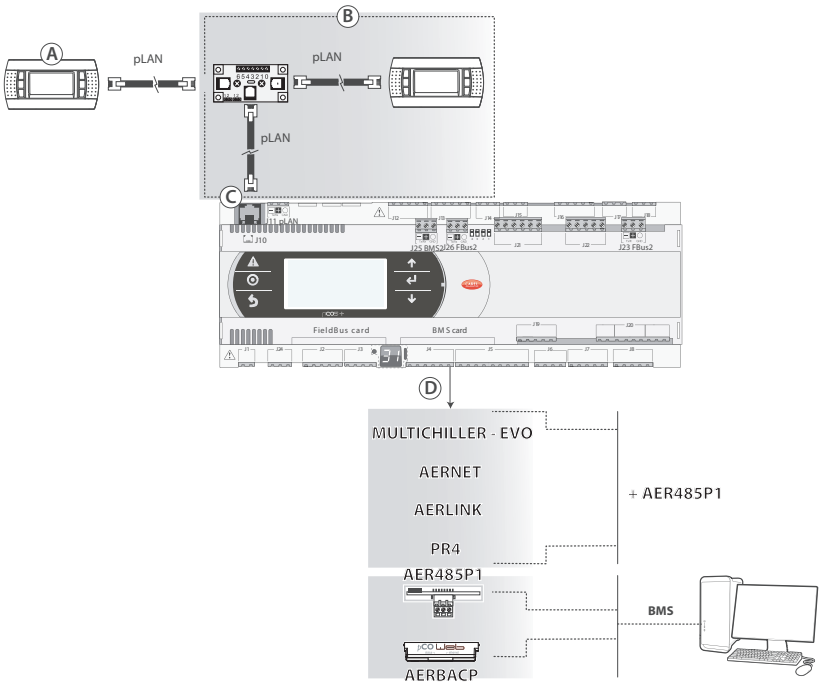
For more information about VMF system, refer to the dedicated documentation.

COMPATIBILITY BETWEEN CONTROL ACCESSORIES

Model	Ver	0504
AER485P1	A,E	•
AERBACP	A,E	•
AERLINK	A,E	•
AERNET	A,E	•
MULTICHILLER-EVO	A,E	•
PGD1	A,E	•

Remote panel

Model	Ver	0504
PR4	A,E	•



Key:

A Display on the unit.

B Control panel accessory "PGD1".

C Control panel connection port "PGD1".

D **BMS Card serial port:** where to connect 1 among the accessories "MULTICHILLER-EVO AERNET, ,AERLINK, PR4 but to be connected also must also have "AER485P1"; in the case of BMS communication with the accessories "AER485P1 or AERBACP" the only mandatory compatible accessory is the control panel "PGD1".

ACCESSORIES COMPATIBILITY

Antivibration

Ver	0504
Integrated hydronic kit: 00, 01, 02, 03, 04, 09, P1, P2, P3, P4	
A, E	VT11

Pipe kits required to connect more than one unit

Ver	0504
System type: °	
A, E	KTUBES

Pair of caps with grooved joints assembled on the unit manifold

Ver	0504
System type: °	
A, E	KNYB

A grey background indicates the accessory must be assembled in the factory

Condensate drip with resistance

Ver	0504
A, E	BRC1R_PRM

A grey background indicates the accessory must be assembled in the factory

Condensate drip

Ver	0504
A, E	BRC1_PRM

A grey background indicates the accessory must be assembled in the factory

Device for peak current reduction

Ver	0504
A, E	DREPRM504

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0504
A, E	RIFPRM504

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

PRM - A

Size		0504
Fans: °		
Cooling performance 12 °C / 7 °C (1)		
Cooling capacity	kW	95,6
Input power	kW	35,5
Cooling total input current	A	69,6
EER	W/W	2,69
Water flow rate system side	l/h	16444
Pressure drop system side	kPa	22
Heating performance 40 °C / 45 °C (2)		
Heating capacity	kW	101,8
Input power	kW	31,9
Heating total input current	A	65,9
COP	W/W	3,19
Water flow rate system side	l/h	17655
Pressure drop system side	kPa	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

■ *With the J fan option, the data are equivalent*

PRM - E

Size		0504
Fans: J		
Cooling performance 12 °C / 7 °C (1)		
Cooling capacity	kW	92,8
Input power	kW	35,8
Cooling total input current	A	67,5
EER	W/W	2,59
Water flow rate system side	l/h	15965
Pressure drop system side	kPa	21
Heating performance 40 °C / 45 °C (2)		
Heating capacity	kW	101,8
Input power	kW	31,9
Heating total input current	A	64,2
COP	W/W	3,19
Water flow rate system side	l/h	17655
Pressure drop system side	kPa	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA - STANDARD/INVERTER FANS

Size			0504
Fans: J			
SEER - 12/7 (EN 14825: 2018) (1)			
SEER	A	W/W	4,08
	E	W/W	4,03
Seasonal efficiency	A	%	160,00
	E	%	158,10
SEER - 23/18 (EN 14825: 2018) (1)			
SEER	A	W/W	4,93
	E	W/W	4,82
Seasonal efficiency	A	%	194,26
	E	%	189,80

(1) Calculation performed with VARIABLE water flow rate

Size			0504
Fans: °			
SEER - 12/7 (EN 14825: 2018) (1)			
SEER	A	W/W	3,96
	E	W/W	-
Seasonal efficiency	A	%	155,55
	E	%	-
SEER - 23/18 (EN 14825: 2018) (1)			
SEER	A	W/W	4,85
	E	W/W	-
Seasonal efficiency	A	%	190,96
	E	%	-

(1) Calculation performed with VARIABLE water flow rate

ENERGY DATA - STANDARD/INVERTER FANS (35°C)

Size			0504
Fans: J			
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)			
SCOP	A,E	W/W	4,10
ηsh	A,E	%	161,00
Pdesignh	A,E	kW	82,81

(1) Efficiencies for low temperature applications (35 °C)

Size			0504
Fans: °			
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)			
SCOP	A	W/W	3,86
	E	W/W	-
ηsh	A	%	151,41
	E	%	-
Pdesignh	A	kW	82,81
	E	kW	-

(1) Efficiencies for low temperature applications (35 °C)

ENERGY DATA - STANDARD/INVERTER FANS (55°C)

Size			0504
Fans: J			
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)			
SCOP	A,E	W/W	3,30
ηsh	A,E	%	128,91
Pdesignh	A,E	kW	80,58

(1) Efficiencies for average temperature applications (55 °C)

Size			0504
Fans: °			
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)			
SCOP	A	W/W	3,14
	E	W/W	-
ηsh	A	%	122,74
	E	%	-
Pdesignh	A	kW	80,58
	E	kW	-

(1) Efficiencies for average temperature applications (55 °C)

GENERAL TECHNICAL DATA

Size			0504
Fans: °			
Compressor			
Type	A,E	type	Scroll
Compressor regulation	A,E	Type	On-Off
Number	A,E	no.	4
Circuits	A,E	no.	2
Refrigerant	A,E	type	R290
Refrigerant load circuit 1 (1)	A,E	kg	3,8
Refrigerant load circuit 2 (1)	A,E	kg	3,8
Potential global heating	A,E	GWP	3kgCO_2eq

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

■ *With the J fan option, the data are equivalent*

Size			0504
System side heat exchanger			
Type	A,E	type	Brazed plate
Number	A,E	no.	1

Size			0504
System type: N			
Hydraulic connections without hydronic kit			
Sizes (in/out)	A,E	Ø	2"1/2
Connections (in/out)	A,E	Type	Grooved joints

Size			0504
System type: °			
Hydraulic connections without hydronic kit			
Sizes (in/out)	A,E	Ø	6"
Connections (in/out)	A,E	Type	Grooved joints

SOUND DATA

Size			0504
Fans: J			
Sound data calculated in cooling mode (1)			
Sound power level	A	dB(A)	87,8
	E	dB(A)	84,8
Sound data calculated in heating mode (1)			
Sound power level	A,E	dB(A)	87,8

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			0504
Fans: °			
Sound data calculated in cooling mode (1)			
Sound power level	A	dB(A)	87,8
	E	dB(A)	-
Sound data calculated in heating mode (1)			
Sound power level	A	dB(A)	87,8
	E	dB(A)	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

ELECTRIC DATA

Size			0504
Electric data			
Maximum current (FLA)	A,E	A	115,2
Peak current (LRA)	A,E	A	235,2

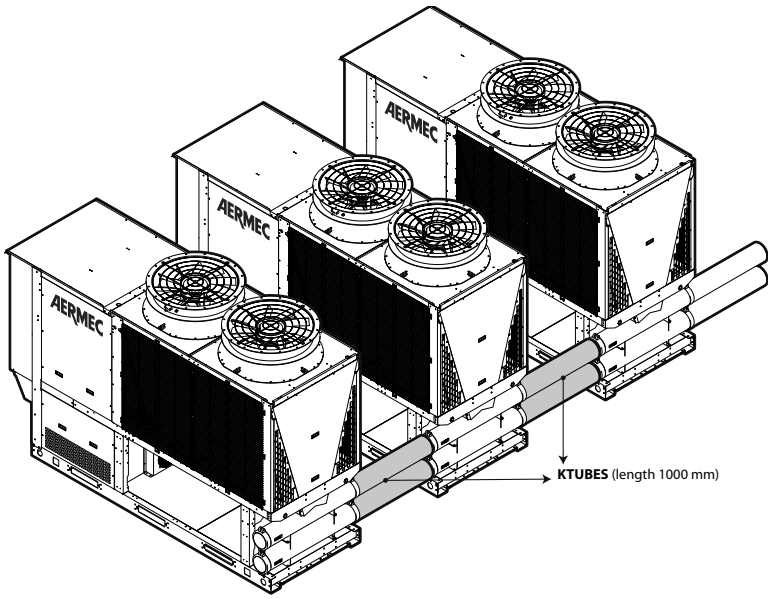
Data calculated without hydronic kit and accessories.

FANS DATA

Size			0504
Fans: J			
Fan			
Type	A,E	type	Axial
Fan motor	A,E	type	Inverter
Number	A,E	no.	2
Air flow rate	A	m^3/h	38500
	E	m^3/h	27500

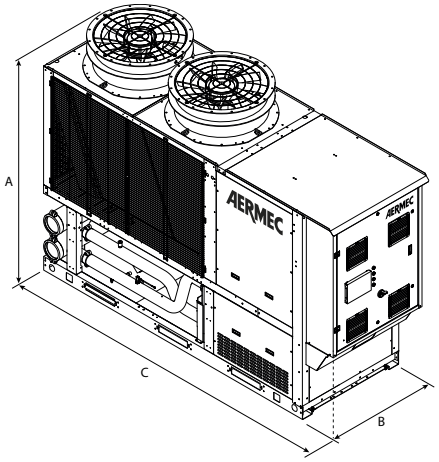
Size			0504
Fans: °			
Fan			
Type	A	type	Axial
	E	type	-
Fan motor	A	type	Asynchronous + DCPX
	E	type	-
Number	A	no.	2
	E	no.	-
Air flow rate	A	m^3/h	38500
	E	m^3/h	-

MODULAR INSTALLATION

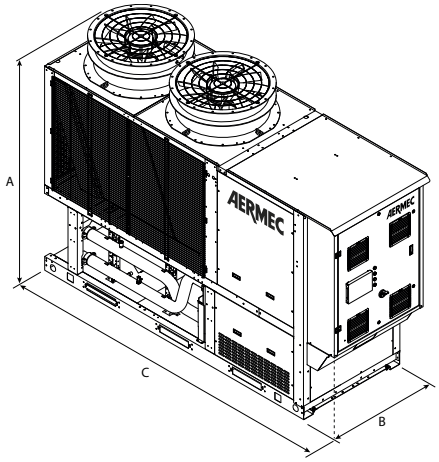


It is possible to couple up to 9 units designed to reduce the overall unit dimensions to a minimum.

DIMENSIONS



Modular version (°)



Version without modular pipes (N)

Size			0504
Integrated hydronic kit: 00			
Dimensions and weights			
A	A,E	mm	2520
B	A,E	mm	1198
C	A,E	mm	3583

Size			0504
Integrated hydronic kit: 00			
Modular version (°)			
Empty weight	A,E	kg	1502
Weight functioning	A,E	kg	1567
Version without modular pipes (N)			
Empty weight	A,E	kg	1441
Weight functioning	A,E	kg	1451

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume
responsibility or liability for errors or omissions.

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PRG-0282H-0654H

Reversible air/water heat pump

Cooling capacity 49 ÷ 143 kW
Heating capacity 51 ÷ 143 kW

- **R290 natural refrigerant gas**
- **Low refrigerant charge**
- **Production of hot water up to 75 °C**
- **High efficiency also at partial loads**
- **Compact dimensions**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -20°C outside air temperature in winter, and up to 48°C in summer. Hot water production up to 75°C.

Units mono or dual-circuit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.
Two scroll compressors are installed in each circuit in a tandem configuration.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Refrigerant HC R290

Using the natural R290 refrigerant, classified A3 to ISO 817 (non-toxic, odourless and flammable refrigerant), the unit's environmental impact drops significantly.
Combining low refrigerant load (less than 5 kg per circuit) with ultra-low Global Warming Potential (GWP), these units boast practically negligible direct equivalent CO2 emissions.

■ *The refrigerant gas detector, the double pressure relief valve (with exchange isolation valve) and the battery protection grilles are standard.*

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The use of the electronic expansion valve offers significant benefits (especially when the unit is working with partial loads), increasing the seasonal energy efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ *VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.*

CONTROL PCO[5]

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Swing HP and LP controls:** available for all models with inverter fan or with DCPX. By continuously modulating the fans, they streamline operation of the unit at any work point both in cooling and heating mode. This results in enhanced energy efficiency of the unit at partial loads.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.
— **"Noise Demand Limit" function**: only in non-quiet versions, this function limits the compressors within a time band to set a quiet operation profile, useful for example at night for greater acoustic comfort.

— Possibility to control two units in Master - Slave parallel mode. In this case, it is possible to use only one accessory PGD1 for both units.

ACCESSORIES

The units PRG-0282H-0654H must be controlled remotely through an appropriate accessory (remote control panelPGD1,,AERNET MULTICHILLER-EVO, AERLINK orPR4) to be obligatorily and separately. Only in this way is it possible to modify some basic operating parameters or view the presence of any alarms, which avoids accessing risk and restricted access areas.

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
RXBAS: Heater for finned coil heat exchanger.

COMPATIBILITY WITH VMF SYSTEM

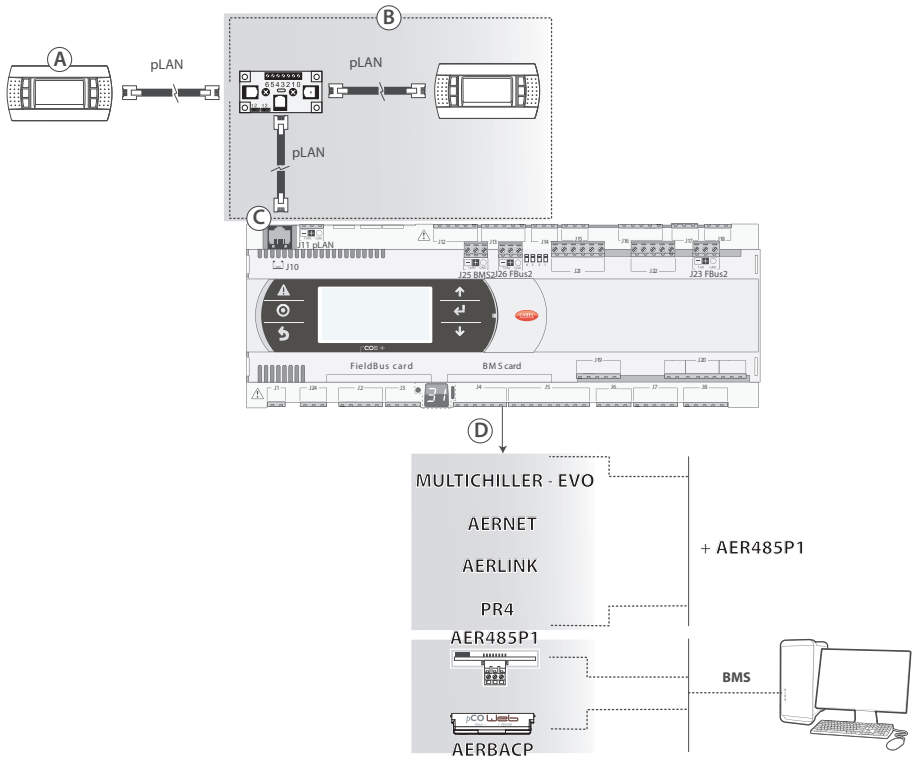
For more information about VMF system, refer to the dedicated documentation.

COMPATIBILITY BETWEEN CONTROL ACCESSORIES

Model	Ver	0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•
PGD1	A,E	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
PR4	A,E	•	•	•	•	•	•	•	•	•	•



Key:

A Display on the unit.

B Control panel accessory "PGD1".

C Control panel connection port "PGD1".

D **BMS Card serial port:** where to connect 1 among the accessories "MULTICHILLER-EVO AERNET, ,AERLINK, PR4 but to be connected also must also have "AER485P1"; in the case of BMS communication with the accessories "AER485P1 or AERBACP" the only mandatory compatible accessory is the control panel "PGD1".

ACCESSORIES COMPATIBILITY

Antivibration

Ver	0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4										
A, E	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11
Integrated hydronic kit: 01, 02, 03, 04, 09, K1, K2, K3, K4, W1, W2, W3, W4										
A, E	VT10	VT10	VT10	VT10	VT10	VT11	VT11	VT11	VT11	VT11

Device for peak current reduction

Ver	0282	0292	0302	0322	0332
A, E	DREPRG282	DREPRG292	DREPRG302	DREPRG322	DREPRG332

A grey background indicates the accessory must be assembled in the factory

Ver	0504	0554	0604	0634	0654
A, E	DREPRG504	DREPRG554	DREPRG604	DREPRG634	DREPRG654

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0292	0302	0322	0332
A, E	RIFPRG282	RIFPRG292	RIFPRG302	RIFPRG322	RIFPRG332

A grey background indicates the accessory must be assembled in the factory

Ver	0504	0554	0604	0634	0654
A, E	RIFPRG504	RIFPRG554	RIFPRG604	RIFPRG634	RIFPRG654

A grey background indicates the accessory must be assembled in the factory

Heater for finned coil heat exchanger

Ver	0282	0292	0302	0322	0332
A, E	RXBAS10	RXBAS10	RXBAS10	RXBAS10	RXBAS10

A grey background indicates the accessory must be assembled in the factory

Ver	0504	0554	0604	0634	0654
A, E	RXBAS11	RXBAS11	RXBAS12	RXBAS12	RXBAS12

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**PRG**
4,5,6,7	**Size** 0282, 0292, 0302, 0322, 0332, 0504, 0554, 0604, 0634, 0654
8	**Operating field**
X	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
9	**Model**
H	Heat pump
10	**Heat recovery**
D	With desuperheater (3)
°	Without heat recovery
11	**Version**
A	High efficiency
E	Silenced high efficiency (4)
12	**Coils**
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Copper-aluminium
13	**Fans**
J	Inverter
°	Standard with DCPX (5)
14	**Power supply**
°	400V ~ 3N 50Hz with magnet circuit breakers
15,16	**Integrated hydronic kit**
00	Without hydronic kit
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s and storage tank with holes for heaters
05	Storage tank with holes for heaters and single low head pump (6)
06	Storage tank with holes for heaters and pump low head + stand-by pump (6)
07	Storage tank with holes for heaters and single high head pump (6)
08	Storage tank with holes for heaters and pump high head + stand-by pump (6)
	Double loop
09	Storage tank with double loop and intermediate heat exchanger
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with inverter pump/s to fixed speed
I1	Single low head pump + fixed speed inverter
I2	Single low head pump with fixed speed inverter + stand-by pump
I3	Single high head pump + fixed speed inverter
I4	Single high head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and inverter pump/s to fixed speed
K1	Single low head pump + storage tank + fixed speed inverter
K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
K3	Single high head pump + storage tank + fixed speed inverter
K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and variable speed inverter pump/s
W1	Single low head pump + Storage tank + variable speed inverter (7)
W2	Double low head pump + Storage tank + variable speed inverter (7)
W3	Single high head pump + Storage tank + variable speed inverter (7)
W4	Double high head pump + Storage tank + variable speed inverter (7)

(1) Water produced from 4 °C ÷ 20 °C
(2) Processed water temperature 8 °C ÷ -10 °C. The option is not compatible with hydronic kits W1-W2-W3-W4. Not compatible with a desuperheater.
(3) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) Sizes 0282-0292-0302-0322-0332 are only available in low noise version (E).
(5) Option not available only for size 0504-0554-0604-0634-0654 version E
(6) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.
(7) Not available with Low temperature electronic thermostatic valve "Z"

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

PRG - A

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J, °											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	-	-	-	-	-	94,5	103,9	123,7	133,6	143,1
Input power	kW	-	-	-	-	-	35,8	40,5	40,8	45,1	49,5
Cooling total input current	A	-	-	-	-	-	67,6	81,8	92,2	105,8	119,4
EER	W/W	-	-	-	-	-	2,64	2,56	3,04	2,96	2,89
Water flow rate system side	l/h	-	-	-	-	-	16267	17888	21319	23015	24641
Pressure drop system side	kPa	-	-	-	-	-	30	36	47	54	62
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	-	-	-	-	-	102,3	113,2	124,7	134,1	143,1
Input power	kW	-	-	-	-	-	32,0	35,5	39,6	43,4	47,0
Heating total input current	A	-	-	-	-	-	63,8	77,0	91,2	104,8	117,8
COP	W/W	-	-	-	-	-	3,20	3,19	3,15	3,09	3,04
Water flow rate system side	l/h	-	-	-	-	-	17738	19623	21615	23253	24809
Pressure drop system side	kPa	-	-	-	-	-	31	37	48	55	63

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PRG - E

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	49,3	54,3	60,5	65,2	70,3	91,8	101,6	119,1	128,3	137,0
Input power	kW	16,5	18,6	20,3	22,6	25,0	35,7	40,6	40,1	44,8	49,6
Cooling total input current	A	35,3	42,2	50,1	56,9	63,8	67,5	82,0	91,0	104,8	118,8
EER	W/W	2,99	2,92	2,98	2,88	2,81	2,57	2,50	2,97	2,87	2,76
Water flow rate system side	l/h	8486	9361	10417	11227	12117	15797	17489	20523	22099	23601
Pressure drop system side	kPa	30	37	37	42	49	28	35	43	50	56
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	51,2	55,9	61,9	66,3	70,7	102,3	113,2	124,7	134,1	143,1
Input power	kW	15,4	17,1	18,8	20,4	22,2	32,1	35,6	39,6	43,4	47,0
Heating total input current	A	34,6	41,1	49,2	55,5	62,0	64,1	77,3	91,8	105,4	118,5
COP	W/W	3,33	3,27	3,28	3,25	3,19	3,19	3,18	3,15	3,09	3,04
Water flow rate system side	l/h	8872	9688	10728	11490	12242	17738	19623	21616	23254	24810
Pressure drop system side	kPa	33	39	39	44	50	36	44	48	55	62

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: °											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	49,3	54,3	60,5	65,2	70,3	-	-	-	-	-
Input power	kW	16,5	18,6	20,3	22,6	25,0	-	-	-	-	-
Cooling total input current	A	35,3	42,2	50,1	56,9	63,8	-	-	-	-	-
EER	W/W	2,99	2,92	2,98	2,88	2,81	-	-	-	-	-
Water flow rate system side	l/h	8486	9361	10417	11227	12117	-	-	-	-	-
Pressure drop system side	kPa	30	37	37	42	49	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	51,2	55,9	61,9	66,3	70,7	-	-	-	-	-
Input power	kW	15,4	17,1	18,8	20,4	22,2	-	-	-	-	-
Heating total input current	A	34,6	41,1	49,2	55,5	62,0	-	-	-	-	-
COP	W/W	3,33	3,27	3,28	3,25	3,19	-	-	-	-	-
Water flow rate system side	l/h	8872	9688	10728	11490	12242	-	-	-	-	-
Pressure drop system side	kPa	33	39	39	44	50	-	-	-	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

PRG - A

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J, °											
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	-	-	-	-	-	130,8	144,0	173,7	185,8	197,2
Input power	kW	-	-	-	-	-	39,8	45,0	44,4	49,4	54,5
Cooling total input current	A	-	-	-	-	-	74,4	90,0	98,9	114,0	129,2
EER	W/W	-	-	-	-	-	3,29	3,20	3,91	3,76	3,62
Water flow rate system side	l/h	-	-	-	-	-	22619	24890	30031	32116	34090
Pressure drop system side	kPa	-	-	-	-	-	58	70	93	105	118
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	-	-	-	-	-	104,9	115,3	127,0	135,5	144,1
Input power	kW	-	-	-	-	-	27,3	30,0	33,7	37,0	40,1
Heating total input current	A	-	-	-	-	-	54,2	64,9	77,2	89,0	100,1
COP	W/W	-	-	-	-	-	3,85	3,84	3,77	3,66	3,60
Water flow rate system side	l/h	-	-	-	-	-	18135	19911	21938	23418	24903
Pressure drop system side	kPa	-	-	-	-	-	32	38	49	56	63

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

PRG - E

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J											
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	68,5	75,4	84,3	90,1	97,0	126,2	139,9	166,0	176,9	187,2
Input power	kW	18,3	20,8	22,5	25,1	27,6	40,3	45,7	44,3	49,7	55,3
Cooling total input current	A	38,5	46,4	54,4	62,1	69,2	75,6	91,4	99,1	114,8	130,6
EER	W/W	3,75	3,62	3,75	3,59	3,51	3,13	3,06	3,75	3,56	3,38
Water flow rate system side	l/h	11856	13054	14611	15584	16779	21823	24180	28702	30587	32356
Pressure drop system side	kPa	59	72	72	81	94	54	66	85	95	106
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	52,5	56,8	63,0	66,9	72,0	104,8	115,1	126,9	135,5	144,0
Input power	kW	13,0	14,4	15,9	17,2	18,7	27,2	30,3	33,5	36,7	39,7
Heating total input current	A	29,1	34,5	41,3	46,6	52,1	54,2	65,5	77,2	88,7	99,8
COP	W/W	4,04	3,94	3,97	3,88	3,85	3,86	3,80	3,79	3,69	3,63
Water flow rate system side	l/h	9062	9817	10889	11546	12426	18110	19882	21926	23404	24884
Pressure drop system side	kPa	34	40	40	45	52	37	45	50	56	63

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

Size		0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: °											
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	68,5	75,4	84,3	90,1	97,0	-	-	-	-	-
Input power	kW	18,3	20,8	22,5	25,1	27,6	-	-	-	-	-
Cooling total input current	A	38,5	46,4	54,4	62,1	69,2	-	-	-	-	-
EER	W/W	3,75	3,62	3,75	3,59	3,51	-	-	-	-	-
Water flow rate system side	l/h	11856	13054	14611	15584	16779	-	-	-	-	-
Pressure drop system side	kPa	59	72	72	81	94	-	-	-	-	-
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	52,5	56,8	63,0	66,9	72,0	-	-	-	-	-
Input power	kW	13,0	14,4	15,9	17,2	18,7	-	-	-	-	-
Heating total input current	A	29,1	34,5	41,3	46,6	52,1	-	-	-	-	-
COP	W/W	4,04	3,94	3,97	3,88	3,85	-	-	-	-	-
Water flow rate system side	l/h	9062	9817	10889	11546	12426	-	-	-	-	-
Pressure drop system side	kPa	34	40	40	45	52	-	-	-	-	-

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA - STANDARD/INVERTER FANS

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J												
SEER - 12/7 (EN 14825: 2018) (1)												
SEER	A	W/W	-	-	-	-	-	4,11	4,01	4,61	4,55	4,43
	E	W/W	4,36	4,38	4,37	4,34	4,35	4,06	3,97	4,54	4,49	4,37
Seasonal efficiency	A	%	-	-	-	-	-	161,47	157,50	181,28	179,15	174,34
	E	%	171,34	172,18	171,98	170,59	171,01	159,56	155,60	178,73	176,80	171,92
SEER - 23/18 (EN 14825: 2018) (1)												
SEER	A	W/W	-	-	-	-	-	5,06	4,93	5,62	5,52	5,31
	E	W/W	5,45	5,45	5,31	5,26	5,24	4,06	3,97	4,54	4,49	4,37

(1) Calculation performed with VARIABLE water flow rate

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Seasonal efficiency	A	%	-	-	-	-	-	199,20	194,04	221,76	217,92	209,47
	E	%	214,82	215,18	209,56	207,44	206,66	159,56	155,60	178,73	176,80	171,92

(1) Calculation performed with VARIABLE water flow rate

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: °												
SEER - 12/7 (EN 14825: 2018) (1)												
SEER	A	W/W	-	-	-	-	-	3,96	3,86	4,49	4,43	4,32
	E	W/W	4,29	4,31	4,31	4,27	4,28	-	-	-	-	-
Seasonal efficiency	A	%	-	-	-	-	-	155,35	151,49	176,41	174,29	169,62
	E	%	168,62	169,41	169,27	167,75	168,28	-	-	-	-	-
SEER - 23/18 (EN 14825: 2018) (1)												
SEER	A	W/W	-	-	-	-	-	4,85	4,73	5,49	5,40	5,21
	E	W/W	5,38	5,39	5,26	5,20	5,17	-	-	-	-	-
Seasonal efficiency	A	%	-	-	-	-	-	191,06	186,20	216,59	212,83	205,36
	E	%	212,20	212,61	207,30	204,96	203,76	-	-	-	-	-

(1) Calculation performed with VARIABLE water flow rate

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J												
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)												
Efficiency energy class	A		-	-	-	-	-	-	-	-	-	-
	E		A++	A++	A++	A++	A++	-	-	-	-	-
ηsh	A	%	-	-	-	-	-	-	-	-	-	-
	E	%	156,55	155,98	155,53	155,63	157,12	-	-	-	-	-
SCOP	A	W/W	-	-	-	-	-	-	-	-	-	-
	E	W/W	3,99	3,97	3,96	3,97	4,00	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	-	-	-	-	-	-
	E	kW	40,85	43,36	50,06	52,18	53,99	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)												
Efficiency energy class	A		-	-	-	-	-	-	-	-	-	-
	E		A+	A+	A+	A+	A++	-	-	-	-	-
ηsh	A	%	-	-	-	-	-	-	-	-	-	-
	E	%	123,14	122,78	123,70	123,84	125,66	-	-	-	-	-
SCOP	A	W/W	-	-	-	-	-	-	-	-	-	-
	E	W/W	3,15	3,14	3,17	3,17	3,22	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	-	-	-	-	-	-
	E	kW	39,90	42,10	49,10	51,20	52,90	-	-	-	-	-
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
SCOP	A,E	W/W	-	-	-	-	-	4,08	3,87	4,04	3,95	4,02
ηsh	A,E	%	-	-	-	-	-	160,04	151,64	158,46	154,90	157,62
Pdesignh	A	kW	-	-	-	-	-	81,43	87,59	97,03	103,17	111,52
	E	kW	-	-	-	-	-	81,60	87,81	97,02	103,18	111,52
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)												
SCOP	A,E	W/W	-	-	-	-	-	3,30	3,14	3,31	3,30	3,34
ηsh	A,E	%	-	-	-	-	-	129,04	122,74	129,26	128,91	130,63
Pdesignh	A	kW	-	-	-	-	-	79,70	85,10	94,00	102,70	111,00
	E	kW	-	-	-	-	-	80,00	85,40	94,10	102,80	111,20

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: °												
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)												
Efficiency energy class	A		-	-	-	-	-	-	-	-	-	-
	E		A++	A++	A++	A++	A++	-	-	-	-	-
ηsh	A	%	-	-	-	-	-	-	-	-	-	-
	E	%	153,35	152,80	152,36	152,45	155,47	-	-	-	-	-
SCOP	A	W/W	-	-	-	-	-	-	-	-	-	-
	E	W/W	3,91	3,90	3,88	3,86	3,96	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	-	-	-	-	-	-
	E	kW	40,84	43,36	50,06	52,18	53,99	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)												
Efficiency energy class	A		-	-	-	-	-	-	-	-	-	-
	E		A+	A+	A+	A+	A+	-	-	-	-	-
ηsh	A	%	-	-	-	-	-	-	-	-	-	-
	E	%	120,95	120,95	121,68	122,25	124,65	-	-	-	-	-
SCOP	A	W/W	-	-	-	-	-	-	-	-	-	-
	E	W/W	3,10	3,09	3,12	3,13	3,19	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	-	-	-	-	-	-
	E	kW	39,90	42,10	49,10	51,20	52,90	-	-	-	-	-

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
SCOP	A	W/W	-	-	-	-	-	3,95	3,75	3,92	3,83	3,90
	E	W/W	-	-	-	-	-	-	-	-	-	-
ηsh	A	%	-	-	-	-	-	155,15	147,00	153,61	150,17	152,80
	E	%	-	-	-	-	-	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	-	81,43	87,59	97,03	103,17	111,52
	E	kW	-	-	-	-	-	-	-	-	-	-
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)												
SCOP	A	W/W	-	-	-	-	-	3,22	3,06	3,23	3,20	3,30
	E	W/W	-	-	-	-	-	-	-	-	-	-
ηsh	A	%	-	-	-	-	-	125,67	119,30	126,09	125,15	128,88
	E	%	-	-	-	-	-	-	-	-	-	-
Pdesignh	A	kW	-	-	-	-	-	79,70	85,10	94,00	102,70	111,00
	E	kW	-	-	-	-	-	-	-	-	-	-

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Electric data												
Maximum current (FLA)	A	A	-	-	-	-	-	115,8	123,8	135,7	147,7	159,7
	E	A	57,3	61,3	66,4	72,4	78,4	115,8	123,8	135,7	147,7	159,7
Peak current (LRA)	A	A	-	-	-	-	-	235,8	250,8	262,7	307,7	319,7
	E	A	177,3	188,3	193,4	232,4	238,4	235,8	250,8	262,7	307,7	319,7

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Compressor												
Type	A,E	type	Scroll									
Compressor regulation	A,E	Type	On-Off									
Number	A	no.	-	-	-	-	-	4	4	4	4	4
	E	no.	2	2	2	2	2	4	4	4	4	4
Circuits	A	no.	-	-	-	-	-	2	2	2	2	2
	E	no.	1	1	1	1	1	2	2	2	2	2
Refrigerant	A,E	type	R290									
Refrigerant load circuit 1 (1)	A	kg	-	-	-	-	-	4,2	4,2	4,9	4,9	4,9
	E	kg	4,2	4,2	4,9	4,9	4,9	4,2	4,2	4,9	4,9	4,9
Refrigerant load circuit 2 (1)	A,E	kg	-	-	-	-	-	4,2	4,2	4,9	4,9	4,9
Potential global heating	A,E	GWP	3kgCO_2eq									
System side heat exchanger												
Type	A,E	type	Brazed plate									
Number	A	no.	-	-	-	-	-	1	1	1	1	1
	E	no.	1	1	1	1	1	1	1	1	1	1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
System side heat exchanger												
Type	A,E	type	Brazed plate									
Number	A	no.	-	-	-	-	-	1	1	1	1	1
	E	no.	1	1	1	1	1	1	1	1	1	1

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Integrated hydronic kit: 00												
System side hydraulic connections												
Connections (in/out)	A,E	Type	Grooved joints									
Sizes (in/out)	A	Ø	-	-	-	-	-	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
	E	Ø	2 1/2"									

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J												
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	-	-	-	-	-	86,6	86,6	87,2	87,2	87,2
	E	dB(A)	82,0	82,0	82,2	84,0	84,0	84,6	84,6	84,7	85,3	85,3
Sound data calculated in heating mode (1)												
Sound power level	A	dB(A)	-	-	-	-	-	86,6	86,6	87,2	87,2	87,2
	E	dB(A)	82,0	82,0	82,2	84,0	84,0	86,0	86,0	86,6	87,2	87,2

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: °												
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	-	-	-	-	-	86,6	86,6	87,2	87,2	87,2
	E	dB(A)	82,0	82,0	82,2	84,0	84,0	-	-	-	-	-
Sound data calculated in heating mode (1)												
Sound power level	A	dB(A)	-	-	-	-	-	86,6	86,6	87,2	87,2	87,2
	E	dB(A)	82,0	82,0	82,2	84,0	84,0	-	-	-	-	-

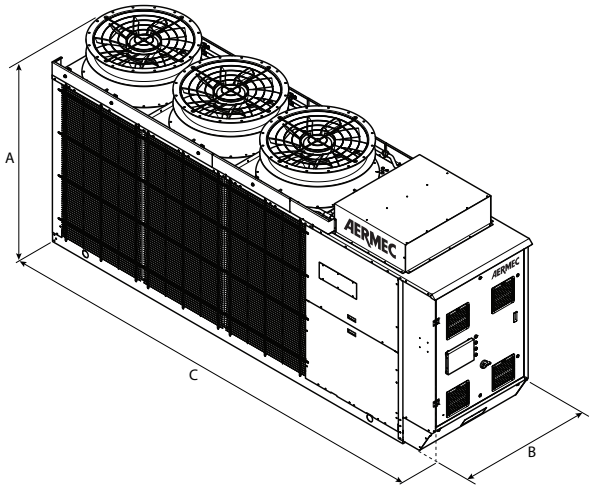
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: J												
Fan												
Type	A	type	-	-	-	-	-	Axial	Axial	Axial	Axial	Axial
	E	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Fan motor	A	type	-	-	-	-	-	Inverter	Inverter	Inverter	Inverter	Inverter
	E	type	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
Number	A	no.	-	-	-	-	-	2	2	3	3	3
	E	no.	6	6	8	8	8	2	2	3	3	3
Air flow rate	A	m^3/h	-	-	-	-	-	38211	38211	58970	58970	58970
	E	m^3/h	22937	22937	28830	28830	28830	31935	31935	42553	42553	42553

Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Fans: °												
Fan												
Type	A	type	-	-	-	-	-	Axial	Axial	Axial	Axial	Axial
	E	type	Axial	Axial	Axial	Axial	Axial	-	-	-	-	-
Fan motor	A	type	-	-	-	-	-	Asynchronous + DCPX	Asynchronous + DCPX	Asynchronous + DCPX	Asynchronous + DCPX	Asynchronous + DCPX
	E	type	Asynchronous + DCPX	Asynchronous + DCPX	Asynchronous + DCPX	Asynchronous + DCPX	Asynchronous + DCPX	-	-	-	-	-
Number	A	no.	-	-	-	-	-	2	2	3	3	3
	E	no.	6	6	8	8	8	-	-	-	-	-
Air flow rate	A	m^3/h	-	-	-	-	-	38211	38211	58970	58970	58970
	E	m^3/h	22937	22937	28830	28830	28830	-	-	-	-	-

DIMENSIONS



Size			0282	0292	0302	0322	0332	0504	0554	0604	0634	0654
Integrated hydronic kit: 00												
Dimensions and weights												
A	A	mm	-	-	-	-	-	1980	1980	1980	1980	1980
	E	mm	1920	1920	1920	1920	1920	1980	1980	1980	1980	1980
B	A	mm	-	-	-	-	-	1108	1108	1108	1108	1108
	E	mm	1108	1108	1108	1108	1108	1108	1108	1108	1108	1108
C	A	mm	-	-	-	-	-	3635	3635	4423	4423	4423
	E	mm	3375	3375	3375	3375	3375	3635	3635	4423	4423	4423

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRB 0282-0754

Air-water chiller

Cooling capacity 56 ÷ 202 kW

- **High seasonal efficiency**
- **Night mode**
- **Low refrigerant charge**
- **Compact dimensions**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 51°C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Dual-circuit unit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, available to configurator, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** available for all models with inverter fans or with DCPX. Allows, with continuous fan modulation, to optimize the operation of the unit in any operating point, ensuring an increase in the energy efficiency at partial load.
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
T6: Double safety valve with exchange cock, both on the high and low pressure branches.
C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
AER485P1	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•
SGD	E,L,N	•	•	•	•											
	U				•											

Remote panel

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
PR4	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0282	0302	0332	0352	0502	0552	0602	0604
Fans: M								
°, A	-	-	-	-	DCPX142	DCPX142	DCPX142	DCPX142
E, L	DCPX141	DCPX141	DCPX141	DCPX141	As standard	As standard	As standard	As standard
N	DCPX141	DCPX141	DCPX141	As standard	As standard	As standard	As standard	As standard
U	-	-	-	DCPX142	DCPX142	DCPX142	DCPX143	DCPX143
Fans: °								
E, L	DCPX140	DCPX140	DCPX140	DCPX140	-	-	-	-
N	DCPX140	DCPX140	DCPX140	-	-	-	-	-

Ver	0652	0654	0682	0702	0704	0752	0754
Fans: M							
°	DCPX142	DCPX142	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143
A	DCPX142	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4															
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
E	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
L	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
N	VT17	VT17	VT17	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT23	VT23	VT23	VT23

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
U	-	-	-	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT23	VT23	VT23	VT23
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, 09, K1, K2, K3, K4															
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
L	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
N	VT13	VT13	VT13	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT23	VT23	VT23	VT23
U	-	-	-	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT23	VT23	VT23	VT23

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
E	GP3	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
L	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
N	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP14 x 4 (1)	GP14 x 4 (1)	GP14 x 4 (1)	GP14 x 4 (1)
U	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP14 x 4 (1)	GP14 x 4 (1)	GP14 x 4 (1)	GP14 x 4 (1)

(1) x _ indicates the quantity to buy
The accessory cannot be fitted on the configurations indicated with -

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0602	0604
°, A	-	-	-	-	RIF0502	RIF0552	RIF0602	RIF0604
E, L, N	RIF0282	RIF0302	RIF0332	RIF0352	RIF0502	RIF0552	RIF0602	RIF0604
U	-	-	-	RIF0352	RIF0502	RIF0552	RIF0602	RIF0604

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754
°, A, E, L, N, U	RIF0652	RIF0654	RIF0682	RIF0702	RIF0704	RIF0752	RIF0754

A grey background indicates the accessory must be assembled in the factory

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0602	0604
°, A	-	-	-	-	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)
E, L, N	DRENRB282 (1)	DRENRB302 (1)	DRENRB332 (1)	DRENRB352 (1)	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)
U	-	-	-	DRENRB352 (1)	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754
°, A, E, L, N, U	DRENRB652 (1)	DRENRB654 (1)	DRENRB682 (1)	DRENRB702 (1)	DRENRB704 (1)	DRENRB752 (1)	DRENRB754 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°, A	-	-	-	-	T6NRB8	T6NRB8	T6NRB8	T6NRB11	T6NRB8	T6NRB11	T6NRB9	T6NRB10	T6NRB12	T6NRB10	T6NRB12
E, L	T6NRB6	T6NRB6	T6NRB6	T6NRB6	T6NRB8	T6NRB8	T6NRB8	T6NRB11	T6NRB8	T6NRB11	T6NRB9	T6NRB10	T6NRB12	T6NRB10	T6NRB12
N	T6NRB6	T6NRB6	T6NRB6	T6NRB8	T6NRB8	T6NRB8	T6NRB8	T6NRB11	T6NRB8	T6NRB11	T6NRB9	T6NRB10	T6NRB12	T6NRB10	T6NRB12
U	-	-	-	T6NRB8	T6NRB8	T6NRB8	T6NRB8	T6NRB11	T6NRB8	T6NRB11	T6NRB9	T6NRB10	T6NRB12	T6NRB10	T6NRB12

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Touch screen keyboard

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°, A, E, L, N, U	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0282, 0302, 0332, 0352, 0502, 0552, 0602, 0604, 0652, 0654, 0682, 0702, 0704, 0752, 0754
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Double mechanical thermostat for low temperature (2)
	Z	Low temperature electronic thermostatic valve (3)
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	C	Motocondensing unit
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (4)
	T	With total recovery (4)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	M	Oversized (5)
	°	Standard (6)
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with pump/s and storage tank with holes for heaters
	05	Storage tank with holes for heaters and single low head pump (7)
	06	Storage tank with holes for heaters and pump low head + stand-by pump (7)
	07	Storage tank with holes for heaters and single high head pump (7)
	08	Storage tank with holes for heaters and pump high head + stand-by pump (7)
		Double loop
	09	Double loop
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump
		Kit with inverter pump/s to fixed speed
	I1	Single low head pump + fixed speed inverter
	I2	Single low head pump with fixed speed inverter + stand-by pump
	I3	Single high head pump + fixed speed inverter
	I4	Single high head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and inverter pump/s to fixed speed
	K1	Single low head pump + storage tank + fixed speed inverter
	K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
	K3	Single high head pump + storage tank + fixed speed inverter
	K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and variable speed inverter pump/s
	W1	Single low head pump + Storage tank + variable speed inverter (8)
	W2	Double low head pump + Storage tank + variable speed inverter (8)
	W3	Single high head pump + Storage tank + variable speed inverter (8)
	W4	Double high head pump + Storage tank + variable speed inverter (8)

(1) Water produced from 4 °C ÷ 18 °C
(2) Water produced from -10 °C ÷ 18 °C
(3) Water produced from 4 °C ÷ 18 °C for ° version; -10 °C for the others versions
(4) For "YT" - "ZT" - "YD" and "ZD" recovery versions, contact the headquarters; Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program
(5) As standard in sizes fom 0502 to 0754 version ° - A - E - L, in sizes from 0352 to 0754 version N - U
(6) As standard in sizes from 0282 to 0352 versions E - L and in size from 0282 to 0332 version N
(7) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.
(8) Options Y and Z are not compatible with W1/W2/W3/W4

PERFORMANCE SPECIFICATIONS

Included units with '°' fans.

NRB - L

Size		0282	0302	0332	0352
Fans: °					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	56,5	64,3	73,9	85,5
Input power	kW	19,8	22,2	24,8	29,6
Cooling total input current	A	35,0	41,0	46,0	54,0
EER	W/W	2,85	2,90	2,98	2,89
Water flow rate system side	l/h	9734	11090	12722	14734
Pressure drop system side	kPa	37	48	39	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - E

Size		0282	0302	0332	0352
Fans: °					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	60,6	68,4	77,0	89,2
Input power	kW	18,6	21,1	23,8	28,3
Cooling total input current	A	32,0	36,0	41,0	46,0
EER	W/W	3,26	3,24	3,23	3,16
Water flow rate system side	l/h	10429	11774	13258	15372
Pressure drop system side	kPa	26	33	30	40

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - N

Size		0282	0302	0332
Fans: °				
Cooling performance 12 °C / 7 °C (1)				
Cooling capacity	kW	60,8	69,0	76,9
Input power	kW	17,8	20,5	22,9
Cooling total input current	A	33,0	39,0	44,0
EER	W/W	3,42	3,37	3,36
Water flow rate system side	l/h	10460	11884	13249
Pressure drop system side	kPa	27	25	31

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Included units with 'M' fans.

NRB - °

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	-	98,4	107,0	125,9	125,5	135,1	141,0	159,7	178,9	170,7	195,7	193,5
Input power	kW	-	-	-	-	33,2	37,5	41,6	45,6	47,4	52,2	54,8	60,8	58,3	71,8	67,2
Cooling total input current	A	-	-	-	-	59,0	65,0	71,0	80,0	81,0	92,0	93,0	102,0	104,0	117,0	117,0
EER	W/W	-	-	-	-	2,96	2,85	3,03	2,75	2,85	2,70	2,92	2,95	2,93	2,73	2,88
Water flow rate system side	l/h	-	-	-	-	16941	18444	21694	21620	23270	24282	27502	30805	29385	33700	33309
Pressure drop system side	kPa	-	-	-	-	39	46	42	50	49	48	52	66	71	78	65

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - L

Size		0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	96,3	104,5	122,6	121,5	131,1	134,8	156,1	174,3	166,4	189,9	187,4
Input power	kW	34,0	38,6	42,9	47,6	49,2	55,0	56,0	62,5	60,0	74,7	69,5
Cooling total input current	A	59,0	65,0	72,0	82,0	82,0	95,0	93,0	102,0	105,0	119,0	119,0
EER	W/W	2,83	2,71	2,86	2,55	2,67	2,45	2,79	2,79	2,78	2,54	2,70
Water flow rate system side	l/h	16583	18007	21114	20937	22592	23230	26870	30010	28645	32685	32255
Pressure drop system side	kPa	37	43	40	46	45	44	50	62	66	73	61

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - A

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	-	103,9	114,8	130,1	129,7	140,0	150,2	167,9	186,9	176,8	207,6	198,8
Input power	kW	-	-	-	-	31,4	35,4	40,3	43,5	45,0	47,6	51,9	59,2	56,6	69,6	63,8
Cooling total input current	A	-	-	-	-	55,0	59,0	68,0	73,0	74,0	77,0	86,0	94,0	98,0	103,0	107,0
EER	W/W	-	-	-	-	3,31	3,24	3,23	2,98	3,11	3,16	3,24	3,16	3,12	2,98	3,11
Water flow rate system side	l/h	-	-	-	-	17889	19764	22404	22344	24116	25867	28897	32172	30430	35736	34210
Pressure drop system side	kPa	-	-	-	-	30	36	35	42	40	57	46	56	55	60	58

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - E

Size		0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M												
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	100,4	110,5	123,9	122,2	132,4	144,8	161,4	178,0	168,2	195,9	187,7
Input power	kW	32,5	36,9	42,7	46,6	48,2	49,4	54,0	62,6	59,7	74,7	68,0
Cooling total input current	A	54,0	59,0	69,0	75,0	77,0	77,0	86,0	95,0	100,0	107,0	110,0
EER	W/W	3,09	3,00	2,90	2,62	2,75	2,93	2,99	2,84	2,82	2,62	2,76
Water flow rate system side	l/h	17275	19020	21329	21052	22807	24939	27779	30648	28950	33719	32307
Pressure drop system side	kPa	27	33	32	36	36	52	42	51	49	53	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - U

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	92,7	104,5	117,2	132,1	137,9	146,8	152,9	171,6	191,4	180,5	209,6	202,9
Input power	kW	-	-	-	27,1	30,8	34,5	38,8	41,3	44,2	45,5	50,7	59,3	56,2	67,2	63,1
Cooling total input current	A	-	-	-	51,0	56,0	61,0	68,0	76,0	76,0	86,0	88,0	101,0	104,0	116,0	115,0
EER	W/W	-	-	-	3,42	3,39	3,40	3,40	3,34	3,32	3,36	3,39	3,23	3,21	3,12	3,21
Water flow rate system side	l/h	-	-	-	15945	17984	20172	22745	23741	25275	26327	29532	32945	31067	36076	34915
Pressure drop system side	kPa	-	-	-	24	30	29	38	34	36	42	41	51	48	61	56

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - N

Size		0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M													
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	89,7	100,8	112,4	128,6	133,5	142,2	147,1	164,5	185,1	174,5	201,1	195,1
Input power	kW	27,8	31,9	36,1	39,4	42,4	45,3	47,2	52,9	60,9	57,5	70,2	65,3
Cooling total input current	A	50,0	55,0	62,0	66,0	74,0	75,0	85,0	88,0	100,0	102,0	116,0	114,0
EER	W/W	3,23	3,16	3,12	3,26	3,15	3,14	3,11	3,11	3,04	3,03	2,87	2,99
Water flow rate system side	l/h	15444	17352	19347	22150	22978	24481	25334	28325	31856	30031	34611	33586
Pressure drop system side	kPa	22	28	27	36	32	34	39	38	48	45	56	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: J																	
SEER - 12/7 (EN14825: 2018) (1)																	
SEER	°	W/W	-	-	-	-	4,34	4,23	4,39	4,12	4,26	4,11	4,28	4,26	4,13	4,24	4,12
	A	W/W	-	-	-	-	4,48	4,48	4,59	4,20	4,48	4,13	4,49	4,40	4,34	4,44	4,16
	E	W/W	4,59	4,69	4,60	4,52	4,48	4,46	4,53	4,16	4,34	4,18	4,51	4,32	4,13	4,33	4,11
	L	W/W	4,38	4,37	4,46	4,35	4,36	4,24	4,38	4,11	4,18	4,12	4,32	4,23	4,13	4,19	4,11
	N	W/W	4,79	4,84	4,73	4,81	4,68	4,76	4,84	4,53	4,72	4,39	4,77	4,60	4,35	4,56	4,31
	U	W/W	-	-	-	4,74	4,71	4,82	4,65	4,33	4,66	4,31	4,76	4,53	4,22	4,52	4,29
Seasonal efficiency	°	%	-	-	-	-	170,60	166,20	172,60	161,80	167,30	161,40	168,20	167,40	162,20	166,60	161,80
	A	%	-	-	-	-	176,20	176,20	180,60	165,00	176,20	162,20	176,60	173,00	170,60	174,60	163,40
	E	%	180,60	184,60	181,00	177,80	176,20	175,40	178,20	163,40	170,60	164,20	177,40	169,80	162,20	170,20	161,40
	L	%	172,20	171,80	175,40	171,00	171,40	166,60	172,20	161,40	164,20	161,80	169,80	166,20	162,20	164,60	161,40
	N	%	188,60	190,60	186,20	189,40	184,20	187,40	190,60	178,20	185,80	172,60	187,80	181,00	171,00	179,40	169,40
	U	%	-	-	-	186,80	185,40	189,80	183,00	170,20	183,40	169,40	187,40	178,20	165,80	177,80	168,60
SEER - 23/18 (EN14825: 2018) (2)																	
SEER	°	W/W	-	-	-	-	5,31	5,07	5,29	4,89	5,04	4,93	5,13	5,12	5,01	4,99	4,95
	A	W/W	-	-	-	-	5,55	5,42	5,54	5,06	5,36	5,11	5,43	5,23	5,30	5,24	5,03
	E	W/W	5,50	5,62	5,55	5,58	5,47	5,41	5,37	4,88	5,10	5,05	5,37	5,06	4,93	5,02	4,88
	L	W/W	5,17	5,22	5,34	5,22	5,27	5,00	5,12	4,81	4,89	4,82	5,13	4,92	4,91	4,83	4,84
	N	W/W	5,75	5,82	5,73	5,91	5,72	5,68	5,88	5,49	5,67	5,29	5,71	5,46	5,27	5,38	5,21
	U	W/W	-	-	-	5,92	5,86	5,85	5,72	5,32	5,68	5,30	5,79	5,45	5,22	5,41	5,21

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Seasonal efficiency	°	%	-	-	-	-	209,30	199,60	208,40	192,70	198,50	194,20	202,20	201,60	197,50	196,50	194,80
	A	%	-	-	-	-	219,00	213,90	218,60	199,50	211,30	201,30	214,10	206,30	208,80	206,60	198,20
	E	%	216,80	221,60	218,80	220,00	215,70	213,30	211,80	192,00	200,80	199,10	211,60	199,30	194,00	197,90	192,20
	L	%	203,80	205,90	210,60	205,60	207,70	197,10	201,70	189,40	192,70	189,70	202,00	193,60	193,20	190,00	190,40
	N	%	227,00	229,80	226,30	233,30	225,80	224,10	232,30	216,40	223,70	208,50	225,30	215,30	207,60	212,10	205,20
	U	%	-	-	-	233,80	231,40	231,10	225,80	209,60	224,00	209,00	228,70	214,90	205,70	213,40	205,40
SEPR - (EN 14825: 2018) (2)																	
SEPR	°	W/W	-	-	-	-	5,79	5,61	5,74	5,62	5,66	5,57	5,59	5,84	5,94	5,45	5,76
	A	W/W	-	-	-	-	6,10	5,97	6,00	5,73	5,97	5,74	5,92	5,79	5,89	5,75	5,78
	E	W/W	6,46	6,42	6,13	6,36	5,98	5,95	5,79	5,41	5,72	5,68	5,83	5,67	5,69	5,51	5,47
	L	W/W	6,15	6,00	5,97	6,07	5,79	5,65	5,61	5,31	5,55	5,28	5,58	5,60	5,77	5,37	5,53
	N	W/W	6,71	6,53	6,23	6,54	6,22	6,21	6,16	6,12	6,14	5,93	6,09	5,97	6,08	5,83	5,90
	U	W/W	-	-	-	6,43	6,30	6,31	6,01	6,15	6,09	5,88	6,19	5,88	6,05	5,85	6,07

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																	
SEER - 12/7 (EN14825: 2018) (1)																	
SEER	°	W/W	-	-	-	-	4,23	4,13	4,29	- (2)	4,16	- (2)	4,18	4,16	- (2)	4,14	- (2)
	A	W/W	-	-	-	-	4,37	4,37	4,48	- (2)	4,37	- (2)	4,38	4,29	- (2)	4,33	- (2)
	E	W/W	4,48	4,58	4,49	4,42	4,37	4,35	4,42	- (2)	4,24	- (2)	4,40	4,21	- (2)	4,23	- (2)
	L	W/W	4,28	4,27	4,35	4,27	4,25	4,14	4,27	- (2)	4,11	- (2)	4,22	4,13	- (2)	4,11	- (2)
	N	W/W	4,68	4,72	4,62	4,69	4,56	4,65	4,72	4,42	4,61	4,28	4,65	4,49	4,24	4,45	4,20
	U	W/W	-	-	-	4,62	4,59	4,71	4,54	4,22	4,54	4,20	4,64	4,42	4,11	4,41	4,18
Seasonal efficiency	°	%	-	-	-	-	166,20	162,20	168,40	- (2)	163,40	- (2)	164,10	163,40	- (2)	162,50	- (2)
	A	%	-	-	-	-	171,90	171,60	176,10	- (2)	171,70	- (2)	172,20	168,70	- (2)	170,20	- (2)
	E	%	176,20	180,20	176,40	173,60	171,70	171,00	173,80	- (2)	166,50	- (2)	172,80	165,50	- (2)	166,00	- (2)
	L	%	168,10	167,80	171,10	167,00	167,00	162,50	167,80	- (2)	161,20	- (2)	165,70	162,10	- (2)	161,30	- (2)
	N	%	184,00	185,70	181,70	184,70	179,50	182,90	185,90	173,70	181,20	168,20	182,90	176,40	166,70	174,90	165,10
	U	%	-	-	-	181,70	180,60	185,20	178,50	165,60	178,70	165,10	182,50	173,80	161,40	173,30	164,30
SEER - 23/18 (EN14825: 2018) (3)																	
SEER	°	W/W	-	-	-	-	5,17	4,95	5,16	4,77	4,95	4,80	5,01	4,99	4,86	4,82	4,90
	A	W/W	-	-	-	-	5,42	5,28	5,40	4,91	5,22	4,94	5,29	5,10	4,95	5,11	4,99
	E	W/W	5,36	5,48	5,40	5,44	5,33	5,27	5,24	4,68	4,97	4,93	5,23	4,93	4,81	4,90	4,74
	L	W/W	5,05	5,10	5,21	5,09	5,13	4,88	4,99	4,65	4,77	4,52	5,00	4,79	4,78	4,67	4,74
	N	W/W	5,61	5,67	5,59	5,76	5,58	5,54	5,74	5,35	5,53	5,12	5,56	5,32	5,13	5,24	5,07
	U	W/W	-	-	-	5,77	5,71	5,71	5,58	5,18	5,53	5,17	5,64	5,32	5,08	5,27	5,07
Seasonal efficiency	°	%	-	-	-	-	203,90	194,80	203,30	187,70	195,10	189,00	197,30	196,70	191,50	189,90	193,00
	A	%	-	-	-	-	213,60	208,30	213,10	193,50	205,80	194,60	208,70	201,10	194,90	201,30	196,70
	E	%	211,40	216,30	213,10	214,70	210,20	207,90	206,50	184,00	195,90	194,00	206,10	194,20	189,20	193,00	186,50
	L	%	199,00	201,10	205,30	200,70	202,30	192,30	196,60	183,10	187,90	177,60	197,10	188,70	188,10	183,80	186,40
	N	%	221,40	223,80	220,60	227,50	220,00	218,70	226,60	210,90	218,20	203,00	219,50	209,70	202,20	206,70	199,90
	U	%	-	-	-	227,60	225,50	225,40	220,30	204,00	218,30	203,60	222,70	209,60	200,00	207,90	199,90
SEPR - (EN 14825: 2018) (3)																	
SEPR	°	W/W	-	-	-	-	5,79	5,61	5,74	5,62	5,66	5,57	5,59	5,84	5,94	5,45	5,76
	A	W/W	-	-	-	-	6,10	5,97	6,00	5,73	5,97	5,74	5,92	5,79	5,89	5,75	5,78
	E	W/W	6,46	6,42	6,13	6,36	5,98	5,95	5,79	5,41	5,72	5,68	5,83	5,67	5,69	5,51	5,47
	L	W/W	6,15	6,00	5,97	6,07	5,79	5,65	5,61	5,31	5,55	5,28	5,58	5,60	5,77	5,37	5,53
	N	W/W	6,71	6,53	6,23	6,54	6,22	6,12	6,16	6,12	6,14	5,93	6,09	5,97	6,08	5,83	5,90
	U	W/W	-	-	-	6,43	6,30	6,31	6,01	6,15	6,09	5,88	6,19	5,88	6,05	5,85	6,07

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: °																	
SEER - 12/7 (EN14825: 2018) (1)																	
SEER	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	W/W	4,48	4,58	4,49	4,42	-	-	-	-	-	-	-	-	-	-	-
	L	W/W	4,28	4,27	4,35	4,25	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	4,68	4,72	4,62	-	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	°,A,U	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	%	176,20	180,20	176,40	173,60	-	-	-	-	-	-	-	-	-	-	-
	L	%	168,10	167,80	171,10	167,00	-	-	-	-	-	-	-	-	-	-	-
	N	%	184,00	185,70	181,70	-	-	-	-	-	-	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (2)																	
SEER	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	W/W	5,36	5,48	5,40	5,44	-	-	-	-	-	-	-	-	-	-	-
	L	W/W	5,05	5,10	5,21	5,09	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	5,61	5,67	5,59	-	-	-	-	-	-	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Seasonal efficiency	°,A,U	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	%	211,40	216,30	213,10	214,70	-	-	-	-	-	-	-	-	-	-	-
	L	%	199,00	201,10	205,30	200,70	-	-	-	-	-	-	-	-	-	-	-
	N	%	221,40	223,80	220,60	-	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN 14825: 2018) (2)																	
SEPR	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	W/W	6,46	6,42	6,13	6,36	-	-	-	-	-	-	-	-	-	-	-
	L	W/W	6,15	6,00	5,97	6,07	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	6,71	6,53	6,23	-	-	-	-	-	-	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Electric data																	
Maximum current (FLA)	°	A	-	-	-	-	72,2	77,1	86,0	98,2	94,9	111,3	112,7	127,3	131,4	144,0	141,2
	A	A	-	-	-	-	72,2	77,1	86,0	98,2	94,9	114,5	112,7	127,3	131,4	144,0	141,2
	E	A	42,6	49,2	56,9	65,3	72,2	77,1	86,0	98,2	94,9	114,5	112,7	127,3	131,4	144,0	141,2
	L	A	41,5	49,2	55,8	65,3	72,2	77,1	86,0	98,2	94,9	111,3	112,7	127,3	131,4	144,0	141,2
	N	A	42,6	50,3	56,9	67,3	72,2	77,1	89,2	101,3	98,1	114,5	112,7	130,5	134,6	147,2	144,4
	U	A	-	-	-	67,3	72,2	77,1	89,2	101,3	98,1	114,5	112,7	130,5	134,6	147,2	144,4
Peak current (LRA)	°	A	-	-	-	-	277,6	282,5	329,2	211,9	338,1	225,1	363,8	378,4	274,9	476,4	346,6
	A	A	-	-	-	-	277,6	282,5	329,2	211,9	338,1	228,3	363,8	378,4	274,9	476,4	346,6
	E	A	148,0	163,0	170,6	208,9	277,6	282,5	329,2	211,9	338,1	228,3	363,8	378,4	274,9	476,4	346,6
	L	A	146,9	163,0	169,5	208,9	277,6	282,5	329,2	211,9	338,1	225,1	363,8	378,4	274,9	476,4	346,6
	N	A	148,0	164,1	170,6	210,8	277,6	282,5	332,4	215,1	341,3	228,3	363,8	381,6	278,1	479,6	349,8
	U	A	-	-	-	210,8	277,6	282,5	332,4	215,1	341,3	228,3	363,8	381,6	278,1	479,6	349,8

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Compressor																	
Type	°,A,E,L,N,U	type								Scroll							
Number	°,A	no.	-	-	-	-	2	2	2	4	2	4	2	2	4	2	4
	E,L,N	no.	2	2	2	2	2	2	2	4	2	4	2	2	4	2	4
	U	no.	-	-	-	2	2	2	2	4	2	4	2	2	4	2	4
Circuits	°,A	no.	-	-	-	-	1	1	1	2	1	2	1	1	2	1	2
	E,L,N	no.	1	1	1	1	1	1	1	2	1	2	1	1	2	1	2
	U	no.	-	-	-	1	1	1	1	2	1	2	1	1	2	1	2
Refrigerant	°,A,E,L,N,U	type								R410A							
System side heat exchanger																	
Type	°,A,E,L,N,U	type								Brazed plate							
Number	°,A	no.	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1
	E,L,N	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	U	no.	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																	
Sizes (in/out)	°,A	Ø	-	-	-	-	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2
	E,L,N	Ø								2" 1/2							
	U	Ø	-	-	-	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2

G.s. = Grooved joints

Fans

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fan																	
Type	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Number	°	no.	-	-	-	-	2	2	2	2	3	3	3	2	2	3	3
	A	no.	-	-	-	-	2	2	2	2	3	3	3	2	3	3	3
	E	no.	6	6	8	8	2	2	2	2	3	3	3	2	3	3	3
	L	no.	4	6	6	8	2	2	2	2	3	3	3	2	2	3	3
	N	no.	6	8	8	2	2	2	3	3	3	4	4	3	3	4	4
	U	no.	-	-	-	2	2	2	3	3	3	4	4	3	3	4	4

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: °																	
Fan																	
Fan motor	°,A,U	type	Asynchronous														
	E,L,N	type	Asynchronous with phase cut														
Air flow rate	°,A,U	m³/h	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	m³/h	20700	22200	27500	24800	-	-	-	-	-	-	-	-	-	-	-
	L	m³/h	15200	20700	22200	27500	-	-	-	-	-	-	-	-	-	-	-
	N	m³/h	22200	27500	24800	-	-	-	-	-	-	-	-	-	-	-	-
Sound data calculated in cooling mode (1)																	
Sound power level	°,A,U	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	dB(A)	72,4	72,9	73,7	73,9	-	-	-	-	-	-	-	-	-	-	-
	L	dB(A)	71,8	72,9	73,3	73,9	-	-	-	-	-	-	-	-	-	-	-
	N	dB(A)	72,4	73,3	73,7	-	-	-	-	-	-	-	-	-	-	-	-

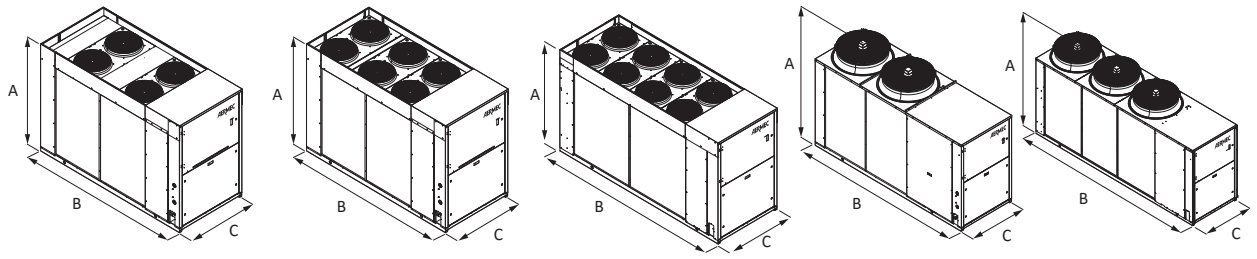
(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M																	
Increased fan																	
Fan motor	°,A,U	type	Asynchronous														
	E,L,N	type	Asynchronous with phase cut														
With static pressure																	
Air flow rate	°	m³/h	-	-	-	-	36600	36600	35100	35100	35100	33700	55200	53100	53100	53100	53100
	A	m³/h	-	-	-	-	35100	35100	33800	33800	33700	53100	53100	51100	51100	51100	51100
	E	m³/h	20700	22200	27500	24800	26800	26800	25600	25600	25600	40500	40500	38800	38800	38800	38800
	L	m³/h	15200	20700	22200	27500	30900	30900	29500	29500	46500	44600	44600	29500	28300	44600	44600
	N	m³/h	22200	27500	24800	26800	25600	25600	40500	40500	40500	38800	38800	54600	54600	54600	54600
	U	m³/h	-	-	-	35100	33700	33700	53100	53100	53100	51100	51100	71200	71200	71200	71200
High static pressure	°,A,U	Pa	-	-	-	-	50	50	50	50	50	50	50	50	50	50	50
	E,L	Pa	80	80	80	80	50	50	50	50	50	50	50	50	50	50	50
	N	Pa	80	80	80	50	50	50	50	50	50	50	50	50	50	50	50
Sound power level	°	dB(A)	-	-	-	-	84,5	85,0	85,3	84,2	85,5	84,3	86,9	87,0	85,9	87,7	87,5
	A	dB(A)	-	-	-	-	84,5	85,0	85,3	84,2	85,5	85,9	86,9	87,0	85,9	87,7	87,5
	E	dB(A)	72,4	72,9	73,7	73,9	80,7	81,5	82,1	76,1	82,5	77,2	83,6	83,8	77,4	85,0	83,0
	L	dB(A)	71,8	72,9	73,3	73,9	80,7	81,5	82,1	76,1	82,5	76,5	83,6	83,8	77,4	85,0	83,5
	N	dB(A)	72,4	73,3	73,7	79,7	80,7	81,5	83,0	76,9	83,4	77,2	83,6	84,5	77,9	85,5	83,3
	U	dB(A)	-	-	-	84,0	84,5	85,0	86,6	85,8	86,8	85,9	86,9	87,9	87,0	88,5	88,5
Without Static pressure																	
Air flow rate	°	m³/h	-	-	-	-	42300	42300	40400	40400	40400	38700	63700	61000	61000	61000	61000
	A	m³/h	-	-	-	-	40400	40400	38600	38600	38600	61100	61000	58500	58500	58500	58500
	E	m³/h	-	-	-	-	26800	26800	25600	25600	25600	40500	40500	38800	38800	38800	38800
	L	m³/h	-	-	-	-	30900	30900	29500	29500	29500	28300	46500	44600	44600	44600	44600
	N	m³/h	-	-	-	26800	25600	25600	40500	40500	40500	38800	38800	54600	54600	54600	54600
	U	m³/h	-	-	-	45700	44000	44000	69000	69000	69000	66500	69000	66500	66500	66500	66500
High static pressure	°,A,E,L	Pa	-	-	-	-	0	0	0	0	0	0	0	0	0	0	0
	N,U	Pa	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
Sound power level	°	dB(A)	-	-	-	-	86,6	86,8	87,0	86,0	87,1	86,0	88,2	88,3	87,7	88,6	88,5
	A	dB(A)	-	-	-	-	86,6	86,8	87,0	86,0	87,1	87,7	88,2	88,3	87,7	88,6	88,5
	E	dB(A)	-	-	-	-	80,7	81,5	82,1	76,1	82,5	77,2	83,6	83,8	77,4	85,0	83,0
	L	dB(A)	-	-	-	-	80,7	81,5	82,1	76,1	82,5	76,5	83,6	83,8	77,4	85,0	83,5
	N	dB(A)	-	-	-	79,7	80,7	81,5	83,0	76,9	83,4	77,2	83,6	84,5	77,9	85,5	83,3
	U	dB(A)	-	-	-	86,4	86,6	86,8	88,5	87,7	88,6	87,7	88,2	89,3	88,9	89,6	89,6

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: J																	
Inverter fan																	
Fan motor	°,A,E,L,N,U	type								Inverter							
Air flow rate	°	m^3/h	-	-	-	-	36600	36600	35100	35100	35100	33700	55200	53100	53100	53100	53100
	A	m^3/h	-	-	-	-	35100	35100	33800	33800	33700	53100	53100	51100	51100	51100	51100
	E	m^3/h	20700	22200	27500	24800	26800	26800	25600	25600	25600	40500	40500	38800	38800	38800	38800
	L	m^3/h	15200	20700	22200	27500	30900	30900	29500	29500	29500	28300	46500	44600	44600	44600	44600
	N	m^3/h	22200	27500	24800	26800	25600	25600	40500	40500	40500	38800	38800	54600	54600	54600	54600
	U	m^3/h	-	-	-	35100	33700	33700	53100	53100	51100	71200	71200	53100	51100	71200	71200
High static pressure	°,A	Pa	-	-	-	-	120	120	120	120	120	120	120	120	120	120	120
	E,L	Pa	20	20	20	20	120	120	120	120	120	120	120	120	120	120	120
	N	Pa	20	20	20	120	120	120	120	120	120	120	120	120	120	120	120
	U	Pa	-	-	-	120	120	120	120	120	120	120	120	120	120	120	120
Sound data calculated in cooling mode (1)																	
Sound power level	°	dB(A)	-	-	-	-	84,5	85,0	85,3	85,5	86,9	87,0	87,7	84,2	84,3	85,9	87,5
	A	dB(A)	-	-	-	-	84,5	85,0	85,3	85,5	86,9	87,0	87,7	84,2	85,9	85,9	87,5
	E	dB(A)	72,4	72,9	73,7	73,9	80,7	81,5	82,1	82,5	83,6	83,8	85,0	76,1	77,2	77,4	83,0
	L	dB(A)	71,8	72,9	73,3	73,9	80,7	81,5	82,1	82,5	83,6	83,8	85,0	76,1	76,5	77,4	83,5
	N	dB(A)	72,4	73,3	73,7	79,7	80,7	81,5	83,0	83,4	83,6	84,5	85,5	76,9	77,2	77,9	83,3
	U	dB(A)	-	-	-	84,0	84,5	85,0	86,6	86,8	86,9	87,9	88,5	85,8	85,9	87,0	88,5

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Dimensions and weights																	
A	°,A	mm	-	-	-	-	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
	E,L	mm	1680	1680	1680	1680	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
	N	mm	1680	1680	1680	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
	U	mm	-	-	-	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
B	°	mm	-	-	-	-	3200	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010
	A	mm	-	-	-	-	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010	4010
	E	mm	2450	2950	2950	2950	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010	4010
	L	mm	2450	2450	2950	2950	3200	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010
	N	mm	2950	2950	2950	3200	3200	3200	4010	4010	4010	4010	4010	5200	5200	5200	5200
	U	mm	-	-	-	3200	3200	3200	4010	4010	4010	4010	4010	5200	5200	5200	5200
C	°,A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	E,L,N	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	U	mm	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Weights																	
Without hydronic kit	°	kg	-	-	-	-	993	1018	1075	1160	1075	1210	1267	1427	1331	1440	1392
	A	kg	-	-	-	-	1046	1072	1116	1200	1116	1325	1347	1507	1410	1531	1471
	E	kg	828	889	912	962	1046	1072	1116	1116	1347	1507	1531	1200	1325	1410	1471
	L	kg	810	828	894	907	993	1018	1075	1160	1075	1210	1267	1427	1331	1440	1392
	N	kg	884	907	957	1020	1076	1109	1232	1243	1426	1647	1660	1327	1415	1549	1607
	U	kg	-	-	-	1020	1076	1109	1232	1243	1426	1647	1660	1327	1415	1549	1607

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRB 0282H-0754H

Reversible air/water heat pump

Cooling capacity 52 ÷ 261 kW
Heating capacity 57 ÷ 193 kW

- **High efficiency also at partial loads**
- **Components redundancy for greater safety**
- **Low refrigerant charge**
- **Compact dimensions**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION
Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS
° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced

FEATURES

Operating field
Working at full load up to -15°C outside air temperature in winter, and up to 48°C in summer. Hot water production up to 55°C (for more information see the technical documentation).

Units mono or dual-circuit
The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

New condensing Coils
The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve
The possibility to use electronic expansion valve, available to configurator, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Option integrated hydronic kit
An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ *VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.*

CONTROL
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

ACCESSORIES
AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud con-

nection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.
AERCALM: The aim of the accessory installed in the electric box of the unit is to provide a clean contact for commanding - on the basis of the outside air temperature - a boiler to replace the heat pump. Aercalm must be requested at the time of ordering, as it is installed in the factory.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
AER485P1	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SGD	E,L	•	•	•	•											

Remote panel

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
PR4	°,A					•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Fans: M															
E, L	DCPX141	DCPX141	DCPX141	DCPX141	-	-	-	-	-	-	-	-	-	-	-
Fans: °															
°	-	-	-	-	DCPX142	DCPX142	DCPX142	DCPX142	DCPX142	DCPX142	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143
A	-	-	-	-	DCPX142	DCPX142	DCPX142	DCPX142	DCPX142	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143	DCPX143
E, L	DCPX140	DCPX140	DCPX140	DCPX140	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4															
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
E	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
L	VT17	VT17	VT17	VT17	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, K1, K2, K3, K4, W1, W2, W3, W4															
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22
L	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
E	GP3	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
L	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy
The accessory cannot be fitted on the configurations indicated with -

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0602	0604
°, A	-	-	-	-	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)
E, L	DRENRB282 (1)	DRENRB302 (1)	DRENRB332 (1)	DRENRB352 (1)	DRENRB502 (1)	DRENRB552 (1)	DRENRB602 (1)	DRENRB604 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754
°, A, E, L	DRENRB652 (1)	DRENRB654 (1)	DRENRB682 (1)	DRENRB702 (1)	DRENRB704 (1)	DRENRB752 (1)	DRENRB754 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°, A	-	-	-	-	RIF0502	RIF0552	RIF0602	RIF0604	RIF0652	RIF0654	RIF0682	RIF0702	RIF0704	RIF0752	RIF0754
E, L	RIF0282	RIF0302	RIF0332	RIF0352	RIF0502	RIF0552	RIF0602	RIF0604	RIF0652	RIF0654	RIF0682	RIF0702	RIF0704	RIF0752	RIF0754

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Touch screen keyboard

Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
°, A, E, L	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH	C-TOUCH

A grey background indicates the accessory must be assembled in the factory

Clean contact for controlling a boiler.

Model	Ver	0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
AERCALM	°,A,E,L								•		•			•		•

CONFIGURATOR

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0282, 0302, 0332, 0352, 0502, 0552, 0602, 0604, 0652, 0654, 0682, 0702, 0704, 0752, 0754
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Double mechanical thermostat for low temperature (2)
	Z	Low temperature electronic thermostatic valve (3)
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (4)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency (5)
	L	Standard silenced (5)
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	M	Oversized (6)
	°	Standard
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with pump/s and storage tank with holes for heaters
	05	Storage tank with holes for heaters and single low head pump (7)
	06	Storage tank with holes for heaters and pump low head + stand-by pump (7)
	07	Storage tank with holes for heaters and single high head pump (7)
	08	Storage tank with holes for heaters and pump high head + stand-by pump (7)
		Double loop
	09	Double loop
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump
		Kit with inverter pump/s to fixed speed
	I1	Single low head pump + fixed speed inverter
	I2	Single low head pump with fixed speed inverter + stand-by pump
	I3	Single high head pump + fixed speed inverter
	I4	Single high head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and inverter pump/s to fixed speed
	K1	Single low head pump + storage tank + fixed speed inverter
	K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
	K3	Single high head pump + storage tank + fixed speed inverter
	K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and variable speed inverter pump/s
	W1	Single low head pump + Storage tank + variable speed inverter
	W2	Double low head pump + Storage tank + variable speed inverter
	W3	Single high head pump + Storage tank + variable speed inverter
	W4	Double high head pump + Storage tank + variable speed inverter

(1) Water produced from 4 °C ÷ 18 °C
(2) Water produced from -10 °C ÷ 18 °C
(3) Water produced from 4 °C ÷ 18 °C for ° version; -10 °C for the others versions
(4) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(5) The size 0282-0302-0332-0352 are only available in the silenced versions "HL/HE"
(6) Only for 0282 ÷ 0352 sizes
(7) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

NRB H°

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	-	91,2	99,7	116,0	115,4	124,7	133,4	151,0	169,9	159,9	187,2	180,8
Input power	kW	-	-	-	-	33,5	37,5	42,6	46,2	47,8	51,2	51,7	60,0	58,0	69,8	65,7
Cooling total input current	A	-	-	-	-	61,0	67,0	74,0	83,0	83,0	92,0	90,0	102,0	105,0	116,0	116,0
EER	W/W	-	-	-	-	2,72	2,66	2,72	2,50	2,61	2,60	2,92	2,83	2,76	2,68	2,75
Water flow rate system side	l/h	-	-	-	-	15705	17177	19972	19876	21484	22988	25997	29247	27534	32236	31116
Pressure drop system side	kPa	-	-	-	-	35	42	37	44	43	44	50	61	65	74	59
Heating performance 40 °C / 45 °C (2)																
Heating capacity	kW	-	-	-	-	96,8	105,8	123,7	129,0	136,1	143,4	158,7	178,4	171,8	198,7	188,6
Input power	kW	-	-	-	-	31,0	33,8	38,7	42,7	43,3	47,7	51,2	58,2	57,3	66,0	61,8
Heating total input current	A	-	-	-	-	56,0	60,0	68,0	77,0	76,0	87,0	89,0	99,0	104,0	110,0	111,0
COP	W/W	-	-	-	-	3,12	3,13	3,20	3,03	3,15	3,01	3,10	3,07	3,00	3,01	3,05
Water flow rate system side	l/h	-	-	-	-	16773	18334	21443	22371	23594	24863	27527	30948	29797	34460	32710
Pressure drop system side	kPa	-	-	-	-	40	48	43	56	52	52	56	69	76	84	65

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HL

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	52,1	59,2	67,3	78,1	88,5	96,5	111,5	110,4	119,3	126,4	147,0	164,5	154,9	180,5	174,0
Input power	kW	19,5	22,0	24,8	29,5	34,1	38,3	44,1	48,4	49,9	54,2	52,3	61,5	59,2	72,5	67,8
Cooling total input current	A	35,0	41,0	47,0	55,0	59,0	66,0	74,0	84,0	84,0	94,0	87,0	100,0	103,0	116,0	116,0
EER	W/W	2,67	2,69	2,71	2,65	2,60	2,52	2,53	2,28	2,39	2,33	2,81	2,68	2,62	2,49	2,57
Water flow rate system side	l/h	8974	10197	11584	13455	15234	16630	19200	19020	20540	21776	25312	28324	26677	31068	29958
Pressure drop system side	kPa	33	42	33	45	33	39	34	40	39	40	48	58	60	69	55
Heating performance 40 °C / 45 °C (2)																
Heating capacity	kW	57,5	65,7	75,3	84,9	96,8	105,8	123,7	129,0	136,1	143,4	158,7	178,4	171,8	198,7	188,6
Input power	kW	17,6	20,7	23,1	26,9	31,0	33,8	38,7	42,6	43,3	47,7	51,2	58,2	57,3	66,0	61,8
Heating total input current	A	32,0	38,0	43,0	51,0	56,0	60,0	68,0	77,0	76,0	87,0	89,0	99,0	104,0	110,0	111,0
COP	W/W	3,27	3,17	3,26	3,16	3,12	3,13	3,20	3,03	3,15	3,01	3,10	3,07	3,00	3,01	3,05
Water flow rate system side	l/h	9973	11376	13056	14711	16773	18334	21443	22371	23594	24863	27527	30948	29797	34460	32710
Pressure drop system side	kPa	41	53	42	54	40	47	43	55	52	52	56	69	75	84	65

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HA

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	-	-	-	-	96,9	106,5	123,6	123,1	133,6	142,1	163,9	178,5	168,0	199,9	190,0
Input power	kW	-	-	-	-	32,3	36,1	39,5	43,3	45,0	47,2	50,7	57,0	55,4	66,5	62,8
Cooling total input current	A	-	-	-	-	57,0	61,0	68,0	73,0	74,0	79,0	85,0	94,0	99,0	102,0	106,0
EER	W/W	-	-	-	-	3,00	2,95	3,13	2,84	2,97	3,01	3,23	3,13	3,03	3,01	3,03
Water flow rate system side	l/h	-	-	-	-	16684	18331	21277	21205	23007	24462	28216	30726	28924	34406	32698
Pressure drop system side	kPa	-	-	-	-	26	31	32	38	38	50	44	52	50	56	54
Heating performance 40 °C / 45 °C (2)																
Heating capacity	kW	-	-	-	-	100,3	110,9	124,3	129,7	138,2	149,4	164,1	179,7	172,3	200,6	190,0
Input power	kW	-	-	-	-	30,7	33,5	37,6	40,5	42,0	46,7	50,2	56,3	54,3	62,9	59,5
Heating total input current	A	-	-	-	-	56,0	60,0	67,0	73,0	74,0	86,0	87,0	96,0	99,0	106,0	107,0
COP	W/W	-	-	-	-	3,27	3,31	3,31	3,20	3,29	3,20	3,27	3,19	3,17	3,19	3,19
Water flow rate system side	l/h	-	-	-	-	17406	19230	21553	22489	23953	25914	28469	31171	29889	34800	32956
Pressure drop system side	kPa	-	-	-	-	28	34	33	42	41	56	45	54	54	57	55

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HE

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	55,4	62,1	70,0	81,2	94,0	103,0	119,1	117,6	128,0	138,3	159,4	172,5	162,3	191,7	182,6
Input power	kW	18,5	21,0	23,7	28,3	32,8	36,9	40,7	44,7	46,9	47,7	51,4	58,5	56,7	69,3	64,9
Cooling total input current	A	32,0	37,0	42,0	47,0	56,0	61,0	68,0	74,0	75,0	76,0	83,0	93,0	98,0	102,0	106,0
EER	W/W	3,00	2,96	2,95	2,86	2,86	2,79	2,92	2,63	2,73	2,90	3,10	2,95	2,87	2,77	2,81
Water flow rate system side	l/h	9530	10696	12052	13983	16181	17722	20498	20255	22037	23819	27431	29692	27947	33000	31425
Pressure drop system side	kPa	23	29	26	35	24	29	30	34	34	48	41	49	47	51	50
Heating performance 40 °C / 45 °C (2)																
Heating capacity	kW	59,0	68,2	76,6	87,1	100,3	110,9	124,3	129,7	138,2	149,4	164,1	179,7	172,3	200,6	190,0
Input power	kW	17,5	20,3	22,9	26,4	30,7	33,5	37,6	40,5	42,0	46,7	50,2	56,3	54,3	62,9	59,5
Heating total input current	A	33,0	38,0	44,0	50,0	56,0	60,0	67,0	73,0	74,0	86,0	87,0	96,0	99,0	106,0	107,0
COP	W/W	3,37	3,36	3,35	3,30	3,27	3,31	3,31	3,20	3,29	3,20	3,27	3,19	3,17	3,19	3,19
Water flow rate system side	l/h	10227	11816	13289	15100	17406	19230	21553	22489	23953	25914	28469	31171	29889	34800	32956
Pressure drop system side	kPa	26	35	31	41	28	34	33	42	41	56	45	54	54	57	55

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

NRB H°

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 23 °C / 18 °C (1)																
Cooling capacity	kW	-	-	-	-	122,6	133,3	155,1	154,9	165,6	183,4	203,5	227,9	218,9	248,3	247,3
Input power	kW	-	-	-	-	36,3	41,0	46,5	50,2	52,2	55,9	55,8	65,6	62,6	77,0	72,2
Cooling total input current	A	-	-	-	-	65,0	72,0	80,0	89,0	90,0	99,0	96,0	110,0	112,0	126,0	126,0
EER	W/W	-	-	-	-	3,38	3,25	3,33	3,08	3,17	3,28	3,65	3,48	3,50	3,23	3,42
Water flow rate system side	l/h	-	-	-	-	21190	23054	26805	26775	28622	31700	35175	39395	37837	42931	42743
Pressure drop system side	kPa	-	-	-	-	63	75	67	81	76	84	92	111	123	131	112
Heating performance 30 °C / 35 °C (2)																
Heating capacity	kW	-	-	-	-	98,8	107,2	127,4	132,8	139,6	146,7	163,5	182,9	176,8	201,7	192,4
Input power	kW	-	-	-	-	25,4	27,7	31,8	34,3	35,5	38,4	42,0	47,3	46,5	53,2	50,4
Heating total input current	A	-	-	-	-	46,0	49,0	56,0	61,0	62,0	70,0	72,0	80,0	84,0	88,0	90,0
COP	W/W	-	-	-	-	3,89	3,87	4,01	3,87	3,93	3,82	3,90	3,87	3,80	3,79	3,82
Water flow rate system side	l/h	-	-	-	-	17058	18508	21998	22936	24118	25357	28248	31616	30551	34851	33261
Pressure drop system side	kPa	-	-	-	-	41	49	45	59	54	54	59	72	80	86	68

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

NRB HL

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 23 °C / 18 °C (1)																
Cooling capacity	kW	69,6	79,3	92,2	105,6	118,1	128,2	147,6	146,8	156,6	170,9	196,8	218,8	210,1	237,3	235,3
Input power	kW	21,9	24,2	27,3	32,5	37,3	42,4	48,9	53,8	55,5	60,7	57,2	68,1	64,8	81,0	75,7
Cooling total input current	A	39,0	44,0	51,0	60,0	64,0	72,0	81,0	92,0	93,0	104,0	94,0	110,0	111,0	128,0	128,0
EER	W/W	3,18	3,27	3,37	3,25	3,17	3,02	3,02	2,73	2,82	2,82	3,44	3,22	3,24	2,93	3,11
Water flow rate system side	l/h	12041	13740	15960	18270	20427	22163	25508	25376	27064	29542	34006	37824	36327	41017	40668
Pressure drop system side	kPa	59	77	63	83	59	69	61	70	68	73	86	103	112	120	101
Heating performance 30 °C / 35 °C (2)																
Heating capacity	kW	58,9	66,7	77,1	86,8	98,8	107,2	127,4	132,8	139,6	146,7	163,5	182,9	176,8	201,7	192,4
Input power	kW	13,9	16,5	18,4	21,5	25,4	27,7	31,8	34,3	35,5	38,4	42,0	47,3	46,5	53,2	50,4
Heating total input current	A	25,0	30,0	34,0	40,0	46,0	49,0	56,0	61,0	62,0	70,0	72,0	80,0	84,0	88,0	90,0
COP	W/W	4,25	4,06	4,19	4,03	3,89	3,87	4,01	3,87	3,93	3,82	3,90	3,87	3,80	3,79	3,82
Water flow rate system side	l/h	10168	11516	13317	14972	17058	18508	21998	22936	24118	25357	28248	31616	30551	34851	33261
Pressure drop system side	kPa	42	54	44	56	41	48	45	57	54	54	59	72	79	86	68

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

NRB HA

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 23 °C / 18 °C (1)																
Cooling capacity	kW	-	-	-	-	131,3	143,6	166,5	170,4	178,7	198,2	222,3	241,2	231,6	268,1	261,3
Input power	kW	-	-	-	-	34,9	39,4	42,9	47,2	49,0	50,3	54,8	62,4	59,6	73,6	68,8
Cooling total input current	A	-	-	-	-	61,0	66,0	74,0	79,0	80,0	82,0	91,0	101,0	105,0	112,0	115,0
EER	W/W	-	-	-	-	3,77	3,65	3,88	3,61	3,65	3,94	4,06	3,86	3,88	3,65	3,80
Water flow rate system side	l/h	-	-	-	-	22699	24821	28771	29452	30874	34255	38412	41683	40019	46336	45163
Pressure drop system side	kPa	-	-	-	-	48	57	59	73	68	98	81	97	96	102	103
Heating performance 30 °C / 35 °C (2)																
Heating capacity	kW	-	-	-	-	104,2	114,6	128,1	133,6	141,8	154,4	169,0	184,0	177,3	203,5	193,6
Input power	kW	-	-	-	-	25,2	27,6	30,9	32,6	34,4	38,0	41,2	45,8	44,1	50,7	48,5
Heating total input current	A	-	-	-	-	46,0	49,0	54,0	59,0	60,0	69,0	71,0	78,0	80,0	85,0	87,0
COP	W/W	-	-	-	-	4,14	4,16	4,15	4,10	4,12	4,07	4,10	4,02	4,02	4,01	3,99
Water flow rate system side	l/h	-	-	-	-	18004	19795	22128	23077	24492	26674	29206	31801	30649	35173	33469
Pressure drop system side	kPa	-	-	-	-	30	36	35	45	43	60	47	56	56	58	57

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

NRB HE

Size		0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 23 °C / 18 °C (1)																
Cooling capacity	kW	76,4	85,7	96,8	111,4	126,2	137,5	158,5	160,4	168,9	191,5	214,3	230,5	221,2	253,2	247,4
Input power	kW	20,4	23,1	25,7	31,2	35,9	41,0	45,2	49,8	52,2	51,4	56,4	65,1	62,1	78,2	72,6
Cooling total input current	A	35,0	40,0	45,0	51,0	61,0	66,0	75,0	81,0	82,0	81,0	90,0	102,0	106,0	114,0	117,0
EER	W/W	3,74	3,72	3,77	3,57	3,51	3,36	3,51	3,22	3,24	3,72	3,80	3,54	3,56	3,24	3,41
Water flow rate system side	l/h	13219	14836	16740	19268	21829	23767	27392	27721	29185	33098	37025	39827	38232	43759	42750
Pressure drop system side	kPa	43	55	50	66	44	52	53	64	60	92	75	88	88	91	92
Heating performance 30 °C / 35 °C (2)																
Heating capacity	kW	60,5	70,2	78,9	90,4	104,2	114,6	128,1	133,6	141,8	154,4	169,0	184,0	177,3	203,5	193,6
Input power	kW	13,8	16,1	18,2	21,1	25,2	27,6	30,9	32,6	34,4	38,0	41,2	45,8	44,1	50,7	48,5
Heating total input current	A	26,0	30,0	35,0	40,0	46,0	49,0	54,0	59,0	60,0	69,0	71,0	78,0	80,0	85,0	87,0
COP	W/W	4,38	4,36	4,34	4,28	4,14	4,16	4,15	4,10	4,12	4,07	4,10	4,02	4,02	4,01	3,99
Water flow rate system side	l/h	10456	12125	13636	15617	18004	19795	22128	23077	24492	26674	29206	31801	30649	35173	33469
Pressure drop system side	kPa	27	37	33	43	30	36	35	45	43	60	47	56	56	58	57

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling capacity with low leaving water temp (UE n° 2016/2281)																	
SEER	°	W/W	-	-	-	-	3,92	3,83	3,99	3,70	3,91	3,67	4,14	3,97	3,73	3,88	3,76
	A	W/W	-	-	-	-	4,21	4,14	4,39	3,93	4,20	3,92	4,38	4,27	3,99	4,24	4,06
	E	W/W	4,28	4,32	4,22	4,24	4,17	4,10	4,33	3,86	4,12	3,93	4,35	4,21	3,98	4,16	3,92
	L	W/W	4,10	4,11	4,11	4,00	3,88	3,83	3,93	3,68	3,89	3,64	4,08	3,89	3,70	3,81	3,71
ηsc	°	%	-	-	-	-	154,00	150,00	157,00	145,00	153,00	144,00	163,00	156,00	146,00	152,00	147,00
	A	%	-	-	-	-	165,00	163,00	173,00	154,00	165,00	154,00	172,00	168,00	157,00	167,00	160,00
	E	%	168,00	170,00	166,00	167,00	164,00	161,00	170,00	151,00	162,00	154,00	171,00	165,00	156,00	163,00	154,00
	L	%	161,00	161,00	161,00	157,00	152,00	150,00	154,00	144,00	153,00	143,00	160,00	153,00	145,00	149,00	145,00
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)																	
Pdesignh	°	kW	-	-	-	-	88,80	97,30	112,20	116,80	124,50	129,90	144,90	162,80	157,50	182,70	172,10
	A	kW	-	-	-	-	90,20	99,60	112,20	116,80	125,80	135,00	149,00	164,10	157,00	183,30	173,60
	E	kW	53,46	53,46	53,46	78,80	90,20	99,60	112,20	116,80	125,80	135,00	149,00	164,10	157,00	183,30	173,60
	L	kW	52,20	60,22	68,44	78,20	88,80	97,30	112,20	116,80	124,50	129,90	144,90	162,80	157,50	182,70	172,10
ηsh	°	%	-	-	-	-	135,90	139,50	140,40	130,40	140,30	129,50	134,00	137,30	126,30	138,40	128,50
	A	%	-	-	-	-	138,00	142,80	143,20	133,00	143,10	132,10	139,80	141,30	128,00	142,00	133,00
	E	%	158,26	158,26	158,26	152,70	138,50	142,80	143,20	133,00	143,10	132,10	139,80	141,30	128,40	142,00	133,00
	L	%	156,16	152,79	152,22	150,00	135,90	139,50	140,40	130,50	140,30	129,50	134,00	137,30	126,30	138,40	128,50
SCOP	°	W/W	-	-	-	-	3,47	3,56	3,58	3,34	3,58	3,31	3,43	3,51	3,23	3,54	3,29
	A	W/W	-	-	-	-	3,53	3,65	3,66	3,40	3,65	3,38	3,57	3,61	3,29	3,63	3,40
	E	W/W	4,03	4,04	4,03	3,89	3,54	3,65	3,65	3,40	3,66	3,38	3,57	3,61	3,29	3,62	3,40
	L	W/W	3,98	3,89	3,88	3,83	3,47	3,56	3,59	3,34	3,58	3,31	3,43	3,51	3,23	3,54	3,29

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

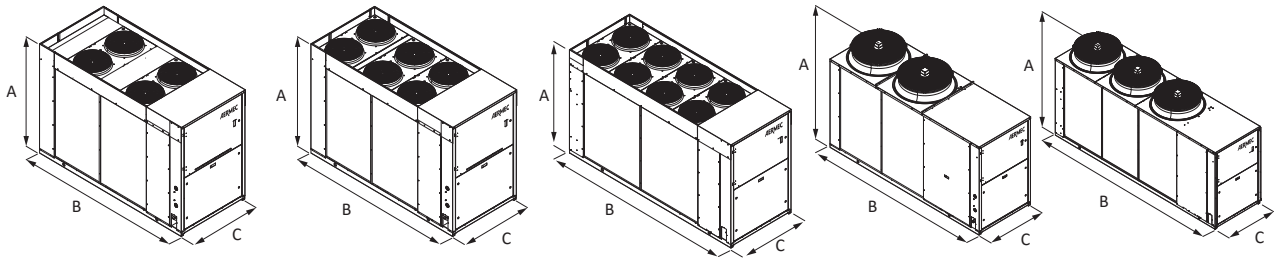
Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Electric data																	
Maximum current (FLA)	°	A	-	-	-	-	74,3	79,2	88,1	100,3	97,0	113,5	115,9	130,5	134,6	147,2	144,4
	A	A	-	-	-	-	74,3	79,2	88,1	100,3	97,0	117,7	115,9	130,5	134,6	147,2	144,4
	E	A	42,6	49,2	56,9	65,3	74,3	79,2	88,1	100,3	97,0	117,7	115,9	130,5	134,6	147,2	144,4
	L	A	41,5	49,2	55,8	65,3	74,3	79,2	88,1	100,3	97,0	113,5	115,9	130,5	134,6	147,2	144,4
Peak current (LRA)	°	A	-	-	-	-	279,8	284,7	331,4	214,1	340,3	227,2	367,0	381,6	278,1	479,6	349,8
	A	A	-	-	-	-	279,8	284,7	331,4	214,1	340,3	231,5	367,0	381,6	278,1	479,6	349,8
	E	A	148,0	163,0	170,6	208,9	279,8	284,7	331,4	214,1	340,3	231,5	367,0	381,6	278,1	479,6	349,8
	L	A	146,9	163,0	169,5	208,9	279,8	284,7	331,4	214,1	340,3	227,2	367,0	381,6	278,1	479,6	349,8

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Compressor																	
Type	°,A,E,L	type								Scroll							
Compressor regulation	°,A,E,L	Type								On-Off							
Number	°,A	no.	-	-	-	-	2	2	2	4	2	4	2	2	4	2	4
	E,L	no.	2	2	2	2	2	2	2	4	2	4	2	2	4	2	4
Circuits	°,A	no.	-	-	-	-	1	1	1	2	1	2	1	1	2	1	2
	E,L	no.	1	1	1	1	1	1	1	2	1	2	1	1	2	1	2
Refrigerant	°,A,E,L	type								R410A							
Refrigerant charge (1)	°	kg	-	-	-	-	12,2	12,2	16,8	17,6	16,8	20,0	24,5	24,5	23,0	24,5	23,0
	A	kg	-	-	-	-	15,9	15,8	17,8	19,8	18,4	21,6	28,6	28,6	27,0	28,6	27,0
	E	kg	9,1	10,7	11,1	12,5	15,9	15,8	17,8	19,8	18,4	21,6	28,6	28,6	27,0	28,6	27,0
	L	kg	8,8	9,4	10,3	11,0	12,2	12,2	16,8	17,6	16,8	20,0	24,5	24,5	23,0	24,5	23,0
System side heat exchanger																	
Type	°,A,E,L	type								Brazed plate							
Number	°,A	no.	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1
	E,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																	
Connections (in/out)	°,A,E,L	Type								Grooved joints							
Sizes (in/out)	°,A,E,L	Ø								2"1/2							
Fan																	
Type	°,A,E,L	type								Axial							
Number	°	no.	-	-	-	-	2	2	2	2	2	2	3	3	3	3	3
	A	no.	-	-	-	-	2	2	2	2	2	3	3	3	3	3	3
	E	no.	6	6	8	8	2	2	2	2	2	3	3	3	3	3	3
	L	no.	4	6	6	8	2	2	2	2	2	2	3	3	3	3	3
Air flow rate	°	m^3/h	-	-	-	-	42785	42785	41094	41065	41094	39542	62015	61936	61936	61936	61936
	A	m^3/h	-	-	-	-	41080	41080	39461	39461	39461	59684	59701	59684	59684	59684	59684
	E	m^3/h	21230	22746	28176	25787	31149	31149	29855	29855	29855	47085	45202	45187	45187	45187	45187
	L	m^3/h	15574	21226	22732	28156	32650	32650	31613	31169	31161	29823	47087	47125	47125	47125	47125
Sound data calculated in cooling mode (2)																	
Sound power level	°	dB(A)	-	-	-	-	86,6	86,9	87,1	86,5	87,3	86,5	88,8	88,9	88,2	89,4	89,5
	A	dB(A)	-	-	-	-	86,6	86,9	87,1	86,5	87,3	88,2	88,8	88,9	88,2	89,4	89,5
	E	dB(A)	73,0	73,5	74,3	74,5	82,2	82,9	83,3	76,7	83,7	77,8	84,9	85,0	78,0	86,1	84,0
	L	dB(A)	72,4	73,5	73,9	74,5	82,2	82,9	83,3	76,7	83,7	77,1	84,9	85,0	78,0	86,1	84,0
Sound pressure level (10 m)	°	dB(A)	-	-	-	-	54,8	55,0	55,2	54,6	55,4	54,6	56,8	56,9	56,2	57,4	57,5
	A	dB(A)	-	-	-	-	54,8	55,0	55,2	54,6	55,4	56,2	56,8	56,9	56,2	57,4	57,5
	E	dB(A)	41,3	41,7	42,5	42,7	50,3	51,0	51,4	44,8	51,8	45,8	52,9	53,1	46,0	54,1	52,0
	L	dB(A)	40,7	41,7	42,1	42,7	50,3	51,0	51,4	44,8	51,8	45,3	52,9	53,1	46,0	54,1	52,0

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0602	0604	0652	0654	0682	0702	0704	0752	0754
Dimensions and weights																	
A	°,A	mm	-	-	-	-	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
	E,L	mm	1680	1680	1680	1680	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898	1898
B	°	mm	-	-	-	-	3200	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010
	A	mm	-	-	-	-	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010	4010
	E	mm	2450	2950	2950	2950	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010	4010
	L	mm	2450	2450	2950	2950	3200	3200	3200	3200	3200	3200	4010	4010	4010	4010	4010
C	°,A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	E,L	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100

Aermec reserves the right to make any modiÿcations deemed necessary.
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NRG 0282-0804

Air-water chiller

Cooling capacity 55,8 ÷ 224,6 kW

- **High efficiency also at partial loads**
- **Low refrigerant charge**
- **Compact dimensions**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas (A2L).
Condensing coil with copper pipes and aluminium louvers, plate heat exchanger.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50°C external air temperature. Unit can produce chilled water up to -10 °C.
For more information refer to the selection program and to to the dedicated documentation.

Units mono or dual-circuit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ *VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption and to guarantee operation of the unit even in critical conditions.*

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
AER485P1	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SGD	E,L,N	•	•	•	•														
	U				•														

Remote panel

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
PR4	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L,N	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	U				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
Fans: M									
°, A	-	-	-	-	DCPX146	DCPX146	DCPX147	DCPX146	DCPX147
E, L	-	-	-	-	As standard	As standard	As standard	As standard	As standard
N	-	-	-	As standard	As standard	As standard	As standard	As standard	As standard
U	-	-	-	DCPX146	DCPX146	DCPX146	DCPX147	DCPX147	DCPX147
Fans: °									
E, L	DCPX145	DCPX145	DCPX145	DCPX145	-	-	-	-	-
N	DCPX145	DCPX145	DCPX145	-	-	-	-	-	-

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: M									
°, A	DCPX146	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147
E	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
L	As standard	As standard	As standard	As standard	As standard	As standard	As standard	-	-
N	As standard	As standard	As standard	-	-	-	-	-	-
U	DCPX147	DCPX147	DCPX147	-	-	-	-	-	-

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4																		
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
E	VT17	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
L	VT17	VT17	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	-	-
N	VT13	VT13	VT13	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
U	-	-	-	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, K1, K2, K3, K4, W1, W2, W3, W4																		
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
L	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	-	-
N	VT13	VT13	VT13	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
U	-	-	-	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°, A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)
E	GP3	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)
L	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)
N	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)
U	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy
The accessory cannot be fitted on the configurations indicated with -

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
A, E	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
L	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	-	-
N, U	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652
°, A	-	-	DRENRG332N	-	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604	DRENRG652
E, L, N	DRENRG282	DRENRG302	DRENRG332N	DRENRG352	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604	DRENRG652
U	-	-	DRENRG332N	DRENRG352	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604	DRENRG652

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0654	0682	0702	0704	0752	0754	0802	0804
°, A, E, N, U	DRENRG654N	DRENRG682	DRENRG702	DRENRG704	DRENRG752	DRENRG754	DRENRG802	DRENRG804
L	DRENRG654N	DRENRG682	DRENRG702	DRENRG704	DRENRG752	DRENRG754	-	-

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652
°, A	-	-	RIFNRG332N	-	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604	RIFNRG652
E, L, N	RIFNRG282	RIFNRG302	RIFNRG332N	RIFNRG352	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604	RIFNRG652
U	-	-	RIFNRG332N	RIFNRG352	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604	RIFNRG652

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0654	0682	0702	0704	0752	0754	0802	0804
°, A, E, N, U	RIFNRG654N	RIFNRG682	RIFNRG702	RIFNRG704	RIFNRG752	RIFNRG754	RIFNRG802	RIFNRG804
L	RIFNRG654N	RIFNRG682	RIFNRG702	RIFNRG704	RIFNRG752	RIFNRG754	-	-

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
°, A, E, N, U	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2
L	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	-	-

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRG**
4,5,6,7		**Size** 0282, 0302, 0332, 0352, 0502, 0552, 0554, 0602, 0604, 0652, 0654, 0682, 0702, 0704, 0752, 0754, 0802, 0804
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency (4)
	L	Standard silenced (4)
	N	Silenced very high efficiency (4)
	U	Very high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter (5)
	M	Oversized (6)
	°	Standard (7)
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with pump/s and storage tank with holes for heaters
	05	Storage tank with holes for heaters and single low head pump (8)
	06	Storage tank with holes for heaters and pump low head + stand-by pump (8)
	07	Storage tank with holes for heaters and single high head pump (8)
	08	Storage tank with holes for heaters and pump high head + stand-by pump (8)
		Double loop
	09	Double loop
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump
		Kit with inverter pump/s to fixed speed
	I1	Single low head pump + fixed speed inverter
	I2	Single low head pump with fixed speed inverter + stand-by pump
	I3	Single high head pump + fixed speed inverter
	I4	Single high head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and inverter pump/s to fixed speed
	K1	Single low head pump + storage tank + fixed speed inverter
	K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
	K3	Single high head pump + storage tank + fixed speed inverter
	K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and variable speed inverter pump/s
	W1	Single low head pump + Storage tank + variable speed inverter
	W2	Double low head pump + Storage tank + variable speed inverter
	W3	Single high head pump + Storage tank + variable speed inverter
	W4	Double high head pump + Storage tank + variable speed inverter

(1) Water produced from 4 °C ÷ 20 °C
(2) Water produced from 8 °C to -10 °C. The option is not compatible with hydronic kits W1-W2-W3-W4.
(3) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program
(4) The size 0282-0302-0332-0352 only available in low noise versions.
(5) As standard in size 0702-0704-0752-0754-0802-0804 in the version U and N.
(6) As standard in sizes fom 0502 to 0804 version ° - L - A - E and in sizes from 0352 to 0682 and in sizes from 0554 to 0654 version N - U.
(7) As standard in sizes from 0282 to 0352 versions E - L and in size from 0282 to 0332 version N
(8) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRG - °

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	-	100,8	110,6	117,6	127,1	130,0	138,5	143,5	161,9	182,0	171,7	203,9	194,0	222,4	212,3
Input power	kW	-	-	-	-	33,4	37,8	37,8	39,7	44,2	45,1	50,7	52,5	59,4	57,4	69,6	66,5	80,4	74,8
Cooling total input current	A	-	-	-	-	59,0	64,0	59,0	68,0	79,0	77,0	91,0	88,0	95,0	108,0	111,0	117,0	127,0	126,0
EER	W/W	-	-	-	-	3,02	2,92	3,11	3,20	2,94	3,07	2,83	3,08	3,06	2,99	2,93	2,92	2,77	2,84
Water flow rate system side	l/h	-	-	-	-	17363	19059	20268	21893	22383	23841	24712	27874	31338	29554	35100	33389	38287	36547
Pressure drop system side	kPa	-	-	-	-	40	49	46	44	56	53	50	54	69	71	68	67	81	80

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - L

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754
Cooling performance 12 °C / 7 °C (1)																	
Cooling capacity	kW	55,8	63,8	73,3	84,5	98,9	108,2	113,4	123,5	123,9	132,9	139,3	159,0	178,5	168,5	198,8	189,6
Input power	kW	19,7	22,1	24,4	28,6	33,9	38,6	38,5	40,9	45,2	46,7	53,6	53,5	60,3	59,0	71,8	68,2
Cooling total input current	A	32,0	41,0	45,0	55,0	58,0	63,0	59,0	68,0	79,0	77,0	92,0	88,0	96,0	107,0	112,0	117,0
EER	W/W	2,83	2,88	3,01	2,95	2,92	2,80	2,95	3,02	2,74	2,85	2,60	2,97	2,96	2,85	2,77	2,78
Water flow rate system side	l/h	9604	10989	12618	14572	17043	18647	19537	21269	21332	22880	23984	27367	30726	29004	34224	32640
Pressure drop system side	kPa	35	46	37	50	39	46	45	43	54	50	47	52	66	69	65	64

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - A

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	-	105,3	116,3	118,7	129,7	132,2	141,2	151,3	167,9	186,4	177,0	208,8	199,2	228,6	218,5
Input power	kW	-	-	-	-	31,0	34,9	37,7	40,1	43,8	45,6	47,8	51,1	57,3	56,2	67,0	64,9	77,2	73,6
Cooling total input current	A	-	-	-	-	56,0	60,0	60,0	69,0	80,0	78,0	88,0	85,0	93,0	106,0	108,0	115,0	124,0	123,0
EER	W/W	-	-	-	-	3,39	3,33	3,14	3,23	3,02	3,09	3,16	3,29	3,25	3,15	3,12	3,07	2,96	2,97
Water flow rate system side	l/h	-	-	-	-	18133	20029	20437	22332	22778	24316	26053	28900	32076	30475	35940	34279	39342	37605
Pressure drop system side	kPa	-	-	-	-	30	36	34	34	42	41	56	45	57	56	62	59	74	72

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - E

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	58,7	64,8	74,8	88,1	101,0	112,1	115,3	124,8	126,8	134,9	147,6	161,6	180,1	171,4	201,8	191,5	216,6	208,9
Input power	kW	18,7	21,5	23,3	27,6	31,6	35,8	38,6	40,7	45,6	46,8	49,3	52,1	59,4	58,0	70,9	67,4	81,8	77,1
Cooling total input current	A	31,0	41,0	45,0	54,0	55,0	60,0	61,0	70,0	81,0	79,0	87,0	85,0	95,0	106,0	111,0	116,0	129,0	126,0
EER	W/W	3,14	3,02	3,21	3,19	3,20	3,13	2,98	3,07	2,78	2,88	2,99	3,10	3,03	2,96	2,85	2,84	2,65	2,71
Water flow rate system side	l/h	10097	11156	12874	15166	17382	19311	19858	21482	21840	23238	25406	27822	31004	29499	34739	32965	37282	35953
Pressure drop system side	kPa	24	29	28	37	28	34	32	32	38	37	53	43	53	52	57	55	67	65

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - U

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	94,0	105,1	116,7	122,4	134,4	135,9	148,2	154,1	170,1	192,0	179,4	215,0	203,9	236,8	224,6
Input power	kW	-	-	-	26,8	30,6	34,4	36,1	38,2	41,9	42,9	46,5	49,5	57,5	56,2	66,4	63,6	75,7	72,1
Cooling total input current	A	-	-	-	53,0	57,0	61,0	58,0	68,0	78,0	76,0	87,0	83,0	92,0	106,0	106,0	114,0	120,0	121,0
EER	W/W	-	-	-	3,51	3,43	3,39	3,39	3,52	3,24	3,45	3,32	3,44	3,34	3,19	3,24	3,20	3,13	3,11
Water flow rate system side	l/h	-	-	-	16172	18095	20096	21081	23146	23408	25528	26524	29288	33054	30884	37012	35090	40762	38655
Pressure drop system side	kPa	-	-	-	24	30	28	37	38	46	36	43	47	53	58	66	59	80	72

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - N

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	59,7	66,0	76,0	92,0	103,0	114,9	120,1	131,5	132,9	144,6	148,5	163,6	188,0	175,9	209,5	199,0	227,4	218,5
Input power	kW	18,1	20,8	23,3	27,9	31,8	36,1	37,0	39,2	43,2	44,5	48,5	52,1	57,9	56,8	67,6	65,1	78,0	74,5
Cooling total input current	A	30,0	41,0	45,0	52,0	57,0	62,0	57,0	67,0	78,0	75,0	88,0	85,0	92,0	106,0	107,0	114,0	123,0	123,0
EER	W/W	3,29	3,17	3,26	3,30	3,24	3,18	3,25	3,35	3,07	3,25	3,06	3,14	3,25	3,10	3,10	3,06	2,92	2,93
Water flow rate system side	l/h	10270	11372	13087	15837	17726	19768	20680	22650	22893	24895	25579	28156	32351	30273	36062	34256	39138	37603
Pressure drop system side	kPa	25	31	29	23	28	26	36	36	44	34	41	44	50	56	63	57	75	68

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: J																				
SEER - 12/7 (EN14825: 2018) (1)																				
SEER	°	W/W	-	-	-	-	4,30	4,30	4,36	4,44	4,33	4,32	4,31	4,37	4,38	4,28	4,32	4,29	4,23	4,26
	A	W/W	-	-	-	-	4,50	4,55	4,43	4,61	4,38	4,55	4,35	4,60	4,56	4,42	4,53	4,37	4,34	4,27
	E	W/W	4,56	4,40	4,56	4,48	4,54	4,46	4,44	4,53	4,40	4,33	4,37	4,55	4,38	4,40	4,37	4,39	4,25	4,27
	L	W/W	4,29	4,21	4,43	4,32	4,32	4,24	4,35	4,30	4,33	4,23	4,31	4,28	4,24	4,30	4,23	4,30	-	-
	N	W/W	4,74	4,66	4,70	4,78	4,71	4,59	4,54	4,77	4,46	4,69	4,49	4,75	4,63	4,48	4,59	4,48	4,37	4,33
	U	W/W	-	-	-	4,77	4,73	4,77	4,51	4,68	4,44	4,72	4,51	4,82	4,66	4,44	4,64	4,42	4,50	4,30
Seasonal efficiency	°	%	-	-	-	-	169,07	169,11	171,47	174,48	170,14	169,96	169,32	171,68	172,37	168,37	169,62	168,51	166,33	167,34
	A	%	-	-	-	-	176,81	179,08	174,25	181,27	172,29	179,03	170,93	181,13	179,44	173,98	178,17	171,94	170,64	167,83
	E	%	179,42	172,83	179,43	176,18	178,57	175,52	174,63	178,28	173,17	170,02	171,96	179,14	172,39	172,91	171,65	172,46	166,80	167,89
	L	%	168,77	165,30	174,27	169,95	169,78	166,72	171,12	168,86	170,11	166,28	169,22	168,35	166,67	169,00	166,22	169,06	-	-
	N	%	186,54	183,37	185,00	188,02	185,24	180,46	178,48	187,81	175,31	184,43	176,70	186,89	182,33	176,32	180,67	176,26	171,95	170,07
	U	%	-	-	-	187,91	186,30	188,00	177,39	184,10	174,64	185,66	177,42	189,79	183,53	174,64	182,68	173,97	177,05	169,03
SEER - 23/18 (EN14825: 2018) (2)																				
SEER	°	W/W	-	-	-	-	4,99	4,86	5,09	5,02	5,00	4,85	5,02	4,90	4,97	4,91	4,88	4,88	4,78	4,71
	A	W/W	-	-	-	-	5,27	5,18	5,28	5,27	5,23	4,92	5,10	5,22	5,20	5,15	5,12	5,02	4,90	4,74
	E	W/W	5,34	5,10	5,33	5,19	5,20	4,92	5,24	4,99	5,22	4,69	5,10	5,07	4,82	5,09	4,61	4,99	4,74	4,68
	L	W/W	4,90	4,77	5,09	4,99	4,85	4,59	5,09	4,73	5,03	4,56	5,05	4,81	4,61	4,89	4,58	4,86	-	-
	N	W/W	5,56	5,41	5,49	5,52	5,40	5,07	5,34	5,39	5,23	5,26	5,29	5,28	5,23	5,17	5,10	5,11	4,84	4,94
	U	W/W	-	-	-	5,64	5,56	5,44	5,39	5,33	5,29	5,12	5,37	5,47	5,35	5,16	5,24	5,08	5,07	4,80
Seasonal efficiency	°	%	-	-	-	-	196,60	191,50	200,50	197,80	197,10	190,80	197,70	193,00	195,90	193,20	192,10	192,30	188,00	185,20
	A	%	-	-	-	-	207,80	204,10	208,30	207,60	206,20	193,90	200,90	205,60	205,00	202,90	201,80	197,80	193,10	186,50
	E	%	210,70	200,80	210,00	204,60	204,90	193,60	206,70	196,40	205,70	184,70	201,00	199,60	189,90	200,40	181,20	196,50	186,70	184,10
	L	%	192,90	187,90	200,70	196,60	191,10	180,50	200,70	186,30	198,30	179,40	199,10	189,20	181,20	192,50	180,20	191,50	-	-
	N	%	219,30	213,20	216,50	217,80	212,90	199,70	210,60	212,40	206,20	207,30	208,70	208,10	206,00	203,70	201,10	201,30	190,40	194,50
	U	%	-	-	-	222,70	219,50	214,60	212,60	210,30	208,40	201,80	211,60	215,60	210,80	203,50	206,70	200,30	199,60	189,00
SEPR - (EN 14825: 2018) (2)																				
SEPR	°	W/W	-	-	-	-	5,78	5,60	6,35	5,79	6,38	5,73	6,34	5,66	6,07	6,34	5,81	6,03	5,78	5,94
	A	W/W	-	-	-	-	6,23	5,98	6,61	5,93	6,60	6,14	6,51	5,98	6,27	6,54	6,05	6,08	5,90	5,90
	E	W/W	6,66	6,39	6,59	6,52	6,30	6,03	6,47	5,93	6,55	5,79	6,41	6,01	6,13	6,44	5,85	6,06	5,21	5,87
	L	W/W	6,34	6,26	6,43	6,30	5,86	5,68	6,35	5,73	6,47	5,69	6,47	5,64	5,95	6,28	5,72	5,92	-	-
	N	W/W	6,87	6,70	6,81	6,88	6,47	6,14	6,58	6,20	6,54	6,21	6,57	6,17	6,54	6,56	6,25	6,19	5,93	6,35
	U	W/W	-	-	-	6,73	6,43	6,14	6,73	6,18	6,68	6,51	6,73	6,26	6,34	6,68	6,18	6,30	6,10	5,99

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: M																				
SEER - 12/7 (EN14825: 2018) (1)																				
SEER	°	W/W	-	-	-	-	4,18	4,18	4,23	4,31	4,20	4,20	4,18	4,24	4,26	4,16	4,19	4,16	4,11	4,14
	A	W/W	-	-	-	-	4,36	4,42	4,30	4,47	4,26	4,42	4,22	4,47	4,43	4,30	4,40	4,25	4,22	4,15
	E	W/W	-	-	-	-	4,41	4,34	4,31	4,40	4,27	4,20	4,25	4,42	4,26	4,27	4,24	4,26	4,12	4,15
	L	W/W	-	-	-	-	4,19	4,12	4,22	4,17	4,20	4,11	4,18	4,16	4,12	4,18	4,11	4,18	-	-
	N	W/W	-	-	-	4,64	4,57	4,45	4,40	4,63	4,33	4,55	4,36	4,61	-	-	-	-	-	-
	U	W/W	-	-	-	4,63	4,60	4,64	4,38	4,54	4,31	4,58	4,38	4,68	-	-	-	-	-	-
Seasonal efficiency	°	%	-	-	-	-	164,19	164,24	166,29	169,41	164,99	165,02	164,13	166,59	167,36	163,42	164,59	163,49	161,43	162,48
	A	%	-	-	-	-	171,56	173,79	169,11	175,81	167,34	173,76	166,00	175,82	174,24	168,98	173,01	166,92	165,82	162,95
	E	%	-	-	-	-	173,34	170,47	169,31	173,05	167,98	165,00	166,82	173,83	167,44	167,75	166,62	167,42	161,90	163,00
	L	%	-	-	-	-	164,75	161,78	165,90	163,73	165,02	161,37	164,21	163,40	161,82	164,05	161,39	164,10	-	-
	N	%	-	-	-	182,41	179,82	175,17	173,00	182,25	170,09	178,97	171,51	181,37	-	-	-	-	-	-
	U	%	-	-	-	182,34	180,84	182,53	172,00	178,62	169,50	180,31	172,13	184,18	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (2)																				
SEER	°	W/W	-	-	-	-	4,86	4,73	4,94	4,89	4,86	4,71	4,87	4,77	4,84	4,77	4,74	4,75	4,64	4,58
	A	W/W	-	-	-	-	5,13	5,04	5,13	5,12	5,09	4,79	4,96	5,08	5,06	5,01	4,98	4,88	4,78	4,61
	E	W/W	-	-	-	-	5,06	4,79	5,09	4,85	5,07	4,56	4,95	4,93	4,70	4,94	4,62	4,85	4,48	4,55
	L	W/W	-	-	-	-	4,72	4,46	4,94	4,60	4,89	4,44	4,91	4,68	4,48	4,75	4,45	4,73	-	-
	N	W/W	-	-	-	5,37	5,25	4,93	5,19	5,24	5,08	5,12	5,14	5,14	-	-	-	-	-	-
	U	W/W	-	-	-	5,49	5,41	5,29	5,23	5,19	5,14	4,98	5,21	5,31	-	-	-	-	-	-
Seasonal efficiency	°	%	-	-	-	-	191,30	186,20	194,50	192,40	191,20	185,50	191,70	187,60	190,40	187,70	186,60	186,80	182,70	180,00
	A	%	-	-	-	-	202,10	198,50	202,20	201,70	200,40	188,50	195,30	200,00	199,40	197,20	196,30	192,20	188,00	181,20
	E	%	-	-	-	-	199,30	188,40	200,50	191,00	199,60	179,50	195,10	194,00	184,80	194,60	181,60	190,90	176,30	178,80
	L	%	-	-	-	-	185,80	175,40	194,70	181,00	192,50	174,40	193,30	184,00	176,20	187,00	175,10	186,10	-	-
	N	%	-	-	-	211,70	207,10	194,20	204,40	206,50	200,30	201,60	202,70	202,40	-	-	-	-	-	-
	U	%	-	-	-	216,60	213,50	208,70	206,30	204,40	202,40	196,20	205,50	209,50	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
SEPR - (EN 14825: 2018) (2)																				
SEPR	°	W/W	-	-	-	-	5,78	5,60	6,35	5,79	6,38	5,73	6,34	5,66	6,07	6,34	5,81	6,03	5,78	5,94
	A	W/W	-	-	-	-	6,23	5,98	6,61	5,93	6,60	6,14	6,51	5,98	6,27	6,54	6,05	6,08	5,90	5,90
	E	W/W	-	-	-	-	6,30	6,03	6,47	5,93	6,55	5,79	6,41	6,01	6,13	6,44	5,85	6,06	5,21	5,87
	L	W/W	-	-	-	-	5,86	5,68	6,35	5,73	6,47	5,69	6,47	5,64	5,95	6,28	5,72	5,92	-	-
	N	W/W	-	-	-	6,88	6,47	6,14	6,58	6,20	6,54	6,21	6,57	6,17	-	-	-	-	-	-
	U	W/W	-	-	-	6,73	6,43	6,14	6,73	6,18	6,68	6,51	6,73	6,26	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: °																				
SEER - 12/7 (EN14825: 2018) (1)																				
SEER	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	W/W	4,52	4,35	4,51	4,43	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	W/W	4,25	4,17	4,39	4,28	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	4,69	4,62	4,65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	°,A,U	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	%	177,70	171,11	177,59	174,38	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	%	166,98	163,66	172,63	168,23	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	%	184,57	181,62	183,16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (2)																				
SEER	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	W/W	5,30	5,05	5,28	5,14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	W/W	4,85	4,73	5,05	4,94	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	5,50	5,36	5,44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	°,A,U	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	%	208,80	199,00	208,00	202,60	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	%	190,90	186,10	198,90	194,70	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	%	217,10	211,30	214,40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN 14825: 2018) (2)																				
SEPR	°,A,U	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	W/W	6,66	6,39	6,59	6,52	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	W/W	6,34	6,26	6,43	6,30	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	W/W	6,87	6,70	6,81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Electric data																				
Maximum current (FLA)	°	A	-	-	-	-	73,5	79,1	80,5	88,3	97,2	97,4	113,5	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	A	A	-	-	-	-	73,5	79,1	80,5	88,3	97,2	97,4	116,4	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	E	A	41,6	49,9	59,5	67,6	73,5	79,1	80,5	88,3	97,2	97,4	116,4	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	L	A	40,2	49,9	58,1	67,6	73,5	79,1	80,5	88,3	97,2	97,4	113,5	111,5	122,6	132,7	139,4	144,0	-	-
	N	A	41,6	49,9	59,5	67,8	73,5	79,1	83,4	91,2	100,1	100,3	116,4	111,5	125,6	135,7	142,4	147,0	159,1	158,3
	U	A	-	-	-	67,8	73,5	79,1	83,4	91,2	100,1	100,3	116,4	111,5	125,6	135,7	142,4	147,0	159,1	158,3
Peak current (LRA)	°	A	-	-	-	-	276,8	282,5	200,8	329,5	221,3	338,6	268,5	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	A	A	-	-	-	-	276,8	282,5	200,8	329,5	221,3	338,6	271,4	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	E	A	161,9	174,0	214,4	222,6	276,8	282,5	200,8	329,5	221,3	338,6	271,4	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	L	A	160,5	174,0	213,0	222,6	276,8	282,5	200,8	329,5	221,3	338,6	268,5	396,5	407,7	287,7	601,7	347,4	-	-
	N	A	161,9	174,0	214,4	222,8	276,8	282,5	203,7	332,4	224,2	341,5	271,4	396,5	410,7	290,7	604,7	350,4	621,4	361,7
	U	A	-	-	-	222,8	276,8	282,5	203,7	332,4	224,2	341,5	271,4	396,5	410,7	290,7	604,7	350,4	621,4	361,7

■ *Data calculated without hydronic kit and accessories.*

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Compressor																				
Type	°,A,E,N,U	type	Scroll																	
	L	type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	-	-
Compressor regulation	°,A,E,N,U	Type	On-Off																	
	L	Type	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	On-Off	-	-
Number	°,A,E,N,U	no.	2	2	2	2	2	2	4	2	4	2	4	2	2	4	2	4	2	4
	L	no.	2	2	2	2	2	2	4	2	4	2	4	2	2	4	2	4	-	-
Circuits	°,A,E,N,U	no.	1	1	1	1	1	1	2	1	2	1	2	1	1	2	1	2	1	2
	L	no.	1	1	1	1	1	1	2	1	2	1	2	1	1	2	1	2	-	-
Refrigerant	°,A,E,N,U	type	R32																	
	L	type	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	R32	-	-

Size				0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
System side heat exchanger																					
Type	°,A,E,N,U	type		Brazed plate																	
	L	type		Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	-	-
Number	°,A,E,N,U	no.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	L	no.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	-
System side hydraulic connections																					
Sizes (in/out)	°,A,E,N,U	Ø		2" 1/2																	
	L	Ø		2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	-	-

Fans

Size				0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fan																					
Type	°,A,E,N,U	type		Axial																	
	L	type		Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	-	-
Number	°	no.		-	-	-	-	2	2	2	2	2	2	2	3	3	3	3	3	3	3
	A	no.		-	-	-	-	2	2	2	2	2	2	3	3	3	3	3	3	3	3
	E	no.		6	6	8	8	2	2	2	2	2	2	3	3	3	3	3	3	3	3
	L	no.		4	6	6	8	2	2	2	2	2	2	2	3	3	3	3	3	-	-
	N	no.		6	6	8	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3
	U	no.		-	-	-	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: °																				
Fan																				
Air flow rate	°,A,U	m^3/h	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	m^3/h	20469	20469	27112	24667	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	m^3/h	15291	20474	22212	27150	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	m^3/h	22189	22189	24655	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sound data calculated in cooling mode (1)																				
Sound power level	°,A,U	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E	dB(A)	73,0	73,5	74,3	74,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L	dB(A)	72,4	73,5	73,9	74,5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	N	dB(A)	73,0	73,9	74,3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

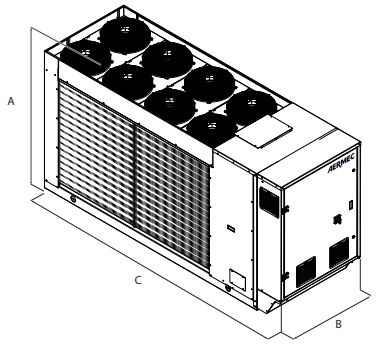
(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: M																				
Without Static pressure																				
Air flow rate	°	m^3/h	-	-	-	-	40400	40400	40400	40400	40400	40400	40400	60600	60600	60600	60600	60600	60600	60600
	A	m^3/h	-	-	-	-	40400	40400	40400	40400	40400	40400	60600	60600	60600	60600	60600	60600	60600	60600
	E	m^3/h	-	-	-	-	26625	26625	25488	25497	25488	25497	40270	40267	38638	38640	38638	38640	38638	38640
	L	m^3/h	-	-	-	-	30672	30672	29318	29318	29318	29318	28069	46243	44312	44307	44312	44307	-	-
	N	m^3/h	-	-	-	26623	25495	25495	40269	40274	40269	40274	38640	38634	-	-	-	-	-	-
	U	m^3/h	-	-	-	40400	40400	40400	60600	60600	60600	60600	60600	60600	-	-	-	-	-	-
Sound power level	°	dB(A)	-	-	-	-	86,8	87,1	86,2	87,3	86,6	87,5	86,7	89,0	89,1	88,3	89,6	89,5	91,0	90,4
	A	dB(A)	-	-	-	-	86,8	87,1	86,2	87,3	86,6	87,5	88,3	89,0	89,1	88,3	89,6	89,5	91,0	90,4
	E	dB(A)	-	-	-	-	81,3	82,1	76,1	82,7	76,7	83,1	77,8	84,2	84,4	78,0	85,6	83,6	87,3	86,7
	L	dB(A)	-	-	-	-	81,3	82,1	76,1	82,7	76,7	83,1	77,1	84,2	84,4	78,0	85,6	84,1	-	-
	N	dB(A)	-	-	-	80,3	81,3	82,1	76,9	83,6	77,5	84,0	77,8	84,2	-	-	-	-	-	-
	U	dB(A)	-	-	-	86,5	86,8	87,1	88,4	88,8	88,3	88,9	88,3	89,0	-	-	-	-	-	-

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: J																				
Inverter fan																				
Air flow rate	°	m^3/h	-	-	-	-	36600	36600	35100	35100	35100	35100	33700	55200	53100	53100	53100	53100	53100	53100
	A	m^3/h	-	-	-	-	35100	35100	33800	33800	33800	33700	53100	53100	51100	51100	51100	51100	51100	51100
	E	m^3/h	20700	22200	27500	24800	26800	26800	25600	25600	25600	25600	40500	40500	38800	38800	38800	38800	38800	38800
	L	m^3/h	15200	20700	22200	27500	30900	30900	29500	29500	29500	29500	28300	46500	44600	44600	44600	44600	-	-
	N	m^3/h	22200	27500	24800	26800	25600	25600	40500	40500	40500	40500	38800	38800	52317	52324	52317	52324	52317	52324
	U	m^3/h	-	-	-	35100	33700	33700	53100	53100	53100	53100	51100	51100	66361	66361	66361	66361	66361	66361
Sound data calculated in cooling mode (1)																				
Sound power level	°	dB(A)	-	-	-	-	85,1	85,6	84,2	85,9	84,8	86,1	84,9	87,5	87,6	86,5	88,3	88,1	90,1	89,4
	A	dB(A)	-	-	-	-	85,1	85,6	84,2	85,9	84,8	86,1	86,5	87,5	87,6	86,5	88,3	88,1	90,1	89,4
	E	dB(A)	73,0	73,5	74,3	74,5	81,3	82,1	76,1	82,7	76,7	83,1	77,8	84,2	84,4	78,0	85,6	83,6	87,3	86,7
	L	dB(A)	72,4	73,5	73,9	74,5	81,3	82,1	76,1	82,7	76,7	83,1	77,1	84,2	84,4	78,0	85,6	84,1	-	-
	N	dB(A)	73,0	73,9	74,3	80,3	81,3	82,1	76,9	83,6	77,5	84,0	77,8	84,2	89,3	87,4	89,7	88,5	90,1	89,8
	U	dB(A)	-	-	-	84,6	85,1	85,6	85,8	87,2	86,4	87,4	86,5	87,5	92,3	91,1	92,5	91,7	92,7	92,3

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Dimensions and weights																				
A	°	mm	-	-	-	-	1907	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900
	A	mm	-	-	-	-	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900
	E	mm	1652	1658	1658	1658	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900
	L	mm	1652	1652	1658	1658	1907	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	-	-
	N	mm	1658	1658	1658	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
	U	mm	-	-	-	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
B	°,A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	E,N	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	L	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	-	-
	U	mm	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	°	mm	-	-	-	-	3567	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368
	A	mm	-	-	-	-	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368
	E	mm	2818	3317	3317	3317	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368
	L	mm	2818	2818	3317	3317	3567	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	-	-
	N	mm	3317	3317	3317	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368
	U	mm	-	-	-	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368	4368

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRG 0282H-0804H

Reversible air/water heat pump

Cooling capacity 52,5 ÷ 212,0 kW – Heating capacity 56,6 ÷ 214,4 kW

- **High efficiency also at partial loads**
- **Low refrigerant charge**
- **Compact dimensions**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced

FEATURES

Operating field

Working at full load up to -15°C outside air temperature in winter, and up to 48 °C in summer. Hot water production up to 60°C (for more details refer to the technical documentation).

Units mono or dual-circuit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ *VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.*

CONTROL PCO[5]

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Swing HP and LP controls:** available for all models with inverter fan or with DCPX. By continuously modulating the fans, they streamline operation of the unit at any work point both in cooling and heating mode. This results in enhanced energy efficiency of the unit at partial loads.
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

INTEGRATED SOLUTION

The **"integrated solution" concept has been implemented in the system architecture**, consisting in an integrated and streamlined control of compressors and electronic valve.
This solution allowed a variety of new features to be introduced, such as:

— **Low Superheat Control**: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
— **DLT control**: Control of electronic valve at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range, especially in heating mode.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
AER485P1	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SGD	E,L	•	•	•															

Remote panel

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
PR4	°,A					•	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Integrated hydronic kit: 00																		
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
E	VT17	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
L	VT17	VT17	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, K1, K2, K3, K4, W1, W2, W3, W4																		
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
L	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
Integrated hydronic kit: I1, I2, I3, I4, P1, P2, P3, P4																		
°	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22
A	-	-	-	-	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
E	VT17	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22	VT22
L	VT17	VT17	VT13	VT13	VT11	VT11	VT11	VT11	VT11	VT11	VT11	VT22	VT22	VT22	VT22	VT22	VT22	VT22

Condensation control temperature

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°, A	-	-	-	-	DCPX146	DCPX146	DCPX146	DCPX146	DCPX146
E, L	DCPX145	DCPX145	DCPX145	DCPX145	As standard	As standard	As standard	As standard	As standard

The accessory cannot be fitted on the configurations indicated with -

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°	DCPX146	DCPX146	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147
A	DCPX146	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147	DCPX147
E, L	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°, A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)
E	GP3	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)
L	GP3	GP3	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)

(1) x _ indicates the quantity to buy
The accessory cannot be fitted on the configurations indicated with -

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°, L	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
A, E	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°, A	-	-	DRENRG332N	-	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604
E, L	DRENRG282	DRENRG302	DRENRG332N	DRENRG352	DRENRG502	DRENRG552	DRENRG554	DRENRG602	DRENRG604

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°, A, E, L	DRENRG652	DRENRG654N	DRENRG682	DRENRG702	DRENRG704	DRENRG752	DRENRG754	DRENRG802	DRENRG804

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604
°, A	-	-	RIFNRG332N	-	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604
E, L	RIFNRG282	RIFNRG302	RIFNRG332N	RIFNRG352	RIFNRG502	RIFNRG552	RIFNRG554	RIFNRG602	RIFNRG604

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	0652	0654	0682	0702	0704	0752	0754	0802	0804
°, A, E, L	RIFNRG652	RIFNRG654N	RIFNRG682	RIFNRG702	RIFNRG704	RIFNRG752	RIFNRG754	RIFNRG802	RIFNRG804

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
°, A, E, L	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG1	T6NRG2	T6NRG1	T6NRG2	T6NRG1	T6NRG2

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**NRG**
4,5,6,7	**Size** 0282, 0302, 0332, 0352, 0502, 0552, 0554, 0602, 0604, 0652, 0654, 0682, 0702, 0704, 0752, 0754, 0802, 0804
8	**Operating field**
X	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
9	**Model**
H	Heat pump
10	**Heat recovery**
D	With desuperheater (3)
°	Without heat recovery
11	**Version**
°	Standard
A	High efficiency
E	Silenced high efficiency (4)
L	Standard silenced (4)
12	**Coils**
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Copper-aluminium
13	**Fans**
J	Inverter
°	Standard
14	**Power supply**
°	400V ~ 3N 50Hz with magnet circuit breakers
15,16	**Integrated hydronic kit**
00	Without hydronic kit

Field	Description
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s and storage tank with holes for heaters
05	Storage tank with holes for heaters and single low head pump (5)
06	Storage tank with holes for heaters and pump low head + stand-by pump (5)
07	Storage tank with holes for heaters and single high head pump (5)
08	Storage tank with holes for heaters and pump high head + stand-by pump (5)
	Double loop
09	Double loop
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with inverter pump/s to fixed speed
I1	Single low head pump + fixed speed inverter
I2	Single low head pump with fixed speed inverter + stand-by pump
I3	Single high head pump + fixed speed inverter
I4	Single high head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and inverter pump/s to fixed speed
K1	Single low head pump + storage tank + fixed speed inverter
K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
K3	Single high head pump + storage tank + fixed speed inverter
K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and variable speed inverter pump/s
W1	Single low head pump + Storage tank + variable speed inverter (6)

Field	Description
W2	Double low head pump + Storage tank + variable speed inverter (6)
W3	Single high head pump + Storage tank + variable speed inverter (6)
W4	Double high head pump + Storage tank + variable speed inverter (6)

(1) Water produced from 4 °C ÷ 20 °C
(2) Water produced from 18 °C to -10 °C. The option is not compatible with hydronic kits W1-W2-W3-W4. Not available with desuperheater.
(3) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) The size 0282-0302-0332-0352 are only available in the silenced versions "HL/HE"
(5) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.
(6) Not available with Low temperature electronic thermostatic valve "Z"

PERFORMANCE SPECIFICATIONS

NRG H°

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	-	93,7	103,4	114,4	117,5	127,3	127,8	141,4	156,4	175,2	169,8	196,0	190,4	215,2	209,1
Input power	kW	-	-	-	-	34,7	39,1	37,8	43,0	43,9	48,9	50,8	51,6	59,6	58,0	69,0	66,0	79,1	74,5
Cooling total input current	A	-	-	-	-	62,0	66,0	60,0	73,0	80,0	82,0	91,0	87,0	97,0	109,0	111,0	117,0	126,0	126,0
EER	W/W	-	-	-	-	2,70	2,65	3,03	2,73	2,90	2,61	2,78	3,03	2,94	2,93	2,84	2,89	2,72	2,81
Water flow rate system side	l/h	-	-	-	-	16141	17808	19683	20225	21912	22017	24335	26922	30168	29239	33727	32773	37044	35991
Pressure drop system side	kPa	-	-	-	-	31	38	20	34	24	40	25	48	60	36	60	40	72	49
Heating performance 40 °C / 45 °C (2)																			
Heating capacity	kW	-	-	-	-	99,6	108,8	118,2	125,6	132,1	137,6	146,9	162,6	183,1	176,7	203,0	195,8	222,4	214,4
Input power	kW	-	-	-	-	31,5	34,4	35,9	38,0	40,7	42,2	45,2	50,3	57,4	54,5	62,7	59,0	69,8	64,1
Heating total input current	A	-	-	-	-	59,0	62,0	59,0	68,0	79,0	75,0	88,0	87,0	96,0	109,0	105,0	112,0	117,0	116,0
COP	W/W	-	-	-	-	3,16	3,17	3,30	3,31	3,24	3,26	3,25	3,23	3,19	3,24	3,24	3,32	3,19	3,35
Water flow rate system side	l/h	-	-	-	-	17265	18855	20522	21779	22925	23855	25482	28203	31767	30659	35221	33974	38576	37206
Pressure drop system side	kPa	-	-	-	-	36	43	22	40	27	48	28	54	67	41	67	45	80	53

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HL

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	52,5	60,5	69,3	80,7	91,0	100,0	110,8	113,2	122,9	122,4	135,2	152,6	170,4	165,0	189,1	184,2	205,8	202,2
Input power	kW	20,2	23,0	25,4	30,1	35,2	39,6	38,4	44,3	45,0	50,9	53,2	52,2	61,2	59,1	71,5	67,9	82,7	77,3
Cooling total input current	A	33,0	42,0	47,0	57,0	60,0	65,0	59,0	72,0	79,0	82,0	92,0	84,0	95,0	107,0	111,0	116,0	128,0	126,0
EER	W/W	2,60	2,63	2,73	2,68	2,59	2,53	2,88	2,55	2,73	2,40	2,54	2,92	2,79	2,79	2,64	2,71	2,49	2,62
Water flow rate system side	l/h	9048	10428	11932	13896	15671	17215	19059	19485	21152	21086	23262	26277	29331	28417	32540	31692	35428	34793
Pressure drop system side	kPa	30	41	31	43	30	36	19	32	23	37	23	46	56	34	56	37	66	45
Heating performance 40 °C / 45 °C (2)																			
Heating capacity	kW	56,6	65,4	74,6	87,5	99,6	108,8	118,2	125,6	132,1	137,6	146,9	162,6	183,1	176,7	203,0	195,8	222,4	214,4
Input power	kW	17,4	20,2	22,3	26,5	31,5	34,4	35,9	38,0	40,7	42,2	45,2	50,3	57,4	54,5	62,7	59,0	69,8	64,1
Heating total input current	A	29,0	40,0	44,0	54,0	59,0	62,0	59,0	68,0	79,0	75,0	88,0	87,0	96,0	109,0	105,0	112,0	117,0	116,0
COP	W/W	3,26	3,24	3,35	3,30	3,16	3,17	3,30	3,31	3,24	3,26	3,25	3,23	3,19	3,24	3,24	3,32	3,19	3,35
Water flow rate system side	l/h	9816	11328	12928	15158	17265	18855	20522	21779	22925	23855	25482	28203	31767	30659	35221	33974	38576	37206
Pressure drop system side	kPa	37	48	38	51	36	43	22	40	27	48	28	54	67	41	67	45	80	53

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HA

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	-	-	-	-	96,4	106,6	115,8	122,0	128,8	133,3	146,8	160,1	178,0	170,7	199,5	191,8	219,8	212,0
Input power	kW	-	-	-	-	32,6	36,6	37,2	39,7	43,3	45,5	48,6	49,8	57,4	56,7	66,3	64,4	75,9	72,5
Cooling total input current	A	-	-	-	-	60,0	64,0	60,0	70,0	80,0	78,0	90,0	85,0	94,0	108,0	108,0	116,0	123,0	124,0
EER	W/W	-	-	-	-	2,95	2,91	3,11	3,07	2,97	2,93	3,02	3,21	3,10	3,01	3,01	2,98	2,90	2,93
Water flow rate system side	l/h	-	-	-	-	16583	18342	19918	21002	22155	22958	25273	27557	30631	29392	34336	33010	37829	36487
Pressure drop system side	kPa	-	-	-	-	23	28	17	29	21	35	28	40	49	33	54	39	66	48
Heating performance 40 °C / 45 °C (2)																			
Heating capacity	kW	-	-	-	-	103,0	113,7	119,7	126,6	133,9	138,9	155,5	162,3	181,1	175,3	200,6	195,0	219,9	213,7
Input power	kW	-	-	-	-	31,0	33,8	35,6	37,4	40,4	41,5	47,0	49,1	55,3	53,3	60,9	57,8	67,5	62,7
Heating total input current	A	-	-	-	-	59,0	61,0	58,0	68,0	79,0	75,0	91,0	86,0	93,0	107,0	103,0	110,0	114,0	114,0
COP	W/W	-	-	-	-	3,32	3,36	3,36	3,39	3,31	3,35	3,31	3,30	3,27	3,29	3,29	3,37	3,26	3,41
Water flow rate system side	l/h	-	-	-	-	17866	19723	20784	21964	23234	24088	26976	28153	31410	30409	34811	33832	38148	37079
Pressure drop system side	kPa	-	-	-	-	27	32	19	32	23	39	31	42	52	35	57	41	68	49

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HE

Size		0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Cooling performance 12 °C / 7 °C (1)																			
Cooling capacity	kW	55,1	61,1	71,0	82,7	93,8	103,3	111,9	118,0	124,0	128,3	144,2	154,7	173,0	166,6	192,6	186,2	210,5	202,8
Input power	kW	19,3	22,3	24,4	28,6	33,0	37,4	38,2	40,8	44,9	46,7	48,9	50,9	58,9	57,3	68,8	65,7	79,3	75,4
Cooling total input current	A	32,0	42,0	47,0	56,0	58,0	62,0	60,0	69,0	80,0	78,0	87,0	82,0	93,0	106,0	109,0	114,0	125,0	123,0
EER	W/W	2,85	2,75	2,91	2,89	2,84	2,76	2,93	2,89	2,76	2,75	2,95	3,04	2,94	2,91	2,80	2,83	2,65	2,69
Water flow rate system side	l/h	9484	10522	12223	14246	16136	17773	19250	20314	21332	22097	24814	26647	29783	28680	33149	32040	36227	34901
Pressure drop system side	kPa	20	24	24	33	22	26	16	27	19	32	26	38	47	31	51	36	60	44
Heating performance 40 °C / 45 °C (2)																			
Heating capacity	kW	58,8	65,4	76,6	88,8	103,0	113,7	119,7	126,6	133,9	138,9	155,5	162,3	181,1	175,3	200,6	195,0	219,9	213,7
Input power	kW	17,2	19,7	22,5	26,5	31,0	33,8	35,6	37,4	40,4	41,5	47,0	49,1	55,3	53,3	60,9	57,8	67,5	62,7
Heating total input current	A	30,0	39,0	45,0	54,0	59,0	61,0	58,0	68,0	79,0	75,0	91,0	86,0	93,0	107,0	103,0	110,0	114,0	114,0
COP	W/W	3,42	3,32	3,40	3,35	3,32	3,36	3,36	3,39	3,31	3,35	3,31	3,30	3,27	3,29	3,29	3,37	3,26	3,41
Water flow rate system side	l/h	10207	11335	13280	15399	17866	19723	20784	21964	23234	24088	26976	28153	31410	30409	34811	33832	38148	37079
Pressure drop system side	kPa	23	28	29	39	27	32	19	32	23	39	31	42	52	35	57	41	68	49

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA - STANDARD/INVERTER FANS

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: °																				
Cooling capacity with low leaving water temp (UE n° 2016/2281)																				
SEER	°	W/W	-	-	-	-	3,92	3,84	3,97	4,00	3,83	3,94	3,88	4,17	4,06	3,87	3,95	3,92	3,82	3,80
	A	W/W	-	-	-	-	4,21	4,14	4,07	4,34	4,01	4,24	4,10	4,40	4,32	4,14	4,31	4,17	4,12	4,04
	E	W/W	4,40	4,32	4,37	4,33	4,26	4,13	4,03	4,29	3,97	4,10	4,06	4,36	4,21	4,10	4,20	4,13	4,07	4,00
	L	W/W	4,14	4,03	4,22	4,07	3,98	3,89	3,94	4,01	3,80	3,89	3,84	4,12	4,00	3,84	3,91	3,88	3,77	3,77
ηsc	°	%	-	-	-	-	154%	151%	156%	157%	150%	155%	152%	164%	160%	152%	155%	154%	150%	149%
	A	%	-	-	-	-	165%	163%	160%	171%	157%	167%	161%	173%	170%	162%	169%	164%	162%	159%
	E	%	173%	170%	172%	170%	167%	162%	158%	169%	156%	161%	160%	172%	166%	161%	165%	162%	160%	157%
	L	%	163%	158%	166%	160%	156%	153%	155%	157%	149%	153%	151%	162%	157%	150%	153%	152%	148%	148%

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: J																				
Cooling capacity with low leaving water temp (UE n° 2016/2281)																				
SEER	°	W/W	-	-	-	-	4,04	3,96	4,10	4,12	3,96	4,06	4,00	4,30	4,19	3,99	4,07	4,04	3,94	3,91
	A	W/W	-	-	-	-	4,33	4,26	4,20	4,47	4,13	4,37	4,23	4,54	4,45	4,26	4,43	4,29	4,25	4,17
	E	W/W	4,45	4,36	4,41	4,37	4,38	4,25	4,16	4,42	4,09	4,22	4,19	4,49	4,34	4,22	4,33	4,25	4,20	4,13
	L	W/W	4,18	4,07	4,26	4,10	4,10	4,01	4,06	4,12	3,92	4,01	3,96	4,25	4,13	3,95	4,03	4,00	3,89	3,88
ηsc	°	%	-	-	-	-	159%	155%	161%	162%	155%	159%	157%	169%	164%	157%	160%	158%	155%	154%
	A	%	-	-	-	-	170%	168%	165%	176%	162%	172%	166%	178%	175%	167%	174%	169%	167%	164%
	E	%	175%	171%	174%	172%	172%	167%	163%	174%	161%	166%	164%	177%	171%	166%	170%	167%	165%	162%
	L	%	164%	160%	167%	161%	161%	157%	159%	162%	154%	157%	155%	167%	162%	155%	158%	157%	153%	152%

ENERGY DATA - STANDARD/INVERTER FANS (35°C)

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: J																				
Performance in average ambient conditions (average) - 35 °C (1)																				
Pdesignh	°	kW	-	-	-	-	88	97	103	109	115	119	128	141	159	154	178	171	193	188
	A	kW	-	-	-	-	91	101	105	110	117	121	136	141	158	153	176	170	191	187
	E	kW	52	58	68	78	91	101	105	110	117	121	136	141	158	153	176	170	191	187
	L	kW	50	58	66	77	88	97	103	109	115	119	128	141	159	154	178	171	193	188
SCOP	°	W/W	-	-	-	-	3,61	3,66	3,53	3,66	3,49	3,71	3,49	3,57	3,68	3,42	3,65	3,52	3,52	3,56
	A	W/W	-	-	-	-	3,70	3,80	3,60	3,80	3,59	3,81	3,59	3,70	3,76	3,53	3,77	3,63	3,67	3,64
	E	W/W	4,10	4,04	4,06	3,99	3,70	3,80	3,60	3,80	3,59	3,81	3,59	3,70	3,76	3,53	3,77	3,63	3,67	3,64
	L	W/W	3,95	3,90	3,91	3,91	3,61	3,66	3,53	3,66	3,49	3,71	3,49	3,57	3,68	3,42	3,65	3,52	3,52	3,56
ηsh	°	%	-	-	-	-	141%	143%	138%	143%	137%	146%	136%	140%	144%	134%	143%	138%	138%	139%
	A	%	-	-	-	-	145%	149%	141%	149%	141%	149%	141%	145%	147%	138%	148%	142%	144%	143%
	E	%	161%	159%	159%	157%	145%	149%	141%	149%	141%	149%	141%	145%	147%	138%	148%	142%	144%	143%
	L	%	155%	153%	153%	153%	141%	143%	138%	143%	137%	146%	136%	140%	144%	134%	143%	138%	138%	139%
Efficiency energy class	°,A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E,L		A+	A+	A+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) Efficiencies for low temperature applications (35 °C)

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Fans: °																				
Performance in average ambient conditions (average) - 35 °C (1)																				
Pdesignh	°	kW	-	-	-	-	88	97	103	109	115	119	128	141	159	154	178	171	193	188
	A	kW	-	-	-	-	91	101	105	110	117	121	136	141	158	153	176	170	191	187
	E	kW	52	58	68	78	91	101	105	110	117	121	136	141	158	153	176	170	191	187
	L	kW	50	58	66	77	88	97	103	109	115	119	128	141	159	154	178	171	193	188
SCOP	°	W/W	-	-	-	-	3,50	3,55	3,36	3,55	3,33	3,61	3,32	3,47	3,57	3,23	3,54	3,32	3,41	3,36
	A	W/W	-	-	-	-	3,59	3,69	3,43	3,69	3,42	3,70	3,38	3,59	3,65	3,33	3,66	3,42	3,56	3,44
	E	W/W	4,06	4,00	4,02	3,91	3,59	3,69	3,43	3,69	3,42	3,70	3,38	3,59	3,65	3,33	3,66	3,42	3,56	3,44
	L	W/W	3,91	3,86	3,87	3,83	3,50	3,55	3,36	3,55	3,33	3,61	3,32	3,47	3,57	3,23	3,54	3,32	3,41	3,36
ηsh	°	%	-	-	-	-	135%	139%	131%	139%	130%	141%	130%	135%	139%	126%	139%	130%	134%	131%
	A	%	-	-	-	-	141%	145%	134%	145%	134%	145%	132%	141%	143%	130%	143%	134%	140%	134%
	E	%	159%	157%	158%	154%	141%	145%	134%	145%	134%	145%	132%	141%	143%	130%	143%	134%	140%	134%
	L	%	153%	151%	152%	150%	135%	139%	131%	139%	130%	141%	130%	135%	139%	126%	139%	130%	134%	131%
Efficiency energy class	°,A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	E,L		A+	A+	A+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) Efficiencies for low temperature applications (35 °C)

ENERGY DATA - STANDARD/INVERTER FANS (55°C)

Size			0282	0302	0332	0352	0502	0552	0602	0652	0682	0702	0752	0802
Fans: J														
Performance in average ambient conditions (average) - 55 °C (1)														
Pdesignh	°	kW	-	-	-	-	88	98	109	120	139	155	178	-
	A	kW	-	-	-	-	91	103	110	122	139	154	175	187
	E	kW	52	58	68	78	91	103	110	122	139	154	175	187
	L	kW	50	57	65	77	88	98	109	120	139	155	178	-
SCOP	°	W/W	-	-	-	-	2,92	3,02	3,02	3,09	2,93	2,93	2,93	-
	A	W/W	-	-	-	-	2,99	3,13	3,12	3,13	3,02	2,98	3,01	2,92
	E	W/W	3,16	3,12	3,14	3,12	2,99	3,13	3,12	3,13	3,02	2,98	3,01	2,92
	L	W/W	3,08	3,06	3,06	3,07	2,92	3,02	3,02	3,09	2,93	2,93	2,93	-
ηsh	°	%	-	-	-	-	114%	118%	118%	120%	114%	114%	114%	-
	A	%	-	-	-	-	117%	122%	122%	122%	118%	116%	117%	114%
	E	%	123%	122%	123%	122%	117%	122%	122%	122%	118%	116%	117%	114%
	L	%	120%	119%	119%	120%	114%	118%	118%	120%	114%	114%	114%	-
Efficiency energy class	°,A		-	-	-	-	-	-	-	-	-	-	-	-
	E,L		A++	A++	A++	-	-	-	-	-	-	-	-	-

(1) Efficiencies for average temperature applications (55 °C)

Size			0282	0302	0332	0352	0502	0552	0602	0652	0682	0702	0752	0802
Fans: °														
Performance in average ambient conditions (average) - 55 °C (1)														
Pdesignh	°	kW	-	-	-	-	88	98	109	120	139	155	178	-
	A	kW	-	-	-	-	91	103	110	122	139	154	175	187
	E	kW	52	58	68	78	91	103	110	122	139	154	175	187
	L	kW	50	57	65	77	88	98	109	120	139	155	178	-
SCOP	°	W/W	-	-	-	-	2,84	2,94	2,93	3,00	2,84	2,84	2,84	-
	A	W/W	-	-	-	-	2,91	3,05	3,03	3,04	2,93	2,89	2,92	2,84
	E	W/W	3,13	3,10	3,11	3,06	2,91	3,05	3,03	3,04	2,93	2,89	2,92	2,84
	L	W/W	3,05	3,03	3,03	3,01	2,84	2,94	2,93	3,00	2,84	2,84	2,84	-
ηsh	°	%	-	-	-	-	111%	115%	114%	117%	111%	111%	111%	-
	A	%	-	-	-	-	113%	119%	118%	119%	114%	113%	114%	110%
	E	%	122%	121%	122%	119%	113%	119%	118%	119%	114%	113%	114%	110%
	L	%	119%	118%	118%	117%	111%	115%	114%	117%	111%	111%	111%	-
Efficiency energy class	°,A		-	-	-	-	-	-	-	-	-	-	-	-
	E,L		A++	A++	A++	-	-	-	-	-	-	-	-	-

(1) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Electric data																				
Maximum current (FLA)	°	A	-	-	-	-	73,5	79,1	80,5	88,3	97,2	97,4	113,5	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	A	A	-	-	-	-	73,5	79,1	80,5	88,3	97,2	97,4	116,4	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	E	A	41,6	49,9	59,5	67,6	73,5	79,1	80,5	88,3	97,2	97,4	116,4	111,5	122,6	132,7	139,4	144,0	156,1	155,3
	L	A	40,2	49,9	58,1	67,6	73,5	79,1	80,5	88,3	97,2	97,4	113,5	111,5	122,6	132,7	139,4	144,0	156,1	155,3
Peak current (LRA)	°	A	-	-	-	-	276,8	282,5	200,8	329,5	221,3	338,6	268,5	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	A	A	-	-	-	-	276,8	282,5	200,8	329,5	221,3	338,6	271,4	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	E	A	161,9	174,0	214,4	222,6	276,8	282,5	200,8	329,5	221,3	338,6	271,4	396,5	407,7	287,7	601,7	347,4	618,4	358,7
	L	A	160,5	174,0	213,0	222,6	276,8	282,5	200,8	329,5	221,3	338,6	268,5	396,5	407,7	287,7	601,7	347,4	618,4	358,7

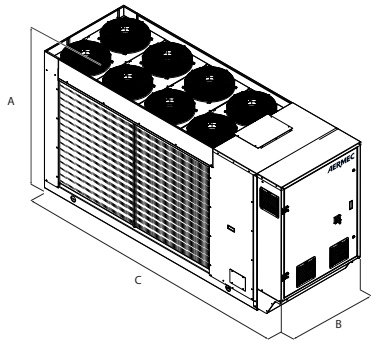
Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Compressor																				
Type	°,A,E,L	type										Scroll								
Compressor regulation	°,A,E,L	Type										On-Off								
Number	°,A,E,L	no.	2	2	2	2	2	2	4	2	4	2	4	2	2	4	2	4	2	4
Circuits	°,A,E,L	no.	1	1	1	1	1	1	2	1	2	1	2	1	1	2	1	2	1	2
Refrigerant	°,A,E,L	type										R32								
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	9,5	9,5	6,8	12,2	7,1	12,2	7,1	17,7	17,7	8,1	17,7	9,0	17,7	9,0
	A	kg	-	-	-	-	12,8	13,3	7,4	13,3	7,7	13,3	8,7	18,2	18,2	8,3	18,4	10,0	18,4	9,5
	E	kg	6,8	8,3	11,2	11,1	12,8	13,3	7,4	13,3	7,7	13,3	8,7	18,2	18,2	8,3	18,4	10,0	18,4	9,5
	L	kg	6,5	6,8	7,4	7,4	9,5	9,5	6,8	12,2	7,1	12,2	7,1	17,7	17,7	8,1	17,7	9,0	17,7	9,0
Refrigerant load circuit 2 (1)	°,L	kg	-	-	-	-	-	-	6,8	-	7,1	-	7,1	-	-	8,1	-	9,0	-	9,0
	A,E	kg	-	-	-	-	-	-	7,4	-	7,7	-	8,7	-	-	8,3	-	10,0	-	9,5
Potential global heating	°,A,E,L	GWP										675kgCO_2eq								
System side heat exchanger																				
Type	°,A,E,L	type										Brazed plate								
Number	°,A,E,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Fan																				
Type	°,A,E,L	type										Axial								
Number	°	no.	-	-	-	-	2	2	2	2	2	2	2	3	3	3	3	3	3	3
	A	no.	-	-	-	-	2	2	2	2	2	2	3	3	3	3	3	3	3	3
	E	no.	6	6	8	8	2	2	2	2	2	2	3	3	3	3	3	3	3	3
	L	no.	4	6	6	8	2	2	2	2	2	2	2	3	3	3	3	3	3	3
Air flow rate	°	m^3/h	-	-	-	-	42831	42819	40170	41067	40170	41067	38299	62024	62022	60681	62022	60681	62022	60681
	A	m^3/h	-	-	-	-	41097	41097	38299	39483	38299	39483	60681	59734	59721	57995	59721	57995	59721	57995
	E	m^3/h	21224	21224	28177	25805	31035	31035	28870	29848	28870	29848	45978	45211	45211	43804	45211	43804	45211	43804
	L	m^3/h	15552	21229	22716	28186	32592	32592	30388	31000	30388	31000	28869	47029	47029	45980	47029	45980	47029	45980
Sound data calculated in cooling mode (2)																				
Sound power level	°	dB(A)	-	-	-	-	87,2	87,5	86,5	87,7	87,1	87,9	87,1	89,4	89,5	88,8	90,0	90,1	90,1	90,0
	A	dB(A)	-	-	-	-	87,2	87,5	86,5	87,7	87,1	87,9	88,8	89,4	89,5	88,8	90,0	90,1	90,1	90,0
	E	dB(A)	73,6	74,1	74,9	75,1	82,8	83,5	76,6	83,9	77,3	84,3	78,4	85,5	85,6	78,6	86,7	84,6	87,3	86,2
	L	dB(A)	73,0	74,1	74,5	75,1	82,8	83,5	76,6	83,9	77,3	84,3	77,7	85,5	85,6	78,6	86,7	84,6	87,3	86,2
Sound data calculated in heating mode (2)																				
Sound power level	°	dB(A)	-	-	-	-	87,2	87,5	86,5	87,7	87,1	87,9	87,1	89,4	89,5	88,8	90,0	90,1	90,1	90,0
	A	dB(A)	-	-	-	-	87,2	87,5	86,5	87,7	87,1	87,9	88,8	89,4	89,5	88,8	90,0	90,1	90,1	90,0
	E	dB(A)	73,6	74,1	74,9	75,1	87,2	87,5	86,5	87,7	87,1	87,9	88,8	89,4	89,5	88,8	90,0	90,1	90,1	90,0
	L	dB(A)	73,0	74,1	74,5	75,1	87,2	87,5	86,5	87,7	87,1	87,9	87,1	89,4	89,5	88,8	90,0	90,1	90,1	90,0

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0554	0602	0604	0652	0654	0682	0702	0704	0752	0754	0802	0804
Dimensions and weights																				
A	°	mm	-	-	-	-	1907	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900
	A	mm	-	-	-	-	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900
	E	mm	1652	1658	1658	1658	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900	1900
	L	mm	1652	1652	1658	1658	1907	1907	1907	1907	1907	1907	1907	1900	1900	1900	1900	1900	1900	1900
B	°,A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
	E,L	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	°	mm	-	-	-	-	3567	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368
	A	mm	-	-	-	-	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368
	E	mm	2818	3317	3317	3317	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368	4368
	L	mm	2818	2818	3317	3317	3567	3567	3567	3567	3567	3567	3567	4368	4368	4368	4368	4368	4368	4368

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRGI 151-602

Air-water chiller

Cooling capacity 31.0 ÷ 132.2 kW

- **High efficiency also at partial loads**
- **High modulation capacity**
- **Continuous modulation of the cooling capacity**
- **Compressors and fans with Inverter**
- **Low refrigerant charge**
- **Stable temperature control of the outlet water**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas.
Condensing coil with copper pipes and aluminium louvers, plate heat exchanger and **standard electronic expansion valve.**
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 50°C external air temperature. Unit can produce chilled water up to -10 °C.
For more information refer to the selection program and to to the dedicated documentation.

High efficiency

These are flexible and reliable units which adapt to the most diverse load conditions thanks to the precise design and **the use of steady speed compressors together with inverter-controlled variable speed compressors** guaranteeing a high energy efficiency level both at full and partial load.

Inverter compressor + On-Off

They can be configured with a single variable speed compressor or two in tandem configuration, one steady and one variable speed. This pair guarantees high efficiency both with partial and full loads.
Sizes 151-281 have a single variable speed compressor. Sizes 302-602 have two compressors in tandem configuration.
This solution gets the best value out of the particularities and advantages of each compressor, enhancing the efficiency of each load condition and allowing for
— High seasonal efficiency
— steady and precise modulation of the chilling demand
— The stability of the outlet water temperature.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.
■ *The leak detector is supplied as per standard.*

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

Single-compressor units have a standard electronic expansion valve, while units with tandem compressors have two.
The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Fans

Inverter: standard from size 151 to size 352, available as an optional for the other sizes.
Boosted, asynchronous with phase cutting: standard from size 382 to size 602.
Both types of fan permit:
— Steady air flow rate adjustment
— Low consumption and reduced sound level at partial loads
— Operation with low outdoor air temperatures
— Precise condensation control for an extended operating range.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ *VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.*

CONTROL PCO[5]

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** this function can be activated in all the units, to optimise unit operation at any point by continuously modulating the fan speed. In addition, the use of inverter fans allows increased energy efficiency with partial loads.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

INTEGRATED SOLUTION

The **"integrated solution" concept has been implemented in the system architecture**, consisting in an integrated and streamlined control of compressors and electronic valves.
This solution allowed a variety of new features to be introduced, such as:

— **Low Superheat Control**: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
— **DLT control**: Control of electronic valves at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	151	201	281	302	332	352	382	502	552	602
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•
PGD1	A,E	•	•	•	•	•	•	•	•	•	•
SGD	A,E	•	•	•	•	•	•	•			

Remote panel

Model	Ver	151	201	281	302	332	352	382	502	552	602
PR4	A,E	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	151	201	281	302	332	352	382	502	552	602
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4										
A, E	VT17	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT22
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, 09, K1, K2, K3, K4, W1, W2, W3, W4										
A, E	VT13	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT22

Anti-intrusion grid

Ver	151	201	281	302	332	352	382	502	552	602
A, E	GP3	GP4	GP4	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy

Device for peak current reduction

Ver	151	201	281	302	332	352	382	502	552	602
A, E	-	-	-	DRENRGI302	DRENRGI332	DRENRGI352	DRENRGI382	DRENRGI502	DRENRGI552	DRENRGI602

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	151	201	281	302	332	352	382	502	552	602
A, E	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3,4		**NRGI**
5,6,7		**Size** 151, 201, 281, 302, 332, 352, 382, 502, 552, 602
8		**Operating field (1)**
	X	Electronic thermostatic expansion valve
9		**Model**
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (2)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	M	Boosted with phase cutting (3)
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with pump/s and storage tank with holes for heaters
	05	Storage tank with holes for heaters and single low head pump (4)
	06	Storage tank with holes for heaters and pump low head + stand-by pump (4)
	07	Storage tank with holes for heaters and single high head pump (4)
	08	Storage tank with holes for heaters and pump high head + stand-by pump (4)
		Double loop
	09	Double loop
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump
		Kit with inverter pump/s to fixed speed
	I1	Single low head pump + fixed speed inverter
	I2	Single low head pump with fixed speed inverter + stand-by pump
	I3	Single high head pump + fixed speed inverter
	I4	Single high head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and inverter pump/s to fixed speed
	K1	Single low head pump + storage tank + fixed speed inverter
	K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
	K3	Single high head pump + storage tank + fixed speed inverter
	K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and variable speed inverter pump/s
	W1	Single low head pump + Storage tank + variable speed inverter
	W2	Double low head pump + Storage tank + variable speed inverter
	W3	Single high head pump + Storage tank + variable speed inverter
	W4	Double high head pump + Storage tank + variable speed inverter

(1) Water produced from -10 °C ÷ 20 °C. Double electronic thermostatic valve from size 302 to 602.
(2) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program
(3) Only for 382 - 502 - 552 - 602 sizes
(4) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRGI - A

Size		151	201	281	302	332	352	382	502	552	602
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	39,2	52,6	58,2	69,4	77,7	83,2	93,2	103,3	114,0	132,2
Input power	kW	11,8	15,2	17,5	20,8	23,3	25,6	27,6	31,4	35,1	39,1
Cooling total input current	A	18,0	23,0	26,0	37,0	41,0	46,0	43,0	49,0	53,0	60,0
EER	W/W	3,31	3,47	3,32	3,33	3,34	3,25	3,37	3,29	3,24	3,38
Water flow rate system side	l/h	6746	9067	10028	11960	13388	14335	16031	17775	19616	22750
Pressure drop system side	kPa	18	33	40	35	44	50	24	23	28	29

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRGI - E

Size		151	201	281	302	332	352	382	502	552	602
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	31,0	40,1	46,4	61,7	70,1	75,6	84,9	91,3	101,8	119,6
Input power	kW	8,9	11,0	13,1	17,9	20,2	22,5	24,6	26,9	30,8	34,2
Cooling total input current	A	13,0	17,0	19,0	32,0	36,0	41,0	39,0	43,0	47,0	53,0
EER	W/W	3,49	3,63	3,55	3,45	3,46	3,36	3,45	3,39	3,31	3,50
Water flow rate system side	l/h	5326	6900	7994	10624	12066	13021	14607	15705	17509	20576
Pressure drop system side	kPa	11	19	25	27	35	41	20	18	22	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY DATA

Size			151	201	281	302	332	352	382	502	552	602
Fans: J												
SEER - 12/7 (EN14825: 2018) (1)												
SEER	A	W/W	5,19	5,32	5,37	5,04	5,07	5,22	5,33	5,36	5,18	5,33
	E	W/W	5,23	5,36	5,42	5,08	5,11	5,26	5,37	5,40	5,23	5,37
Seasonal efficiency	A	%	204,40	209,80	211,90	198,40	199,70	205,70	210,00	211,40	204,30	210,00
	E	%	206,00	211,50	213,60	200,00	201,30	207,30	211,80	213,10	206,00	211,70
SEER - 23/18 (EN14825: 2018) (2)												
SEER	A	W/W	6,35	6,45	6,33	5,81	5,79	5,89	6,21	6,21	5,94	6,11
	E	W/W	6,52	6,75	6,58	5,93	5,84	5,91	6,31	6,32	6,00	6,21
Seasonal efficiency	A	%	250,90	254,90	250,20	229,50	228,40	232,40	245,20	245,30	234,60	241,50
	E	%	257,90	266,80	260,30	234,20	230,40	233,40	249,40	249,80	237,10	245,40
SEPR - (EN 14825: 2018) (2)												
SEPR	A	W/W	7,10	7,60	7,50	7,10	7,30	7,40	7,10	7,10	6,50	6,50
	E	W/W	7,10	7,50	7,40	7,20	7,40	7,40	7,10	7,20	6,60	6,60

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			151	201	281	302	332	352	382	502	552	602
Fans: M												
SEER - 12/7 (EN14825: 2018) (1)												
SEER	A	W/W	-	-	-	-	-	-	5,33	5,36	5,18	5,33
	E	W/W	-	-	-	-	-	-	5,37	5,40	5,23	5,37
Seasonal efficiency	A	%	-	-	-	-	-	-	210,00	211,40	204,30	210,00
	E	%	-	-	-	-	-	-	211,80	213,10	206,00	211,70
SEER - 23/18 (EN14825: 2018) (2)												
SEER	A	W/W	-	-	-	-	-	-	6,21	6,21	5,94	6,11
	E	W/W	-	-	-	-	-	-	6,31	6,32	6,00	6,21
Seasonal efficiency	A	%	-	-	-	-	-	-	245,20	245,30	234,60	241,50
	E	%	-	-	-	-	-	-	249,40	249,80	237,10	245,40
SEPR - (EN 14825: 2018) (2)												
SEPR	A	W/W	-	-	-	-	-	-	7,10	7,10	6,50	6,50
	E	W/W	-	-	-	-	-	-	7,10	7,20	6,60	6,60

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			151	201	281	302	332	352	382	502	552	602
Electric data												
Maximum current (FLA)	A,E	A	23,8	31,6	34,9	47,6	52,8	58,1	60,1	68,8	74,4	87,5
Peak current (LRA)	A,E	A	30,3	43,0	43,0	142,8	167,1	201,1	174,4	211,8	278,6	329,2

■ *Data calculated without hydronic kit and accessories.*

GENERAL TECHNICAL DATA

Size			151	201	281	302	332	352	382	502	552	602
Compressor												
Type	A,E	type	Scroll									
Compressor regulation	A,E	Type	I	I	I	1+I	1+I	1+I	1+I	1+I	1+I	1+I
Number	A,E	no.	1	1	1	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	A,E	type	R32									
System side heat exchanger												
Type	A,E	type	Brazed plate									
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1

FANS DATA

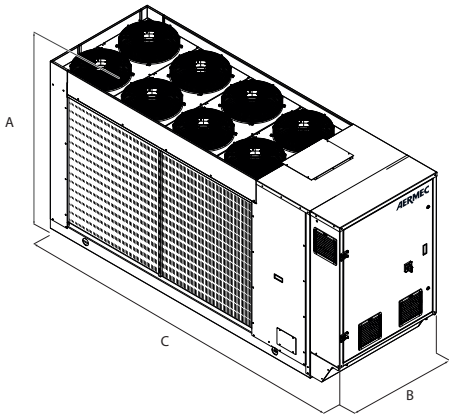
Size			151	201	281	302	332	352	382	502	552	602
Fans: J												
Fan												
Type	A,E	type	Axial									
Fan motor	A,E	type	Inverter									
Number	A,E	no.	4	6	6	8	8	8	2	2	2	3
Air flow rate	A	m^3/h	16669	24469	24476	30793	28649	28662	36174	36174	36149	54601
	E	m^3/h	14488	21255	21255	26704	24966	24966	26850	26850	26781	40488
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	81,8	84,6	85,9	82,2	85,0	85,1	85,4	86,5	87,7	88,1
	E	dB(A)	79,3	82,8	83,3	80,9	81,3	81,7	82,8	83,0	85,4	85,5
Sound pressure level (10 m)	A	dB(A)	50,0	52,7	54,1	50,3	53,2	53,3	53,5	54,5	55,8	56,0
	E	dB(A)	47,5	51,0	51,4	49,0	49,5	49,8	50,8	51,1	53,5	53,5

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			151	201	281	302	332	352	382	502	552	602
Fans: M												
Increased fan												
Type	A,E	type	Axial									
Fan motor	A,E	type	Asynchronous with phase cut									
Number	A,E	no.	-	-	-	-	-	-	2	2	2	3
Air flow rate	A	m^3/h	-	-	-	-	-	-	36174	36174	36149	54601
	E	m^3/h	-	-	-	-	-	-	26850	26850	26781	40488
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	-	-	-	-	-	-	85,4	86,5	87,7	88,1
	E	dB(A)	-	-	-	-	-	-	82,8	83,0	85,4	85,5
Sound pressure level (10 m)	A	dB(A)	-	-	-	-	-	-	53,5	54,5	55,8	56,0
	E	dB(A)	-	-	-	-	-	-	50,8	51,1	53,5	53,5

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			151	201	281	302	332	352	382	502	552	602
Dimensions and weights												
A	A,E	mm	1652	1652	1652	1652	1652	1652	1907	1907	1907	1900
B	A,E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	A,E	mm	2873	3372	3372	3372	3372	3372	3623	3623	3623	4373

Size			151	201	281	302	332	352	382	502	552	602
Integrated hydronic kit: 00												
Weights												
Weight empty + packaging	A,E	kg	826	899	899	986	1027	1028	1093	1101	1123	1313
Weight functioning	A,E	kg	795	867	867	955	996	997	1062	1072	1094	1284

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRGI 151H-602H

Reversible air/water heat pump

Cooling capacity 28.9 ÷ 123.7 kW – Heating capacity 31.6 ÷ 133.9 kW

- **High efficiency also at partial loads**
- **High modulation capacity**
- **Continuous modulation of the cooling capacity**
- **Compressors and fans with Inverter**
- **Low refrigerant charge**
- **Stable temperature control of the outlet water**



EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas.
Condensing coil with copper pipes and aluminium louvers, plate heat exchanger and **standard electronic expansion valve.**
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 49 °C in summer. Hot water production up to 60 °C
For more information refer to the selection program and to to the dedicated documentation.

High efficiency

These are flexible and reliable units which adapt to the most diverse load conditions thanks to the precise design and **the use of steady speed compressors together with inverter-controlled variable speed compressors** guaranteeing a high energy efficiency level both at full and partial load.

Inverter compressor + On-Off

They can be configured with a single variable speed compressor or two in tandem configuration, one steady and one variable speed. This pair guarantees high efficiency both with partial and full loads.
Sizes 151-281 have a single variable speed compressor. Sizes 302-602 have two compressors in tandem configuration.
This solution gets the best value out of the particularities and advantages of each compressor, enhancing the efficiency of each load condition and allowing for

— High seasonal efficiency
— steady and precise modulation of the chilling demand
— The stability of the outlet water temperature.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

Single-compressor units have a standard electronic expansion valve, while units with tandem compressors have two.
The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Inverter fans

All of the units are equipped as per standard with high-efficiency inverter-controlled axial fans which provide:

— Steady air flow rate adjustment
— Low consumption and reduced sound level at partial loads
— Operation with low outdoor air temperatures
— Precise condensation control for an extended operating range.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed or variable pumps also inverter.

■ *VARIABLE FLOW RATE: Correctly adjust the speed of the inverter-controlled pumps according to the load demand of the system, in order to reduce power consumption.*

CONTROL PCO[5]

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Swing HP and LP controls:** available for all models. By continuously modulating the fans, they streamline operation of the unit at any work point both in cooling and heating mode. This results in enhanced energy efficiency of the unit at partial loads.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

INTEGRATED SOLUTION

The **"integrated solution" concept has been implemented in the system architecture**, consisting in an integrated and streamlined control of compressors and electronic valves.

This solution allowed a variety of new features to be introduced, such as:

— **Low Superheat Control**: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
— **DLT control**: Control of electronic valves at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range, especially in heating mode.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.

AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

PGD1: Allows you to control the unit at a distance.

SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

GP: Anti-intrusion grid.

VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	151	201	281	302	332	352	382	502	552	602
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•
PGD1	A,E	•	•	•	•	•	•	•	•	•	•
SGD	A,E	•	•	•	•	•	•	•			

Remote panel

Model	Ver	151	201	281	302	332	352	382	502	552	602
PR4	A,E	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	151	201	281	302	332	352	382	502	552	602
Integrated hydronic kit: 00, I1, I2, I3, I4, P1, P2, P3, P4										
A, E	VT17	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT22
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, 09, K1, K2, K3, K4, W1, W2, W3, W4										
A, E	VT13	VT13	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT22

Anti-intrusion grid

Ver	151	201	281	302	332	352	382	502	552	602
A, E	GP3	GP4	GP4	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy

Device for peak current reduction

Ver	151	201	281	302	332	352	382	502	552	602
A, E	-	-	-	DRENRGI302	DRENRGI332	DRENRGI352	DRENRGI382	DRENRGI502	DRENRGI552	DRENRGI602

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	151	201	281	302	332	352	382	502	552	602
A, E	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1	T6NRG1

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3,4		**NRGI**
5,6,7		**Size** 151, 201, 281, 302, 332, 352, 382, 502, 552, 602
8		**Operating field (1)**
	X	Electronic thermostatic expansion valve
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (2)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	°	Standard with phase cut
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump

Field		Description
		Kit with pump/s and storage tank with holes for heaters
	05	Storage tank with holes for heaters and single low head pump (3)
	06	Storage tank with holes for heaters and pump low head + stand-by pump (3)
	07	Storage tank with holes for heaters and single high head pump (3)
	08	Storage tank with holes for heaters and pump high head + stand-by pump (3)
		Double loop
	09	Double loop
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump
		Kit with inverter pump/s to fixed speed
	I1	Single low head pump + fixed speed inverter
	I2	Single low head pump with fixed speed inverter + stand-by pump
	I3	Single high head pump + fixed speed inverter
	I4	Single high head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and inverter pump/s to fixed speed
	K1	Single low head pump + storage tank + fixed speed inverter
	K2	Storage tank and low head pump with fixed speed inverter + stand-by pump
	K3	Single high head pump + storage tank + fixed speed inverter
	K4	Storage tank and low head pump with fixed speed inverter + stand-by pump
		Kit with storage tank and variable speed inverter pump/s
	W1	Single low head pump + Storage tank + variable speed inverter
	W2	Double low head pump + Storage tank + variable speed inverter
	W3	Single high head pump + Storage tank + variable speed inverter
	W4	Double high head pump + Storage tank + variable speed inverter

(1) Water produced from -10 °C ÷ 20 °C. Double electronic thermostatic valve from size 302 to 602.
(2) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(3) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRGI - HA

Size		151	201	281	302	332	352	382	502	552	602
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	36,5	48,9	54,2	64,1	72,1	77,3	87,0	95,7	106,0	123,7
Input power	kW	12,1	15,6	18,1	21,5	23,9	26,3	28,4	32,3	36,1	39,1
Cooling total input current	A	18,0	24,0	27,0	38,0	42,0	47,0	44,0	51,0	55,0	60,0
EER	W/W	3,00	3,13	3,00	2,98	3,02	2,94	3,06	2,96	2,93	3,16
Water flow rate system side	l/h	6280	8416	9328	11028	12414	13315	14969	16471	18246	21290
Pressure drop system side	kPa	15	28	34	28	35	41	19	18	23	25
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	39,6	53,4	59,0	69,9	78,1	84,1	94,7	104,8	115,7	133,9
Input power	kW	11,6	15,4	17,3	20,3	23,0	24,9	29,4	32,2	34,6	40,6
Heating total input current	A	18,0	24,0	27,0	38,0	42,0	46,0	46,0	52,0	54,0	64,0
COP	W/W	3,42	3,46	3,42	3,45	3,40	3,37	3,22	3,25	3,34	3,30
Water flow rate system side	l/h	6869	9260	10228	12113	13544	14563	16431	18188	20074	23220
Pressure drop system side	kPa	18	33	40	34	42	49	23	22	27	29

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRGI - HE

Size		151	201	281	302	332	352	382	502	552	602
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	28,9	37,0	42,6	56,7	64,9	70,1	78,8	84,0	94,0	111,3
Input power	kW	9,1	11,4	13,5	18,4	20,8	23,2	25,3	27,6	31,6	34,1
Cooling total input current	A	13,0	17,0	20,0	33,0	36,0	41,0	39,0	44,0	49,0	53,0
EER	W/W	3,17	3,25	3,15	3,07	3,12	3,03	3,12	3,04	2,97	3,26
Water flow rate system side	l/h	4974	6363	7326	9764	11165	12069	13554	14451	16179	19152
Pressure drop system side	kPa	10	16	21	22	29	33	16	14	18	20
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	31,6	41,2	47,5	62,3	70,4	76,5	87,0	93,3	104,4	122,0
Input power	kW	9,1	11,8	13,6	18,0	20,3	22,2	27,0	28,5	31,2	36,8
Heating total input current	A	15,0	20,0	22,0	35,0	38,0	43,0	43,0	47,0	50,0	59,0
COP	W/W	3,49	3,49	3,49	3,47	3,47	3,44	3,23	3,27	3,35	3,32
Water flow rate system side	l/h	5484	7151	8247	10814	12215	13253	15103	16186	18126	21177
Pressure drop system side	kPa	12	20	26	27	34	40	20	18	22	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			151	201	281	302	332	352	382	502	552	602
Fans: J												
Performance in average ambient conditions (average) - 35 °C (1)												
Efficiency energy class	A		A++	A++	A++	A++	A++	-	-	-	-	-
	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Pdesignh	A	kW	34	46	51	61	67	73	82	91	100	116
	E	kW	27	35	41	54	61	66	75	81	90	105
SCOP	A	W/W	4,25	4,33	4,25	4,40	4,29	4,35	4,27	4,25	4,13	4,02
	E	W/W	4,28	4,35	4,28	4,43	4,33	4,38	4,30	4,29	4,17	4,05
ηsh	A	%	167,00	170,00	167,10	173,00	168,40	170,95	167,75	167,17	162,28	157,71
	E	%	168,00	171,00	168,00	174,00	170,00	172,00	169,12	168,53	163,60	159,00
Performance in average ambient conditions (average) - 55 °C (2)												
Efficiency energy class	A		A++	A++	A++	A++	A++	-	-	-	-	-
	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Pdesignh	A	kW	35	48	53	62	69	73	83	92	102	117
	E	kW	28	37	43	55	62	67	76	82	92	106
SCOP	A	W/W	3,31	3,40	3,38	3,38	3,43	3,49	3,28	3,35	3,35	3,27
	E	W/W	3,33	3,40	3,38	3,38	3,40	3,48	3,39	3,37	3,36	3,28
ηsh	A	%	129,40	133,00	132,10	132,00	134,00	136,50	128,10	130,80	130,90	127,70
	E	%	130,00	133,00	132,00	132,00	133,00	136,00	132,50	131,80	131,20	128,00

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Size			151	201	281	302	332	352	382	502	552	602
Fans: °												
Performance in average ambient conditions (average) - 35 °C (1)												
Efficiency energy class	A		A++	A++	A++	A++	A++	-	-	-	-	-
	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Pdesignh	A	kW	34	46	51	61	67	73	82	91	100	116
	E	kW	27	35	41	54	61	66	75	81	90	105
SCOP	A	W/W	4,10	4,20	4,13	4,28	4,15	4,22	4,14	4,13	4,01	3,90
	E	W/W	4,15	4,20	4,15	4,30	4,18	4,25	4,17	4,16	4,04	3,93
ηsh	A	%	161,00	165,00	162,00	168,00	163,00	165,73	162,63	162,06	157,32	152,89
	E	%	163,00	165,00	163,00	169,00	164,00	167,00	163,96	163,38	158,60	154,14
Performance in average ambient conditions (average) - 55 °C (2)												
Efficiency energy class	A		A++	A++	A++	A++	A++	-	-	-	-	-
	E		A++	A++	A++	A++	A++	A++	-	-	-	-
Pdesignh	A	kW	35	48	53	62	69	73	83	92	102	117
	E	kW	28	37	43	55	62	67	76	82	92	106
SCOP	A	W/W	3,20	3,30	3,28	3,28	3,30	3,38	3,18	3,30	3,25	3,17
	E	W/W	3,23	3,30	3,28	3,28	3,30	3,38	3,29	3,27	3,26	3,18
ηsh	A	%	125,00	129,00	128,00	128,00	129,00	132,30	124,20	128,80	126,90	123,80
	E	%	126,00	129,00	128,00	128,00	129,00	132,00	128,40	127,70	127,20	124,10

(1) Efficiencies for low temperature applications (35 °C)
(2) Efficiencies for average temperature applications (55 °C)

Size			151	201	281	302	332	352	382	502	552	602
SEER - (EN14825:2018) 12/7 with inverter fans (1)												
SEER	A	W/W	4,67	4,96	4,89	4,62	4,74	4,68	4,79	4,84	4,90	5,09
	E	W/W	4,71	5,00	4,93	4,66	4,78	4,72	4,83	4,88	4,94	5,13
Seasonal efficiency	A	%	183,90	195,27	192,49	181,84	186,68	184,20	188,75	190,52	192,91	200,54
	E	%	185,40	196,86	194,06	183,31	188,19	185,69	190,29	192,07	194,48	202,17

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

Size			151	201	281	302	332	352	382	502	552	602
SEER - 12/7 (EN14825:2018) with standard fans (1)												
SEER	A	W/W	4,49	4,76	4,69	4,44	4,55	4,49	4,60	4,64	4,70	4,88
	E	W/W	4,52	4,80	4,73	4,47	4,59	4,53	4,64	4,68	4,74	4,92
Seasonal efficiency	A	%	176,43	187,34	184,67	174,44	179,09	176,71	181,08	182,78	185,08	192,40
	E	%	177,86	188,86	186,17	175,86	180,55	178,15	182,56	184,26	186,58	193,96

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

ELECTRIC DATA

Size			151	201	281	302	332	352	382	502	552	602
Electric data												
Maximum current (FLA)	A,E	A	23,8	31,6	34,9	47,6	52,8	58,1	60,1	68,8	74,4	87,5
Peak current (LRA)	A	A	30,3	43,0	43,0	142,8	167,1	201,1	174,4	211,8	278,6	329,2
	E	A	30,3	43,0	43,0	136,2	160,5	194,5	166,6	204,0	270,8	317,5

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

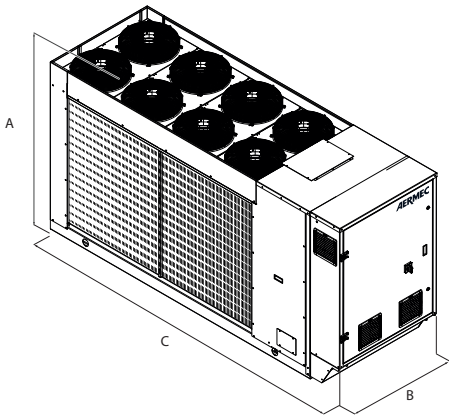
Size			151	201	281	302	332	352	382	502	552	602
Compressor												
Type	A,E	type	Scroll									
Compressor regulation	A,E	Type	Inverter	Inverter	Inverter	Inverter+On/Off	Inverter+On/Off	Inverter+On/Off	Inverter+On/Off	Inverter+On/Off	Inverter+On/Off	Inverter+On/Off
Number	A,E	no.	1	1	1	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	A,E	type	R32									
System side heat exchanger												
Type	A,E	type	Brazed plate									
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	81,8	84,6	86,0	82,2	85,0	85,1	85,4	86,5	87,8	88,1
	E	dB(A)	79,3	82,8	83,3	80,9	81,3	81,7	82,8	83,0	85,4	85,6

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			151	201	281	302	332	352	382	502	552	602
Fans: J												
Fan												
Type	A,E	type	Axial									
Fan motor	A,E	type	Inverter									
Number	A,E	no.	4	6	6	8	8	8	2	2	2	3
Air flow rate	A	m^3/h	16896	24887	24891	31613	29660	29659	36859	36859	36859	55733
	E	m^3/h	14667	21591	21591	27379	25774	25774	27308	27308	27307	41430

DIMENSIONS



Size			151	201	281	302	332	352	382	502	552	602
Dimensions and weights												
A	A,E	mm	1652	1652	1652	1652	1652	1652	1907	1907	1907	1900
B	A,E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	A,E	mm	2873	3372	3372	3372	3372	3372	3623	3623	3623	4373

Size			151	201	281	302	332	352	382	502	552	602
Integrated hydronic kit: 00												
Weights												
Weight empty + packaging	A,E	kg	856	929	929	1019	1063	1064	1131	1137	1159	1365
Weight functioning	A,E	kg	825	897	897	988	1032	1033	1099	1108	1130	1336

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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www.aermec.com

NRL 0280-0350

Air-water chiller

Cooling capacity 56 ÷ 82 kW

- **Low noise levels in silenced versions**
- **High efficiency also at partial loads**
- **Compact dimensions**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 47 °C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Dual-circuit unit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, available to configurator, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.

AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
GP: Anti-intrusion grid.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

PRM1: It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.

C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	0280	0300	0330	0350
AER485P1	E	•	•	•	•
AERBACP	E	•	•	•	•
AERLINK	E	•	•	•	•
AERNET	E	•	•	•	•
MULTICHILLER-EVO	E	•	•	•	•
PGD1	E	•	•	•	•
SGD	E	•	•	•	•

Model	Ver	0280	0300	0330	0350
C-TOUCH	E	•	•	•	•

Remote panel

Model	Ver	0280	0300	0330	0350
PR4	E	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0280	0300	0330	0350
Fans: M				
E	DCPX63	DCPX63	DCPX63	DCPX63

Antivibration

Ver	0280	0300	0330	0350
Integrated hydronic kit: 00, P1, P2, P3, P4				
E	VT17	VT17	VT17	VT17
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, 09				
E	VT13	VT13	VT13	VT13

Anti-intrusion grid

Ver	0280	0300	0330	0350
E	GP3	GP4	GP4	GP4

Device for peak current reduction

Ver	0280	0300	0330	0350
Power supply: °				
E	DRE281 (1)	DRE301 (1)	DRE331 (1)	DRE351 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0280	0300	0330	0350
E	RIF50	RIF50	RIF50	RIF51

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRL**
4,5,6,7		**Size** 0280, 0300, 0330, 0350
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	C	Motocondensing unit
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery
	°	Without heat recovery
11		**Version (4)**
	E	Silenced high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter (5)
	M	Oversized (6)
14		**Power supply**
	°	400V ~ 3N 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit

Field		Description
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with pump/s and storage tank with holes for heaters
	05	Storage tank with holes for heaters and single low head pump (7)
	06	Storage tank with holes for heaters and pump low head + stand-by pump (7)
	07	Storage tank with holes for heaters and single high head pump (7)
	08	Storage tank with holes for heaters and pump high head + stand-by pump (7)
		Double loop
	09	Double loop
	10	Double loop with supplementary electric heater
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump

(1) Water produced from 4 °C ÷ 18 °C
(2)) Water produced from 4 °C ÷ 18 °C for version"E", -10 °C for the others versions
(3) For "YT" - "ZT" - "YD" and "ZD" recovery versions, contact the headquarters; Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program
(4) The size up 0280 ÷ 0350 are only available in the silenced versions "E" with inverer fans
(5) Standard for size 0280 ÷ 0350, without useful static pressure, option for other size with useful static pressure.
(6) Standard for size 0500, without useful static pressure, option for other size with useful static pressure.
(7) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRL - E

Size		0280	0300	0330	0350
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	56,8	64,8	73,8	82,8
Input power	kW	17,1	19,7	22,1	25,5
Cooling total input current	A	30,0	34,0	37,0	45,0
EER	W/W	3,33	3,29	3,34	3,24
Water flow rate system side	l/h	9793	11168	12714	14260
Pressure drop system side	kPa	43	39	35	44

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRL - C

Size			0280	0300	0330	0350
Model: C						
Cooling performance 12 °C / 7 °C (1)						
Cooling capacity	E	kW	59,0	67,0	76,0	85,0
Input power	E	kW	17,0	19,6	22,0	25,3
Input current	E	A	35,0	39,0	43,0	49,0
EER	E	W/W	3,47	3,42	3,45	3,36

(1) Evaporating temperature 5 °C, External air 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Energy index data

Size			0280	0300	0330	0350
Fans: J						
SEER - 12/7 (EN14825: 2018) (1)						
SEER	E	W/W	- (2)	- (2)	- (2)	- (2)
Seasonal efficiency	E	%	- (2)	- (2)	- (2)	- (2)
SEER - 23/18 (EN14825: 2018) (3)						
SEER	E	W/W	4,55	4,70	4,62	4,47
Seasonal efficiency	E	%	178,90	184,90	181,60	175,90
SEPR - (EN 14825: 2018) (3)						
SEPR	E	W/W	5,81	5,94	5,85	5,66

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

Size			0280	0300	0330	0350
Fans: M						
SEER - 12/7 (EN14825: 2018) (1)						
SEER	E	W/W	- (2)	- (2)	- (2)	- (2)
Seasonal efficiency	E	%	- (2)	- (2)	- (2)	- (2)
SEER - 23/18 (EN14825: 2018) (3)						
SEER	E	W/W	4,55	4,70	4,62	4,47
Seasonal efficiency	E	%	178,90	184,90	181,60	175,90
SEPR - (EN 14825: 2018) (3)						
SEPR	E	W/W	5,81	5,94	5,85	5,66

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0280	0300	0330	0350
Electric data						
Maximum current (FLA)	E	A	46,0	53,0	58,0	63,0
Peak current (LRA)	E	A	155,0	184,0	190,0	200,0

GENERAL TECHNICAL DATA

General data

Size			0280	0300	0330	0350
Compressor						
Type	E	type		Scroll		
Compressor regulation	E	Type		On-Off		
Number	E	no.	2	2	2	2
Circuits	E	no.	2	2	2	2
Refrigerant	E	type		R410A		
System side heat exchanger						
Type	E	type		Brazed plate		
Number	E	no.	1	1	1	1
System side hydraulic connections						
Connections (in/out)	E	Type		Grooved joints		
Sizes (in/out)	E	Ø		2"1/2		
Sound data calculated in cooling mode (1)						
Sound power level	E	dB(A)	74,0	74,0	75,0	76,0
Sound pressure level (10 m)	E	dB(A)	42,3	42,2	43,2	44,2

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Fans

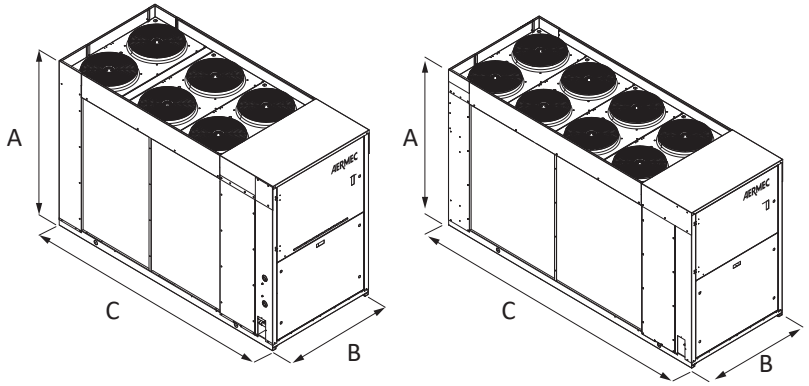
Size			0280	0300	0330	0350
Fan						
Type	E	type		Axial		
Number	E	no.	6	6	8	8

Size			0280	0300	0330	0350
Fans: M						
Increased fan						
Fan motor	E	type		Asynchronous with phase cut		
Without Static pressure						
Air flow rate	E	m^3/h	-	-	-	-
High static pressure	E	Pa	-	-	-	-
Sound power level	E	dB(A)	-	-	-	-
With static pressure						
Air flow rate	E	m^3/h	22000	22000	27000	27000
High static pressure	E	Pa	50	50	50	50
Sound power level	E	dB(A)	74,0	74,0	75,0	76,0

Size			0280	0300	0330	0350
Fans: J						
Inverter fan						
Fan motor	E	type		Inverter		
Air flow rate	E	m^3/h	22000	22000	27000	27000
High static pressure	E	Pa	80	80	80	80
Sound data calculated in cooling mode (1)						
Sound power level	E	dB(A)	74,0	74,0	75,0	76,0

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Dimensions and weights

Size			0280	0300	0330	0350
Dimensions and weights						
A	E	mm	1606	1606	1606	1606
B	E	mm	1100	1100	1100	1100
C	E	mm	2450	2950	2950	2950
Dimensions and weights without hydronic kit						
Empty weight	E	kg	686	751	761	767

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NRL 0280H-0350H

Reversible air/water heat pump

Cooling capacity 51 ÷ 76 kW – Heating capacity 58 ÷ 86 kW

- **High efficiency also at partial loads**
- **Compact dimensions**
- **Quick & easy installation**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

E Silenced high efficiency
L Standard silenced

FEATURES

Operating field

Working at full load up to -15°C outside air temperature in winter, and up to 46°C in summer. Hot water production up to 55°C (for more information see the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, available to configurator, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
BMConverter: The BMConverter accessory consists of the FPC-N54 network device which allows units that communicate via the Modbus RTU protocol on RS485, to be controlled by a third-party BMS system via the BACNet TCP-IP protocol.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
GP: Anti-intrusion grid.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0280	0300	0330	0350
AER485P1	E,L	•	•	•	•
AERBACP	E,L	•	•	•	•
AERLINK	E,L	•	•	•	•
AERNET	E,L	•	•	•	•
BMConverter	E,L	•	•	•	•
MULTICHILLER-EVO	E,L	•	•	•	•
PGD1	E,L	•	•	•	•
SGD	E,L	•	•	•	

Model	Ver	0280	0300	0330	0350
C-TOUCH	E,L	•	•	•	•

Remote panel

Model	Ver	0280	0300	0330	0350
PR4	E,L	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0280	0300	0330	0350
Fans: M				
E, L	DCPX63	DCPX63	DCPX63	DCPX63

Antivibration

Ver	0280	0300	0330	0350
Integrated hydronic kit: 00, P1, P2, P3, P4				
E, L	VT17	VT17	VT17	VT17
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, 09				
E, L	VT13	VT13	VT13	VT13

Anti-intrusion grid

Ver	0280	0300	0330	0350
E	GP3	GP4	GP4	GP4
L	GP3	GP3	GP3	GP3

Model	Ver	0280	0300	0330	0350
C-TOUCH	E,L	•	•	•	•

Device for peak current reduction

Ver	0280	0300	0330	0350
E, L	DRE281 (1)	DRE301 (1)	DRE331 (1)	DRE351 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0280	0300	0330	0350
E, L	RIF50	RIF50	RIF50	RIF51

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRL**
4,5,6,7		**Size** 0280, 0300, 0330, 0350
8		**Operating field**
	X	Electronic thermostatic expansion valve
	°	Standard mechanic thermostatic valve
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (1)
	°	Without heat recovery
11		**Version**
	E	Silenced high efficiency
	L	Standard silenced
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter (2)
	M	Oversized
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**

Field	Description
00	Without hydronic kit
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s and storage tank with holes for heaters
05	Storage tank with holes for heaters and single low head pump (3)
06	Storage tank with holes for heaters and pump low head + stand-by pump (3)
07	Storage tank with holes for heaters and single high head pump (3)
08	Storage tank with holes for heaters and pump high head + stand-by pump (3)
	Double loop
09	Double loop
10	Double loop with holes for heaters
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump

(1) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(2) Standard for size 0280 ÷ 0350, without useful static pressure, option for other size with useful static pressure.
(3) Storage tanks with holes for supplementary heaters (not provided) are sent from the factory with plastic protection caps. Before loading the system, if the installation of one or all resistances is not expected, all plastic caps must be replaced with the special caps, commonly commercially available.

PERFORMANCE SPECIFICATIONS

NRL HL

Size		0280	0300	0330	0350
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	50,8	60,8	65,9	72,8
Input power	kW	20,4	22,8	26,4	31,4
Cooling total input current	A	36,0	40,0	44,0	51,0
EER	W/W	2,49	2,67	2,49	2,32
Water flow rate system side	l/h	8762	10480	11340	12542
Pressure drop system side	kPa	47	43	29	45
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	58,2	68,2	75,2	82,3
Input power	kW	19,0	21,7	24,6	28,3
Heating total input current	A	33,0	38,0	41,0	50,0
COP	W/W	3,06	3,14	3,05	2,91
Water flow rate system side	l/h	10080	11818	13035	14252
Pressure drop system side	kPa	61	54	36	56

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRL HE

Size		0280	0300	0330	0350
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	52,9	61,9	68,8	76,8
Input power	kW	18,1	20,2	23,4	26,9
Cooling total input current	A	30,0	34,0	37,0	45,0
EER	W/W	2,93	3,06	2,94	2,86
Water flow rate system side	l/h	9106	10652	11855	13229
Pressure drop system side	kPa	27	27	51	29
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	59,1	69,2	76,3	86,2
Input power	kW	17,5	20,6	23,1	26,1
Heating total input current	A	35,0	39,0	43,0	49,0
COP	W/W	3,38	3,36	3,31	3,30
Water flow rate system side	l/h	10254	11992	13209	14947
Pressure drop system side	kPa	25	34	66	34

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ELECTRIC DATA

Size			0280	0300	0330	0350
Electric data						
Maximum current (FLA)	E	A	46,0	53,0	58,0	63,0
	L	A	46,0	53,0	53,0	63,0
Peak current (LRA)	E	A	155,0	184,0	190,0	200,0
	L	A	155,0	184,0	184,0	200,0

ENERGY DATA

Size			0280	0300	0330	0350
Cooling capacity with low leaving water temp (UE n° 2016/2281)						
SEER	E	W/W	3,74	3,71	3,80	3,71
	L	W/W	2,96	3,19	3,01	3,28
ηsc	E	%	146,50	145,20	148,90	145,30
	L	%	115,30	124,40	117,30	128,30
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)						
Efficiency energy class	E,L		A+	A+	A+	-
Pdesignh	E,L	kW	-	-	-	-
ηsh	E	%	138,00	137,00	137,00	135,00
	L	%	125,00	128,00	125,00	125,00
SCOP	E	W/W	3,53	3,50	3,50	3,45
	L	W/W	3,20	3,28	3,20	3,20

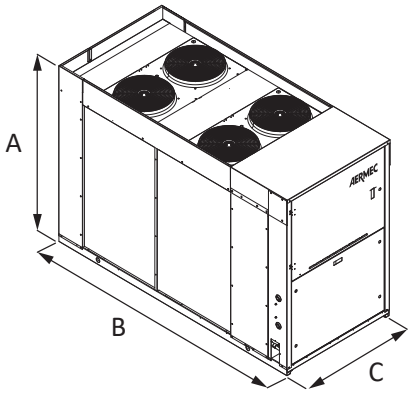
(1) Efficiencies for low temperature applications (35 °C)

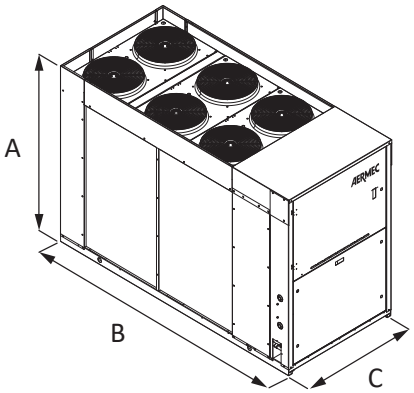
GENERAL TECHNICAL DATA

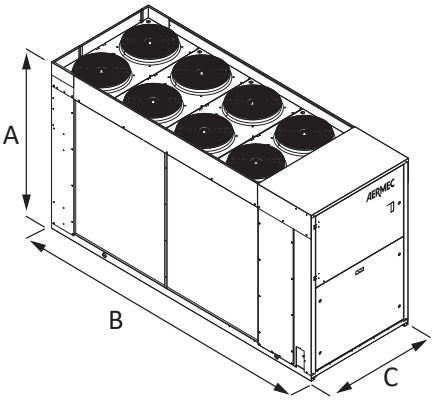
Size			0280	0300	0330	0350
Compressor						
Type	E,L	type		Scroll		
Compressor regulation	E,L	Type		On-Off		
Number	E,L	no.	2	2	2	2
Circuits	E,L	no.	2	2	2	2
Refrigerant	E,L	type		R410A		
System side heat exchanger						
Type	E,L	type		Brazed plate		
Number	E,L	no.	1	1	1	1
System side hydraulic connections						
Connections (in/out)	E,L	Type		Grooved joints		
Sizes (in/out)	E,L	Ø		2"1/2		
Fan						
Type	E,L	type		axials		
Number	E	no.	6	8	8	8
	L	no.	4	6	6	6
Air flow rate	E	m^3/h	20000	26000	26000	26000
	L	m^3/h	14000	20000	20000	20000
Sound data calculated in cooling mode (1)						
Sound power level	E	dB(A)	74,0	75,0	75,0	76,0
	L	dB(A)	73,0	74,0	74,0	75,0
Sound pressure level (10 m)	E	dB(A)	42,3	43,2	43,2	44,2
	L	dB(A)	41,3	42,3	42,3	43,3

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS







Size			0280	0300	0330	0350
Dimensions and weights						
A	E,L	mm	1606	1606	1606	1606
B	E,L	mm	1100	1100	1100	1100
C	E	mm	-	2950	2950	2950
	L	mm	2450	2450	2450	2450
Weights						
Without hydronic kit	E	kg	730	795	805	811
	L	kg	713	724	731	740

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRG 0800-3600

Air-water chiller

Cooling capacity 225,7 ÷ 1034,5 kW

- **High efficiency also at partial loads**
- **Low refrigerant charge**
- **Night mode**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas axial fan, microchannel batteries and plate exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 49°C external air temperature. Unit can produce chilled water up to -10 °C in some versions.
For more information refer to the selection program and to to the dedicated documentation.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It's available in various configurations, with storage tank or pumps.

CONTROL PCO_5

The units from size 0800 to 2400 have 1 control card, while the units from size 2600 to 3600 have 2 control cards.
Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Floating HP control:** the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.
- **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

— Possibility to control two units in a Master-Slave configuration (from size 0800 to 2400)

INTEGRATED SOLUTION (2600 ÷ 3600)

The **"integrated solution" concept has been implemented in the system architecture**, consisting in an integrated and streamlined control of compressors and electronic valve.
This solution allowed a variety of new features to be introduced, such as:

— **Low Superheat Control**: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
— **DLT control**: Control of electronic valve at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

AVX: Spring anti-vibration supports.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
AER485P1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•						
AER485P1 x no. 2	°,A,E,L,N,U												•	•	•	•	•	•
AERBACP	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•						
AERBACP x no. 2	°,A,E,L,N,U												•	•	•	•	•	•
AERLINK	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
PR4	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
Integrated hydronic kit: 00									
°	AVX1125	AVX1125	AVX1125	AVX1125	AVX1127	AVX1127	AVX1127	AVX1129	AVX1130
A, L	AVX1125	AVX1125	AVX1127	AVX1127	AVX1127	AVX1143	AVX1143	AVX1138	AVX1138
E, U	AVX1127	AVX1127	AVX1127	AVX1143	AVX1143	AVX1148	AVX1148	AVX1136	AVX1139
N	AVX1143	AVX1143	AVX1143	AVX1148	AVX1148	AVX1148	AVX1136	AVX1139	AVX1141
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ									
°	AVX1126	AVX1126	AVX1126	AVX1126	AVX1128	AVX1128	AVX1128	AVX1131	AVX1131
A, L	AVX1126	AVX1126	AVX1128	AVX1128	AVX1128	AVX1147	AVX1147	AVX1135	AVX1135
E, U	AVX1128	AVX1128	AVX1128	AVX1147	AVX1147	AVX1135	AVX1135	AVX1137	AVX1140
N	AVX1147	AVX1147	AVX1147	AVX1135	AVX1135	AVX1135	AVX1137	AVX1140	AVX1142
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ									
°	AVX1125	AVX1125	AVX1125	AVX1125	AVX1126	AVX1126	AVX1126	AVX1132	AVX1132
A, L	AVX1125	AVX1125	AVX1126	AVX1126	AVX1126	AVX1144	AVX1144	AVX1134	AVX1138
E, U	AVX1126	AVX1126	AVX1126	AVX1144	AVX1144	AVX1149	AVX1149	AVX1136	AVX1139
N	AVX1144	AVX1144	AVX1144	AVX1149	AVX1149	AVX1149	AVX1136	AVX1139	AVX1141

Ver	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00								
°	AVX1130	AVX1138	AVX1167	AVX1167	AVX1167	AVX1167	AVX1168	AVX1168
A, L	AVX1150	AVX1150	AVX1171	AVX1171	AVX1171	AVX1172	AVX1172	AVX1250
E, U	AVX1139	AVX1141	AVX1251	AVX1170	AVX1170	AVX1253	AVX1253	AVX1253
N	AVX1141	AVX1145	AVX1174	AVX1254	AVX1254	AVX1254	AVX1254	AVX1176
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ								
°	AVX1131	AVX1135	AVX1167	AVX1167	AVX1167	AVX1167	AVX1168	AVX1168
A, L	AVX1137	AVX1137	AVX1171	AVX1171	AVX1172	AVX1172	AVX1250	AVX1251
E, U	AVX1140	AVX1142	AVX1251	AVX1170	AVX1252	AVX1253	AVX1253	AVX1174
N	AVX1142	AVX1146	AVX1174	AVX1254	AVX1254	AVX1254	AVX1176	AVX1176
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ								
°	AVX1132	AVX1133	AVX1167	AVX1167	AVX1167	AVX1167	AVX1168	AVX1168
A, L	AVX1150	AVX1150	AVX1171	AVX1171	AVX1171	AVX1172	AVX1250	AVX1250
E, U	AVX1139	AVX1141	AVX1251	AVX1170	AVX1252	AVX1253	AVX1253	AVX1253
N	AVX1141	AVX1145	AVX1174	AVX1254	AVX1254	AVX1254	AVX1176	AVX1176

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
Fans: M									
°	DCPX161	DCPX161	DCPX161	DCPX161	DCPX163	DCPX163	DCPX163	DCPX165	DCPX165
A	DCPX161	DCPX161	DCPX163	DCPX163	DCPX163	DCPX165	DCPX165	DCPX167	DCPX167
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX163	DCPX163	DCPX163	DCPX165	DCPX165	DCPX167	DCPX167	DCPX169	DCPX171

Ver	2200	2400	2600	2800	3000	3200	3400	3600
Fans: M								
°	DCPX165	DCPX167	As standard	As standard	As standard	As standard	As standard	As standard
A	DCPX169	DCPX169	As standard	As standard	As standard	As standard	As standard	As standard
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX171	DCPX172	As standard	As standard	As standard	As standard	As standard	As standard

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°, A, E, L, N, U	DRENRG0800	DRENRG0900	DRENRG1000	DRENRG1100	DRENRG1200	DRENRG1400	DRENRG1600	DRENRG1800	DRENRG2000

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°, A, E, L, N, U	DRENRG2200	DRENRG2400	DRENRG2600	DRENRG2800	DRENRG3000	DRENRG3200	DRENRG3400	DRENRG3600

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°, A, E, L, N, U	RIFNRG0800	RIFNRG0900	RIFNRG1000	RIFNRG1100	RIFNRG1200	RIFNRG1400	RIFNRG1600	RIFNRG1800	RIFNRG2000

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°, A, E, L, N, U	RIFNRG2200	RIFNRG2400	RIFNRG2600	RIFNRG2800	RIFNRG3000	RIFNRG3200	RIFNRG3400	RIFNRG3600

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°	GP2VN	GP2VN	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP4G	GP4G
A, L	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G
E, U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°	GP4G	GP5G	GP11G	GP11G	GP11G	GP11G	GP11G	GP12G
A, L	GP6G	GP6G	GP11G	GP12G	GP12G	GP12G	GP13G	GP13G
E, U	GP7G	GP8G	GP12G	GP13G	GP14G	GP14G	GP14G	GP15G
N	GP8G	GP9G	GP13G	GP14G	GP15G	GP15G	GP15G	GP15G

A grey background indicates the accessory must be assembled in the factory

■ *GP2VN becomes GP2VNA if configured with a type A or B hydronic kit*

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°, A, E, L, N, U	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS2	T6NRGLS3

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°, A, E, L, N, U	T6NRGLS3	T6NRGLS3	T6NRGLS3	T6NRGLS4	T6NRGLS5	T6NRGLS5	T6NRGLS5	T6NRGLS5

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRG**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400, 2600, 2800, 3000, 3200, 3400, 3600
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery (4)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils**
	I	Copper-aluminium
	O	Coated aluminium microchannel
	R	Copper-copper
	S	Tinned copper
	V	Copper-painted alumimium
	°	Aluminium microchannel
13		**Fans**
	J	Inverter
	M	Oversized (5)
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (6)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (6)
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A
	AB	Storage tank and pump B
	AC	Storage tank and pump C
	AD	Storage tank and pump D
	AE	Storage tank and pump E
	AF	Storage tank and pump F
	AG	Storage tank and pump G
	AH	Storage tank and pump H
	AI	Storage tank and pump I
	AJ	Storage tank and pump J (6)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump
	BB	Storage tank with pump B + stand-by pump
	BC	Storage tank with pump C + stand-by pump
	BD	Storage tank with pump D + stand-by pump
	BE	Storage tank with pump E + stand-by pump
	BF	Storage tank with pump F + stand-by pump
	BG	Storage tank with pump G + stand-by pump
	BH	Storage tank with pump H + stand-by pump
	BI	Storage tank with pump I + stand-by pump
	BJ	Storage tank with pump J + stand-by pump (6)
		Kit with n° 1 inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed (7)
	IG	Pump G equipped with inverter device to work at fixed speed (7)
	IH	Pump H equipped with inverter device to work at fixed speed (7)
	II	Pump I equipped with inverter device to work at fixed speed (7)
	IJ	Pump J equipped with inverter device to work at fixed speed (8)
		Kit with n° 1 inverter pump + stand-by pump to fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (7)
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (7)
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed (7)
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed (7)
	JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (8)
		Kit with storage tank and n° 1 inverter pump to fixed speed
	CA	Buffer tank + pump A, equipped with inverter to work at fixed speed
	CB	Buffer tank + pump B, equipped with inverter to work at fixed speed
	CC	Buffer tank + pump C, equipped with inverter to work at fixed speed
	CD	Buffer tank + pump D, equipped with inverter to work at fixed speed
	EC	Buffer tank + pump E, equipped with inverter to work at fixed speed
	CF	Buffer tank + pump F, equipped with inverter to work at fixed speed (7)
	CG	Buffer tank + pump G, equipped with inverter to work at fixed speed (7)
	CH	Buffer tank + pump H, equipped with inverter to work at fixed speed (7)
	CI	Buffer tank + pump I, equipped with inverter to work at fixed speed (7)
	CJ	Buffer tank + pump J, equipped with inverter to work at fixed speed (7)
		Kit with storage tank and n° 1 pump + stand-by pump to fixed speed
	KA	Buffer tank+pump A+stand-by pump, both with inverter to work at fixed speed
	KB	Buffer tank+pump B+stand-by pump, both with inverter to work at fixed speed
	KC	Buffer tank+pump C+stand-by pump, both with inverter to work at fixed speed
	KD	Buffer tank+pump D+stand-by pump, both with inverter to work at fixed speed
	KE	Buffer tank+pump E+stand-by pump, both with inverter to work at fixed speed
	KF	Buffer tank+pump F+stand-by pump, both with inverter to work at fixed speed (7)
	KG	Buffer tank+pump G+stand-by pump, both with inverter to work at fixed speed (7)
	KH	Buffer tank+pump H+stand-by pump, both with inverter to work at fixed speed (7)
	KI	Buffer tank+pump I+stand-by pump, both with inverter to work at fixed speed (7)
	KJ	Buffer tank+pump J+stand-by pump, both with inverter to work at fixed speed (8)

(1) Water produced from 4 °C ÷ 20 °C
(2) Water produced from 8 °C ÷ -10 °C
(3) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program
(4) None of the hydronic kits (from PA to KJ) are compatible with the following sizes and with versions with heat recovery T: 0800 - 0900 - 1000 - 1100 version °; 0800 - 0900 version A; 0800 - 0900 version L. None of the hydronic kits with pump(s) and storage tank (AA - AJ, BA-BJ, CA-CJ, KA-KJ) are compatible with all the sizes and with versions with heat recovery T. Total recovery is not compatible with sizes from 2600 to 3600.
(5) As standard in sizes fom 800 to 2400. DPCX included as standard in sizes from 2600 to 3600.
(6) For all configurations including pump J please contact the factory.
(7) Hydronic kit not available with sizes 0800 version °/L/A, 0900 version °/L/A, 1000 version °, 1100 version °.
(8) For all possible configurations which include the "J" pump please be in touch with Aermec. Hydronic kit is not available with sizes 0800 version °/L/A, 0900 version °/L/A, 1000 version °, 1100 version °.

PERFORMANCE SPECIFICATIONS

NRG - °

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J, M																		
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	229,0	251,4	278,2	314,5	372,4	399,7	459,4	532,8	593,5	635,8	698,1	742,2	792,8	849,5	890,4	929,9	988,3
Input power	kW	70,6	80,3	90,1	107,8	118,6	129,5	152,5	170,8	197,3	212,9	226,5	237,4	260,6	286,7	302,3	318,7	329,5
Cooling total input current	A	121,9	138,4	155,6	182,3	197,6	222,2	248,5	282,0	325,0	353,5	366,3	399,8	449,0	492,2	512,4	547,7	550,4
EER	W/W	3,24	3,13	3,09	2,92	3,14	3,09	3,01	3,12	3,01	2,99	3,08	3,13	3,04	2,96	2,94	2,92	3,00
Water flow rate system side	l/h	39392	43247	47863	54104	64061	68767	79015	91640	102081	109354	120062	127638	136347	146093	153120	159916	169959
Pressure drop system side	kPa	36	44	54	51	60	62	42	57	62	62	64	64	73	80	83	85	93

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - L

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J, M																		
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	225,7	247,6	279,0	317,6	360,5	410,2	451,3	526,9	590,3	640,5	679,3	730,9	800,5	861,6	899,4	951,1	987,3
Input power	kW	70,6	80,3	88,3	106,0	121,5	133,0	151,3	171,3	200,0	209,3	224,5	239,4	260,0	286,0	302,8	314,0	330,1
Cooling total input current	A	121,4	138,2	148,4	174,4	201,5	215,7	242,7	276,7	323,2	337,2	364,0	394,9	431,3	474,5	494,3	508,7	532,6
EER	W/W	3,20	3,09	3,16	3,00	2,97	3,08	2,98	3,08	2,95	3,06	3,03	3,05	3,08	3,01	2,97	3,03	2,99
Water flow rate system side	l/h	38832	42603	47996	54644	62004	70568	77616	90617	101513	110161	116806	125699	137666	148170	154674	163553	169784
Pressure drop system side	kPa	36	43	42	48	47	53	41	49	53	62	39	59	67	73	78	86	80

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - A

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J, M																		
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	230,4	253,6	287,0	328,9	374,1	424,3	468,8	542,9	608,8	663,3	702,9	746,1	816,2	880,4	920,3	971,2	1009,6
Input power	kW	69,3	78,3	86,3	100,7	116,2	127,9	144,7	163,4	187,9	202,4	217,9	234,1	256,3	277,8	293,3	308,5	323,4
Cooling total input current	A	123,4	139,3	150,6	173,7	197,3	214,7	238,4	274,6	316,8	334,0	357,6	399,8	438,4	479,1	497,8	515,6	537,7
EER	W/W	3,33	3,24	3,33	3,27	3,22	3,32	3,24	3,32	3,24	3,28	3,23	3,19	3,18	3,17	3,14	3,15	3,12
Water flow rate system side	l/h	39642	43624	49381	56584	64350	72980	80631	93379	104697	114081	120866	128314	140372	151403	158257	167010	173615
Pressure drop system side	kPa	37	45	44	52	52	56	44	53	58	67	42	61	70	77	81	90	84

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - E

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J, M																		
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	229,7	256,5	280,7	330,9	378,2	424,6	466,3	542,7	617,8	652,1	705,8	746,7	822,8	892,1	930,9	968,4	1019,2
Input power	kW	68,3	77,4	86,8	100,0	116,7	128,4	144,7	165,0	186,7	203,2	214,1	234,1	256,2	278,2	294,6	306,7	322,4
Cooling total input current	A	116,2	132,1	148,6	167,0	190,7	208,2	231,2	268,2	302,4	326,9	343,4	385,3	425,5	457,4	475,2	501,3	515,7
EER	W/W	3,37	3,32	3,24	3,31	3,24	3,31	3,22	3,29	3,31	3,21	3,30	3,19	3,21	3,21	3,16	3,16	3,16
Water flow rate system side	l/h	39530	44119	48278	56919	65043	73027	80200	93338	106248	112132	121358	128409	141496	153408	160081	166526	175267
Pressure drop system side	kPa	38	35	38	48	39	38	44	47	59	45	37	62	67	78	83	78	82

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - U

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J, M																		
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	234,8	263,0	288,8	339,2	389,3	435,6	479,7	558,1	634,0	671,3	725,0	756,9	834,1	903,8	943,7	982,9	1033,7
Input power	kW	68,2	76,5	85,2	99,1	114,3	126,8	142,5	163,7	185,1	200,1	212,0	231,3	253,6	274,6	290,0	304,2	319,2
Cooling total input current	A	120,5	135,5	150,8	171,3	192,6	212,3	233,1	271,5	307,9	329,7	348,7	392,9	434,6	469,5	486,6	510,4	528,3
EER	W/W	3,44	3,44	3,39	3,42	3,41	3,44	3,37	3,41	3,43	3,35	3,42	3,27	3,29	3,29	3,25	3,23	3,24
Water flow rate system side	l/h	40397	45241	49677	58351	66957	74921	82502	95984	109036	115443	124657	130163	143439	155430	162284	169028	177747
Pressure drop system side	kPa	40	36	41	50	40	39	47	49	62	48	39	57	69	81	82	80	85

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRG - N

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J, M																		
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	235,0	262,1	290,7	339,2	389,2	430,7	481,8	556,2	627,9	670,3	719,8	759,5	831,3	900,0	938,8	977,7	1019,2
Input power	kW	67,2	76,1	85,1	98,7	113,4	126,5	141,8	163,9	184,6	198,3	212,1	231,2	253,1	273,9	290,2	304,4	317,8
Cooling total input current	A	114,7	129,5	144,6	163,8	185,1	208,2	225,3	262,3	297,3	320,1	337,6	379,3	419,5	452,9	470,1	494,4	515,7
EER	W/W	3,50	3,44	3,42	3,44	3,43	3,40	3,40	3,39	3,40	3,38	3,39	3,29	3,28	3,29	3,24	3,21	3,21
Water flow rate system side	l/h	40430	45090	50006	58350	66941	74070	82857	95663	107988	115265	123768	130611	142953	154767	161439	168129	175265
Pressure drop system side	kPa	41	38	41	50	41	38	42	49	61	47	39	61	69	80	85	79	82

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																			
SEER - 12/7 (EN 14825: 2018) (1)																			
SEER	°	W/W	4,60	4,60	4,51	4,53	4,68	4,61	4,75	4,72	4,67	4,72	4,66	4,92	5,04	5,03	4,98	4,93	4,96
	A	W/W	4,82	4,85	4,82	4,84	4,85	4,85	4,87	4,92	4,91	4,90	4,85	5,01	5,15	5,19	5,14	5,08	5,04
	E	W/W	4,93	4,97	4,90	4,95	4,95	5,06	5,03	5,14	5,09	4,99	4,97	5,03	5,13	5,12	5,08	5,10	5,04
	L	W/W	4,74	4,74	4,81	4,80	4,79	4,99	4,84	4,98	4,97	4,96	4,93	4,94	5,07	5,10	5,07	5,04	5,01
	N	W/W	5,01	5,03	5,05	5,08	5,06	5,17	5,14	5,19	5,14	5,06	5,01	5,10	5,19	5,16	5,12	5,13	5,11
	U	W/W	4,88	4,89	4,91	4,94	4,93	4,87	4,95	4,96	4,87	4,84	4,84	5,11	5,25	5,25	5,14	5,12	5,10
Seasonal efficiency	°	%	181,20	180,81	177,55	178,19	184,10	181,33	187,11	185,77	183,62	185,93	183,49	193,99	198,74	198,31	196,15	194,31	195,23
	A	%	189,63	191,00	189,65	190,48	191,13	191,01	191,98	193,63	193,20	192,83	191,19	197,45	203,06	204,69	202,63	200,04	198,74
	E	%	194,09	195,85	192,97	195,14	195,09	199,22	198,28	202,75	200,40	196,73	195,73	198,31	202,20	201,77	200,04	200,90	198,74
	L	%	186,54	186,65	189,26	188,90	188,53	196,47	190,41	196,04	195,71	195,37	194,18	194,42	199,96	200,82	199,61	198,74	197,45
	N	%	197,31	198,10	199,16	200,08	199,21	203,95	202,63	204,40	202,46	199,48	197,51	200,90	204,54	203,58	201,92	202,36	201,34
	U	%	192,19	192,79	193,28	194,65	194,13	191,62	194,98	195,59	191,72	190,54	190,68	201,34	206,95	207,06	202,63	201,77	200,98
SEER - 23/18 (EN 14825: 2018) (1)																			
SEER	°	W/W	5,47	5,43	5,32	5,34	5,61	5,49	5,60	5,61	5,55	5,57	5,56	5,81	5,97	5,97	5,90	5,85	5,86
	A	W/W	5,77	5,79	5,79	5,78	5,74	5,78	5,72	5,84	5,84	5,84	5,80	6,00	6,17	6,22	6,15	6,07	6,03
	E	W/W	5,91	5,94	5,80	5,90	5,83	6,01	5,91	6,08	6,01	5,92	5,92	5,96	6,08	6,06	6,01	6,04	5,97
	L	W/W	5,69	5,66	5,69	5,66	5,59	5,88	5,64	5,82	5,80	5,81	5,77	5,78	5,95	5,97	5,94	5,91	5,87
	N	W/W	6,04	6,05	6,05	6,11	6,03	6,11	6,07	6,16	6,10	6,02	5,99	6,07	6,18	6,14	6,09	6,11	6,08
	U	W/W	5,93	5,92	5,90	5,96	5,89	5,80	5,87	5,93	5,86	5,85	5,86	6,18	6,35	6,35	6,21	6,19	6,16
Seasonal efficiency	°	%	215,77	214,03	209,84	210,78	221,22	216,68	221,00	221,39	218,97	219,81	219,27	229,30	235,87	235,76	233,09	230,91	231,55
	A	%	227,94	228,49	228,46	228,12	226,73	228,27	225,89	230,58	230,52	230,72	229,10	236,89	243,65	245,61	243,10	239,80	238,34
	E	%	233,50	234,52	229,14	233,17	230,29	237,47	233,26	240,04	237,31	233,77	233,69	235,56	240,22	239,55	237,47	238,59	235,95
	L	%	224,54	223,48	224,79	223,35	220,60	232,13	222,79	229,99	229,03	229,46	227,62	228,35	234,91	235,86	234,41	233,25	231,69
	N	%	238,70	239,11	239,16	241,55	238,13	241,52	239,72	243,56	240,96	237,95	236,49	239,74	244,07	242,76	240,75	241,39	240,13
	U	%	234,19	233,99	232,90	235,60	232,79	228,85	231,88	234,26	231,29	230,89	231,57	244,25	250,90	250,85	245,47	244,48	243,44
SEPR - (EN 14825: 2018) (2)																			
SEPR	°	W/W	5,84	5,73	5,82	5,67	5,95	6,14	6,27	6,31	6,09	6,12	6,30	6,38	6,60	6,61	6,53	6,47	6,47
	A	W/W	6,12	6,09	6,21	6,13	6,12	6,35	6,41	6,46	6,38	6,45	6,48	6,68	6,89	6,96	6,89	6,78	6,74
	E	W/W	6,24	6,26	6,28	6,23	6,14	6,72	6,72	6,78	6,73	6,64	6,62	6,70	6,84	6,82	6,77	6,80	6,72
	L	W/W	6,10	6,05	6,16	6,08	5,87	6,54	6,44	6,56	6,54	6,50	6,43	6,47	6,67	6,73	6,70	6,64	6,69
	N	W/W	6,36	6,35	6,37	6,38	6,43	6,82	6,80	6,93	6,85	6,78	6,71	6,85	6,99	6,95	6,89	6,92	6,88
	U	W/W	6,38	6,36	6,36	6,25	6,30	6,55	6,63	6,55	6,50	6,59	6,64	7,01	7,21	7,21	7,05	7,02	6,98

(1) Calculation performed with VARIABLE water flow rate
(2) Calculation performed with FIXED water flow rate

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: M																			
SEER - 12/7 (EN 14825: 2018) (1)																			
SEER	°	W/W	4,49	4,48	4,42	4,45	4,34	4,42	4,56	4,59	4,55	4,62	4,57	4,60	4,62	4,64	4,65	4,67	4,63
	A	W/W	4,57	4,61	4,59	4,64	4,66	4,81	4,78	4,81	4,82	4,77	4,73	4,63	4,66	4,69	4,71	4,69	4,69
	E	W/W	4,66	4,72	4,70	4,75	4,74	4,81	4,83	4,88	4,86	4,81	4,82	4,69	4,68	4,69	4,67	4,67	4,69
	L	W/W	4,52	4,54	4,61	4,61	4,60	4,81	4,74	4,81	4,80	4,80	4,78	4,63	4,65	4,65	4,65	4,64	4,65
	N	W/W	4,74	4,77	4,84	4,86	4,84	4,93	4,93	4,92	4,91	4,88	4,87	4,72	4,70	4,72	4,72	4,70	4,72
	U	W/W	4,63	4,66	4,68	4,74	4,73	4,82	4,86	4,86	4,78	4,72	4,73	4,67	4,71	4,73	4,72	4,73	4,71
Seasonal efficiency	°	%	176,62	176,29	173,89	175,16	170,44	173,62	179,47	180,79	179,09	181,96	179,69	180,94	181,88	182,75	183,18	183,61	182,32
	A	%	179,65	181,43	180,66	182,42	183,41	189,30	188,26	189,31	189,61	187,82	186,31	182,32	183,56	184,74	185,26	184,44	184,41
	E	%	183,47	185,88	184,93	186,81	186,78	189,58	190,12	192,35	191,44	189,50	189,92	184,46	184,04	184,46	183,61	183,98	184,46
	L	%	177,91	178,50	181,50	181,45	181,06	189,43	186,65	189,36	188,92	189,17	188,22	182,32	183,14	183,10	183,14	182,71	183,14
	N	%	186,42	187,94	190,76	191,43	190,66	194,09	194,23	193,86	193,28	192,09	191,66	185,75	184,92	185,77	185,78	184,89	185,68
	U	%	182,14	183,35	184,17	186,53	186,34	189,96	191,23	191,32	188,27	185,91	186,04	183,61	185,32	186,18	185,78	186,18	185,32
SEER - 23/18 (EN 14825: 2018) (1)																			
SEER	°	W/W	5,33	5,29	5,21	5,25	5,17	5,26	5,21	5,46	5,41	5,44	5,38	5,39	5,43	5,47	5,49	5,51	5,45
	A	W/W	5,47	5,50	5,51	5,53	5,49	5,73	5,61	5,71	5,72	5,69	5,65	5,53	5,56	5,60	5,61	5,59	5,59
	E	W/W	5,59	5,64	5,56	5,65	5,56	5,72	5,67	5,77	5,74	5,70	5,73	5,54	5,52	5,53	5,51	5,52	5,53
	L	W/W	5,43	5,42	5,46	5,43	5,37	5,67	5,53	5,63	5,59	5,62	5,59	5,41	5,43	5,44	5,44	5,42	5,44
	N	W/W	5,71	5,75	5,80	5,84	5,76	5,82	5,82	5,85	5,82	5,80	5,80	5,60	5,58	5,60	5,60	5,58	5,60
	U	W/W	5,62	5,64	5,62	5,71	5,65	5,75	5,76	5,80	5,75	5,70	5,71	5,63	5,68	5,70	5,69	5,71	5,68
Seasonal efficiency	°	%	210,28	208,66	205,52	207,05	203,71	207,46	205,26	215,21	213,44	214,60	212,06	212,65	214,00	215,76	216,46	217,23	214,80
	A	%	215,89	217,00	217,57	218,29	216,47	226,19	221,50	225,43	225,87	224,50	222,82	218,02	219,42	220,85	221,58	220,41	220,54
	E	%	220,65	222,52	219,54	223,14	219,44	225,89	223,61	227,72	226,58	224,85	226,30	218,58	217,96	218,35	217,34	217,87	218,39
	L	%	214,09	213,68	215,50	214,23	211,81	223,78	218,35	222,16	220,51	221,80	220,63	213,52	214,37	214,43	214,59	213,78	214,59
	N	%	225,54	226,84	229,06	230,70	227,28	229,69	229,77	230,98	229,93	228,93	229,01	221,18	220,09	220,95	220,99	220,05	220,96
	U	%	221,93	222,50	221,86	225,46	222,97	226,86	227,42	229,11	227,10	225,09	225,49	222,28	224,20	225,07	224,68	225,27	224,11

(1) Calculation performed with VARIABLE water flow rate
(2) Calculation performed with FIXED water flow rate

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
SEPR - (EN 14825: 2018) (2)																			
SEPR	°	W/W	5,68	5,58	5,70	5,58	5,60	5,96	5,95	6,10	5,92	5,97	6,07	5,91	5,95	6,01	6,03	6,05	5,97
	A	W/W	5,79	5,78	5,93	5,95	5,87	6,34	6,27	6,33	6,32	6,30	6,31	6,11	6,16	6,20	6,23	6,19	6,20
	E	W/W	5,94	5,94	6,04	6,00	5,89	6,41	6,41	6,47	6,44	6,36	6,42	6,18	6,16	6,17	6,15	6,16	6,18
	L	W/W	5,85	5,77	5,93	5,84	5,63	6,29	6,29	6,35	6,28	6,26	6,21	6,01	6,03	6,04	6,06	6,02	6,13
	N	W/W	6,03	6,02	6,12	6,13	6,17	6,49	6,50	6,60	6,52	6,50	6,49	6,28	6,25	6,27	6,28	6,26	6,28
	U	W/W	6,04	6,05	6,04	6,02	6,07	6,49	6,50	6,41	6,37	6,42	6,46	6,34	6,39	6,42	6,41	6,43	6,40

(1) Calculation performed with VARIABLE water flow rate
(2) Calculation performed with FIXED water flow rate

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Electric data																			
Maximum current (FLA)	°	A	158,2	176,5	198,8	226,7	262,4	290,3	318,1	371,7	417,5	445,4	481,1	542,5	588,3	634,1	662,0	689,9	725,5
	A,L	A	162,2	180,5	200,6	228,5	256,4	290,1	317,9	369,5	415,3	449,0	476,9	542,5	596,1	641,9	669,8	705,5	733,3
	E,U	A	164,0	182,3	200,6	234,3	262,2	295,9	323,7	375,3	426,9	454,8	488,5	550,3	603,9	657,5	685,4	713,3	748,9
	N	A	169,8	188,1	206,4	240,1	268,0	295,9	329,5	381,1	432,7	460,6	494,3	558,1	611,7	665,3	693,2	721,1	748,9
Peak current (LRA)	°	A	361,6	417,7	440,0	689,0	724,7	752,6	780,4	834,1	879,9	907,7	943,4	1004,8	1050,6	1096,4	1124,3	1152,2	1187,8
	A,L	A	365,6	421,7	441,8	690,8	718,7	752,4	780,2	831,9	877,7	911,3	939,2	1004,8	1058,4	1104,2	1132,1	1167,8	1195,6
	E,U	A	367,4	423,5	441,8	696,6	724,5	758,2	786,0	837,7	889,3	917,1	950,8	1012,6	1066,2	1119,8	1147,7	1175,6	1211,2
	N	A	373,2	429,3	447,6	702,4	730,3	758,2	791,8	843,5	895,1	922,9	956,6	1020,4	1074,0	1127,6	1155,5	1183,4	1211,2

■ *Data calculated without hydronic kit and accessories.*

GENERAL TECHNICAL DATA

Compressors

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Compressor																			
Type	°,A,E,L,N,U	type	Scroll																
Compressor regulation	°,A,E,L,N,U	Type	On/Off																
Number	°,A,E,L,N,U	no.	4	4	4	4	4	4	4	5	6	6	6	7	8	9	9	9	9
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
Refrigerant	°,A,E,L,N,U	type	R32																
Refrigerant load circuit 1 (1)	°	kg	10,5	10,9	11,3	14,0	15,0	15,0	15,8	20,6	20,6	24,1	29,0	21,0	20,5	21,6	21,6	24,6	29,0
	A,L	kg	11,3	10,9	11,0	15,0	15,8	18,0	18,0	20,6	24,0	24,4	26,3	21,0	24,0	24,0	24,0	24,4	26,3
	E,U	kg	15,4	15,0	16,1	19,9	19,9	24,0	23,3	25,9	28,1	33,8	30,8	23,3	25,9	28,1	28,1	33,8	30,8
	N	kg	16,0	16,0	17,3	24,2	26,3	26,3	30,8	30,0	37,5	34,1	34,1	30,8	30,0	37,5	37,5	34,1	34,1
Refrigerant load circuit 2 (1)	°	kg	10,5	10,9	11,3	14,0	15,0	15,0	15,8	20,6	20,6	25,6	29,0	22,5	20,5	23,6	23,6	26,0	29,0
	A,L	kg	11,3	10,9	11,0	15,0	15,8	20,5	20,5	20,6	24,0	24,4	26,3	22,5	28,0	24,0	24,0	24,4	26,3
	E,U	kg	15,4	15,0	16,1	19,9	19,9	25,5	23,3	25,9	28,1	33,8	30,8	23,3	25,9	28,1	28,1	33,8	30,8
	N	kg	16,0	16,0	18,8	25,4	26,3	26,3	30,8	30,0	37,5	34,1	34,1	30,8	30,0	37,5	37,5	34,1	30,8
Refrigerant load circuit 3 (1)	°,A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-	-	-	30,0	30,0	30,0	30,0	30,0	30,0
Potential global heating	°,A,E,L,N,U	GWP	675kgCO_2eq																

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

System side heat exchanger

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
System side heat exchanger																			
Type	°,A,E,L,N,U	type	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate	Brazed plate
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																			
Hydraulic connections																			
Connections (in/out)	°,A,E,L,N,U	Type	Grooved joints																
Sizes (in/out)	°	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″
	A,L	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″	5″
	E,N,U	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″	5″

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

Fans

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																			
Inverter fan																			
Type	°,A,E,L,N,U	type	Axial																
Fan motor	°,A,E,L,N,U	type	Inverter																

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Number	°	no.	4	4	4	4	6	6	6	8	8	8	10	14	14	14	14	14	16
	A,L	no.	4	4	6	6	6	8	8	10	10	12	12	14	16	16	16	18	18
	E,U	no.	6	6	6	8	8	10	10	12	14	14	16	16	18	20	20	20	22
	N	no.	8	8	8	10	10	10	12	14	16	16	18	18	20	22	22	22	22
Air flow rate	°	m^3/h	65555	65555	76744	76744	115121	115121	115121	153480	153480	153480	191819	262339	262339	262339	262339	262339	299816
	A	m^3/h	76743	76743	98321	98321	98321	131111	131087	163789	163789	196572	196572	262339	299816	299816	299816	337293	337293
	E	m^3/h	74973	74973	74973	99978	99978	124970	124970	149950	174934	174934	199932	254531	285031	315528	315528	315528	346030
	L	m^3/h	62605	62605	74978	74978	74978	99996	99996	124953	124953	149882	149882	213489	243988	243988	243988	274487	274487
	N	m^3/h	99973	99973	99973	124966	124966	124966	149960	174953	199946	199946	224939	285030	315528	346027	346027	346027	346027
	U	m^3/h	98320	98320	98320	131139	131139	163815	163815	196680	229462	229462	262164	299816	337293	374770	374770	374770	412247
Sound data calculated in cooling mode (1)																			
Sound power level	°	dB(A)	87,1	87,1	90,5	90,6	92,4	92,5	92,6	93,8	93,8	93,9	94,8	96,5	96,6	96,6	96,6	96,7	97,3
	A	dB(A)	90,5	90,5	88,1	88,7	89,2	89,9	90,2	90,9	91,5	92,3	92,5	96,5	97,1	97,1	97,1	97,6	97,7
	E	dB(A)	84,4	84,5	84,5	85,8	86,5	87,6	88,1	88,6	89,0	89,7	90,2	93,4	93,9	94,3	94,4	94,4	94,9
	L	dB(A)	85,1	85,1	84,5	85,1	85,4	86,6	87,2	87,7	88,4	89,1	89,5	89,8	90,1	90,2	90,5	91,0	91,2
	N	dB(A)	85,3	85,4	85,4	86,9	87,6	88,1	89,0	89,4	89,8	90,5	91,0	93,8	94,2	94,6	94,7	94,8	94,9
	U	dB(A)	88,6	88,6	88,6	90,1	90,5	91,6	91,9	92,5	93,0	93,2	93,8	97,0	97,5	97,9	98,0	98,0	98,5

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

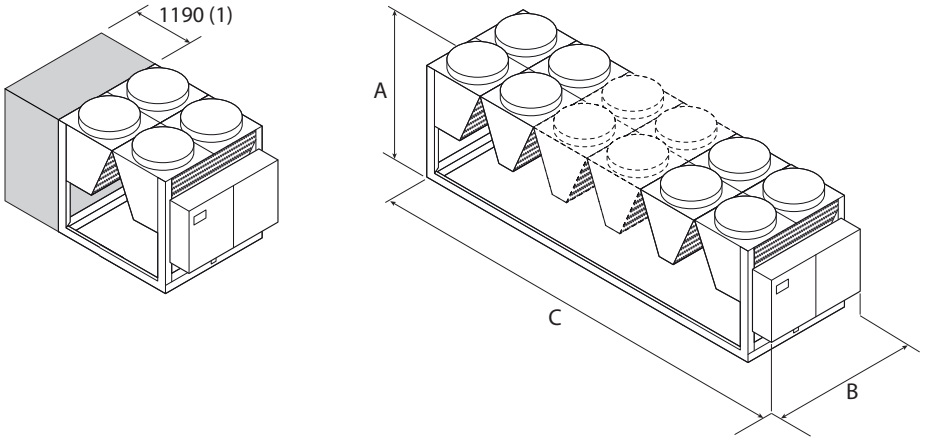
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000
Fans: M											
Increased fan											
Type	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Fan motor	°,A,U	type	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)	- (1)
	E,L,N	type	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
Number	°	no.	4	4	4	4	6	6	6	8	8
	A,L	no.	4	4	6	6	6	8	8	10	10
	E,U	no.	6	6	6	8	8	10	10	12	14
	N	no.	8	8	8	10	10	10	12	14	16
Without Static pressure											
Air flow rate	°	m^3/h	76740	76740	76744	76744	115121	115121	115121	153480	153480
	A	m^3/h	76743	76743	115110	115110	115110	153480	153480	191850	191850
	E	m^3/h	74973	74973	74973	99978	99978	124970	124970	149950	174934
	L	m^3/h	62605	62605	74978	74978	74978	99996	99996	124953	124953
	N	m^3/h	99973	99973	99973	124966	124966	124966	149960	174953	199946
	U	m^3/h	115110	115110	115110	153480	153480	191850	191850	230220	268590
Sound power level	°	dB(A)	89,2	89,2	90,5	90,6	92,4	92,5	92,6	93,8	93,8
	A	dB(A)	90,5	90,5	90,5	90,8	91,1	92,1	92,3	93,1	93,4
	E	dB(A)	84,4	84,5	84,5	85,8	86,5	87,6	88,1	88,6	89,0
	L	dB(A)	85,1	85,1	84,5	85,1	85,4	86,6	87,2	87,7	88,4
	N	dB(A)	85,3	85,4	85,4	86,9	87,6	88,1	89,0	89,4	89,8
	U	dB(A)	90,8	90,8	90,8	92,2	92,5	93,5	93,6	94,3	94,9

(1) Asynchronous
(2) Asynchronous with phase cut

Size			2200	2400	2600	2800	3000	3200	3400	3600
Fans: M										
Increased fan										
Type	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Fan motor	°,A,U	type	- (1)	- (1)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	E,L,N	type	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
Number	°	no.	8	10	14	14	14	14	14	16
	A,L	no.	12	12	14	16	16	16	18	18
	E,U	no.	14	16	16	18	20	20	20	22
	N	no.	16	18	18	20	22	22	22	22
Without Static pressure										
Air flow rate	°	m^3/h	153480	191819	268597	268600	268600	268600	268600	307026
	A	m^3/h	230220	230220	268597	306979	306979	306979	345327	345327
	E	m^3/h	174934	199932	259432	290737	322041	322041	322041	353346
	L	m^3/h	149882	149882	219126	250455	250455	250455	281706	281706
	N	m^3/h	199946	224939	290848	322029	353368	353368	353368	353368
	U	m^3/h	268590	306960	306970	345339	383716	383711	383711	422082
Sound power level	°	dB(A)	93,9	94,8	96,5	96,6	96,6	96,6	96,7	97,3
	A	dB(A)	94,2	94,3	96,5	97,1	97,1	97,1	97,6	97,7
	E	dB(A)	89,7	90,2	93,4	93,9	94,3	94,4	94,4	94,9
	L	dB(A)	89,1	89,5	89,8	90,1	90,2	90,5	91,0	91,2
	N	dB(A)	90,5	91,0	93,8	94,2	94,6	94,7	94,8	94,9
	U	dB(A)	95,0	95,6	97,0	97,5	97,9	98,0	98,0	98,5

(1) Asynchronous
(2) Asynchronous with phase cut

DIMENSIONS



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes:
NRG 0800°, 0900°, 1000°, 1100°
NRG 0800L, 0900L
NRG 0800A, 0900A

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																			
Dimensions and weights																			
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	2780	2780	2780	2780	3970	3970	3970	5160	5160	5160	6350	8730	8730	8730	8730	8730	9920
	A,L	mm	2780	2780	3970	3970	3970	5160	5160	6350	6350	7540	7540	8730	9920	9920	9920	11110	11110
	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9920	9920	11110	12300	12300	12300	13490
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9920	9920	11110	11110	12300	13490	13490	13490	13490

■ *The units 0800°, 0900°, 1000°, 1100°; 0800L, 0900L; and 0800A, 0900A with the "storage tank" option, are 3970mm long.*

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																			
Weights																			
Empty weight	°	kg	2140	2140	2150	2310	2850	2960	3180	3830	4030	4210	4740	6280	6515	6810	6930	7135	7655
	A,L	kg	2160	2160	2580	2730	2870	3440	3650	4250	4460	4960	5070	6300	6960	7265	7380	7925	8015
	E,U	kg	2580	2590	2600	3220	3430	3930	4070	4660	5270	5400	5990	6755	7390	8120	8230	8390	8925
	N	kg	3050	3070	3080	3630	3850	3990	4470	5110	5750	5880	6370	7155	7870	8565	8675	8830	8955

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRG 0800H-3600H

Reversible air/water heat pump

Cooling capacity 194,9 ÷ 962,3 kW – Heating capacity 209,6 ÷ 991,9 kW

- **High efficiency also at partial loads**
- **Low refrigerant charge**
- **Night mode**



DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 49 °C in summer. Hot water production up to 60 °C (for more details refer to the technical documentation).

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *Refrigerant gas detector is supplied as per standard.*

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

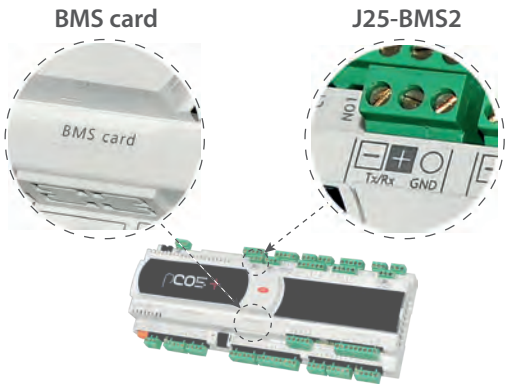
Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed pumps also inverter.

CONTROL PCO[5]

The units from size 0800 to 2400 have 1 control card, while the units from size 2600 to 3600 have 2 control cards.
Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Floating HP control:** available for all models with an inverter fan or DCPX. Thanks to continuous fan modulation, unit operation is optimised in every working position in cooling mode. The result is enhanced machine energy efficiency with partial loads.
- **"EASYLOG" data logger as per standard:** allows all operating data read by the pCO5 to be stored on an SD card.
- **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.
- Possibility to control two units in a Master-Slave configuration (from size 0800 to 2400)



In the 'BMS card' port, the compatible accessories are:

— AER485P1
— AERBACP
— MULTICHILLER-EVO + AER485P1

In the 'J25-BMS2' port, the compatible accessories are:

— AERNET

Note:

— "BMS card" and "J25-BMS2" are two ports on the unit's control board. Only one accessory can be connected to each port.
— An 'EASYLOG' diagnostic device may be present in port 'J25-BMS2', possibly disconnect it to connect the accessory AERNET.
— **For other requirements, please contact the company.**

INTEGRATED SOLUTION

The **"integrated solution" concept has been implemented in the system architecture**, consisting in an integrated and streamlined control of compressors and electronic valve.
This solution allowed a variety of new features to be introduced, such as:
— **Low Superheat Control**: Progressive superheating reduction in conditions of stability. This allows to increase energy performance: both in modulation and in full load conditions;
— **DLT control**: Control of electronic valve at discharge temperature in certain operating conditions. This is demonstrated in an enhanced reliability of the control and a considerable expansion of the machine's operating range, especially in heating mode.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.
BRC1: Condensate drip tray. Consider 1 for each V-block.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
AER485P1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•						
AER485P1 x no. 2	°,A,E,L												•	•	•	•	•	•
AERBACP	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•						
AERBACP x no. 2	°,A,E,L												•	•	•	•	•	•
AERLINK	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
PR4	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°	DCPX161	DCPX161	DCPX161	DCPX163	DCPX163	DCPX163	DCPX163	DCPX165	DCPX167
A	DCPX161	DCPX163	DCPX163	DCPX163	DCPX165	DCPX165	DCPX165	DCPX167	DCPX167
E, L	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°	DCPX167	DCPX167	DCPX174	DCPX174	DCPX175	DCPX175	DCPX175	DCPX175
A	DCPX169	DCPX169	DCPX174	DCPX175	DCPX175	DCPX175	DCPX176	DCPX176
E, L	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																	
°,	AVX1151	AVX1151	AVX1151	AVX1153	AVX1153	AVX1153	AVX1153	AVX1154	AVX1163	AVX1163	AVX1163	AVX1167	AVX1167	AVX1171	AVX1171	AVX1171	AVX1171
A, L	AVX1151	AVX1153	AVX1153	AVX1153	AVX1154	AVX1154	AVX1154	AVX1156	AVX1156	AVX1159	AVX1159	AVX1167	AVX1171	AVX1171	AVX1171	AVX1169	AVX1169
E	AVX1153	AVX1154	AVX1154	AVX1154	AVX1156	AVX1156	AVX1159	AVX1161	AVX1161	AVX1165	AVX1165	AVX1169	AVX1173	AVX1173	AVX1173	AVX1175	AVX1175
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ																	
°,	AVX1152	AVX1152	AVX1152	AVX1152	AVX1152	AVX1152	AVX1152	AVX1155	AVX1157	AVX1157	AVX1157	AVX1168	AVX1168	AVX1172	AVX1172	AVX1172	AVX1172
A, L	AVX1152	AVX1152	AVX1152	AVX1152	AVX1155	AVX1155	AVX1155	AVX1157	AVX1157	AVX1160	AVX1160	AVX1168	AVX1172	AVX1172	AVX1172	AVX1170	AVX1170
E	AVX1152	AVX1155	AVX1155	AVX1155	AVX1157	AVX1157	AVX1160	AVX1162	AVX1162	AVX1166	AVX1166	AVX1170	AVX1174	AVX1174	AVX1174	AVX1176	AVX1176
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ																	
°,	AVX1151	AVX1151	AVX1151	AVX1153	AVX1153	AVX1153	AVX1153	AVX1154	AVX1163	AVX1163	AVX1163	AVX1167	AVX1167	AVX1171	AVX1171	AVX1171	AVX1171
A, L	AVX1151	AVX1153	AVX1153	AVX1153	AVX1154	AVX1154	AVX1158	AVX1156	AVX1156	AVX1164	AVX1164	AVX1167	AVX1171	AVX1171	AVX1171	AVX1169	AVX1169
E	AVX1153	AVX1154	AVX1154	AVX1154	AVX1156	AVX1156	AVX1159	AVX1161	AVX1161	AVX1165	AVX1165	AVX1169	AVX1173	AVX1173	AVX1173	AVX1175	AVX1175

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°, A, E, L	DRENRG0800	DRENRG0900	DRENRG1000	DRENRG1100	DRENRG1200	DRENRG1400	DRENRG1600	DRENRG1800	DRENRG2000

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°, A, E, L	DRENRG2200	DRENRG2400	DRENRG2600	DRENRG2800	DRENRG3000	DRENRG3200	DRENRG3400	DRENRG3600

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°, A, E, L	RIFNRG0800	RIFNRG0900	RIFNRG1000	RIFNRG1100	RIFNRG1200	RIFNRG1400	RIFNRG1600	RIFNRG1800	RIFNRG2000

A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°, A, E, L	RIFNRG2200	RIFNRG2400	RIFNRG2600	RIFNRG2800	RIFNRG3000	RIFNRG3200	RIFNRG3400	RIFNRG3600

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
°	GP2VN	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP3G	GP4G	GP5G	GP5G	GP5G	GP11G	GP10G	GP12G	GP12G	GP12G	GP12G
A, L	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G	GP11G	GP12G	GP12G	GP12G	GP13G	GP13G
E	GP3G	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G	GP8G	GP13G	GP14G	GP14G	GP14G	GP15G	GP15G

A grey background indicates the accessory must be assembled in the factory

■ *GP2VN becomes GP2VNA if configured with a type A or B hydronic kit*

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
°, A, E, L	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS2	T6NRGLS3	T6NRGLS3	T6NRGLS3	T6NRGLS3	T6NRGLS4	T6NRGLS5	T6NRGLS5	T6NRGLS5	T6NRGLS5

A grey background indicates the accessory must be assembled in the factory

Condensate drip.

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000
°	BRC1 x 2 (1)	BRC1 x 2 (1)	BRC1 x 2 (1)	BRC1 x 3 (1)	BRC1 x 3 (1)	BRC1 x 3 (1)	BRC1 x 3 (1)	BRC1 x 4 (1)	BRC1 x 5 (1)
A, L	BRC1 x 2 (1)	BRC1 x 3 (1)	BRC1 x 3 (1)	BRC1 x 3 (1)	BRC1 x 4 (1)	BRC1 x 4 (1)	BRC1 x 4 (1)	BRC1 x 5 (1)	BRC1 x 5 (1)
E	BRC1 x 3 (1)	BRC1 x 4 (1)	BRC1 x 4 (1)	BRC1 x 4 (1)	BRC1 x 5 (1)	BRC1 x 5 (1)	BRC1 x 6 (1)	BRC1 x 7 (1)	BRC1 x 7 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

Ver	2200	2400	2600	2800	3000	3200	3400	3600
°	BRC1 x 5 (1)	BRC1 x 5 (1)	BRC1 x 7 (1)	BRC1 x 7 (1)	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 8 (1)
A, L	BRC1 x 6 (1)	BRC1 x 6 (1)	BRC1 x 7 (1)	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 9 (1)	BRC1 x 9 (1)
E	BRC1 x 8 (1)	BRC1 x 8 (1)	BRC1 x 9 (1)	BRC1 x 10 (1)	BRC1 x 10 (1)	BRC1 x 10 (1)	BRC1 x 11 (1)	BRC1 x 11 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRG**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400, 2600, 2800, 3000, 3200, 3400, 3600
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (3)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (4)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (4)
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A
	AB	Storage tank and pump B
	AC	Storage tank and pump C
	AD	Storage tank and pump D
	AE	Storage tank and pump E
	AF	Storage tank and pump F
	AG	Storage tank and pump G
	AH	Storage tank and pump H
	AI	Storage tank and pump I
	AJ	Storage tank and pump J (4)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump
	BB	Storage tank with pump B + stand-by pump
	BC	Storage tank with pump C + stand-by pump
	BD	Storage tank with pump D + stand-by pump
	BE	Storage tank with pump E + stand-by pump
	BF	Storage tank with pump F + stand-by pump
	BG	Storage tank with pump G + stand-by pump
	BH	Storage tank with pump H + stand-by pump
	BI	Storage tank with pump I + stand-by pump
	BJ	Storage tank with pump J + stand-by pump (4)
		Kit with n° 1 inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed (5)
	IG	Pump G equipped with inverter device to work at fixed speed (5)
	IH	Pump H equipped with inverter device to work at fixed speed (5)
	II	Pump I equipped with inverter device to work at fixed speed (5)
	IJ	Pump J equipped with inverter device to work at fixed speed (6)
		Kit with n° 1 inverter pump + stand-by pump to fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5)
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5)
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed (5)
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed (5)
	JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (6)
		Kit with storage tank and n° 1 inverter pump to fixed speed
	CA	Buffer tank + pump A, equipped with inverter to work at fixed speed
	CB	Buffer tank + pump B, equipped with inverter to work at fixed speed
	CC	Buffer tank + pump C, equipped with inverter to work at fixed speed
	CD	Buffer tank + pump D, equipped with inverter to work at fixed speed
	EC	Buffer tank + pump E, equipped with inverter to work at fixed speed
	CF	Buffer tank + pump F, equipped with inverter to work at fixed speed (5)
	CG	Buffer tank + pump G, equipped with inverter to work at fixed speed (5)
	CH	Buffer tank + pump H, equipped with inverter to work at fixed speed (5)
	CI	Buffer tank + pump I, equipped with inverter to work at fixed speed (5)
	CJ	Buffer tank + pump J, equipped with inverter to work at fixed speed (6)
		Kit with storage tank and n° 1 pump + stand-by pump to fixed speed
	KA	Buffer tank+pump A+stand-by pump, both with inverter to work at fixed speed
	KB	Buffer tank+pump B+stand-by pump, both with inverter to work at fixed speed
	KC	Buffer tank+pump C+stand-by pump, both with inverter to work at fixed speed
	KD	Buffer tank+pump D+stand-by pump, both with inverter to work at fixed speed
	KE	Buffer tank+pump E+stand-by pump, both with inverter to work at fixed speed
	KF	Buffer tank+pump F+stand-by pump, both with inverter to work at fixed speed (5)
	KG	Buffer tank+pump G+stand-by pump, both with inverter to work at fixed speed (5)
	KH	Buffer tank+pump H+stand-by pump, both with inverter to work at fixed speed (5)
	KI	Buffer tank+pump I+stand-by pump, both with inverter to work at fixed speed (5)
	KJ	Buffer tank+pump J+stand-by pump, both with inverter to work at fixed speed (6)

(1) Water produced from 4 °C ÷ 20 °C
(2) Water produced from 8 °C ÷ -10 °C
(3) This option is not available with the Z operating field. The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) For all configurations including pump J please contact the factory.
(5) Hydronic kit not available with sizes 0800 version °/L/A, 0900 version °, 1000 version °, 1800 version °.
(6) For all possible configurations which include the "J" pump please be in touch with Aermec. Hydronic kit is not available with sizes 0800 version °/L/A, 0900 version °, 1000 version °, 1800 version °.

PERFORMANCE SPECIFICATIONS

NRG H°

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	200,5	220,2	238,5	292,2	325,7	353,6	381,6	456,8	531,9	561,5	591,1	705,6	749,2	824,6	859,3	895,1	925,3
Input power	kW	72,8	83,7	95,6	107,5	123,5	144,5	160,8	179,5	199,4	219,3	239,1	249,8	277,9	299,4	317,7	334,1	354,4
Cooling total input current	A	127,0	144,0	163,0	182,0	207,0	238,0	268,0	300,0	333,0	362,0	391,0	424,0	485,0	506,0	527,0	567,0	597,0
EER	W/W	2,75	2,63	2,49	2,72	2,64	2,45	2,37	2,55	2,67	2,56	2,47	2,83	2,70	2,75	2,70	2,68	2,61
Water flow rate system side	l/h	34503	37880	41031	50268	56029	60821	65615	78560	91483	96570	101650	121347	128839	141815	147773	153929	159128
Pressure drop system side	kPa	25	30	35	45	45	47	29	42	50	49	47	53	60	69	73	75	79
Heating performance 40 °C / 45 °C (2)																		
Heating capacity	kW	212,2	235,2	256,2	310,2	348,1	384,0	416,2	492,2	568,3	603,5	638,4	729,6	782,6	858,4	896,3	931,7	966,8
Input power	kW	66,1	73,5	80,8	98,1	109,5	123,5	129,7	153,3	175,5	186,3	198,1	232,9	252,2	275,3	288,2	299,7	312,5
Heating total input current	A	120,0	133,0	145,0	173,0	190,0	210,0	221,0	263,0	303,0	319,0	337,0	395,0	430,0	471,0	490,0	506,0	524,0
COP	W/W	3,21	3,20	3,17	3,16	3,18	3,11	3,21	3,21	3,24	3,24	3,22	3,13	3,10	3,12	3,11	3,11	3,09
Water flow rate system side	l/h	36823	40823	44470	53838	60421	66654	72264	85444	98663	104778	110847	126695	135884	149044	155628	161773	167874
Pressure drop system side	kPa	29	36	42	53	54	58	37	52	60	60	58	58	66	76	81	83	88

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HL

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	194,9	231,4	252,7	283,9	335,9	367,7	399,5	467,1	515,0	568,3	599,3	684,6	752,3	804,8	836,8	889,9	919,8
Input power	kW	73,7	78,6	88,8	107,7	118,0	136,6	154,7	175,4	203,9	213,7	232,1	255,0	275,5	305,5	325,1	334,6	353,5
Cooling total input current	A	125,0	136,0	153,0	179,0	196,0	222,0	249,0	285,0	331,0	346,0	374,0	420,0	457,0	506,0	528,0	540,0	568,0
EER	W/W	2,65	2,94	2,85	2,64	2,85	2,69	2,58	2,66	2,53	2,66	2,58	2,69	2,73	2,63	2,57	2,66	2,60
Water flow rate system side	l/h	33540	39819	43473	48838	57788	63245	68702	80332	88566	97728	103054	117728	129370	138391	143907	153027	158170
Pressure drop system side	kPa	23	33	34	39	45	47	33	39	41	49	35	51	59	64	67	75	70
Heating performance 40 °C / 45 °C (2)																		
Heating capacity	kW	209,6	244,9	268,8	305,3	357,3	394,2	431,7	502,3	558,0	611,4	647,2	717,8	788,1	844,0	880,6	933,5	969,8
Input power	kW	64,6	76,2	83,3	95,6	111,1	123,9	131,4	152,8	170,0	186,9	199,5	227,5	249,8	267,9	280,7	297,4	310,8
Heating total input current	A	115,0	134,0	147,0	165,0	188,0	207,0	219,0	257,0	288,0	313,0	333,0	378,0	416,0	447,0	466,0	491,0	512,0
COP	W/W	3,24	3,22	3,23	3,19	3,22	3,18	3,29	3,29	3,28	3,27	3,24	3,15	3,16	3,15	3,14	3,14	3,12
Water flow rate system side	l/h	36369	42513	46657	52988	62021	68420	74962	87217	96884	106143	112386	124645	136849	146552	152908	162100	168406
Pressure drop system side	kPa	28	39	40	47	53	56	40	47	51	60	42	57	66	71	75	84	80

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HA

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	200,5	236,4	258,7	292,2	344,0	378,0	412,2	480,7	532,0	584,8	618,3	700,8	768,8	824,7	859,0	911,3	943,6
Input power	kW	71,4	78,5	88,2	105,8	117,2	134,5	151,4	172,4	196,2	210,0	227,1	245,1	271,0	296,0	314,1	327,9	345,4
Cooling total input current	A	127,0	141,0	157,0	182,0	201,0	226,0	251,0	289,0	333,0	351,0	377,0	424,0	462,0	509,0	529,0	545,0	571,0
EER	W/W	2,81	3,01	2,93	2,76	2,94	2,81	2,72	2,79	2,71	2,78	2,72	2,86	2,84	2,79	2,73	2,78	2,73
Water flow rate system side	l/h	34505	40669	44506	50268	59178	65028	70879	82668	91485	100578	106317	120517	132216	141823	147725	156722	162264
Pressure drop system side	kPa	24	33	34	39	45	47	33	39	42	50	35	53	61	67	70	79	74
Heating performance 40 °C / 45 °C (2)																		
Heating capacity	kW	214,2	249,2	273,9	311,8	364,1	404,2	439,5	510,6	568,3	624,2	661,5	726,3	796,9	854,6	892,3	944,8	982,2
Input power	kW	65,5	76,7	84,1	96,3	111,6	125,5	132,9	153,9	171,9	189,2	201,7	229,0	250,4	268,2	280,9	299,3	312,3
Heating total input current	A	119,0	139,0	152,0	170,0	195,0	215,0	227,0	265,0	298,0	325,0	344,0	389,0	428,0	458,0	477,0	506,0	526,0
COP	W/W	3,27	3,25	3,25	3,24	3,26	3,22	3,31	3,32	3,31	3,30	3,28	3,17	3,18	3,19	3,18	3,16	3,15
Water flow rate system side	l/h	37179	43255	47538	54127	63192	70158	76308	88642	98663	108366	114875	126116	138372	148390	154943	164062	170550
Pressure drop system side	kPa	29	40	41	49	55	58	41	49	53	62	44	58	67	73	77	86	82

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRG HE

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Cooling performance 12 °C / 7 °C (1)																		
Cooling capacity	kW	210,2	241,4	265,0	301,3	349,5	385,3	433,9	499,0	555,3	602,8	639,1	718,4	790,6	846,2	879,4	924,9	962,3
Input power	kW	68,8	76,7	85,7	101,9	115,0	130,8	142,8	165,0	189,0	202,2	217,7	241,7	264,6	289,3	308,3	320,7	337,3
Cooling total input current	A	120,0	135,0	150,0	173,0	192,0	215,0	234,0	272,0	312,0	332,0	355,0	390,0	433,0	474,0	493,0	512,0	536,0
EER	W/W	3,05	3,15	3,09	2,96	3,04	2,94	3,04	3,02	2,94	2,98	2,94	2,97	2,99	2,93	2,85	2,88	2,85
Water flow rate system side	l/h	36167	41535	45585	51820	60126	66279	74616	85811	95491	103665	109890	123535	135965	145529	151221	159049	165476
Pressure drop system side	kPa	24	33	34	40	45	47	33	40	42	50	35	56	62	70	74	71	74
Heating performance 40 °C / 45 °C (2)																		
Heating capacity	kW	220,6	251,8	277,3	320,3	367,5	407,1	456,1	525,1	586,9	634,6	674,7	737,8	806,3	867,9	904,3	951,9	991,9
Input power	kW	67,2	77,5	84,8	98,3	110,5	122,3	137,5	158,0	176,7	191,9	204,0	230,9	251,4	270,6	283,3	299,9	313,6
Heating total input current	A	119,0	137,0	150,0	170,0	189,0	207,0	229,0	266,0	299,0	321,0	340,0	384,0	419,0	452,0	470,0	497,0	516,0
COP	W/W	3,28	3,25	3,27	3,26	3,33	3,33	3,32	3,32	3,32	3,31	3,31	3,20	3,21	3,21	3,19	3,17	3,16
Water flow rate system side	l/h	38284	43702	48137	55596	63813	70679	79187	91172	101894	110186	117170	128108	140013	150692	157019	165295	172243
Pressure drop system side	kPa	31	35	39	45	36	35	44	45	55	47	39	60	65	75	79	77	81

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY INDEX

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: J																			
SEER - 12/7 (EN14825: 2018) (1)																			
SEER	°	W/W	3,91	4,03	3,76	4,01	3,91	3,74	3,72	3,92	4,10	-	-	-	-	-	-	-	-
	A	W/W	4,13	4,47	4,22	4,21	4,48	4,13	4,21	4,29	4,27	4,57	4,58	4,56	4,55	4,56	4,55	4,55	4,55
	E	W/W	4,48	4,70	4,65	4,49	4,69	4,49	4,73	4,76	4,56	4,68	4,65	4,76	4,76	4,74	4,68	4,69	4,64
	L	W/W	4,08	4,38	4,31	4,23	4,49	4,33	4,17	4,32	4,24	4,57	4,57	4,58	4,61	4,56	4,56	4,57	4,56
Seasonal efficiency	°	%	153,54	158,21	147,58	157,44	153,60	146,56	145,75	153,87	160,99	-	-	-	-	-	-	-	-
	A	%	162,28	175,77	165,92	165,53	176,30	162,21	165,54	168,43	167,63	179,84	180,02	179,30	179,05	179,25	179,11	179,12	179,03
	E	%	176,01	184,84	182,87	176,49	184,43	176,41	186,08	187,33	179,21	184,21	182,92	187,25	187,42	186,77	184,02	184,64	182,40
	L	%	160,02	172,22	169,30	166,37	176,46	170,12	163,61	169,99	166,45	179,96	179,77	180,32	181,27	179,57	179,44	179,67	179,24
SEER - 23/18 (EN14825: 2018) (2)																			
SEER	°	W/W	4,53	4,62	4,30	4,53	4,48	4,26	4,26	4,36	4,53	4,68	4,67	5,20	5,04	5,05	4,95	5,04	4,89
	A	W/W	4,82	5,14	4,88	4,83	5,05	4,68	4,77	4,78	4,70	4,74	4,81	5,32	5,32	5,33	5,34	5,33	5,33
	E	W/W	5,22	5,39	5,29	5,11	5,24	5,05	5,33	5,29	5,01	5,07	5,11	5,49	5,49	5,47	5,39	5,40	5,34
	L	W/W	4,86	5,04	4,92	4,80	5,00	4,85	4,70	4,80	4,72	4,81	4,84	5,12	5,16	5,10	5,09	5,10	5,09
Seasonal efficiency	°	%	178,23	181,99	169,18	178,03	176,17	167,49	167,32	171,54	178,15	184,08	183,60	205,12	198,46	198,95	195,09	198,65	192,44
	A	%	189,87	202,58	192,30	190,02	199,05	184,16	187,89	188,04	185,13	186,42	189,27	209,91	209,61	210,19	210,50	210,33	210,27
	E	%	205,68	212,67	208,75	201,59	206,78	199,04	210,37	208,55	197,30	199,90	201,24	216,49	216,66	215,99	212,50	213,20	210,64
	L	%	191,27	198,67	193,92	188,82	196,81	191,05	185,11	189,15	185,81	189,25	190,57	201,98	203,21	201,03	200,73	201,14	200,54
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)																			
SCOP	°	W/W	3,75	3,72	3,74	3,65	3,72	3,69	3,84	3,87	3,90	3,92	3,98	3,85	3,79	3,79	3,78	3,78	3,76
	A	W/W	3,98	3,87	3,91	3,92	3,89	3,93	4,04	4,03	4,08	4,08	4,13	4,01	4,00	3,98	3,95	3,93	3,90
	E	W/W	3,94	3,86	3,89	3,90	3,88	4,00	4,05	4,08	4,09	4,09	4,13	3,97	3,96	3,93	3,90	3,88	3,86
	L	W/W	3,85	3,81	3,86	3,82	3,85	3,87	3,94	3,98	4,02	3,99	4,06	3,91	3,90	3,89	3,87	3,85	3,84
ηsh	°	%	147,19	145,69	146,78	143,12	145,88	144,64	150,61	151,86	152,83	153,82	156,25	151,09	148,73	148,69	148,14	148,30	147,30
	A	%	156,18	151,63	153,29	153,96	152,61	154,02	158,78	158,12	160,03	160,11	162,27	157,54	157,00	156,15	155,07	154,33	152,86
	E	%	154,67	151,25	152,53	152,86	152,04	156,84	159,16	160,06	160,74	160,54	162,33	155,93	155,35	154,31	152,99	152,26	151,57
	L	%	151,15	149,30	151,53	149,80	151,00	151,92	154,77	156,17	157,80	156,44	159,42	153,41	152,88	152,46	151,65	151,15	150,49
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (4)																			
SCOP	°	W/W	3,13	3,11	3,12	3,08	3,11	3,05	3,08	3,15	3,26	3,26	3,29	3,18	3,15	3,17	3,17	3,17	3,12
	A	W/W	3,30	3,26	3,28	3,28	3,25	3,24	3,24	3,26	3,36	3,37	3,35	3,30	3,31	3,30	3,29	3,29	3,20
	E	W/W	3,31	3,25	3,27	3,26	3,22	3,28	3,29	3,33	3,42	3,38	3,37	3,30	3,30	3,30	3,28	3,26	3,21
	L	W/W	3,19	3,20	3,23	3,18	3,20	3,19	3,15	3,22	3,31	3,28	3,28	3,20	3,21	3,21	3,20	3,21	3,18
ηsh	°	%	122,27	121,29	121,95	120,26	121,59	119,01	120,35	122,90	127,46	127,29	128,67	124,30	123,00	123,82	123,69	123,98	121,67
	A	%	129,05	127,35	128,02	128,24	126,95	126,45	126,66	127,60	131,34	131,91	130,84	128,88	129,31	129,14	128,59	128,77	125,11
	E	%	129,38	127,17	127,67	127,41	125,90	128,13	128,78	130,27	133,70	132,16	131,79	129,12	129,08	129,12	128,32	127,41	125,24
	L	%	124,44	124,94	126,12	124,20	125,05	124,58	123,06	125,71	129,24	128,27	128,14	124,91	125,29	125,42	125,07	125,42	124,38
SEPR - (EN 14825: 2018) (2)																			
SEPR	°	W/W	5,05	5,15	4,98	5,20	5,21	5,23	5,12	5,31	5,49	5,45	5,37	5,51	5,52	5,52	5,51	5,51	5,51
	A	W/W	5,34	5,76	5,59	5,54	5,85	5,69	5,67	5,79	5,66	5,85	5,87	5,52	5,53	5,53	5,53	5,53	5,52
	E	W/W	5,91	6,15	6,16	5,82	6,03	6,22	6,44	6,48	6,24	6,31	6,25	5,56	5,57	5,57	5,56	5,56	5,56
	L	W/W	5,38	5,72	5,70	5,51	5,69	5,87	5,66	5,85	5,69	5,96	5,88	5,51	5,52	5,52	5,51	5,51	5,51

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for low temperature applications (35 °C)
(4) Efficiencies for average temperature applications (55 °C)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: °																			
SEER - 12/7 (EN14825: 2018) (1)																			
SEER	°	W/W	3,82	3,93	3,69	3,95	3,76	3,66	3,63	3,77	3,94	-	-	-	-	-	-	-	-
	A	W/W	3,92	4,26	4,03	4,04	4,31	4,05	4,14	4,16	4,14	-	-	-	-	-	-	-	-
	E	W/W	4,24	4,47	4,46	4,30	4,49	4,23	4,54	4,48	4,30	-	-	-	-	-	-	-	-
	L	W/W	3,89	4,20	4,14	4,07	4,32	4,14	4,09	4,16	4,05	-	-	-	-	-	-	-	-
Seasonal efficiency	°	%	149,69	154,31	144,66	154,85	147,58	143,34	142,18	147,82	154,74	-	-	-	-	-	-	-	-
	A	%	153,94	167,22	158,24	158,70	169,32	159,16	162,42	163,51	162,60	-	-	-	-	-	-	-	-
	E	%	166,62	175,64	175,43	169,12	176,71	166,29	178,62	176,32	169,05	-	-	-	-	-	-	-	-
	L	%	152,78	164,88	162,52	159,98	169,62	162,45	160,44	163,31	158,98	-	-	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) (2)																			
SEER	°	W/W	4,42	4,52	4,23	4,46	4,31	4,17	4,16	4,25	4,43	4,56	4,55	4,84	4,69	4,70	4,61	4,69	4,57
	A	W/W	4,58	4,90	4,67	4,63	4,86	4,60	4,69	4,68	4,62	4,60	4,67	4,94	4,94	4,95	4,95	4,95	4,95
	E	W/W	4,95	5,13	5,09	4,90	5,03	4,78	5,13	5,04	4,80	4,95	5,00	5,15	5,16	5,15	5,07	5,09	5,03
	L	W/W	4,65	4,84	4,73	4,62	4,81	4,64	4,62	4,66	4,56	4,64	4,67	4,81	4,84	4,80	4,79	4,81	4,79
Seasonal efficiency	°	%	173,96	177,67	166,01	175,30	169,38	163,98	163,39	167,16	174,39	179,50	179,00	190,59	184,41	185,05	181,49	184,72	179,79
	A	%	180,39	193,01	183,69	182,32	191,25	180,93	184,52	184,13	181,81	180,84	183,73	194,77	194,67	194,96	194,98	195,10	194,96
	E	%	194,99	202,37	200,52	193,16	198,13	188,06	202,21	198,68	189,12	194,99	196,98	203,18	203,49	202,94	199,98	200,57	198,18
	L	%	182,93	190,46	186,38	181,81	189,53	182,80	181,68	183,24	179,38	182,56	183,91	189,59	190,78	188,98	188,76	189,33	188,66
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)																			
SCOP	°	W/W	3,70	3,66	3,70	3,62	3,63	3,64	3,78	3,78	3,84	3,84	3,87	3,78	3,72	3,72	3,70	3,71	3,68
	A	W/W	3,86	3,75	3,80	3,83	3,80	3,84	3,96	3,92	4,00	3,97	4,03	3,93	3,92	3,90	3,87	3,86	3,82
	E	W/W	3,82	3,74	3,79	3,80	3,78	3,86	3,96	3,93	3,99	3,96	4,02	3,90	3,88	3,86	3,82	3,81	3,79
	L	W/W	3,75	3,71	3,77	3,73	3,72	3,81	3,90	3,89	3,95	3,88	3,95	3,83	3,82	3,81	3,79	3,78	3,76
ηsh	°	%	144,95	143,51	145,03	141,70	142,39	142,72	148,37	148,22	150,74	150,57	151,99	148,07	145,75	145,71	145,18	145,33	144,35
	A	%	151,26	147,10	148,95	150,09	148,92	150,73	155,38	153,74	157,11	156,00	158,37	154,40	153,86	153,03	151,98	151,25	149,80
	E	%	149,60	146,63	148,74	148,95	148,14	151,30	155,26	154,27	156,73	155,51	157,88	152,82	152,24	151,22	149,93	149,22	148,54
	L	%	146,96	145,41	147,82	146,29	145,93	149,25	152,96	152,42	155,05	152,28	154,95	150,34	149,82	149,41	148,61	148,12	147,48
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (4)																			
SCOP	°	W/W	3,08	3,05	3,08	3,05	3,03	3,00	3,03	3,06	3,21	3,18	3,18	3,12	3,09	3,11	3,11	3,11	3,06
	A	W/W	3,18	3,15	3,17	3,19	3,16	3,16	3,17	3,17	3,29	3,27	3,25	3,23	3,24	3,24	3,23	3,23	3,14
	E	W/W	3,19	3,14	3,17	3,17	3,13	3,15	3,20	3,19	3,32	3,26	3,26	3,24	3,24	3,24	3,22	3,20	3,14
	L	W/W	3,09	3,10	3,14	3,10	3,08	3,12	3,11	3,13	3,23	3,18	3,17	3,14	3,14	3,15	3,14	3,15	3,12
ηsh	°	%	120,10	119,16	120,24	118,86	118,20	117,16	118,26	119,46	125,22	124,15	124,36	121,80	120,53	121,33	121,20	121,49	119,23
	A	%	124,31	122,92	123,79	124,47	123,37	123,50	123,70	123,68	128,55	127,96	127,17	126,29	126,72	126,55	126,01	126,19	122,60
	E	%	124,44	122,64	123,96	123,61	122,14	122,87	125,09	124,79	129,60	127,34	127,57	126,53	126,49	126,53	125,75	124,86	122,72
	L	%	120,43	121,14	122,52	120,80	120,36	121,82	121,38	122,19	126,39	124,30	123,94	122,40	122,78	122,90	122,56	122,90	121,88
SEPR - (EN 14825: 2018) (2)																			
SEPR	°	W/W	4,93	5,03	4,88	5,11	5,01	5,11	5,00	5,11	5,29	5,27	5,11	5,51	5,52	5,52	5,51	5,51	5,51
	A	W/W	5,07	5,49	5,34	5,31	5,63	5,58	5,57	5,62	5,49	5,55	5,58	5,52	5,53	5,53	5,53	5,53	5,52
	E	W/W	5,60	5,85	5,91	5,58	5,78	5,87	6,19	6,11	5,89	6,09	6,03	5,56	5,57	5,57	5,56	5,56	5,56
	L	W/W	5,14	5,48	5,47	5,31	5,48	5,61	5,55	5,63	5,44	5,65	5,56	5,51	5,52	5,52	5,51	5,51	5,51

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for low temperature applications (35 °C)
(4) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Electric data																			
Maximum current (FLA)	°	A	162,2	180,5	198,8	234,5	262,4	290,3	318,1	371,7	425,3	453,2	481,1	542,5	588,3	641,9	669,8	697,7	725,5
	A,L	A	162,2	188,3	206,6	234,5	270,2	298,1	325,9	379,5	425,3	461,0	488,9	542,5	596,1	641,9	669,8	705,5	733,3
	E	A	170,0	196,1	214,4	242,3	278,0	305,9	341,5	395,1	440,9	476,6	504,5	558,1	611,7	657,5	685,4	721,1	748,9
Peak current (LRA)	°	A	365,6	421,7	440,0	696,8	724,7	752,6	780,4	834,1	887,7	915,5	943,4	1004,8	1050,6	1104,2	1132,1	1160,0	1187,8
	A,L	A	365,6	429,5	447,8	696,8	732,5	760,4	788,2	841,9	887,7	923,3	951,2	1004,8	1058,4	1104,2	1132,1	1167,8	1195,6
	E	A	373,4	437,3	455,6	704,6	740,3	768,2	803,8	857,5	903,3	938,9	966,8	1020,4	1074,0	1119,8	1147,7	1183,4	1211,2

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

Compressors

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Compressor																			
Type	°,A,E,L	type	Scroll																
Compressor regulation	°,A,E,L	Type	On-Off																
Number	°,A,E,L	no.	4	4	4	4	4	4	4	5	6	6	6	7	8	9	9	9	9
Circuits	°,A,E,L	no.	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
Refrigerant	°,A,E,L	type	R32																
Refrigerant load circuit 1 (1)	°	kg	16,5	16,5	22,5	23,3	23,3	22,5	22,5	30,4	30,8	36,0	36,0	34,4	35,1	35,4	35,4	38,9	38,9
	A,L	kg	13,0	22,0	20,0	20,0	28,0	28,0	29,3	33,0	43,9	40,0	41,0	34,4	39,6	44,1	44,1	44,1	44,6
	E	kg	21,8	28,5	29,3	27,5	29,3	34,9	42,0	51,0	53,6	56,3	51,8	48,9	48,9	50,6	50,6	52,4	53,4
Refrigerant load circuit 2 (1)	°	kg	16,5	16,5	22,5	23,3	23,3	22,5	22,5	30,4	30,8	36,0	36,0	34,4	35,1	35,4	35,4	38,9	38,9
	A,L	kg	13,0	22,0	22,0	20,0	28,0	28,0	29,3	33,0	43,9	40,0	41,0	34,4	39,6	44,1	44,1	44,1	44,6
	E	kg	21,8	28,5	29,3	27,5	29,3	34,9	42,0	51,0	53,6	56,3	51,8	48,9	48,9	50,6	50,6	52,4	53,4
Refrigerant load circuit 3 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	34,4	35,1	35,4	35,4	38,9	38,9
	A,L	kg	-	-	-	-	-	-	-	-	-	-	-	34,4	39,6	44,1	44,1	44,1	44,6
	E	kg	-	-	-	-	-	-	-	-	-	-	-	48,9	48,9	50,6	50,6	52,4	53,4
Potential global heating	°,A,E,L	GWP	675kgCO_2eq																

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

System side heat exchanger

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
System side heat exchanger																			
Type	°,A,E,L	type	Brazed plate																
Number	°,A,E,L	no.	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																			
Hydraulic connections																			
Connections (in/out)	°,A,E,L	Type	Grooved joints																
Sizes (in/out)	°	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″
	A,L	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″	5″
	E	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″	5″	5″	5″	5″	5″	5″

Fans

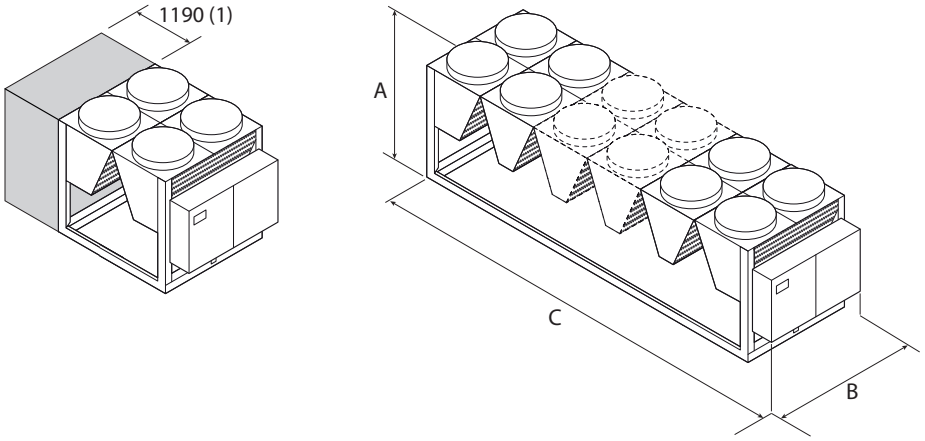
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Fans: °																			
Fan																			
Type	°,A,E,L	type	Axial																
Number	°	no.	4	4	4	6	6	6	6	8	10	10	10	14	14	16	16	16	16
	A,L	no.	4	6	6	6	8	8	8	10	10	12	12	14	16	16	16	18	18
	E	no.	6	8	8	8	10	10	12	14	14	16	16	18	20	20	20	22	22
Fan motor	°,A	type	Asynchronous																
	E,L	type	Asynchronous with phase cut																
Air flow rate	°	m^3/h	82398	82398	82424	123596	123596	123561	123561	164866	205969	205969	205969	288399	288399	329594	329594	329598	329598
	A	m^3/h	82403	123609	123609	123605	164779	164779	164779	205996	205998	247152	247152	288414	329556	329556	329556	370819	370819
	E	m^3/h	102378	136491	136491	136491	170613	170613	204757	238871	238871	272982	272982	315634	349835	349835	349835	383943	383943
	L	m^3/h	68237	102348	102348	102356	136528	136528	136528	170617	170614	204825	204825	238801	273004	273004	273004	307010	307010

Sound data

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Sound data calculated in cooling mode (1)																			
Sound power level	°	dB(A)	90,5	90,5	90,5	92,3	92,4	92,5	92,6	93,8	94,7	94,7	94,8	96,5	96,6	97,1	97,1	97,2	97,3
	A	dB(A)	90,5	92,2	92,2	92,3	93,6	93,6	93,7	94,6	94,7	95,4	95,5	96,5	97,1	97,1	97,1	97,6	97,7
	E	dB(A)	85,2	86,2	86,2	87,0	88,3	88,8	89,7	90,1	90,2	90,9	91,2	92,2	92,5	92,6	92,8	93,3	93,5
	L	dB(A)	83,5	84,7	84,8	85,8	87,2	87,8	88,3	88,9	89,0	89,8	90,1	91,0	91,3	91,4	91,7	92,2	92,4
Sound pressure level (10 m)	°	dB(A)	58,4	58,4	58,4	60,0	60,1	60,2	60,4	61,3	62,1	62,2	62,2	63,7	63,7	64,1	64,2	64,3	64,3
	A	dB(A)	58,4	59,9	59,9	60,0	61,2	61,2	61,3	62,1	62,1	62,8	62,8	63,7	64,1	64,1	64,2	64,6	64,6
	E	dB(A)	52,9	53,8	53,8	54,6	55,7	56,3	57,0	57,3	57,4	57,9	58,2	59,1	59,3	59,4	59,7	60,0	60,2
	L	dB(A)	51,4	52,5	52,5	53,5	54,8	55,4	55,9	56,4	56,5	57,1	57,4	58,2	58,4	58,5	58,8	59,1	59,4

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes:
NRG 0800H°, 0900H°, 1000H°
NRG 0800HL
NRG 0800HA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ																			
Dimensions and weights																			
A	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	2780	2780	2780	3970	3970	3970	3970	5160	6350	6350	6350	8730	8730	9920	9920	9920	9920
	A,L	mm	2780	3970	3970	3970	5160	5160	5160	6350	6350	7540	7540	8730	9920	9920	9920	11110	11110
	E	mm	3970	5160	5160	5160	6350	6350	7540	8730	8730	9920	9920	11110	12300	12300	12300	13490	13490

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ																			
Dimensions and weights																			
A	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	3970	3970	3970	3970	3970	3970	3970	5160	6350	6350	6350	8730	8730	9920	9920	9920	9920
	A,L	mm	3970	3970	3970	3970	5160	5160	5160	6350	6350	7540	7540	8730	9920	9920	9920	11110	11110
	E	mm	3970	5160	5160	5160	6350	6350	7540	8730	8730	9920	9920	11110	12300	12300	12300	13490	13490

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600
Integrated hydronic kit: 00																			
Weights																			
Empty weight	°	kg	2375	2405	2405	3065	3215	3365	3635	4480	5260	5505	5620	7035	7310	8070	8185	8410	8520
	A,L	kg	2375	2875	2885	3050	3805	3965	4225	4970	5305	5930	5965	7035	7800	8105	8220	8840	8930
	E	kg	2860	3485	3495	3685	4460	4460	5050	5875	6180	6880	7010	7980	8810	9090	9200	9845	9970
Weight functioning	°	kg	2397	2427	2427	3090	3244	3396	3688	4533	5321	5577	5697	7114	7392	8160	8278	8514	8627
	A,L	kg	2397	2897	2910	3077	3838	3999	4278	5031	5377	6005	6048	7117	7890	8206	8324	8947	9043
	E	kg	2882	3510	3522	3714	4511	4513	5103	5947	6255	6961	7101	8062	8911	9194	9307	9958	10091

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRB 0800-2406

Air-water chiller

Cooling capacity 216,9 ÷ 716,9 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **HP floating: ESEER +7% with inverter fans**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
They are outdoor units with axial fan scroll compressors, microchannel batteries and plate exchangers.
In the unit with desuperheater, it is also possible to produce free-hot water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 51°C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.
It is standard in all sizes from 1805 to 2406.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO[5]

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Floating HP control:** available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. **ESEER up to +7% with inverter fans.**
- **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

CONFIGURATOR

Configuration options

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	C	Motocondensing unit (3)
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (4)
	T	With total recovery (5)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils**
	I	Copper-aluminium
	O	Coated aluminium microchannel
	R	Copper-copper
	S	Tinned copper
	V	Copper-painted alumimium
	°	Aluminium microchannel
13		**Fans**
	J	Inverter
	M	Oversized
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (6)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump (7)
	DB	Pump B + stand-by pump (7)
	DC	Pump C + stand-by pump (7)
	DD	Pump D + stand-by pump (7)
	DE	Pump E + stand-by pump (7)
	DF	Pump F + stand-by pump (7)
	DG	Pump G + stand-by pump (7)
	DH	Pump H + stand-by pump (7)
	DI	Pump I + stand-by pump (7)
	DJ	Pump J + stand-by pump (8)
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A
	AB	Storage tank and pump B
	AC	Storage tank and pump C
	AD	Storage tank and pump D
	AE	Storage tank and pump E
	AF	Storage tank and pump F
	AG	Storage tank and pump G
	AH	Storage tank and pump H
	AI	Storage tank and pump I
	AJ	Storage tank and pump J (6)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump (7)
	BB	Storage tank with pump B + stand-by pump (7)
	BC	Storage tank with pump C + stand-by pump (7)
	BD	Storage tank with pump D + stand-by pump (7)
	BE	Storage tank with pump E + stand-by pump (7)
	BF	Storage tank with pump F + stand-by pump (7)
	BG	Storage tank with pump G + stand-by pump (7)
	BH	Storage tank with pump H + stand-by pump (7)
	BI	Storage tank with pump I + stand-by pump (7)
	BJ	Storage tank with pump J + stand-by pump (8)

(1) Water produced from 4 °C ÷ 18 °C
(2) Processed water from 4°C to -8°C for the ° - L versions, and from 4°C to -10°C for A - E - U - N versions
(3) Condensing units "C" are not compatible with the Y/X/Z/T/D option
(4) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(5) None of the hydronic kits (from PA to BJ) are compatible with the following sizes and with versions with heat recovery T: 0800 - 0900 - 1000 - 1100 version °; 0800 - 0900 version A; 0800 - 0900 version L. None of the hydronic kits with pump(s) and storage tank (from AA to BJ) are compatible with all the sizes and with versions with heat recovery T
(6) For all configurations including pump J please contact the factory.
(7) None of the hydronic kits with twin pump (from DA to DJ and from BA to BJ) are compatible for the following sizes and versions with desuperheater D: 1805 versions °- L-A, 2006-2206 version °.
(8) For all combinations with pump J, please contact our head office. None of the hydronic kits with twin pump (from DA to DJ and from BA to BJ) are compatible for the following sizes and versions with desuperheater D: 1805 versions °-L-A, 2006-2206 version °.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.
XLA: The Kit, which consists of resistances for the electric power board and "J" inverter fans, allows the outdoor air temperature operating range to be extended from –10°C to –20°C outdoor air.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400
Fans: M						
°	DCPX130	DCPX130	DCPX130	DCPX130	DCPX131	DCPX131
A	DCPX130	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX131	DCPX131	DCPX131	DCPX132	DCPX132	DCPX132

Ver	1600	1805	2006	2206	2406
Fans: M					
°	DCPX131	DCPX155	DCPX155	DCPX155	DCPX156
A	DCPX132	DCPX155	DCPX156	DCPX156	DCPX134
E, L, N	As standard	As standard	As standard	As standard	As standard
U	DCPX133	DCPX134	DCPX134	DCPX135	DCPX135

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
°	AVX805	AVX805	AVX805	AVX805	AVX808	AVX808	AVX808	AVX810	AVX810	AVX810	AVX809
A, L	AVX805	AVX805	AVX806	AVX808	AVX808	AVX808	AVX810	AVX810	AVX809	AVX809	AVX863
E, U	AVX806	AVX806	AVX808	AVX807	AVX807	AVX810	AVX809	AVX863	AVX863	AVX813	AVX813
N	AVX807	AVX807	AVX807	AVX809	AVX809	AVX809	AVX863	AVX812	AVX812	AVX814	AVX814
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, BA, BB, BC, BD, BE, BF, BG, BH											
°	AVX844	AVX844	AVX844	AVX844	AVX844	AVX848	AVX848	AVX845	AVX845	AVX845	AVX847
A, L	AVX844	AVX844	AVX844	AVX844	AVX844	AVX848	AVX845	AVX845	AVX847	AVX847	AVX849
E, U	AVX844	AVX844	AVX844	AVX845	AVX845	AVX845	AVX847	AVX849	AVX849	AVX851	AVX851
N	AVX845	AVX845	AVX845	AVX847	AVX847	AVX847	AVX849	AVX850	AVX851	AVX852	AVX852
Integrated hydronic kit: BI, BJ											
°	AVX844	AVX844	AVX844	AVX844	AVX846	AVX848	AVX848	AVX845	AVX845	AVX845	AVX847
A, L	AVX844	AVX844	AVX846	AVX846	AVX846	AVX848	AVX845	AVX845	AVX847	AVX847	AVX849
E, U	AVX844	AVX844	AVX846	AVX845	AVX845	AVX845	AVX847	AVX849	AVX849	AVX851	AVX851
N	AVX845	AVX845	AVX845	AVX847	AVX847	AVX847	AVX849	AVX850	AVX851	AVX852	AVX852
Integrated hydronic kit: DA, DB, DC, PA, PB, PC, PD, PE, PF, PG, PH											
°	AVX822	AVX822	AVX822	AVX822	AVX825	AVX825	AVX825	AVX826	AVX826	AVX826	AVX828

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
A, L	AVX822	AVX822	AVX825	AVX825	AVX825	AVX825	AVX826	AVX826	AVX828	AVX828	AVX830
E, U	AVX825	AVX825	AVX825	AVX826	AVX826	AVX826	AVX828	AVX830	AVX830	AVX832	AVX832
N	AVX826	AVX826	AVX826	AVX828	AVX828	AVX828	AVX830	AVX831	AVX831	AVX833	AVX833
Integrated hydronic kit: DD, DE, DF, DG, DH, PI, PJ											
°	AVX823	AVX823	AVX823	AVX823	AVX825	AVX825	AVX825	AVX826	AVX826	AVX826	AVX829
A, L	AVX823	AVX823	AVX825	AVX825	AVX825	AVX825	AVX826	AVX826	AVX829	AVX829	AVX830
E, U	AVX825	AVX825	AVX825	AVX826	AVX826	AVX826	AVX829	AVX830	AVX830	AVX832	AVX832
N	AVX826	AVX826	AVX826	AVX829	AVX829	AVX829	AVX830	AVX831	AVX831	AVX833	AVX833
Integrated hydronic kit: DI, DJ											
°	AVX864	AVX864	AVX829	AVX864	AVX825	AVX825	AVX827	AVX827	AVX827	AVX827	AVX829
A, L	AVX864	AVX864	AVX825	AVX825	AVX825	AVX825	AVX827	AVX827	AVX829	AVX829	AVX830
E, U	AVX825	AVX825	AVX825	AVX827	AVX827	AVX827	AVX829	AVX830	AVX830	AVX832	AVX832
N	AVX827	AVX827	AVX827	AVX829	AVX829	AVX829	AVX830	AVX831	AVX831	AVX833	AVX833

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°, A, E, L, N, U	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°, A, E, L, N, U	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
°, A, L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
E, U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A, L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2416
E, N, U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
°	GP2VN	GP2VN	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP4G	GP4G	GP4G	GP5G
A, L	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4G	GP5G	GP5G	GP6V
E, U	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory

■ *GP2VN becomes GP2VNA if configured with a type A or B hydronic kit*

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
°	T6NRB13	T6NRB13	T6NRB13	T6NRB13	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB15
A, L	T6NRB13	T6NRB13	T6NRB14	T6NRB14	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB16
E, U	T6NRB14	T6NRB14	T6NRB14	T6NRB14	T6NRB15	T6NRB15	T6NRB15	T6NRB17	T6NRB16	T6NRB19	T6NRB19
N	T6NRB14	T6NRB14	T6NRB14	T6NRB14	T6NRB15	T6NRB15	T6NRB18	T6NRB19	T6NRB19	T6NRB20	T6NRB20

A grey background indicates the accessory must be assembled in the factory

Kit for low temperature

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
°	-	-	-	-	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)
A, L	-	-	-	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)
E, U	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)
N	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)

(1) With the accessory XLA do not use the DCPX.
The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

NRB - °

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	221,5	244,5	270,3	299,7	353,1	404,9	439,0	511,2	560,9	598,2	675,8
Input power	kW	73,3	83,1	94,1	110,3	117,5	135,4	155,1	175,7	194,0	216,6	236,5
Cooling total input current	A	128,3	143,1	160,0	185,5	201,6	229,9	260,8	299,7	329,8	366,5	404,6
EER	W/W	3,02	2,94	2,87	2,72	3,00	2,99	2,83	2,91	2,89	2,76	2,86
Water flow rate system side	l/h	38117	42077	46498	51565	60733	69640	75512	87913	96469	102883	116222
Pressure drop system side	kPa	46	55	38	45	44	39	46	40	47	53	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - L

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	216,9	237,7	272,7	307,7	343,9	391,0	438,4	498,2	555,4	608,2	666,2
Input power	kW	73,0	85,9	92,0	107,4	122,7	139,0	151,9	173,3	191,6	213,6	233,8
Cooling total input current	A	122,8	142,3	154,5	179,0	203,4	231,8	250,8	289,7	318,6	359,2	390,2
EER	W/W	2,97	2,77	2,97	2,87	2,80	2,81	2,89	2,87	2,90	2,85	2,85
Water flow rate system side	l/h	37323	40891	46905	52926	59137	67243	75381	85669	95498	104586	114564
Pressure drop system side	kPa	25	20	27	24	29	23	30	28	37	36	44

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	224,1	252,2	283,7	326,1	361,2	411,7	462,2	519,2	576,0	633,3	697,6
Input power	kW	70,6	80,9	90,2	104,7	115,3	131,8	147,6	166,3	183,5	203,1	223,3
Cooling total input current	A	123,9	139,9	158,8	181,8	198,2	224,1	252,4	283,8	316,2	348,7	386,3
EER	W/W	3,17	3,12	3,15	3,12	3,13	3,12	3,13	3,12	3,14	3,12	3,12
Water flow rate system side	l/h	38561	43394	48802	56076	62118	70789	79487	89271	99048	108894	119965
Pressure drop system side	kPa	27	22	30	27	32	25	34	30	39	39	48

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	219,2	248,3	275,0	321,4	358,7	403,2	455,0	514,5	569,0	637,2	688,3
Input power	kW	69,6	79,4	88,5	102,2	114,9	129,8	144,5	164,7	183,0	203,4	221,4
Cooling total input current	A	119,5	134,7	148,8	172,1	192,6	215,7	240,1	275,1	306,1	342,6	372,8
EER	W/W	3,15	3,13	3,11	3,15	3,12	3,11	3,15	3,12	3,11	3,13	3,11
Water flow rate system side	l/h	37710	42726	47303	55271	61679	69338	78240	88465	97841	109550	118323
Pressure drop system side	kPa	19	23	20	27	21	27	26	33	33	22	25

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - U

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	227,6	257,6	286,5	329,6	369,8	414,6	466,9	529,2	594,0	655,1	716,9
Input power	kW	68,8	77,7	86,8	99,5	111,7	126,1	140,9	159,5	179,0	197,8	215,3
Cooling total input current	A	124,3	138,5	152,9	176,0	195,6	218,0	244,0	278,3	311,7	347,7	377,4
EER	W/W	3,30	3,31	3,30	3,31	3,31	3,28	3,31	3,32	3,32	3,31	3,33
Water flow rate system side	l/h	39151	44308	49294	56689	63596	71302	80286	91003	102137	112618	123250
Pressure drop system side	kPa	20	25	21	29	23	28	27	35	36	23	27

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - N

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	227,7	260,4	284,7	327,7	367,7	412,3	466,1	521,6	579,1	645,7	702,6
Input power	kW	68,5	78,9	86,4	98,5	111,9	125,4	140,4	157,8	176,0	194,6	212,9
Cooling total input current	A	118,2	135,1	146,9	166,9	188,6	209,4	234,0	264,2	295,4	328,9	360,0
EER	W/W	3,32	3,30	3,30	3,33	3,29	3,29	3,32	3,31	3,29	3,32	3,30
Water flow rate system side	l/h	39166	44792	48972	56365	63234	70905	80151	89691	99569	111009	120789
Pressure drop system side	kPa	20	25	21	28	23	28	27	34	34	23	26

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: J													
SEER - 12/7 (EN14825: 2018) (1)													
SEER	°	W/W	4,44	4,33	4,27	4,25	4,39	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,65	4,55	4,66	4,70	4,69	4,73	4,76	4,64	4,64	4,62	4,61
	E	W/W	4,75	4,67	4,63	4,81	4,82	4,76	4,88	4,73	4,67	4,70	4,74
	L	W/W	4,56	4,42	4,50	4,51	4,58	4,59	4,67	4,56	4,56	4,58	4,57
	N	W/W	4,85	4,79	4,83	4,96	4,93	4,97	5,03	4,93	4,82	4,89	4,83
	U	W/W	4,76	4,75	4,71	4,89	4,85	4,86	4,91	4,84	4,77	4,82	4,78
Seasonal efficiency	°	%	174,60	170,10	167,60	167,10	172,70	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	182,80	179,10	183,40	185,00	184,70	186,20	187,30	182,70	182,40	181,70	181,50
	E	%	187,00	183,70	182,00	189,30	189,60	187,50	192,30	186,20	183,90	184,80	186,40
	L	%	179,20	173,80	177,00	177,50	180,10	180,40	183,90	179,50	179,40	180,10	179,60
	N	%	191,10	188,40	190,30	195,40	194,20	195,90	198,10	194,10	189,90	192,40	190,00
	U	%	187,40	187,10	185,20	192,50	191,00	191,30	193,30	190,70	187,70	189,60	188,10
SEER - 23/18 (EN14825: 2018) (3)													
SEER	°	W/W	5,28	5,16	5,07	4,96	5,40	5,44	5,18	5,07	5,13	4,77	5,07
	A	W/W	5,50	5,35	5,50	5,51	5,55	5,55	5,63	5,34	5,44	5,30	5,42
	E	W/W	5,62	5,53	5,46	5,70	5,69	5,63	5,77	5,50	5,52	5,48	5,59
	L	W/W	5,34	5,14	5,35	5,33	5,37	5,34	5,47	5,26	5,32	5,20	5,26
	N	W/W	5,92	5,71	5,76	5,91	5,88	5,91	5,99	5,75	5,74	5,71	5,75
	U	W/W	5,65	5,67	5,59	5,82	5,76	5,80	5,83	5,67	5,69	5,61	5,68
Seasonal efficiency	°	%	208,10	203,40	199,80	195,40	212,90	214,50	204,10	199,90	202,10	187,80	199,60
	A	%	217,00	210,90	217,00	217,50	219,10	219,10	222,10	210,50	214,60	209,10	213,60
	E	%	221,90	218,30	215,30	224,90	224,50	222,20	227,70	216,80	217,70	216,00	220,60
	L	%	210,40	202,70	211,00	210,20	211,60	210,40	215,80	207,40	209,70	205,10	207,50
	N	%	229,90	225,30	227,50	233,50	232,10	233,40	236,40	226,80	226,40	225,50	227,10
	U	%	222,80	223,70	220,70	229,90	227,50	228,80	230,20	223,80	224,50	221,50	224,00
SEPR - (EN 14825: 2018) (3)													
SEPR	°	W/W	5,39	5,22	5,17	5,03	5,36	5,51	5,52	5,58	5,52	5,51	5,51
	A	W/W	5,64	5,29	5,58	5,30	5,55	5,52	5,56	5,56	5,57	5,55	5,55
	E	W/W	5,56	5,22	5,47	5,25	5,52	5,56	5,58	5,54	5,53	5,55	5,55
	L	W/W	5,32	5,05	5,31	5,04	5,18	5,05	5,53	5,53	5,53	5,52	5,54
	N	W/W	5,69	5,55	5,67	5,60	5,64	5,62	5,66	5,57	5,67	5,60	5,64
	U	W/W	5,67	5,54	5,66	5,54	5,68	5,59	5,69	5,55	5,55	5,58	5,72

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: M													
SEER - 12/7 (EN14825: 2018) (1)													
SEER	°	W/W	4,23	4,13	4,10	4,11	4,19	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,41	4,34	4,39	4,45	4,48	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	E	W/W	4,47	4,40	4,40	4,54	4,54	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	L	W/W	4,31	4,17	4,25	4,27	4,31	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	N	W/W	4,61	4,56	4,58	4,72	4,68	4,72	4,78	4,66	4,58	4,61	4,62
	U	W/W	4,51	4,51	4,51	4,63	4,64	4,65	4,70	4,61	4,56	4,57	4,59
Seasonal efficiency	°	%	166,00	162,30	161,00	161,20	164,70	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	173,50	170,60	172,40	174,90	176,00	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	E	%	175,60	173,10	173,10	178,70	178,50	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	L	%	169,40	163,60	166,80	167,60	169,20	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	N	%	181,30	179,30	180,00	185,70	184,10	185,90	188,20	183,40	180,30	181,50	181,60
	U	%	177,20	177,40	177,20	182,10	182,50	183,10	184,80	181,40	179,20	179,90	180,50
SEER - 23/18 (EN14825: 2018) (3)													
SEER	°	W/W	5,08	4,98	4,92	4,82	5,20	5,26	5,03	4,91	4,97	4,63	4,91
	A	W/W	5,29	5,15	5,25	5,28	5,35	5,37	5,42	5,15	5,22	5,09	5,22
	E	W/W	5,36	5,24	5,28	5,40	5,43	5,37	5,54	5,21	5,22	5,21	5,30
	L	W/W	5,06	4,87	5,07	5,08	5,05	5,10	5,19	5,02	5,02	4,92	4,99
	N	W/W	5,57	5,47	5,50	5,66	5,61	5,65	5,73	5,48	5,48	5,44	5,54
	U	W/W	5,41	5,44	5,41	5,58	5,56	5,60	5,63	5,46	5,49	5,39	5,50
Seasonal efficiency	°	%	200,10	196,00	193,60	189,90	205,10	207,30	198,30	193,30	195,70	182,00	193,50
	A	%	208,40	203,00	206,80	208,00	211,10	211,60	213,60	203,10	205,70	200,60	205,60
	E	%	211,40	206,40	208,30	213,00	214,00	211,80	218,50	205,50	205,70	205,30	208,90
	L	%	199,40	191,90	199,70	200,10	199,10	200,80	204,40	197,70	197,60	193,90	196,40
	N	%	219,70	215,80	216,80	223,40	221,50	223,00	226,20	216,00	216,30	214,60	218,40
	U	%	213,40	214,40	213,30	220,00	219,50	221,00	222,20	215,30	216,40	212,50	216,90

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
SEPR - (EN 14825: 2018) (3)													
SEPR	°	W/W	5,39	5,22	5,17	5,03	5,36	5,51	5,52	5,58	5,52	5,51	5,51
	A	W/W	5,64	5,29	5,58	5,30	5,55	5,52	5,56	5,56	5,57	5,55	5,55
	E	W/W	5,56	5,22	5,47	5,25	5,52	5,56	5,58	5,54	5,53	5,55	5,55
	L	W/W	5,32	5,05	5,31	5,04	5,18	5,05	5,53	5,53	5,53	5,52	5,54
	N	W/W	5,69	5,55	5,67	5,60	5,64	5,62	5,66	5,57	5,63	5,60	5,64
	U	W/W	5,67	5,54	5,66	5,54	5,68	5,59	5,69	5,55	5,55	5,58	5,72

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
Maximum current (FLA)	°	A	164,3	180,7	197,0	226,4	262,1	291,1	320,1	371,3	416,0	445,0	480,4
	A,L	A	177,1	193,4	222,5	251,8	281,2	310,2	351,9	396,7	454,2	483,2	530,8
	E,U	A	189,8	206,1	222,5	264,5	293,9	322,9	364,6	428,0	472,8	514,5	543,5
	N	A	202,5	218,8	235,2	277,3	306,6	335,6	383,2	440,7	485,5	527,2	556,2
Peak current (LRA)	°	A	352,9	408,1	424,4	477,1	512,8	625,3	654,3	705,5	750,3	779,3	814,6
	A,L	A	365,6	420,8	449,9	502,5	531,9	644,4	686,1	730,9	788,4	817,4	865,0
	E,U	A	378,3	433,5	449,9	515,3	544,6	657,1	698,8	762,2	807,0	848,7	877,7
	N	A	391,1	446,2	462,6	528,0	557,3	669,8	717,4	774,9	819,7	861,4	890,4

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	°,A,E,L,N,U	type	Scroll										
Compressor regulation	°,A,E,L,N,U	Type	Asynchronous										
Number	°,A,E,L,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type	R410A										
Refrigerant load circuit 1 (1)	°	kg	14,0	14,5	15,0	16,0	20,5	21,0	21,0	26,0	26,0	26,0	31,0
	A,L	kg	15,0	16,0	20,0	22,0	21,0	22,5	23,5	25,0	30,0	31,0	32,5
	E,U	kg	20,5	20,0	21,5	26,0	25,0	26,0	30,0	32,0	36,0	44,5	56,0
	N	kg	25,0	26,5	26,5	29,0	28,0	35,0	42,0	38,0	43,0	62,0	42,0
Refrigerant load circuit 2 (1)	°	kg	14,0	14,5	15,0	16,0	20,5	21,0	21,0	29,0	29,0	29,0	34,0
	A,L	kg	15,0	16,0	20,0	22,0	21,0	22,5	25,5	30,0	34,0	34,0	37,5
	E,U	kg	20,5	20,0	21,5	27,0	28,0	27,0	32,0	37,0	39,0	45,5	56,0
	N	kg	25,0	26,5	26,5	30,0	31,0	35,0	42,0	42,0	47,0	62,0	49,0
Potential global heating	°,A,E,L,N,U	GWP	2088kgCO_2eq										
System side heat exchanger													
Type	°,A,E,L,N,U	type	Brazed plate										
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections													
Connections (in/out)	°,A,E,L,N,U	Type	Grooved joints										
Hydraulic connections without hydronic kit													
Sizes (in/out)	°,A,E,L,N,U	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″
Hydraulic connections with hydronic kit													
Sizes (in/out)	°,A,E,L,N,U	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

Fans

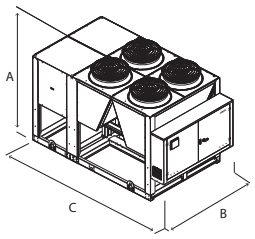
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: M													
Fan													
Type	°,A,E,L,N,U	type	Axial										
Fan motor	°,A,U	type	Asynchronous										
	E,L,N	type	Asynchronous with phase cut										
Number	°	no.	4	4	4	4	6	6	6	8	8	8	10
	A,L	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
With static pressure													
Air flow rate	°	m^3/h	64000	64000	64000	64000	96000	96000	96000	128000	128000	128000	160000
	A	m^3/h	64000	64000	96000	96000	96000	96000	128000	128000	160000	160000	192000
	E	m^3/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m^3/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m^3/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m^3/h	96000	96000	96000	128000	128000	128000	160000	192000	192000	224000	224000
High static pressure	°,A,U	Pa	50	50	50	50	50	50	50	50	50	50	50
	E,L,N	Pa	120	120	120	120	120	120	120	120	120	120	120
Without Static pressure													
Air flow rate	°	m^3/h	72000	72000	72000	72000	108000	108000	108000	144000	144000	144000	180000
	A	m^3/h	72000	72000	108000	108000	108000	108000	144000	144000	180000	180000	216000
	E	m^3/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m^3/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m^3/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m^3/h	108000	108000	108000	144000	144000	144000	180000	216000	216000	252000	252000
High static pressure	°,A,E,L,N,U	Pa	0	0	0	0	0	0	0	0	0	0	0
With static pressure													
Sound power level	°	dB(A)	87,8	87,8	87,8	87,8	90,0	90,0	90,0	92,0	92,5	93,0	94,7
	A	dB(A)	87,8	87,8	90,0	90,0	90,0	90,0	91,5	92,0	93,7	94,2	95,6
	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	90,0	90,0	90,0	91,5	91,5	91,5	92,7	94,2	94,7	96,0	96,5
Without Static pressure													
Sound power level	°	dB(A)	89,7	89,7	89,7	89,7	91,7	91,7	91,7	93,4	93,2	93,5	94,9
	A	dB(A)	89,7	89,7	91,7	91,7	91,7	91,7	93,1	93,4	94,3	94,6	95,8
	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	92,3	92,3	92,3	93,6	93,6	93,6	94,6	95,7	95,5	96,5	96,8

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: J													
Fan													
Type	°,A,E,L,N,U	type	Axial										
Fan motor	°,A,E,L,N,U	type	Inverter										
Number	°	no.	4	4	4	4	6	6	6	8	8	8	10
	A,L	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
Inverter fan													
Air flow rate	°	m^3/h	64000	64000	64000	64000	96000	96000	96000	128000	128000	128000	160000
	A	m^3/h	64000	64000	96000	96000	96000	96000	128000	128000	160000	160000	192000
	E	m^3/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m^3/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m^3/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m^3/h	96000	96000	96000	128000	128000	128000	160000	192000	192000	224000	224000
High static pressure	°	Pa	120	120	120	120	120	120	120	75	75	75	75
	A,U	Pa	120	120	120	120	120	120	120	120	120	120	120
	E,L,N	Pa	200	200	200	200	200	200	200	200	200	200	200
Sound data calculated in cooling mode (1)													
Sound power level	°	dB(A)	87,8	87,8	87,8	87,8	90,0	90,0	90,0	92,0	92,5	93,0	94,7
	A	dB(A)	87,8	87,8	90,0	90,0	90,0	90,0	91,5	92,0	93,7	94,2	95,6
	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	90,0	90,0	90,0	91,5	91,5	91,5	92,7	94,2	94,7	96,0	96,5

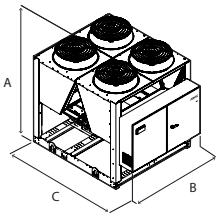
(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS

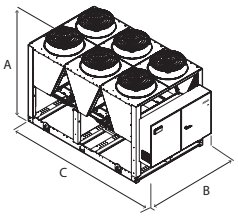
NRB 0800 - 1100 ° (1)
NRB 0800 - 0900 L/A (1)



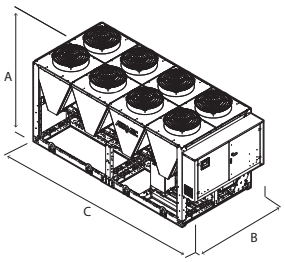
NRB 0800 - 1100 °
NRB 0800 - 0900 L/A



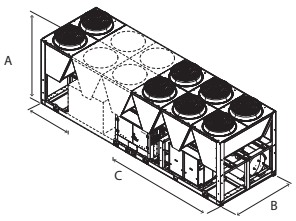
NRB 1200 - 1600 °
NRB 1000 - 1400 L/A
NRB 0800 -1000 E/U



NRB 1805 - 2406 °
NRB 1805 - 2206 L/A



NRB 2406 L/A
NRB 1100 - 2406 E/U
NRB 0800 - 2406 N



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes:
0800°, 0900°, 1000°, 1100°
0800L, 0900L
0800A, 0900A

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights													
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	2780	2780	2780	2780	3970	3970	3970	5160	5160	5160	6350
	A,L	mm	2780	2780	3970	3970	3970	3970	4760	5160	6350	6350	7140
	E,U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520

■ *The units 0800°, 0900°, 1000°, 1100°; 0800L, 0900L; and 0800A, 0900A with the "storage tank" option, are 3970mm long.*

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Weights													
Empty weight	°	kg	2240	2280	2350	2390	2880	2930	2960	3660	3830	3870	4360
	A,L	kg	2260	2320	2800	2870	2910	2970	3490	3710	4280	4360	4780
	E,U	kg	2720	2760	2840	3370	3440	3460	3940	4490	4700	5350	5390
	N	kg	3220	3270	3340	3770	3840	3870	4290	4940	5160	5750	5790

■ *The weights are for standard units with plate heat exchangers and no hydronic kit.*

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRB 0800-2406 Q

Air-water chiller with shell and tube heat exchanger

Cooling capacity 216,9 ÷ 716,9 kW

- **Microchannel coil**
- **Shell and tube heat exchanger**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **HP floating: ESEER +7% with inverter fans**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
They are outdoor units with axial fan scroll compressors, microchannel coils and Shell and tube exchangers.
In the unit with desuperheater, it is also possible to produce free-hot water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50°C external air temperature. Unit can produce chilled water (up to -10°C of water produced in some versions).

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.
It is standard in all sizes from 1805 to 2406.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO[5]

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Floating HP control:** available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. **ESEER up to +7% with inverter fans.**
- **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

CONFIGURATOR

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	Q	Cooling only with shell and tube heat exchanger
10		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery (4)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils**
	I	Copper-aluminium
	O	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Aluminium microchannel
13		**Fans**
	J	Inverter
	M	Oversized

Field		Description
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit (5)
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump

(1) Water produced from 4 °C ÷ 18 °C
(2) Processed water from 4°C to -8°C for the ° - L versions, and from 4°C to -10°C for A - E - U - N versions
(3) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(4) For compatibility with total recovery see table below.
(5) For compatibility with the hydronic kit, see the table below.

Compatible with total recovery

Version		800	900	1000	1100	1200	1400	1600	1805	2006	2206	2406
standard	°	-	-	-	-	-	-	-	-	-	-	•
Standard silenced	L	-	-	-	-	-	-	-	-	•	•	•
High efficiency	A	-	-	-	-	-	-	-	-	•	•	•
Silenced high efficiency	E	-	-	-	-	-	-	•	•	•	•	•
Very high efficiency	U	-	-	-	-	-	-	•	•	•	•	•
Silenced very high efficiency	N	-	-	-	•	•	•	•	•	•	•	•

Compatibility of models with hydronic units available with a configurator

Version		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
standard	°	-	-	-	-	•	-	-	•	•	•	•
Standard silenced	L	-	-	•	-	-	-	•	•	•	•	•
High efficiency	A	-	-	•	-	-	-	•	•	•	•	•
Silenced high efficiency	E	•	•	-	•	•	•	•	•	•	•	•
Very high efficiency	U	•	•	-	•	•	•	•	•	•	•	•
Silenced very high efficiency	N	•	•	•	•	•	•	•	•	•	•	•

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400
Fans: M						
°	DCPX130	DCPX130	DCPX130	DCPX130	DCPX131	DCPX131
A	DCPX130	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX131	DCPX131	DCPX131	DCPX132	DCPX132	DCPX132

Ver	1600	1805	2006	2206	2406
Fans: M					
°	DCPX131	DCPX155	DCPX155	DCPX155	DCPX156
A	DCPX132	DCPX155	DCPX156	DCPX156	DCPX134
E, L, N	As standard	As standard	As standard	As standard	As standard
U	DCPX133	DCPX134	DCPX134	DCPX135	DCPX135

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
°	AVX1107	AVX1107	AVX1107	AVX1107	AVX1108	AVX1108	AVX1108	AVX1109	AVX1109	AVX1109	AVX1110
A, L	AVX1107	AVX1107	AVX1108	AVX1108	AVX1108	AVX1108	AVX1109	AVX1109	AVX1110	AVX1110	AVX1111
E, U	AVX1108	AVX1108	AVX1108	AVX1109	AVX1109	AVX1109	AVX1110	AVX1111	AVX1111	AVX1105	AVX1105
N	AVX1109	AVX1109	AVX1109	AVX1110	AVX1110	AVX1110	AVX1111	AVX1105	AVX1105	AVX1102	AVX1102
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
°	-	-	-	-	AVX1108	-	-	AVX1109	AVX1109	AVX1109	AVX1110
A, L	-	-	AVX1108	-	-	-	AVX1109	AVX1109	AVX1110	AVX1110	AVX1111
E, U	AVX1108	AVX1108	-	AVX1109	AVX1109	AVX1109	AVX1110	AVX1111	AVX1111	AVX1105	AVX1105
N	AVX1109	AVX1109	AVX1109	AVX1110	AVX1110	AVX1110	AVX1111	AVX1105	AVX1105	AVX1102	AVX1102

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°, A, E, L, N, U	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°, A, E, L, N, U	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
°, A, L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
E, U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A, L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2416
E, N, U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
°	GP2VN	GP2VN	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP4VN	GP5VN
A, L	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN
E, U	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP4VN
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
°	-	-	-	-	GP3VN	-	-	GP4VN	GP4VN	GP4VN	GP5VN
A, L	-	-	GP3VN	-	-	-	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN
E, U	GP3VN	GP3VN	-	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP4VN

A grey background indicates the accessory must be assembled in the factory

Kit for low temperature

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
°	-	-	-	-	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)
A, L	-	-	-	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)
E, U	-	-	-	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)
N	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)	XLA (1)

(1) With the accessory XLA do not use the DCPX.
The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

NRB - °

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	221,5	244,5	270,3	299,7	353,1	404,9	439,0	511,2	560,9	598,2	675,8
Input power	kW	73,3	83,1	94,1	110,3	117,5	135,4	155,1	175,7	194,0	216,6	236,5
Cooling total input current	A	128,3	143,1	160,0	185,5	201,6	229,9	260,8	299,7	329,8	366,5	404,6
EER	W/W	3,02	2,94	2,87	2,72	3,00	2,99	2,83	2,91	2,89	2,76	2,86
Water flow rate system side	l/h	38117	42077	46498	51565	60733	69640	75512	87913	96469	102883	116222
Pressure drop system side	kPa	46	55	38	45	44	39	46	40	47	53	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - L

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	216,9	237,7	272,7	307,7	343,9	391,0	438,4	498,2	555,4	608,2	666,2
Input power	kW	73,0	85,9	92,0	107,4	122,7	139,0	151,9	173,3	191,6	213,6	233,8
Cooling total input current	A	122,8	142,3	154,5	179,0	203,4	231,8	250,8	289,7	318,6	359,2	390,2
EER	W/W	2,97	2,77	2,97	2,87	2,80	2,81	2,89	2,87	2,90	2,85	2,85
Water flow rate system side	l/h	37323	40891	46905	52926	59137	67243	75381	85669	95498	104586	114564
Pressure drop system side	kPa	25	20	27	24	29	23	30	28	37	36	44

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	224,1	252,2	283,7	326,1	361,2	411,7	462,2	519,2	576,0	633,3	697,6
Input power	kW	70,6	80,9	90,2	104,7	115,3	131,8	147,6	166,3	183,5	203,1	223,3
Cooling total input current	A	123,9	139,9	158,8	181,8	198,2	224,1	252,4	283,8	316,2	348,7	386,3
EER	W/W	3,17	3,12	3,15	3,12	3,13	3,12	3,13	3,12	3,14	3,12	3,12
Water flow rate system side	l/h	38561	43394	48802	56076	62118	70789	79487	89271	99048	108894	119965
Pressure drop system side	kPa	27	22	30	27	32	25	34	30	39	39	48

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	219,2	248,3	275,0	321,4	358,7	403,2	455,0	514,5	569,0	637,2	688,3
Input power	kW	69,6	79,4	88,5	102,2	114,9	129,8	144,5	164,7	183,0	203,4	221,4
Cooling total input current	A	119,5	134,7	148,8	172,1	192,6	215,7	240,1	275,1	306,1	342,6	372,8
EER	W/W	3,15	3,13	3,11	3,15	3,12	3,11	3,15	3,12	3,11	3,13	3,11
Water flow rate system side	l/h	37710	42726	47303	55271	61679	69338	78240	88465	97841	109550	118323
Pressure drop system side	kPa	19	23	20	27	21	27	26	33	33	22	25

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - U

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	227,6	257,6	286,5	329,6	369,8	414,6	466,9	529,2	594,0	655,1	716,9
Input power	kW	68,8	77,7	86,8	99,5	111,7	126,1	140,9	159,5	179,0	197,8	215,3
Cooling total input current	A	124,3	138,5	152,9	176,0	195,6	218,0	244,0	278,3	311,7	347,7	377,4
EER	W/W	3,30	3,31	3,30	3,31	3,31	3,28	3,31	3,32	3,32	3,31	3,33
Water flow rate system side	l/h	39151	44308	49294	56689	63596	71302	80286	91003	102137	112618	123250
Pressure drop system side	kPa	20	25	21	29	23	28	27	35	36	23	27

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NRB - N

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	227,7	260,4	284,7	327,7	367,7	412,3	466,1	521,6	579,1	645,7	702,6
Input power	kW	68,5	78,9	86,4	98,5	111,9	125,4	140,4	157,8	176,0	194,6	212,9
Cooling total input current	A	118,2	135,1	146,9	166,9	188,6	209,4	234,0	264,2	295,4	328,9	360,0
EER	W/W	3,32	3,30	3,30	3,33	3,29	3,29	3,32	3,31	3,29	3,32	3,30
Water flow rate system side	l/h	39166	44792	48972	56365	63234	70905	80151	89691	99569	111009	120789
Pressure drop system side	kPa	20	25	21	28	23	28	27	34	34	23	26

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: J													
SEER - 12/7 (EN14825: 2018) (1)													
SEER	°	W/W	4,44	4,33	4,27	4,25	4,39	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,65	4,55	4,66	4,70	4,69	4,73	4,76	4,64	4,64	4,62	4,61
	E	W/W	4,75	4,67	4,63	4,81	4,82	4,76	4,88	4,73	4,67	4,70	4,74
	L	W/W	4,56	4,42	4,50	4,51	4,58	4,59	4,67	4,56	4,56	4,58	4,57
	N	W/W	4,85	4,79	4,83	4,96	4,93	4,97	5,03	4,93	4,82	4,89	4,83
	U	W/W	4,76	4,75	4,71	4,89	4,85	4,86	4,91	4,84	4,77	4,82	4,78
Seasonal efficiency	°	%	174,60	170,10	167,60	167,10	172,70	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	182,80	179,10	183,40	185,00	184,70	186,20	187,30	182,70	182,40	181,70	181,50
	E	%	187,00	183,70	182,00	189,30	189,60	187,50	192,30	186,20	183,90	184,80	186,40
	L	%	179,20	173,80	177,00	177,50	180,10	180,40	183,90	179,50	179,40	180,10	179,60
	N	%	191,10	188,40	190,30	195,40	194,20	195,90	198,10	194,10	189,90	192,40	190,00
	U	%	187,40	187,10	185,20	192,50	191,00	191,30	193,30	190,70	187,70	189,60	188,10
SEER - 23/18 (EN14825: 2018) (3)													
SEER	°	W/W	5,28	5,16	5,07	4,96	5,40	5,44	5,18	5,07	5,13	4,77	5,07
	A	W/W	5,50	5,35	5,50	5,51	5,55	5,55	5,63	5,34	5,44	5,30	5,42
	E	W/W	5,62	5,53	5,46	5,70	5,69	5,63	5,77	5,50	5,52	5,48	5,59
	L	W/W	5,34	5,14	5,35	5,33	5,37	5,34	5,47	5,26	5,32	5,20	5,26
	N	W/W	5,92	5,71	5,76	5,91	5,88	5,91	5,99	5,75	5,74	5,71	5,75
	U	W/W	5,65	5,67	5,59	5,82	5,76	5,80	5,83	5,67	5,69	5,61	5,68
Seasonal efficiency	°	%	208,10	203,40	199,80	195,40	212,90	214,50	204,10	199,90	202,10	187,80	199,60
	A	%	217,00	210,90	217,00	217,50	219,10	219,10	222,10	210,50	214,60	209,10	213,60
	E	%	221,90	218,30	215,30	224,90	224,50	222,20	227,70	216,80	217,70	216,00	220,60
	L	%	210,40	202,70	211,00	210,20	211,60	210,40	215,80	207,40	209,70	205,10	207,50
	N	%	229,90	225,30	227,50	233,50	232,10	233,40	236,40	226,80	226,40	225,50	227,10
	U	%	222,80	223,70	220,70	229,90	227,50	228,80	230,20	223,80	224,50	221,50	224,00
SEPR - (EN 14825: 2018) (3)													
SEPR	°	W/W	5,39	5,22	5,17	5,03	5,36	5,51	5,52	5,58	5,52	5,51	5,51
	A	W/W	5,64	5,29	5,58	5,30	5,55	5,52	5,56	5,56	5,57	5,55	5,55
	E	W/W	5,56	5,22	5,47	5,25	5,52	5,56	5,58	5,54	5,53	5,55	5,55
	L	W/W	5,32	5,05	5,31	5,04	5,18	5,05	5,53	5,53	5,53	5,52	5,54
	N	W/W	5,69	5,55	5,67	5,60	5,64	5,62	5,66	5,57	5,67	5,60	5,64
	U	W/W	5,67	5,54	5,66	5,54	5,68	5,59	5,69	5,55	5,55	5,58	5,72

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: M													
SEER - 12/7 (EN14825: 2018) (1)													
SEER	°	W/W	4,23	4,13	4,10	4,11	4,19	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,41	4,34	4,39	4,45	4,48	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	E	W/W	4,47	4,40	4,40	4,54	4,54	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	L	W/W	4,31	4,17	4,25	4,27	4,31	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	N	W/W	4,61	4,56	4,58	4,72	4,68	4,72	4,78	4,66	4,58	4,61	4,62
	U	W/W	4,51	4,51	4,51	4,63	4,64	4,65	4,70	4,61	4,56	4,57	4,59
Seasonal efficiency	°	%	166,00	162,30	161,00	161,20	164,70	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	173,50	170,60	172,40	174,90	176,00	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	E	%	175,60	173,10	173,10	178,70	178,50	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	L	%	169,40	163,60	166,80	167,60	169,20	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	N	%	181,30	179,30	180,00	185,70	184,10	185,90	188,20	183,40	180,30	181,50	181,60
	U	%	177,20	177,40	177,20	182,10	182,50	183,10	184,80	181,40	179,20	179,90	180,50
SEER - 23/18 (EN14825: 2018) (3)													
SEER	°	W/W	5,08	4,98	4,92	4,82	5,20	5,26	5,03	4,91	4,97	4,63	4,91
	A	W/W	5,29	5,15	5,25	5,28	5,35	5,37	5,42	5,15	5,22	5,09	5,22
	E	W/W	5,36	5,24	5,28	5,40	5,43	5,37	5,54	5,21	5,22	5,21	5,30
	L	W/W	5,06	4,87	5,07	5,08	5,05	5,10	5,19	5,02	5,02	4,92	4,99
	N	W/W	5,57	5,47	5,50	5,66	5,61	5,65	5,73	5,48	5,48	5,44	5,54
	U	W/W	5,41	5,44	5,41	5,58	5,56	5,60	5,63	5,46	5,49	5,39	5,50
Seasonal efficiency	°	%	200,10	196,00	193,60	189,90	205,10	207,30	198,30	193,30	195,70	182,00	193,50
	A	%	208,40	203,00	206,80	208,00	211,10	211,60	213,60	203,10	205,70	200,60	205,60
	E	%	211,40	206,40	208,30	213,00	214,00	211,80	218,50	205,50	205,70	205,30	208,90
	L	%	199,40	191,90	199,70	200,10	199,10	200,80	204,40	197,70	197,60	193,90	196,40
	N	%	219,70	215,80	216,80	223,40	221,50	223,00	226,20	216,00	216,30	214,60	218,40
	U	%	213,40	214,40	213,30	220,00	219,50	221,00	222,20	215,30	216,40	212,50	216,90
SEPR - (EN 14825: 2018) (3)													
SEPR	°	W/W	5,39	5,22	5,17	5,03	5,36	5,51	5,52	5,58	5,52	5,51	5,51
	A	W/W	5,64	5,29	5,58	5,30	5,55	5,52	5,56	5,56	5,57	5,55	5,55
	E	W/W	5,56	5,22	5,47	5,25	5,52	5,56	5,58	5,54	5,53	5,55	5,55
	L	W/W	5,32	5,05	5,31	5,04	5,18	5,05	5,53	5,53	5,53	5,52	5,54
	N	W/W	5,69	5,55	5,67	5,60	5,64	5,62	5,66	5,57	5,63	5,60	5,64
	U	W/W	5,67	5,54	5,66	5,54	5,68	5,59	5,69	5,55	5,55	5,58	5,72

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
Maximum current (FLA)	°	A	164,3	180,7	197,0	226,4	262,1	291,1	320,1	371,3	416,0	445,0	480,4
	A,L	A	177,1	193,4	222,5	251,8	281,2	310,2	351,9	396,7	454,2	483,2	530,8
	E,U	A	189,8	206,1	222,5	264,5	293,9	322,9	364,6	428,0	472,8	514,5	543,5
	N	A	202,5	218,8	235,2	277,3	306,6	335,6	383,2	440,7	485,5	527,2	556,2
Peak current (LRA)	°	A	352,9	408,1	424,4	477,1	512,8	625,3	654,3	705,5	750,3	779,3	814,6
	A,L	A	365,6	420,8	449,9	502,5	531,9	644,4	686,1	730,9	788,4	817,4	865,0
	E,U	A	378,3	433,5	449,9	515,3	544,6	657,1	698,8	762,2	807,0	848,7	877,7
	N	A	391,1	446,2	462,6	528,0	557,3	669,8	717,4	774,9	819,7	861,4	890,4

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	°,A,E,L,N,U	type						Scroll					
Compressor regulation	°,A,E,L,N,U	Type						On/Off					
Number	°,A,E,L,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Partialisation of the unit with mechanical thermostatic valve	°,A,E,L,N,U	%	25%	25%	25%	25%	25%	25%	25%	17%	17%	17%	17%
Partialisation of the unit with electronic thermostatic expansion valve	°,A,E,L,N,U	%	25%	25%	25%	25%	25%	25%	25%	17%	17%	17%	17%
Refrigerant	°,A,E,L,N,U	type						R410A					
Refrigerant charge (1)	°	kg	28,0	29,0	30,0	32,0	41,0	42,0	42,0	55,0	55,0	55,0	65,0
	A,L	kg	30,0	32,0	40,0	44,0	42,0	45,0	49,0	55,0	64,0	65,0	70,0
	E,U	kg	41,0	40,0	43,0	53,0	53,0	53,0	62,0	69,0	75,0	90,0	112,0
	N	kg	50,0	53,0	53,0	59,0	59,0	70,0	84,0	80,0	90,0	124,0	91,0
Oil	°,A,E,L,N,U	Type											
Oil charge circuit 1	°,A,E,L,N,U	kg	9,3	11,5	13,6	13,1	12,6	12,6	12,6	16,6	24,9	24,9	12,6
Oil charge circuit 2	°,A,E,L,N,U	kg	9,3	11,5	13,6	13,1	12,6	12,6	12,6	24,9	24,9	24,9	24,9
System side heat exchanger													
Type	°,A,E,L,N,U	type						Shell and tube					
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections													
Connections (in/out)	°,A,E,L,N,U	Type						Grooved joints					
Hydraulic connections without hydronic kit													
Sizes (in/out)	°	Ø	5″	5″	5″	5″	5″	5″	5″	6″	6″	6″	6″
	A,L	Ø	5″	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″
	E,N,U	Ø	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″	6″
Hydraulic connections with hydronic kit													
Sizes (in/out)	°	Ø	-	-	-	-	3″	-	-	4″	4″	4″	4″
	A,L	Ø	-	-	3″	-	-	-	4″	4″	4″	4″	4″
	E,U	Ø	3″	3″	-	3″	3″	3″	4″	4″	4″	4″	4″
	N	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Water filter not supplied. Installation is mandatory or the guarantee will void.

Fans

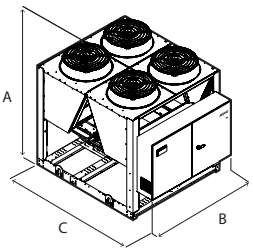
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: M													
Fan													
Type	°,A,E,L,N,U	type	Axial										
Fan motor	°,A,U	type	Asynchronous										
	E,L,N	type	Asynchronous with phase cut										
Number	°	no.	4	4	4	4	6	6	6	8	8	8	10
	A,L	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
With static pressure													
Air flow rate	°	m^3/h	64000	64000	64000	64000	96000	96000	96000	128000	128000	128000	160000
	A	m^3/h	64000	64000	96000	96000	96000	96000	128000	128000	160000	160000	192000
	E	m^3/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m^3/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m^3/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m^3/h	96000	96000	96000	128000	128000	128000	160000	192000	192000	224000	224000
High static pressure	°,A,U	Pa	50	50	50	50	50	50	50	50	50	50	50
	E,L,N	Pa	120	120	120	120	120	120	120	120	120	120	120
Without Static pressure													
Air flow rate	°	m^3/h	72000	72000	72000	72000	108000	108000	108000	144000	144000	144000	180000
	A	m^3/h	72000	72000	108000	108000	108000	108000	144000	144000	180000	180000	216000
	E	m^3/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m^3/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m^3/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m^3/h	108000	108000	108000	144000	144000	144000	180000	216000	216000	252000	252000
High static pressure	°,A,E,L,N,U	Pa	0	0	0	0	0	0	0	0	0	0	0
With static pressure													
Sound power level	°	dB(A)	87,8	87,8	87,8	87,8	90,0	90,0	90,0	92,0	92,5	93,0	94,7
	A	dB(A)	87,8	87,8	90,0	90,0	90,0	90,0	91,5	92,0	93,7	94,2	95,6
	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	90,0	90,0	90,0	91,5	91,5	91,5	92,7	94,2	94,7	96,0	96,5
Without Static pressure													
Sound power level	°	dB(A)	89,7	89,7	89,7	89,7	91,7	91,7	91,7	93,4	93,2	93,5	94,9
	A	dB(A)	89,7	89,7	91,7	91,7	91,7	91,7	93,1	93,4	94,3	94,6	95,8
	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	92,3	92,3	92,3	93,6	93,6	93,6	94,6	95,7	95,5	96,5	96,8

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: J													
Fan													
Type	°,A,E,L,N,U	type	Axial										
Fan motor	°,A,E,L,N,U	type	Inverter										
Number	°	no.	4	4	4	4	6	6	6	8	8	8	10
	A,L	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
Inverter fan													
Air flow rate	°	m^3/h	64000	64000	64000	64000	96000	96000	96000	128000	128000	128000	160000
	A	m^3/h	64000	64000	96000	96000	96000	96000	128000	128000	160000	160000	192000
	E	m^3/h	69000	69000	69000	92000	92000	92000	115000	138000	138000	161000	161000
	L	m^3/h	46000	46000	69000	69000	69000	69000	92000	92000	115000	115000	138000
	N	m^3/h	92000	92000	92000	115000	115000	115000	138000	161000	161000	184000	184000
	U	m^3/h	96000	96000	96000	128000	128000	128000	160000	192000	192000	224000	224000
High static pressure	°	Pa	120	120	120	120	120	120	120	75	75	75	75
	A,U	Pa	120	120	120	120	120	120	120	120	120	120	120
	E,L,N	Pa	200	200	200	200	200	200	200	200	200	200	200
Sound data calculated in cooling mode (1)													
Sound power level	°	dB(A)	87,8	87,8	87,8	87,8	90,0	90,0	90,0	92,0	92,5	93,0	94,7
	A	dB(A)	87,8	87,8	90,0	90,0	90,0	90,0	91,5	92,0	93,7	94,2	95,6
	E	dB(A)	84,8	84,8	84,8	86,3	86,3	86,3	87,5	89,0	89,5	90,8	91,3
	L	dB(A)	82,7	82,7	84,8	84,8	84,8	85,6	86,3	87,7	88,5	89,8	90,5
	N	dB(A)	86,3	86,3	86,3	87,5	87,5	87,5	88,5	89,8	90,3	91,5	92,0
	U	dB(A)	90,0	90,0	90,0	91,5	91,5	91,5	92,7	94,2	94,7	96,0	96,5

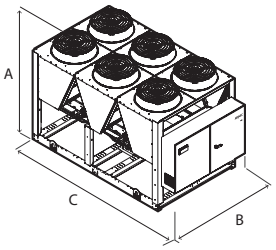
(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS

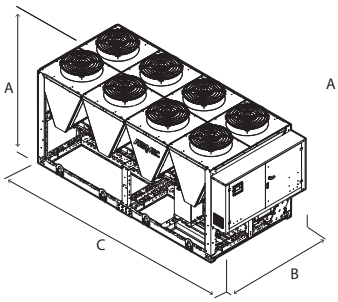
NRB 0800 - 1100 °
NRB 0800 - 0900 L/A



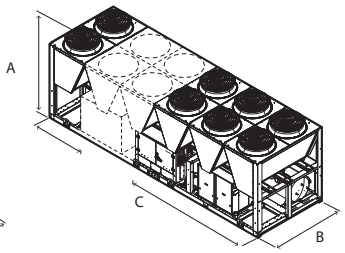
NRB 1200 - 1600 °
NRB 1000 - 1400 L/A
NRB 0800 -1000 E/U



NRB 1805 - 2206 °
NRB 1600 - 1805 L/A
NRB 1200 - 1400 E/U
NRB 0800 - 1000 N



NRB 2406 °
NRB 2006 - 2406 L/A
NRB 1600 - 2406 E/U
NRB 1100 - 2406 N



Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights without hydronic kit													
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	2780	2780	2780	2780	3970	3970	3970	5160	5160	5160	6350
	A,L	mm	2780	2780	3970	3970	3970	3970	4760	5160	6350	6350	7140
	E,U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520
Dimensions and weights with pump/s													
A	°	mm	-	-	-	-	2450	-	-	2450	2450	2450	2450
	A,L	mm	-	-	2450	-	-	-	2450	2450	2450	2450	2450
	E,U	mm	2450	2450	-	2450	2450	2450	2450	2450	2450	2450	2450
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°	mm	-	-	-	-	2200	-	-	2200	2200	2200	2200
	A,L	mm	-	-	2200	-	-	-	2200	2200	2200	2200	2200
	E,U	mm	2200	2200	-	2200	2200	2200	2200	2200	2200	2200	2200
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	-	-	-	-	3970	-	-	5160	5160	5160	6350
	A,L	mm	-	-	3970	-	-	-	4760	5160	6350	6350	7140
	E,U	mm	3970	3970	-	4760	4760	4760	5950	7140	7140	8330	8330
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Weights													
Empty weight	°	kg	2390	2430	2500	2540	3030	3080	3110	3810	3980	4020	4560
	A,L	kg	2410	2470	2950	3020	3060	3120	3640	3910	4480	4560	4980
	E,U	kg	2870	2910	2990	3520	3590	3610	4140	4690	4900	5650	5690
	N	kg	3370	3420	3490	3920	3990	4020	4490	5140	5360	6050	6090

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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www.aermec.com

NRB 0800H-2406H

Reversible air/water heat pump

Cooling capacity 196,4 ÷ 647,7 kW – Heating capacity 209,8 ÷ 683,9 kW

- **High efficiency also at partial loads**
- **Night mode**
- **HP floating: ESEER +7% with inverter fans**
- **Also available with Shell and tube heat exchanger**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 50 °C in summer. Hot water production up to 55 °C.
(for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.
It is standard in all sizes from 1805 to 2406.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, with high or low head and storage tank, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. **ESEER up to +7% with inverter fans.**
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
BRC1: Condensate drip tray. Consider 1 for each V-block.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
°	AVX1000	AVX1000	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1006	AVX1006	AVX1010	AVX1010
A, L	AVX1000	AVX1004	AVX1004	AVX1004	AVX1004	AVX1006	AVX1006	AVX1010	AVX1010	AVX1016	AVX1016
E	AVX1004	AVX1006	AVX1006	AVX1006	AVX1006	AVX1010	AVX1013	AVX1024	AVX1024	AVX1033	AVX1033
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, BA, BB, BC											
°	AVX1003	AVX1003	AVX1005	AVX1005	AVX1005	AVX1005	AVX1005	AVX1005	AVX1008	AVX1012	AVX1012
A, L	AVX1003	AVX1005	AVX1005	AVX1005	AVX1005	AVX1008	AVX1008	AVX1008	AVX1012	AVX1017	AVX1017
E	AVX1005	AVX1008	AVX1008	AVX1008	AVX1008	AVX1012	AVX1015	AVX1025	AVX1025	AVX1035	AVX1035
Integrated hydronic kit: AI, AJ, BD, BE, BF, BG, BH, BI, BJ											
°	AVX1003	AVX1003	AVX1005	AVX1005	AVX1005	AVX1005	AVX1005	AVX1008	AVX1008	AVX1012	AVX1012
A, L	AVX1003	AVX1005	AVX1005	AVX1005	AVX1005	AVX1008	AVX1008	AVX1012	AVX1012	AVX1017	AVX1017
E	AVX1005	AVX1008	AVX1008	AVX1008	AVX1008	AVX1012	AVX1015	AVX1025	AVX1025	AVX1035	AVX1035
Integrated hydronic kit: DA, DB, DC, PA, PB, PC, PD, PE, PF, PG, PH											
°	AVX1001	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1009	AVX1009	AVX1010	AVX1010
A, L	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1009	AVX1009	AVX1010	AVX1010	AVX1016	AVX1016
E	AVX1004	AVX1006	AVX1006	AVX1006	AVX1009	AVX1010	AVX1013	AVX1024	AVX1024	AVX1034	AVX1034
Integrated hydronic kit: DD, DE, DF, DG, DH, PI, PJ											
°	AVX1001	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1009	AVX1009	AVX1011	AVX1011
A, L	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1009	AVX1009	AVX1011	AVX1011	AVX1016	AVX1016
E	AVX1004	AVX1007	AVX1007	AVX1007	AVX1009	AVX1011	AVX1014	AVX1024	AVX1024	AVX1034	AVX1034
Integrated hydronic kit: DI, DJ											
°	AVX1002	AVX1002	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1007	AVX1007	AVX1011	AVX1011
A, L	AVX1002	AVX1004	AVX1004	AVX1004	AVX1004	AVX1007	AVX1007	AVX1011	AVX1011	AVX1016	AVX1016
E	AVX1004	AVX1007	AVX1007	AVX1007	AVX1007	AVX1011	AVX1014	AVX1024	AVX1024	AVX1034	AVX1034

Condensation control temperature

Ver	0800	0900	1000	1100	1200	1400
Fans: °						
°	DCPX130	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131
A	DCPX130	DCPX131	DCPX131	DCPX131	DCPX131	DCPX132
E, L	As standard	As standard	As standard	As standard	As standard	As standard

Ver	1600	1805	2006	2206	2406
Fans: °					
°	DCPX131	DCPX155	DCPX155	DCPX156	DCPX156
A	DCPX132	DCPX156	DCPX156	DCPX134	DCPX134
E, L	As standard	As standard	As standard	As standard	As standard

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°, A, E, L	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°, A, E, L	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
°	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
A, L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1401
E	RIFNRB0800	RIFNRB0901	RIFNRB1001	RIFNRB1001	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A, L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2216	RIFNRB2416
E	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
°	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4G	GP4G	GP5G	GP5G
A, L	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5G	GP5G	GP6V	GP6V
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory

The units 0800-0900 H°, 0800 HL/HA with the optional "storage tank" are 3970 mm long, and they must mount the GP2VNA grids.

Condensate drip

Ver	0800	0900	1000	1100	1200	1400
°	BRC1x2 (1)	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)
A, L	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x4 (1)
E	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)
A, L	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)	BRC1x6 (1)	BRC1x6 (1)
E	BRC1x6 (1)	BRC1x7 (1)	BRC1x7 (1)	BRC1x8 (1)	BRC1x8 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	°	Standard mechanic thermostatic valve
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (2)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (3)

Field		Description
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump (4)
	DB	Pump B + stand-by pump (4)
	DC	Pump C + stand-by pump (4)
	DD	Pump D + stand-by pump (4)
	DE	Pump E + stand-by pump (4)
	DF	Pump F + stand-by pump (4)
	DG	Pump G + stand-by pump (4)
	DH	Pump H + stand-by pump (4)
	DI	Pump I + stand-by pump (4)
	DJ	Pump J + stand-by pump (5)
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A
	AB	Storage tank and pump B
	AC	Storage tank and pump C
	AD	Storage tank and pump D
	AE	Storage tank and pump E
	AF	Storage tank and pump F
	AG	Storage tank and pump G
	AH	Storage tank and pump H
	AI	Storage tank and pump I
	AJ	Storage tank and pump J (3)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump (4)
	BB	Storage tank with pump B + stand-by pump (4)
	BC	Storage tank with pump C + stand-by pump (4)
	BD	Storage tank with pump D + stand-by pump (4)
	BE	Storage tank with pump E + stand-by pump (4)
	BF	Storage tank with pump F + stand-by pump (4)
	BG	Storage tank with pump G + stand-by pump (4)
	BH	Storage tank with pump H + stand-by pump (4)
	BI	Storage tank with pump I + stand-by pump (4)
	BJ	Storage tank with pump J + stand-by pump (5)

(1) Electronic thermostatic as standard from size 1805÷2406.
(2) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(3) For all configurations including pump J please contact the factory.
(4) None of the hydronic kits with twin pump (from DA to DJ and from BA to BJ) are compatible for the following sizes and versions with desuperheater D: 1805-2006 version °.
(5) For all combinations with pump J, please contact our head office. None of the hydronic kits with twin pump (from DA to DJ and from BA to BJ) are compatible for the following sizes and versions with desuperheater D: 1805-2006 version °.

PERFORMANCE SPECIFICATIONS

NRB H°

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	196,4	218,0	251,8	279,2	314,2	353,8	389,0	456,7	501,9	568,7	616,1
Input power	kW	74,1	86,1	91,7	107,9	119,5	141,6	155,6	172,6	193,2	211,2	231,1
Cooling total input current	A	131,0	150,0	163,0	189,0	207,0	242,0	263,0	296,0	331,0	365,0	398,0
EER	W/W	2,65	2,53	2,74	2,59	2,63	2,50	2,50	2,65	2,60	2,69	2,67
Water flow rate system side	l/h	33794	37515	43314	48020	54046	60853	66910	78531	86311	97783	105939
Pressure drop system side	kPa	34	24	32	26	33	31	37	32	38	37	42
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	215,0	237,4	275,0	306,0	343,9	366,2	412,6	478,4	527,7	592,0	643,2
Input power	kW	70,2	77,7	89,6	99,8	112,3	121,7	137,0	157,3	174,3	193,9	210,7
Heating total input current	A	125,0	138,0	158,0	175,0	195,0	212,0	236,0	274,0	304,0	340,0	369,0
COP	W/W	3,06	3,06	3,07	3,07	3,06	3,01	3,01	3,04	3,03	3,05	3,05
Water flow rate system side	l/h	37311	41207	47745	53116	59705	63585	71640	83071	91620	102803	111681
Pressure drop system side	kPa	42	28	38	32	40	34	42	36	42	40	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	197,9	227,9	247,7	275,2	301,1	359,1	392,2	453,8	495,0	552,5	592,9
Input power	kW	75,3	78,6	89,8	106,2	123,2	133,0	153,4	169,0	193,9	208,9	234,1
Cooling total input current	A	126,0	133,0	150,0	176,0	203,0	220,0	252,0	280,0	321,0	347,0	390,0
EER	W/W	2,63	2,90	2,76	2,59	2,44	2,70	2,56	2,69	2,55	2,64	2,53
Water flow rate system side	l/h	34040	39194	42596	47339	51779	61758	67431	78030	85114	95003	101921
Pressure drop system side	kPa	14	18	15	19	14	20	18	23	23	29	17
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	209,8	250,3	274,3	304,8	334,3	394,3	431,0	497,4	543,0	609,3	654,3
Input power	kW	67,1	79,5	87,1	98,9	108,2	126,2	136,7	158,3	173,1	194,8	208,8
Heating total input current	A	119,0	139,0	152,0	171,0	187,0	216,0	234,0	272,0	299,0	336,0	363,0
COP	W/W	3,13	3,15	3,15	3,08	3,09	3,12	3,15	3,14	3,14	3,13	3,13
Water flow rate system side	l/h	36429	43447	47619	52924	58032	68469	74854	86379	94306	105817	113644
Pressure drop system side	kPa	15	22	19	23	17	24	21	28	28	35	21

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	206,2	243,8	266,9	297,0	329,2	385,5	425,3	488,4	538,3	601,4	651,3
Input power	kW	71,8	78,2	88,1	102,2	117,2	129,2	147,2	163,7	184,8	201,3	222,3
Cooling total input current	A	127,0	141,0	157,0	179,0	203,0	225,0	254,0	285,0	321,0	352,0	389,0
EER	W/W	2,87	3,12	3,03	2,91	2,81	2,98	2,89	2,98	2,91	2,99	2,93
Water flow rate system side	l/h	35459	41942	45909	51076	56619	66291	73125	83982	92547	103407	111966
Pressure drop system side	kPa	15	21	18	22	17	23	21	27	27	34	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	214,3	254,4	279,0	310,5	341,2	400,9	438,9	506,0	553,2	620,0	666,5
Input power	kW	66,6	79,3	86,7	97,1	106,2	124,8	137,1	157,5	171,8	193,5	207,0
Heating total input current	A	120,0	142,0	155,0	172,0	187,0	219,0	240,0	277,0	303,0	342,0	368,0
COP	W/W	3,22	3,21	3,22	3,20	3,21	3,21	3,20	3,21	3,22	3,20	3,22
Water flow rate system side	l/h	37204	44148	48436	53909	59226	69618	76226	87877	96076	107669	115772
Pressure drop system side	kPa	16	23	20	24	18	25	22	29	29	36	22

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	209,6	241,7	264,7	294,5	326,7	377,8	432,4	489,4	540,5	597,8	647,7
Input power	kW	67,3	77,4	85,0	98,1	112,4	125,3	139,1	157,0	177,4	192,3	215,2
Cooling total input current	A	115,0	132,0	144,0	164,0	187,0	208,0	230,0	261,0	296,0	322,0	362,0
EER	W/W	3,12	3,12	3,11	3,00	2,91	3,02	3,11	3,12	3,05	3,11	3,01
Water flow rate system side	l/h	36053	41586	45538	50642	56185	64960	74341	84155	92932	102793	111352
Pressure drop system side	kPa	15	20	18	22	16	22	21	27	27	33	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	223,4	258,1	283,7	316,7	349,3	403,2	458,7	520,7	571,9	634,1	683,9
Input power	kW	69,3	80,5	87,9	98,5	109,0	126,1	143,1	162,7	177,1	198,2	211,7
Heating total input current	A	122,0	140,0	153,0	170,0	188,0	216,0	244,0	278,0	305,0	341,0	367,0
COP	W/W	3,22	3,21	3,23	3,22	3,20	3,20	3,21	3,20	3,23	3,20	3,23
Water flow rate system side	l/h	38791	44787	49248	54989	60660	70010	79655	90422	99327	110122	118791
Pressure drop system side	kPa	17	23	20	25	19	25	24	31	31	38	23

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
	°	A	168,6	185,0	209,8	239,2	268,5	297,5	326,5	379,8	424,6	462,1	491,1
Maximum current (FLA)	A,L	A	168,6	193,5	209,8	239,2	268,5	306,0	335,0	388,3	433,1	470,6	499,6
	E	A	177,1	202,0	218,3	247,7	277,0	314,5	352,0	405,3	450,1	487,6	516,6
	°	A	357,2	412,4	437,2	489,9	519,2	631,7	660,7	714,0	758,8	796,3	825,3
Peak current (LRA)	A,L	A	357,2	420,9	437,2	489,9	519,2	640,2	669,2	722,5	767,3	804,8	833,8
	E	A	365,7	429,4	445,7	498,4	527,7	648,7	686,2	739,5	784,3	821,8	850,8

ENERGY INDICES (REG. 2016/2281 EU)

NRB H°

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	203	224	260	289	325	346	296	343	379	425	462
SCOP	W/W	3,65	3,65	3,65	3,68	3,65	3,60	3,73	3,73	3,80	3,73	3,80
ηsh	%	143,00	143,00	143,00	144,00	143,00	141,00	146,00	143,00	149,00	146,00	149,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,79	3,66	3,88	3,81	3,91	3,80	3,89	3,92	3,80	- (3)	- (3)
Seasonal efficiency	%	148,40	143,50	152,20	149,50	153,20	149,10	152,70	153,80	149,00	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	- (3)	- (3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	- (3)	- (3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,67	4,76
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	183,90	187,30
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,88	5,02
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	192,30	197,70
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54

(1) Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	197	235	258	286	314	370	306	353	385	433	464
SCOP	W/W	3,73	3,75	3,75	3,68	3,68	3,73	3,93	3,83	3,95	3,83	3,93
ηsh	%	146,00	147,00	147,00	144,00	144,00	146,00	154,00	150,00	155,00	150,00	154,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,83	4,01	3,92	3,90	3,82	4,05	3,99	4,04	3,87	- (3)	- (3)
Seasonal efficiency	%	150,30	157,20	153,90	149,60	159,00	156,40	156,60	158,60	151,80	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	- (3)	- (3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	- (3)	- (3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,72	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,70	183,60
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,08	5,11
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	200,30	201,20
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51

(1) Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	196	233	255	284	312	367	304	351	384	430	462
SCOP	W/W	3,03	3,08	3,03	3,08	3,03	3,10	3,13	3,08	3,30	3,08	3,15
ηsh	%	118,00	120,00	118,00	120,00	118,00	121,00	122,00	120,00	129,00	120,00	123,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,96	4,13	4,09	4,09	4,07	4,23	4,22	4,22	4,10	- (3)	- (3)
Seasonal efficiency	%	155,40	162,10	160,40	160,60	159,70	166,10	165,60	165,80	161,0	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	180,3%	179,6%
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,96	5,01
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	195,30	197,40
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	180,30	179,60
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52

(1) Efficiencies for average temperature applications (55 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	204	236	259	290	320	369	318	361	397	440	474
SCOP	W/W	3,05	3,08	3,05	3,10	3,03	3,08	3,13	3,05	3,30	3,08	3,15
ηsh	%	119,00	120,00	119,00	121,00	118,00	120,00	122,00	119,00	129,00	120,00	123,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	4,16	4,15	4,18	4,19	4,16	4,27	4,39	4,36	4,22	- (3)	- (3)
Seasonal efficiency	%	163,40	163,00	164,10	164,70	163,40	167,90	172,70	171,40	165,80	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,4%	183,7%
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,17	5,20
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	203,60	204,90
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54

(1) Efficiencies for average temperature applications (55 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

FANS

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fans: °													
Fan													
Type	°,A,E,L	type	Axial										
Fan motor	°,A	type	Asynchronous										
	E,L	type	Asynchronous with phase cut										
Number	°	no.	4	4	6	6	6	6	6	8	8	10	10
	A,L	no.	4	6	6	6	6	8	8	10	10	12	12
	E	no.	6	8	8	8	8	10	12	14	14	16	16
Air flow rate	°	m^3/h	80000	80000	120000	120000	120000	120000	120000	160000	160000	200000	200000
	A	m^3/h	80000	120000	120000	120000	120000	160000	160000	200000	200000	240000	240000
	E	m^3/h	90000	120000	120000	120000	120000	150000	180000	210000	210000	240000	240000
	L	m^3/h	60000	90000	90000	90000	90000	120000	120000	150000	150000	180000	180000

GENERAL TECHNICAL DATA

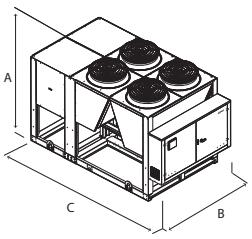
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	°,A,E,L	type	Scroll										
Compressor regulation	°,A,E,L	Type	On-Off										
Number	°,A,E,L	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L	type	R410A										
Refrigerant charge (1)	°	kg	44,0	44,0	54,0	62,0	62,0	60,0	60,0	81,0	82,0	100,0	95,0
	A	kg	44,0	60,0	64,0	62,0	66,0	81,0	78,0	99,0	102,0	117,0	119,0
	E	kg	58,0	76,5	78,0	76,0	78,0	93,0	112,0	136,0	143,0	152,0	152,0
	L	kg	44,0	60,0	64,0	62,0	66,0	78,0	78,0	104,0	102,0	117,0	117,0
System side heat exchanger													
Type	°,A,E,L	type	Brazed plate										
Hydraulic connections													
Connections (in/out)	°,A,E,L	Type	Grooved joints										
Hydraulic connections without hydronic kit													
Sizes (in/out)	°,A,E,L	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″
Hydraulic connections with hydronic kit													
Sizes (in/out)	°,A,E,L	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″
Sound data calculated in cooling mode (2)													
Sound power level	°	dB(A)	89,5	89,5	91,6	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2
	A	dB(A)	89,5	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2	95,1	95,1
	E	dB(A)	84,6	86,1	86,1	86,1	86,1	87,2	88,2	89,4	89,9	91,1	91,6
	L	dB(A)	82,6	84,6	84,6	84,6	84,6	86,1	86,1	87,7	88,2	89,6	90,1
Sound pressure level (10 m)	°	dB(A)	57,4	57,4	59,3	59,3	59,3	59,3	59,3	60,7	60,7	61,7	61,7
	A	dB(A)	57,4	59,3	59,3	59,3	59,3	60,7	60,7	61,6	61,6	62,5	62,5
	E	dB(A)	52,4	53,7	53,7	53,7	53,7	54,7	55,5	56,7	57,2	58,2	58,7
	L	dB(A)	50,5	52,4	52,4	52,4	52,4	53,8	53,8	55,2	55,7	57,0	57,5

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

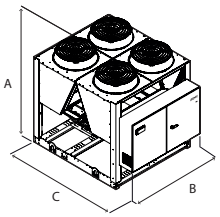
In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

DIMENSIONS

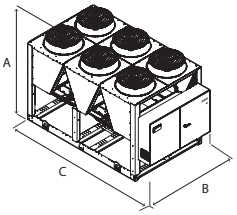
NRB 0800 H°/HL/HA (1)
NRB 0900 H° (1)



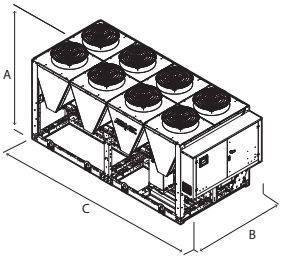
NRB 0800 H°/HL/HA
NRB 0900 H°



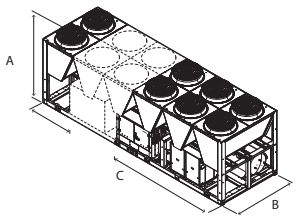
NRB 0800 HE
NRB 0900-1200 HL/HA
NRB 1000-1600 H°



NRB 1805-2406 H°
NRB 1805-2006 HL/HA



NRB 1400-1600 HL/HA
NRB 2206-2406 HL-HA
NRB 0900-2406 HE



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes:
NRB 0800H°, 0900H°
NRB 0800 HL/HA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights without hydronic kit													
A	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	2780	2780	3970	3970	3970	3970	3970	5160	5160	6350	6350
	A,L	mm	2780	3970	3970	3970	3970	4760	4760	6350	6350	7140	7140
	E	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520

The units 0800-0900 H°, 0800 HL/HA with the optional "storage tank" are 3970 mm long.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Weights													
Empty weight	°	kg	2520	2580	3160	3210	3250	3310	3340	4200	4370	4990	5030
	A,L	kg	2550	3130	3200	3240	3320	3970	4040	4780	4990	5490	5730
	E	kg	3080	3770	3840	3870	3950	4510	5020	5860	6080	6610	6800

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRB 0800-2406 W

Reversible air/water heat pump with shell and tube heat exchanger

Cooling capacity 196,4 ÷ 647,7 kW – Heating capacity 209,8 ÷ 683,9 kW

- **Shell and tube heat exchanger**
- **High efficiency also at partial loads**
- **Night mode**
- **HP floating: ESEER +7% with inverter fans**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
They are outdoor units with axial fan scroll compressors and Shell and tube exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced

FEATURES

Operating field

Working at full load up to -10 °C outside air temperature in winter, and up to 50 °C in summer. Hot water production up to 55 °C.
(for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.
It is standard in all sizes from 1805 to 2406.

Option integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** available for all models with inverter fans or with DCPX. Together with continuous fan modulation, it optimises unit operation in any working point, enhancing energy efficiency with partial loads. **ESEER up to +7% with inverter fans.**
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
BRC1: Condensate drip tray. Consider 1 for each V-block.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	°,A,E,L	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
°	AVX1001	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1004	AVX1123	AVX1123	AVX1124	AVX1124
A, L	AVX1001	AVX1004	AVX1004	AVX1004	AVX1004	AVX1123	AVX1123	AVX1124	AVX1124	AVX1115	AVX1115
E	AVX1004	AVX1123	AVX1123	AVX1123	AVX1123	AVX1124	AVX1119	AVX1117	AVX1117	AVX1116	AVX1116
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
°	-	-	AVX1004	AVX1004	AVX1004	-	-	AVX1123	AVX1123	AVX1124	AVX1124
A, L	-	AVX1004	-	-	-	AVX1123	AVX1123	AVX1124	AVX1124	AVX1115	AVX1115
E	AVX1004	AVX1123	AVX1123	AVX1123	AVX1123	AVX1124	AVX1119	AVX1117	AVX1117	AVX1116	AVX1116

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
°, A, E, L	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°, A, E, L	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
°	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
A, L	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1401
E	RIFNRB0800	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°	RIFNRB1600	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2406
A, L	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2216	RIFNRB2416
E	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
°	GP2VN	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5VN	GP5VN
A	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP4VN	GP4VN	GP5VN	GP4VN	GP6V	GP6V
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP4VN	GP6V	GP7V	GP7V	GP8V	GP8V
L	GP2VN	GP3VN	GP3VN	GP3VN	GP3VN	GP5VN	GP4VN	GP5VN	GP5VN	GP6V	GP6V
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
°	-	-	GP3VN	GP3VN	GP3VN	-	-	GP4VN	GP4VN	GP5VN	GP5VN
A	-	GP3VN	-	-	-	GP4VN	GP4VN	GP5VN	GP4VN	GP6V	GP6V
E	GP3VN	GP4VN	GP4VN	GP4VN	GP4VN	GP4VN	GP6V	GP7V	GP7V	GP8V	GP8V
L	-	GP3VN	-	-	-	GP5VN	GP4VN	GP5VN	GP5VN	GP6V	GP6V

A grey background indicates the accessory must be assembled in the factory

Condensate drip

Ver	0800	0900	1000	1100	1200	1400
°	BRC1x2 (1)	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)
A, L	BRC1x2 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x3 (1)	BRC1x4 (1)
E	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
°	BRC1x3 (1)	BRC1x4 (1)	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)
A, L	BRC1x4 (1)	BRC1x5 (1)	BRC1x5 (1)	BRC1x6 (1)	BRC1x6 (1)
E	BRC1x6 (1)	BRC1x7 (1)	BRC1x7 (1)	BRC1x8 (1)	BRC1x8 (1)

(1) Condensate drip tray. Consider 1 for each V-block.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		**Operating field**
	X	Electronic thermostatic expansion valve
	°	Standard mechanic thermostatic valve
9		**Model**
	W	Heat pump with shell and tube heat exchanger
10		**Heat recovery**
	D	With desuperheater (1)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**

Field		Description
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (2)
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (2)

(1) The desuperheater can only be used with cold running.
(2) For all configurations including pump J please contact the factory.

Compatibility of models with hydronic units available with a configurator

Version		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406	2600	2800	3000	3200	3400	3600
Standard	H°	-	-	•	•	•	-	-	•	•	•	•	•	•	•	•	•	•
Standard silenced	HL	-	•	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•
High efficiency	HA	-	•	-	-	-	•	•	•	•	•	•	•	•	•	•	•	•
Silenced high efficiency	HE	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

PERFORMANCE SPECIFICATIONS

NRB H°

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	196,4	218,0	251,8	279,2	314,2	353,8	389,0	456,7	501,9	568,7	616,1
Input power	kW	74,1	86,1	91,7	107,9	119,5	141,6	155,6	172,6	193,2	211,2	231,1
Cooling total input current	A	131,0	150,0	163,0	189,0	207,0	242,0	263,0	296,0	331,0	365,0	398,0
EER	W/W	2,65	2,53	2,74	2,59	2,63	2,50	2,50	2,65	2,60	2,69	2,67
Water flow rate system side	l/h	33794	37515	43314	48020	54046	60853	66910	78531	86311	97783	105939
Pressure drop system side	kPa	34	24	32	26	33	31	37	32	38	37	42
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	215,0	237,4	275,0	306,0	343,9	366,2	412,6	478,4	527,7	592,0	643,2
Input power	kW	70,2	77,7	89,6	99,8	112,3	121,7	137,0	157,3	174,3	193,9	210,7
Heating total input current	A	125,0	138,0	158,0	175,0	195,0	212,0	236,0	274,0	304,0	340,0	369,0
COP	W/W	3,06	3,06	3,07	3,07	3,06	3,01	3,01	3,04	3,03	3,05	3,05
Water flow rate system side	l/h	37311	41207	47745	53116	59705	63585	71640	83071	91620	102803	111681
Pressure drop system side	kPa	42	28	38	32	40	34	42	36	42	40	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	197,9	227,9	247,7	275,2	301,1	359,1	392,2	453,8	495,0	552,5	592,9
Input power	kW	75,3	78,6	89,8	106,2	123,2	133,0	153,4	169,0	193,9	208,9	234,1
Cooling total input current	A	126,0	133,0	150,0	176,0	203,0	220,0	252,0	280,0	321,0	347,0	390,0
EER	W/W	2,63	2,90	2,76	2,59	2,44	2,70	2,56	2,69	2,55	2,64	2,53
Water flow rate system side	l/h	34040	39194	42596	47339	51779	61758	67431	78030	85114	95003	101921
Pressure drop system side	kPa	14	18	15	19	14	20	18	23	23	29	17
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	209,8	250,3	274,3	304,8	334,3	394,3	431,0	497,4	543,0	609,3	654,3
Input power	kW	67,1	79,5	87,1	98,9	108,2	126,2	136,7	158,3	173,1	194,8	208,8
Heating total input current	A	119,0	139,0	152,0	171,0	187,0	216,0	234,0	272,0	299,0	336,0	363,0
COP	W/W	3,13	3,15	3,15	3,08	3,09	3,12	3,15	3,14	3,14	3,13	3,13
Water flow rate system side	l/h	36429	43447	47619	52924	58032	68469	74854	86379	94306	105817	113644
Pressure drop system side	kPa	15	22	19	23	17	24	21	28	28	35	21

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	206,2	243,8	266,9	297,0	329,2	385,5	425,3	488,4	538,3	601,4	651,3
Input power	kW	71,8	78,2	88,1	102,2	117,2	129,2	147,2	163,7	184,8	201,3	222,3
Cooling total input current	A	127,0	141,0	157,0	179,0	203,0	225,0	254,0	285,0	321,0	352,0	389,0
EER	W/W	2,87	3,12	3,03	2,91	2,81	2,98	2,89	2,98	2,91	2,99	2,93
Water flow rate system side	l/h	35459	41942	45909	51076	56619	66291	73125	83982	92547	103407	111966
Pressure drop system side	kPa	15	21	18	22	17	23	21	27	27	34	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	214,3	254,4	279,0	310,5	341,2	400,9	438,9	506,0	553,2	620,0	666,5
Input power	kW	66,6	79,3	86,7	97,1	106,2	124,8	137,1	157,5	171,8	193,5	207,0
Heating total input current	A	120,0	142,0	155,0	172,0	187,0	219,0	240,0	277,0	303,0	342,0	368,0
COP	W/W	3,22	3,21	3,22	3,20	3,21	3,21	3,20	3,21	3,22	3,20	3,22
Water flow rate system side	l/h	37204	44148	48436	53909	59226	69618	76226	87877	96076	107669	115772
Pressure drop system side	kPa	16	23	20	24	18	25	22	29	29	36	22

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	kW	209,6	241,7	264,7	294,5	326,7	377,8	432,4	489,4	540,5	597,8	647,7
Input power	kW	67,3	77,4	85,0	98,1	112,4	125,3	139,1	157,0	177,4	192,3	215,2
Cooling total input current	A	115,0	132,0	144,0	164,0	187,0	208,0	230,0	261,0	296,0	322,0	362,0
EER	W/W	3,12	3,12	3,11	3,00	2,91	3,02	3,11	3,12	3,05	3,11	3,01
Water flow rate system side	l/h	36053	41586	45538	50642	56185	64960	74341	84155	92932	102793	111352
Pressure drop system side	kPa	15	20	18	22	16	22	21	27	27	33	21
Heating performance 40 °C / 45 °C (2)												
Heating capacity	kW	223,4	258,1	283,7	316,7	349,3	403,2	458,7	520,7	571,9	634,1	683,9
Input power	kW	69,3	80,5	87,9	98,5	109,0	126,1	143,1	162,7	177,1	198,2	211,7
Heating total input current	A	122,0	140,0	153,0	170,0	188,0	216,0	244,0	278,0	305,0	341,0	367,0
COP	W/W	3,22	3,21	3,23	3,22	3,20	3,20	3,21	3,20	3,23	3,20	3,23
Water flow rate system side	l/h	38791	44787	49248	54989	60660	70010	79655	90422	99327	110122	118791
Pressure drop system side	kPa	17	23	20	25	19	25	24	31	31	38	23

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
Maximum current (FLA)	°	A	168,6	185,0	209,8	239,2	268,5	297,5	326,5	423,4	487,6	516,6	570,9
	A,L	A	168,6	193,5	209,8	239,2	268,5	306,0	335,0	468,1	512,9	561,3	590,3
	E	A	177,1	202,0	218,3	247,7	277,0	314,5	352,0	487,5	532,3	580,7	609,7
Peak current (LRA)	°	A	357,2	412,4	437,2	489,9	519,2	631,7	660,7	757,6	821,8	850,8	905,1
	A,L	A	357,2	420,9	437,2	489,9	519,2	640,2	669,2	802,3	847,1	895,5	924,5
	E	A	365,7	429,4	445,7	498,4	527,7	648,7	686,2	821,7	866,5	914,9	943,9

ENERGY INDICES (REG. 2016/2281 EU)

NRB H°

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	203	224	260	289	325	346	296	343	379	425	462
SCOP	W/W	3,65	3,65	3,65	3,68	3,65	3,60	3,73	3,73	3,80	3,73	3,80
ηsh	%	143,00	143,00	143,00	144,00	143,00	141,00	146,00	143,00	149,00	146,00	149,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,79	3,66	3,88	3,81	3,91	3,80	3,89	3,92	3,80	- (3)	- (3)
Seasonal efficiency	%	148,40	143,50	152,20	149,50	153,20	149,10	152,70	153,80	149,00	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	- (3)	- (3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	- (3)	- (3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,67	4,76
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	183,90	187,30
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,88	5,02
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,53	5,54

(1) Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

NRB HL

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	197	235	258	286	314	370	306	353	385	433	464
SCOP	W/W	3,73	3,75	3,75	3,68	3,68	3,73	3,93	3,83	3,95	3,83	3,93
ηsh	%	146,00	147,00	147,00	144,00	144,00	146,00	154,00	150,00	155,00	150,00	154,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,83	4,01	3,92	3,90	3,82	4,05	3,99	4,04	3,87	- (3)	- (3)
Seasonal efficiency	%	150,30	157,20	153,90	149,60	159,00	156,40	156,60	158,60	151,80	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	- (3)	- (3)
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	- (3)	- (3)
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,72	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,70	183,60
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,08	5,11
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,51	5,51

(1) Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

NRB HA

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	196	233	255	284	312	367	304	351	384	430	462
SCOP	W/W	3,03	3,08	3,03	3,08	3,03	3,10	3,13	3,08	3,30	3,08	3,15
ηsh	%	118,00	120,00	118,00	120,00	118,00	121,00	122,00	120,00	129,00	120,00	123,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	3,96	4,13	4,09	4,09	4,07	4,23	4,22	4,22	4,10	- (3)	- (3)
Seasonal efficiency	%	155,40	162,10	160,40	160,60	159,70	166,10	165,60	165,80	161,0	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	180,3%	179,6%
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,96	5,01
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	195,30	197,40
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,58	4,57
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,52

(1) Efficiencies for average temperature applications (55 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

NRB HE

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)												
Pdesignh	kW	204	236	259	290	320	369	318	361	397	440	474
SCOP	W/W	3,05	3,08	3,05	3,10	3,03	3,08	3,13	3,05	3,30	3,08	3,15
ηsh	%	119,00	120,00	119,00	121,00	118,00	120,00	122,00	119,00	129,00	120,00	123,00
SEER - 12/7 (EN14825:2018) with standard fans (2)												
SEER	W/W	4,16	4,15	4,18	4,19	4,16	4,27	4,39	4,36	4,22	- (3)	- (3)
Seasonal efficiency	%	163,40	163,00	164,10	164,70	163,40	167,90	172,70	171,40	165,80	- (3)	- (3)
SEER - (EN14825:2018) 12/7 with inverter fans (2)												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	185,4%	183,7%
SEER - 23/18 (EN14825: 2018) with standard fans (4)												
SEER	W/W	-	-	-	-	-	-	-	-	-	5,17	5,20
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	203,60	204,90
SEER - 23/18 (EN14825: 2018) with inverter fans												
SEER	W/W	-	-	-	-	-	-	-	-	-	4,71	4,67
Seasonal efficiency	%	-	-	-	-	-	-	-	-	-	-	-
SEPR - (EN14825: 2018) High temperature with standard fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54
SEPR - (EN14825: 2018) High temperature with inverter fans (4)												
SEPR	W/W	-	-	-	-	-	-	-	-	-	5,52	5,54

(1) Efficiencies for average temperature applications (55 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(3) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(4) Calculation performed with FIXED water flow rate.

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	°,A,E,L	type						Scroll					
Compressor regulation	°,A,E,L	Type						On-Off					
Number	°,A,E,L	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	°,A,E,L	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,L	type						R410A					
	E	type											
Refrigerant charge (1)	°	kg	41,0	42,0	55,0	56,0	56,0	58,0	58,0	84,0	84,0	100,0	100,0
	A,L	kg	43,0	56,0	58,0	58,0	60,0	84,0	87,0	100,0	103,0	116,0	125,0
	E	kg	56,0	80,0	82,0	82,0	84,0	97,0	113,0	137,0	140,0	153,0	162,0
System side heat exchanger													
Type	°,A,E,L	type						Shell and tube					
Hydraulic connections													
Connections (in/out)	°,A,E,L	Type						Grooved joints					
Hydraulic connections without hydronic kit													
Sizes (in/out)	°	Ø	5″	5″	5″	5″	5″	5″	5″	6″	6″	6″	6″
	A,E,L	Ø	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″	6″
Hydraulic connections with hydronic kit													
Sizes (in/out)	°	Ø	-	-	3″	3″	3″	-	-	4″	4″	4″	4″
	A,L	Ø	-	3″	-	-	-	3″	4″	4″	4″	4″	4″
	E	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

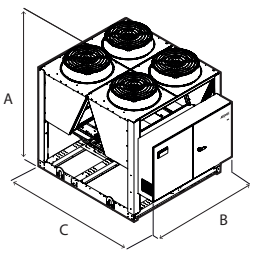
Water filter not supplied. Installation is mandatory or the guarantee will void.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Fan													
Type	°,A,E,L	type	Axial										
Fan motor	°,A	type	Asynchronous										
	E,L	type	Asynchronous with phase cut										
Number	°	no.	4	4	6	6	6	6	6	8	8	10	10
	A,L	no.	4	6	6	6	6	8	8	10	10	12	12
	E	no.	6	8	8	8	8	10	12	14	14	16	16
Air flow rate	°	m^3/h	80000	80000	120000	120000	120000	120000	120000	160000	160000	200000	200000
	A	m^3/h	80000	120000	120000	120000	120000	160000	160000	200000	200000	240000	240000
	E	m^3/h	90000	120000	120000	120000	120000	150000	180000	210000	210000	240000	240000
	L	m^3/h	60000	90000	90000	90000	90000	120000	120000	150000	150000	180000	180000
Sound data calculated in cooling mode (1)													
Sound power level	°	dB(A)	89,5	89,5	91,6	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2
	A	dB(A)	89,5	91,6	91,6	91,6	91,6	93,1	93,1	94,2	94,2	95,1	95,1
	E	dB(A)	84,6	86,1	86,1	86,1	86,1	87,2	88,2	89,4	89,9	91,1	91,6
	L	dB(A)	82,6	84,6	84,6	84,6	84,6	86,1	86,1	87,7	88,2	89,6	90,1
Sound pressure level (10 m)	°	dB(A)	57,4	57,4	59,3	59,3	59,3	59,3	59,3	60,7	60,7	61,7	61,7
	A	dB(A)	57,4	59,3	59,3	59,3	59,3	60,7	60,7	61,6	61,6	62,5	62,5
	E	dB(A)	52,4	53,7	53,7	53,7	53,7	54,7	55,5	56,7	57,2	58,2	58,7
	L	dB(A)	50,5	52,4	52,4	52,4	52,4	53,8	53,8	55,2	55,7	57,0	57,5

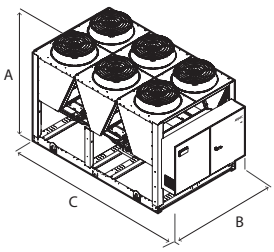
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

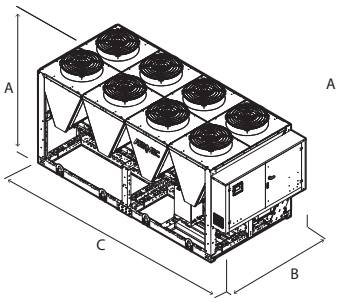
NRB 0800 - 0900 °
NRB 0800 L/A



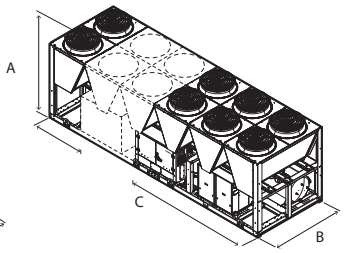
NRB 1000 - 1600 °
NRB 0900 - 1200 L/A
NRB 0800 E



NRB 1805 - 2006 °
NRB 1400 - 1600 L/A
NRB 0900 - 1200 E



NRB 2206 - 2406 °
NRB 1805 - 2406 L/A
NRB 1400 - 2406 E



Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights without hydronic kit													
A	°,A,E,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	2780	2780	3970	3970	3970	3970	3970	5160	5160	6350	6350
	A,L	mm	2780	3970	3970	3970	3970	4760	4760	6350	6350	7140	7140
	E	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520
Dimensions and weights with pump/s													
A	°	mm	-	-	2450	2450	2450	-	-	2450	2450	2450	2450
	A,L	mm	-	2450	-	-	-	2450	2450	2450	2450	2450	2450
	E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°	mm	-	-	2200	2200	2200	-	-	2200	2200	2200	2200
	A,L	mm	-	2200	-	-	-	2200	2200	2200	2200	2200	2200
	E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	-	-	3970	3970	3970	-	-	5160	5160	6350	6350
	A,L	mm	-	3970	-	-	-	4760	4760	6350	6350	7140	7140
	E	mm	3970	4760	4760	4760	4760	5950	7140	8330	8330	9520	9520

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Weights													
Empty weight	°	kg	2670	2730	3310	3360	3400	3460	3490	4350	4520	5190	5230
	A,L	kg	2700	3280	3350	3390	3470	4120	4240	4980	5190	5690	6030
	E	kg	3230	3920	3990	4020	4100	4660	5220	6060	6280	6810	7100

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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CL 025-200

Air-water chiller

Cooling capacity 5,8 ÷ 41 kW

- **Standard version**
- **Version with Integrated hydronic kit system side**
- **Fan Plug-fan**



DESCRIPTION

Chillers for indoor installation for chilled water production with scroll compressors, plugfan fans, external copper coils with aluminum louvers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A With storage tank and pump
P With pump

FEATURES

Operating field

Operation at full load up to 46°C external air temperature. Unit can produce chilled water up to -10°C.

EC fan plug-fan

The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction.
In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.

Air supply

Horizontal or vertical, adjustable during installation for all sizes.
Directional air discharge hood:
— plastic for sizes 050 to 090
— galvanised steel for the other sizes

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to save money and to facilitate installation.

Hot water production

In the configuration with desuperheater, it is also possible to produce free-hot water.

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.
The regulation using an outside air temperature sensor allows a dynamic control of the water temperature produced by increasing the energy efficiency of the system.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

VT: Anti-vibration supports.

CLPA: Galvanised steel plenum to be installed on the condenser coil, facilitates duct installations.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

KR: Anti-freeze electric heater for the plate heat exchanger.

GPCL: Protection grille for the source side exchange coil.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	025	030	050	070	090	100	150	200
AERBAC-MODU	°,A,P	•	•	•	•	•	•	•	•
AERLINK	°,A,P	•	•	•	•	•	•	•	•
AERSET	°,A,P	•	•	•	•	•	•	•	•
MODU-485BL	°,A,P	•	•	•	•	•	•	•	•
MULTICONTROL	°,A,P	•	•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	•
SGD	°,A,P	•	•	•	•	•	•	•	•
SPLW (1)	°,A,P	•	•	•	•	•	•	•	•

(1) Probe required for MULTICONTROL to manage the secondary circuit system.

Remote panel

Model	Ver	025	030	040	050	070	080	090	100	150	200
PR4	°,A,P	•	•	•	•	•	•	•	•	•	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

Antivibration

Ver	025	030	050	070	090	100	150	200
°, P	VT9	VT9	VT9	VT9	VT9	VT15	VT15	VT15
A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15	VT15	VT15

Galvanised steel plenum

Ver	025	030	050	070	090	100	150	200
°, A, P	CLPA1 (1)	CLPA1 (1)	CLPA2 (2)	CLPA2 (2)	CLPA2 (2)	CLPA3	CLPA3	CLPA3

(1) Not compatible with the GPCL1 accessory
(2) Not compatible with the GPCL2 accessory

Device for peak current reduction

Ver	025	030	050	070	090	100	150	200
°, A, P	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Antifreeze electric heater

Ver	025	030	050	070	090	100	150	200
°, A, P	KR2	KR2	KR2	KR2	KR2	KR100	KR100	KR100

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	025	030	050	070	090	100	150	200
°, A, P	GPCL1	GPCL1	GPCL2	GPCL2	GPCL2	GPCL3	GPCL3	GPCL3

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2	**CL**
3,4,5	**Size** 025, 030, 050, 070, 090, 100, 150, 200
6	**Model**
°	Cooling only
7	**Execution**
°	Standard
8	**Version**
°	Standard
A	With storage tank and pump
P	With pump
9	**Heat recovery**
D	With desuperheater (1)
°	Without heat recovery
10	**Coils**
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Copper-aluminium
11	**Operating field**
Y	Low temperature mechanic thermostatic valve (2)
Z	Low temperature electronic thermostatic valve (3)
°	Standard mechanic thermostatic valve (4)
12	**Evaporator**
C	Motocondensing unit
°	Standard
13	**Power supply**
M	230V ~ 3 50Hz (5)
°	400V ~ 3N 50Hz with magnet circuit breakers (6)

(1) It is only available in size CL 050 ÷ 200; If the unit is also fitted with one of the low temperature valves in addition to the desuperheater, it is necessary to always guarantee a water temperature of 35°C at the inlet of the desuperheater.
(2) Water produced from 0 °C ÷ - 10 °C
(3) Water produced from 0 °C ÷ 4 °C
(4) Water produced from 4 °C ÷ 18 °C
(5) Only for CL 025 ÷ 030 sizes
(6) Only for CL 025 ÷ 200 sizes

PERFORMANCE SPECIFICATIONS

CL ° - (version °) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	050	070	090	100	150	200
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	5,8	7,1	12,7	16,3	20,2	26,3	33,0	40,6
Input power	kW	2,2	2,6	4,3	5,5	6,8	8,8	11,3	14,4
Cooling total input current - 400V	A	4,8	5,1	8,4	10,0	13,0	17,0	19,0	25,0
Cooling total input current - 230V	A	10,0	13,0	-	-	-	-	-	-
EER	W/W	2,70	2,72	2,98	3,00	2,98	2,99	2,91	2,82
Water flow rate system side	l/h	1008	1233	2189	2817	3484	4533	5695	7001
Pressure drop system side	kPa	19	26	27	29	29	45	53	72

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

CL ° - (versions A/P) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	050	070	090	100	150	200
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	5,9	7,2	12,8	16,5	20,4	26,5	33,4	41,0
Input power	kW	2,1	2,6	4,2	5,4	6,8	8,9	11,6	14,6
Cooling total input current - 400V	A	5,1	5,4	9,0	11,0	13,0	18,0	21,0	27,0
Cooling total input current - 230V	A	11,0	14,0	-	-	-	-	-	-
EER	W/W	2,76	2,78	3,02	3,04	3,02	2,97	2,87	2,81
Water flow rate system side	l/h	1008	1233	2189	2817	3484	4533	5695	7001
Useful head system side	kPa	71	62	73	66	58	83	131	122

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY DATA

Size			025	030	050	070	090	100	150	200
SEER - 12/7 (EN14825:2018) with standard fans (1)										
SEER	°	W/W	4,11	4,11	4,10	4,11	4,12	4,38	4,32	4,10
	A,P	W/W	4,22	4,22	4,17	4,21	4,22	4,21	4,13	4,12
Seasonal efficiency	°	%	161,3%	161,4%	161,1%	161,3%	161,8%	172,0%	169,7%	161,0%
	A,P	%	165,7%	165,7%	163,8%	165,2%	165,6%	165,5%	162,3%	161,8%
SEER - 23/18 (EN14825: 2018) with standard fans (2)										
SEER	°	W/W	4,72	4,47	4,50	4,44	4,52	5,13	4,99	4,51
	A,P	W/W	4,86	4,62	4,64	4,58	4,72	4,90	4,65	4,36
Seasonal efficiency	°	%	185,9%	175,9%	176,8%	174,7%	177,7%	202,2%	196,6%	177,2%
	A,P	%	191,2%	181,7%	182,6%	180,0%	185,7%	193,1%	183,0%	171,5%
SEPR - (EN14825: 2018) High temperature with standard fans (2)										
SEPR	°	W/W	5,38	5,10	5,10	5,03	5,04	5,67	5,59	5,30
	A,P	W/W	5,49	5,21	5,18	5,13	5,16	5,56	5,37	5,20

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			025	030	050	070	090	100	150	200
Power supply: °										
Electric data										
Maximum current (FLA)	°	A	11,0	11,6	13,6	15,4	20,4	27,4	30,8	40,8
	A,P	A	11,4	12,0	14,4	16,1	21,1	29,3	33,8	43,8
Peak current (LRA)	°	A	44,6	40,6	77,2	77,2	105,2	90,9	92,6	125,6
	A,P	A	45,0	41,0	77,9	77,9	105,9	92,8	95,6	128,6

Size			025	030	050	070	090	100	150	200
Power supply: M										
Electric data										
Maximum current (FLA)	°	A	22,0	25,0	-	-	-	-	-	-
	A,P	A	22,6	25,6	-	-	-	-	-	-
Peak current (LRA)	°	A	67,0	88,0	-	-	-	-	-	-
	A,P	A	67,6	88,6	-	-	-	-	-	-

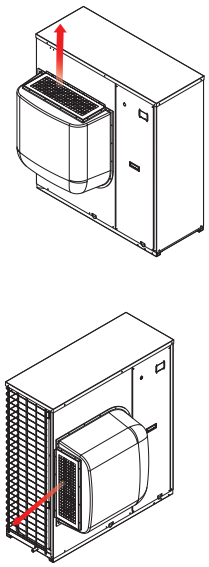
GENERAL TECHNICAL DATA

Size			025	030	050	070	090	100	150	200
Compressor										
Type	°,A,P	type	Scroll							
Compressor regulation	°,A,P	Type	On-off							
Number	°,A,P	no.	1	1	1	1	1	2	2	2
Circuits	°,A,P	no.	1	1	1	1	1	1	1	1
Refrigerant	°,A,P	type	R410A							
Refrigerant charge (1)	°,A,P	kg	1,5	2,7	4,0	4,0	4,0	5,5	7,5	7,5
System side heat exchanger										
Type	°,A,P	type	Brazed plate							
Number	°,A,P	no.	1	1	1	1	1	1	1	1
Hydraulic connections										
Connections (in/out)	°,A,P	Type	Gas - F							
Size (in)	°,A,P	Ø	1¼							
Size (out)	°,A,P	Ø	1¼							
Fan										
Type	°,A,P	type	Plug-fan							
Fan motor	°,A,P	type	Inverter							
Number	°,A,P	no.	1	1	1	1	1	2	2	2
Air flow rate	°,A,P	m^3/h	4000	4000	6500	6500	7500	10000	12000	12000
High static pressure	°,A,P	Pa	50	50	50	50	50	50	50	50
Intake plus machine body										
Sound power level	°,A,P	dB(A)	78,0	78,0	73,0	73,0	76,0	74,0	79,0	79,0
Sound pressure level in cooling mode (10 m)	°,A,P	dB(A)	46,0	46,0	41,0	41,0	44,0	42,0	47,0	47,0
Machine exhaust										
Sound power level	°,A,P	dB(A)	78,0	78,0	78,0	78,0	81,0	78,0	83,0	83,0
Sound pressure level in cooling mode (10 m)	°,A,P	dB(A)	46,0	46,0	46,0	46,0	49,0	47,0	52,0	52,0

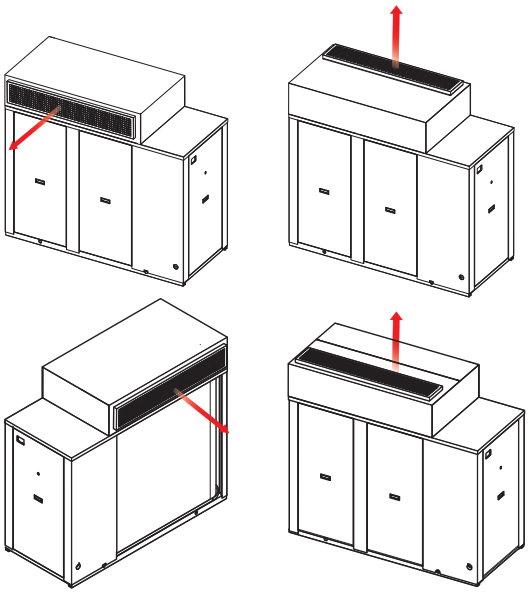
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

DISCHARGE HOOD POSSIBLE CONFIGURATIONS

CL 025 ÷ 090



CL 100 ÷ 200

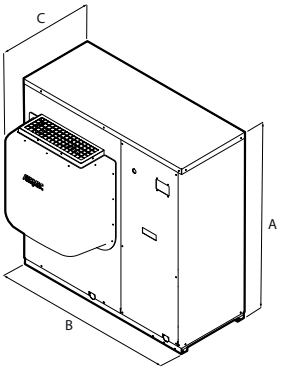


Air supply
Horizontal or vertical, adjustable during installation for all sizes.
Directional air discharge hood:

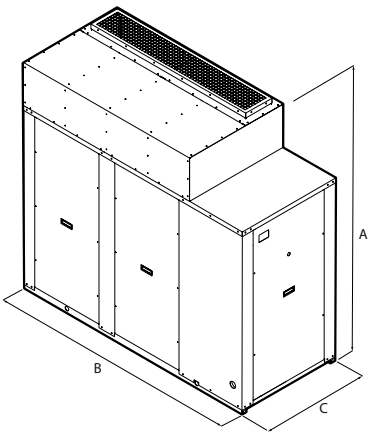
— plastic for sizes 050 to 090
— galvanised steel for the other sizes

DIMENSIONS

CL 025 ÷ 090



CL 100 ÷ 200



Size			025	030	050	070	090	100	150	200
Dimensions and weights										
A	°,A,P	mm	1028	1281	1281	1281	1281	1674	1674	1674
B	°,P	mm	1005	1006	1160	1160	1160	1897	1897	1897
	A	mm	1366	1458	1610	1610	1610	1897	1897	1897
C	°,A,P	mm	702	754	798	798	798	801	801	801
Empty weight	°	kg	127	160	208	210	212	469	471	475
	A	kg	157	201	252	260	256	532	537	542
	P	kg	133	166	217	225	221	482	487	492

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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CL 025H-200H

Reversible air/water heat pump

Cooling capacity 6,5 ÷ 50,9 kW – Heating capacity 7,7 ÷ 44,8 kW

- **Cooling / heating / high-temperature water production even for DHW production.**
- **Water produced up to 60 °C**
- **Heating operations with external temperatures down to -15 °C**
- **Fan Plug-fan**



DESCRIPTION

Reversible air/water heat pump for air conditioning systems with cold water production for cooling rooms and hot water for heating and/or domestic hot water services, suitable for connection with small or medium users.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A With storage tank and pump
P With pump

FEATURES

Operating field

Working at full load up to -15 °C outside air temperature in winter, and up to 46 °C in summer. Hot water production up to 60 °C.

EC fan plug-fan

The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction.
In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.

Air supply

Horizontal or vertical, adjustable during installation for all sizes.
Directional air discharge hood:
— plastic for sizes 050 to 090
— galvanised steel for the other sizes

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to save money and to facilitate installation.

Hot water production

Special attention has been paid to winter operation: compared with traditional heat pumps, the operating limits have been extended thanks to particular technological expedients.

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.
The regulation using an outside air temperature sensor allows a dynamic control of the water temperature produced by increasing the energy efficiency of the system.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
MULTICONTROL: Allows the simultaneous control of several units (up to 4), installed in the same hydraulic system.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SDHW: Domestic hot water sensor. To be used with a storage tank for the control of water temperature produced.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating

system during the photovoltaic production phase and release it at times when heating demand is highest.
SPLW: System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring
VT: Anti-vibration supports.
CLPA: Galvanised steel plenum to be installed on the condenser coil, facilitates duct installations.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	025	030	040	050	070	080	090	100	150	200
AERBAC-MODU	°,A,P	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,P	•	•	•	•	•	•	•	•	•	•
AERSET	°,A,P	•	•	•	•	•	•	•	•	•	•
MODU-485BL	°,A,P	•	•	•	•	•	•	•	•	•	•
MULTICONTROL	°,A,P	•	•	•	•	•	•	•	•	•	•
PR3	°,A,P	•	•	•	•	•	•	•	•	•	•
SDHW (1)	°,A,P	•	•	•	•	•	•	•	•	•	•
SGD	°,A,P	•	•	•	•	•	•	•	•	•	•
SPLW (2)	°,A,P	•	•	•	•	•	•	•	•	•	•

(1) Probe required for MULTICONTROL for managing the domestic hot water system.
(2) Probe required for MULTICONTROL to manage the secondary circuit system.

■ *MODU-485BL = Accessory mandatory for the production of domestic hot water*

Remote panel

Model	Ver	025	030	040	050	070	080	090	100	150	200
PR4	°,A,P	•	•	•	•	•	•	•	•	•	•

For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.

Antivibration

Ver	025	030	040	050	070	080	090	100	150	200
°, P	VT9	VT9	VT9	VT9	VT9	VT9	VT9	VT15	VT15	VT15
A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15A	VT15	VT15	VT15

BSKW: Electric heater kit

Ver	025	030	040	050	070	080	090	100	150	200
Power supply: M										
°, A, P	BS4KW230M, BS6KW230M	BS4KW230M, BS6KW230M	BS4KW230M, BS6KW230M	-	-	-	-	-	-	-
Power supply: °										
°, A, P	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T	BS6KW400T, BS9KW400T

Galvanised steel plenum

Ver	025	030	040	050	070	080	090	100	150	200
°, A, P	CLPA1 (1)	CLPA1 (1)	CLPA2 (2)	CLPA2 (2)	CLPA2 (2)	CLPA2 (2)	CLPA2 (2)	CLPA3	CLPA3	CLPA3

(1) Not compatible with the GPCL1 accessory
(2) Not compatible with the GPCL2 accessory

Device for peak current reduction

Ver	025	030	040	050	070	080	090	100	150	200
Power supply: °										
°, A, P	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)	DRE5 x 2 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Electric Heater for the Base

Ver	025	030	040	050	070	080	090	100	150	200
°, A, P	KRB4 (1)	KRB4 (1)	KRB5 (1)	KRB5 (1)	KRB5 (1)	KRB5 (1)	KRB5 (1)	KRB6 (1)	KRB6 (1)	KRB6 (1)

(1) Incompatible with the condensate collection basin accessory with integrated resistance.
A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	025	030	040	050	070	080	090	100	150	200
°, A, P	GPCL1	GPCL1	GPCL2	GPCL2	GPCL2	GPCL2	GPCL2	GPCL3	GPCL3	GPCL3

A grey background indicates the accessory must be assembled in the factory

■ *For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.*

FACTORY FITTED ACCESSORIES

KRB: Electric anti-freeze resistance kit for base.
GPCL: Protection grille for the source side exchange coil.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

CONFIGURATOR

Field		Description
1,2		**CL**
3,4,5		**Size** 025, 030, 040, 050, 070, 080, 090, 100, 150, 200
6		**Model**
	H	Heat pump
7		**Execution**
	°	Standard
8		**Version**
	°	Standard
	A	With storage tank and pump (1)
	P	With pump
9		**Heat recovery**
	°	Without heat recovery
10		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
11		**Operating field**
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (3)
	°	Standard mechanic thermostatic valve (4)
12		**Evaporator**
	°	Standard
13		**Power supply**
	M	230V ~ 50Hz (5)
	°	400V 3N ~ 50Hz (6)

(1) The version with integrated storage tank is not suitable for the production of domestic hot water (DHW).
(2) Water produced from 0 °C ÷ - 10 °C
(3) Water produced from 0 °C ÷ 4 °C
(4) Water produced from 4 °C ÷ 18 °C
(5) Only for CL 025 ÷ 040 sizes
(6) Only for CL 025 ÷ 200 sizes

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

CL - (H°) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	040	050	070	080	090	100	150	200
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	6,4	8,4	10,4	11,9	14,0	15,5	19,0	23,9	31,3	37,6
Input power	kW	2,6	3,1	3,8	4,2	4,8	5,6	6,8	8,2	10,9	14,4
Cooling total input current - 400V	A	5,5	6,3	6,6	7,5	8,3	9,6	13,0	14,0	21,0	26,0
Cooling total input current - 230V	A	13,0	15,0	16,0	-	-	-	-	-	-	-
EER	W/W	2,44	2,73	2,74	2,87	2,90	2,77	2,81	2,93	2,86	2,61
Water flow rate system side	l/h	1104	1441	1785	2054	2411	2676	3272	4122	5388	6477
Pressure drop system side	kPa	13	12	13	11	15	26	26	34	22	43
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	7,9	9,8	12,5	14,4	15,9	18,6	21,0	27,8	34,8	43,8
Input power	kW	2,3	2,9	3,7	4,1	4,7	5,5	6,5	8,1	10,6	14,4
Heating total input current - 400V	A	5,5	6,2	6,4	7,5	8,1	9,2	13,0	14,0	19,0	26,0
Heating total input current - 230V	A	12,0	14,0	15,0	-	-	-	-	-	-	-
COP	W/W	3,41	3,32	3,40	3,52	3,36	3,40	3,20	3,44	3,27	3,03
Water flow rate system side	l/h	1368	1693	2164	2502	2756	3214	3634	4822	6034	7581
Pressure drop system side	kPa	19	16	18	17	21	32	34	49	30	42

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

CL - (HP/HA) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	040	050	070	080	090	100	150	200
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	6,5	8,4	10,5	12,0	14,1	15,7	19,1	24,2	31,6	38,0
Input power	kW	2,6	3,0	3,7	4,2	4,8	5,6	6,7	8,3	11,3	14,7
Cooling total input current - 400V	A	5,8	6,7	7,0	8,1	8,9	10,0	14,0	15,0	23,0	28,0
Cooling total input current - 230V	A	13,0	16,0	16,0	-	-	-	-	-	-	-
EER	W/W	2,49	2,79	2,79	2,90	2,94	2,82	2,85	2,91	2,81	2,58
Water flow rate system side	l/h	1104	1441	1785	2054	2411	2676	3272	4122	5388	6477
Useful head system side	kPa	76	75	69	92	86	80	64	99	158	145
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	7,8	9,7	12,4	14,3	15,8	18,4	20,8	27,6	34,5	43,4
Input power	kW	2,3	2,9	3,6	4,1	4,7	5,4	6,5	8,2	11,0	14,8
Heating total input current - 400V	A	5,9	6,6	6,8	8,1	8,7	9,9	13,0	15,0	21,0	28,0
Heating total input current - 230V	A	12,0	15,0	16,0	-	-	-	-	-	-	-
COP	W/W	3,42	3,34	3,42	3,50	3,35	3,40	3,21	3,35	3,14	2,92
Water flow rate system side	l/h	1368	1693	2164	2502	2756	3214	3634	4822	6034	7581
Useful head system side	kPa	68	67	56	84	78	66	53	72	133	103

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

CL - (H°) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	040	050	070	080	090	100	150	200
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	8,5	11,1	13,8	15,8	18,6	20,6	25,2	31,7	41,6	49,9
Input power	kW	2,8	3,3	4,0	4,4	5,1	6,0	7,2	8,7	11,6	15,4
Cooling total input current - 400V	A	5,8	6,6	6,9	8,0	8,7	10,0	14,0	15,0	22,0	27,0
Cooling total input current - 230V	A	13,0	16,0	17,0	-	-	-	-	-	-	-
EER	W/W	3,05	3,42	3,43	3,59	3,63	3,45	3,50	3,63	3,57	3,24
Water flow rate system side	l/h	1472	1922	2381	2740	3216	3570	4364	5498	7187	8639
Pressure drop system side	kPa	23	21	23	20	27	46	46	60	39	77
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	8,2	10,1	12,9	15,0	16,5	19,2	21,7	28,9	36,1	45,4
Input power	kW	2,0	2,5	3,1	3,5	4,0	4,6	5,5	6,8	9,0	12,4
Heating total input current - 400V	A	4,7	5,3	5,4	6,4	6,8	7,8	11,0	12,0	16,0	22,0
Heating total input current - 230V	A	10,0	12,0	13,0	-	-	-	-	-	-	-
COP	W/W	4,16	4,08	4,15	4,30	4,12	4,17	3,93	4,22	3,99	3,67
Water flow rate system side	l/h	1413	1749	2235	2585	2846	3320	3754	4981	6233	7832
Pressure drop system side	kPa	20	17	19	18	22	34	36	52	32	45

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

CL - (HP/HA) - (400V 3N ~ 50Hz / 230V ~ 50Hz)

Size		025	030	040	050	070	080	090	100	150	200
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	8,6	11,2	13,9	16,0	18,7	20,8	25,4	32,0	41,9	50,3
Input power	kW	2,7	3,2	4,0	4,4	5,1	5,9	7,2	8,9	12,1	15,8
Cooling total input current - 400V	A	6,2	7,0	7,3	8,6	9,4	11,0	15,0	16,0	24,0	30,0
Cooling total input current - 230V	A	14,0	17,0	17,0	-	-	-	-	-	-	-
EER	W/W	3,13	3,50	3,50	3,64	3,69	3,52	3,55	3,58	3,45	3,18
Water flow rate system side	l/h	1472	1922	2381	2740	3216	3570	4364	5498	7187	8639
Useful head system side	kPa	63	59	48	79	66	55	27	41	81	57
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	8,1	10,0	12,8	14,8	16,3	19,1	21,6	28,6	35,8	45,0
Input power	kW	1,9	2,4	3,1	3,4	4,0	4,6	5,5	7,0	9,4	12,8
Heating total input current - 400V	A	5,0	5,6	5,8	7,0	7,5	8,5	11,0	13,0	18,0	24,0
Heating total input current - 230V	A	11,0	13,0	14,0	-	-	-	-	-	-	-
COP	W/W	4,18	4,11	4,19	4,30	4,13	4,19	3,94	4,09	3,80	3,52
Water flow rate system side	l/h	1413	1749	2235	2585	2846	3320	3754	4981	6233	7832
Useful head system side	kPa	66	65	54	82	76	63	49	65	124	93

(1) Data EN 14511:2022; System side water heat exchanger 23 °C/ 18 °C; External air 35 °C
(2) Data EN 14511:2022; System side water heat exchanger 30 °C / 35 °C; External air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			025	030	040	050	070	080	090	100	150	200
Cooling capacity with low leaving water temp (UE n° 2016/2281)												
SEER	°	W/W	2,93	3,27	3,32	3,45	3,43	3,27	3,39	4,06	4,06	3,66
	A,P	W/W	3,11	3,47	3,53	3,62	3,62	3,46	3,60	4,06	3,85	3,60
ηsc	°	%	114,20	127,60	129,60	134,80	134,00	127,80	132,40	159,20	159,20	143,40
	A,P	%	121,40	135,90	138,00	142,00	141,70	135,30	141,00	159,50	150,80	141,10
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)												
Pdesignh	°,A,P	kW	-	-	-	-	-	-	-	-	-	-
SCOP	°	W/W	3,35	3,35	3,45	3,58	3,45	3,53	3,30	3,53	3,35	3,23
	A,P	W/W	3,43	3,43	3,53	3,63	3,50	3,58	3,35	3,45	3,23	3,20
ηsh	°	%	131,00	131,00	135,00	140,00	135,00	138,00	129,00	138,00	131,00	126,00
	A,P	%	134,00	134,00	138,00	142,00	137,00	140,00	131,00	135,00	126,00	125,00
Efficiency energy class	°,A,P		A+	A+	A+	A+	A+	A+	A+	A+	A+	A+

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			025	030	040	050	070	080	090	100	150	200
Power supply: °												
Electric data												
Maximum current (FLA)	°	A	11,0	11,9	11,9	13,5	14,7	15,2	20,4	27,0	30,3	40,8
	A,P	A	11,4	12,4	12,3	14,3	15,4	15,9	21,1	29,0	33,4	43,8
Peak current (LRA)	°	A	44,6	44,6	57,1	64,2	74,2	94,2	105,2	77,7	109,3	125,6
	A,P	A	45,0	45,0	57,6	64,9	74,9	94,9	105,9	79,6	112,4	128,6

Size			025	030	040	050	070	080	090	100	150	200
Power supply: M												
Electric data												
Maximum current (FLA)	°	A	19,0	24,0	24,0	-	-	-	-	-	-	-
	A,P	A	19,8	24,7	25,0	-	-	-	-	-	-	-
Peak current (LRA)	°	A	86,0	96,0	96,0	-	-	-	-	-	-	-
	A,P	A	87,1	96,5	97,1	-	-	-	-	-	-	-

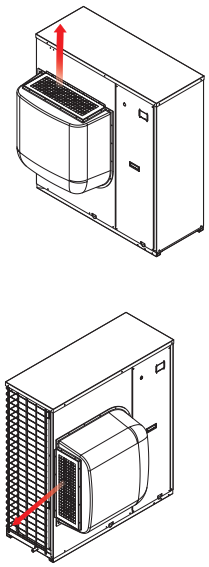
GENERAL TECHNICAL DATA

Size			025	030	040	050	070	080	090	100	150	200
Compressor												
Type	°,A,P	type	Scroll									
Compressor regulation	°,A,P	Type	On-off									
Number	°,A,P	no.	1	1	1	1	1	1	1	2	2	2
Circuits	°,A,P	no.	1	1	1	1	1	1	1	1	1	1
Refrigerant	°,A,P	type	R410A									
Refrigerant charge (1)	°,A,P	kg	2,7	2,7	4,3	5,6	5,6	5,6	5,7	8,3	8,0	7,5
System side heat exchanger												
Type	°,A,P	type	Brazed plate									
Number	°,A,P	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	°,A,P	Type	Gas - F									
Size (in)	°,A,P	Ø	1¼									
Size (out)	°,A,P	Ø	1¼									
Fan												
Type	°,A,P	type	Plug-fan									
Fan motor	°,A,P	type	Inverter									
Number	°,A,P	no.	1	1	1	1	1	1	1	2	2	2
Air flow rate	°,A,P	m^3/h	4000	4000	6500	6500	6500	6500	7500	10000	12000	16000
High static pressure	°,A,P	Pa	50	50	50	80	80	80	80	80	100	100
Intake plus machine body												
Sound power level	°,A,P	dB(A)	78,0	78,0	73,0	73,0	73,0	73,0	76,0	74,0	79,0	80,0
Sound pressure level in cooling mode (10 m)	°,A,P	dB(A)	46,0	46,0	41,0	41,0	41,0	41,0	44,0	42,0	47,0	48,0
Machine exhaust												
Sound power level	°,A,P	dB(A)	78,0	78,0	78,0	78,0	78,0	78,0	81,0	78,0	83,0	85,0
Sound pressure level in cooling mode (10 m)	°,A,P	dB(A)	46,0	46,0	46,0	46,0	46,0	46,0	49,0	47,0	52,0	54,0

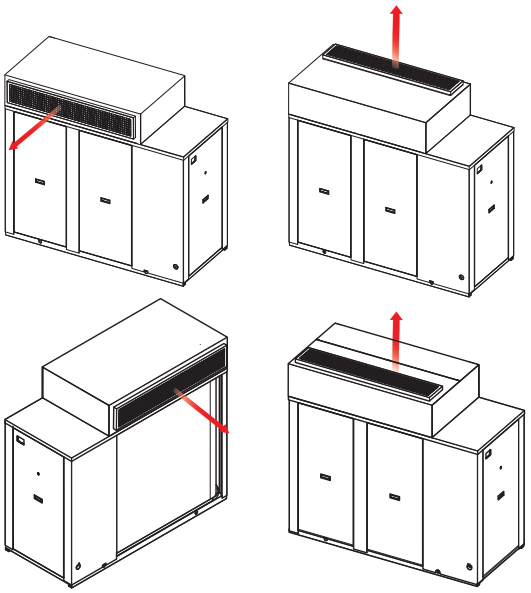
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

DISCHARGE HOOD POSSIBLE CONFIGURATIONS

CL 025 ÷ 090



CL 100 ÷ 200

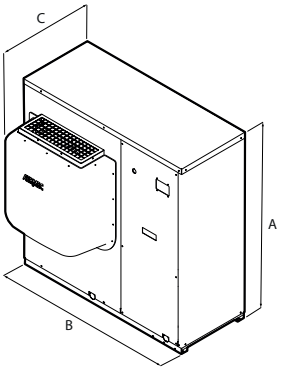


Air supply
Horizontal or vertical, adjustable during installation for all sizes.
Directional air discharge hood:

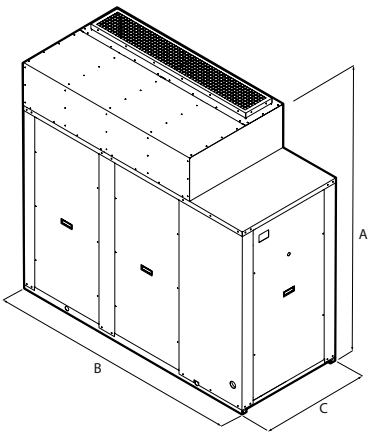
— plastic for sizes 050 to 090
— galvanised steel for the other sizes

DIMENSIONS

CL 025 ÷ 090



CL 100 ÷ 200



Size			025	030	040	050	070	080	090	100	150	200
Dimensions and weights												
A	°,A,P	mm	1028	1028	1281	1281	1281	1281	1281	1674	1674	1674
B	°,P	mm	1005	1005	1160	1160	1160	1160	1160	1897	1897	1897
	A	mm	1366	1366	1610	1610	1610	1610	1610	1897	1897	1897
C	°,A,P	mm	702	702	798	798	798	798	798	801	801	801
Empty weight	°	kg	142	142	229	229	240	240	234	504	527	515
	A	kg	172	172	274	274	284	284	279	567	593	581
	P	kg	148	148	239	239	250	250	243	517	543	531

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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www.aermec.com

NLC 0280-1250

Air-water chiller

Cooling capacity 53 ÷ 322 kW

- **High efficiency also at partial loads**
- **Complete air flow versatility**
- **EC fan Plug-fan with high performance**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Chiller offering chilled/hot water, designed to mit air conditioning needs in residential / commercial complexes or industrial applications.
Indoor units with Scroll compressors, centrifugal fans and plate heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 46°C external air temperature. Unit can produce chilled water up to -10°C.

Units mono or dual-circuit

The range includes units with 2 compressors in single circuit and units with 4 compressors divided into two independent circuits.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

EC fan plug-fan

The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction.
In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to save money and to facilitate installation.

Hot water production

In the configuration with desuperheater or total recovery, it is also possible to produce free-hot water.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating

system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.
VT: Anti-vibration supports.
FLG: Flange for ducts.
FILW: Water filter

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
KRQ: Electric heater for the control and electric power board.
KRA: Anti-freeze electric heater for the buffer tank.
C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
AER485P1	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERLINK	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FL	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SGD	°,A,E	•	•	•	•											

Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
C-TOUCH	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
PR4	°,A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

FILTROW

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°, A, E	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN65 (1)	FILTRO W DN65 (1)	FILTRO W DN65 (1)	FILTRO W DN65 (1)

(1) Installation is mandatory, contrarily garantee becomes void.

Ver	0700	0750	0800	0900	1000	1100	1250
°, A, E	FILTRO W DN65 (1)	FILTRO W DN65 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)

(1) Installation is mandatory, contrarily garantee becomes void.

Flange for ducts

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°	FLG1	FLG1	FLG1	FLG1	FLG1	FLG2 x 2 (1)	FLG2 x 2 (1)	FLG2 x 2 (1)
A, E	FLG1	FLG1	FLG1	FLG1	FLG2 x 2 (1)	FLG2 x 2 (1)	FLG2 x 2 (1)	FLG2 x 2 (1)

(1) x... indicates the quantity to buy.

Ver	0700	0750	0800	0900	1000	1100	1250
°	FLG1 x 2 (1)	FLG1 + FLG2 x 2 (1)	FLG2 x 4 (1)	FLG1 + FLG2 x 2 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)
A, E	FLG1 x 2 (1)	FLG1 + FLG2 x 2 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)

(1) x... indicates the quantity to buy.

Antivibration

Ver	0280	0300	0330	0350	0550	0600	0650	0675
Integrated hydronic kit: 00								
°, A, E	VT17	VT17	VT17	VT17	-	-	-	-
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08								
°, A, E	VT11	VT11	VT11	VT11	-	-	-	-
Integrated hydronic kit: P1, P2, P3, P4, P5, P6, P7, P8								
°, A, E	VT13	VT13	VT13	VT13	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	0280	0300	0330	0350	0550	0600	0650	0675
Integrated hydronic kit: 00								
°	-	-	-	-	AVX437	AVX421	AVX421	AVX421
A, E	-	-	-	-	AVX421	AVX421	AVX421	AVX421
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08								
°	-	-	-	-	AVX439	AVX423	AVX423	AVX423
A, E	-	-	-	-	AVX423	AVX423	AVX423	AVX423
Integrated hydronic kit: P1, P3, P5, P7								
°	-	-	-	-	AVX438	AVX421	AVX421	AVX421
A, E	-	-	-	-	AVX421	AVX421	AVX421	AVX421

Ver	0280	0300	0330	0350	0550	0600	0650	0675
Integrated hydronic kit: P2, P4, P6, P8								
°	-	-	-	-	AVX438	AVX422	AVX422	AVX422
A, E	-	-	-	-	AVX422	AVX422	AVX422	AVX422

The accessory cannot be fitted on the configurations indicated with -

Ver	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 00							
°	AVX424	AVX440	AVX440	AVX444	AVX431	AVX431	AVX431
A, E	AVX424	AVX428	AVX431	AVX431	AVX431	AVX431	AVX431
Integrated hydronic kit: 01, 03, 05, 07							
°	AVX427	AVX441	AVX441	AVX446	AVX435	AVX434	AVX434
A, E	AVX427	AVX430	AVX434	AVX434	AVX434	AVX434	AVX434
Integrated hydronic kit: 02, 04, 06, 08							
°	AVX427	AVX441	AVX441	AVX446	AVX435	AVX436	AVX436
A, E	AVX427	AVX430	AVX435	AVX435	AVX435	AVX436	AVX436
Integrated hydronic kit: P1, P3, P5, P7							
°	AVX425	AVX425	AVX442	AVX445	AVX432	AVX432	AVX432
A, E	AVX425	AVX429	AVX432	AVX432	AVX432	AVX432	AVX432
Integrated hydronic kit: P2, P4, P6, P8							
°	AVX426	AVX426	AVX443	AVX445	AVX433	AVX433	AVX433
A, E	AVX426	AVX429	AVX433	AVX433	AVX433	AVX433	AVX433

DRE: Device for peak current reduction

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°, A, E	DRE275 (1)	DRE275 (1)	DRE300 (1)	DRE350 (1)	DRE552 (1)	DRE602 (1)	DRE652 (1)	DRE675 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
°, A, E	DRE350 x 2	DRE552 x 2	DRE552 x 2	DRE602 x 2	DRE652 x 2	DRE675 x 2	DRE1250 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°, A, E	RIFNLC1	RIFNLC1	RIFNLC2	RIFNLC3	RIFNLC1	RIFNLC1	RIFNLC1	RIFNLC4

A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
°, A, E	RIFNLC3 x 2 (1)	RIFNLC3 + RIFNLC2 (1)	RIFNLC1 x 2 (1)	RIFNLC1 x 2 (1)	RIFNLC1 x 2 (1)	RIFNLC4 x 2 (1)	RIFNLC3 x 2 (1)

(1) x... indicates the quantity to buy.
A grey background indicates the accessory must be assembled in the factory

Anti-condensate electric board resistance

Ver	0280	0300	0330	0350	0550	0600	0650	0675
°, A, E	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ

A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
°, A, E	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ

A grey background indicates the accessory must be assembled in the factory

Anti-freeze electric heater for the storage tank

Ver	0280	0300	0330	0350	0550	0600	0650	0675
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08								
°, A, E	KRA1	KRA1	KRA1	KRA1	KRA2	KRA2	KRA2	KRA2

A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08							
°, A, E	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NLC**
4,5,6,7		**Size** 0280, 0300, 0330, 0350, 0550, 0600, 0650, 0675, 0700, 0750, 0800, 0900, 1000, 1100, 1250
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	C	Motocondensing unit
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery (4)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with storage tank and pump/s
	01	Storage tank with low head pump
	02	Storage tank with low head pump + stand-by pump
	03	Storage tank with high head pump
	04	Storage tank with high head pump + stand-by pump
		Kit with storage tank and inverter pump/s
	05	Storage tank with low-head inverter pump
	06	Storage tank with low head inverter pump + stand-by pump
	07	Storage tank with high head inverter pump
	08	Storage tank with high head inverter pump + stand-by pump
		Kit with pump/s
	P1	Single pump low head
	P2	Pump low head + stand-by pump
	P3	Single pump high head
	P4	Pump high head + stand-by pump
		Kit with pump/s, with inverter speed
	P5	Single low head pump + fixed speed inverter (5)
	P6	Single low head pump with fixed speed inverter + stand-by pump (5)
	P7	Single high head pump + fixed speed inverter (5)
	P8	Single high head pump with fixed speed inverter + stand-by pump (5)

(1) Water produced from 4 °C ÷ 18 °C
(2) Water produced from 4 °C ÷ -10 °C
(3) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(4) Options not available for standard unit "°", condensing unit and with alls hydronic kit.
(5) The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate.

PERFORMANCE SPECIFICATIONS

NLC - °

Size		0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	52,1	57,1	62,8	75,4	94,2	112,0	123,0	137,4	151,4	170,2	189,7	220,2	242,6	277,4	306,7
Input power	kW	20,4	23,4	24,3	28,9	39,3	44,3	50,1	53,7	58,6	66,6	79,0	86,4	99,8	107,6	121,3
Cooling total input current	A	38,0	42,0	46,0	57,0	68,0	77,0	85,0	92,0	113,0	121,0	136,0	148,0	169,0	181,0	208,0
EER	W/W	2,56	2,44	2,59	2,61	2,40	2,53	2,45	2,56	2,58	2,56	2,40	2,55	2,43	2,58	2,53
Water flow rate system side	l/h	8969	9828	10807	12972	16236	19277	21167	23676	26081	29294	32644	37884	41733	47712	52763
Pressure drop system side	kPa	19	22	28	27	43	27	31	43	37	30	38	35	35	41	48

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NLC - A

Size		0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	54,0	59,4	66,9	78,6	106,3	119,5	129,2	146,3	157,4	177,9	209,7	233,2	257,6	290,6	319,2
Input power	kW	19,5	21,5	23,4	27,7	37,7	42,9	45,0	52,4	55,3	60,3	75,4	84,8	89,6	105,7	115,9
Cooling total input current	A	36,0	40,0	43,0	53,0	63,0	71,0	73,0	87,0	107,0	113,0	126,0	139,0	146,0	173,0	198,0
EER	W/W	2,77	2,76	2,85	2,84	2,82	2,78	2,87	2,79	2,85	2,95	2,78	2,75	2,88	2,75	2,75
Water flow rate system side	l/h	9295	10223	11511	13539	18298	20566	22250	25188	27095	30617	36080	40118	44310	49980	54911
Pressure drop system side	kPa	20	24	22	30	25	30	36	36	25	25	33	33	35	37	43

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NLC - E

Size		0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																
Cooling performance 12 °C / 7 °C (1)																
Cooling capacity	kW	52,2	58,0	64,2	73,4	102,9	115,6	124,5	142,6	151,1	171,3	201,2	224,8	248,0	282,8	310,6
Input power	kW	19,3	21,5	23,7	27,4	37,6	42,7	45,9	52,5	55,4	60,1	74,9	85,2	90,6	105,8	116,0
Cooling total input current	A	36,0	39,0	43,0	53,0	62,0	69,0	73,0	85,0	106,0	112,0	123,0	138,0	146,0	170,0	197,0
EER	W/W	2,70	2,70	2,71	2,67	2,74	2,71	2,71	2,72	2,73	2,85	2,69	2,64	2,74	2,67	2,68
Water flow rate system side	l/h	8986	9982	11047	12628	17714	19896	21442	24552	25995	29483	34637	38675	42661	48640	53433
Pressure drop system side	kPa	19	23	20	26	23	29	34	34	23	24	31	30	33	35	41

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
SEER - 12/7 (EN14825: 2018) (1)																	
	°	W/W	5,33	5,02	4,92	4,97	4,25	4,87	4,57	4,73	4,28	4,15	4,10	4,12	4,10	4,15	4,10
SEER	A	W/W	5,79	5,77	5,33	5,34	5,24	5,33	5,15	5,03	4,75	4,93	4,55	4,46	4,63	4,42	4,35
	E	W/W	4,83	4,98	4,74	4,80	4,58	4,70	4,53	4,55	4,48	4,63	4,19	4,14	4,31	4,19	4,12
	°	%	210,30	197,80	193,90	195,80	167,10	191,60	179,60	186,00	168,20	162,80	161,00	161,90	161,10	163,10	161,00
Seasonal efficiency	A	%	228,60	227,60	210,20	210,40	206,70	210,10	202,90	198,30	186,90	194,00	178,80	175,50	182,30	173,90	171,10
	E	%	190,30	196,00	186,70	189,00	180,10	185,00	178,30	179,10	176,20	182,10	164,60	162,70	169,20	164,40	161,90
SEER - 23/18 (EN14825: 2018) (2)																	
	°	W/W	6,25	5,89	5,79	5,84	5,02	5,72	5,37	5,58	5,08	4,91	4,86	4,90	4,86	4,93	4,87
SEER	A	W/W	6,84	6,82	6,27	6,27	6,17	6,27	6,07	5,93	5,62	5,84	5,39	5,29	5,49	5,25	5,16
	E	W/W	5,68	5,85	5,58	5,64	5,39	5,54	5,35	5,37	5,29	5,46	4,96	4,90	5,10	4,95	4,88
	°	%	246,80	232,50	228,50	230,50	197,70	225,80	211,90	220,10	200,00	193,40	191,40	192,80	191,50	194,10	191,60
Seasonal efficiency	A	%	270,60	269,70	247,60	247,70	243,60	247,80	239,80	234,30	221,80	230,40	212,40	208,50	216,60	206,90	203,50
	E	%	224,20	230,80	220,30	222,70	212,70	218,40	211,00	211,80	208,60	215,50	195,30	193,00	200,90	195,00	192,00
SEPR - (EN 14825: 2018) (2)																	
	°	W/W	6,54	6,22	6,12	6,02	5,18	5,73	5,32	5,70	5,45	5,08	5,04	5,25	5,04	5,07	5,03
SEPR	A	W/W	6,87	6,88	6,44	6,47	6,21	6,35	5,98	5,90	5,94	6,32	5,65	5,40	5,72	5,41	5,39
	E	W/W	5,91	5,92	5,65	5,55	5,14	5,36	5,03	5,15	5,12	5,48	5,09	5,01	5,09	5,05	5,03

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Electric data																	
Maximum current (FLA)	°	A	52,0	56,0	62,0	73,0	103,0	111,0	119,0	132,0	146,0	169,0	206,0	222,0	238,0	263,0	289,0
	A,E	A	52,0	56,0	62,0	73,0	92,0	111,0	119,0	132,0	146,0	158,0	183,0	210,0	238,0	263,0	289,0
Peak current (LRA)	°	A	128,0	130,0	133,0	216,0	261,0	273,0	281,0	358,0	290,0	346,0	353,0	372,0	400,0	489,0	515,0
	A,E	A	128,0	130,0	133,0	216,0	273,0	273,0	281,0	358,0	290,0	357,0	376,0	384,0	400,0	489,0	515,0

GENERAL TECHNICAL DATA

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Compressor																	
Type	°,A,E	type	Scroll														
Compressor regulation	°,A,E	Type	On/Off														
Number	°,A,E	no.	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4
Circuits	°,A,E	no.	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Refrigerant	°,A,E	type	R410A														
Refrigerant load circuit 1 (1)	°	kg	7,0	7,0	8,5	9,0	13,7	15,0	18,0	19,0	9,5	8,3	13,8	13,5	15,0	19,1	19,1
	A	kg	8,7	8,5	9,5	10,0	18,0	18,7	22,0	22,0	10,7	9,5	18,7	19,5	22,0	22,0	22,0
	E	kg	8,7	8,5	9,5	10,0	18,0	18,7	21,0	21,5	10,7	9,5	18,7	19,0	21,1	22,0	22,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	-	-	9,5	12,3	13,8	13,5	15,0	19,1	19,1
	A	kg	-	-	-	-	-	-	-	-	10,7	17,0	18,7	19,5	22,0	22,0	22,0
	E	kg	-	-	-	-	-	-	-	-	10,7	17,0	18,7	19,0	20,6	22,0	22,0
System side heat exchanger																	
Type	°,A,E	type	Brazed plate														
Number	°,A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

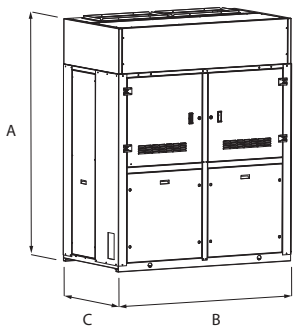
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

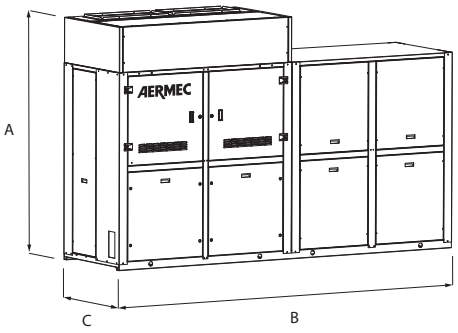
Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 00																	
System side hydraulic connections																	
Connections (in/out)	°,A,E	Type	Grooved joints														
Sizes (in/out)	°	Ø	2″	2″	2″	2″	2″	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	3″	3″	3″	3″	3″
	A,E	Ø	2″	2″	2″	2″	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	3″	3″	3″	3″	3″

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08, P1, P2, P3, P4, P5, P6, P7, P8																	
System side hydraulic connections																	
Connections (in/out)	°,A,E	Type	Grooved joints														
Sizes (in/out)	°,A,E	Ø	2″	2″	2″	2″	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	3″	3″	3″	3″	3″

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Fan																	
Type	°,A,E	type	Plug-fun														
Fan motor	°,A,E	type	EC Inverter motors														
Number	°	no.	2	2	2	2	2	4	4	4	4	4	4	6	8	8	8
	A,E	no.	2	2	2	2	4	4	4	4	4	6	8	8	8	8	8
Air flow rate	°	m^3/h	21600	24000	21150	23600	23200	34050	34050	38200	47150	46750	46350	62150	68100	66650	71750
	A	m^3/h	21150	23600	19400	22050	27700	33350	27150	32750	44050	57900	55350	55350	54300	65450	65450
	E	m^3/h	15000	18400	14650	16450	14900	22200	14600	21750	32900	41900	29850	29850	29200	43500	43500
Machine exhaust																	
Sound power level	°	dB(A)	83,3	85,6	82,9	85,4	87,5	83,9	83,9	86,1	88,4	89,6	90,5	86,9	86,9	89,1	89,1
	A	dB(A)	83,6	86,1	81,9	84,5	82,9	85,2	82,9	85,1	87,5	85,8	85,9	88,2	85,9	88,1	88,1
	E	dB(A)	76,7	80,1	76,5	78,3	75,2	78,5	75,2	78,4	81,3	80,0	78,2	81,5	78,2	81,4	81,4
Intake plus machine body																	
Sound power level	°	dB(A)	78,4	80,1	79,2	81,0	83,8	86,4	84,8	85,6	83,9	85,1	86,7	87,7	87,2	89,3	89,3
	A	dB(A)	78,7	80,1	80,0	81,2	86,1	87,4	86,1	87,1	84,0	86,5	89,1	92,5	89,1	90,1	90,4
	E	dB(A)	76,8	76,7	78,6	79,2	84,2	85,1	84,1	84,7	81,0	82,4	86,2	89,7	86,2	86,6	86,8

DIMENSIONS





Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 00																	
Dimensions and weights																	
A	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	°	mm	1750	1750	1750	1750	1750	3150	3150	3150	3500	3500	3500	4900	6300	6300	6300
	A,E	mm	1750	1750	1750	1750	3150	3150	3150	3150	3500	4900	6300	6300	6300	6300	6300
C	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	°	kg	759	759	787	798	994	1409	1415	1450	1510	1682	1858	2294	2692	2775	2789
	A,E	kg	775	775	809	813	1432	1436	1470	1485	1553	2156	2728	2744	2818	2844	2858

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 01, 03, 05, 07																	
Dimensions and weights																	
A	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	°	mm	3400	3400	3400	3400	3500	4150	4150	4150	5250	4900	5250	5900	7300	7300	7300
	A,E	mm	3400	3400	3400	3400	4150	4150	4150	4150	5250	5900	7300	7300	7300	7300	7300
C	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	°	kg	973	973	1001	1022	1479	1691	1707	1741	1889	2061	2259	2599	3018	3101	3115
	A,E	kg	989	989	1023	1038	1715	1719	1761	1777	1931	2438	3035	3050	3144	3170	3184

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 02, 04, 06, 08																	
Dimensions and weights																	
A	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	°	mm	3400	3400	3400	3400	3500	4150	4150	4150	5250	4900	5250	5900	7300	7300	7300
	A,E	mm	3400	3400	3400	3400	4150	4150	4150	4150	5250	5900	7300	7300	7300	7300	7300
C	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	°	kg	1016	1016	1044	1076	1533	1745	1770	1804	1942	2114	2334	2674	3114	3197	3211
	A,E	kg	1032	1032	1066	1091	1768	1772	1824	1840	1985	2492	3110	3126	3240	3266	3280

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: P1, P3, P5, P7																	
Dimensions and weights																	
A	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	°	mm	2500	2500	2500	2500	2500	3150	3150	3150	4250	4250	7300	4900	6300	6300	6300
	A,E	mm	2500	2500	2500	2500	3150	3150	3150	3150	4250	4900	6300	6300	6300	6300	6300
C	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	°	kg	888	888	916	937	1146	1468	1483	1518	1664	1836	2041	2375	2793	2876	2890
	A,E	kg	904	904	939	953	1491	1495	1538	1554	1707	2215	2809	2825	2919	2945	2959

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: P2, P4, P6, P8																	
Dimensions and weights																	
A	°,A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	°	mm	2500	2500	2500	2500	2500	3150	3150	3150	4250	4250	7300	4900	6300	6300	6300
	A,E	mm	2500	2500	2500	2500	3150	3150	3150	3150	4250	4900	6300	6300	6300	6300	6300
C	°,A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	°	kg	931	960	991	1199	1522	1546	1581	1718	1890	2117	2451	2888	2972	3054	2986
	A	kg	948	948	982	1007	1545	1549	1601	1617	1760	2268	2885	2900	3014	3040	3054
	E	kg	948	948	982	1007	1545	1549	1601	1617	1760	2268	2885	2900	3014	3040	931

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NLC 0280H-1250H

Reversible air/water heat pump

Cooling capacity 53 ÷ 322 kW – Heating capacity 55 ÷ 342 kW

- **High efficiency also at partial loads**
- **Complete air flow versatility**
- **EC fan Plug-fan with high performance**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Reversible heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
Indoor units with Scroll compressors, centrifugal fans and plate heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Work up to 44°C of outdoor air temperature at full load, depending on size and version. For further details refer to the selection software / technical documentation.

Units mono or dual-circuit

The range includes units with 2 compressors in single circuit and units with 4 compressors divided into two independent circuits.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

EC fan plug-fan

The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction.
In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.

Version with Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

FLG: Flange for ducts.
FILW: Water filter

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
KRB: Electric anti-freeze resistance kit for base.
KRQ: Electric heater for the control and electric power board.
KRA: Anti-freeze electric heater for the buffer tank.
C-TOUCH: 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
AER485P1	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FL	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SGD	A,E	•	•	•	•											

Remote panel

Model	Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
PR4	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Water filter

Ver	0280	0300	0330	0350	0550	0600	0650	0675
A, E	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN50 (1)	FILTRO W DN65 (1)	FILTRO W DN65 (1)	FILTRO W DN65 (1)	FILTRO W DN65 (1)

(1) Installation is mandatory, contrarily garantee becomes void.

Ver	0700	0750	0800	0900	1000	1100	1250
A, E	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)	FILTRO W DN80 (1)

(1) Installation is mandatory, contrarily garantee becomes void.

Flange for ducts

Ver	0280	0300	0330	0350	0550	0600	0650	0675
A, E	FLG1	FLG1	FLG1	FLG1	FLG2 x 2 (1)	FLG2 x 2 (1)	FLG2 x 2 (1)	FLG2 x 2 (1)

(1) x... indicates the quantity to buy.

Ver	0700	0750	0800	0900	1000	1100	1250
A, E	FLG1 x 2 (1)	FLG1 + FLG2 x 2 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)	FLG2 x 4 (1)

(1) x... indicates the quantity to buy.

Antivibration

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 00															
A, E	VT17	VT17	VT17	VT17	-	-	-	-	-	-	-	-	-	-	-
Integrated hydronic kit: 01, 02, 03, 04, 05, 06, 07, 08															
A, E	VT11	VT11	VT11	VT11	-	-	-	-	-	-	-	-	-	-	-
Integrated hydronic kit: P1, P2, P3, P4, P5, P6, P7, P8															
A, E	VT13	VT13	VT13	VT13	-	-	-	-	-	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Integrated hydronic kit: 00															
A, E	-	-	-	-	AVX410	AVX410	AVX410	AVX410	AVX410	AVX416	AVX418	AVX418	AVX420	AVX420	AVX420
Integrated hydronic kit: 01, 02, 03, 04															
A, E	-	-	-	-	AVX412	AVX412	AVX412	AVX412	AVX415	AVX417	AVX419	AVX419	AVX419	AVX419	AVX419
Integrated hydronic kit: 05, 06, 07, 08															
A	-	-	-	-	AVX423	AVX412	AVX412	AVX412	AVX415	AVX417	AVX419	AVX419	AVX419	AVX419	AVX419
E	-	-	-	-	AVX412	AVX412	AVX412	AVX412	AVX415	AVX417	AVX419	AVX419	AVX419	AVX419	AVX419
Integrated hydronic kit: P1, P3, P5, P7															
A, E	-	-	-	-	AVX410	AVX410	AVX410	AVX410	AVX413	AVX416	AVX418	AVX418	AVX420	AVX420	AVX420
Integrated hydronic kit: P2, P4, P6, P8															
A, E	-	-	-	-	AVX411	AVX411	AVX411	AVX411	AVX414	AVX416	AVX418	AVX418	AVX420	AVX420	AVX420

The accessory cannot be fitted on the configurations indicated with -

DRE: Device for peak current reduction

Ver	0280	0300	0330	0350	0550	0600	0650	0675
A, E	DRE275 (1)	DRE275 (1)	DRE300 (1)	DRE350 (1)	DRE552 (1)	DRE602 (1)	DRE652 (1)	DRE675 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
A, E	DRE350 x 2	DRE552 x 2	DRE552 x 2	DRE602 x 2	DRE652 x 2	DRE675 x 2	DRE1250 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0280	0300	0330	0350	0550	0600	0650	0675
A, E	RIFNLC1	RIFNLC1	RIFNLC2	RIFNLC3	RIFNLC1	RIFNLC1	RIFNLC1	RIFNLC4

A grey background indicates the accessory must be assembled in the factory

Ver	0700	0750	0800	0900	1000	1100	1250
A, E	RIFNLC3 x 2 (1)	RIFNLC3 + RIFNLC2 (1)	RIFNLC1 x 2 (1)	RIFNLC1 x 2 (1)	RIFNLC1 x 2 (1)	RIFNLC4 x 2 (1)	RIFNLC3 x 2 (1)

(1) x... indicates the quantity to buy.
A grey background indicates the accessory must be assembled in the factory

Anti-condensate electric board resistance

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
A, E	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ	KRQ

A grey background indicates the accessory must be assembled in the factory

Anti-freeze electric heater for the storage tank

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
A, E	KRA1	KRA1	KRA1	KRA1	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2	KRA2

A grey background indicates the accessory must be assembled in the factory

Electric heater for the base

Ver	0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
A, E	KRB21 (1)	KRB21 (1)	KRB21 (1)	KRB21 (1)	KRB22 (1)	KRB22 (1)	KRB22 (1)	KRB22 (1)	KRB23 (1)	KRB24 (1)	KRB25 (1)	KRB25 (1)	KRB25 (1)	KRB25 (1)	KRB25 (1)

(1) Incompatible with the condensate collection basin accessory with integrated resistance.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NLC**
4,5,6,7		**Size** 0280, 0300, 0330, 0350, 0550, 0600, 0650, 0675, 0700, 0750, 0800, 0900, 1000, 1100, 1250
8		**Operating field (1)**
	X	Electronic thermostatic expansion valve
	°	Standard mechanic thermostatic valve
9		**Model**
	H	Heat pump
10		**Heat recovery**
	D	With desuperheater (2)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
12		**Coils**
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Copper-aluminium
13		**Fans**
	J	Inverter
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**

Field	Description
00	Without hydronic kit
	Kit with storage tank and pump/s
01	Storage tank with low head pump
02	Storage tank with low head pump + stand-by pump
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with storage tank and inverter pump/s
05	Storage tank with low-head inverter pump
06	Storage tank with low head inverter pump + stand-by pump
07	Storage tank with high head inverter pump
08	Storage tank with high head inverter pump + stand-by pump
	Kit with pump/s
P1	Single pump low head
P2	Pump low head + stand-by pump
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with pump/s, with inverter speed
P5	Single low head pump + fixed speed inverter (3)
P6	Single low head pump with fixed speed inverter + stand-by pump (3)
P7	Single high head pump + fixed speed inverter (3)
P8	Single high head pump with fixed speed inverter + stand-by pump (3)

(1) Water produced from 4 °C ÷ 18 °C
(2) The desuperheater must be intercepted in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(3) The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate.

PERFORMANCE SPECIFICATIONS

NLC - HA / HE

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Cooling performance 12 °C / 7 °C (1)																	
Cooling capacity	A	kW	54,4	60,4	66,7	78,6	102,5	115,3	126,0	143,4	158,1	181,1	202,0	232,5	252,7	287,1	316,5
	E	kW	52,1	58,2	63,5	75,0	97,8	110,6	118,5	136,8	150,2	172,1	192,7	223,8	242,2	273,7	305,0
Input power	A	kW	20,0	22,5	24,4	28,6	37,7	43,4	46,9	54,6	57,4	66,3	74,7	87,1	93,6	108,9	127,4
	E	kW	20,4	23,0	25,5	29,4	40,1	46,0	49,1	56,5	58,8	67,2	79,8	90,2	97,1	112,6	128,0
Cooling total input current	A	A	36,0	41,0	45,0	56,0	68,0	77,0	81,0	96,0	112,0	121,0	136,0	155,0	162,0	192,0	219,0
	E	A	36,0	40,0	45,0	55,0	69,0	77,0	83,0	95,0	111,0	121,0	139,0	153,0	166,0	191,0	218,0
EER	A	W/W	2,72	2,69	2,73	2,75	2,72	2,66	2,69	2,63	2,75	2,73	2,70	2,67	2,70	2,64	2,48
	E	W/W	2,55	2,53	2,49	2,55	2,44	2,40	2,41	2,42	2,55	2,56	2,42	2,48	2,49	2,43	2,38
Water flow rate system side	A	l/h	9368	10396	11480	13535	17638	19855	21700	24691	27213	31158	34751	40001	43480	49382	54436
	E	l/h	8967	10021	10934	12905	16829	19040	20401	23542	25847	29620	33162	38500	41662	47091	52474
Pressure drop system side	A	kPa	21	25	23	30	24	29	35	35	26	25	34	34	36	38	44
	E	kPa	20	24	20	27	20	25	29	30	24	25	33	35	38	42	53
Heating performance 40 °C / 45 °C (2)																	
Heating capacity	A,E	kW	56,4	63,5	70,7	82,6	109,8	122,4	137,1	156,5	168,5	193,6	218,3	244,7	273,4	312,4	348,1
Input power	A,E	kW	19,1	21,9	24,0	27,8	37,0	41,5	46,4	53,7	55,9	65,1	73,6	82,9	91,5	105,2	118,1
Heating total input current	A,E	A	36,0	40,0	44,0	54,0	65,0	74,0	78,0	91,0	105,0	114,0	129,0	145,0	153,0	179,0	199,0
COP	A,E	W/W	2,95	2,90	2,95	2,97	2,97	2,95	2,95	2,91	3,01	2,97	2,97	2,95	2,99	2,97	2,95
Water flow rate system side	A,E	l/h	9781	11023	12266	14321	19050	21235	23760	27154	29225	33591	37889	42470	47456	54236	60425
Pressure drop system side	A,E	kPa	22	27	25	32	27	32	40	41	29	28	38	37	41	43	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Cooling capacity with low leaving water temp (UE n° 2016/2281)																	
SEER	A	W/W	4,48	4,50	4,52	4,71	4,89	4,74	4,65	4,52	4,38	4,33	4,51	4,47	4,36	4,29	4,08
	E	W/W	4,16	4,16	4,08	4,50	4,29	4,23	4,29	4,22	4,20	4,14	3,98	4,21	4,13	3,99	3,86
ηsc	A	%	176,10	177,10	177,80	185,20	192,50	186,40	183,10	177,70	172,20	170,30	177,50	175,80	171,40	168,70	160,00
	E	%	163,20	163,50	160,30	177,10	168,50	166,00	168,40	165,90	165,00	162,60	156,20	165,30	162,20	156,40	151,40
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (1)																	
SCOP	A,E	W/W	3,28	3,20	3,28	-	-	-	-	-	-	-	-	-	-	-	-
ηsh	A,E	%	128,00	125,00	128,00	-	-	-	-	-	-	-	-	-	-	-	-
Efficiency energy class	A,E		A+	A+	A+	-	-	-	-	-	-	-	-	-	-	-	-

(1) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Electric data																	
Maximum current (FLA)	A,E	A	52,2	55,6	62,0	71,4	103,0	110,9	118,8	131,8	142,8	167,1	206,0	221,8	237,6	263,6	289,6
Peak current (LRA)	A,E	A	127,9	129,6	132,8	215,4	272,9	272,9	280,8	357,8	286,8	355,6	375,9	383,8	399,6	489,6	515,6

GENERAL TECHNICAL DATA

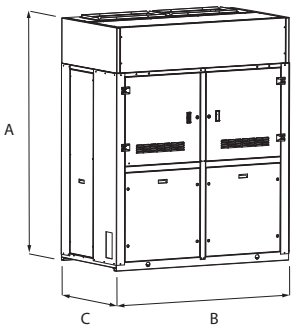
Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Fans: J																	
Compressor																	
Type	A,E	type	Scroll														
Compressor regulation	A,E	Type	On-Off														
Number	A,E	no.	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4
Circuits	A,E	no.	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Refrigerant	A,E	type	R410A														
Refrigerant charge (1)	A,E	kg	9,2	9,5	11,0	11,0	18,5	20,0	25,0	25,0	23,0	32,0	42,0	42,0	50,0	50,0	50,0
System side heat exchanger																	
Type	A,E	type	Brazed plate														
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																	
Connections (in/out)	A,E	Type	Grooved joints														
Sizes (in/out)	A,E	Ø	2"	2"	2"	2"	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"
Fan																	
Type	A,E	type	Plug-fun														
Fan motor	A,E	type	EC Inverter motors														
Number	A,E	no.	2	2	2	2	4	4	4	4	4	6	8	8	8	8	8
Machine exhaust																	
Sound power level	A	dB(A)	84,1	87,9	86,3	88,9	85,2	87,9	86,4	89,5	91,9	86,7	88,2	90,9	89,4	92,5	92,5
	E	dB(A)	77,3	80,5	77,6	81,5	78,5	81,3	79,4	83,2	84,5	79,4	81,5	84,3	82,4	86,2	86,2

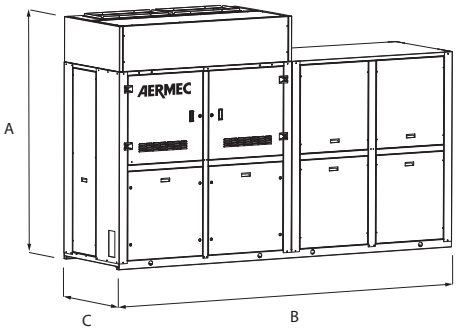
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Intake plus machine body																	
Sound power level	A	dB(A)	78,9	81,7	80,6	83,1	83,9	85,1	84,4	85,7	85,3	86,0	87,2	88,2	87,2	88,9	89,3
	E	dB(A)	75,1	78,0	76,0	79,7	82,3	82,8	82,3	84,1	82,7	85,3	85,3	85,8	85,3	87,1	88,2

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

DIMENSIONS





Size			0280	0300	0330	0350	0550	0600	0650	0675	0700	0750	0800	0900	1000	1100	1250
Dimensions and weights																	
A	A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	A,E	mm	1750	1750	1750	1750	3150	3150	3150	3150	3500	4900	6300	6300	6300	6300	6300
C	A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Empty weight	A,E	kg	790	790	828	832	1452	1456	1492	1507	1586	2194	2768	2783	2863	2889	2903
Dimensions and weights with pump/s																	
A	A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	A,E	mm	2500	2500	2500	2500	3150	3150	3150	3150	4250	4900	6300	6300	6300	6300	6300
C	A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
Dimensions and weights with storage tank and pump/s																	
A	A,E	mm	2154	2154	2154	2154	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196
B	A,E	mm	3400	3400	3400	3400	4150	4150	4150	4150	5250	5900	7300	7300	7300	7300	7300
C	A,E	mm	950	950	950	950	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NSM 1402-9603

Air-water chiller

Cooling capacity 302 ÷ 2100 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **HP floating: ESEER +5% with inverter fans**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger.
In the unit with desuperheater, it is also possible to produce free-hot water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 51 °C external air temperature depending on the size and vesion. For more information refer to the dedicated documentations or the selection program Magellano.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Inverter fans

Standard inverter fans for sizes and versions (°) from 2002 to 9603, optional for other sizes and versions. Option for all configurations.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

■ *As standard from size 5202÷6402 and 8403÷9603, optional for all other sizes.*

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO_5

Units include 1 control board for each compressor.
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** available for all models with inverter fans or with DCPX. Allows, with continuous fan modulation, to optimize the operation of the unit in any operating point, ensuring an increase in the energy efficiency at partial load. **ESEER up to +5% with inverter fans**
— **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.
— Possibility to control two units in a Master-Slave configuration (from size 1402 to 6402)

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud con-

nection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

PRV3: Allows you to control the chiller at a distance.

DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

GP_: Anti-intrusion grid kit

KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
AER485P1 x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•						
AER485P1 x no. 3	°,A,L								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERBACP x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•						
AERBACP x no. 3	°,A,L								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERNET	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
MULTICHILLER-EVO	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
PRV3	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002
Fans: M										
°	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX111	DCPX111	DCPX112
A	DCPX111	DCPX111	DCPX111	DCPX111	DCPX112	DCPX112	DCPX112	DCPX113	DCPX113	DCPX113
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX111	DCPX111	DCPX112	DCPX112	DCPX113	DCPX113	DCPX114	DCPX114	DCPX114	DCPX114

Ver	3202	3402	3602	3902	4202	4502	4802	5202	5602	6002
Fans: M										
°	DCPX112	DCPX112	DCPX112	DCPX113	DCPX113	DCPX114	DCPX114	DCPX115	DCPX115	DCPX115
A	DCPX113	DCPX114	DCPX114	DCPX115	DCPX115	DCPX116	DCPX116	DCPX116	DCPX117	DCPX118
E, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
L	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	-	-
U	DCPX114	DCPX115	DCPX115	DCPX116	DCPX117	DCPX117	DCPX118	DCPX119	DCPX130	DCPX131

Ver	6402	6503	6703	6903	7203	8403	9603
Fans: M							
°	DCPX116	DCPX135+DCPX113	DCPX135+DCPX113	DCPX125+DCPX114	DCPX114+DCPX136	DCPX114+DCPX136	DCPX114+DCPX136
A	DCPX118	DCPX115+DCPX136	DCPX115+DCPX136	DCPX116+DCPX136	DCPX116+DCPX136	DCPX117+DCPX136	DCPX118+DCPX137
E	As standard	As standard	As standard	As standard	As standard	-	-
L	As standard	As standard	As standard	As standard	As standard	As standard	-
N	As standard	As standard	-	-	-	-	-
U	DCPX132	DCPX116+DCPX137	DCPX117+DCPX137	DCPX117+DCPX137	DCPX118+DCPX137	-	-

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ														
°	AVX900	AVX900	AVX900	AVX904	AVX904	AVX904	AVX904	AVX904	AVX904	AVX959	AVX959	AVX960	AVX960	AVX911
A, L	AVX901	AVX901	AVX901	AVX904	AVX959	AVX959	AVX959	AVX903	AVX903	AVX903	AVX903	AVX909	AVX909	AVX907
E, U	AVX901	AVX901	AVX959	AVX959	AVX959	AVX903	AVX903	AVX906	AVX906	AVX906	AVX906	AVX907	AVX907	AVX912
N	AVX959	AVX959	AVX903	AVX903	AVX903	AVX906	AVX906	AVX907	AVX907	AVX907	AVX907	AVX912	AVX910	AVX913

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00, TF, TG, TH, TI, TJ													
°	AVX911	AVX909	AVX909	AVX907	AVX907	AVX907	AVX912	AVX914	AVX914	AVX915	AVX916	AVX916	AVX916
A, L	AVX907	AVX912	AVX912	AVX912	AVX910	AVX913	AVX913	AVX924	AVX924	AVX925	AVX925	AVX927	AVX926
E, U	AVX910	AVX910	AVX913	AVX913	AVX920	AVX917	AVX918	AVX925	AVX927	AVX927	AVX928	-	-
N	AVX913	AVX917	AVX918	AVX919	AVX921	AVX921	AVX921	AVX926	-	-	-	-	-
Integrated hydronic kit: DA, DB, DC, DD, DE, PA, PB, PC, PD, PE													
°	AVX911	-	-	-	-	-	-	-	-	-	-	-	-
A, L	AVX907	-	-	-	-	-	-	-	-	-	-	-	-
E, U	AVX910	-	-	-	-	-	-	-	-	-	-	-	-
N	AVX913	-	-	-	-	-	-	-	-	-	-	-	-
Integrated hydronic kit: DF, DG, DH, DI, DJ, PF, PG, PH, PI, PJ													
°	AVX911	AVX909	AVX909	AVX907	AVX907	AVX907	AVX912	-	-	-	-	-	-
A, L	AVX907	AVX912	AVX912	AVX912	AVX910	AVX913	AVX913	-	-	-	-	-	-
E, U	AVX910	AVX910	AVX913	AVX913	AVX920	AVX917	AVX918	-	-	-	-	-	-
N	AVX913	AVX917	AVX918	AVX919	AVX921	AVX921	AVX921	-	-	-	-	-	-

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
°	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802Q
A, L	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
°	RIFNSM3002Q	RIFNSM3202Q	RIFNSM3402Q	RIFNSM3602Q	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
A, E, L, U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
°, A, L	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Grids

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
°	GP3V	GP3V	GP3V	GP4V	GP4V	GP4V	GP4V	GP4V	GP4V
A, L	GP4V	GP4V	GP4VN	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V
E, U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
°	GP5V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP8V
A, L	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP9V	GP9V	GP9V
E, U	GP7V	GP7V	GP8V	GP8V	GP9V	GP10V	GP10V	GP11V	GP11V
N	GP8V	GP8V	GP9V	GP10V	GP11V	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V

A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
°	GP8V	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP11V
A, L	GP11V	GP11V	GP11V	GP4V+GP8V	GP4V+GP8V	GP5V+GP9V	GP5V+GP9V	GP5V+GP10V	GP6V+GP11V
E, U	GP6V+GP6V	GP6V+GP7V	GP7V+GP7V	GP5V+GP9V	GP5V+GP10V	GP5V+GP10V	GP6V+GP11V	-	-
N	GP8V+GP8V	GP8V+GP8V	GP8V+GP8V	GP6V+GP11V	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
°, A, L	KRS22	KRS22	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23
E, N, U	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
°	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24
A, E, L	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
N	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23
U	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS24	KRS24

A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
°	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
A, L	KRS24	KRS24	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
E, U	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-
N	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NSM**
4,5,6,7		**Size** 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703, 6903, 7203, 8403, 9603
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (3)
9		**Model**
	C	Motocondensing unit (4)
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (5)
	T	With total recovery (6)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils**
	I	Copper-aluminium
	O	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Aluminium microchannel
13		**Fans**
	J	Inverter
	M	Oversized
14		**Power supply**
	8	400V~3 50Hz with magnet circuit breakers
	°	400V~3 50Hz with fuses
15,16		**Integrated hydronic kit**

Field		Description
		Without hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump
		Kit with 2 pumps
	TF	Double pump F (7)
	TG	Double pump G (7)
	TH	Double pump H (7)
	TI	Double pump I (7)
	TJ	Double pump J (7)

(1) Water produced from 4 °C ÷ 18 °C
(2) Water produced from 4 °C ÷ - 8 °C
(3) Water produced from 4 °C ÷ 15 °C
(4) The motor condensing units are not configurable with option D and T, and with the integrated hydronic kit
(5) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(6) The models 1402° - 1602° - 1802° cannot have total recovery, which is available for all the other sizes and versions. If it is necessary to have total recovery as well as the hydronic kit, feasibility must be evaluated when ordering.
(7) The unit from 5602 to 9603 can only have hydronic kit "TF - TG - TH- TI - TJ"

PERFORMANCE SPECIFICATIONS

NSM - °

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	307,5	348,9	397,0	450,3	489,4	524,7	543,8	577,3	613,8	680,5	725,1	770,1	813,8	906,1
Input power	kW	104,8	121,0	139,0	152,8	166,4	180,6	193,9	210,5	226,5	232,7	247,5	272,1	298,3	316,2
Cooling total input current	A	182,0	207,0	229,0	257,0	281,0	306,0	329,0	356,0	381,0	392,0	414,0	447,0	484,0	520,0
EER	W/W	2,93	2,88	2,86	2,95	2,94	2,91	2,81	2,74	2,71	2,92	2,93	2,83	2,73	2,87
Water flow rate system side	l/h	52881	59999	68270	77459	84185	90223	93509	99261	105543	117009	124685	132413	139916	155801
Pressure drop system side	kPa	27	36	38	49	57	26	28	33	35	39	42	47	38	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM °

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	958,5	1051,2	1099,1	1168,1	1195,0	1237,7	1327,6	1393,8	1439,8	1578,6	1669,7	1742,2	1859,9
Input power	kW	345,9	360,3	388,1	403,4	430,8	453,1	460,3	488,6	517,2	559,8	575,1	659,2	730,6
Cooling total input current	A	573,0	597,0	641,0	668,0	712,0	749,0	766,0	806,0	857,0	927,0	966,0	1103,0	1230,0
EER	W/W	2,77	2,92	2,83	2,90	2,77	2,73	2,88	2,85	2,78	2,82	2,90	2,64	2,55
Water flow rate system side	l/h	164794	180726	188953	200816	205451	212795	228246	239604	247511	271348	287011	299461	319697
Pressure drop system side	kPa	41	48	42	46	48	55	62	44	46	30	33	36	40

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - L

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	302,4	344,0	392,7	428,1	490,9	513,8	537,4	583,4	602,8	664,4	709,1	771,0	826,1	908,8
Input power	kW	102,7	117,2	135,7	155,9	167,8	179,4	192,5	202,9	215,3	238,3	261,2	265,4	296,6	316,1
Cooling total input current	A	173,0	196,0	218,0	254,0	277,0	297,0	319,0	336,0	354,0	391,0	426,0	429,0	473,0	509,0
EER	W/W	2,94	2,94	2,89	2,75	2,93	2,86	2,79	2,88	2,80	2,79	2,72	2,91	2,79	2,88
Water flow rate system side	l/h	52016	59162	67531	73600	84402	88342	92402	100313	103652	114244	121903	132545	142018	156242
Pressure drop system side	kPa	27	36	38	18	24	25	28	33	31	36	23	23	25	32

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - L

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	949,7	1032,5	1076,9	1122,7	1183,7	1254,5	1295,6	1395,1	1436,6	1605,1	1649,4	1758,0	1946,7
Input power	kW	348,7	365,9	395,0	428,8	442,3	453,2	476,4	491,5	523,6	556,9	586,7	660,2	713,5
Cooling total input current	A	567,0	593,0	638,0	693,0	716,0	736,0	776,0	793,0	849,0	914,0	960,0	1067,0	1163,0
EER	W/W	2,72	2,82	2,73	2,62	2,68	2,77	2,72	2,84	2,74	2,88	2,81	2,66	2,73
Water flow rate system side	l/h	163268	177512	185148	193004	203496	215669	222723	239820	246956	275911	283536	302181	334622
Pressure drop system side	kPa	34	44	46	33	36	42	45	33	34	45	47	34	45

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - A

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	315,6	360,2	415,2	461,4	509,5	544,9	576,9	620,9	658,9	699,4	741,7	800,6	884,3	955,2
Input power	kW	99,0	113,7	133,7	148,3	161,8	173,6	183,3	197,5	208,3	223,6	237,4	253,4	281,2	303,8
Cooling total input current	A	175,0	198,0	223,0	250,0	278,0	298,0	314,0	340,0	355,0	378,0	399,0	421,0	459,0	502,0
EER	W/W	3,19	3,17	3,11	3,11	3,15	3,14	3,15	3,14	3,16	3,13	3,12	3,16	3,15	3,14
Water flow rate system side	l/h	54280	61954	71417	79331	87600	93687	99196	106766	113293	120259	127516	137633	152015	164211
Pressure drop system side	kPa	30	39	43	21	26	28	32	37	37	40	25	25	29	36

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - A

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	1021,7	1084,5	1160,1	1213,2	1275,8	1352,3	1402,7	1462,2	1531,9	1682,9	1753,4	1908,6	2106,4
Input power	kW	328,5	347,0	371,7	389,2	410,5	432,6	451,5	466,3	493,4	534,6	560,2	614,3	673,3
Cooling total input current	A	547,0	577,0	614,0	647,0	685,0	725,0	758,0	772,0	821,0	897,0	936,0	1017,0	1132,0
EER	W/W	3,11	3,13	3,12	3,12	3,11	3,13	3,11	3,14	3,10	3,15	3,13	3,11	3,13
Water flow rate system side	l/h	175657	186457	199460	208561	219327	232478	241144	251345	263330	289291	301409	328062	362058
Pressure drop system side	kPa	39	49	53	38	42	49	52	36	39	49	53	41	52

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - E

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	319,6	368,5	417,6	472,4	514,2	543,2	579,6	615,2	652,1	695,4	740,6	796,5	881,6	951,8
Input power	kW	101,7	117,4	132,3	150,0	165,4	173,7	186,0	194,8	210,1	224,0	238,6	255,4	283,8	305,7
Cooling total input current	A	171,0	196,0	214,0	245,0	272,0	288,0	309,0	324,0	347,0	367,0	389,0	411,0	450,0	490,0
EER	W/W	3,14	3,14	3,16	3,15	3,11	3,13	3,12	3,16	3,10	3,11	3,10	3,12	3,11	3,11
Water flow rate system side	l/h	54958	63367	71800	81228	88406	93396	99657	105762	112115	119555	127316	136926	151562	163628
Pressure drop system side	kPa	15	14	18	21	24	26	30	24	26	29	26	25	29	36

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - E

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	1018,9	1082,1	1159,1	1206,7	1265,2	1322,0	1389,6	1464,9	1528,1	1670,1	1752,6	-	-
Input power	kW	325,9	347,4	370,9	387,8	405,6	422,2	443,7	469,4	489,0	534,5	563,0	-	-
Cooling total input current	A	529,0	560,0	598,0	628,0	656,0	686,0	724,0	764,0	792,0	861,0	898,0	-	-
EER	W/W	3,13	3,11	3,13	3,11	3,12	3,13	3,13	3,12	3,13	3,12	3,11	-	-
Water flow rate system side	l/h	175173	186051	199271	207449	217481	227238	238869	251810	262683	287098	301260	-	-
Pressure drop system side	kPa	40	49	36	38	24	24	29	35	40	49	45	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - U

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	331,0	378,1	432,1	481,7	527,6	564,7	590,5	635,0	675,3	708,2	750,8	811,2	902,5	975,6
Input power	kW	98,6	113,5	128,9	145,7	161,0	169,2	178,4	190,3	204,2	214,1	228,0	245,2	273,3	294,9
Cooling total input current	A	173,0	197,0	218,0	248,0	275,0	292,0	309,0	330,0	352,0	366,0	387,0	410,0	448,0	490,0
EER	W/W	3,36	3,33	3,35	3,31	3,28	3,34	3,31	3,34	3,31	3,31	3,29	3,31	3,30	3,31
Water flow rate system side	l/h	56933	65026	74302	82821	90716	97089	101524	109164	116096	121764	129073	139455	155146	167724
Pressure drop system side	kPa	17	15	19	21	25	28	31	25	28	30	26	26	30	37

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - U

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	1043,4	1104,7	1184,6	1234,0	1301,2	1360,8	1419,5	1505,6 (2)	1579,3	1693,4	1772,6	-	-
Input power	kW	315,2	336,8	357,4	380,5	400,8	418,5	427,8	453,3	472,9	522,1	540,7	-	-
Cooling total input current	A	530,0	562,0	597,0	634,0	671,0	706,0	725,0	762,0	795,0	870,0	896,0	-	-
EER	W/W	3,31	3,28	3,31	3,24	3,25	3,25	3,32	3,32	3,34	3,24	3,28	-	-
Water flow rate system side	l/h	179384	189926	203652	212142	223669	233910	244004	258808	271482	291091	304708	-	-
Pressure drop system side	kPa	42	51	38	40	26	26	31	37	42	51	46	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Unit not Eurovent certified because it exceeds 1500 kW

NSM - N

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	329,8	375,3	431,9	474,4	517,0	550,9	578,6	620,4	659,2	701,2	743,2	803,1	879,6	955,4
Input power	kW	98,1	113,1	127,6	144,8	160,4	168,7	178,2	190,1	204,5	217,3	231,1	247,6	270,2	292,6
Cooling total input current	A	165,0	190,0	207,0	237,0	265,0	281,0	297,0	317,0	339,0	358,0	378,0	399,0	429,0	470,0
EER	W/W	3,36	3,32	3,38	3,28	3,22	3,27	3,25	3,26	3,22	3,23	3,22	3,24	3,26	3,27
Water flow rate system side	l/h	56717	64546	74260	81573	88881	94723	99476	106664	113329	120551	127777	138054	151226	164260
Pressure drop system side	kPa	16	15	19	21	24	28	30	25	27	29	26	25	30	37

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSM - N

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	1014,4	1086,1	1169,7	1219,0	1267,1	1317,0	1367,2	1452,6	-	-	-	-	-
Input power	kW	315,6	332,8	352,6	374,6	396,5	410,4	428,2	450,1	-	-	-	-	-
Cooling total input current	A	513,0	540,0	569,0	605,0	643,0	668,0	700,0	731,0	-	-	-	-	-
EER	W/W	3,21	3,26	3,32	3,25	3,20	3,21	3,19	3,23	-	-	-	-	-
Water flow rate system side	l/h	174394	186718	201086	209575	217799	226384	235022	249705	-	-	-	-	-
Pressure drop system side	kPa	40	35	44	44	26	26	30	37	-	-	-	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Increased fan

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: M																
SEPR - (EN 14825: 2018) (1)																
SEPR	°	W/W	5,41	5,44	5,37	5,53	5,54	5,51	5,54	5,51	5,53	5,51	5,51	5,52	5,52	5,53
	A	W/W	5,70	5,67	5,57	5,54	5,61	5,60	5,62	5,62	5,65	5,51	5,52	5,53	5,60	5,61
	E	W/W	5,82	5,76	5,80	5,71	5,66	5,79	5,74	5,77	5,73	5,64	5,60	5,63	5,72	5,74
	L	W/W	5,62	5,59	5,48	5,54	5,53	5,52	5,56	5,54	5,60	5,52	5,52	5,52	5,55	5,54
	N	W/W	5,94	5,85	5,98	5,79	5,70	5,78	5,75	5,77	5,70	5,63	5,57	5,65	5,73	5,74
	U	W/W	5,91	5,85	5,89	5,81	5,77	5,88	5,84	5,87	5,83	5,75	5,68	5,74	5,82	5,84

(1) Calculation performed with FIXED water flow rate.

Size			4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: M													
SEPR - (EN 14825: 2018) (1)													
SEPR	°	W/W	5,53	5,52	5,53	5,52	5,52	5,64	5,51	5,54	5,55	5,51	5,54
	A	W/W	5,60	5,57	5,60	5,60	5,57	5,66	5,61	5,71	5,69	5,62	5,68
	E	W/W	5,75	5,62	5,60	5,60	5,74	5,85	5,90	5,70	5,77	-	-
	L	W/W	5,55	5,54	5,56	5,55	5,52	5,64	5,61	5,68	5,66	5,63	5,68
	N	W/W	5,73	5,79	5,65	5,67	5,65	5,79	-	-	-	-	-
	U	W/W	5,85	5,73	5,71	5,72	5,84	5,93	5,98	5,82	5,87	-	-

(1) Calculation performed with FIXED water flow rate.

Inverter fan

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: J																
SEER - 12/7 (EN14825: 2018) (1)																
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,44	4,40	4,55	4,56	4,56	4,56	4,57	4,55	4,56	4,56	4,57	4,57	4,56	4,56
	E	W/W	4,48	4,47	4,57	4,57	4,58	4,58	4,58	4,58	4,58	4,59	4,59	4,59	4,59	4,60
	L	W/W	4,43	4,39	4,53	4,55	4,56	4,56	4,56	4,55	4,56	4,56	4,56	4,56	4,56	4,56
	N	W/W	4,54	4,51	4,60	4,60	4,61	4,59	4,60	4,61	4,60	4,61	4,60	4,60	4,60	4,60
	U	W/W	4,49	4,48	4,57	4,59	4,60	4,59	4,59	4,59	4,59	4,59	4,59	4,59	4,59	4,60
Seasonal efficiency	°	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	174,50	172,80	179,00	179,20	179,40	179,40	179,70	179,10	179,50	179,50	179,70	179,60	179,50	179,40
	E	%	176,30	175,60	179,60	179,80	180,20	180,00	180,10	180,00	180,20	180,60	180,40	180,40	180,50	180,80
	L	%	174,00	172,40	178,30	179,00	179,30	179,20	179,20	179,00	179,40	179,20	179,30	179,30	179,30	179,20
	N	%	178,70	177,40	180,80	180,90	181,30	180,70	180,90	181,20	180,90	181,30	181,10	181,10	181,00	181,10
	U	%	176,60	176,10	179,80	180,40	180,90	180,50	180,70	180,60	180,70	180,60	180,60	180,40	180,50	180,90
SEPR - (EN 14825: 2018) (3)																
SEPR	°	W/W	5,41	5,44	5,37	5,53	5,54	5,51	5,54	5,51	5,53	5,51	5,51	5,52	5,52	5,53
	A	W/W	5,70	5,67	5,57	5,54	5,61	5,60	5,62	5,62	5,65	5,51	5,52	5,53	5,60	5,61
	E	W/W	5,82	5,76	5,80	5,71	5,66	5,79	5,74	5,77	5,73	5,64	5,60	5,63	5,72	5,74
	L	W/W	5,62	5,59	5,48	5,54	5,53	5,52	5,56	5,54	5,60	5,52	5,52	5,52	5,55	5,54
	N	W/W	5,94	5,85	5,98	5,79	5,70	5,78	5,75	5,77	5,70	5,63	5,57	5,65	5,73	5,74
	U	W/W	5,91	5,85	5,89	5,81	5,77	5,88	5,84	5,87	5,83	5,75	5,68	5,74	5,82	5,84

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: J															
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,56	4,56	4,56	4,55	4,57	4,56	4,56	4,56	4,57	4,56	4,56	4,56	4,57
	E	W/W	4,58	4,59	4,59	4,59	4,59	4,59	4,59	4,59	4,60	4,58	4,59	-	-
	L	W/W	4,55	4,56	4,55	4,56	4,56	4,57	4,56	4,57	4,56	4,56	4,56	4,56	4,56
	N	W/W	4,60	4,60	4,60	4,60	4,60	4,61	4,60	4,61	-	-	-	-	-
	U	W/W	4,59	4,59	4,60	4,60	4,60	4,60	4,59	4,60	4,60	4,59	4,59	-	-
Seasonal efficiency	°	%	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	%	179,50	179,40	179,40	179,10	179,80	179,40	179,40	179,20	179,60	179,20	179,40	179,50	179,70
	E	%	180,30	180,60	180,70	180,60	180,40	180,40	180,60	180,50	180,90	180,20	180,40	-	-
	L	%	179,00	179,20	179,10	179,20	179,40	179,60	179,40	179,60	179,30	179,20	179,50	179,40	179,50
	N	%	180,80	181,00	181,10	181,00	181,10	181,20	180,80	181,40	-	-	-	-	-
	U	%	180,40	180,60	180,80	180,90	180,90	180,80	180,60	180,80	180,90	180,60	180,60	-	-
SEPR - (EN 14825: 2018) (3)															
SEPR	°	W/W	5,51	5,52	5,53	5,52	5,53	5,52	5,52	5,64	5,51	5,54	5,55	5,51	5,54
	A	W/W	5,56	5,60	5,60	5,57	5,60	5,60	5,57	5,66	5,61	5,71	5,69	5,62	5,68
	E	W/W	5,75	5,70	5,75	5,62	5,60	5,60	5,74	5,85	5,90	5,70	5,77	-	-
	L	W/W	5,51	5,53	5,55	5,54	5,56	5,55	5,52	5,64	5,61	5,68	5,66	5,63	5,68
	N	W/W	5,71	5,71	5,73	5,79	5,65	5,67	5,65	5,79	-	-	-	-	-
	U	W/W	5,85	5,81	5,85	5,73	5,71	5,72	5,84	5,93	5,98	5,82	5,87	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Non-compliant with 2016/2281 EU regulation for comfort applications 12°C / 7°C
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
Maximum current (FLA)	°	A	229,0	257,0	284,0	324,0	357,0	379,0	400,0	433,0	458,0	466,0	466,0	514,0	562,0	619,0
	A,L	A	235,0	263,0	291,0	324,0	364,0	385,0	406,0	437,0	462,0	462,0	462,0	516,0	564,0	619,0
	E,U	A	235,0	263,0	297,0	330,0	364,0	391,0	413,0	444,0	468,0	468,0	468,0	523,0	571,0	625,0
	N	A	242,0	270,0	303,0	337,0	370,0	398,0	419,0	450,0	475,0	475,0	475,0	529,0	583,0	644,0
Peak current (LRA)	°	A	251,0	292,0	335,0	380,0	403,0	450,0	467,0	502,0	512,0	521,0	521,0	645,0	685,0	814,0
	A,L	A	257,0	299,0	342,0	380,0	409,0	456,0	473,0	507,0	517,0	517,0	517,0	647,0	687,0	814,0
	E,U	A	257,0	299,0	348,0	386,0	409,0	462,0	480,0	513,0	523,0	523,0	523,0	653,0	693,0	821,0
	N	A	263,0	305,0	354,0	392,0	415,0	469,0	486,0	519,0	529,0	529,0	529,0	660,0	706,0	839,0

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Electric data															
Maximum current (FLA)	°	A	667,0	714,0	753,0	805,0	848,0	882,0	924,0	949,0	997,0	1084,0	1137,0	1266,0	1368,0
	A,L	A	667,0	712,0	751,0	813,0	865,0	913,0	947,0	955,0	1003,0	1094,0	1133,0	1268,0	1406,0
	E,U	A	679,0	718,0	770,0	813,0	862,0	902,0	943,0	968,0	1022,0	1100,0	1145,0	-	-
	N	A	692,0	743,0	789,0	838,0	887,0	921,0	955,0	987,0	-	-	-	-	-
Peak current (LRA)	°	A	841,0	914,0	936,0	1100,0	1147,0	1259,0	1264,0	1038,0	1065,0	1160,0	1197,0	1446,0	1552,0
	A,L	A	841,0	911,0	934,0	1108,0	1164,0	1290,0	1287,0	1044,0	1071,0	1170,0	1193,0	1448,0	1590,0
	E,U	A	854,0	918,0	953,0	1108,0	1161,0	1279,0	1283,0	1056,0	1090,0	1176,0	1205,0	-	-
	N	A	866,0	943,0	972,0	1133,0	1186,0	1298,0	1295,0	1076,0	-	-	-	-	-

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802
Compressor											
Type	°,A,E,L,N,U	type					Screw				
Number	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type					R134a				
Refrigerant load circuit 1 (1)	°	kg	24,0	24,0	24,0	30,0	30,0	35,0	35,0 (2)	35,0	35,0
	A	kg	26,5	34,0 (2)	28,0	28,0	34,0	35,0	38,5	40,5	45,0
	E	kg	28,0	30,0	41,0 (2)	41,0 (2)	46,0 (2)	43,0	41,0	46,0	45,0
	L	kg	24,0	34,0 (2)	37,0 (2)	28,0	34,0	35,0	38,5	40,0	42,0 (2)
	N	kg	36,0 (2)	38,0 (2)	44,0 (2)	44,0 (2)	49,0 (2)	53,0 (2)	56,0 (2)	60,0 (2)	64,0 (2)
	U	kg	32,0 (2)	34,0 (2)	34,0	35,0	46,0 (2)	49,0 (2)	49,0	46,0 (2)	45,0 (2)
Refrigerant load circuit 2 (1)	°	kg	24,0	25,0	25,0	41,0	33,0	38,0	37,0 (2)	37,5	36,5
	A	kg	28,0	34,0 (2)	29,5	36,0	34,0	49,0	40,5	45,0	47,5
	E	kg	30,0	31,5	41,0 (2)	46,0 (2)	46,0 (2)	45,0	46,0	52,0	53,0
	L	kg	27,0	34,0 (2)	37,0 (2)	36,0	34,0	40,0	40,5	43,0	46,0 (2)
	N	kg	36,0 (2)	38,0 (2)	44,0 (2)	49,0 (2)	49,0 (2)	56,0 (2)	56,0 (2)	64,0 (2)	64,0 (2)
	U	kg	32,0 (2)	34,0 (2)	36,0	41,5	46,0 (2)	53,0 (2)	54,0	52,0 (2)	48,5 (2)
Refrigerant load circuit 3 (1)	°,A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-
System side heat exchanger											
Type	°,A,E,L,N,U	type					Shell and tube				
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) The refrigerant gas charge is approximate, for more information contact the office.

Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Compressor											
Type	°,A,E,L,N,U	type					Screw				
Number	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type					R134a				
Refrigerant load circuit 1 (1)	°	kg	40,0	46,0	42,5	44,5	51,0	52,0	55,0	55,0 (2)	63,0 (2)
	A	kg	44,0 (2)	47,0	52,0 (2)	55,0	74,0 (2)	62,0	67,0	67,0	70,0
	E	kg	45,0 (2)	57,0	54,0 (2)	74,0 (2)	60,0 (2)	70,0	89,0 (2)	80,0 (2)	100,0 (2)
	L	kg	44,0	47,0	52,0 (2)	54,0	56,0 (2)	62,0	67,0 (2)	67,0	70,0
	N	kg	64,0 (2)	55,0 (2)	72,0 (2)	81,0 (2)	85,0 (2)	92,0 (2)	99,0 (2)	110,0 (2)	114,0 (2)
	U	kg	60,0 (2)	54,5	58,0	58,0	60,0 (2)	70,0	89,0 (2)	80,0	85,0 (2)
Refrigerant load circuit 2 (1)	°	kg	50,0	48,0	46,0	46,0	59,0	59,0	64,0	64,0 (2)	70,0 (2)
	A	kg	52,0 (2)	50,0	55,0 (2)	60,0	81,0 (2)	70,0	78,0	78,0	82,0
	E	kg	53,0 (2)	59,0	59,0 (2)	74,0 (2)	77,0 (2)	85,0	96,0 (2)	90,0 (2)	110,0 (2)
	L	kg	52,0	50,0	55,0 (2)	58,0	72,0 (2)	70,0	79,0 (2)	78,0	82,0
	N	kg	69,0 (2)	57,0 (2)	77,0 (2)	81,0 (2)	92,0 (2)	92,0 (2)	107,0 (2)	110,0 (2)	124,0 (2)
	U	kg	65,0 (2)	59,0	62,0	63,0	77,0 (2)	85,0	96,0 (2)	90,0	103,0 (2)
Refrigerant load circuit 3 (1)	°,A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-
System side heat exchanger											
Type	°,A,E,L,N,U	type					Shell and tube				
Number	°,A,E,L,U	no.	1	1	1	1	1	1	1	1	1
	N	no.	1	1	1	1	1	1	2	2	2

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) The refrigerant gas charge is approximate, for more information contact the office.

Size			5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor											
Type	°,A,E,L,N,U	type					Screw				
Number	°,A,L	no.	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	3	-	-	-	-	-
Circuits	°,A,L	no.	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	3	-	-	-	-	-
Refrigerant	°,A,E,L,N,U	type					R134a				
Refrigerant load circuit 1 (1)	°	kg	65,0 (2)	62,0	70,0 (2)	67,0 (2)	55,0	78,0 (2)	62,0 (2)	99,0 (2)	112,0 (2)
	A	kg	106,0 (2)	82,0	82,0 (2)	74,0 (2)	81,0 (2)	85,0 (2)	70,0	106,0 (2)	80,0
	E	kg	113,0 (2)	86,0	95,0 (2)	77,0 (2)	89,0 (2)	89,0 (2)	100,0 (2)	-	-
	L	kg	106,0 (2)	82,0	82,0 (2)	74,0 (2)	81,0 (2)	85,0 (2)	70,0 (2)	106,0 (2)	80,0
	N	kg	128,0 (2)	128,0 (2)	138,0 (2)	85,0 (2)	-	-	-	-	-
	U	kg	113,0 (2)	86,0	95,0	77,0 (2)	89,0 (2)	89,0 (2)	100,0 (2)	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) The refrigerant gas charge is approximate, for more information contact the office.

Size			5602	6002	6402	6503	6703	6903	7203	8403	9603
Refrigerant load circuit 2 (1)	°	kg	71,0 (2)	73,0	80,0 (2)	74,0 (2)	61,0	85,0 (2)	70,0 (2)	99,0 (2)	112,0 (2)
	A	kg	106,0 (2)	99,0	99,0 (2)	81,0 (2)	81,0 (2)	92,0 (2)	75,0	106,0 (2)	95,0
	E	kg	113,0 (2)	98,0	97,0 (2)	85,0 (2)	89,0 (2)	96,0 (2)	100,0 (2)	-	-
	L	kg	106,0 (2)	99,0	99,0 (2)	81,0 (2)	81,0 (2)	92,0 (2)	75,0 (2)	106,0 (2)	95,0
	N	kg	128,0 (2)	138,0 (2)	138,0 (2)	92,0 (2)	-	-	-	-	-
	U	kg	113,0 (2)	98,0	97,0	85,0 (2)	89,0 (2)	96,0 (2)	100,0 (2)	-	-
Refrigerant load circuit 3 (1)	°	kg	-	-	-	74,0 (2)	65,0	85,0 (2)	80,0 (2)	99,0 (2)	112,0 (2)
	A	kg	-	-	-	81,0 (2)	81,0 (2)	92,0 (2)	75,0	106,0 (2)	85,0
	E,U	kg	-	-	-	85,0 (2)	89,0 (2)	96,0 (2)	100,0 (2)	-	-
	L	kg	-	-	-	81,0 (2)	81,0 (2)	92,0 (2)	75,0 (2)	106,0 (2)	85,0
	N	kg	-	-	-	92,0 (2)	-	-	-	-	-
System side heat exchanger											
Type	°,A,E,L,N,U	type	Shell and tube								
Number	°	no.	1	1	1	1	1	1	1	1	1
	A,L	no.	1	1	1	2	2	2	2	2	2
	E,U	no.	2	2	2	2	2	2	2	-	-
	N	no.	2	2	2	2	-	-	-	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) The refrigerant gas charge is approximate, for more information contact the office.

FANS DATA

Oversized

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802
Fans: M											
Increased fan											
Type	°,A,E,L,N,U	type	axials								
Fan motor	°,A,U	type	Asynchronous								
	E,L,N	type	Asynchronous with phase cut								
Fan											
Number	°	no.	6	6	6	8	8	8	8	8	8
	A,L	no.	8	8	8	8	10	10	10	12	12
	E,U	no.	8	8	10	10	10	12	12	14	14
	N	no.	10	10	12	12	12	14	14	16	16
With static pressure											
Air flow rate	°	m^3/h	96000	96000	96000	128000	128000	128000	128000	144000	144000
	A	m^3/h	128000	128000	128000	128000	160000	160000	160000	192000	192000
	E	m^3/h	92000	92000	115000	115000	115000	138000	138000	161000	161000
	L	m^3/h	92000	92000	92000	92000	115000	115000	115000	138000	138000
	N	m^3/h	115000	115000	138000	138000	138000	161000	161000	184000	184000
	U	m^3/h	128000	128000	160000	160000	160000	192000	192000	224000	224000
High static pressure	°	Pa	50	50	50	50	50	50	50	-	-
	A,E,L,N,U	Pa	50	50	50	50	50	50	50	50	50
Without Static pressure											
Air flow rate	°	m^3/h	108000	108000	108000	144000	144000	144000	144000	144000	144000
	A	m^3/h	144000	144000	144000	144000	180000	180000	180000	216000	216000
	E	m^3/h	92000	92000	115000	115000	115000	138000	138000	161000	161000
	L	m^3/h	92000	92000	92000	92000	115000	115000	115000	138000	138000
	N	m^3/h	115000	115000	138000	138000	138000	161000	161000	184000	184000
	U	m^3/h	144000	144000	180000	180000	180000	216000	216000	252000	252000
High static pressure	°,A,E,L,N,U	Pa	0	0	0	0	0	0	0	0	0
With static pressure											
Sound power level	°	dB(A)	96,8	97,0	97,2	97,6	97,8	98,0	98,2	98,4	98,4
	A	dB(A)	97,3	97,4	97,8	97,9	98,2	98,3	98,4	98,8	98,9
	E	dB(A)	89,3	89,4	90,2	90,3	90,4	90,8	91,2	91,8	92,0
	L	dB(A)	88,9	89,0	89,1	89,2	90,3	90,5	90,6	90,8	90,9
	N	dB(A)	90,0	90,4	90,9	91,0	91,1	91,4	91,4	92,1	92,2
	U	dB(A)	97,0	97,4	98,0	98,2	98,4	98,8	98,8	99,0	99,1
Without Static pressure											
Sound power level	°	dB(A)	97,5	97,6	97,6	97,9	98,1	98,2	98,4	98,4	98,4
	A	dB(A)	98,2	98,2	98,6	98,7	99,1	99,2	99,2	99,7	99,8
	E	dB(A)	89,3	89,4	90,2	90,3	90,4	90,8	91,2	91,8	92,0
	L	dB(A)	88,9	89,0	89,1	89,2	90,3	90,5	90,6	90,8	90,9
	N	dB(A)	90,0	90,4	90,9	91,0	91,1	91,4	91,4	92,1	92,2
	U	dB(A)	97,9	98,2	98,9	99,1	99,2	99,7	99,7	100,0	100,1

Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Fans: M											
Increased fan											
Type	°,A,E,L,N,U	type	axials								
Fan motor	°,A,U	type	Asynchronous								
	E,L,N	type	Asynchronous with phase cut								

Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Fan											
Number	°	no.	10	10	10	10	12	12	14	14	16
	A,L	no.	12	12	14	14	16	16	18	18	18
	E,U	no.	14	14	16	16	18	20	20	22	22
	N	no.	16	16	18	20	22	22	26	28	30
With static pressure											
Air flow rate	°	m^3/h	180000	180000	180000	180000	216000	216000	252000	252000	288000
	A	m^3/h	192000	192000	224000	224000	256000	256000	288000	288000	324000
	E	m^3/h	161000	161000	184000	184000	207000	230000	230000	253000	253000
	L	m^3/h	138000	138000	161000	161000	184000	184000	207000	207000	234000
	N	m^3/h	184000	184000	207000	230000	253000	253000	299000	322000	345000
	U	m^3/h	224000	224000	256000	256000	288000	320000	320000	352000	352000
High static pressure	°	Pa	-	-	-	-	-	-	-	-	-
	A,L	Pa	50	50	50	50	50	50	50	50	-
	E,N,U	Pa	50	50	50	50	50	50	50	50	50
Without Static pressure											
Air flow rate	°	m^3/h	180000	180000	180000	180000	216000	216000	252000	252000	288000
	A	m^3/h	216000	216000	252000	252000	288000	288000	324000	324000	324000
	E	m^3/h	161000	161000	184000	184000	207000	230000	230000	253000	253000
	L	m^3/h	138000	138000	161000	161000	184000	184000	207000	207000	234000
	N	m^3/h	184000	184000	207000	230000	253000	253000	299000	322000	345000
	U	m^3/h	252000	252000	288000	288000	324000	360000	360000	396000	396000
High static pressure	°,A,E,L,N,U	Pa	0	0	0	0	0	0	0	0	0
With static pressure											
Sound power level	°	dB(A)	99,4	99,5	99,6	99,8	100,7	100,8	101,2	101,3	101,7
	A	dB(A)	99,0	99,1	99,3	99,4	100,1	100,2	100,4	100,8	101,5
	E	dB(A)	92,2	92,3	92,8	93,0	93,2	93,5	93,6	93,7	93,8
	L	dB(A)	91,0	91,1	91,3	91,4	92,4	92,5	93,0	93,1	93,2
	N	dB(A)	92,3	92,4	92,8	93,1	93,3	93,4	94,3	94,4	94,8
	U	dB(A)	99,2	99,3	99,9	100,0	100,4	100,7	101,0	101,3	101,6
Without Static pressure											
Sound power level	°	dB(A)	99,4	99,5	99,6	99,8	100,7	100,8	101,2	101,3	101,7
	A	dB(A)	99,9	100,0	100,2	100,3	101,0	101,1	101,3	101,7	101,5
	E	dB(A)	92,2	92,3	92,8	93,0	93,2	93,5	93,6	93,7	93,8
	L	dB(A)	91,0	91,1	91,3	91,4	92,4	92,5	93,0	93,1	93,2
	N	dB(A)	92,3	92,4	92,8	93,1	93,3	93,4	94,3	94,4	94,8
	U	dB(A)	100,2	100,2	100,8	100,9	101,3	101,7	101,9	102,2	102,5

Size			5602	6002	6402	6503	6703	6903	7203
Fans: M									
Increased fan									
Type	°,A,E,L,N,U	type	axials						
Fan motor	°,A,U	type	Asynchronous						
	E,L,N	type	Asynchronous with phase cut						
Fan									
Number	°	no.	16	16	18	18	18	20	22
	A,L	no.	20	22	22	24	24	28	28
	E,U	no.	24	26	28	28	30	30	32
	N	no.	32	32	32	34	-	-	-
With static pressure									
Air flow rate	°	m^3/h	288000	288000	324000	324000	324000	360000	396000
	A	m^3/h	360000	396000	396000	384000	384000	448000	448000
	E	m^3/h	276000	299000	322000	322000	345000	345000	368000
	L	m^3/h	260000	286000	286000	276000	276000	322000	322000
	N	m^3/h	368000	368000	368000	391000	-	-	-
	U	m^3/h	384000	416000	448000	448000	480000	480000	512000
High static pressure	°	Pa	-	-	-	-	-	-	-
	A,L	Pa	-	-	-	50	50	50	50
	E,U	Pa	50	50	50	50	50	50	50
	N	Pa	50	50	50	50	-	-	-
Without Static pressure									
Air flow rate	°	m^3/h	288000	288000	324000	324000	324000	360000	396000
	A	m^3/h	360000	396000	396000	432000	432000	504000	504000
	E	m^3/h	276000	299000	322000	322000	345000	345000	368000
	L	m^3/h	260000	286000	286000	276000	276000	322000	322000
	N	m^3/h	368000	368000	368000	391000	-	-	-
	U	m^3/h	432000	468000	504000	504000	540000	540000	576000
High static pressure	°,A,E,L,U	Pa	0	0	0	0	0	0	0
	N	Pa	0	0	0	0	-	-	-

Size			5602	6002	6402	6503	6703	6903	7203
With static pressure									
Sound power level	°	dB(A)	101,7	101,8	102,1	102,3	102,4	103,0	103,1
	A	dB(A)	101,7	101,9	102,0	102,0	102,1	102,3	102,4
	E	dB(A)	93,9	94,0	94,2	94,3	94,3	94,4	94,8
	L	dB(A)	93,7	93,9	94,0	94,2	94,2	94,3	94,3
	N	dB(A)	95,0	95,2	95,3	95,4	-	-	-
	U	dB(A)	102,0	102,1	102,2	102,2	102,3	102,4	102,4
Without Static pressure									
Sound power level	°	dB(A)	101,7	101,8	102,1	102,3	102,4	103,0	103,1
	A	dB(A)	101,7	101,9	102,0	102,9	103,0	103,2	103,3
	E	dB(A)	93,9	94,0	94,2	94,3	94,3	94,4	94,8
	L	dB(A)	93,7	93,9	94,0	94,2	94,2	94,3	94,3
	N	dB(A)	95,0	95,2	95,3	95,4	-	-	-
	U	dB(A)	102,9	103,0	103,2	103,2	103,3	103,4	103,4

Inverter

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802
Fan											
Type	°,A,E,L,N,U	type					axials				
Fan motor	°,A,E,L,N,U	type					On-Off				
Number	°	no.	6	6	6	8	8	8	8	8	8
	A,L	no.	8	8	8	8	10	10	10	12	12
	E,U	no.	8	8	10	10	10	12	12	14	14
	N	no.	10	10	12	12	12	14	14	16	16
Inverter fan											
Air flow rate	°	m^3/h	96000	96000	96000	128000	128000	128000	128000	144000	144000
	A	m^3/h	12800	12800	12800	12800	16000	16000	160000	160000	160000
	E	m^3/h	92000	92000	115000	115000	115000	138000	138000	161000	161000
	L	m^3/h	115000	115000	115000	138000	138000	138000	138000	161000	161000
	N	m^3/h	15000	15000	18000	18000	18000	21000	21000	24000	24000
	U	m^3/h	128000	128000	160000	160000	160000	192000	192000	224000	224000
High static pressure	°	Pa	120	120	120	120	120	120	120	75	75
	A,E,L,N,U	Pa	120	120	120	120	120	120	120	120	120
Sound data calculated in cooling mode (1)											
Sound power level	°,A,E,L,N,U	dB(A)	-	-	-	-	-	-	-	-	-

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			3002	3202	3402	3602	3902	4202	4502	4802	5202
Fans: J											
Fan											
Type	°,A,E,L,N,U	type					axials				
Fan motor	°,A,E,L,N,U	type					Inverter				
Number	°	no.	10	10	10	10	12	12	14	14	16
	A,L	no.	12	12	14	14	16	16	18	18	18
	E,U	no.	14	14	16	16	18	20	20	22	22
	N	no.	16	16	18	20	22	22	26	28	30
Inverter fan											
Air flow rate	°	m^3/h	180000	180000	180000	180000	216000	216000	252000	252000	288000
	A	m^3/h	192000	192000	224000	224000	256000	256000	288000	288000	324000
	E	m^3/h	161000	161000	184000	184000	207000	230000	230000	253000	253000
	L	m^3/h	138000	138000	161000	161000	184000	184000	207000	207000	234000
	N	m^3/h	184000	184000	207000	230000	253000	253000	299000	322000	345000
	U	m^3/h	224000	224000	256000	256000	288000	320000	320000	352000	352000
High static pressure	°	Pa	75	75	75	75	75	75	75	75	75
	A,L	Pa	120	120	120	120	120	120	120	120	75
	E,N,U	Pa	120	120	120	120	120	120	120	120	120
Sound data calculated in cooling mode (1)											
Sound power level	°	dB(A)	99,4	99,5	99,6	99,8	100,7	100,8	101,2	101,3	101,7
	A	dB(A)	99,0	99,1	99,3	99,4	100,1	100,2	100,4	100,8	101,5
	E	dB(A)	92,2	92,3	92,8	93,0	93,2	93,5	93,6	93,7	93,8
	L	dB(A)	91,0	91,1	91,3	91,4	92,4	92,5	93,0	93,1	93,2
	N	dB(A)	92,3	92,4	92,8	93,1	93,3	93,4	94,3	94,4	94,8
	U	dB(A)	99,2	99,3	99,9	100,0	100,4	100,7	101,0	101,3	101,6

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

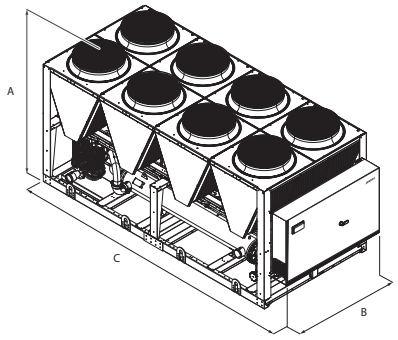
Size			5602	6002	6402	6503	6703	6903	7203
Fans: J									
Fan									
Type	°,A,E,L,N,U	type				axials			
Fan motor	°,A,E,L,N,U	type				Inverter			

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			5602	6002	6402	6503	6703	6903	7203
Number	°	no.	16	16	18	18	18	20	22
	A,L	no.	20	22	22	24	24	28	28
	E,U	no.	24	26	28	28	30	30	32
	N	no.	32	32	32	34	-	-	-
Inverter fan									
Air flow rate	°	m^3/h	288000	288000	324000	324000	324000	360000	396000
	A	m^3/h	360000	396000	396000	384000	384000	448000	448000
	E	m^3/h	276000	299000	322000	322000	345000	345000	368000
	L	m^3/h	260000	286000	286000	276000	276000	322000	322000
	N	m^3/h	368000	368000	368000	391000	-	-	-
	U	m^3/h	384000	416000	448000	448000	480000	480000	512000
High static pressure	°	Pa	75	75	75	75	75	75	75
	A,L	Pa	75	75	75	120	120	120	120
	E,U	Pa	120	120	120	120	120	120	120
	N	Pa	120	120	120	120	-	-	-
Sound data calculated in cooling mode (1)									
Sound power level	°	dB(A)	101,7	101,8	102,1	102,3	102,4	103,0	103,1
	A	dB(A)	101,7	101,9	102,0	102,0	102,1	102,3	102,4
	E	dB(A)	93,9	94,0	94,2	94,3	94,3	94,4	94,8
	L	dB(A)	93,7	93,9	94,0	94,2	94,2	94,3	94,3
	N	dB(A)	95,0	95,2	95,3	95,4	-	-	-
	U	dB(A)	102,0	102,1	102,2	102,2	102,3	102,4	102,4

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights																
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	3970	3970	3970	5160	5160	5160	5160	5160	5160	6350	6350	6350	6350	7140
	A,L	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330	9520
	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520	10710
	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900	13090

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Dimensions and weights															
A	°,A,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
	E,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	-	-	-	-	-
B	°,A,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	E,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	-	-	-	-	-
C	°	mm	7140	8330	8330	9520	9520	9520	10710	11110	11110	11900	13090	13090	13090
	A,L	mm	9520	10710	10710	10710	11900	13090	13090	14280	14280	16660	16660	17850	20230
	E,U	mm	11900	11900	13090	13090	14280	15470	16660	16660	17850	17850	19040	-	-
	N	mm	13090	15470	16660	17850	19040	19040	19040	20230	-	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately. For more information, please refer to the technical manual and / or installation.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00																
Weights																
Empty weight	°	kg	3660	3702	3831	4670	5040	5053	5077	5273	5396	5922	5977	6410	6901	7477
	A,L	kg	4213	4249	4373	4699	5472	5488	5691	6228	6424	6477	6577	7656	8129	8647
	E,U	kg	4373	4394	4840	5431	5785	6333	6356	6805	6896	6914	6953	8149	8660	9431
	N	kg	4791	4812	5373	5965	6318	6741	6764	7254	7346	7416	7508	8882	9759	10383
Weight functioning	°	kg	3753	3790	3962	4801	5171	5202	5226	5548	5671	6244	6299	6732	7214	7790
	A,L	kg	4306	4337	4505	4848	5621	5637	5966	6503	6747	6799	6871	8173	8645	9152
	E,U	kg	4505	4543	4989	5753	6107	6655	6679	7118	7209	7279	7352	8718	9177	9936
	N	kg	4923	4962	5522	6287	6641	7063	7086	7567	7659	7729	7802	9399	10276	10888

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00															
Weights															
Empty weight	°	kg	7574	7993	8302	8826	8954	9017	9719	11612	11688	12216	12761	13047	13176
	A,L	kg	8710	9428	9481	9902	10433	11018	11060	13354	13417	14572	14625	15743	16934
	E,U	kg	9922	9983	10887	11013	11820	12261	12701	14514	15005	15119	16034	-	-
	N	kg	10456	11646	12355	12989	12721	13666	13709	16119	-	-	-	-	-
Weight functioning	°	kg	7868	8287	8819	9342	9471	9522	10224	12527	12603	13089	13633	13920	14048
	A,L	kg	9215	9922	9974	10795	11327	11898	11940	14121	14184	15328	15381	16950	18126
	E,U	kg	10427	10476	11781	11907	12446	12886	13327	15281	15772	15875	17190	-	-
	N	kg	10961	12171	12880	13564	14249	14292	14726	16937	-	-	-	-	-

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All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NSMI 1251-6102

Air-water chiller

Cooling capacity 285,6 ÷ 1342,6 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **Low electrical consumption**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger.
In the unit with desuperheater, it is also possible to produce free-hot water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on the size and vesion. For more information refer to the dedicated documentations or the selection program Magellano.

Unit with 1 / 2 cooling circuits

Unit with 1–2 refrigerant circuits.
The single circuit units have the inverter compressor, while the dual-circuit have an asynchronous compressor on/off switch and an inverter, the combination provides both high efficiency at part load and full load.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

Low noise version

Silenced versions "E" feature a special compressor jacket which ensures a further noise reduction of approximately 4dB.

CONTROL PCO[5]

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

- Possibility to control two units in a Master-Slave configuration
- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Accessories

Model	Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
AER485P1	A,E	•	•	•												
AER485P1 x no. 2	A,E				•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•												
AERBACP x no. 2	A,E				•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Antivibration

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A	AVX991	AVX992	AVX993	AVX996	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX997	AVX998	AVX998	AVX998	AVX998
E	AVX991	AVX992	AVX994	AVX996	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX997	AVX998	AVX998	AVX998	AVX998

Heater exchangers

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A, E	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid kit

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A, E	GP4V	GP4V	GP5V	GP5V	GP6V	GP7V	GP7V	GP7V	GP8V	GP9V	GP10V	GP11V	GP11V	GP11V	GP11V

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3,4		**NSMI**
5,6,7,8		**Size** 1251, 1601, 1801, 2352, 2652, 2802, 3202, 3402, 3802, 4102, 4402, 4802, 5202, 5702, 6102
9		**Model**
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (1)
	T	With total recovery
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
12		**Coils**
	I	Copper-aluminium
	O	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Aluminium microchannel
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	°	400V~3 50Hz with fuses
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (2)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (2)
		Kit with 2 pumps
	TF	Double pump F
	TG	Double pump G
	TH	Double pump H
	TI	Double pump I
	TJ	Double pump J (2)

(1) Minimum water temperature of 35 °C must always be ensured at heat exchanger inlet if working with low temperatures of water produced in the primary circuit.
(2) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NSMI - A/E

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Cooling performance 12 °C / 7 °C (1)																	
Cooling capacity		kW	285,6	382,0	464,0	519,1	605,4	659,4	725,2	802,4	842,6	948,0	1008,8	1110,4	1204,3	1253,0	1342,6
Input power		kW	91,3	120,2	149,5	167,1	194,3	212,3	232,7	257,5	269,9	304,8	324,7	356,2	397,4	415,9	454,6
Cooling total input current		A	155,0	200,0	245,0	293,0	337,0	360,0	393,0	431,0	443,0	517,0	547,0	619,0	665,0	728,0	761,0
EER		W/W	3,13	3,18	3,10	3,11	3,12	3,11	3,12	3,12	3,12	3,11	3,11	3,12	3,03	3,01	2,95
Water flow rate system side		l/h	49130	65700	79773	89247	104092	113376	124682	137945	144852	162983	173442	190903	207040	215409	230815
Pressure drop system side		kPa	45	15	21	18	25	28	33	27	30	39	45	38	44	49	55

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
SEER - 12/7 (EN14825:2018) with standard fans (1)																	
SEER	A,E	W/W	4,75	4,82	4,78	4,90	4,92	4,90	4,91	4,93	4,93	4,90	4,88	4,90	4,85	4,70	4,69
Seasonal efficiency	A,E	%	186,8%	189,7%	188,0%	193,1%	193,9%	193,0%	193,3%	194,2%	194,3%	192,8%	192,2%	192,9%	191,0%	185,1%	184,7%
SEER - (EN14825:2018) 12/7 with inverter fans (1)																	
SEER	A,E	W/W	4,95	5,04	5,00	5,01	5,03	5,01	5,02	5,04	5,04	5,00	4,99	5,00	4,96	4,81	4,80
Seasonal efficiency	A,E	%	194,9%	198,4%	196,8%	197,3%	198,1%	197,2%	197,6%	198,5%	198,5%	197,1%	196,4%	197,1%	195,3%	189,2%	188,8%
SEPR - (EN14825: 2018) High temperature with standard fans (2)																	
SEPR	A,E	W/W	5,70	5,62	5,59	6,56	6,43	6,42	6,77	6,94	7,21	6,96	7,47	6,88	7,21	6,69	7,01
SEPR - (EN14825: 2018) High temperature with inverter fans (2)																	
SEPR	A,E	W/W	5,70	5,62	5,59	6,56	6,43	6,42	6,77	6,94	7,21	6,96	7,47	6,88	7,21	6,69	7,01

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Electric data																	
Maximum current (FLA)	A,E	A	251,3	291,3	377,7	442,0	473,0	519,4	519,4	567,4	653,8	708,1	753,5	874,8	917,2	1002,2	1036,2
Peak current (LRA)	A,E	A	51,3	51,3	57,7	571,7	605,0	651,4	651,4	775,4	861,8	989,1	1059,4	1180,2	1335,2	1420,2	1532,2

GENERAL TECHNICAL DATA

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Compressor																	
Type	A,E	type	Screw														
Compressor regulation	A,E	Type	I	I	I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I	1+I
Number	A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type	R134a														
Refrigerant charge (1)	A,E	kg	28,0	28,0	30,0	81,0	92,0	110,0	114,0	107,0	131,0	146,0	163,0	183,0	183,0	195,0	195,0
System side heat exchanger																	
Type	A,E	type	Shell and tube														
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections																	
Connections (in/out)	A,E	Type	Grooved joints														
Sizes (in/out)	A,E	Ø	5"	6"	6"	6"	6"	6"	6"	8"	8"	8"	8"	10"	10"	10"	10"

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Fans

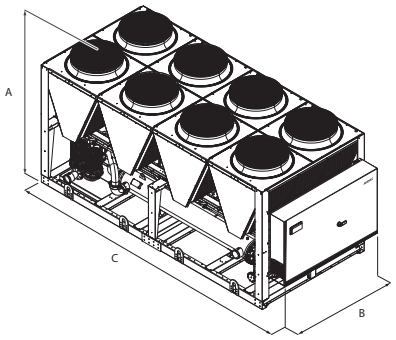
Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Fans: °																	
Fan																	
Type	A,E	type	Axial														
Fan motor	A,E	type	Asynchronous with phase cut														
Number	A,E	no.	8	8	10	10	12	14	14	14	16	18	20	22	22	22	22
Air flow rate	A,E	m^3/h	128000	128000	160000	160000	192000	224000	224000	224000	256000	288000	320000	396000	396000	396000	396000

Sound data

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Sound data calculated in cooling mode (1)																	
Sound power level	A	dB(A)	97,2	98,6	98,6	98,6	98,8	99,9	99,9	100,3	100,3	100,4	101,0	102,9	103,2	102,9	103,2
	E	dB(A)	92,9	95,8	95,9	94,7	95,1	96,1	96,1	97,3	97,4	97,7	98,0	99,9	99,9	99,9	99,9
Sound pressure level (10 m)	A	dB(A)	64,8	66,2	66,1	66,1	66,2	67,1	67,1	67,5	67,5	67,4	67,9	69,7	69,9	69,7	69,9
	E	dB(A)	60,6	63,4	63,4	62,1	62,5	63,3	63,3	64,6	64,5	64,7	64,8	66,7	66,7	66,7	66,7

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Dimensions and weights																	
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	4760	4760	5950	6400	7140	8330	8330	8330	9520	10710	11900	13090	13090	13090	13090

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Integrated hydronic kit: 00																	
Dimensions and weights																	
Empty weight	A	kg	3752	4162	4578	6039	6447	6896	6987	7635	8103	8872	9324	10798	10888	10918	10991
	E	kg	4054	4464	4880	6642	7050	7499	7590	8239	8706	9475	9928	11637	11727	11757	11830
Weight functioning	A	kg	3832	4416	4832	6360	6768	7206	7275	8165	8632	9389	9841	11730	11819	11835	11908
	E	kg	4134	4718	5134	6964	7371	7809	7878	8768	9236	9993	10445	12568	12658	12674	12747

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NS

Reversible air/water heat pump

Cooling capacity 251 ÷ 731 kW – Heating capacity 281 ÷ 786 kW

- **High efficiency also at partial loads**
- **Electronic expansion valve**



DESCRIPTION

Reversible outdoor heat pumps for the production of chilled/heated water designed to satisfy the needs of residential and commercial buildings, or for industrial applications.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Working at full load up to -10 °C outside air temperature in winter, and up to 48°C in summer. Hot water production up to 55°C (for more details refer to the technical documentation).

Bi-tri circuit unit

The units are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.
GP_M: Anti-intrusion grid.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
KRS: Electric heater for the heat exchanger
AK: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
AER485P1	A,E	•	•		•		•											
AER485P1 x no. 2	A,E			•		•		•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•		•		•											
AERBACP x no. 2	A,E			•		•		•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Condensation control temperature

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202
A	DCPX69	DCPX69	DCPX68	DCPX69	DCPX68	DCPX69	DCPX68	DCPX73	DCPX73
E	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard

Ver	2352	2502	2652	2802	3002	3202	3402	3602
A	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73	DCPX73
E	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard

Anti-intrusion grid

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202
A, E	GP300M	GP300M	GP300B	GP300M	GP300B	GP400M	GP400B	GP500B	GP500B

Ver	2352	2502	2652	2802	3002	3202	3402	3602
A, E	GP500B	GP500B	GP500B	GP500B	GP300M+300M	GP300M+300M	GP300M+400M	GP400M+400M

Antivibration

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Integrated hydronic kit: 00																	
A, E	AVX536	AVX536	AVX537	AVX536	AVX538	AVX540	AVX541	AVX543	AVX543	AVX545	AVX549	AVX551	AVX551	AVX554	AVX556	AVX557	AVX559
Integrated hydronic kit: PA																	
A, E	AVX536	AVX536	AVX537	AVX536	AVX538	AVX540	AVX541	AVX543	AVX543	AVX545	AVX550	AVX551	AVX551	AVX553	AVX553	AVX557	AVX559
Integrated hydronic kit: PC, PE, PG, PJ																	
A, E	AVX536	AVX536	AVX538	AVX536	AVX538	AVX540	AVX541	AVX543	AVX543	AVX545	AVX550	AVX551	AVX551	AVX553	AVX555	AVX557	AVX559

Heater exchangers

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E	KRS11	KRS11	KRS19	KRS11	KRS19	KRS11	KRS19	KRS19	KRS19	KRS19	KRS19	KRS19	KRS19	KRS14	KRS14	KRS14	KRS14

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202
A, E	RIFNSH1251	RIFNSH1401	RIFNSH1402	RIFNSH1601	RIFNSH1602	RIFNSH1801	RIFNSH1802	RIFNSH2002	RIFNSH2202

A grey background indicates the accessory must be assembled in the factory

Ver	2352	2502	2652	2802	3002	3202	3402	3602
A, E	RIFNSH2352	RIFNSH2502	RIFNSH2652	RIFNSH2802	RIFNSH3002	RIFNSH3202	RIFNSH3402	RIFNSH3602

A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2	**NS**
3,4,5,6	**Size** 1251, 1401, 1402, 1601, 1602, 1801, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602
7	**Operating field**
X	Electronic thermostatic expansion valve
8	**Model**
H	Heat pump
9	**Heat recovery**
D	With desuperheater
°	Without heat recovery
10	**Version**
A	High efficiency
E	Silenced high efficiency
11	**Coils**
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Copper-aluminium
12	**Fans**
J	Inverter
°	Standard
13	**Power supply**
8	400V~3 50Hz with magnet circuit breakers
°	400V~3 50Hz with fuses
14,15	**Integrated hydronic kit**
	Without hydronic kit
00	Without hydronic kit
	Kit with n° 1 pump
PA	Pump A
PC	Pump C
PE	Pump E
PG	Pump G
PJ	Pump J (1)

(1) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NS - HA

Size		1251	1401	1402	1601	1602	1801	1802	2002	2202
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	262,7	281,7	257,7	309,7	315,6	365,6	365,6	384,6	414,5
Input power	kW	86,9	95,0	94,9	107,8	108,3	128,3	125,3	132,5	138,8
Cooling total input current	A	149,0	164,0	168,0	185,0	186,0	215,0	216,0	227,0	233,0
EER	W/W	3,02	2,96	2,72	2,87	2,91	2,85	2,92	2,90	2,99
Water flow rate system side	l/h	45186	48451	44327	53262	54292	62883	62883	66147	71302
Pressure drop system side	kPa	38	41	36	27	50	43	43	47	53
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	281,4	297,4	281,4	332,3	342,5	393,5	395,5	412,5	450,6
Input power	kW	88,2	94,2	93,2	104,0	106,8	126,7	123,7	133,9	141,3
Heating total input current	A	150,0	163,0	165,0	180,0	182,0	212,0	213,0	229,0	236,0
COP	W/W	3,19	3,16	3,02	3,20	3,21	3,11	3,20	3,08	3,19
Water flow rate system side	l/h	48838	51618	48838	57701	59439	68303	68651	71605	78210
Pressure drop system side	kPa	47	49	47	33	64	54	54	58	67

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		2352	2502	2652	2802	3002	3202	3402	3602
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	454,6	499,5	524,5	547,5	591,5	619,6	675,5	731,4
Input power	kW	158,4	173,5	186,7	195,9	202,6	215,4	235,9	256,4
Cooling total input current	A	268,0	295,0	318,0	335,0	349,0	370,0	400,0	430,0
EER	W/W	2,87	2,88	2,81	2,80	2,92	2,88	2,86	2,85
Water flow rate system side	l/h	78174	85906	90201	94153	101712	106523	116144	125766
Pressure drop system side	kPa	37	38	40	43	34	27	35	43
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	502,5	541,5	563,6	585,6	629,5	664,5	725,6	786,7
Input power	kW	157,9	171,0	177,1	185,4	198,0	207,8	230,4	253,1
Heating total input current	A	267,0	292,0	303,0	318,0	342,0	359,0	391,0	423,0
COP	W/W	3,18	3,17	3,18	3,16	3,18	3,20	3,15	3,11
Water flow rate system side	l/h	87247	94025	97849	101673	109320	115403	126004	136606
Pressure drop system side	kPa	49	47	49	53	41	33	43	54

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

NS - HE

Size		1251	1401	1402	1601	1602	1801	1802	2002	2202
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	250,7	266,7	242,7	292,7	301,6	343,6	349,6	366,6	394,5
Input power	kW	91,8	101,9	100,8	115,7	116,2	136,1	132,2	140,3	146,5
Cooling total input current	A	161,0	178,0	181,0	202,0	202,0	234,0	233,0	246,0	254,0
EER	W/W	2,73	2,62	2,41	2,53	2,60	2,52	2,65	2,61	2,69
Water flow rate system side	l/h	43125	45874	41750	50341	51887	59103	60134	63055	67865
Pressure drop system side	kPa	32	37	33	24	46	38	39	43	48
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	281,4	297,4	281,4	332,3	342,5	393,5	395,5	412,5	450,6
Input power	kW	88,2	94,2	93,2	104,0	106,8	126,7	123,7	133,9	141,3
Heating total input current	A	150,0	163,0	165,0	180,0	182,0	212,0	213,0	229,0	236,0
COP	W/W	3,19	3,16	3,02	3,20	3,21	3,11	3,20	3,08	3,19
Water flow rate system side	l/h	48838	51618	48838	57701	59439	68303	68651	71605	78210
Pressure drop system side	kPa	47	49	47	33	64	54	54	58	67

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

Size		2352	2502	2652	2802	3002	3202	3402	3602
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	435,6	487,6	506,5	517,5	559,6	585,6	636,5	687,5
Input power	kW	169,3	192,4	202,5	210,6	217,4	231,2	251,6	272,0
Cooling total input current	A	293,0	333,0	349,0	365,0	380,0	403,0	436,0	468,0
EER	W/W	2,57	2,53	2,50	2,46	2,57	2,53	2,53	2,53
Water flow rate system side	l/h	74910	83844	87108	88998	96214	100681	109444	118206
Pressure drop system side	kPa	34	35	37	39	30	24	31	38
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	502,5	541,5	563,6	585,6	629,5	664,5	725,6	786,7
Input power	kW	157,9	171,0	177,1	185,4	198,0	207,8	230,4	253,1
Heating total input current	A	267,0	292,0	303,0	318,0	342,0	359,0	391,0	423,0
COP	W/W	3,18	3,17	3,18	3,16	3,18	3,20	3,15	3,11
Water flow rate system side	l/h	87247	94025	97849	101673	109320	115403	126004	136606
Pressure drop system side	kPa	49	47	49	53	41	33	43	54

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Data EN 14511:2022; System side water heat exchanger 40 °C / 45 °C; Outside air 7 °C d.b. / 6 °C w.b.

ENERGY DATA

Size				1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (1)																				
Pdesignh	A,E	kW		185	195	185	218	225	259	260	271	297	330	356	370	385	325	342	374	400
SCOP	A,E	W/W		3,33	3,28	3,23	3,33	3,33	3,23	3,33	3,20	3,30	3,30	3,30	3,33	3,30	3,35	3,40	3,33	3,28
ηsh	A,E	%		130.0%	128.0%	126.0%	130.0%	130.0%	126.0%	130.0%	125.0%	129.0%	129.0%	129.0%	130.0%	129.0%	131.0%	133.0%	130.0%	128.0%
SEER - 12/7 (EN14825:2018) with standard fans (2)																				
SEER	A	W/W		3,88	3,81	3,46	3,76	3,68	3,71	3,73	3,70	3,80	3,72	3,74	3,66	3,64	3,81	3,76	3,73	3,72
	E	W/W		3,41	3,28	3,00	3,19	3,23	3,19	3,32	3,28	3,37	3,28	3,23	3,18	3,12	3,30	3,25	3,23	3,23
Seasonal efficiency	A	%		152.1%	149.4%	135.2%	147.4%	144.2%	145.2%	146.0%	145.0%	149.0%	145.7%	146.6%	143.5%	142.5%	149.5%	147.5%	146.1%	145.8%
	E	%		133.4%	128.1%	116.8%	124.4%	126.2%	124.7%	129.7%	128.2%	131.8%	128.1%	126.3%	124.3%	121.7%	129.1%	126.9%	126.1%	126.2%

(1) Efficiencies for low temperature applications (35 °C)
(2) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.

ELECTRIC DATA

Size			1251	1401	1402	1601	1602	1801	1802	2002	2202
Electric data											
Maximum current (FLA)	A,E	A	209,0	242,0	276,0	258,0	276,0	316,0	325,0	352,0	370,0
Peak current (LRA)	A,E	A	327,0	387,0	251,0	431,0	251,0	472,0	305,0	313,0	350,0

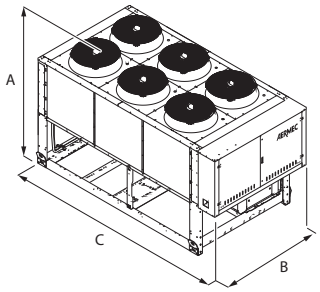
Size			2352	2502	2652	2802	3002	3202	3402	3602
Electric data										
Maximum current (FLA)	A,E	A	390,0	410,0	443,0	476,0	500,0	516,0	574,0	631,0
Peak current (LRA)	A,E	A	365,0	436,0	461,0	521,0	534,0	578,0	612,0	653,0

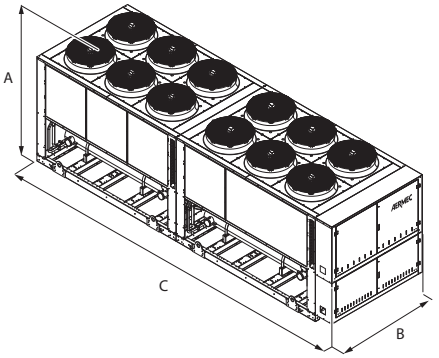
GENERAL TECHNICAL DATA

Size			1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Compressor																			
Type	A,E	type									Screw								
Compressor regulation	A,E	Type									On/Off								
Number	A,E	no.	1	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	2	1	2	1	2	2	2	2	2	2	2	2	2	2	2
Partialisation of the unit with	A	%	40-100	40-100	20-100	40-100	20-100	40-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100
electronic thermostatic expansion valve	E	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigerant	A,E	type									R134a								
Refrigerant load circuit 1 (1)	A	kg	90,0	92,0	43,0	100,0	57,0	138,0	57,0	55,0	80,0	80,0	85,0	-	97,0	92,0	-	110,0	138,0
	E	kg	90,0	92,0	43,0	118,0	57,0	138,0	57,0	55,0	80,0	80,0	85,0	-	97,0	92,0	118,0	110,0	138,0
Refrigerant load circuit 2 (1)	A	kg	-	-	45,0	-	57,0	-	57,0	75,0	102,0	85,0	85,0	-	97,0	100,0	-	145,0	138,0
	E	kg	-	-	45,0	-	57,0	-	57,0	75,0	102,0	85,0	85,0	-	97,0	118,0	118,0	145,0	138,0
Total oil charge	A,E	kg	22,0	19,0	30,0	19,0	30,0	35,0	30,0	30,0	30,0	37,0	44,0	41,0	38,0	38,0	38,0	54,0	70,0
System side heat exchanger																			
Type	A,E	type									Shell and tube								
Number	A,E	no.	1	1	2	1	2	1	2	2	1	1	1	1	1	2	2	2	2
Minimum water flow rate	A	l/h	22593	24226	22164	26631	27146	31442	31442	33074	35651	39087	42953	45101	47077	50856	53262	58072	62883
	E	l/h	21563	22937	20875	25171	25944	29552	30067	31528	33933	37455	41922	43554	44499	48107	50341	54722	59103
Maximum water flow rate	A	l/h	75310	80752	73878	88770	90487	104805	104805	110245	118837	130290	143177	150335	156922	169520	177538	193573	209610
	E	l/h	71875	76457	69583	83902	86478	98505	100223	105092	113108	124850	139740	145180	148330	160357	167802	182407	197010
Water content	A,E	l	96,0	101,2	96,0	98,1	101,2	132,9	132,9	132,9	159,8	159,8	149,9	220,7	220,7	199,3	196,2	231,0	265,8
System side hydraulic connections																			
Connections (in/out)	A,E	Type									Grooved joints								
Sizes (in/out)	A,E	Ø									6"								
Sound data calculated in cooling mode (2)																			
Sound power level	A	dB(A)	93,5	93,5	94,0	94,5	95,0	96,0	96,0	96,5	96,5	96,5	97,0	97,0	97,0	97,0	97,5	98,3	99,0
	E	dB(A)	88,5	88,5	89,0	89,5	90,0	91,0	91,0	91,5	91,5	91,5	92,0	92,0	92,0	92,0	92,5	93,3	94,0
Sound pressure level (10 m)	A	dB(A)	61,3	61,3	61,8	62,3	62,8	63,6	63,6	64,0	64,0	64,0	64,5	64,5	64,5	64,4	64,9	65,6	66,2
	E	dB(A)	56,3	56,3	56,8	57,3	57,8	58,6	58,6	59,0	59,0	59,0	59,5	59,5	59,5	57,4	59,9	60,6	61,2
Sound pressure level (1 m)	A	dB(A)	73,8	73,8	74,3	74,8	75,3	75,8	75,8	75,9	75,9	75,9	76,4	76,4	76,4	75,8	76,3	76,8	77,2
	E	dB(A)	68,8	68,8	69,3	69,8	70,3	70,8	70,8	70,9	70,9	70,9	71,4	71,4	71,4	70,8	71,3	71,8	72,2

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS





Size			1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Dimensions and weights																			
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3780	3780	3780	3780	3780	4770	4770	5750	5750	5750	5750	5750	5750	7160	7160	8150	9140

Size			1251	1401	1402	1601	1602	1801	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Integrated hydronic kit: 00																			
Dimensions and weights																			
Empty weight	A,E	kg	3245	3280	3570	3435	3835	4115	4005	4385	4570	4940	5265	5470	5610	6540	6745	7425	8105
Weight functioning	A,E	kg	3340	3380	3665	3535	3935	4250	4140	4520	4730	5100	5415	5690	5830	6740	6940	7655	8370

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NSG

Air-water chiller

Cooling capacity 228 ÷ 1580 kW

- **Microchannel coil**
- **High efficiency also at partial loads**
- **Night mode**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger.
In the unit with desuperheater, it is also possible to produce free-hot water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency
E Silenced high efficiency
L Standard silenced
N Silenced very high efficiency
U Very high efficiency

FEATURES

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:
da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430; with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

Bi-tri circuit unit

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO_5

Units include 1 control board for each compressor.
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

- The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- **Night mode:** only in the **non-silenced versions with the fan to be, inverter or phase-cut or with the DCPX accessory**, a silenced operation profile can be set, which is useful, for example, at night for greater acoustic comfort, but always ensures performance even at peak load hours.
- Possibility to control two units in a Master-Slave configuration (from size 1402 to 6402)

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
DCPX: Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERSET	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	°,A,E,L,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
AER485P1 x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•						
AER485P1 x no. 3	°,A,L								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERBACP x no. 2	°,A,E,L,N,U	•	•	•	•	•	•	•						
AERBACP x no. 3	°,A,L								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERNET	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
AERSET	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
MULTICHILLER-EVO	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
PRV3	°,A,L	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					

Condensation control temperature

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002
Fans: M										
°	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX110	DCPX111	DCPX111	DCPX112
A	DCPX111	DCPX111	DCPX111	DCPX111	DCPX112	DCPX112	DCPX112	DCPX113	DCPX113	DCPX113
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX111	DCPX111	DCPX112	DCPX112	DCPX113	DCPX113	DCPX114	DCPX114	DCPX114	DCPX114

Ver	3202	3402	3602	3902	4202	4502	4802	5202	5602	6002
Fans: M										
°	DCPX112	DCPX112	DCPX112	DCPX113	DCPX113	DCPX114	DCPX114	DCPX115	DCPX115	DCPX115
A	DCPX113	DCPX114	DCPX114	DCPX115	DCPX115	DCPX116	DCPX116	DCPX116	DCPX117	DCPX118
E, L, N	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX114	DCPX115	DCPX115	DCPX116	DCPX117	DCPX117	DCPX118	DCPX119	DCPX130	DCPX131

Ver	6402	6503	6703	6903	7203	8403	9603
Fans: M							
°	DCPX116	DCPX135+DCPX113	DCPX135+DCPX113	DCPX125+DCPX114	DCPX114+DCPX136	DCPX114+DCPX136	DCPX114+DCPX136
A	DCPX118	DCPX115+DCPX136	DCPX115+DCPX136	DCPX116+DCPX136	DCPX116+DCPX136	DCPX117+DCPX136	-
E, N	As standard	As standard	As standard	As standard	As standard	-	-
L	As standard	As standard	As standard	As standard	As standard	As standard	As standard
U	DCPX132	DCPX116+DCPX137	DCPX117+DCPX137	DCPX117+DCPX137	DCPX118+DCPX137	-	-

The accessory cannot be fitted on the configurations indicated with -

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00														
°	AVX962	AVX962	AVX962	AVX963	AVX963	AVX963	AVX963	AVX968	AVX968	AVX966	AVX966	AVX966	AVX966	AVX965
A, L	AVX963	AVX963	AVX963	AVX963	AVX964	AVX964	AVX966	AVX965	AVX965	AVX970	AVX965	AVX967	AVX967	AVX969
E, U	AVX963	AVX963	AVX964	AVX966	AVX966	AVX965	AVX965	AVX967	AVX967	AVX967	AVX967	AVX969	AVX969	AVX971
N	AVX964	AVX964	AVX987	AVX965	AVX965	AVX967	AVX967	AVX969	AVX969	AVX969	AVX969	AVX971	AVX961	AVX972

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00													
°	AVX965	AVX967	AVX967	AVX969	AVX969	AVX969	AVX971	AVX978	AVX978	AVX983	AVX984	AVX984	AVX984
A, L	AVX969	AVX971	AVX971	AVX971	AVX961	AVX972	AVX972	AVX979	AVX979	AVX980	AVX980	AVX986	AVX981
E, U	AVX961	AVX961	AVX972	AVX972	AVX976	AVX973	AVX974	AVX980	AVX982	AVX982	AVX985	-	-
N	AVX972	AVX973	AVX974	AVX975	AVX977	AVX977	AVX977	AVX981	-	-	-	-	-

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
°, A, E, L, N, U	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
°, A, L	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)
E, U	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	-	-
N	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	RIF (1)	-	-	-	-	-

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
°	GP3V	GP3V	GP3V	GP4V	GP4V	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP5V	GP6V
A	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
E, U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP7V	GP7V	GP8V	GP8V	GP9V
L	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP8V	GP9V	GP10V	GP11V

A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
°	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP11V
A, L	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP4V+GP8V	GP4V+GP8V	GP5V+GP9V	GP5V+GP9V	GP5V+GP10V	GP6V+GP11V
E, U	GP10V	GP10V	GP11V	GP11V	GP6V+GP6V	GP6V+GP7V	GP7V+GP7V	GP5V+GP9V	GP5V+GP10V	GP5V+GP10V	GP6V+GP11V	-	-
N	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V	GP8V+GP8V	GP8V+GP8V	GP8V+GP8V	GP6V+GP11V	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002
°, A, L	KRS22	KRS22	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23
E, N, U	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23

A grey background indicates the accessory must be assembled in the factory

Ver	3202	3402	3602	3902	4202	4502	4802	5202	5602	6002
°	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24
A, L	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
E, U	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23
N	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23

A grey background indicates the accessory must be assembled in the factory

Ver	6402	6503	6703	6903	7203	8403	9603
°	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
A, L	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
E, U	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-
N	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NSG**
4,5,6,7		**Size** 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703, 6903, 7203, 8403, 9603
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	°	Cooling only
10		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery (4)
	°	Without heat recovery
11		**Version**
	°	Standard
	A	High efficiency
	E	Silenced high efficiency
	L	Standard silenced
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils**
	0	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Aluminium microchannel
13		**Fans**
	J	Inverter
	M	Oversized
14		**Power supply**
	2	230V~3 50Hz with fuses (5)
	4	230V~3 50Hz with magnet circuit breakers (5)
	5	500V~3 50Hz with fuses (6)
	8	400V~3 50Hz with magnet circuit breakers
	9	500V~3 50Hz with magnet circuit breakers (6)
	°	400V~3 50Hz with fuses

Field		Description
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (7)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (7)
		Kit with 2 pumps
	TF	Double pump F (8)
	TG	Double pump G (8)
	TH	Double pump H (8)
	TI	Double pump I (8)
	TJ	Double pump J (8)

(1) Water produced from 0 °C ÷ 23 °C
(2) Water produced from 8 °C ÷ -10 °C; incompatible whit D and T
(3) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(4) The temperature of the water in the heat exchanger inlet must never drop below 35°C. The units from 1402° - 1602° - 1802° with total recovery are not configurable. For all other sizes and versions it is to be evaluated at the order stage.
(5) Only for sizes from 1402 to 2202
(6) Only for sizes from 1402 to 3202
(7) For all configurations including pump J please contact the factory.
(8) The unit from 5603 to 9603 can only have hydronic kit "TF - TG - TH- TI - TJ"

PERFORMANCE SPECIFICATIONS

NSG - °

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	228,6	261,3	297,8	334,1	358,6	389,8	402,8	443,7	462,6	506,3	531,6	566,5	623,6	676,0
Input power	kW	74,3	85,8	100,4	108,3	119,9	129,9	138,2	151,6	162,6	167,0	175,7	193,9	214,9	228,2
Cooling total input current	A	138,0	156,0	174,0	192,0	214,0	233,0	248,0	271,0	289,0	297,0	309,0	332,0	359,0	390,0
EER	W/W	3,08	3,05	2,97	3,08	2,99	3,00	2,91	2,93	2,85	3,03	3,02	2,92	2,90	2,96
Water flow rate system side	l/h	39316	44954	51218	57461	61665	67027	69255	76286	79541	87045	91392	97398	107202	116226
Pressure drop system side	kPa	14	18	16	21	24	20	22	18	19	17	19	21	24	29

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	739,5	792,4	835,2	874,9	897,0	942,5	989,1	1060,2	1095,1	1215,2	1268,8	1333,1	1410,0
Input power	kW	251,7	263,0	281,6	288,8	302,5	320,8	329,9	355,3	375,5	407,7	419,3	461,7	512,0
Cooling total input current	A	434,0	454,0	482,0	500,0	524,0	558,0	581,0	609,0	649,0	701,0	728,0	805,0	900,0
EER	W/W	2,94	3,01	2,97	3,03	2,97	2,94	3,00	2,98	2,92	2,98	3,03	2,89	2,75
Water flow rate system side	l/h	127152	136250	143578	150403	154212	162036	170045	182263	188254	208871	218093	229141	242359
Pressure drop system side	kPa	33	38	28	31	33	38	42	29	31	20	22	25	28

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSG - L

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	227,7	261,7	298,7	335,0	373,6	386,8	415,2	446,3	476,8	498,0	546,8	602,0	645,3	707,0
Input power	kW	72,7	84,0	98,1	112,6	120,1	128,4	138,3	144,3	155,8	165,4	179,1	193,2	212,5	231,2
Cooling total input current	A	131,0	148,0	165,0	192,0	208,0	224,0	242,0	252,0	270,0	284,0	303,0	318,0	342,0	375,0
EER	W/W	3,13	3,12	3,04	2,97	3,11	3,01	3,00	3,09	3,06	3,01	3,05	3,12	3,04	3,06
Water flow rate system side	l/h	39167	45014	51371	57614	64237	66506	71390	76738	81966	85616	94000	103492	110929	121547
Pressure drop system side	kPa	15	18	17	15	19	20	16	19	16	17	19	15	18	22

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	743,5	806,3	841,6	893,3	933,8	982,7	1023,0	1083,7	1120,2	1222,9	1269,4	1383,5	1517,2 (2)
Input power	kW	252,4	266,7	283,5	297,7	306,0	315,5	334,5	357,8	379,1	402,0	421,5	465,5	504,7
Cooling total input current	A	416,0	437,0	465,0	490,0	507,0	533,0	563,0	583,0	623,0	670,0	699,0	763,0	848,0
EER	W/W	2,95	3,02	2,97	3,00	3,05	3,12	3,06	3,03	2,96	3,04	3,01	2,97	3,01
Water flow rate system side	l/h	127821	138615	144692	153568	160522	168943	175872	186277	192550	210223	218211	237808	260789
Pressure drop system side	kPa	24	31	33	24	26	31	33	22	24	31	33	26	32

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Unit not Eurovent certified because it exceeds 1500 kW

NSG - A

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	233,0	267,3	306,8	346,4	383,4	397,6	429,0	458,6	491,7	511,7	561,1	619,9	669,1	731,1
Input power	kW	73,5	83,8	96,7	109,8	118,4	126,0	134,9	142,3	152,7	160,7	171,9	187,9	206,4	224,9
Cooling total input current	A	139,0	155,0	170,0	195,0	214,0	229,0	246,0	260,0	276,0	287,0	303,0	322,0	344,0	380,0
EER	W/W	3,17	3,19	3,17	3,15	3,24	3,16	3,18	3,22	3,22	3,18	3,26	3,30	3,24	3,25
Water flow rate system side	l/h	40072	45975	52777	59582	65922	68370	73757	78851	84535	87974	96463	106561	115027	125681
Pressure drop system side	kPa	15	19	18	16	20	22	17	20	16	18	20	16	19	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	770,4	833,7	872,2	923,2	961,9	1011,0	1053,8	1121,6	1160,9	1263,4	1313,4	1432,8	1580,6 (2)
Input power	kW	243,7	258,6	273,6	291,5	301,9	312,6	330,2	347,1	365,9	390,3	408,0	451,1	495,6
Cooling total input current	A	417,0	440,0	466,0	502,0	524,0	554,0	583,0	588,0	625,0	676,0	701,0	769,0	866,0
EER	W/W	3,16	3,22	3,19	3,17	3,19	3,23	3,19	3,23	3,17	3,24	3,22	3,18	3,19
Water flow rate system side	l/h	132447	143336	149960	158709	165357	173799	181161	192795	199561	217184	225782	246285	271702
Pressure drop system side	kPa	26	33	36	26	28	33	35	24	26	33	36	27	35

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C
(2) Unit not Eurovent certified because it exceeds 1500 kW

NSG - E

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	243,5	281,0	317,4	359,0	387,6	413,2	428,5	471,9	494,2	514,3	550,0	608,1	654,7	714,4
Input power	kW	73,6	86,3	96,5	111,1	122,0	126,7	133,3	144,0	153,3	160,2	172,1	188,9	204,8	222,5
Cooling total input current	A	133,0	152,0	163,0	189,0	211,0	222,0	237,0	251,0	267,0	279,0	293,0	310,0	334,0	368,0
EER	W/W	3,31	3,26	3,29	3,23	3,18	3,26	3,21	3,28	3,22	3,21	3,20	3,22	3,20	3,21
Water flow rate system side	l/h	41877	48309	54578	61723	66638	71045	73675	81134	84968	88414	94560	104538	112548	122817
Pressure drop system side	kPa	12	11	14	9	11	12	13	15	16	18	19	16	18	23

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	764,3	813,2	877,0	900,7	944,8	1000,3	1028,9	1101,9	1151,7	1242,8	1300,9	-	-
Input power	kW	236,0	255,6	273,4	283,8	292,9	310,2	318,7	343,0	357,9	392,1	407,8	-	-
Cooling total input current	A	399,0	428,0	450,0	475,0	495,0	519,0	544,0	572,0	599,0	656,0	673,0	-	-
EER	W/W	3,24	3,18	3,21	3,17	3,23	3,22	3,23	3,21	3,22	3,17	3,19	-	-
Water flow rate system side	l/h	131397	139814	150755	154839	162399	171941	176857	189402	197982	213642	223617	-	-
Pressure drop system side	kPa	26	32	24	25	16	16	19	23	26	32	24	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSG - U

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	249,3	288,6	324,9	369,0	399,5	423,8	440,0	483,4	507,1	526,0	564,2	623,1	674,9	735,2
Input power	kW	74,1	85,8	96,9	110,1	120,0	126,0	132,1	143,6	152,2	157,5	167,5	185,9	201,2	218,7
Cooling total input current	A	141,0	158,0	172,0	196,0	217,0	231,0	246,0	263,0	277,0	287,0	298,0	319,0	342,0	377,0
EER	W/W	3,36	3,36	3,35	3,35	3,33	3,36	3,33	3,37	3,33	3,34	3,37	3,35	3,35	3,36
Water flow rate system side	l/h	42866	49623	55869	63446	68694	72874	75659	83113	87181	90438	96990	107116	116011	126384
Pressure drop system side	kPa	13	11	14	10	11	13	14	16	17	18	20	17	20	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	784,5	837,2	901,8	927,6	971,1	1026,7	1054,7	1133,1	1182,5	1280,2	1339,0	-	-
Input power	kW	232,3	250,1	268,3	277,9	288,3	306,2	315,5	337,3	352,2	383,1	399,1	-	-
Cooling total input current	A	411,0	437,0	461,0	486,0	509,0	536,0	564,0	586,0	617,0	668,0	689,0	-	-
EER	W/W	3,38	3,35	3,36	3,34	3,37	3,35	3,34	3,36	3,36	3,34	3,36	-	-
Water flow rate system side	l/h	134866	143931	155027	159459	166915	176480	181297	194780	203262	220062	230162	-	-
Pressure drop system side	kPa	28	34	25	27	17	17	20	24	28	34	25	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

NSG - N

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	kW	245,2	283,6	318,2	364,5	394,3	417,2	432,9	475,2	498,1	517,4	552,6	613,0	669,6	727,4
Input power	kW	73,4	84,4	95,3	107,6	118,7	124,5	130,7	141,2	149,3	156,7	165,7	182,9	200,4	216,0
Cooling total input current	A	132,0	149,0	162,0	185,0	207,0	219,0	234,0	249,0	264,0	274,0	287,0	306,0	324,0	359,0
EER	W/W	3,34	3,36	3,34	3,39	3,32	3,35	3,31	3,37	3,34	3,30	3,34	3,35	3,34	3,37
Water flow rate system side	l/h	42156	48766	54716	62663	67797	71743	74443	81707	85643	88946	95006	105378	115107	125049
Pressure drop system side	kPa	13	11	15	9	11	13	14	15	17	18	20	16	20	24

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)														
Cooling capacity	kW	766,9	834,2	880,8	925,4	961,2	1003,2	1036,3	1120,4	-	-	-	-	-
Input power	kW	230,1	248,2	261,5	275,0	286,5	296,1	311,6	333,3	-	-	-	-	-
Cooling total input current	A	395,0	413,0	435,0	458,0	480,0	509,0	537,0	557,0	-	-	-	-	-
EER	W/W	3,33	3,36	3,37	3,36	3,35	3,39	3,33	3,36	-	-	-	-	-
Water flow rate system side	l/h	131846	143411	151421	159089	165211	172435	178132	192584	-	-	-	-	-
Pressure drop system side	kPa	27	23	29	29	17	17	20	24	-	-	-	-	-

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: M																
SEER - 12/7 (EN14825: 2018) (1)																
SEER	°,A,E,L,N,U	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEPR - (EN 14825: 2018) (3)																
SEPR	°	W/W	5,32	5,40	5,30	5,46	5,46	5,50	5,52	5,51	5,51	5,51	5,54	5,53	5,51	5,52
	A	W/W	5,53	5,59	5,47	5,51	5,59	5,56	5,55	5,56	5,57	5,51	5,53	5,59	5,57	5,58
	E	W/W	5,69	5,72	5,77	5,64	5,58	5,71	5,65	5,72	5,67	5,65	5,67	5,64	5,66	5,68
	L	W/W	5,46	5,56	5,43	5,53	5,54	5,52	5,52	5,52	5,55	5,55	5,75	5,61	5,52	5,52
	N	W/W	5,75	5,77	5,89	5,69	5,58	5,66	5,62	5,68	5,61	5,59	5,63	5,64	5,64	5,65
	U	W/W	5,73	5,78	5,81	5,70	5,65	5,76	5,71	5,77	5,72	5,70	5,72	5,70	5,72	5,74

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: M															
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°,A,E,L,N,U	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
SEPR - (EN 14825: 2018) (3)															
SEPR	°	W/W	5,53	5,52	5,52	5,52	5,52	5,51	5,52	5,53	5,52	5,52	5,55	5,52	5,52
	A	W/W	5,51	5,56	5,55	5,52	5,55	5,56	5,52	5,65	5,59	5,69	5,66	5,60	5,65
	E	W/W	5,69	5,64	5,69	5,56	5,56	5,56	5,69	5,81	5,86	5,67	5,72	-	-
	L	W/W	5,53	5,51	5,52	5,51	5,54	5,54	5,54	5,63	5,59	5,66	5,65	5,62	5,66
	N	W/W	5,61	5,62	5,64	5,69	5,57	5,60	5,56	5,71	-	-	-	-	-
	U	W/W	5,76	5,71	5,75	5,64	5,63	5,63	5,74	5,86	5,89	5,73	5,77	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: J																
SEER - 12/7 (EN14825: 2018) (1)																
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,43	4,40	4,48	4,54	4,51	4,54	4,56	4,56	4,56	4,56	4,57	4,57	4,56	4,57
	E	W/W	4,46	4,47	4,55	4,55	4,55	4,58	4,57	4,59	4,57	4,58	4,58	4,58	4,59	4,57
	L	W/W	4,41	4,38	4,47	4,51	4,50	4,54	4,56	4,56	4,56	4,56	4,56	4,56	4,56	4,56
	N	W/W	4,51	4,48	4,57	4,55	4,56	4,60	4,60	4,61	4,60	4,60	4,61	4,61	4,60	4,60
	U	W/W	4,48	4,47	4,56	4,57	4,56	4,58	4,57	4,59	4,58	4,59	4,59	4,59	4,60	4,58
SEPR - (EN 14825: 2018) (3)																
SEPR	°	W/W	5,32	5,40	5,30	5,46	5,46	5,50	5,52	5,51	5,51	5,51	5,54	5,53	5,51	5,52
	A	W/W	5,50	5,60	5,50	5,50	5,60	5,60	5,60	5,60	5,60	5,50	5,50	5,60	5,60	5,60
	E	W/W	5,70	5,70	5,80	5,60	5,60	5,70	5,70	5,70	5,70	5,70	5,70	5,60	5,70	5,70
	L	W/W	5,50	5,60	5,40	5,50	5,50	5,50	5,50	5,50	5,60	5,60	5,80	5,60	5,50	5,50
	N	W/W	5,80	5,80	5,90	5,70	5,60	5,70	5,60	5,70	5,60	5,60	5,60	5,60	5,60	5,70
	U	W/W	5,70	5,80	5,80	5,70	5,70	5,80	5,70	5,80	5,70	5,70	5,70	5,70	5,70	5,70

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: J															
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°	W/W	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)	- (2)
	A	W/W	4,57	4,57	4,56	4,56	4,56	4,57	4,56	4,57	4,57	4,58	4,57	4,57	4,58
	E	W/W	4,58	4,56	4,59	4,57	4,59	4,57	4,58	4,60	4,61	4,58	4,60	-	-
	L	W/W	4,56	4,56	4,55	4,56	4,56	4,56	4,55	4,57	4,56	4,57	4,57	4,56	4,57
	N	W/W	4,60	4,59	4,61	4,60	4,60	4,59	4,60	4,62	-	-	-	-	-
	U	W/W	4,59	4,57	4,59	4,57	4,59	4,58	4,59	4,61	4,61	4,58	4,60	-	-
SEPR - (EN 14825: 2018) (3)															
SEPR	°	W/W	5,53	5,52	5,52	5,52	5,52	5,51	5,52	5,53	5,52	5,52	5,55	5,52	5,52
	A	W/W	5,50	5,60	5,60	5,50	5,60	5,60	5,50	5,70	5,60	5,70	5,70	5,60	5,70
	E	W/W	5,70	5,60	5,70	5,60	5,60	5,60	5,70	5,80	5,90	5,70	5,70	-	-
	L	W/W	5,50	5,50	5,50	5,50	5,50	5,50	5,50	5,60	5,60	5,70	5,70	5,60	5,70
	N	W/W	5,60	5,60	5,60	5,70	5,60	5,60	5,60	5,70	-	-	-	-	-
	U	W/W	5,80	5,70	5,80	5,60	5,60	5,60	5,70	5,90	5,90	5,70	5,80	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Not covered by standard (EN14825: 2018 for comfort applications, 12°C / 7°C)
(3) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
Maximum current (FLA)	°	A	223,7	241,3	264,3	300,3	327,4	346,4	365,4	386,4	407,4	431,3	446,3	470,3	494,3	543,1
	A,L	A	232,6	250,2	273,2	300,3	336,3	355,3	374,3	404,1	425,1	440,1	455,1	488,0	512,0	560,9
	E,U	A	232,6	250,2	282,1	309,2	336,3	364,1	383,1	413,0	434,0	449,0	464,0	496,9	520,9	569,8
	N	A	241,5	259,1	290,9	318,0	345,1	373,0	392,0	421,9	442,9	457,9	472,9	505,8	538,7	593,4
Peak current (LRA)	°	A	252,0	287,1	329,4	376,3	395,0	442,0	459,0	486,0	493,7	597,6	636,2	665,2	661,2	791,0
	A,L	A	260,9	296,0	338,3	376,3	403,9	450,9	467,9	503,7	511,4	606,4	645,0	682,9	678,9	808,8
	E,U	A	260,9	296,0	347,2	385,2	403,9	459,7	476,7	512,6	520,3	615,3	653,9	691,8	687,8	817,7
	N	A	269,8	304,9	356,0	394,0	412,7	468,6	485,6	521,5	529,2	624,2	662,8	700,7	705,6	841,3

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Electric data															
Maximum current (FLA)	°	A	583,1	625,0	658,0	697,9	728,9	760,9	801,8	831,8	871,8	946,7	994,4	1087,4	1183,4
	A,L	A	600,9	642,8	675,8	706,8	746,7	793,4	825,4	864,3	904,3	988,1	1021,1	1122,9	1236,7
	E,U	A	618,7	651,7	699,4	730,4	770,3	811,2	852,1	882,1	930,9	996,9	1038,8	-	-
	N	A	633,4	684,2	726,1	765,9	805,8	837,8	869,8	908,7	-	-	-	-	-
Peak current (LRA)	°	A	821,3	894,2	914,2	1078,1	1097,9	1209,9	1249,8	993,9	1024,2	1117,1	1151,8	1346,4	1520,4
	A,L	A	839,1	912,0	932,0	1087,0	1115,7	1242,4	1273,4	1026,4	1056,7	1158,5	1178,5	1381,9	1573,7
	E,U	A	856,9	920,9	955,6	1110,6	1139,3	1260,2	1300,1	1044,2	1083,3	1167,3	1196,2	-	-
	N	A	871,6	953,4	982,3	1146,1	1174,8	1286,8	1317,8	1070,8	-	-	-	-	-

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Compressor																
Type	°,A,E,L,N,U	type	Screw													
Number	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	°,A,E,L,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,A,E,L,N,U	type	R1234ze													

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Refrigerant load circuit 1 (1)	°	kg	24,0	24,0	23,0	30,0	30,0	35,0	35,0	35,0	35,0	40,0	46,0	42,5	44,5	51,0
	A	kg	26,5	34,0	28,0	30,5	34,0	35,0	38,5	40,5	45,0	43,0	47,0	52,0	55,0	74,0
	E	kg	29,0	30,0	41,0	34,0	40,0	43,0	43,0	46,0	45,0	45,0	57,0	54,0	74,0	60,0
	L	kg	24,0	26,0	37,0	28,0	34,0	35,0	38,5	40,0	42,0	44,0	47,0	52,0	54,0	56,0
	N	kg	36,0	38,0	34,0	44,0	49,0	53,0	56,0	60,0	64,0	64,0	55,0	72,0	81,0	85,0
	U	kg	32,0	34,0	34,0	35,0	46,0	49,0	49,0	46,0	45,0	60,0	54,5	58,0	58,0	75,0
Refrigerant load circuit 2 (1)	°	kg	24,0	25,0	25,0	41,0	33,0	38,0	37,0	37,5	35,0	50,0	48,0	46,0	46,0	59,0
	A	kg	28,0	34,0	29,5	36,0	34,0	49,0	40,5	45,0	47,5	48,0	50,0	55,0	60,0	81,0
	E	kg	29,0	31,5	41,0	40,0	40,0	45,0	45,0	52,0	53,0	53,0	59,0	59,0	74,0	77,0
	L	kg	27,0	28,0	37,0	36,0	34,0	40,0	40,5	43,0	46,0	52,0	50,0	55,0	58,0	72,0
	N	kg	36,0	38,0	34,0	49,0	49,0	56,0	56,0	64,0	64,0	69,0	57,0	77,0	81,0	92,0
	U	kg	32,0	34,0	36,0	41,5	46,0	53,0	54,0	52,0	48,5	65,0	59,0	62,0	63,0	90,0
Refrigerant load circuit 3 (1)	°,A,E,L,N,U	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
System side heat exchanger																
Type	°,A,E,L,N,U	type	Shell and tube													
Number	°,A,E,L,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor															
Type	°,A,E,L,N,U	type	Screw												
Number	°,A,L	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Circuits	°,A,L	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Refrigerant	°,A,E,L,N,U	type	R1234ze												
Refrigerant load circuit 1 (1)	°	kg	52,0	55,0	55,0	63,0	65,0	62,0	70,0	67,0	55,0	78,0	62,0	99,0	112,0
	A,L	kg	62,0	67,0	67,0	70,0	106,0	82,0	82,0	74,0	81,0	85,0	70,0	106,0	80,0
	E	kg	70,0	89,0	80,0	100,0	113,0	86,0	95,0	77,0	89,0	89,0	100,0	-	-
	N	kg	92,0	99,0	110,0	114,0	128,0	128,0	138,0	85,0	-	-	-	-	-
	U	kg	70,0	89,0	80,0	85,0	113,0	86,0	95,0	77,0	89,0	89,0	100,0	-	-
Refrigerant load circuit 2 (1)	°	kg	59,0	64,0	64,0	70,0	71,0	73,0	80,0	74,0	61,0	85,0	70,0	99,0	112,0
	A	kg	70,0	78,0	78,0	82,0	106,0	99,0	99,0	81,0	81,0	92,0	75,0	106,0	95,0
	E	kg	85,0	96,0	90,0	110,0	113,0	98,0	97,0	85,0	89,0	96,0	100,0	-	-
	L	kg	70,0	79,0	78,0	82,0	106,0	99,0	99,0	81,0	81,0	92,0	75,0	106,0	95,0
	N	kg	92,0	107,0	110,0	124,0	128,0	138,0	138,0	92,0	-	-	-	-	-
	U	kg	85,0	96,0	90,0	103,0	113,0	98,0	97,0	85,0	89,0	96,0	100,0	-	-
Refrigerant load circuit 3 (1)	°	kg	-	-	-	-	-	-	-	74,0	65,0	85,0	80,0	99,0	112,0
	A,L	kg	-	-	-	-	-	-	-	81,0	81,0	92,0	75,0	106,0	85,0
	E,U	kg	-	-	-	-	-	-	-	85,0	89,0	96,0	100,0	-	-
	N	kg	-	-	-	-	-	-	-	92,0	-	-	-	-	-
System side heat exchanger															
Type	°,A,E,L,N,U	type	Shell and tube												
Number	°	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
	A,L	no.	1	1	1	1	1	1	1	2	2	2	2	2	2
	E,U	no.	1	1	1	1	2	2	2	2	2	2	2	-	-
	N	no.	1	2	2	2	2	2	2	2	-	-	-	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

FANS DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fan																
Type	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Number	°	no.	6	6	6	8	8	8	8	8	8	10	10	10	10	12
	A,L	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fan															
Type	°,A,E,L,N,U	type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Number	°	no.	12	14	14	16	16	16	18	18	18	20	22	22	22
	A,L	no.	16	18	18	18	20	22	22	24	24	28	28	30	34
	E,U	no.	20	20	22	22	24	26	28	28	30	30	32	-	-
	N	no.	22	26	28	30	32	32	32	34	-	-	-	-	-

Oversized

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: M																
Increased fan																
Fan motor	°,A,U	type	Asynchronous													
	E,L,N	type	Asynchronous with phase cut													
Without Static pressure																
Air flow rate	°	m^3/h	108000	108000	108000	144000	144000	144000	144000	144000	144000	180000	180000	180000	180000	216000
	A	m^3/h	144000	144000	144000	144000	180000	180000	180000	216000	216000	216000	216000	252000	252000	288000
	E	m^3/h	92000	92000	115000	115000	115000	138000	138000	161000	161000	161000	161000	184000	184000	207000
	L	m^3/h	92000	92000	92000	92000	115000	115000	115000	138000	138000	138000	138000	161000	161000	184000
	N	m^3/h	115000	115000	138000	138000	138000	161000	161000	184000	184000	184000	184000	207000	230000	253000
	U	m^3/h	144000	144000	180000	180000	180000	216000	216000	252000	252000	252000	252000	288000	288000	324000
Sound power level	°	dB(A)	98,0	98,0	98,0	98,0	98,0	98,0	98,0	98,0	98,0	99,0	99,0	100,0	100,0	101,0
	A	dB(A)	98,0	98,0	99,0	99,0	99,0	99,0	99,0	100,0	100,0	100,0	100,0	100,0	100,0	101,0
	E	dB(A)	89,0	89,0	90,0	90,0	90,0	91,0	91,0	92,0	92,0	92,0	92,0	93,0	93,0	93,0
	L	dB(A)	89,0	89,0	89,0	89,0	90,0	91,0	91,0	91,0	91,0	91,0	91,0	91,0	91,0	92,0
	N	dB(A)	90,0	90,0	91,0	91,0	91,0	91,0	91,0	92,0	92,0	92,0	92,0	93,0	93,0	93,0
	U	dB(A)	98,0	98,0	99,0	99,0	99,0	100,0	100,0	100,0	100,0	100,0	100,0	101,0	101,0	101,0

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: M															
Increased fan															
Fan motor	°,A,U	type	Asynchronous												
	E,L,N	type	Asynchronous with phase cut												
Without Static pressure															
Air flow rate	°	m^3/h	216000	252000	252000	288000	288000	288000	324000	324000	324000	360000	396000	396000	396000
	A	m^3/h	288000	324000	324000	324000	360000	396000	396000	432000	432000	504000	504000	540000	612000
	E	m^3/h	230000	230000	253000	253000	276000	299000	322000	322000	345000	345000	368000	-	-
	L	m^3/h	184000	207000	207000	234000	260000	286000	286000	276000	276000	322000	322000	345000	442000
	N	m^3/h	253000	299000	322000	345000	368000	368000	368000	391000	-	-	-	-	-
	U	m^3/h	360000	360000	396000	396000	432000	468000	504000	504000	540000	540000	576000	-	-
Sound power level	°	dB(A)	101,0	101,0	101,0	102,0	102,0	102,0	102,0	102,0	102,0	103,0	103,0	103,0	103,0
	A	dB(A)	101,0	101,0	102,0	101,0	102,0	102,0	102,0	103,0	103,0	103,0	103,0	104,0	104,0
	E	dB(A)	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	95,0	-	-
	L	dB(A)	93,0	93,0	93,0	93,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	95,0
	N	dB(A)	93,0	94,0	94,0	95,0	95,0	95,0	95,0	95,0	-	-	-	-	-
	U	dB(A)	102,0	102,0	102,0	102,0	103,0	103,0	103,0	103,0	103,0	103,0	103,0	-	-

Inverter

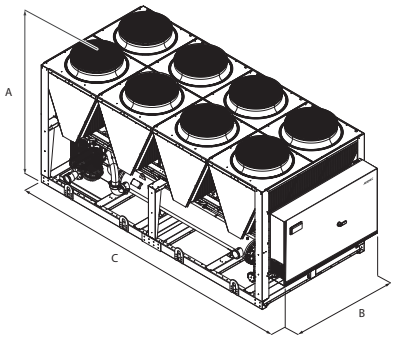
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Fans: J																
Inverter fan																
Fan motor	°,A,E,L,N,U	type	Inverter													
Air flow rate	°	m^3/h	96000	96000	96000	128000	128000	128000	128000	144000	144000	180000	180000	180000	180000	216000
	A	m^3/h	128000	128000	128000	128000	160000	160000	160000	192000	192000	192000	192000	224000	224000	256000
	E	m^3/h	92000	92000	115000	115000	115000	138000	138000	161000	161000	161000	161000	184000	184000	207000
	L	m^3/h	92000	92000	92000	92000	115000	115000	115000	138000	138000	138000	138000	161000	161000	184000
	N	m^3/h	115000	115000	138000	138000	138000	161000	161000	184000	184000	184000	184000	207000	230000	253000
	U	m^3/h	128000	128000	160000	160000	160000	192000	192000	224000	224000	224000	224000	256000	256000	288000
Sound data calculated in cooling mode (1)																
Sound power level	°	dB(A)	97,0	97,0	97,0	98,0	98,0	98,0	98,0	98,0	98,0	99,0	100,0	100,0	100,0	101,0
	A	dB(A)	97,0	97,0	98,0	98,0	98,0	98,0	98,0	99,0	99,0	99,0	99,0	99,0	99,0	100,0
	E	dB(A)	89,0	89,0	90,0	90,0	90,0	91,0	91,0	92,0	92,0	92,0	92,0	93,0	93,0	93,0
	L	dB(A)	89,0	89,0	89,0	89,0	90,0	91,0	91,0	91,0	91,0	91,0	91,0	91,0	91,0	92,0
	N	dB(A)	90,0	90,0	91,0	91,0	91,0	91,0	91,0	92,0	92,0	92,0	92,0	93,0	93,0	93,0
	U	dB(A)	97,0	97,0	98,0	98,0	98,0	99,0	99,0	99,0	99,0	99,0	99,0	100,0	100,0	100,0

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Fans: J															
Inverter fan															
Fan motor	°,A,E,L,N,U	type							Inverter						
Air flow rate	°	m^3/h	216000	252000	252000	288000	288000	288000	324000	324000	324000	360000	396000	396000	396000
	A	m^3/h	256000	288000	288000	324000	360000	396000	396000	384000	384000	448000	448000	480000	612000
	E	m^3/h	230000	230000	253000	253000	276000	299000	322000	322000	345000	345000	368000	-	-
	L	m^3/h	184000	207000	207000	234000	260000	286000	286000	276000	276000	322000	322000	345000	442000
	N	m^3/h	253000	299000	322000	345000	368000	368000	368000	391000	-	-	-	-	-
	U	m^3/h	320000	320000	352000	352000	384000	416000	448000	448000	480000	480000	512000	-	-
Sound data calculated in cooling mode (1)															
Sound power level	°	dB(A)	101,0	101,0	101,0	102,0	102,0	102,0	102,0	102,0	102,0	103,0	103,0	103,0	103,0
	A	dB(A)	100,0	100,0	101,0	102,0	102,0	102,0	102,0	102,0	102,0	102,0	102,0	103,0	104,0
	E	dB(A)	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	95,0	-	-
	L	dB(A)	93,0	93,0	93,0	93,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	94,0	95,0
	N	dB(A)	93,0	94,0	94,0	95,0	95,0	95,0	95,0	95,0	-	-	-	-	-
	U	dB(A)	101,0	101,0	101,0	102,0	102,0	102,0	102,0	102,0	102,0	102,0	102,0	-	-

(1) Sound power: calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure measured in free field (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights																
A	°,A,E,L,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	°,A,E,L,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	°	mm	3970	3970	3970	5160	5160	5160	5160	5160	5160	6350	6350	6350	6350	7540
	A,L	mm	5160	5160	5160	5160	6350	6350	6350	7540	7540	7540	7540	8730	8730	9920
	E,U	mm	5160	5160	6350	6350	6350	7540	7540	8730	8730	8730	8730	9920	9920	11110
	N	mm	6350	6350	7540	7540	7540	8730	8730	9920	9920	9920	9920	11110	12300	13490

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Dimensions and weights															
A	°,A,L	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
	E,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	-	-	-	-	-
B	°,A,L	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	E,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	-	-	-	-	-
C	°	mm	7540	8730	8730	9920	9920	9920	11110	11110	11110	12300	13490	13490	13490
	A,L	mm	9920	11110	11110	11110	12300	13490	13490	15080	15080	17460	17460	18650	21030
	E,U	mm	12300	12300	13490	13490	15080	16270	17460	17460	18650	18650	19840	-	-
	N	mm	13490	16270	17460	18650	19840	19840	19840	21030	-	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately. For more information, please refer to the technical manual and / or installation.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00																
Single module unit																
Empty weight	°	kg	4108	4153	4275	5137	5468	5476	5485	5680	5690	6659	7153	7163	7188	7854
	A	kg	4637	4684	4806	5137	5882	5890	6085	6696	6782	7261	7806	8486	8501	9029
	E	kg	4768	4800	5220	5814	6145	6755	6763	7198	7213	7707	7806	8940	8950	9719
	L	kg	4637	4684	4806	5137	5882	5890	6085	6696	6782	7261	8223	8486	8501	9029
	N	kg	5179	5214	5822	6415	6746	7163	7177	7649	7659	8161	8223	9630	10062	10682
	U	kg	4768	4800	5220	5814	6145	6755	6763	7198	7213	7707	8672	8940	8950	9719
Weight functioning	°	kg	4186	4225	4393	5256	5586	5614	5622	5953	5962	6982	7475	7485	7501	8166
	A	kg	4714	4757	4925	5275	6019	6028	6357	6968	7105	7583	8098	9016	9030	9547
	E	kg	4887	4937	5358	6137	6467	7077	7086	7510	7525	8019	8098	9470	9480	10237
	L	kg	4714	4757	4925	5275	6019	6028	6357	6968	7105	7583	8515	9016	9030	9547
	N	kg	5298	5352	5959	6738	7069	7486	7500	7961	7971	8474	8515	10160	10592	11199
	U	kg	4887	4937	5358	6137	6467	7077	7086	7510	7525	8019	8964	9470	9480	10237

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00															
Single module unit															
Empty weight	°	kg	7947	8389	8704	9252	9347	9405	10170	11843	11931	12488	13081	13400	13552
	A,L	kg	9090	9829	9892	10315	10836	11441	11519	-	-	-	-	-	-
	E,U	kg	10203	10282	11194	11284	-	-	-	-	-	-	-	-	-
	N	kg	10748	-	-	-	-	-	-	-	-	-	-	-	-
Weight functioning	°	kg	8239	8681	9234	9781	9877	9922	10687	12797	12885	13398	13990	14309	14462
	A,L	kg	9608	10334	10397	11247	11767	12358	12437	-	-	-	-	-	-
	E,U	kg	10720	10787	12125	12215	-	-	-	-	-	-	-	-	-
	N	kg	11265	-	-	-	-	-	-	-	-	-	-	-	-
Bimodule unit															
Empty weight module 1	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
	A,L	kg	-	-	-	-	-	-	-	9029	9090	9829	9892	10836	11519
	E,U	kg	-	-	-	-	6276	6276	6741	9719	10203	10282	11194	-	-
	N	kg	-	6084	6517	6517	7126	7126	7190	10880	-	-	-	-	-

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Empty weight module 2	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
	A,L	kg	-	-	-	-	-	-	-	5068	5068	5512	5512	5675	6265
	E,U	kg	-	-	-	-	6207	6671	6671	5482	5482	5512	5512	-	-
	N	kg	-	6448	6448	7056	7056	7120	7120	6014	-	-	-	-	-
Total empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
	A,L	kg	-	-	-	-	-	-	-	14098	14159	15342	15405	16511	17784
	E,U	kg	-	-	-	-	12483	12948	13412	15202	15685	15795	16706	-	-
	N	kg	-	12531	12965	13573	14182	14246	14310	16894	-	-	-	-	-
Weight functioning module 1	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
	A,L	kg	-	-	-	-	-	-	-	9547	9608	10334	10397	11767	12437
	E,U	kg	-	-	-	-	6589	6589	7053	10237	10720	10787	12125	-	-
	N	kg	-	6342	6776	6776	7438	7438	7502	11398	-	-	-	-	-
Weight functioning module 2	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
	A,L	kg	-	-	-	-	-	-	-	5327	5327	5771	5771	5987	6577
	E,U	kg	-	-	-	-	6519	6984	6984	5741	5741	5771	5771	-	-
	N	kg	-	6706	6706	7369	7369	7433	7433	6273	-	-	-	-	-
Total weight functioning	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-
	A,L	kg	-	-	-	-	-	-	-	14874	14935	16105	16168	17755	19014
	E,U	kg	-	-	-	-	13108	13572	14037	15978	16461	16558	17896	-	-
	N	kg	-	13049	13482	14144	14807	14871	14935	17670	-	-	-	-	-

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com

TBA 1300-4325

Air-water chiller

Cooling capacity 328 ÷ 1404 kW

- **High efficiency also at partial loads**
- **Microchannel coil**
- **Low peak current (only 6 Amps!)**
- **Evaporator with low refrigerant charge**
- **Available also with R513A (XP10) refrigerant**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Air-cooled chiller designed to meet air conditioning needs in residential / commercial complexes or industrial applications.
These are outdoor units with oil free centrifugal compressor, axial fans, micro-channel coils, and shell and tube heat exchangers.
The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 43°C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Units mono or dual-circuit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Oil free centrifugal compressor

Two-stage oil-free centrifugal compressor with magnetic levitation and inverter.

Compressor features:
— Operates without oil as bearings are magnetic levitation type
— Continuous load modulation by varying rpm (from 30% to 100%)
— Low peak currents (only 6 Amps!)

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO[5]

Units include 1 control board for each circuit.
Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Further features:
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

XLATB: This kit allows to extend the working range of the unit from 0 °C to -10 °C ambient temperature, thanks to an additional electric heater and a special insulating material for the heat exchanger.
GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
AER485P1	A,E,N,U	•	•	•		•	•		•	•	
AER485P1 x no. 2	A,E,N,U				•			•			•
AERBACP	A,E,N,U	•	•	•		•	•		•	•	
AERBACP x no. 2	A,E,N,U				•			•			•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•

Antivibration

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ										
A, E	AVX. (1)	AVX500	AVX588	AVX592	AVX589	AVX. (1)	AVX593	AVX. (1)	AVX. (1)	AVX. (1)
N, U	AVX. (1)	AVX500	AVX592	AVX589	AVX. (1)	AVX593	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Kit low temperature

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
A, E	XLATB1	XLATB3	XLATB5	XLATB6	XLATB7	XLATB6	XLATB7	XLATB7	XLATB8	XLATB8
N, U	XLATB2	XLATB5	XLATB5	XLATB5	XLATB7	XLATB6	XLATB6	XLATB7	XLATB8	XLATB8

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
A, E	GP3T	GP4T	GP5T	GP6T	GP7T	GP8T	GP9T	GP10T	GP10T	GP11T
N, U	GP3T	GP4T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T	GP11T	GP11T

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**TBA**
4,5,6,7		**Size** 1300, 1350, 2300, 2325, 2350, 3300, 3320, 3340, 3350, 4325
8		**Model**
	°	Cooling only
9		**Heat recovery**
	°	Without heat recovery
10		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
11		**Coils**
	I	Copper-aluminium
	O	Coated aluminium microchannel
	R	Copper pipes-copper fins
	S	Copper pipes-Tinned copper fins
	V	Copper pieps-Coated aluminium fins
	°	Aluminium microchannel
12		**Fans**
	J	Inverter
13		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
14,15		**Integrated hydronic kit**
	00	Without hydronic kit
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (1)
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (1)
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed
	IG	Pump G equipped with inverter device to work at fixed speed
	IH	Pump H equipped with inverter device to work at fixed speed
	II	Pump I equipped with inverter device to work at fixed speed
	IJ	Pump J equipped with inverter device to work at fixed speed (1)
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
	JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (1)
	KF	Doble pump F with inverter device to work at fixed speed
	KG	Doble pump G with inverter device to work at fixed speed
	KH	Doble pump H with inverter device to work at fixed speed
	KI	Doble pump I with inverter device to work at fixed speed
	KJ	Doble pump J with inverter device to work at fixed speed (1)
	TF	Double pump F
	TG	Double pump G
	TH	Double pump H
	TI	Double pump I
	TJ	Double pump J (1)
16		**Refrigerant gas**
	G	R513A (XP10)
	°	R134a

(1) For all configurations including pump J please contact the factory

PERFORMANCE SPECIFICATIONS

TBA - (A)

Size		1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	330,7	437,3	633,9	741,5	871,9	974,8	1087,0	1155,9	1256,9	1404,1
Input power	kW	95,3	125,9	183,0	214,9	254,8	279,5	314,9	334,9	369,1	413,3
Cooling total input current	A	150,7	200,9	286,2	346,4	416,6	446,9	502,1	547,3	592,3	667,6
EER	W/W	3,47	3,47	3,46	3,45	3,42	3,49	3,45	3,45	3,41	3,40
Water flow rate system side	l/h	56903	75228	109011	127504	149890	167604	186876	198728	216075	241381
Pressure drop system side	kPa	60	55	48	42	30	52	45	54	36	42

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBA - (E)

Size		1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	330,7	437,3	633,9	741,5	871,9	974,8	1087,0	1155,9	1256,9	1404,1
Input power	kW	95,3	125,9	183,0	214,9	254,8	279,5	314,9	334,9	369,1	413,3
Cooling total input current	A	150,7	200,9	286,2	346,4	416,6	446,9	502,1	547,3	592,3	667,6
EER	W/W	3,47	3,47	3,46	3,45	3,42	3,49	3,45	3,45	3,41	3,40
Water flow rate system side	l/h	56903	75228	109011	127504	149890	167604	186876	198728	216075	241381
Pressure drop system side	kPa	60	55	48	42	30	52	45	54	36	42

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBA - (U)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity		kW	328,1	443,8	633,5	758,5	876,4	985,0	1088,0	1154,9	1256,9	1342,4
Input power		kW	92,3	124,4	178,8	213,2	245,5	275,4	306,8	326,3	358,1	386,6
Cooling total input current		A	145,7	200,9	281,4	341,6	401,9	437,1	487,3	522,6	582,6	627,6
EER		W/W	3,56	3,57	3,54	3,56	3,57	3,58	3,55	3,54	3,51	3,47
Water flow rate system side		l/h	56452	76308	108940	130424	150669	169356	187070	198556	216075	230760
Pressure drop system side		kPa	51	25	49	50	30	53	56	53	36	38

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBA - (N)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity		kW	328,1	443,8	633,5	758,5	876,4	985,0	1088,0	1154,9	1256,9	1342,4
Input power		kW	92,3	124,4	178,8	213,2	245,5	275,4	306,8	326,3	358,1	386,6
Cooling total input current		A	145,7	200,9	281,4	341,6	401,9	437,1	487,3	522,6	582,6	627,6
EER		W/W	3,56	3,57	3,54	3,56	3,57	3,58	3,55	3,54	3,51	3,47
Water flow rate system side		l/h	56452	76308	108940	130424	150669	169356	187070	198556	216075	230760
Pressure drop system side		kPa	51	25	49	50	30	53	56	53	36	38

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
SEER - (EN14825:2018) 12/7 with inverter fans (1)												
SEER	A,E	W/W	5,15	5,23	5,48	5,25	5,54	5,54	5,51	5,49	5,57	5,35
	N,U	W/W	5,35	5,41	5,60	5,48	5,76	5,80	5,62	5,71	5,73	5,62
Seasonal efficiency	A,E	%	203,1%	206,0%	216,0%	206,8%	218,4%	218,4%	217,5%	216,5%	219,8%	211,0%
	N,U	%	211,0%	213,5%	221,0%	216,1%	227,3%	229,1%	221,9%	225,4%	226,3%	221,6%
SEPR - (EN14825: 2018) High temperature with inverter fans (2)												
SEPR	A,E	W/W	6,31	6,65	6,11	6,32	6,41	6,13	6,26	6,33	6,28	6,12
	N,U	W/W	6,47	6,61	6,52	6,80	6,49	6,62	6,57	6,50	6,47	6,40

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Electric data												
Maximum current (FLA)	A,E	A	165,0	249,0	319,0	404,0	488,0	483,0	568,0	727,0	727,0	797,0
	N,U	A	165,0	249,0	329,0	413,0	498,0	493,0	577,0	737,0	737,0	797,0
Peak current (LRA)	A,E	A	36,0	45,0	200,0	210,0	305,0	374,0	470,0	565,0	565,0	720,0
	N,U	A	36,0	45,0	210,0	305,0	315,0	384,0	479,0	575,0	575,0	720,0

GENERAL TECHNICAL DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Compressor												
Type	A,E,N,U	type					Centrifugal					
Compressor regulation	A,E,N,U	Type					Inverter					
Number	A,E,N,U	no.	1	1	2	2	2	3	3	3	3	4
Circuits	A,E,N,U	no.	1	1	1	2	1	1	2	1	1	2
Refrigerant	A,E,N,U	type					R134a					
Refrigerant charge (1)	A,E	kg	81,0	166,0	152,0	243,0	285,0	264,0	306,0	317,0	387,0	398,0
	N,U	kg	81,0	166,0	163,0	254,0	296,0	275,0	317,0	328,0	398,0	398,0
System side heat exchanger												
Type	A,E,N,U	type					Shell and tube					
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	A,E,N,U	Type					Grooved joints					
Sizes (in/out)	A,E	Ø	3″	4″	6″	6″	6″	6″	6″	6″	8″	8″
	N,U	Ø	6″	6″	6″	6″	6″	6″	6″	6″	8″	8″
Fan												
Type	A,E,N,U	type					axials					
Fan motor	A,E,N,U	type					Inverter					
Number	A,E	no.	6	8	10	12	14	16	18	20	20	22
	N,U	no.	6	8	12	14	16	18	20	22	22	22
Air flow rate	A,E	m^3/h	112920	150560	188200	225840	263480	301120	338760	376400	376400	414040
	N,U	m^3/h	112920	150560	225840	263480	301120	338760	376400	414040	414040	414040

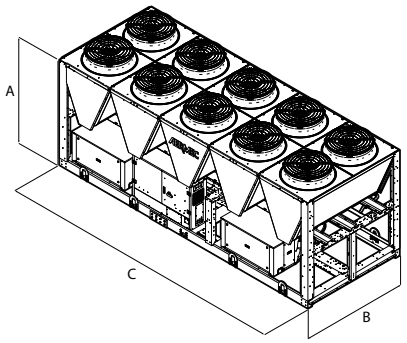
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	88,3	89,9	90,8	92,5	93,0	92,8	93,9	95,3	95,3	95,3
	E	dB(A)	82,3	83,9	84,8	86,5	87,0	86,8	87,9	89,3	89,3	89,3
	N	dB(A)	82,3	84,0	85,3	86,8	87,1	87,1	88,1	89,5	89,5	89,3
	U	dB(A)	88,3	90,0	91,3	92,8	93,1	93,1	94,1	95,5	95,5	95,3
Sound pressure level (10 m)	A	dB(A)	56,1	57,5	58,3	59,9	60,2	59,9	60,9	62,2	62,2	62,1
	E	dB(A)	50,1	51,5	52,3	53,9	54,2	53,9	54,9	56,2	56,2	56,1
	N	dB(A)	50,1	51,6	52,7	54,0	54,2	54,1	55,0	56,3	56,3	56,1
	U	dB(A)	56,1	57,6	58,7	60,0	60,2	60,1	61,0	62,3	62,3	62,1

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ												
Dimensions and weights												
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3570	4760	5950	7140	8330	9520	10710	11900	11900	13090
	N,U	mm	3570	4760	7140	8330	9520	10710	11900	13090	13090	13090

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350	4325
Integrated hydronic kit: 00												
Weights												
Empty weight	A	kg	2770	3480	4500	5550	6390	6760	7950	8240	8600	9700
	E	kg	2850	3590	4630	5720	6580	6980	8190	8510	8870	10000
	N	kg	2880	3810	5120	5950	7060	7430	8200	8950	9320	10000
	U	kg	2800	3700	4950	5760	6840	7180	7920	8650	9010	9700
Weight functioning	A	kg	2840	3560	4630	5730	6650	6960	8210	8500	8940	9990
	E	kg	2920	3670	4760	5900	6840	7180	8450	8770	9210	10290
	N	kg	2960	3940	5250	6100	7320	7630	8410	9210	9660	10290
	U	kg	2880	3830	5080	5910	7100	7380	8130	8910	9350	9990

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TBG 1230-4310

Air-water chiller

Cooling capacity 200 ÷ 1165 kW

- **High efficiency also at partial loads**
- **Microchannel coil**
- **Low peak current (only 6 Amps!)**
- **Evaporator with low refrigerant charge**



DESCRIPTION

Air-cooled chiller designed to meet air conditioning needs in residential / commercial complexes or industrial applications.
These are outdoor units with oil free centrifugal compressor, axial fans, micro-channel coils, and shell and tube heat exchangers.
The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

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U Very high efficiency

FEATURES

Operating field

Operation at full load up to 43°C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

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The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Oil free centrifugal compressor

Two-stage oil-free centrifugal compressor with magnetic levitation and inverter.
Compressor features:
— Operates without oil as bearings are magnetic levitation type
— Continuous load modulation by varying rpm (from 30% to 100%)
— Low peak currents (only 6 Amps!)

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:
da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430;
with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

CONTROL PCO[5]

Units include 1 control board for each circuit.
Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Further features:
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

XLATB: This kit allows to extend the working range of the unit from 0 °C to -10 °C ambient temperature, thanks to an additional electric heater and a special insulating material for the heat exchanger.
GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
AER485P1	A,E,N,U	•	•	•		•		•	•		
AER485P1 x no. 2	A,E,N,U				•		•			•	•
AERBACP	A,E,N,U	•	•	•		•		•	•		
AERBACP x no. 2	A,E,N,U				•		•			•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•

Antivibration

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ										
A, E	AVX596	AVX. (1)	AVX597	AVX588	AVX592	AVX. (1)	AVX. (1)	AVX593	AVX. (1)	AVX. (1)
N, U	AVX. (1)	AVX500	AVX588	AVX592	AVX589	AVX. (1)	AVX593	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

XLATB: Kit for low temperature

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
A, E, N, U	XLATB1	XLATB3	XLATB4	XLATB5	XLATB5	XLATB6	XLATB6	XLATB6	XLATB7	XLATB7

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
A, E	GP2T	GP3T	GP4T	GP5T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T
N, U	GP3T	GP4T	GP5T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T	GP11T

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**TBG**
4,5,6,7	**Size** 1230, 1310, 2230, 2270, 2310, 3270, 3280, 3310, 4270, 4310
8	**Model**
°	Cooling only
9	**Heat recovery**
°	Without heat recovery
10	**Version**
A	High efficiency
E	Silenced high efficiency
N	Silenced very high efficiency
U	Very high efficiency
11	**Coils**
I	Copper-aluminium
O	Coated aluminium microchannel
R	Copper pipes-copper fins
S	Copper pipes-Tinned copper fins
V	Copper pieps-Coated aluminium fins
°	Aluminium microchannel
12	**Fans**
J	Inverter
13	**Power supply**
°	400V ~ 3 50Hz with magnet circuit breakers
14,15	**Integrated hydronic kit**
00	Without hydronic kit
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (1)
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (1)
IA	Pump A equipped with inverter device to work at fixed speed
IB	Pump B equipped with inverter device to work at fixed speed
IC	Pump C equipped with inverter device to work at fixed speedr
ID	Pump D equipped with inverter device to work at fixed speed
IE	Pump E equipped with inverter device to work at fixed speed
IF	Pump F equipped with inverter device to work at fixed speed
IG	Pump G equipped with inverter device to work at fixed speed
IH	Pump H equipped with inverter device to work at fixed speed
II	Pump I equipped with inverter device to work at fixed speed
IJ	Pump J equipped with inverter device to work at fixed speed (1)
JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (1)
KF	Doble pump F with inverter device to work at fixed speed
KG	Doble pump G with inverter device to work at fixed speed
KH	Doble pump H with inverter device to work at fixed speed
KI	Doble pump I with inverter device to work at fixed speed
KJ	Doble pump J with inverter device to work at fixed speed (1)
TF	Double pump F
TG	Double pump G
TH	Double pump H
TI	Double pump I
TJ	Double pump J (1)

(1) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

TBG - (A)

Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	199,9	296,6	417,6	502,3	600,1	687,0	791,4	900,3	1033,3	1165,3
Input power	kW	57,7	86,1	121,5	146,6	174,8	199,1	231,3	262,2	305,7	345,1
Cooling total input current	A	95,5	140,7	200,9	241,2	291,4	326,6	386,9	437,1	502,3	577,6
EER	W/W	3,46	3,45	3,44	3,43	3,43	3,45	3,42	3,43	3,38	3,38
Water flow rate system side	l/h	34397	51028	71817	86370	103190	118120	136075	154785	177653	200332
Pressure drop system side	kPa	28	43	29	32	37	36	38	40	41	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBG - (E)

Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	199,9	296,6	417,6	502,3	600,1	687,0	791,4	900,3	1033,3	1165,3
Input power	kW	57,7	86,1	121,5	146,6	174,8	199,1	231,3	262,2	305,7	345,1
Cooling total input current	A	95,5	140,7	200,9	241,2	291,4	326,6	386,9	437,1	502,3	577,6
EER	W/W	3,46	3,45	3,44	3,43	3,43	3,45	3,42	3,43	3,38	3,38
Water flow rate system side	l/h	34397	51028	71817	86370	103190	118120	136075	154785	177653	200332
Pressure drop system side	kPa	28	43	29	32	37	36	38	40	41	46

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBG - (U)

Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	230,7	324,2	439,6	511,1	604,5	709,0	807,9	906,9	1011,3	1112,5
Input power	kW	65,3	91,2	124,4	143,9	170,1	201,3	230,6	257,3	290,2	323,2
Cooling total input current	A	105,7	150,9	206,2	236,4	276,6	331,9	392,1	427,3	477,6	537,6
EER	W/W	3,53	3,55	3,53	3,55	3,55	3,52	3,50	3,52	3,49	3,44
Water flow rate system side	l/h	39688	55753	75597	87882	103946	121900	138909	155919	173873	191260
Pressure drop system side	kPa	37	32	32	33	38	39	39	41	39	42

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

TBG - (N)

Size		1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	230,7	324,2	439,6	511,1	604,5	709,0	807,9	906,9	1011,3	1112,5
Input power	kW	65,3	91,2	124,4	143,9	170,1	201,3	230,6	257,3	290,2	323,2
Cooling total input current	A	105,7	150,9	206,2	236,4	276,6	331,9	392,1	427,3	477,6	537,6
EER	W/W	3,53	3,55	3,53	3,55	3,55	3,52	3,50	3,52	3,49	3,44
Water flow rate system side	l/h	39688	55753	75597	87882	103946	121900	138909	155919	173873	191260
Pressure drop system side	kPa	37	32	32	33	38	39	39	41	39	42

(1) Data EN 14511:2022; Heat exchanger water (services side) 12°C / 7°C; outside air 35°C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
SEER - (EN14825:2018) 12/7 with inverter fans (1)												
SEER	A,E	W/W	5,44	5,52	5,76	5,44	5,85	5,70	5,77	5,78	5,61	5,60
	N,U	W/W	5,63	6,03	5,97	5,71	6,04	5,80	5,89	5,93	5,81	5,71
Seasonal efficiency	A,E	%	214,6%	217,6%	227,5%	214,6%	231,1%	225,1%	227,6%	228,3%	221,5%	220,8%
	N,U	%	222,3%	238,0%	235,9%	225,2%	238,7%	229,0%	232,5%	234,0%	229,2%	225,5%
SEPR - (EN14825: 2018) High temperature with inverter fans (2)												
SEPR	A,E	W/W	6,34	5,98	5,99	6,54	6,35	6,60	6,05	6,07	5,98	5,97
	N,U	W/W	6,47	6,21	6,18	6,78	6,56	6,73	6,20	6,23	6,17	6,09

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Electric data												
Maximum current (FLA)	A,E	A	115,0	180,0	229,0	294,0	359,0	408,0	528,0	538,0	587,0	707,0
	N,U	A	125,0	189,0	239,0	304,0	368,0	418,0	538,0	547,0	597,0	707,0
Peak current (LRA)	A,E	A	26,0	36,0	151,0	220,0	230,0	180,0	249,0	424,0	209,0	608,0
	N,U	A	36,0	45,0	161,0	230,0	239,0	190,0	259,0	433,0	219,0	608,0

GENERAL TECHNICAL DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Compressor												
Type	A,E,N,U	type	Centrifugal									
Compressor regulation	A,E,N,U	Type	Inverter									
Number	A,E,N,U	no.	1	1	2	2	2	3	3	3	3	4
Circuits	A,E,N,U	no.	1	1	1	2	1	2	1	1	2	2
Refrigerant	A,E,N,U	type	R1234ze									
Refrigerant charge (1)	A,E	kg	71,0	110,0	142,0	177,0	188,0	254,0	265,0	307,0	318,0	328,0
	N,U	kg	82,0	121,0	153,0	188,0	198,0	265,0	276,0	286,0	328,0	328,0
System side heat exchanger												
Type	A,E,N,U	type	Shell and tube									
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	A,E,N,U	Type	Grooved joints									
Sizes (in/out)	A,E,N,U	Ø	3"	4"	5"	6"	6"	6"	6"	6"	6"	6"
Fan												
Type	A,E,N,U	type	axials									
Fan motor	A,E,N,U	type	Inverter									
Number	A,E	no.	4	6	8	10	12	14	16	18	20	22
	N,U	no.	6	8	10	12	14	16	18	20	22	22
Air flow rate	A,E	m^3/h	75280	112920	150560	188200	225840	263480	301120	338760	376400	414040
	N,U	m^3/h	112920	150560	188200	225840	263480	301120	338760	376400	414040	414040

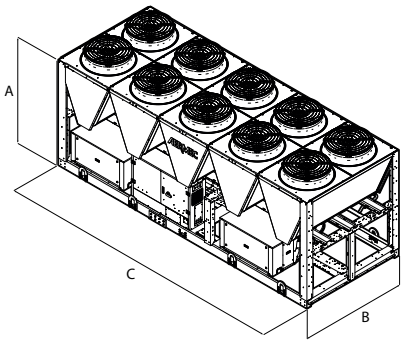
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Sound data calculated in cooling mode (1)												
Sound power level	A	dB(A)	85,2	88,4	88,2	90,1	91,4	91,3	92,9	93,1	93,1	94,2
	E	dB(A)	82,2	85,4	85,2	87,1	88,4	88,3	89,9	90,1	90,1	91,2
	N	dB(A)	83,3	85,9	85,8	87,5	88,7	88,6	90,1	90,3	90,3	91,2
	U	dB(A)	86,3	88,9	88,8	90,5	91,7	91,6	93,1	93,3	93,3	94,2
Sound pressure level (10 m)	A	dB(A)	53,3	56,5	55,8	57,6	58,8	58,5	60,0	60,1	60,0	61,0
	E	dB(A)	50,3	53,5	52,8	54,6	55,8	55,5	57,0	57,1	57,0	58,0
	N	dB(A)	51,1	53,5	53,3	54,9	55,9	55,7	57,1	57,2	57,1	58,0
	U	dB(A)	54,1	56,5	56,3	57,9	58,9	58,7	60,1	60,2	60,1	61,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00												
Dimensions and weights												
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	2780	3970	5160	5950	7140	8330	9520	10710	11900	13090
	N,U	mm	3570	4760	5950	7140	8330	9520	10710	11900	13090	13090

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ												
Dimensions and weights												
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3970	5160	5160	5950	7140	8330	9520	10710	11900	13090
	N,U	mm	3570	4760	5950	7140	8330	9520	10710	11900	13090	13090

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00												
Weights												
Empty weight	A	kg	2470	2980	4020	4800	5250	6490	6950	7440	8900	9510
	E	kg	2520	3060	4130	4940	5410	6680	7170	7690	9170	9810
	N	kg	2840	3590	4560	5420	5890	7150	7620	8130	9610	9800
	U	kg	2760	3480	4430	5250	5700	6930	7370	7850	9310	9500
Weight functioning	A	kg	2540	3050	4110	4930	5390	6670	7150	7650	9160	9780
	E	kg	2590	3130	4220	5070	5550	6860	7370	7900	9430	10080
	N	kg	2910	3670	4650	5550	6030	7330	7820	8340	9870	10070
	U	kg	2830	3560	4520	5380	5840	7110	7570	8060	9570	9770

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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AIR / WATER CHILLERS WITH FREE COOLING

When the cooling of the room is requested throughout the year, even during the winter season, such as in modern communication centers or in industrial applications, it is a waste to consume energy to produce cooling capacity. To meet these needs, Aermec offers a range of chillers capable of exploiting, free of charge, the external cold air to cool the liquid with a considerable energy saving.

AIR / WATER CHILLERS WITH FREECOOLING

		Air flow rate (m3/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
Units with scroll compressors					
NRG 0282-0754 F	Air-water chiller with free-cooling	-	58-190	-	622
NRG 0800-2400-F	Air-water chiller with free-cooling	-	224-717	-	627
NRG 0800-2400-B	Air-water chiller with free-cooling glycol free	-	224-717	-	634
NRB 0800-2406 F	Air-water chiller with free-cooling	-	211-680	-	641
NRB 0800-2406 B	Air-water chiller with free-cooling glycol free		211-680	-	649
NRV 0550 F	Air-water chiller with free-cooling	-	99,9-105,4	-	656
Units with screw compressors					
NSM 1402-9603 F	Air-water chiller with free-cooling	-	306-2028	-	660
NSM 1402-9603 B	Air-water chiller with free-cooling glycol free	-	305,8-2028,1	-	673
NSM-HWT-1402-9603-F	Air-water chiller with free-cooling	-	306-2001	-	684
NSM-HWT-1402-9603-B	Air-water chiller with free-cooling glycol free	-	306-1991	-	693
NSMI 1251-6102 F	Air-water chiller with free-cooling and Inverter screw compressors	-	286-1280	-	702
TBA 1300-3350 F	Air-water chiller with free-cooling	-	317,2-1223,6	-	707
TBG 1230-4310 F	Air-water chiller with free-cooling	-	238-1110	-	712

NRG 0282-0754 F

Air-water chiller with free-cooling

Cooling capacity 58 ÷ 190 kW

- **High efficiency also at partial loads**
- **Low refrigerant charge**
- **Compact dimensions**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas.
Condensing coil with copper pipes and aluminium louvers, plate heat exchanger.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 48°C external air temperature. Unit can produce chilled water up to -10 °C.
For more information refer to the selection program and to to the dedicated documentation.

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Refrigerant HFC R32

The environmental impact of the units is reduced considerably owing to the last generation R32 (A2L) refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

New condensing Coils

The whole range uses copper - aluminium condensation coils with reduced diameter rows, allowing a lower quantity of gas to be used compared to traditional coils.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed pumps also inverter.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Floating HP control:** the function can be activated with inverter fans or with DCPX which allows unit operation to be optimised at any operating point through continuous modulation of the fan speed. In addition, the use of inverter fans ensures an increase in energy efficiency at partial loads.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater

acoustic comfort but always guarantees performance even at peak load times.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

GP: Anti-intrusion grid.
VT: Anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
AER485P1	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•
AERNET	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•
PGD1	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•
SGD	E	•	•	•								

Remote panel

Model	Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
PR4	A					•	•	•	•	•	•	•
	E	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Integrated hydronic kit: 00, I3, I4, P3, P4											
A	-	-	-	-	VT11	VT11	VT11	VT11	VT22	VT22	VT22
E	VT17	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT22	VT22	VT22
Integrated hydronic kit: 03, 04, K3, K4											
A	-	-	-	-	VT11	VT11	VT11	VT11	VT22	VT22	VT22
E	VT13	VT13	VT13	VT13	VT11	VT11	VT11	VT11	VT22	VT22	VT22

Anti-intrusion grid

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
A	-	-	-	-	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)
E	GP4	GP4	GP4	GP4	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 2 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)	GP2 x 3 (1)

(1) x _ indicates the quantity to buy
The accessory cannot be fitted on the configurations indicated with -

Device for peak current reduction

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
A	-	-	-	-	DRENRG502FC	DRENRG552FC	DRENRG554	DRENRG604	DRENRG654	DRENRG704	DRENRG754
E	DRENRG282FC	DRENRG302FC	DRENRG332FC	DRENRG352FC	DRENRG502FC	DRENRG552FC	DRENRG554	DRENRG604	DRENRG654	DRENRG704	DRENRG754

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
A	-	-	-	-	RIFNRG502FC	RIFNRG552FC	RIFNRG554	RIFNRG604	RIFNRG654	RIFNRG704	RIFNRG754
E	RIFNRG282FC	RIFNRG302FC	RIFNRG332FC	RIFNRG352FC	RIFNRG502FC	RIFNRG552FC	RIFNRG554	RIFNRG604	RIFNRG654	RIFNRG704	RIFNRG754

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
A, E	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2	T6NRG2

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**NRG**
4,5,6,7	**Size** 0282, 0302, 0332, 0352, 0502, 0552, 0554, 0604, 0654, 0704, 0754
8	**Operating field**
X	Electronic thermostatic expansion valve
Z	Low temperature electronic thermostatic valve
9	**Model**
F	Free-cooling
S	Free-cooling with special 3-way valve
10	**Heat recovery**
D	With desuperheater
°	Without heat recovery
11	**Version**
A	High efficiency
E	Silenced high efficiency (1)
12	**Coils / free-cooling coils**
R	Copper-copper/Copper-copper
S	Copper-Tinned copper / Copper -Tinned copper
V	Copper-painted alumimium / Copper-painted alumimium
°	Copper-aluminium / Copper-aluminium
13	**Fans**
J	Inverter (2)
°	Standard
14	**Power supply**
°	400V ~ 3N 50Hz with magnet circuit breakers
15,16	**Integrated hydronic kit**
00	Without hydronic kit
	Kit with storage tank and pump/s
03	Storage tank with high head pump
04	Storage tank with high head pump + stand-by pump
	Kit with pump/s
P3	Single pump high head
P4	Pump high head + stand-by pump
	Kit with inverter pump/s to fixed speed
I3	Single high head pump + fixed speed inverter
I4	Single high head pump with fixed speed inverter + stand-by pump
	Kit with storage tank and inverter pump/s to fixed speed
K3	Single high head pump + storage tank + fixed speed inverter
K4	Storage tank and low head pump with fixed speed inverter + stand-by pump

(1) The size 0282-0302-0332-0352 only available in low noise versions.
(2) As standard in sizes fom 0282 to 0352

PERFORMANCE SPECIFICATIONS

NRG - A

Size		0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Cooling performance chiller operation (1)												
Cooling capacity	kW	-	-	-	-	100,8	111,4	116,9	134,7	148,5	168,3	190,0
Input power	kW	-	-	-	-	31,5	35,1	38,4	43,2	49,0	58,5	67,0
Cooling total input current	A	-	-	-	-	60,0	63,0	63,0	83,0	94,0	114,0	123,0
EER	W/W	-	-	-	-	3,20	3,18	3,05	3,12	3,03	2,88	2,84
Water flow rate system side	l/h	-	-	-	-	17316	19137	20081	23139	25509	28916	32647
Pressure drop system side	kPa	-	-	-	-	43	52	44	60	72	84	85
Cooling performances with free-cooling (2)												
Cooling capacity	kW	-	-	-	-	73,2	75,6	76,6	89,6	92,2	95,1	97,5
Input power	kW	-	-	-	-	3,7	3,7	3,8	5,6	5,6	5,6	5,6
Free cooling total input current	A	-	-	-	-	7,0	6,6	6,3	11,0	11,0	11,0	10,0
EER	W/W	-	-	-	-	19,94	20,59	20,14	16,15	16,62	17,14	17,56
Water flow rate system side	l/h	-	-	-	-	17316	19137	20081	23139	25509	28916	32647
Pressure drop system side	kPa	-	-	-	-	63	76	71	65	78	90	93

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRG - E

Size		0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Cooling performance chiller operation (1)												
Cooling capacity	kW	58,5	64,5	71,8	81,3	98,0	108,0	112,6	131,2	144,0	162,0	181,4
Input power	kW	18,7	22,1	24,7	30,4	32,0	36,0	39,7	44,1	50,1	60,7	70,5
Cooling total input current	A	33,0	44,0	50,0	62,0	58,0	62,0	63,0	80,0	91,0	113,0	123,0
EER	W/W	3,13	2,92	2,91	2,67	3,06	3,00	2,83	2,98	2,87	2,67	2,57
Water flow rate system side	l/h	10057	11082	12338	13965	16843	18547	19341	22540	24736	27830	31164
Pressure drop system side	kPa	20	24	29	28	40	49	41	57	68	78	77
Cooling performances with free-cooling (2)												
Cooling capacity	kW	39,2	44,0	48,8	51,0	73,2	75,6	76,6	89,6	92,2	95,1	97,5
Input power	kW	0,8	0,8	1,1	1,1	3,7	3,7	3,8	5,6	5,6	5,6	5,6
Free cooling total input current	A	1,5	1,7	2,2	2,2	6,6	6,3	6,1	10,0	10,0	10,0	9,7
EER	W/W	46,65	52,31	45,70	47,80	19,94	20,59	20,14	16,15	16,62	17,14	17,56
Water flow rate system side	l/h	10057	11082	12338	13965	16843	18547	19341	22540	24736	27830	31164
Pressure drop system side	kPa	35	31	40	41	59	71	66	61	74	84	85

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY DATA BY TYPE OF FAN

Size			0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
SEPR - (EN14825: 2018) High temperature with standard fans (1)													
SEPR	A	W/W	-	-	-	-	6,43	6,30	7,50	7,56	7,17	6,57	6,34
	E	W/W	7,11	6,66	6,65	6,21	6,34	6,14	7,16	7,24	7,02	6,39	6,12

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Electric data													
Maximum current (FLA)	A	A	-	-	-	-	73,5	79,1	80,5	100,1	111,4	132,7	144,0
	E	A	42,3	50,7	58,0	68,7	73,5	79,1	80,5	100,1	111,4	132,7	144,0
Peak current (LRA)	A	A	-	-	-	-	276,8	282,5	200,8	224,2	226,7	287,7	353,0
	E	A	162,7	174,8	173,3	223,7	276,8	282,5	200,8	224,2	226,7	287,7	353,0

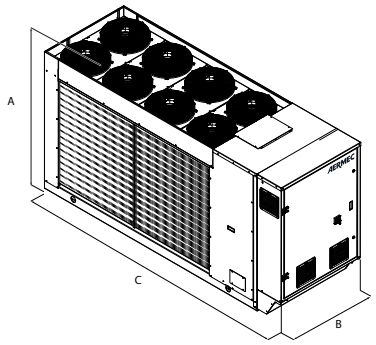
■ *Data calculated without hydronic kit and accessories.*

GENERAL TECHNICAL DATA

Size			0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Compressor													
Type	A,E	type						Scroll					
Compressor regulation	A,E	Type						On/Off					
Number	A,E	no.	2	2	2	2	2	2	4	4	4	4	4
Circuits	A,E	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type						R32					
System side heat exchanger													
Type	A,E	type						Brazed plate					
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections													
Sizes (in/out)	A,E	Ø						2"1/2					
Fan													
Type	A,E	type						Axial					
Number	A	no.	-	-	-	-	2	2	2	3	3	3	3
	E	no.	6	6	8	8	2	2	2	3	3	3	3
Air flow rate	A	m^3/h	-	-	-	-	36079	36079	36079	54481	54481	54481	54481
	E	m^3/h	23294	22734	26915	26915	27483	27483	27483	41449	41449	41449	41449
Sound data calculated in cooling mode (1)													
Sound power level	A	dB(A)	-	-	-	-	85,1	85,6	84,2	86,4	86,4	86,4	86,4
	E	dB(A)	73,0	73,9	74,3	74,5	81,3	82,1	76,1	77,5	77,5	77,5	77,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0282	0302	0332	0352	0502	0552	0554	0604	0654	0704	0754
Dimensions and weights													
A	A	mm	-	-	-	-	1907	1907	1907	1900	1900	1900	1900
	E	mm	1658	1658	1658	1658	1907	1907	1907	1900	1900	1900	1900
B	A	mm	-	-	-	-	1100	1100	1100	1100	1100	1100	1100
	E	mm	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
C	A	mm	-	-	-	-	3567	3567	3567	4467	4467	4467	4467
	E	mm	3317	3317	3317	3317	3567	3567	3567	4467	4467	4467	4467

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRG-0800-2400-F

Air-water chiller with free-cooling

Cooling capacity 224 ÷ 717 kW

- **Microchannel coil**
- **Night mode**
- **High efficiency also at partial loads**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas axial fan, microchannel batteries and plate exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 49 °C external air temperature. Unit can produce chilled water up to -10,0 °C.
For more information refer to the selection program and to to the dedicated documentation.

Refrigerant HFC R32

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).
The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Option integrated hydronic kit

An optional, integrated hydronic kit containing the main hydraulic components, to obtain a solution that allows you to save money and to facilitate installation.
It is available in different configurations with storage tank or with fixed pumps also inverter.

CONTROL PCO_5

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

CONFIGURATOR

Field		Description
1,2,3		**NRG**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Z	Low temperature electronic thermostatic valve (2)
9		**Model**
	F	Free-cooling
10		**Heat recovery**
	D	With desuperheater (3)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils / free-cooling coils**
	I	Copper-aluminium / Copper-aluminium
	O	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
	M	Oversized with DCPX
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A (4)
	AB	Storage tank and pump B (4)
	AC	Storage tank and pump C (4)
	AD	Storage tank and pump D (4)
	AE	Storage tank and pump E (4)
	AF	Storage tank and pump F (4)
	AG	Storage tank and pump G (4)
	AH	Storage tank and pump H (4)
	AI	Storage tank and pump I (4)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump (4)
	BB	Storage tank with pump B + stand-by pump (4)
	BC	Storage tank with pump C + stand-by pump (4)
	BD	Storage tank with pump D + stand-by pump (4)
	BE	Storage tank with pump E + stand-by pump (4)
	BF	Storage tank with pump F + stand-by pump (4)
	BG	Storage tank with pump G + stand-by pump (4)
	BH	Storage tank with pump H + stand-by pump (4)
	BI	Storage tank with pump I + stand-by pump (4)
		Kit with n° 1 inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed
	IG	Pump G equipped with inverter device to work at fixed speed
	IH	Pump H equipped with inverter device to work at fixed speed
	II	Pump I equipped with inverter device to work at fixed speed
		Kit with n° 1 inverter pump + stand-by pump to fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
		Kit with storage tank and n° 1 inverter pump to fixed speed
	CA	Buffer tank + pump A, equipped with inverter to work at fixed speed (4)
	CB	Buffer tank + pump B, equipped with inverter to work at fixed speed (4)
	CC	Buffer tank + pump C, equipped with inverter to work at fixed speed (4)
	CD	Buffer tank + pump D, equipped with inverter to work at fixed speed (4)
	EC	Buffer tank + pump E, equipped with inverter to work at fixed speed (4)
	CF	Buffer tank + pump F, equipped with inverter to work at fixed speed (4)
	CG	Buffer tank + pump G, equipped with inverter to work at fixed speed (4)
	CH	Buffer tank + pump H, equipped with inverter to work at fixed speed (4)
	CI	Buffer tank + pump I, equipped with inverter to work at fixed speed (4)
		Kit with storage tank and n° 1 pump + stand-by pump to fixed speed
	KA	Buffer tank+pump A+stand-by pump, both with inverter to work at fixed speed (4)
	KB	Buffer tank+pump B+stand-by pump, both with inverter to work at fixed speed (4)
	KC	Buffer tank+pump C+stand-by pump, both with inverter to work at fixed speed (4)
	KD	Buffer tank+pump D+stand-by pump, both with inverter to work at fixed speed (4)
	KE	Buffer tank+pump E+stand-by pump, both with inverter to work at fixed speed (4)
	KF	Buffer tank+pump F+stand-by pump, both with inverter to work at fixed speed (4)
	KG	Buffer tank+pump G+stand-by pump, both with inverter to work at fixed speed (4)
	KH	Buffer tank+pump H+stand-by pump, both with inverter to work at fixed speed (4)
	KI	Buffer tank+pump I+stand-by pump, both with inverter to work at fixed speed (4)

(1) Water produced from 4 °C ÷ 20 °C
(2) Water produced from 8 °C ÷ -10 °C
(3) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program. Desuperheater is not compatible with the hydronic kit with storage tank (AA-AI, BA-BI,CA-CI e KA-KI) on the unit 1400-2400°, 1100-1800 E/U, 0800-1600N.
(4) Additional module needed to contain the hydronic kit with "accumulation" option in sizes: 0800 A - 0900 A

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
AER485P1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
PR4	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00											
A	AVX1277	AVX1277	AVX1278	AVX1278	AVX1278	AVX1282	AVX1282	AVX1287	AVX1287	AVX1289	AVX1289
E, U	AVX1278	AVX1278	AVX1278	AVX1282	AVX1282	AVX1286	AVX1286	AVX1289	AVX1294	AVX1294	AVX1296
N	AVX1282	AVX1282	AVX1282	AVX1286	AVX1286	AVX1286	AVX1289	AVX1294	AVX1296	AVX1296	AVX1299
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, BA, BB, BC, BD, BE, BF, BG, BH, BI, CA, CB, CC, CD, CE, CF, CG, CH, CI, KA, KB, KC, KD, KE, KF, KG, KH, KI											
A	AVX1281	AVX1281	AVX1281	AVX1281	AVX1281	AVX1284	AVX1284	AVX1293	AVX1293	AVX1290	AVX1290
E, U	AVX1281	AVX1281	AVX1281	AVX1284	AVX1284	AVX1288	AVX1288	AVX1290	AVX1295	AVX1295	AVX1298
N	AVX1284	AVX1284	AVX1284	AVX1288	AVX1288	AVX1288	AVX1290	AVX1295	AVX1298	AVX1298	AVX1300
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI											
A	AVX1277	AVX1277	AVX1279	AVX1279	AVX1279	AVX1283	AVX1283	AVX1292	AVX1292	AVX1289	AVX1289
E, U	AVX1279	AVX1279	AVX1279	AVX1282	AVX1282	AVX1286	AVX1286	AVX1289	AVX1294	AVX1294	AVX1297
N	AVX1282	AVX1282	AVX1282	AVX1286	AVX1286	AVX1286	AVX1289	AVX1294	AVX1297	AVX1297	AVX1299

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
A, E, N, U	DRENRG0800	DRENRG0900	DRENRG1000	DRENRG1100	DRENRG1200	DRENRG1400

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1800	2000	2200	2400
A, E, N, U	DRENRG1600	DRENRG1800	DRENRG2000	DRENRG2200	DRENRG2400

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
A, E, N, U	RIFNRG0800	RIFNRG0900	RIFNRG1000	RIFNRG1100	RIFNRG1200	RIFNRG1400

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1800	2000	2200	2400
A, E, N, U	RIFNRG1600	RIFNRG1800	RIFNRG2000	RIFNRG2200	RIFNRG2400

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
A, E, N, U	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS2	T6NRGLS3	T6NRGLS3	T6NRGLS3

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
A	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G
E, U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G	GP8G	GP9G

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

NRG - A

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	223,9	245,3	284,1	324,7	368,2	419,0	462,1	535,9	599,5	654,7	692,5
Input power	kW	73,0	82,9	91,3	106,0	122,2	134,8	152,7	172,3	197,6	212,9	230,2
Cooling total input current	A	129,0	146,0	160,0	184,0	209,0	229,0	254,0	293,0	337,0	356,0	381,0
EER	W/W	3,07	2,96	3,11	3,06	3,01	3,11	3,03	3,11	3,03	3,07	3,01
Water flow rate system side	l/h	38467	42143	48813	55779	63264	71985	79391	92073	103007	112479	118984
Pressure drop system side	kPa	60	72	83	101	115	80	77	98	113	88	76
Cooling performances with free-cooling (2)												
Cooling capacity	kW	136,0	137,7	198,2	202,9	206,4	269,0	273,1	337,6	343,1	406,3	409,7
Input power	kW	7,5	7,5	11,2	11,2	11,2	15,0	15,0	18,7	18,7	22,4	22,4
Free cooling total input current	A	13,0	13,0	20,0	20,0	19,0	25,0	25,0	32,0	32,0	38,0	37,0
EER	W/W	18,20	18,42	17,67	18,09	18,40	17,99	18,27	18,06	18,36	18,11	18,26
Water flow rate system side	l/h	38467	42143	48813	55779	63264	71985	79391	92073	103007	112479	118984
Pressure drop system side	kPa	109	129	123	152	178	124	138	157	187	143	137

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRG - E

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	251,9	274,9	324,9	370,2	416,7	456,6	531,6	606,0	638,0	691,8
Input power	kW	72,4	82,1	92,0	106,0	123,9	136,5	153,7	175,2	197,7	215,9	227,8
Cooling total input current	A	122,0	139,0	156,0	176,0	201,0	220,0	245,0	284,0	319,0	346,0	363,0
EER	W/W	3,12	3,07	2,99	3,06	2,99	3,05	2,97	3,03	3,07	2,95	3,04
Water flow rate system side	l/h	38872	43273	47230	55828	63599	71601	78444	91335	104110	109612	118851
Pressure drop system side	kPa	62	65	74	103	72	65	76	92	116	66	72
Cooling performances with free-cooling (2)												
Cooling capacity	kW	158,4	161,9	164,2	214,5	219,3	269,7	273,4	326,8	379,6	383,0	434,0
Input power	kW	7,9	7,9	7,9	10,6	10,6	13,2	13,2	15,8	18,5	18,5	21,1
Free cooling total input current	A	13,0	13,0	13,0	18,0	17,0	21,0	21,0	26,0	30,0	30,0	34,0
EER	W/W	20,02	20,46	20,75	20,33	20,78	20,45	20,73	20,65	20,56	20,74	20,57
Water flow rate system side	l/h	38872	43273	47230	55828	63599	71601	78444	91335	104110	109612	118851
Pressure drop system side	kPa	89	97	112	149	129	103	121	141	170	109	115

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRG - U

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	233,1	260,7	285,8	336,2	385,1	431,6	474,7	552,3	627,9	664,0	717,7
Input power	kW	72,7	81,3	90,2	105,2	121,2	135,0	151,0	173,5	195,9	212,0	225,5
Cooling total input current	A	129,0	145,0	160,0	183,0	206,0	228,0	250,0	291,0	330,0	353,0	374,0
EER	W/W	3,21	3,20	3,17	3,19	3,18	3,20	3,14	3,18	3,21	3,13	3,18
Water flow rate system side	l/h	40049	44784	49102	57760	66170	74152	81560	94895	107889	114087	123303
Pressure drop system side	kPa	68	72	83	111	78	69	82	99	125	72	78
Cooling performances with free-cooling (2)												
Cooling capacity	kW	188,5	194,2	198,5	256,7	265,2	323,5	330,2	393,9	456,3	462,7	522,1
Input power	kW	11,2	11,2	11,2	15,0	15,0	18,7	18,7	22,4	26,2	26,2	29,9
Free cooling total input current	A	20,0	20,0	20,0	26,0	25,0	32,0	31,0	38,0	44,0	44,0	50,0
EER	W/W	16,81	17,32	17,70	17,17	17,74	17,31	17,66	17,56	17,44	17,68	17,46
Water flow rate system side	l/h	40049	44784	49102	57760	66170	74152	81560	94895	107889	114087	123303
Pressure drop system side	kPa	95	104	121	159	139	110	130	152	182	118	123

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRG - N

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)													
Cooling capacity		kW	232,6	258,9	286,6	334,6	383,1	422,5	473,7	546,9	617,8	658,1	707,5
Input power		kW	71,7	81,1	90,4	104,8	120,5	134,5	150,6	174,0	195,5	210,5	225,7
Cooling total input current		A	121,0	136,0	152,0	173,0	195,0	221,0	238,0	277,0	314,0	338,0	357,0
EER		W/W	3,24	3,19	3,17	3,19	3,18	3,14	3,14	3,14	3,16	3,13	3,14
Water flow rate system side		l/h	39959	44482	49239	57495	65813	72590	81381	93965	106146	113074	121557
Pressure drop system side		kPa	69	73	85	109	77	62	77	96	121	69	75
Cooling performances with free-cooling (2)													
Cooling capacity		kW	195,9	202,9	208,3	255,5	264,7	270,1	319,5	371,9	423,9	429,3	478,8
Input power		kW	10,6	10,6	10,6	13,2	13,2	13,2	15,8	18,5	21,1	21,1	23,7
Free cooling total input current		A	18,0	18,0	18,0	22,0	21,0	22,0	25,0	29,0	34,0	34,0	38,0
EER		W/W	18,57	19,23	19,74	19,37	20,07	20,48	20,19	20,14	20,09	20,34	20,17
Water flow rate system side		l/h	39959	44482	49239	57495	65813	72590	81381	93965	106146	113074	121557
Pressure drop system side		kPa	94	104	121	150	128	101	117	141	171	108	114

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J													
SEPR - (EN 14825: 2018) (1)													
SEPR	A	W/W	6,63	6,37	6,71	6,69	6,49	6,93	6,95	7,05	6,79	7,02	6,87
	E	W/W	7,12	6,91	6,90	6,94	6,79	7,41	7,34	7,24	7,19	7,28	7,30
	N	W/W	7,61	7,39	7,29	7,29	7,22	7,63	7,68	7,53	7,43	7,56	7,60
	U	W/W	7,27	7,12	7,02	7,09	6,96	7,33	7,39	7,27	7,14	7,34	7,36

(1) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: M													
SEPR - (EN 14825: 2018) (1)													
SEPR	A	W/W	6,39	6,16	6,50	6,53	6,33	6,89	6,86	6,96	6,69	6,86	6,70
	E	W/W	6,86	6,69	6,71	6,78	6,61	7,18	7,14	7,02	6,95	7,05	7,11
	N	W/W	7,38	7,16	7,09	7,12	7,04	7,39	7,47	7,30	7,18	7,33	7,40
	U	W/W	7,05	6,91	6,80	6,93	6,80	7,30	7,30	7,17	7,04	7,18	7,20

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Electric data													
Maximum current (FLA)	A	A	158,2	176,5	200,6	228,5	256,4	290,1	317,9	369,5	415,3	449,0	476,9
	E,U	A	164,0	182,3	200,6	234,3	262,2	295,9	323,7	375,3	426,9	454,8	488,5
	N	A	169,8	188,1	206,4	240,1	268,0	295,9	329,5	381,1	432,7	460,6	494,3
Peak current (LRA)	A	A	361,6	417,7	436,0	685,0	718,7	746,6	774,4	826,1	871,9	899,7	933,4
	E	A	361,6	417,7	441,8	690,8	718,7	752,4	780,2	831,9	877,7	911,3	939,2
	N	A	350,0	406,1	424,4	673,4	701,3	729,2	757,0	802,9	848,7	876,5	904,4
	U	A	367,4	423,5	441,8	696,6	724,5	758,2	786,0	837,7	889,3	917,1	950,8

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Compressor													
Type	A,E,N,U	type						Scroll					
Compressor regulation	A,E,N,U	Type						Asynchronous					
Number	A,E,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type						R32					
Potential global heating	A,E,N,U	GWP						675kgCO_2eq					
System side heat exchanger													
Type	A,E,N,U	type						Brazed plate					
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections without hydronic kit													
Connections (in/out)	A,E,N,U	Type						Grooved joints					
Sizes (in/out)	A	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″
	E,N,U	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″
Hydraulic connections with hydronic kit													
Connections (in/out)	A,E,N,U	Type						Grooved joints					
Sizes (in/out)	A	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″
	E,N,U	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

SOUND DATA

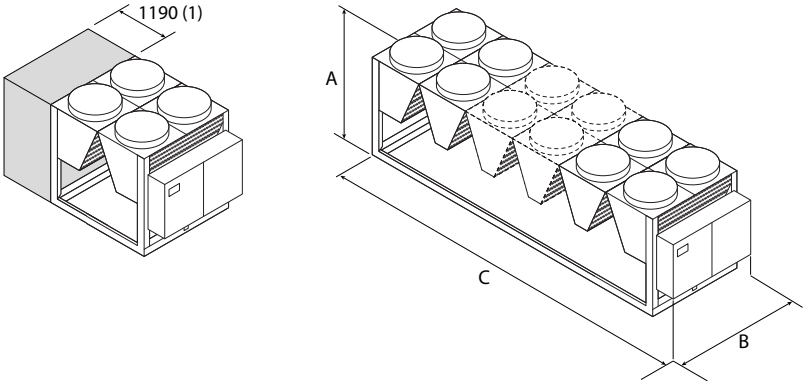
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M													
Sound data calculated in cooling mode (1)													
Sound power level	A	dB(A)	90,5	90,5	90,5	90,8	91,1	92,1	92,3	93,1	93,4	94,2	94,3
	E	dB(A)	84,4	84,5	84,5	85,8	86,5	87,6	88,1	88,6	89,0	89,7	90,2
	N	dB(A)	85,3	85,4	85,4	86,9	87,6	88,1	89,0	89,4	89,8	90,5	91,0
	U	dB(A)	90,8	90,8	90,8	92,2	92,5	93,5	93,6	94,3	94,9	95,0	95,6
Sound pressure level (10 m)	A	dB(A)	58,4	58,4	58,2	58,6	58,9	59,7	59,9	60,5	60,9	61,5	61,7
	E	dB(A)	52,2	52,2	52,3	53,4	54,1	55,1	55,6	55,9	56,2	56,9	57,3
	N	dB(A)	52,9	53,0	53,0	54,4	55,0	55,6	56,3	56,6	56,9	57,6	58,0
	U	dB(A)	58,5	58,5	58,5	59,8	60,1	60,9	61,1	61,7	62,1	62,2	62,7

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M													
Fan													
Type	A,E,N,U	type						Axial					
Number	A	no.	4	4	6	6	6	8	8	10	10	12	12
	E,U	no.	6	6	6	8	8	10	10	12	14	14	16
	N	no.	8	8	8	10	10	10	12	14	16	16	18
Air flow rate	A	m^3/h	57976	57976	86965	86965	86965	115954	115953	144941	144941	173929	173929
	E	m^3/h	63933	63933	63933	85244	85244	106555	106555	127866	149177	149177	170487
	N	m^3/h	85244	85244	85244	106555	106555	106555	127866	149177	170488	170488	191798
	U	m^3/h	86963	86963	86963	115959	115959	144934	144934	173932	202921	202921	231902

DIMENSIONS



Key:
1 Additional module needed to contain the hydronic kit with "accumulation" option in sizes: 0800 A- 0900 A

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI													
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	2780	2780	3970	3970	3970	5160	5160	6350	6350	7540	7540
	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9650
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9650	9650	11110

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, AH, AI, BA, BB, BC, BD, BE, BF, BG, BH, BI, CA, CB, CC, CD, CE, CF, CG, CH, CI, KA, KB, KC, KD, KE, KF, KG, KH, KI													
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	3970	3970	3970	3970	3970	5160	5160	6350	6350	7540	7540
	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9650
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9650	9650	11110

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00													
Weights													
Empty weight	A	kg	2545	2550	3090	3245	3390	4135	4345	5080	5295	6000	6095
	E,U	kg	3095	3110	3115	3890	4130	4755	4895	5630	6390	6580	7270
	N	kg	3720	3730	3735	4425	4680	4815	5440	6225	7000	7190	7825
Weight functioning	A	kg	2690	2695	3235	3390	3540	4360	4590	5355	5580	6360	6460
	E,U	kg	3230	3250	3260	4085	4370	5020	5165	5955	6755	6985	7720
	N	kg	3905	3920	3925	4645	4945	5090	5755	6585	7405	7635	8315

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRG-0800-2400-B

Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 224 ÷ 717 kW

- **Microchannel coil**
- **Night mode**
- **High efficiency also at partial loads**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with streamlined scroll compressors used with R32 gas axial fan, microchannel batteries and plate exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 49 °C external air temperature. Unit can produce chilled water up to -10,0 °C.
For more information refer to the selection program and to to the dedicated documentation.

Refrigerant HFC R32

Use refrigerant fluid R32, whose classification according to ISO 817 is A2L (non-toxic, odourless and slightly flammable refrigerant).
The environmental impact of the units is reduced considerably owing to the last generation R32 refrigerant.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

■ *The leak detector is supplied as per standard.*

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:
1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
2. Primary hydraulic circuit for glycol-free systems.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Option integrated hydronic kit

To obtain a solution that allows you to save money and to facilitate installation. These units can be configured with an integrated hydronic system.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL PCO_5

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

CONFIGURATOR

Field		Description
1,2,3		**NRG**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400
8		**Operating field**
	X	Electronic thermostatic expansion valve
	Z	Low temperature electronic thermostatic valve
9		**Model**
	B	Free-cooling glycol free
10		**Heat recovery**
	D	With desuperheater (1)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils / free-cooling coils**
	I	Copper-aluminium / Copper-aluminium
	O	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
	M	Oversized with DCPX
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
		Kit with n° 1 inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed
	IG	Pump G equipped with inverter device to work at fixed speed
	IH	Pump H equipped with inverter device to work at fixed speed
	II	Pump I equipped with inverter device to work at fixed speed
		Kit with n° 1 inverter pump + stand-by pump to fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed

(1) Warning: on the recovery side, a minimum input temperature of 35°C must always be guaranteed on the heat exchanger. For more information about the unit operating range, refer to the Magellano selection program. For further information please contact the head office.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
AER485P1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
PR4	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00											
A	AVX1277	AVX1277	AVX1301	AVX1301	AVX1301	AVX1303	AVX1303	AVX1308	AVX1308	AVX1307	AVX1307
E, U	AVX1301	AVX1301	AVX1301	AVX1302	AVX1303	AVX1304	AVX1304	AVX1307	AVX1310	AVX1310	AVX1311
N	AVX1302	AVX1302	AVX1302	AVX1304	AVX1304	AVX1304	AVX1307	AVX1310	AVX1311	AVX1311	AVX1313
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI											
A	AVX1285	AVX1285	AVX1301	AVX1301	AVX1306	AVX1303	AVX1303	AVX1309	AVX1309	AVX1307	AVX1307
E, U	AVX1301	AVX1301	AVX1301	AVX1303	AVX1303	AVX1304	AVX1304	AVX1307	AVX1310	AVX1310	AVX1312
N	AVX1302	AVX1302	AVX1302	AVX1305	AVX1304	AVX1304	AVX1307	AVX1310	AVX1312	AVX1312	AVX1313

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
A, E, N, U	DRENRG0800	DRENRG0900	DRENRG1000	DRENRG1100	DRENRG1200	DRENRG1400

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1800	2000	2200	2400
A, E, N, U	DRENRG1600	DRENRG1800	DRENRG2000	DRENRG2200	DRENRG2400

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
A, E, N, U	RIFNRG0800	RIFNRG0900	RIFNRG1000	RIFNRG1100	RIFNRG1200	RIFNRG1400

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1800	2000	2200	2400
A, E, N, U	RIFNRG1600	RIFNRG1800	RIFNRG2000	RIFNRG2200	RIFNRG2400

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
A, E, N, U	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS1	T6NRGLS2	T6NRGLS3	T6NRGLS3	T6NRGLS3

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00											
A	GP2VN	GP2VN	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G
E, U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G	GP8G	GP9G
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI											
A	GP2VNA	GP2VNA	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5G	GP5G	GP6G	GP6G
E, U	GP3G	GP3G	GP3G	GP4GM	GP4GM	GP5GM	GP5GM	GP6G	GP7G	GP7G	GP8G
N	GP4GM	GP4GM	GP4GM	GP5GM	GP5GM	GP5GM	GP6G	GP7G	GP8G	GP8G	GP9G

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

NRG - A

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	223,9	245,3	284,1	324,7	368,2	419,0	462,1	535,9	599,5	654,7	692,5
Input power	kW	73,0	82,9	91,3	106,0	122,2	134,8	152,7	172,3	197,6	212,9	230,2
Cooling total input current	A	129,0	146,0	160,0	184,0	209,0	229,0	254,0	293,0	337,0	356,0	381,0
EER	W/W	3,07	2,96	3,11	3,06	3,01	3,11	3,03	3,11	3,03	3,07	3,01
Water flow rate system side	l/h	38467	42143	48813	55779	63264	71985	79391	92073	103007	112479	118984
Pressure drop system side	kPa	70	85	99	111	116	92	88	107	125	115	105
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	122,1	122,1	178,1	179,1	179,8	241,5	241,5	302,6	302,5	368,7	368,6
Input power	kW	9,9	9,9	14,4	14,4	14,5	19,3	19,3	24,5	24,4	32,3	32,3
Free cooling total input current	A	18,0	17,0	25,0	25,0	25,0	33,0	32,0	42,0	42,0	54,0	54,0
EER	W/W	12,32	12,32	12,36	12,41	12,44	12,54	12,54	12,37	12,37	11,40	11,40
Water flow rate system side	l/h	38467	42143	48813	55779	63264	71985	79391	92073	103007	112479	118984
Pressure drop system side	kPa	70	85	99	111	116	92	88	107	125	115	105

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRG - E

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	251,9	274,9	324,9	370,2	416,7	456,6	531,6	606,0	638,0	691,8
Input power	kW	72,4	82,1	92,0	106,0	123,9	136,5	153,7	175,2	197,7	215,9	227,8
Cooling total input current	A	122,0	139,0	156,0	176,0	201,0	220,0	245,0	284,0	319,0	346,0	363,0
EER	W/W	3,12	3,07	2,99	3,06	2,99	3,05	2,97	3,03	3,07	2,95	3,04
Water flow rate system side	l/h	38872	43273	47230	55828	63599	71601	78444	91335	104110	109612	118851
Pressure drop system side	kPa	73	78	90	98	88	73	87	100	127	90	101
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	146,6	146,6	146,6	194,7	194,8	246,0	246,0	301,6	343,8	345,9	393,2
Input power	kW	11,1	11,1	11,1	14,8	14,8	18,9	18,9	25,6	29,3	29,7	32,5
Free cooling total input current	A	19,0	19,0	19,0	25,0	24,0	31,0	30,0	41,0	47,0	48,0	52,0
EER	W/W	13,20	13,20	13,20	13,18	13,18	13,00	13,00	11,79	11,73	11,64	12,12
Water flow rate system side	l/h	38872	43273	47230	55828	63599	71601	78444	91335	104110	109612	118851
Pressure drop system side	kPa	73	78	90	98	88	73	87	100	127	90	101

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRG - U

Size		0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)												
Cooling capacity	kW	233,1	260,7	285,8	336,2	385,1	431,6	474,7	552,3	627,9	664,0	717,7
Input power	kW	72,7	81,3	90,2	105,2	121,2	135,0	151,0	173,5	195,9	212,0	225,5
Cooling total input current	A	129,0	145,0	160,0	183,0	206,0	228,0	250,0	291,0	330,0	353,0	374,0
EER	W/W	3,21	3,20	3,17	3,19	3,18	3,20	3,14	3,18	3,21	3,13	3,18
Water flow rate system side	l/h	40049	44784	49102	57760	66170	74152	81560	94895	107889	114087	123303
Pressure drop system side	kPa	77	84	97	105	96	78	94	107	136	98	109
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	178,1	178,1	178,1	235,6	235,8	301,9	301,8	364,5	420,7	427,1	481,5
Input power	kW	14,4	14,4	14,4	19,2	19,2	24,4	24,4	32,2	37,0	37,4	41,3
Free cooling total input current	A	26,0	26,0	26,0	33,0	33,0	41,0	40,0	54,0	62,0	62,0	68,0
EER	W/W	12,36	12,36	12,36	12,28	12,29	12,36	12,36	11,33	11,37	11,41	11,67
Water flow rate system side	l/h	40049	44784	49102	57760	66170	74152	81560	94895	107889	114087	123303
Pressure drop system side	kPa	77	84	97	105	96	78	94	107	136	98	109

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRG - N

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Cooling performance chiller operation (1)													
Cooling capacity		kW	232,6	258,9	286,6	334,6	383,1	422,5	473,7	546,9	617,8	658,1	707,5
Input power		kW	71,7	81,1	90,4	104,8	120,5	134,5	150,6	174,0	195,5	210,5	225,7
Cooling total input current		A	121,0	136,0	152,0	173,0	195,0	221,0	238,0	277,0	314,0	338,0	357,0
EER		W/W	3,24	3,19	3,17	3,19	3,18	3,14	3,14	3,14	3,16	3,13	3,14
Water flow rate system side		l/h	39959	44482	49239	57495	65813	72590	81381	93965	106146	113074	121557
Pressure drop system side		kPa	77	84	97	104	95	82	88	105	132	95	105
Cooling performances with free-cooling glycol-free (2)													
Cooling capacity		kW	193,3	193,3	193,3	241,1	241,3	245,3	301,4	343,8	390,1	393,2	439,7
Input power		kW	14,7	14,7	14,7	18,5	18,5	18,8	25,6	29,3	32,0	32,5	35,2
Free cooling total input current		A	25,0	25,0	25,0	30,0	30,0	31,0	40,0	47,0	51,0	52,0	56,0
EER		W/W	13,14	13,14	13,14	13,03	13,03	13,03	11,80	11,73	12,18	12,12	12,51
Water flow rate system side		l/h	39959	44482	49239	57495	65813	72590	81381	93965	106146	113074	121557
Pressure drop system side		kPa	77	84	97	104	95	82	88	105	132	95	105

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J													
SEPR - (EN 14825: 2018) (1)													
SEPR	A	W/W	6,11	5,92	6,30	6,21	6,11	6,51	6,56	6,49	6,43	6,41	6,31
	E	W/W	6,39	6,28	6,20	6,22	6,10	6,56	6,54	6,35	6,30	6,31	6,44
	N	W/W	6,64	6,46	6,47	6,44	6,34	6,77	6,72	6,56	6,44	6,54	6,61
	U	W/W	6,55	6,45	6,41	6,44	6,33	6,75	6,70	6,61	6,51	6,52	6,54

(1) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: M													
SEPR - (EN 14825: 2018) (1)													
SEPR	A	W/W	5,90	5,74	6,12	6,07	5,96	6,48	6,48	6,41	6,34	6,27	6,18
	E	W/W	6,17	6,09	6,04	6,09	5,95	6,37	6,38	6,17	6,10	6,13	6,28
	N	W/W	6,42	6,27	6,31	6,30	6,19	6,58	6,55	6,38	6,24	6,36	6,45
	U	W/W	6,34	6,27	6,22	6,30	6,19	6,72	6,63	6,53	6,43	6,39	6,40

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Electric data													
Maximum current (FLA)	A	A	158,2	176,5	200,6	228,5	256,4	290,1	317,9	369,5	415,3	449,0	476,9
	E,U	A	164,0	182,3	200,6	234,3	262,2	295,9	323,7	375,3	426,9	454,8	488,5
	N	A	169,8	188,1	206,4	240,1	268,0	295,9	329,5	381,1	432,7	460,6	494,3
Peak current (LRA)	A	A	361,6	417,7	436,0	685,0	718,7	746,6	774,4	826,1	871,9	899,7	933,4
	E	A	361,6	417,7	441,8	690,8	718,7	752,4	780,2	831,9	877,7	911,3	939,2
	N	A	350,0	406,1	424,4	673,4	701,3	729,2	757,0	802,9	848,7	876,5	904,4
	U	A	367,4	423,5	441,8	696,6	724,5	758,2	786,0	837,7	889,3	917,1	950,8

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Compressor													
Type	A,E,N,U	type						Scroll					
Compressor regulation	A,E,N,U	Type						Asynchronous					
Number	A,E,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type						R32					
Refrigerant load circuit 1 (1)	A	kg	11,3	10,9	11,0	15,0	15,8	18,0	21,0	20,6	24,0	24,4	26,3
	E,U	kg	15,4	15,0	16,1	19,5	19,9	24,0	23,3	25,9	28,1	33,8	30,8
	N	kg	16,0	16,0	17,3	24,2	26,3	26,3	30,8	30,0	37,5	34,1	34,1
Refrigerant load circuit 2 (1)	A	kg	11,3	10,9	11,0	15,0	15,8	20,5	22,5	20,6	24,0	24,4	26,3
	E,U	kg	15,4	15,0	16,1	20,5	19,9	25,5	23,3	25,9	28,1	33,8	30,8
	N	kg	16,0	16,0	18,8	25,4	26,3	26,3	30,8	30,0	37,5	34,1	34,1
Potential global heating	A,E,N,U	GWP						675kgCO_2eq					
System side heat exchanger													
Type	A,E,N,U	type						Brazed plate					
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections without hydronic kit													
Connections (in/out)	A,E,N,U	Type						Grooved joints					
Sizes (in/out)	A	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″
	E,N,U	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″
Hydraulic connections with hydronic kit													
Connections (in/out)	A,E,N,U	Type						Grooved joints					
Sizes (in/out)	A	Ø	3″	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″
	E,N,U	Ø	3″	3″	3″	3″	4″	4″	4″	4″	4″	5″	5″

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

SOUND DATA

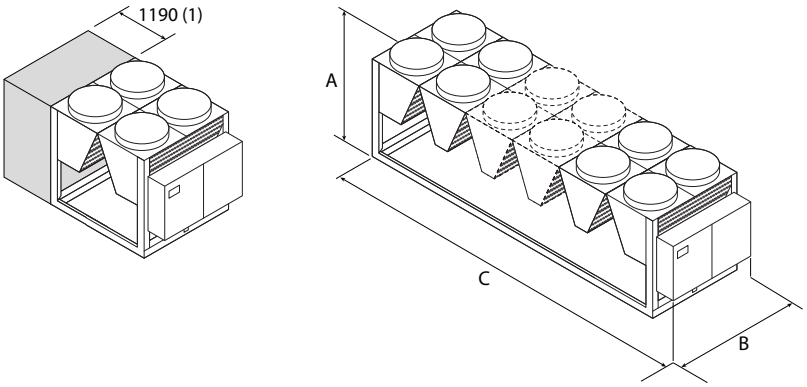
Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M													
Sound data calculated in cooling mode (1)													
Sound power level	A	dB(A)	90,5	90,5	90,5	90,8	91,1	92,1	92,3	93,1	93,4	94,2	94,3
	E	dB(A)	84,4	84,5	84,5	85,8	86,5	87,6	88,1	88,6	89,0	89,7	90,2
	N	dB(A)	85,3	85,4	85,4	86,9	87,6	88,1	89,0	89,4	89,8	90,5	91,0
	U	dB(A)	90,8	90,8	90,8	92,2	92,5	93,5	93,6	94,3	94,9	95,0	95,6
Sound pressure level (10 m)	A	dB(A)	58,4	58,4	58,2	58,6	58,9	59,7	59,9	60,5	60,9	61,5	61,7
	E	dB(A)	52,2	52,2	52,3	53,4	54,1	55,1	55,6	55,9	56,2	56,9	57,3
	N	dB(A)	52,9	53,0	53,0	54,4	55,0	55,6	56,3	56,6	56,9	57,6	58,0
	U	dB(A)	58,5	58,5	58,5	59,8	60,1	60,9	61,1	61,7	62,1	62,2	62,7

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Fans: J, M													
Fan													
Type	A,E,N,U	type						Axial					
Number	A	no.	4	4	6	6	6	8	8	10	10	12	12
	E,U	no.	6	6	6	8	8	10	10	12	14	14	16
	N	no.	8	8	8	10	10	10	12	14	16	16	18
Air flow rate	A	m^3/h	57976	57976	86965	86965	86965	115954	115953	144941	144941	173929	173929
	E	m^3/h	63933	63933	63933	85244	85244	106555	106555	127866	149177	149177	170487
	N	m^3/h	85244	85244	85244	106555	106555	106555	127866	149177	170488	170488	191798
	U	m^3/h	86963	86963	86963	115959	115959	144934	144934	173932	202921	202921	231902

DIMENSIONS



Key:
1 Additional module needed to contain the hydronic kit with "pumps" option in sizes: 0800 A- 0900 A

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00													
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	2780	2780	3970	3970	3970	5160	5160	6350	6350	7540	7540
	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9650
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9650	9650	11110

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: DA, DB, DC, DD, DE, DF, DG, DH, DI, IA, IB, IC, ID, IE, IF, IG, IH, II, JA, JB, JC, JD, JE, JF, JG, JH, JI, PA, PB, PC, PD, PE, PF, PG, PH, PI													
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	3970	3970	3970	3970	3970	5160	5160	6350	6350	7540	7540
	E,U	mm	3970	3970	3970	5160	5160	6350	6350	7540	8730	8730	9650
	N	mm	5160	5160	5160	6350	6350	6350	7540	8730	9650	9650	11110

Size			0800	0900	1000	1100	1200	1400	1600	1800	2000	2200	2400
Integrated hydronic kit: 00													
Weights													
Empty weight	A	kg	2690	2695	3250	3425	3570	4395	4605	5400	5620	6355	6445
	E,U	kg	3250	3265	3275	4095	4340	5035	5180	5985	6760	6945	7660
	N	kg	3880	3900	3905	4655	4915	5045	5760	6595	7380	7565	8185
Weight functioning	A	kg	2895	2900	3460	3655	3805	4765	4990	5840	6070	6900	6995
	E,U	kg	3460	3475	3485	4385	4695	5445	5590	6480	7290	7530	8300
	N	kg	4135	4160	4165	4975	5290	5430	6220	7125	7955	8200	8855

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRB 0800-2406 F

Air-water chiller with free-cooling

Cooling capacity 211 ÷ 680 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **High efficiency also at partial loads**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
Outdoor units with scroll compressors, axial flow fans, micro-channel coil (source side), plate heat exchanger and thermostatic expansion valve (mechanical or electronic, depending on the model).
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.*

Electronic expansion valve

The units from size 1805 to 2406 have an electronic expansion valve as standard.
The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

To obtain a solution that allows you to save money and to facilitate installation. These units can be configured with an integrated hydronic system.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

CONFIGURATOR

Field		Description
1,2,3		**NRB**
4,5,6,7		**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve
	Z	Low temperature electronic thermostatic valve
	°	Standard mechanic thermostatic valve (2)
9		**Model**
	F	Free-cooling
	P	Free-cooling plus (3)
10		**Heat recovery**
	D	With desuperheater (4)
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils / free-cooling coils**
	I	Copper-aluminium / Copper-aluminium
	O	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	°	400 V/3/50 Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (5)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (5)
		Kit with storage tank and n° 1 pump
	AA	Storage tank and pump A
	AB	Storage tank and pump B
	AC	Storage tank and pump C
	AD	Storage tank and pump D
	AE	Storage tank and pump E
	AF	Storage tank and pump F
	AG	Storage tank and pump G
	AH	Storage tank and pump H
	AI	Storage tank and pump I
	AJ	Storage tank and pump J (5)
		Kit with storage tank and n° 1 pump + stand-by pump
	BA	Storage tank with pump A + stand-by pump
	BB	Storage tank with pump B + stand-by pump
	BC	Storage tank with pump C + stand-by pump
	BD	Storage tank with pump D + stand-by pump
	BE	Storage tank with pump E + stand-by pump
	BF	Storage tank with pump F + stand-by pump
	BG	Storage tank with pump G + stand-by pump
	BH	Storage tank with pump H + stand-by pump
	BI	Storage tank with pump I + stand-by pump
	BJ	Storage tank with pump J + stand-by pump (5)

(1) Electronic thermostatic as standard from size 1805÷2406.
(2) Water produced from 4 °C ÷ 18 °C
(3) Free cooling Plus models "P" are compatible only with "°" and "O" coils.
(4) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(5) For all configurations including pump J please contact the factory.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
FL	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00											
A	AVX1066	AVX1066	AVX1068	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1074	AVX1074	AVX1052
E, U	AVX1070	AVX1070	AVX1070	AVX1072	AVX1072	AVX1072	AVX1074	AVX1052	AVX1052	AVX1054	AVX1054
N	AVX1072	AVX1072	AVX1072	AVX1074	AVX1074	AVX1074	AVX1052	AVX1054	AVX1054	AVX1057	AVX1057
Integrated hydronic kit: AA, AB, AC, AD, AE, AF, AG, BA, BB, BC, BD											
A	AVX1068	AVX1068	AVX1069	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1075	AVX1075	AVX1053
E, U	AVX1071	AVX1069	AVX1069	AVX1073	AVX1073	AVX1073	AVX1075	AVX1053	AVX1053	AVX1056	AVX1056
N	AVX1073	AVX1073	AVX1073	AVX1075	AVX1075	AVX1075	AVX1053	AVX1056	AVX1056	AVX1051	AVX1051
Integrated hydronic kit: AH, AI, BE, BF, BG											
A	AVX1068	AVX1068	AVX1069	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1075	AVX1075	AVX1053
E, U	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1073	AVX1075	AVX1053	AVX1053	AVX1056	AVX1056
N	AVX1073	AVX1073	AVX1073	AVX1075	AVX1075	AVX1075	AVX1053	AVX1056	AVX1056	AVX1051	AVX1051
Integrated hydronic kit: BH, BI											
A	AVX1069	AVX1069	AVX1069	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1075	AVX1075	AVX1053
E, U	AVX1069	AVX1069	AVX1069	AVX1073	AVX1073	AVX1073	AVX1075	AVX1053	AVX1053	AVX1056	AVX1056
N	AVX1073	AVX1073	AVX1073	AVX1075	AVX1075	AVX1075	AVX1053	AVX1078	AVX1056	AVX1051	AVX1051
Integrated hydronic kit: DA, DB, DC, DD, PA, PB, PC, PD, PE, PF, PG											
A	AVX1066	AVX1066	AVX1068	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1074	AVX1074	AVX1052
E, U	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1072	AVX1074	AVX1052	AVX1052	AVX1054	AVX1054
N	AVX1072	AVX1072	AVX1072	AVX1074	AVX1074	AVX1074	AVX1052	AVX1054	AVX1054	AVX1050	AVX1050
Integrated hydronic kit: DE, DF, DG, PH, PI											
A	AVX1066	AVX1066	AVX1068	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1074	AVX1074	AVX1052
E, U	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1072	AVX1076	AVX1052	AVX1052	AVX1054	AVX1054
N	AVX1072	AVX1072	AVX1072	AVX1074	AVX1074	AVX1074	AVX1052	AVX1055	AVX1054	AVX1050	AVX1050
Integrated hydronic kit: DH, DI											
A	AVX1067	AVX1067	AVX1068	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1079	AVX1076	AVX1052
E, U	AVX1068	AVX1068	AVX1068	AVX1072	AVX1072	AVX1072	AVX1076	AVX1052	AVX1052	AVX1055	AVX1055
N	AVX1072	AVX1072	AVX1072	AVX1076	AVX1076	AVX1076	AVX1052	AVX1077	AVX1055	AVX1050	AVX1050

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
A, E, N, U	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
A, E, N, U	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
A	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
E, U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
A	RIFNRB1601	RIFNRB1805	RIFNRB2006	RIFNRB2206	RIFNRB2416
E, N, U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Double safety valves

Ver	0800	0900	1000	1100	1200	1400
A	T6NRB13	T6NRB13	T6NRB14	T6NRB14	T6NRB15	T6NRB15
E, N, U	T6NRB14	T6NRB14	T6NRB14	T6NRB14	T6NRB15	T6NRB15

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
A	T6NRB15	T6NRB15	T6NRB15	T6NRB15	T6NRB16
E, U	T6NRB15	T6NRB17	T6NRB16	T6NRB19	T6NRB19
N	T6NRB18	T6NRB19	T6NRB19	T6NRB20	T6NRB20

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
A	GP2VN	GP2VN	GP3VNF	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4G	GP5G	GP5G	GP6V
E, U	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V

A grey background indicates the accessory must be assembled in the factory

Units 0800A and 0900A with the optional "storage tank" are 3970 mm long and must have the GP2VNA grids installed.

PERFORMANCE SPECIFICATIONS

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	kW	211,8	234,3	273,4	307,1	335,9	373,3	432,0	474,2	542,2	584,4	655,6
Input power	kW	76,0	88,0	93,9	108,9	124,8	145,6	157,1	185,1	201,0	229,4	243,7
Cooling total input current	A	133,7	152,1	165,5	189,4	215,1	248,2	269,7	316,3	347,4	394,4	423,3
EER	W/W	2,79	2,66	2,91	2,82	2,69	2,56	2,75	2,56	2,70	2,55	2,69
Water flow rate system side	l/h	36397	40249	46968	52762	57713	64138	74217	81471	93153	100403	112635
Pressure drop system side	kPa	49	50	68	76	91	99	64	68	88	96	122
Cooling performances with free-cooling (2)												
Cooling capacity	kW	139,8	142,0	203,2	208,4	211,6	214,7	280,5	284,4	350,8	354,8	421,5
Input power	kW	7,5	7,5	11,2	11,2	11,2	11,2	15,0	15,0	18,7	18,7	22,5
Free cooling total input current	A	13,2	13,0	19,8	19,6	19,4	19,2	25,7	25,6	32,4	32,2	39,1
EER	W/W	18,64	18,94	18,07	18,53	18,81	19,09	18,71	18,97	18,72	18,93	18,74
Water flow rate system side	l/h	36397	40249	46968	52762	57713	64138	74217	81471	93153	100403	112635
Pressure drop system side	kPa	88	97	101	117	139	158	112	125	144	161	188

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	kW	210,3	232,4	271,9	305,1	333,3	369,6	428,9	469,8	538,2	579,2	650,8
Input power	kW	76,8	89,2	94,8	110,0	126,2	147,6	158,7	187,5	203,2	232,3	246,6
Cooling total input current	A	134,8	153,7	166,7	190,9	217,2	251,0	272,1	319,8	350,6	398,7	427,3
EER	W/W	2,74	2,61	2,87	2,77	2,64	2,50	2,70	2,51	2,65	2,49	2,64
Water flow rate system side	l/h	36136	39921	46723	52411	57266	63506	73697	80717	92472	99510	111819
Pressure drop system side	kPa	48	49	67	75	89	97	63	66	87	95	120
Cooling performances with free-cooling (2)												
Cooling capacity	kW	149,8	152,0	217,8	223,3	226,6	229,5	300,5	304,3	375,9	379,8	451,6
Input power	kW	7,6	7,6	11,4	11,4	11,4	11,4	15,2	15,2	19,0	19,0	22,8
Free cooling total input current	A	13,4	13,1	20,1	19,8	19,7	19,4	26,1	26,0	32,8	32,7	39,6
EER	W/W	19,66	19,95	19,06	19,55	19,83	20,09	19,73	19,98	19,74	19,94	19,76
Water flow rate system side	l/h	36136	39921	46723	52411	57266	63506	73697	80717	92472	99510	111819
Pressure drop system side	kPa	86	95	100	116	137	155	110	123	142	158	185

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	kW	220,6	242,6	265,3	310,3	344,7	379,2	438,5	498,2	546,9	610,1	652,9
Input power	kW	73,4	84,2	95,7	106,6	122,4	142,0	155,3	174,8	199,2	219,5	244,7
Cooling total input current	A	125,5	142,4	160,1	179,2	204,6	235,8	257,7	291,8	333,0	368,2	410,5
EER	W/W	3,00	2,88	2,77	2,91	2,82	2,67	2,82	2,85	2,75	2,78	2,67
Water flow rate system side	l/h	37902	41688	45573	53310	59226	65155	75344	85588	93960	104827	112169
Pressure drop system side	kPa	44	53	57	82	90	109	58	75	85	89	102
Cooling performances with free-cooling (2)												
Cooling capacity	kW	164,6	168,5	171,5	222,5	227,6	231,2	285,4	338,9	344,8	399,2	403,7
Input power	kW	7,9	7,9	7,9	10,5	10,5	10,5	13,1	15,8	15,8	18,4	18,4
Free cooling total input current	A	13,5	13,3	13,2	17,6	17,6	17,4	21,8	26,3	26,3	30,8	30,8
EER	W/W	20,90	21,39	21,78	21,18	21,67	22,02	21,74	21,51	21,89	21,72	21,97
Water flow rate system side	l/h	37902	41688	45573	53310	59226	65155	75344	85588	93960	104827	112169
Pressure drop system side	kPa	67	80	88	120	136	165	95	114	132	139	159

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	kW	219,4	241,1	263,2	308,4	342,1	375,8	435,2	494,7	542,4	605,4	647,1
Input power	kW	74,1	85,1	96,8	107,7	123,7	143,8	157,0	176,7	201,6	222,1	247,8
Cooling total input current	A	126,4	143,5	161,5	180,6	206,5	238,4	260,0	294,4	336,3	371,8	415,0
EER	W/W	2,96	2,83	2,72	2,86	2,76	2,61	2,77	2,80	2,69	2,73	2,61
Water flow rate system side	l/h	37695	41419	45215	52979	58785	64562	74775	84990	93195	104013	111187
Pressure drop system side	kPa	44	53	56	81	89	107	57	74	84	88	100
Cooling performances with free-cooling (2)												
Cooling capacity	kW	175,0	179,4	182,7	236,7	242,4	246,2	304,0	360,9	367,2	425,1	429,9
Input power	kW	8,0	8,0	8,0	10,7	10,7	10,7	13,3	16,0	16,0	18,6	18,6
Free cooling total input current	A	13,6	13,5	13,3	17,9	17,8	17,7	22,1	26,6	26,7	31,2	31,2
EER	W/W	21,90	22,45	22,86	22,22	22,76	23,11	22,83	22,58	22,98	22,80	23,06
Water flow rate system side	l/h	37695	41419	45215	52979	58785	64562	74775	84990	93195	104013	111187
Pressure drop system side	kPa	66	79	87	118	134	162	94	113	130	137	156

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRB - U

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,3	250,9	275,8	320,4	357,9	396,3	455,4	515,9	569,2	633,7	680,9
Input power	kW	73,7	83,6	94,1	106,4	120,6	138,5	153,5	173,2	195,2	215,9	238,4
Cooling total input current	A	133,2	149,2	165,7	188,7	211,5	240,0	266,7	303,5	341,3	379,5	417,9
EER	W/W	3,08	3,00	2,93	3,01	2,97	2,86	2,97	2,98	2,92	2,94	2,86
Water flow rate system side	l/h	39046	43104	47382	55045	61497	68087	78245	88642	97793	108881	116982
Pressure drop system side	kPa	47	57	61	88	97	120	62	81	92	96	111
Cooling performances with free-cooling (2)												
Cooling capacity	kW	192,7	198,6	203,6	261,5	269,7	276,0	338,6	400,3	410,2	473,3	481,2
Input power	kW	11,2	11,2	11,2	15,0	15,0	15,0	18,7	22,5	22,5	26,2	26,2
Free cooling total input current	A	20,3	20,1	19,8	26,6	26,3	26,0	32,6	39,4	39,3	46,1	46,0
EER	W/W	17,13	17,66	18,11	17,44	17,99	18,41	18,07	17,80	18,24	18,04	18,34
Water flow rate system side	l/h	39046	43104	47382	55045	61497	68087	78245	88642	97793	108881	116982
Pressure drop system side	kPa	71	86	95	128	147	179	103	122	143	150	173

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	249,6	274,2	318,8	356,0	393,8	452,9	513,3	565,9	630,2	676,8
Input power	kW	74,4	84,4	95,0	107,4	121,8	139,9	154,8	174,8	197,2	218,0	240,9
Cooling total input current	A	134,1	150,2	166,9	189,9	213,2	242,0	268,6	305,7	344,0	382,4	421,4
EER	W/W	3,04	2,96	2,89	2,97	2,92	2,82	2,93	2,94	2,87	2,89	2,81
Water flow rate system side	l/h	38871	42893	47115	54781	61158	67658	77819	88186	97229	108280	116278
Pressure drop system side	kPa	46	57	60	87	96	118	62	80	91	95	110
Cooling performances with free-cooling (2)												
Cooling capacity	kW	205,9	212,7	218,2	279,8	289,0	295,9	362,9	428,9	439,8	507,3	515,9
Input power	kW	11,4	11,4	11,4	15,2	15,2	15,2	19,0	22,8	22,8	26,7	26,7
Free cooling total input current	A	20,6	20,3	20,1	26,9	26,7	26,4	33,0	40,0	39,9	46,8	46,6
EER	W/W	18,02	18,62	19,10	18,37	18,97	19,42	19,06	18,77	19,25	19,03	19,35
Water flow rate system side	l/h	38871	42893	47115	54781	61158	67658	77819	88186	97229	108280	116278
Pressure drop system side	kPa	70	85	94	126	145	177	102	121	141	148	171

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NRB - N

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	kW	228,3	252,4	278,0	320,3	358,3	397,2	454,4	510,9	563,3	628,5	675,3
Input power	kW	72,5	82,2	92,3	104,6	118,7	136,3	151,0	171,5	194,0	213,5	236,4
Cooling total input current	A	124,4	140,1	156,3	176,6	199,3	227,4	251,4	286,8	325,4	359,5	398,6
EER	W/W	3,15	3,07	3,01	3,06	3,02	2,91	3,01	2,98	2,90	2,94	2,86
Water flow rate system side	l/h	39222	43370	47761	55033	61559	68239	78074	87785	96785	107983	116017
Pressure drop system side	kPa	50	61	66	88	98	120	63	79	90	94	109
Cooling performances with free-cooling (2)												
Cooling capacity	kW	202,3	209,6	216,0	263,3	272,4	279,7	331,7	383,3	392,7	446,3	453,4
Input power	kW	10,5	10,5	10,5	13,1	13,1	13,1	15,8	18,4	18,4	21,0	21,0
Free cooling total input current	A	18,0	17,9	17,8	22,2	22,0	21,9	26,2	30,7	30,8	35,4	35,4
EER	W/W	19,26	19,96	20,57	20,06	20,75	21,30	21,06	20,85	21,37	21,25	21,59
Water flow rate system side	l/h	39222	43370	47761	55033	61559	68239	78074	87785	96785	107983	116017
Pressure drop system side	kPa	71	86	96	121	139	171	95	115	133	143	164

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,4	251,4	276,7	318,8	356,3	394,6	451,9	508,1	559,8	624,6	670,7
Input power	kW	73,1	82,8	93,1	105,5	119,8	137,7	152,4	173,0	195,9	215,7	239,0
Cooling total input current	A	125,1	140,9	157,2	177,7	200,7	229,3	253,2	289,0	328,0	362,5	402,2
EER	W/W	3,11	3,03	2,97	3,02	2,98	2,87	2,97	2,94	2,86	2,90	2,81
Water flow rate system side	l/h	39073	43187	47536	54768	61222	67801	77644	87290	96173	107317	115226
Pressure drop system side	kPa	50	60	65	87	97	119	62	78	89	93	108
Cooling performances with free-cooling (2)												
Cooling capacity	kW	213,1	221,8	229,3	278,7	289,4	297,7	352,9	407,4	418,1	475,0	482,9
Input power	kW	10,7	10,7	10,7	13,3	13,3	13,3	16,0	18,6	18,6	21,3	21,3
Free cooling total input current	A	18,2	18,1	18,0	22,4	22,3	22,2	26,6	31,1	31,2	35,8	35,8
EER	W/W	20,00	20,82	21,53	20,93	21,73	22,36	22,08	21,85	22,43	22,30	22,66
Water flow rate system side	l/h	39073	43187	47536	54768	61222	67801	77644	87290	96173	107317	115226
Pressure drop system side	kPa	70	86	96	120	138	169	94	114	132	141	162

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F													
SEPR - (EN14825: 2018) High temperature with standard fans (1)													
SEPR	A	W/W	6,24	5,77	6,03	6,11	5,82	5,27	6,09	5,55	5,79	5,55	5,70
	E	W/W	6,98	6,31	6,11	6,34	6,16	5,51	6,28	6,19	5,81	5,90	5,73
	N	W/W	7,33	7,13	6,84	6,84	6,70	6,12	6,70	6,57	6,21	6,29	6,07
	U	W/W	7,10	6,80	6,54	6,66	6,52	5,99	6,66	6,57	6,30	6,31	6,16
SEPR - (EN14825: 2018) High temperature with inverter fans (1)													
SEPR	A	W/W	6,24	5,77	6,03	6,11	5,82	5,27	6,09	5,55	5,79	5,55	5,70
	E	W/W	6,98	6,31	6,11	6,34	6,16	5,51	6,28	6,19	5,81	5,90	5,73
	N	W/W	7,33	7,13	6,84	6,84	6,70	6,12	6,70	6,57	6,21	6,29	6,07
	U	W/W	7,10	6,80	6,54	6,66	6,52	5,99	6,66	6,57	6,30	6,31	6,16

(1) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P													
SEPR - (EN14825: 2018) High temperature with standard fans (1)													
SEPR	A	W/W	6,09	5,62	5,91	5,97	5,68	5,13	5,95	5,51	5,65	5,51	5,57
	E	W/W	6,82	6,16	5,95	6,20	6,01	5,37	6,13	6,04	5,66	5,76	5,59
	N	W/W	7,22	6,98	6,71	6,69	6,54	5,98	6,55	6,42	6,07	6,14	5,92
	U	W/W	6,98	6,64	6,39	6,51	6,39	5,86	6,51	6,42	6,16	6,17	6,03
SEPR - (EN14825: 2018) High temperature with inverter fans (1)													
SEPR	A	W/W	6,09	5,62	5,91	5,97	5,68	5,13	5,95	5,51	5,65	5,51	5,57
	E	W/W	6,82	6,16	5,95	6,20	6,01	5,37	6,13	6,04	5,66	5,76	5,59
	N	W/W	7,22	6,98	6,71	6,69	6,54	5,98	6,55	6,42	6,07	6,14	5,92
	U	W/W	6,98	6,64	6,39	6,51	6,39	5,86	6,51	6,42	6,16	6,17	6,03

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
Maximum current (FLA)	A	A	190,4	206,8	242,5	271,9	301,2	330,2	378,6	423,4	487,6	516,6	570,9
	E,U	A	209,8	226,2	242,5	291,3	320,6	349,6	398,0	468,1	512,9	561,3	590,3
	N	A	229,2	245,6	261,9	310,7	340,0	369,0	423,3	487,5	532,3	580,7	609,7
Peak current (LRA)	A	A	379,0	434,2	469,9	522,6	551,9	664,4	712,8	757,6	821,8	850,8	905,1
	E,U	A	398,4	453,6	469,9	542,0	571,3	683,8	732,2	802,3	847,1	895,5	924,5
	N	A	417,8	473,0	489,3	561,4	590,7	703,2	757,5	821,7	866,5	914,9	943,9

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	A,E,N,U	type						Scroll					
Compressor regulation	A,E,N,U	Type						On-Off					
Number	A,E,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type						R410A					
Refrigerant load circuit 1 (1)	A	kg	14,5	15,0	20,0	22,0	21,5	21,5	25,0	25,0	31,0	31,0	44,0
	E,U	kg	20,5	20,0	21,5	26,0	26,0	26,0	30,0	36,0	36,0	56,5	56,0
	N	kg	26,0	26,5	26,5	29,0	28,0	35,0	42,0	44,0	43,0	62,0	62,0
Refrigerant load circuit 2 (1)	A	kg	14,5	15,0	20,0	22,0	23,5	21,5	27,0	30,0	38,0	34,0	44,0
	E,U	kg	20,5	20,0	21,5	27,0	27,0	27,0	32,0	39,0	40,0	56,5	56,0
	N	kg	26,0	26,5	26,5	30,0	31,0	35,0	42,0	47,0	47,0	62,0	62,0
Potential global heating	A,E,N,U	GWP						2088kgCO_2eq					
System side heat exchanger													
Type	A,E,N,U	type						Brazed plate					
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1
Hydraulic connections													
Connections (in/out)	A,E,N,U	Type						Grooved joints					
Hydraulic connections without hydronic kit													
Sizes (in/out)	A,E,N,U	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″
Hydraulic connections with hydronic kit													
Sizes (in/out)	A,E,N,U	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

SOUND DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Sound data calculated in cooling mode (1)													
Sound power level	A	dB(A)	88,0	88,1	90,3	90,2	90,2	90,2	91,7	92,2	93,9	94,4	95,8
	E	dB(A)	85,0	85,1	85,1	86,5	86,5	86,5	87,7	89,2	89,7	91,0	91,5
	N	dB(A)	86,5	86,6	86,6	87,7	87,7	87,7	88,7	90,0	90,5	91,7	92,2
	U	dB(A)	90,2	90,3	90,3	91,7	91,7	91,7	92,9	94,4	94,9	96,2	96,7
Sound pressure level (10 m)	A	dB(A)	55,9	56,0	58,0	57,9	57,9	57,9	59,3	59,8	61,3	61,8	63,2
	E	dB(A)	52,7	52,8	52,8	54,2	54,2	54,2	55,2	56,5	57,0	58,2	58,7
	N	dB(A)	54,2	54,3	54,3	55,2	55,2	55,2	56,0	57,2	57,7	58,8	59,3
	U	dB(A)	57,9	58,0	58,0	59,3	59,3	59,3	60,4	61,7	62,2	63,4	63,9

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

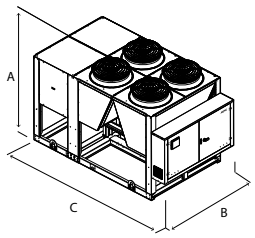
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: F													
Fan													
Type	A,E,N,U	type						axials					
Number	A	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
Air flow rate	A	m^3/h	57600	57600	86400	86400	86400	86400	115200	115200	144000	144000	172800
	E	m^3/h	64800	64800	64800	86400	86400	86400	108000	129600	129600	151200	151200
	N	m^3/h	86400	86400	86400	108000	108000	108000	129600	151200	151200	172800	172800
	U	m^3/h	86400	86400	86400	115200	115200	115200	144000	172800	172800	201600	201600

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: P													
Fan													
Type	A,E,N,U	type						axials					

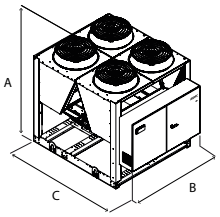
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Number	A	no.	4	4	6	6	6	6	8	8	10	10	12
	E,U	no.	6	6	6	8	8	8	10	12	12	14	14
	N	no.	8	8	8	10	10	10	12	14	14	16	16
Air flow rate	A	m^3/h	54800	54800	82200	82200	82200	82200	109600	109600	137000	137000	164400
	E	m^3/h	61800	61800	61800	82400	82400	82400	103000	123600	123600	144200	144200
	N	m^3/h	82400	82400	82400	103000	103000	103000	123600	144200	144200	164800	164800
	U	m^3/h	82200	82200	82200	109600	109600	109600	137000	164400	164400	191800	191800

DIMENSIONS

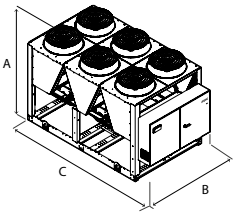
NRB 0800-0900 A (1)



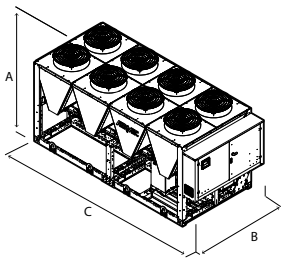
NRB 0800-0900 A



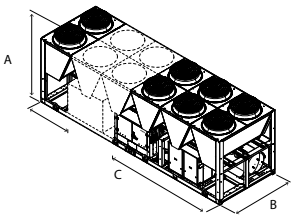
NRB 1000-1400 A
NRB 0800-1000 E-U



NRB 1805-2206 A



NRB 1600 A
NRB 2406 A
NRB 1100-2406 E-U
NRB 0800-2406 N



(1) Additional module needed to contain the hydronic kit with "accumulation" option in sizes:
NRB 0800A, 0900A

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights													
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	2780	2780	3970	3970	3970	3970	4760	5160	6350	6350	7140
	E,U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520

■ *Units 0800A and 0900A with the optional "storage tank" are 3970 mm long.*

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00													
Free-cooling													
Empty weight	A	kg	2570	2620	3260	3330	3370	3420	4080	4290	5020	5100	5670
	E,U	kg	3080	3130	3290	3990	4060	4080	4660	5350	5570	6330	6390
	N	kg	3760	3800	3960	4530	4610	4630	5160	5940	6160	6870	6930
Free-cooling plus													
Empty weight	A	kg	2630	2680	3350	3420	3460	3510	4200	4410	5170	5250	5850
	E,U	kg	3170	3220	3380	4110	4180	4200	4810	5530	5750	6540	6600
	N	kg	3880	3920	4080	4680	4760	4780	5340	6150	6370	7110	7170

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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www.aermec.com

NRB 0800-2406 B

Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 211 ÷ 680 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **High efficiency also at partial loads**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
Outdoor units with scroll compressors, axial flow fans, micro-channel coil (source side), plate heat exchanger and thermostatic expansion valve (mechanical or electronic, depending on the model).
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on the size and vesion. For more information refer to the dedicated documentations or the selection program Magellano.

Dual-circuit unit

Unit with 2 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *If a higher output is needed in free cooling, there is also the "G" free cooling plus model with boosted water coil.*

Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:
1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
2. Primary hydraulic circuit for glycol-free systems.

Electronic expansion valve

The units from size 1805 to 2406 have an electronic expansion valve as standard.
The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

To obtain a solution that allows you to save money and to facilitate installation. These units can be configured with an integrated hydronic system.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS platforms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
AER485P1	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
AERLINK	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
FL	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•
PGD1	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
PR4	A,E	•	•	•	•	•	•					
	N,U	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

Antivibration

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Integrated hydronic kit: 00, DA, DB, DC, DE, DF, DG, DH, DI, DJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ											
A, E	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	-	-	-	-	-
N, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Device for peak current reduction

Ver	0800	0900	1000	1100	1200	1400
A, E, N, U	DRENRB0800 (1)	DRENRB0900 (1)	DRENRB1000 (1)	DRENRB1100 (1)	DRENRB1200 (1)	DRENRB1400 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
N, U	DRENRB1600 (1)	DRENRB1805 (1)	DRENRB2006 (1)	DRENRB2206 (1)	DRENRB2406 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	0800	0900	1000	1100	1200	1400
A	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1100	RIFNRB1200	RIFNRB1400
E, U	RIFNRB0800	RIFNRB0900	RIFNRB1000	RIFNRB1101	RIFNRB1201	RIFNRB1401
N	RIFNRB0801	RIFNRB0901	RIFNRB1001	RIFNRB1101	RIFNRB1201	RIFNRB1401

A grey background indicates the accessory must be assembled in the factory

Ver	1600	1805	2006	2206	2406
N, U	RIFNRB1601	RIFNRB1815	RIFNRB2016	RIFNRB2216	RIFNRB2416

A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
A	GP2VN	GP2VN	GP3VNF	GP3VNF	GP3VNF	GP3VNF	-	-	-	-	-
E	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4VN	GP4VN	-	-	-	-	-
N	GP4VN	GP4VN	GP4VN	GP5VN	GP5VN	GP5VN	GP6V	GP7V	GP7V	GP8V	GP8V
U	GP3VNF	GP3VNF	GP3VNF	GP4VN	GP4VN	GP4VN	GP5VN	GP6V	GP6V	GP7V	GP7V

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**NRB**
4,5,6,7	**Size** 0800, 0900, 1000, 1100, 1200, 1400, 1600, 1805, 2006, 2206, 2406
8	**Operating field**
X	Electronic thermostatic expansion valve
Y	Low temperature mechanic thermostatic valve
Z	Low temperature electronic thermostatic valve
°	Standard mechanic thermostatic valve
9	**Model**
B	Free-cooling glycol free
G	Free-cooling glycol free plus (1)
10	**Heat recovery**
D	With desuperheater (2)
°	Without heat recovery
11	**Version**
A	High efficiency
E	Silenced high efficiency
N	Silenced very high efficiency
U	Very high efficiency
12	**Coils / free-cooling coils**
I	Copper-aluminium / Copper-aluminium
O	Painted alluminium microchannel / Copper painted aluminium
R	Copper-copper/Copper-copper
S	Copper-Tinned copper / Copper -Tinned copper
V	Copper-painted alumimium / Copper-painted alumimium
°	Alluminium microchannel / Copper - aluminium
13	**Fans**
J	Inverter
°	Standard
14	**Power supply**
°	400V~3 50Hz with magnet circuit breakers
15,16	**Integrated hydronic kit**
00	Without hydronic kit
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (3)
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (3)

(1) The Free cooling Plus "G" models are only compatible with "°" and "O" coils.
(2) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(3) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NRB - A

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	211,8	234,3	273,4	307,1	335,9	373,3	-	-	-	-	-
Input power	kW	76,0	88,0	93,9	108,9	124,8	145,6	-	-	-	-	-
Cooling total input current	A	133,7	152,1	165,5	189,4	215,1	248,2	-	-	-	-	-
EER	W/W	2,79	2,66	2,91	2,82	2,69	2,56	-	-	-	-	-
Water flow rate system side	l/h	36397	40249	46968	52762	57713	64138	-	-	-	-	-
Pressure drop system side	kPa	53	58	66	74	88	100	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	116,3	118,3	160,6	167,3	170,9	175,9	-	-	-	-	-
Input power	kW	9,8	9,8	14,3	14,3	14,4	14,4	-	-	-	-	-
Free cooling total input current	A	17,3	17,0	25,3	25,0	24,8	24,5	-	-	-	-	-
EER	W/W	11,84	12,04	11,21	11,66	11,89	12,22	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	210,3	232,4	271,9	305,1	333,3	369,6	-	-	-	-	-
Input power	kW	76,8	89,2	94,8	110,0	126,2	147,6	-	-	-	-	-
Cooling total input current	A	134,8	153,7	166,7	190,9	217,2	251,0	-	-	-	-	-
EER	W/W	2,74	2,61	2,87	2,77	2,64	2,50	-	-	-	-	-
Water flow rate system side	l/h	36136	39921	46723	52411	57266	63506	-	-	-	-	-
Pressure drop system side	kPa	53	57	65	73	87	98	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	121,7	123,8	166,9	174,2	178,1	183,6	-	-	-	-	-
Input power	kW	9,9	9,9	14,5	14,5	14,6	14,6	-	-	-	-	-
Free cooling total input current	A	17,4	17,1	25,5	25,2	25,0	24,8	-	-	-	-	-
EER	W/W	12,24	12,45	11,51	11,99	12,24	12,60	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRB - E

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	220,6	242,6	265,3	310,3	344,7	379,2	-	-	-	-	-
Input power	kW	73,4	84,2	95,7	106,6	122,4	142,0	-	-	-	-	-
Cooling total input current	A	125,5	142,4	160,1	179,2	204,6	235,8	-	-	-	-	-
EER	W/W	3,00	2,88	2,77	2,91	2,82	2,67	-	-	-	-	-
Water flow rate system side	l/h	37902	41688	45573	53310	59226	65155	-	-	-	-	-
Pressure drop system side	kPa	48	53	61	68	84	102	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	134,9	137,3	139,4	182,1	186,7	189,4	-	-	-	-	-
Input power	kW	11,0	11,0	11,0	14,6	14,6	14,6	-	-	-	-	-
Free cooling total input current	A	18,7	18,5	18,3	24,5	24,4	24,3	-	-	-	-	-
EER	W/W	12,31	12,53	12,72	12,50	12,78	12,97	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	219,4	241,1	263,2	308,4	342,1	375,8	-	-	-	-	-
Input power	kW	74,1	85,1	96,8	107,7	123,7	143,8	-	-	-	-	-
Cooling total input current	A	126,4	143,5	161,5	180,6	206,5	238,4	-	-	-	-	-
EER	W/W	2,96	2,83	2,72	2,86	2,76	2,61	-	-	-	-	-
Water flow rate system side	l/h	37695	41419	45215	52979	58785	64562	-	-	-	-	-
Pressure drop system side	kPa	47	52	61	67	83	100	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	140,0	142,6	144,8	189,1	194,0	196,9	-	-	-	-	-
Input power	kW	11,1	11,1	11,1	14,7	14,8	14,8	-	-	-	-	-
Free cooling total input current	A	18,9	18,7	18,5	24,7	24,6	24,5	-	-	-	-	-
EER	W/W	12,64	12,88	13,08	12,85	13,14	13,34	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRB - U

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,3	250,9	275,8	320,4	357,9	396,3	455,4	515,9	569,2	633,7	680,9
Input power	kW	73,7	83,6	94,1	106,4	120,6	138,5	153,5	173,2	195,2	215,9	238,4
Cooling total input current	A	133,2	149,2	165,7	188,7	211,5	240,0	266,7	303,5	341,3	379,5	417,9
EER	W/W	3,08	3,00	2,93	3,01	2,97	2,86	2,97	2,98	2,92	2,94	2,86
Water flow rate system side	l/h	39046	43104	47382	55045	61497	68087	78245	88642	97793	108881	116982
Pressure drop system side	kPa	51	56	66	72	90	111	75	92	112	133	126
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	154,8	158,0	160,8	209,0	215,3	219,0	275,7	335,8	350,8	397,2	401,3
Input power	kW	14,3	14,3	14,3	19,1	19,1	19,1	24,1	31,6	32,0	36,8	36,8
Free cooling total input current	A	25,9	25,6	25,2	33,8	33,5	33,1	41,8	55,3	56,0	64,6	64,4
EER	W/W	10,80	11,03	11,22	10,97	11,27	11,47	11,45	10,64	10,95	10,81	10,92

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	226,2	249,6	274,2	318,8	356,0	393,8	452,9	513,3	565,9	630,2	676,8
Input power	kW	74,4	84,4	95,0	107,4	121,8	139,9	154,8	174,8	197,2	218,0	240,9
Cooling total input current	A	134,1	150,2	166,9	189,9	213,2	242,0	268,6	305,7	344,0	382,4	421,4
EER	W/W	3,04	2,96	2,89	2,97	2,92	2,82	2,93	2,94	2,87	2,89	2,81
Water flow rate system side	l/h	38871	42893	47115	54781	61158	67658	77819	88186	97229	108280	116278
Pressure drop system side	kPa	50	56	66	72	89	109	74	91	111	132	125
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	160,6	164,1	167,1	216,9	223,8	227,8	287,0	350,1	367,2	414,5	419,0
Input power	kW	14,5	14,5	14,5	19,3	19,3	19,3	24,4	31,9	32,4	37,2	37,2
Free cooling total input current	A	26,2	25,8	25,5	34,1	33,8	33,5	42,3	55,8	56,5	65,2	65,0
EER	W/W	11,07	11,31	11,52	11,24	11,57	11,78	11,77	10,97	11,33	11,15	11,27

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NRB - N

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B												
Cooling performance chiller operation (1)												
Cooling capacity	kW	228,3	252,4	278,0	320,3	358,3	397,2	454,4	510,9	563,3	628,5	675,3
Input power	kW	72,5	82,2	92,3	104,6	118,7	136,3	151,0	171,5	194,0	213,5	236,4
Cooling total input current	A	124,4	140,1	156,3	176,6	199,3	227,4	251,4	286,8	325,4	359,5	398,6
EER	W/W	3,15	3,07	3,01	3,06	3,02	2,91	3,01	2,98	2,90	2,94	2,86
Water flow rate system side	l/h	39222	43370	47761	55033	61559	68239	78074	87785	96785	107983	116017
Pressure drop system side	kPa	46	50	60	72	91	103	71	90	110	131	124
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	168,7	172,6	176,0	212,0	218,8	228,0	284,9	321,4	337,3	375,3	379,1
Input power	kW	14,5	14,5	14,5	18,1	18,2	18,2	24,8	28,3	28,9	31,6	31,6
Free cooling total input current	A	25,0	24,8	24,6	30,6	30,5	30,4	41,3	47,3	48,5	53,2	53,3
EER	W/W	11,60	11,86	12,10	11,70	12,03	12,51	11,48	11,37	11,67	11,88	12,00

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G												
Cooling performance chiller operation (1)												
Cooling capacity	kW	227,4	251,4	276,7	318,8	356,3	394,6	451,9	508,1	559,8	624,6	670,7
Input power	kW	73,1	82,8	93,1	105,5	119,8	137,7	152,4	173,0	195,9	215,7	239,0
Cooling total input current	A	125,1	140,9	157,2	177,7	200,7	229,3	253,2	289,0	328,0	362,5	402,2
EER	W/W	3,11	3,03	2,97	3,02	2,98	2,87	2,97	2,94	2,86	2,90	2,81
Water flow rate system side	l/h	39073	43187	47536	54768	61222	67801	77644	87290	96173	107317	115226
Pressure drop system side	kPa	46	50	59	72	90	101	71	89	108	130	123
Cooling performances with free-cooling glycol-free (2)												
Cooling capacity	kW	174,6	178,8	182,6	219,5	226,9	236,7	296,4	333,9	351,1	390,3	394,4
Input power	kW	14,7	14,7	14,7	18,3	18,4	18,4	25,0	28,5	29,2	31,9	31,9
Free cooling total input current	A	25,2	25,0	24,8	30,8	30,8	30,7	41,6	47,6	48,8	53,6	53,7
EER	W/W	11,88	12,17	12,42	12,00	12,35	12,86	11,84	11,71	12,04	12,23	12,36

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

ENERGY DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B													
SEPR - (EN14825: 2018) High temperature with standard fans (1)													
SEPR	A	W/W	5,61	5,25	5,27	5,43	5,25	5,05	-	-	-	-	-
	E	W/W	6,07	5,58	5,44	5,59	5,50	5,13	-	-	-	-	-
	N	W/W	6,38	6,09	5,91	5,92	5,78	5,41	5,67	5,51	5,56	5,58	5,53
	U	W/W	6,22	5,87	5,69	5,84	5,71	5,56	5,73	5,52	5,60	5,58	5,53

(1) Calculation performed with FIXED water flow rate.

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G													
SEPR - (EN14825: 2018) High temperature with standard fans (1)													
SEPR	A	W/W	5,82	5,37	5,48	5,60	5,37	4,87	-	-	-	-	-
	E	W/W	6,42	5,83	5,62	5,85	5,69	5,10	-	-	-	-	-
	N,U	W/W	6,96	6,54	6,28	6,28	6,08	5,63	6,13	5,90	5,77	5,73	5,58

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Electric data													
Maximum current (FLA)	A	A	190,4	206,8	242,5	271,9	301,2	330,2	-	-	-	-	-
	E	A	209,8	226,2	242,5	291,3	320,6	349,6	-	-	-	-	-
	N	A	229,2	245,6	261,9	310,7	340,0	369,0	423,3	487,5	532,3	580,7	609,7
	U	A	209,8	226,2	242,5	291,3	320,6	349,6	398,0	468,1	512,9	561,3	590,3
Peak current (LRA)	A	A	379,0	434,2	469,9	522,6	551,9	664,4	-	-	-	-	-
	E	A	398,4	453,6	469,9	542,0	571,3	683,8	-	-	-	-	-
	N	A	417,8	473,0	489,3	561,4	590,7	703,2	757,5	821,7	866,5	914,9	943,9
	U	A	398,4	453,6	469,9	542,0	571,3	683,8	732,2	802,3	847,1	895,5	924,5

GENERAL TECHNICAL DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Compressor													
Type	A,E,N,U	type						Scroll					
Compressor regulation	A,E,N,U	Type						On-Off					
Number	A,E,N,U	no.	4	4	4	4	4	4	4	5	6	6	6
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type						R410A					
Refrigerant charge (1)	A	kg	32,0	32,0	48,0	48,0	48,0	48,0	64,0	64,0	80,0	80,0	96,0
	E,U	kg	48,0	48,0	48,0	64,0	64,0	64,0	80,0	96,0	96,0	112,0	112,0
	N	kg	64,0	64,0	64,0	80,0	80,0	80,0	96,0	112,0	112,0	128,0	128,0
Hydraulic connections													
Connections (in/out)	A,E,N,U	Type						Grooved joints					
Hydraulic connections without hydronic kit													
Sizes (in/out)	A,E,N,U	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″
Hydraulic connections with hydronic kit													
Sizes (in/out)	A,E,N,U	Ø	3″	3″	3″	3″	3″	3″	4″	4″	4″	4″	4″

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

In the versions without a hydronic kit, the water filter is supplied with a connection point for making the connection. In the versions with a hydronic kit, it is supplied ready-mounted.

SOUND DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Sound data calculated in cooling mode (1)													
Sound power level	A	dB(A)	88,0	88,1	90,3	90,2	90,2	90,2	-	-	-	-	-
	E	dB(A)	85,0	85,1	85,1	86,5	86,5	86,5	-	-	-	-	-
	N	dB(A)	86,5	86,6	86,6	87,7	87,7	87,7	88,7	90,0	90,5	91,7	92,2
	U	dB(A)	90,2	90,3	90,3	91,7	91,7	91,7	92,9	94,4	94,9	96,2	96,7
Sound pressure level (10 m)	A	dB(A)	55,9	56,0	58,0	57,9	57,9	57,9	-	-	-	-	-
	E	dB(A)	52,9	53,0	52,8	54,3	54,3	54,3	-	-	-	-	-
	N	dB(A)	54,4	54,5	54,4	55,4	55,4	55,4	56,3	57,6	58,0	59,2	59,6
	U	dB(A)	58,0	58,1	58,0	59,4	59,4	59,4	60,5	62,0	62,4	63,7	64,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

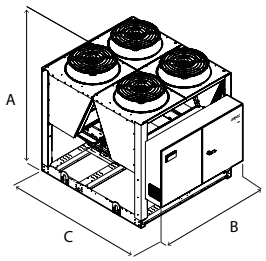
FANS DATA

Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: B													
Fan													
Type	A,E	type	axials	axials	axials	axials	axials	axials	-	-	-	-	-
	N,U	type						axials					
Number	A	no.	4	4	6	6	6	6	-	-	-	-	-
	E	no.	6	6	6	8	8	8	-	-	-	-	-
	N	no.	8	8	8	10	10	10	12	14	14	16	16
	U	no.	6	6	6	8	8	8	10	12	12	14	14
Air flow rate	A	m^3/h	57600	57600	86400	86400	86400	86400	-	-	-	-	-
	E	m^3/h	64800	64800	64800	86400	86400	86400	-	-	-	-	-
	N	m^3/h	86400	86400	86400	108000	108000	108000	129600	151200	151200	172800	172800
	U	m^3/h	86400	86400	86400	115200	115200	115200	144000	172800	172800	201600	201600

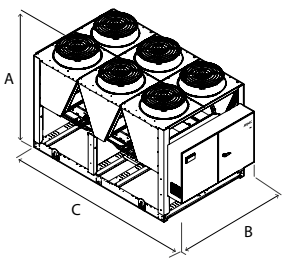
Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Model: G													
Fan													
Type	A,E	type	axials	axials	axials	axials	axials	axials	-	-	-	-	-
	N,U	type						axials					
Number	A	no.	4	4	6	6	6	6	-	-	-	-	-
	E	no.	6	6	6	8	8	8	-	-	-	-	-
	N	no.	8	8	8	10	10	10	12	14	14	16	16
	U	no.	6	6	6	8	8	8	10	12	12	14	14
Air flow rate	A	m^3/h	57600	57600	86400	86400	86400	86400	-	-	-	-	-
	E	m^3/h	64800	64800	64800	86400	86400	86400	-	-	-	-	-
	N	m^3/h	86400	86400	86400	108000	108000	108000	129600	151200	151200	172800	172800
	U	m^3/h	86400	86400	86400	115200	115200	115200	144000	172800	172800	201600	201600

DIMENSIONS

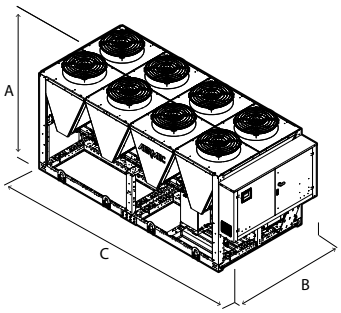
NRB 0800-0900 A



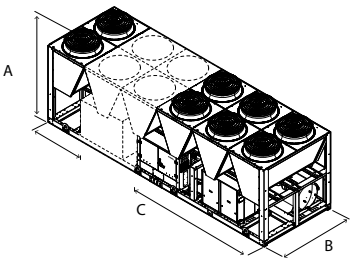
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NRB 1100-1400 E-U
NRB 0800-1000 N



NRB 1100-2406 N
NRB 1600-2406 U



Size			0800	0900	1000	1100	1200	1400	1600	1805	2006	2206	2406
Dimensions and weights													
A	A,E	mm	2450	2450	2450	2450	2450	2450	-	-	-	-	-
	N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	-	-	-	-	-
	N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	2780	2780	3970	3970	3970	3970	-	-	-	-	-
	E	mm	3970	3970	3970	4760	4760	4760	-	-	-	-	-
	N	mm	4760	4760	4760	5950	5950	5950	7140	8330	8330	9520	9520
	U	mm	3970	3970	3970	4760	4760	4760	5950	7140	7140	8330	8330

■ *For the weights please contact the factory.*

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NRV 0550 F

Air-water chiller with free-cooling

Cooling capacity 99,9 ÷ 105,4 kW

- **Easy and quick to install compact**
- **Reliability and modularity**
- **Microchannel coils**



DESCRIPTION

NRV is comprised of independent 99.9 kW modules, that can be connected together up to a power of 900 kW. Each individual module is an outdoor chiller for the production of chilled water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 46°C external air temperature. Unit can produce chilled water up to 4 °C.
Maximum yield at full load but even partial load, thanks to the partialisation steps that increase as the number of connected modules increases this ensures continuous adaptation to the actual system requirements.

Modularity

It is possible to couple up to 9 chillers designed to reduce the overall unit dimensions to a minimum.
The combination of the various chillers allows all the strengths of the individual module to be maintained.
Modularity allows you to adapt installation to the actual development needs of the system. This way the cooling capacity can be increased over time simply and affordably.
Modularity is essential when component redundancy is required, as it allows for a safer system design and increased reliability.

Microchannel coils

Microchannel heat exchanger that guarantees higher thermal exchange yield. Circuit that optimises the liquid distribution in the coil, which is arranged with V beam geometry with open angle.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Components

Already equipped with a water filter, differential pressure switch and butterfly check valves, useful to cut off the hydraulic circuit for maintenance; for instance, to clean the filter.
In the event of variable flow rate, the motorised hydronic valves can intercept one or more modules to reduce the flow rate in low heat load conditions.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Adjustment includes complete management of the alarms and their log.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERLINK: Aerlink is a WiFi gateway with an RS485 serial port that allows a wide range of Aermec products (heat pumps/chillers/system controllers) equipped with this interface to connect easily and securely to a Wi-Fi network. It works both as an access point (AP access point) and as a client (WiFi Station), it can be connected to a single generator or system centraliser, allowing anyone to easily integrate them into any network. Thanks to the AerApp and AerPlants apps, which can be used on Android and iOS plat-

forms, the remote management of the air conditioning systems developed by Aermec becomes intuitive and simple.
FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.
GPNYB_BACK: kit with 1 anti-intrusion grid for the short side of the unit.
GPNYB_SIDE: kit with 2 anti-intrusion grids for the long side of the unit.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.
KNYB: Pair of caps with grooved joints assembled on the unit manifold.
KREC: Accessory kit to remote the electric power supply input to the back
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

COMPATIBILITY WITH VMF SYSTEM

For more information about VMF system, refer to the dedicated documentation.

ACCESSORIES COMPATIBILITY

Model	Ver	0550
AER485P1	A,E	•
AERBACP	A,E	•
AERLINK	A,E	•
FB1	A,E	•
GPNYB_BACK	A,E	•
GPNYB_SIDE	A,E	•
MULTICHILLER-EVO	A,E	•
PGD1	A,E	•

DRE: electronic device for peak current reduction

Ver	0550
A, E	DRE (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

KNYB: Pair of caps with grooved joints assembled on the unit manifold

Ver	0550
A, E	KNYB

A grey background indicates the accessory must be assembled in the factory

KREC: kit to remote the electric power supply input to the back

Ver	0550
A, E	KREC

A grey background indicates the accessory must be assembled in the factory

RIF: Power factor correction

Ver	0550
A, E	RIF (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NRV**
4,5,6,7		**Size** 0550
8		**Operating field**
	X	Electronic thermostatic expansion valve
	°	Standard mechanic thermostatic valve (1)
9		**Model**
	F	Free-cooling
10		**Heat recovery**
	D	With desuperheater
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency

Field		Description
12		**Coils / free-cooling coils**
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
15,16		**Integrated hydronic kit**
	00	Without hydronic kit

(1) Water produced up to +4 °C

PERFORMANCE SPECIFICATIONS

NRV - FA/FE

Size			0550
Cooling performance chiller operation (1)			
Cooling capacity	A	kW	105,4
	E	kW	99,9
Input power	A	kW	36,6
	E	kW	38,2
Cooling total input current	A,E	A	65,0
EER	A	W/W	2,88
	E	W/W	2,61
Water flow rate system side	A	l/h	18104
	E	l/h	17164
Pressure drop system side	A	kPa	31
	E	kPa	27
Cooling performances with free-cooling (2)			
Cooling capacity	A	kW	69,3
	E	kW	57,7
Input power	A	kW	3,7
	E	kW	2,6
Free cooling total input current	A	A	6,7
	E	A	4,5
EER	A	W/W	18,48
	E	W/W	21,98
Water flow rate system side	A	l/h	18104
	E	l/h	17164
Pressure drop system side	A	kPa	73
	E	kPa	66

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0550
SEER - 23/18 (EN14825: 2018) with standard fans (1)			
Seasonal efficiency	A	%	184.2%
	E	%	181.3%
SEER	A	W/W	4,68
	E	W/W	4,61
SEER - 23/18 (EN14825: 2018) with inverter fans			
Seasonal efficiency	A	%	191.5%
	E	%	189.2%
SEER	A	W/W	4,86
	E	W/W	4,81
SEPR - (EN14825: 2018) High temperature with standard fans (1)			
SEPR	A	W/W	5,94
	E	W/W	5,60
SEPR - (EN14825: 2018) High temperature with inverter fans (1)			
SEPR	A	W/W	5,94
	E	W/W	5,60

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

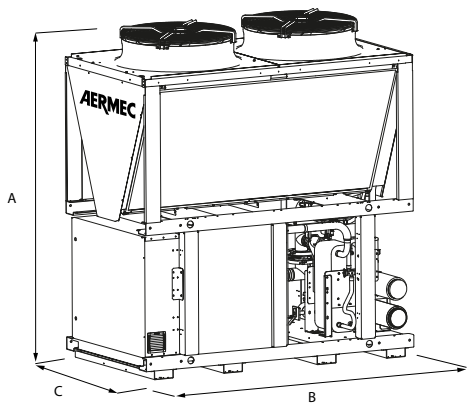
Size			0550
Electric data			
Maximum current (FLA)	A,E	A	95,6
Peak current (LRA)	A,E	A	280,6

GENERAL TECHNICAL DATA

Size			0550
Compressor			
Type	A,E	type	Scroll
Number	A,E	no.	2
Circuits	A,E	no.	1
Refrigerant	A,E	type	R410A
System side heat exchanger			
Type	A,E	type	Brazed plate
Number	A,E	no.	1
System side hydraulic connections			
Connections (in/out)	A,E	Type	Grooved joints
Sizes (in/out)	A,E	Ø	6"
Fan			
Type	A,E	type	axials
Fan motor	A,E	type	Asynchronous with phase cut
Number	A,E	no.	2
Air flow rate	A	m^3/h	28600
	E	m^3/h	22000
Sound data calculated in cooling mode (1)			
Sound power level	A	dB(A)	86,9
	E	dB(A)	81,8
Sound pressure level (10 m)	A	dB(A)	55,0
	E	dB(A)	49,9

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0550
Dimensions and weights			
A	A,E	mm	2480
B	A,E	mm	2200
C	A,E	mm	1190
Empty weight	A,E	kg	1389

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NSM 1402-9603 F

Air-water chiller with free-cooling

Cooling capacity 306 ÷ 2028 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **High efficiency also at partial loads**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.*

Electronic expansion valve

Electronic thermostatic as standard from size 5202 to 6402 and from 8403 to 9603.
The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

To obtain a solution that offers economic savings and easy installation, these units can be configured with an integrated hydronic kit on both the service side and the recovery side.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL

Units include 1 control board for each compressor.
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.
— Possibility to control two units in a Master-Slave configuration (from size 1402 to 6402)

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.

AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x no. 2	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP x no. 2	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
AER485P1 x no. 2	A,E,N,U	•	•	•	•	•	•	•						
AER485P1 x no. 3	A								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERBACP x no. 2	A,E,N,U	•	•	•	•	•	•	•						
AERBACP x no. 3	A								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERNET	A	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
MULTICHILLER-EVO	A	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
PRV3	A	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					

Antivibration - NSM free - cooling

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00														
A	AVX929	AVX929	AVX929	AVX932	AVX933	AVX933	AVX933	AVX934	AVX937	AVX937	AVX937	AVX938	AVX938	AVX942
E, U	AVX929	AVX929	AVX930	AVX933	AVX933	AVX934	AVX934	AVX935	AVX935	AVX935	AVX935	AVX939	AVX939	AVX940
N	AVX930	AVX930	AVX931	AVX931	AVX934	AVX935	AVX935	AVX936	AVX936	AVX936	AVX936	AVX940	AVX941	AVX943

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00													
A	AVX942	AVX944	AVX944	AVX944	AVX945	AVX947	AVX947	AVX953	AVX953	AVX957	AVX954	AVX956	AVX955
E, U	AVX941	AVX945	AVX947	AVX947	AVX950	AVX952	AVX948	AVX954	AVX956	AVX956	AVX958	-	-
N	AVX943	AVX946	AVX948	AVX949	AVX951	AVX951	AVX951	AVX955	-	-	-	-	-

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
E, U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP7V	GP7V	GP8V	GP8V	GP9V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP8V	GP9V	GP10V	GP11V

A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	GP8V	GP9V	GP9V	GP9V	-	GP11V	GP11V	GP4V+GP8V	GP4V+GP8V	GP9V	GP5V+GP9V	GP5V+GP10V	GP6V+GP11V
E, U	GP10V	GP10V	GP11V	GP11V	GP6V+GP6V	GP6V+GP7V	GP7V+GP7V	GP5V+GP9V	GP5V+GP10V	GP5V+GP10V	GP6V+GP11V	-	-
N	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V	GP8V+GP8V	GP8V+GP8V	GP8V	GP6V+GP11V	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	KRS22	KRS22	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24
E, N, U	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24

A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	KRS24	KRS24	KRS23	KRS23	KRS24	KRS24	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
E, U	KRS24	KRS24	KRS23	KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
N	KRS24	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A, E, U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NSM**
4,5,6,7		**Size** 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703, 6903, 7203, 8403, 9603
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (3)
9		**Model**
	F	Free-cooling
	P	Free-cooling plus (4)
10		**Heat recovery**
	D	With desuperheater
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils / free-cooling coils**
	I	Copper-aluminium / Copper-aluminium
	O	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	2	230V ~ 3 50Hz with fuses (5)
	4	230V ~ 3 50Hz with magnet circuit breakers (5)
	8	400V ~ 3 50Hz with magnet circuit breakers
	°	400V ~ 3 50Hz with fuses
15,16		**Integrated hydronic kit**
	00	Without hydronic kit
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (6)
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (6)
	TF	Double pump F (7)
	TG	Double pump G (7)
	TH	Double pump H (7)
	TI	Double pump I (7)
	TJ	Double pump J (7)

(1) Water produced from 4 °C ÷ 18 °C
(2) Water produced from 4 °C ÷ -6 °C
(3) Water produced from 4 °C ÷ 15 °C
(4) The Free-Cooling Plus "P" models are only compatible with"°" ed "0"
(5) available only for size from 1402 to 2202
(6) For all configurations including pump J please contact the factory.
(7) The unit from 5603 to 9603 can only have hydronic kit "TF - TG - TH- TI - TJ"

PERFORMANCE SPECIFICATIONS

NSM - A

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F															
Cooling performance chiller operation (1)															
Cooling capacity	kW	306,5	350,2	396,8	450,5	505,3	522,5	556,5	600,8	649,8	678,4	726,3	813,3	872,8	954,1
Input power	kW	102,8	117,6	136,7	158,3	168,9	180,5	194,5	203,0	220,4	235,0	252,8	269,7	295,6	317,9
Cooling total input current	A	182,3	206,2	230,6	268,0	291,3	311,4	335,2	351,3	378,4	400,0	426,5	450,9	486,5	530,4
EER	W/W	2,98	2,98	2,90	2,85	2,99	2,90	2,86	2,96	2,95	2,89	2,87	3,02	2,95	3,00
Water flow rate system side	l/h	52654	60163	68174	77407	86812	89765	95621	103224	111642	116561	124785	139737	149958	163932
Pressure drop system side	kPa	45	59	54	36	45	48	54	63	67	73	65	43	50	61
Cooling performances with free-cooling (2)															
Cooling capacity	kW	347,7	362,0	373,1	381,9	468,1	471,2	476,5	560,7	569,1	573,2	578,8	671,5	677,9	770,2
Input power	kW	15,0	15,0	15,0	15,0	18,7	18,7	18,7	22,5	22,5	22,5	22,5	26,2	26,2	30,0
Free cooling total input current	A	30,4	30,4	30,4	30,4	38,0	38,0	38,0	45,6	45,6	45,6	45,6	53,2	53,2	60,8
EER	W/W	23,18	24,14	24,88	25,47	24,97	25,14	25,42	24,93	25,30	25,48	25,73	25,59	25,83	25,68
Water flow rate system side	l/h	60230	68250	77490	86910	89860	95730	103340	111770	116690	124920	139890	150120	164110	171460
Pressure drop system side	kPa	66	86	85	76	78	84	95	98	107	116	113	87	99	107

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P															
Cooling performance chiller operation (1)															
Cooling capacity	kW	305,8	349,3	395,0	447,3	502,1	519,1	552,6	597,2	645,4	674,3	721,9	807,8	865,0	946,8
Input power	kW	103,7	118,8	138,1	160,2	170,8	182,6	197,0	205,3	223,1	238,4	257,1	273,3	299,3	321,8
Cooling total input current	A	182,3	206,2	230,6	268,0	291,3	311,4	335,2	351,3	378,4	400,0	426,5	450,9	486,5	530,4
EER	W/W	2,95	2,94	2,86	2,79	2,94	2,84	2,81	2,91	2,89	2,83	2,81	2,96	2,89	2,94
Water flow rate system side	l/h	52546	60019	67864	76853	86266	89180	94948	102598	110891	115859	124023	138789	148609	162675
Pressure drop system side	kPa	45	59	54	36	45	48	54	63	67	73	65	43	50	61
Cooling performances with free-cooling (2)															
Cooling capacity	kW	371,8	388,1	400,1	409,1	501,9	505,2	510,5	601,2	610,0	614,2	619,7	719,2	725,2	824,6
Input power	kW	15,2	15,2	15,2	15,2	19,0	19,0	19,0	22,9	22,9	22,9	22,9	26,7	26,7	30,5
Free cooling total input current	A	30,7	30,7	30,7	30,7	38,4	38,4	38,4	46,1	46,1	46,1	46,1	53,7	53,7	61,4
EER	W/W	24,41	25,48	26,27	26,86	26,36	26,53	26,81	26,31	26,69	26,88	27,12	26,98	27,20	27,07
Water flow rate system side	l/h	52710	60230	68250	77490	86910	89860	95730	103340	111770	116690	124920	139890	150120	164110
Pressure drop system side	kPa	66	86	86	76	79	84	95	98	107	117	114	87	100	108

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - A

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F														
Cooling performance chiller operation (1)														
Cooling capacity	kW	996,8	1082,3	1128,3	1167,3	1222,8	1304,9	1346,7	1459,2	1501,9	1659,0	1705,0	1838,1	2028,1
Input power	kW	346,1	365,7	391,9	422,5	438,9	452,7	472,4	492,1	520,2	557,2	583,3	659,0	704,1
Cooling total input current	A	581,4	614,0	654,6	703,8	733,3	761,1	795,9	821,1	872,1	945,1	985,8	1100,0	1197,7
EER	W/W	2,88	2,96	2,88	2,76	2,79	2,88	2,85	2,97	2,89	2,98	2,92	2,79	2,88
Water flow rate system side	l/h	171269	185947	193855	200561	210092	224201	231379	250713	258050	285029	292937	315803	348457
Pressure drop system side	kPa	66	81	88	75	82	96	102	61	66	81	88	82	102
Cooling performances with free-cooling (2)														
Cooling capacity	kW	774,7	867,5	872,2	875,9	966,0	1058,3	1062,8	1158,4	1162,7	1346,7	1351,7	1449,5	1636,8
Input power	kW	30,0	33,7	33,7	33,7	37,5	41,2	41,2	45,0	45,0	52,5	52,5	56,2	63,7
Free cooling total input current	A	60,8	68,4	68,4	68,4	76,0	83,6	83,6	91,2	91,2	106,4	106,4	114,0	129,2
EER	W/W	25,83	25,71	25,85	25,96	25,77	25,66	25,77	25,75	25,85	25,66	25,75	25,78	25,68
Water flow rate system side	l/h	186150	194070	200780	210330	224450	231640	250990	258340	285350	293260	316150	348840	348457
Pressure drop system side	kPa	117	130	141	131	134	145	154	107	117	130	141	134	154

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P														
Cooling performance chiller operation (1)														
Cooling capacity	kW	988,7	1074,2	1119,1	1156,4	1212,7	1295,2	1336,2	1447,7	1489,6	1646,9	1691,9	1822,8	2013,1
Input power	kW	350,6	370,3	397,1	428,3	444,3	458,0	478,2	498,2	527,1	564,0	590,8	667,0	712,4
Cooling total input current	A	581,4	614,0	654,6	703,8	733,3	761,1	795,9	821,1	872,1	945,1	985,8	1100,0	1197,7
EER	W/W	2,82	2,90	2,82	2,70	2,73	2,83	2,79	2,91	2,83	2,92	2,86	2,73	2,83
Water flow rate system side	l/h	169873	184553	192278	198678	208362	222522	229577	248739	255936	282961	290686	313186	345875
Pressure drop system side	kPa	66	81	88	75	82	96	102	61	66	81	88	82	102
Cooling performances with free-cooling (2)														
Cooling capacity	kW	828,9	928,7	933,1	936,5	1033,8	1133,1	1137,4	1239,8	1243,9	1442,0	1446,8	1551,1	1752,4
Input power	kW	30,5	34,3	34,3	34,3	38,1	41,9	41,9	45,7	45,7	53,3	53,3	57,1	64,7
Free cooling total input current	A	61,4	69,1	69,1	69,1	76,8	84,5	84,5	92,1	92,1	107,5	107,5	115,2	130,5
EER	W/W	27,21	27,09	27,22	27,32	27,15	27,05	27,15	27,13	27,22	27,04	27,13	27,15	27,07
Water flow rate system side	l/h	171460	186150	194070	200780	210330	224450	231640	250990	258340	285350	293260	316150	348840
Pressure drop system side	kPa	117	130	141	131	134	146	155	108	117	130	141	134	155

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - E

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F															
Cooling performance chiller operation (1)															
Cooling capacity	kW	319,8	365,8	417,7	473,0	509,1	549,8	568,8	618,6	646,3	675,1	715,5	796,7	851,7	929,6
Input power	kW	105,5	123,3	137,5	159,4	178,3	183,3	195,5	205,2	220,4	235,9	253,5	270,8	297,1	320,1
Cooling total input current	A	177,3	205,7	223,1	261,0	294,5	304,8	325,9	341,6	365,4	388,5	414,7	437,5	474,1	516,8
EER	W/W	3,03	2,97	3,04	2,97	2,85	3,00	2,91	3,01	2,93	2,86	2,82	2,94	2,87	2,90
Water flow rate system side	l/h	54946	62848	71763	81260	87462	94455	97732	106280	111041	115993	122937	136886	146332	159723
Pressure drop system side	kPa	33	37	32	37	43	50	54	53	58	64	64	43	49	60
Cooling performances with free-cooling (2)															
Cooling capacity	kW	308,8	317,5	389,9	399,1	403,2	476,4	479,1	552,1	556,5	560,4	564,7	643,3	648,3	727,0
Input power	kW	11,0	11,0	13,7	13,7	13,7	16,5	16,5	19,2	19,2	19,2	19,2	22,0	22,0	24,7
Free cooling total input current	A	15,9	15,9	19,9	19,9	19,9	23,9	23,9	27,9	27,9	27,9	27,9	31,8	31,8	35,8
EER	W/W	28,07	28,87	28,36	29,03	29,33	28,88	29,04	28,69	28,91	29,11	29,34	29,25	29,47	29,38
Water flow rate system side	l/h	55010	62920	71840	81350	87560	94560	97840	106400	111160	116120	123070	137040	146490	159900
Pressure drop system side	kPa	56	67	56	68	78	80	85	82	90	98	102	77	88	97

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P															
Cooling performance chiller operation (1)															
Cooling capacity	kW	316,7	363,1	414,5	469,5	504,1	545,4	564,0	613,8	640,8	669,8	710,9	790,6	843,5	921,3
Input power	kW	106,6	124,7	138,6	161,1	181,0	185,4	197,8	207,6	223,1	239,2	257,8	274,6	301,1	324,4
Cooling total input current	A	177,3	205,7	223,1	261,0	294,5	304,8	325,9	341,6	365,4	388,5	414,7	437,5	474,1	516,8
EER	W/W	2,97	2,91	2,99	2,91	2,79	2,94	2,85	2,96	2,87	2,80	2,76	2,88	2,80	2,84
Water flow rate system side	l/h	54406	62391	71215	80666	86616	93710	96909	105464	110105	115087	122135	135840	144915	158291
Pressure drop system side	kPa	33	37	32	37	43	50	54	54	59	64	65	43	49	60
Cooling performances with free-cooling (2)															
Cooling capacity	kW	328,8	338,7	415,7	425,8	429,8	508,2	511,0	589,0	593,7	597,7	602,1	686,0	690,6	774,8
Input power	kW	11,2	11,2	13,9	13,9	13,9	16,7	16,7	19,5	19,5	19,5	19,5	22,3	22,3	25,1
Free cooling total input current	A	16,1	16,1	20,1	20,1	20,1	24,1	24,1	28,1	28,1	28,1	28,1	32,2	32,2	36,2
EER	W/W	29,48	30,36	29,81	30,53	30,82	30,37	30,54	30,17	30,41	30,62	30,84	30,75	30,95	30,87
Water flow rate system side	l/h	55010	62920	71840	81350	87560	94560	97840	106400	111160	116120	123070	137040	146490	159900
Pressure drop system side	kPa	57	67	57	68	78	80	86	83	90	98	103	77	88	98

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - E

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F														
Cooling performance chiller operation (1)														
Cooling capacity	kW	995,2	1051,6	1137,0	1159,2	1217,3	1279,4	1341,6	1434,0	1499,6	1598,6	1684,0	-	-
Input power	kW	339,9	370,0	389,4	418,0	436,6	448,9	461,2	491,1	510,9	568,9	588,3	-	-
Cooling total input current	A	554,8	601,5	631,6	677,8	708,4	731,9	755,4	803,9	832,3	923,9	945,4	-	-
EER	W/W	2,93	2,84	2,92	2,77	2,79	2,85	2,91	2,92	2,93	2,81	2,86	-	-
Water flow rate system side	l/h	170980	180685	195353	199172	209139	219823	230507	246385	257643	274665	289333	-	-
Pressure drop system side	kPa	68	79	73	76	67	72	82	60	68	79	73	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	804,0	809,4	888,6	890,5	967,2	1043,7	1119,7	1129,8	1206,8	1215,8	1295,1	-	-
Input power	kW	27,5	27,5	30,2	30,2	33,0	35,7	38,5	38,5	41,2	41,2	44,0	-	-
Free cooling total input current	A	39,8	39,8	43,8	43,8	47,8	51,7	55,7	55,7	59,7	59,7	63,7	-	-
EER	W/W	29,24	29,44	29,38	29,44	29,31	29,20	29,09	29,35	29,26	29,48	29,44	-	-
Water flow rate system side	l/h	171170	180890	195570	199390	209370	220070	230760	246660	257930	274970	289650	-	-
Pressure drop system side	kPa	104	119	113	117	107	110	119	97	104	119	113	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P														
Cooling performance chiller operation (1)														
Cooling capacity	kW	987,5	1041,9	1127,1	1148,0	1206,7	1269,3	1332,0	1421,7	1487,9	1583,2	1668,4	-	-
Input power	kW	344,2	375,3	394,8	424,0	442,2	454,4	466,6	497,6	517,4	577,4	596,8	-	-
Cooling total input current	A	554,8	601,5	631,6	677,8	708,4	731,9	755,4	803,9	832,3	923,9	945,4	-	-
EER	W/W	2,87	2,78	2,86	2,71	2,73	2,79	2,85	2,86	2,88	2,74	2,80	-	-
Water flow rate system side	l/h	169667	179011	193652	197235	207320	218083	228845	244269	255645	272005	286645	-	-
Pressure drop system side	kPa	69	80	74	76	68	72	82	60	69	80	74	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	857,5	862,4	947,1	948,8	1031,1	1113,1	1194,5	1204,3	1286,9	1295,0	1379,9	-	-
Input power	kW	27,9	27,9	30,7	30,7	33,5	36,3	39,0	39,0	41,8	41,8	44,6	-	-
Free cooling total input current	A	40,2	40,2	44,2	44,2	48,2	52,3	56,3	56,3	60,3	60,3	64,3	-	-
EER	W/W	30,74	30,92	30,87	30,92	30,81	30,70	30,59	30,84	30,76	30,95	30,92	-	-
Water flow rate system side	l/h	171170	180890	195570	199390	209370	220070	230760	246660	257930	274970	289650	-	-
Pressure drop system side	kPa	105	119	113	117	107	111	120	98	105	119	113	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - U

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F															
Cooling performance chiller operation (1)															
Cooling capacity	kW	328,1	378,5	429,3	491,9	531,3	568,6	589,0	638,0	667,8	695,1	735,8	824,8	891,0	967,9
Input power	kW	105,3	121,3	136,2	155,8	172,9	180,0	191,0	202,4	216,1	228,4	242,4	263,0	288,2	311,5
Cooling total input current	A	185,8	211,5	232,0	266,3	297,1	312,9	332,3	352,6	374,2	392,3	413,0	442,7	477,2	522,6
EER	W/W	3,12	3,12	3,15	3,16	3,07	3,16	3,08	3,15	3,09	3,04	3,04	3,14	3,09	3,11
Water flow rate system side	l/h	56372	65027	73755	84508	91287	97691	101204	109611	114731	119418	126414	141715	153088	166304
Pressure drop system side	kPa	35	39	34	40	46	53	57	57	62	68	68	46	53	65
Cooling performances with free-cooling (2)															
Cooling capacity	kW	356,2	369,9	451,2	466,4	473,4	555,1	559,4	641,6	648,6	654,2	661,5	753,3	763,5	854,0
Input power	kW	15,0	15,0	18,7	18,7	18,7	22,5	22,5	26,2	26,2	26,2	26,2	30,0	30,0	33,7
Free cooling total input current	A	30,4	30,4	38,0	38,0	38,0	45,6	45,6	53,2	53,2	53,2	53,2	60,8	60,8	68,4
EER	W/W	23,76	24,67	24,07	24,88	25,26	24,68	24,87	24,45	24,71	24,93	25,21	25,12	25,46	25,31
Water flow rate system side	l/h	56430	65100	73840	84600	91390	97800	101320	109730	114860	119550	126550	141870	153260	166490
Pressure drop system side	kPa	59	71	60	73	85	85	92	88	96	104	108	82	96	105

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P															
Cooling performance chiller operation (1)															
Cooling capacity	kW	326,9	376,7	427,6	488,8	527,6	565,4	585,6	634,6	664,0	691,7	732,5	820,3	884,7	961,8
Input power	kW	106,3	122,5	137,6	157,4	174,8	181,8	193,0	204,4	218,3	231,1	245,7	266,0	291,3	314,8
Cooling total input current	A	185,8	211,5	232,0	266,3	297,1	312,9	332,3	352,6	374,2	392,3	413,0	442,7	477,2	522,6
EER	W/W	3,08	3,07	3,11	3,10	3,02	3,11	3,03	3,10	3,04	2,99	2,98	3,08	3,04	3,06
Water flow rate system side	l/h	56168	64715	73458	83974	90642	97138	100613	109029	114089	118834	125850	140933	152002	165249
Pressure drop system side	kPa	35	40	34	40	47	54	58	57	63	68	69	46	54	65
Cooling performances with free-cooling (2)															
Cooling capacity	kW	381,5	396,7	483,5	500,0	507,4	595,1	599,9	687,8	695,4	701,6	709,4	807,7	818,0	915,4
Input power	kW	15,2	15,2	19,0	19,0	19,0	22,9	22,9	26,7	26,7	26,7	26,7	30,5	30,5	34,3
Free cooling total input current	A	30,7	30,7	38,4	38,4	38,4	46,1	46,1	53,7	53,7	53,7	53,7	61,4	61,4	69,1
EER	W/W	25,04	26,04	25,39	26,26	26,65	26,05	26,25	25,80	26,09	26,32	26,61	26,51	26,85	26,71
Water flow rate system side	l/h	56430	65100	73840	84600	91390	97800	101320	109730	114860	119550	126550	141870	153260	166490
Pressure drop system side	kPa	60	72	60	74	85	86	92	88	96	104	109	83	96	106

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - U

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1031,1	1095,0	1181,2	1208,8	1265,8	1326,2	1386,6	1491,1	1554,3	1666,6	1752,7	-	-
Input power	kW	332,0	358,4	379,0	405,3	426,4	440,0	453,5	478,4	498,9	549,8	570,4	-	-
Cooling total input current	A	564,1	604,8	638,6	681,5	718,3	746,0	773,7	811,6	846,2	926,2	954,2	-	-
EER	W/W	3,11	3,06	3,12	2,98	2,97	3,01	3,06	3,12	3,12	3,03	3,07	-	-
Water flow rate system side	l/h	177155	188137	202935	207692	217477	227858	238239	256194	267046	286336	301135	-	-
Pressure drop system side	kPa	74	86	79	83	73	77	87	64	74	86	79	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	941,7	951,8	1043,5	1047,6	1134,8	1221,6	1307,8	1326,2	1413,8	1431,0	1522,9	-	-
Input power	kW	37,5	37,5	41,2	41,2	45,0	48,7	52,5	52,5	56,2	56,2	60,0	-	-
Free cooling total input current	A	76,0	76,0	83,6	83,6	91,2	98,8	106,4	106,4	114,0	114,0	121,6	-	-
EER	W/W	25,12	25,39	25,30	25,40	25,22	25,07	24,92	25,27	25,14	25,45	25,39	-	-
Water flow rate system side	l/h	177350	188350	203160	207920	217720	228110	238500	256480	267340	286650	301470	-	-
Pressure drop system side	kPa	112	129	122	127	115	119	128	105	112	129	122	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1025,3	1088,1	1174,0	1200,9	1257,9	1318,5	1379,2	1482,0	1545,4	1655,7	1741,6	-	-
Input power	kW	335,5	362,4	383,1	409,7	430,7	444,3	457,9	483,4	504,1	556,1	576,8	-	-
Cooling total input current	A	564,1	604,8	638,6	681,5	718,3	746,0	773,7	811,6	846,2	926,2	954,2	-	-
EER	W/W	3,06	3,00	3,06	2,93	2,92	2,97	3,01	3,07	3,07	2,98	3,02	-	-
Water flow rate system side	l/h	176150	186945	201699	206322	216119	226541	236963	254617	265517	284475	299229	-	-
Pressure drop system side	kPa	74	86	79	83	73	78	88	65	74	86	80	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	1009,7	1020,0	1118,5	1122,6	1216,5	1309,9	1402,4	1421,6	1515,9	1533,4	1632,1	-	-
Input power	kW	38,1	38,1	41,9	41,9	45,7	49,5	53,3	53,3	57,1	57,1	60,9	-	-
Free cooling total input current	A	76,8	76,8	84,5	84,5	92,1	99,8	107,5	107,5	115,2	115,2	122,8	-	-
EER	W/W	26,51	26,78	26,70	26,80	26,62	26,46	26,30	26,66	26,54	26,84	26,78	-	-
Water flow rate system side	l/h	177350	188350	203160	207920	217720	228110	238500	256480	267340	286650	301470	-	-
Pressure drop system side	kPa	113	129	122	128	116	119	128	106	113	130	123	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - N

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F															
Cooling performance chiller operation (1)															
Cooling capacity	kW	326,0	376,5	424,5	486,3	525,3	559,6	579,7	626,1	655,1	682,6	723,4	811,7	888,8	960,7
Input power	kW	103,6	119,3	134,4	153,8	170,9	178,3	189,4	200,8	214,8	227,9	242,9	263,8	283,0	307,1
Cooling total input current	A	174,8	199,9	218,4	252,6	283,3	297,4	316,9	335,2	357,1	376,5	398,7	426,6	452,0	496,6
EER	W/W	3,15	3,16	3,16	3,16	3,07	3,14	3,06	3,12	3,05	3,00	2,98	3,08	3,14	3,13
Water flow rate system side	l/h	56017	64687	72926	83554	90260	96150	99597	107568	112546	117285	124287	139460	152703	165051
Pressure drop system side	kPa	34	39	33	39	45	52	55	55	60	65	66	44	53	64
Cooling performances with free-cooling (2)															
Cooling capacity	kW	365,1	381,0	449,3	465,6	473,2	541,5	545,8	615,7	622,3	627,8	634,7	713,7	791,0	867,2
Input power	kW	13,7	13,7	16,5	16,5	16,5	19,2	19,2	22,0	22,0	22,0	22,0	24,7	27,5	30,2
Free cooling total input current	A	19,9	19,9	23,9	23,9	23,9	27,9	27,9	31,8	31,8	31,8	31,8	35,8	39,8	43,8
EER	W/W	26,56	27,71	27,24	28,22	28,69	28,13	28,36	27,99	28,29	28,54	28,86	28,84	28,77	28,67
Water flow rate system side	l/h	56080	64760	73010	83650	90360	96260	99710	107690	112670	117420	124420	139610	152870	165230
Pressure drop system side	kPa	51	61	51	63	73	76	82	79	87	94	98	74	83	93

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P															
Cooling performance chiller operation (1)															
Cooling capacity	kW	325,1	375,2	422,9	483,6	522,0	556,8	576,7	623,1	651,8	679,6	720,3	807,0	882,8	955,1
Input power	kW	104,5	120,4	135,6	155,5	172,9	180,2	191,5	202,9	217,2	230,8	246,4	267,1	286,2	310,3
Cooling total input current	A	174,8	199,9	218,4	252,6	283,3	297,4	316,9	335,2	357,1	376,5	398,7	426,6	452,0	496,6
EER	W/W	3,11	3,12	3,12	3,11	3,02	3,09	3,01	3,07	3,00	2,94	2,92	3,02	3,09	3,08
Water flow rate system side	l/h	55859	64457	72661	83082	89692	95662	99076	107055	111979	116764	123749	138653	151682	164102
Pressure drop system side	kPa	35	39	33	39	46	52	56	55	61	66	67	45	54	64
Cooling performances with free-cooling (2)															
Cooling capacity	kW	387,5	406,1	478,1	496,6	505,0	577,5	582,4	656,5	663,9	670,1	677,6	761,7	844,0	925,5
Input power	kW	13,9	13,9	16,7	16,7	16,7	19,5	19,5	22,3	22,3	22,3	22,3	25,1	27,9	30,7
Free cooling total input current	A	20,1	20,1	24,1	24,1	24,1	28,1	28,1	32,2	32,2	32,2	32,2	36,2	40,2	44,2
EER	W/W	27,79	29,12	28,57	29,68	30,18	29,58	29,83	29,42	29,75	30,03	30,37	30,35	30,26	30,16
Water flow rate system side	l/h	56080	64760	73010	83650	90360	96260	99710	107690	112670	117420	124420	139610	152870	165230
Pressure drop system side	kPa	52	62	52	64	74	77	82	80	87	94	99	75	83	94

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

NSM - N

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1004,9	1098,6	1161,7	1218,0	1274,5	1318,1	1361,6	1478,4	-	-	-	-	-
Input power	kW	332,9	349,5	369,2	392,7	416,2	433,5	450,9	472,0	-	-	-	-	-
Cooling total input current	A	544,1	569,7	600,1	638,5	677,0	708,3	739,7	770,6	-	-	-	-	-
EER	W/W	3,02	3,14	3,15	3,10	3,06	3,04	3,02	3,13	-	-	-	-	-
Water flow rate system side	l/h	172652	188754	199587	209274	218966	226457	233947	254013	-	-	-	-	-
Pressure drop system side	kPa	70	71	84	88	74	78	85	64	-	-	-	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	874,3	1018,1	1092,1	1164,5	1236,6	1246,2	1254,9	1339,1	-	-	-	-	-
Input power	kW	30,2	35,7	38,5	41,2	44,0	44,0	44,0	46,7	-	-	-	-	-
Free cooling total input current	A	43,8	51,7	55,7	59,7	63,7	63,7	63,7	67,7	-	-	-	-	-
EER	W/W	28,91	28,48	28,37	28,24	28,11	28,33	28,52	28,65	-	-	-	-	-
Water flow rate system side	l/h	172840	188960	199810	209510	219210	226710	234210	254300	-	-	-	-	-
Pressure drop system side	kPa	102	100	114	117	103	109	118	93	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P														
Cooling performance chiller operation (1)														
Cooling capacity	kW	998,8	1092,7	1155,6	1211,7	1267,7	1310,9	1354,2	1470,0	-	-	-	-	-
Input power	kW	336,7	353,2	373,0	396,5	420,0	437,6	455,3	476,9	-	-	-	-	-
Cooling total input current	A	544,1	569,7	600,1	638,5	677,0	708,3	739,7	770,6	-	-	-	-	-
EER	W/W	2,97	3,09	3,10	3,06	3,02	3,00	2,97	3,08	-	-	-	-	-
Water flow rate system side	l/h	171604	187733	198553	208183	217806	225235	232663	252555	-	-	-	-	-
Pressure drop system side	kPa	70	71	85	89	75	78	85	64	-	-	-	-	-
Cooling performances with free-cooling (2)														
Cooling capacity	kW	933,0	1086,4	1165,3	1242,2	1318,7	1329,5	1339,1	1429,1	-	-	-	-	-
Input power	kW	30,7	36,3	39,0	41,8	44,6	44,6	44,6	47,4	-	-	-	-	-
Free cooling total input current	A	44,2	52,3	56,3	60,3	64,3	64,3	64,3	68,3	-	-	-	-	-
EER	W/W	30,41	29,96	29,84	29,69	29,55	29,79	30,01	30,14	-	-	-	-	-
Water flow rate system side	l/h	172840	188960	199810	209510	219210	226710	234210	254300	-	-	-	-	-
Pressure drop system side	kPa	102	101	114	118	104	109	118	94	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F																
SEPR - (EN14825: 2018) High temperature with standard fans (1)																
SEPR	A	W/W	7,41	7,05	6,65	6,29	6,78	6,52	6,34	6,73	6,56	6,31	6,10	6,55	6,32	6,50
	E	W/W	7,22	6,77	7,10	6,65	6,30	6,89	6,59	6,81	6,69	6,42	6,09	6,28	6,23	6,44
	N	W/W	7,68	7,36	7,56	7,20	6,78	7,10	6,94	7,15	6,90	6,67	6,45	6,78	6,94	6,93
	U	W/W	7,50	7,13	7,47	7,13	6,79	7,22	6,97	7,28	7,03	6,82	6,62	6,97	6,75	6,86
SEPR - (EN14825: 2018) High temperature with inverter fans (1)																
SEPR	A	W/W	7,41	7,05	6,65	6,29	6,78	6,52	6,34	6,73	6,56	6,31	6,10	6,55	6,32	6,50
	E	W/W	7,22	6,77	7,10	6,65	6,30	6,89	6,59	6,81	6,69	6,42	6,09	6,28	6,23	6,44
	N	W/W	7,68	7,36	7,56	7,20	6,78	7,10	6,94	7,15	6,90	6,67	6,45	6,78	6,94	6,93
	U	W/W	7,50	7,13	7,47	7,13	6,79	7,22	6,97	7,28	7,03	6,82	6,62	6,97	6,75	6,86

(1) Calculation performed with FIXED water flow rate.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P																
SEPR - (EN14825: 2018) High temperature with standard fans (1)																
SEPR	A	W/W	7,38	7,12	6,67	6,25	6,79	6,49	6,27	6,71	6,49	6,23	5,99	6,51	6,26	6,44
	E	W/W	7,25	6,73	7,15	6,60	6,20	6,83	6,51	6,84	6,61	6,31	5,99	6,46	6,22	6,34
	N	W/W	7,71	7,39	7,62	7,22	6,83	7,18	6,91	7,16	6,88	6,63	6,39	6,75	6,90	6,88
	U	W/W	7,57	7,17	7,56	7,16	6,77	7,23	6,97	7,30	7,02	6,78	6,56	6,97	6,71	6,81
SEPR - (EN14825: 2018) High temperature with inverter fans (1)																
SEPR	A	W/W	7,38	7,12	6,67	6,25	6,79	6,49	6,27	6,71	6,49	6,23	5,99	6,51	6,26	6,44
	E	W/W	7,25	6,73	7,15	6,60	6,20	6,83	6,51	6,84	6,61	6,31	5,99	6,46	6,22	6,34
	N	W/W	7,71	7,39	7,62	7,22	6,83	7,18	6,91	7,16	6,88	6,63	6,39	6,75	6,90	6,88
	U	W/W	7,57	7,17	7,56	7,16	6,77	7,23	6,97	7,30	7,02	6,78	6,56	6,97	6,71	6,81

(1) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F															
SEPR - (EN14825: 2018) High temperature with standard fans (1)															
SEPR	A	W/W	6,18	6,40	6,17	5,87	6,04	6,24	6,13	6,61	6,38	6,69	6,52	6,18	6,44
	E	W/W	6,52	6,28	6,63	5,98	6,02	6,19	6,49	6,72	6,84	6,22	6,46	-	-
	N	W/W	6,65	6,88	7,12	7,03	6,96	6,74	6,72	7,28	-	-	-	-	-
	U	W/W	6,92	6,60	7,04	6,52	6,54	6,68	6,83	7,17	7,22	6,87	7,00	-	-
SEPR - (EN14825: 2018) High temperature with inverter fans (1)															
SEPR	A	W/W	6,18	6,40	6,17	5,87	6,04	6,24	6,13	6,61	6,38	6,69	6,52	6,18	6,44
	E	W/W	6,52	6,28	6,63	5,98	6,02	6,19	6,49	6,72	6,84	6,22	6,46	-	-
	N	W/W	6,65	6,88	7,12	7,03	6,96	6,74	6,72	7,28	-	-	-	-	-
	U	W/W	6,92	6,60	7,04	6,52	6,54	6,68	6,83	7,17	7,22	6,87	7,00	-	-

(1) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P															
SEPR - (EN14825: 2018) High temperature with standard fans (1)															
SEPR	A	W/W	6,09	6,31	6,06	5,76	5,95	6,14	6,01	6,57	6,32	6,64	6,44	6,13	6,37
	E	W/W	6,43	6,15	6,50	5,86	5,94	6,11	6,40	6,66	6,78	6,12	6,37	-	-
	N	W/W	6,59	7,00	7,07	6,99	6,94	6,81	6,68	7,25	-	-	-	-	-
	U	W/W	6,89	6,70	6,99	6,45	6,50	6,66	6,80	7,15	7,19	6,83	6,96	-	-
SEPR - (EN14825: 2018) High temperature with inverter fans (1)															
SEPR	A	W/W	6,09	6,31	6,06	5,76	5,95	6,14	6,01	6,57	6,32	6,64	6,44	6,13	6,37
	E	W/W	6,43	6,15	6,50	5,86	5,94	6,11	6,40	6,66	6,78	6,12	6,37	-	-
	N	W/W	6,59	7,00	7,07	6,99	6,94	6,81	6,68	7,25	-	-	-	-	-
	U	W/W	6,89	6,70	6,99	6,45	6,50	6,66	6,80	7,15	7,19	6,83	6,96	-	-

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
Maximum current (FLA)	A	A	243,9	271,9	299,1	332,5	374,4	395,7	417,0	450,2	474,9	474,9	474,9	531,4	579,4	635,9
	E,U	A	243,9	271,9	307,6	341,0	374,4	404,2	425,5	458,7	483,4	483,4	483,4	539,9	587,9	644,4
	N	A	252,4	280,4	316,1	349,5	382,9	412,7	434,0	467,2	491,9	491,9	491,9	548,4	604,9	667,2
Peak current (LRA)	A	A	265,5	307,3	350,2	388,2	419,8	466,8	484,0	519,5	529,4	529,4	529,4	661,9	701,8	831,3
	E,U	A	265,5	307,3	358,7	396,7	419,8	475,3	492,5	528,0	537,9	537,9	537,9	670,4	710,3	839,8
	N	A	274,0	315,8	367,2	405,2	428,3	483,8	501,0	536,5	546,4	546,4	546,4	678,9	727,3	862,6

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Electric data															
Maximum current (FLA)	A	A	683,9	731,4	770,4	813,4	864,9	913,2	947,2	980,7	1028,7	1123,7	1162,7	1300,2	1419,2
	E,U	A	700,9	739,9	793,2	836,2	887,7	930,2	972,7	997,7	1054,2	1132,2	1179,7	-	-
	N	A	715,2	771,2	818,7	870,2	921,7	955,7	989,7	1023,2	-	-	-	-	-
Peak current (LRA)	A	A	858,2	930,7	953,4	1108,4	1163,9	1290,2	1287,2	1069,4	1096,3	1200,0	1222,7	1480,2	1603,2
	E,U	A	875,2	939,2	976,2	1131,2	1186,7	1307,2	1312,7	1086,4	1121,8	1208,5	1239,7	-	-
	N	A	889,5	970,5	1001,7	1165,2	1220,7	1332,7	1329,7	1111,9	-	-	-	-	-

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Compressor																
Type	A,E,N,U	type	Screw													
Compressor regulation	A,E,N,U	Type	On-Off													
Number	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type	R134a													
Refrigerant load circuit 1 (1)	A	kg	31,0	31,0	28,0	31,0	38,0	36,0	38,0	43,0	44,0	44,0	50,0	58,0	55,0	61,0
	E	kg	28,0	30,0	45,0	39,0	38,0	46,0	46,0	54,0	54,0	54,0	59,0	66,0	61,0	65,0
	N	kg	39,0	39,0	46,0	34,0	46,0	54,0	54,0	61,0	61,0	61,0	66,0	66,0	76,0	84,0
	U	kg	31,0	30,0	35,0	34,0	32,0	46,0	46,0	54,0	54,0	54,0	59,0	66,0	61,0	65,0
Refrigerant load circuit 2 (1)	A	kg	31,0	31,0	28,0	31,0	42,0	36,0	40,0	45,0	48,0	52,0	55,0	60,0	60,0	61,0
	E	kg	30,0	30,0	45,0	39,0	42,0	46,0	46,0	54,0	54,0	59,0	59,0	61,0	61,0	77,0
	N	kg	39,0	39,0	46,0	42,0	50,0	54,0	54,0	61,0	61,0	66,0	66,0	76,0	76,0	84,0
	U	kg	31,0	30,0	35,0	42,0	32,0	46,0	46,0	54,0	54,0	59,0	59,0	61,0	61,0	77,0
System side heat exchanger																
Type	A,E,N,U	type	Shell and tube													
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor															
Type	A,E,N,U	type							Screw						
Compressor regulation	A,E,N,U	Type							On-Off						
	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
Number	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
Circuits	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Refrigerant	A,E,N,U	type							R134a						
	A	kg	64,0	70,0	68,0	69,0	76,0	84,0	84,0	61,0	61,0	72,0	69,0	78,0	84,0
Refrigerant load circuit 1 (1)	E,U	kg	76,0	75,0	84,0	76,0	91,0	91,0	106,0	65,0	76,0	76,0	84,0	-	-
	N	kg	84,0	91,0	106,0	106,0	121,0	121,0	121,0	84,0	-	-	-	-	-
	A	kg	74,0	80,0	83,0	69,0	76,0	84,0	84,0	61,0	61,0	79,0	69,0	87,0	84,0
Refrigerant load circuit 2 (1)	E,U	kg	76,0	85,0	84,0	91,0	91,0	106,0	106,0	70,0	76,0	76,0	84,0	-	-
	N	kg	84,0	106,0	106,0	121,0	121,0	121,0	121,0	84,0	-	-	-	-	-
	A	kg	-	-	-	-	-	-	-	61,0	61,0	73,0	76,0	75,0	91,0
Refrigerant load circuit 3 (1)	E,U	kg	-	-	-	-	-	-	-	70,0	76,0	76,0	76,0	-	-
	N	kg	-	-	-	-	-	-	-	91,0	-	-	-	-	-
System side heat exchanger															
Type	A,E,N,U	type							Shell and tube						
	A	no.	1	1	1	1	1	1	1	2	2	2	2	2	2
Number	E,U	no.	1	1	1	1	2	2	2	2	2	2	2	-	-
	N	no.	1	2	2	2	2	2	2	2	-	-	-	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Integrated hydronic kit: 00																
Hydraulic connections																
Connections (in/out)	A,E,N,U	Type							Grooved joints							
	A	Ø	5″	5″	5″	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″	6″
Size (in)	E,U	Ø	5″	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″	6″	6″	6″
	N	Ø	5″	5″	6″	6″	6″	6″	6″	6″	6″	6″	6″	6″	6″	6″
	A	Ø	5″	5″	5″	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″	6″
Size (out)	E,U	Ø	5″	5″	5″	5″	5″	6″	6″	6″	6″	6″	6″	6″	6″	6″
	N	Ø	5″	5″	6″	6″	6″	6″	6″	6″	6″	6″	6″	6″	6″	6″

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Integrated hydronic kit: 00															
Hydraulic connections															
Connections (in/out)	A,E,N,U	Type							Grooved joints						
	A	Ø	6″	6″	6″	6″	6″	6″	6″	-	-	-	-	-	-
Size (in)	E,U	Ø	6″	6″	6″	6″	-	-	-	-	-	-	-	-	-
	N	Ø	6″	-	-	-	-	-	-	-	-	-	-	-	-
	A	Ø	6″	6″	6″	8″	8″	8″	8″	-	-	-	-	-	-
Size (out)	E,U	Ø	6″	6″	8″	8″	-	-	-	-	-	-	-	-	-
	N	Ø	6″	-	-	-	-	-	-	-	-	-	-	-	-
Module 1															
	A	Ø	-	-	-	-	-	-	-	6″	6″	6″	6″	6″	6″
Size (in)	E,U	Ø	-	-	-	-	6″	6″	6″	6″	6″	6″	6″	-	-
	N	Ø	-	6″	6″	6″	6″	6″	6″	6″	-	-	-	-	-
	A	Ø	-	-	-	-	-	-	-	6″	6″	6″	6″	8″	8″
Size (out)	E,U	Ø	-	-	-	-	6″	6″	6″	6″	6″	6″	8″	-	-
	N	Ø	-	6″	6″	6″	6″	6″	6″	6″	-	-	-	-	-
Module 2															
	A	Ø	-	-	-	-	-	-	-	5″	5″	5″	5″	5″	6″
Size (in)	E,U	Ø	-	-	-	-	6″	6″	6″	5″	5″	5″	5″	-	-
	N	Ø	-	6″	6″	6″	6″	6″	6″	6″	-	-	-	-	-
	A	Ø	-	-	-	-	-	-	-	5″	5″	5″	5″	5″	6″
Size (out)	E,U	Ø	-	-	-	-	6″	6″	6″	5″	5″	5″	5″	-	-
	N	Ø	-	6″	6″	6″	6″	6″	6″	6″	-	-	-	-	-

SOUND DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Sound data calculated in cooling mode (1)																
Sound power level	A	dB(A)	98,0	98,0	98,0	98,0	99,0	99,0	99,0	99,7	99,7	99,7	99,7	100,4	100,4	101,1
	E	dB(A)	91,0	91,0	91,7	91,9	92,1	92,6	92,5	93,0	93,0	93,0	93,0	93,7	93,9	94,6
	N	dB(A)	91,7	91,7	92,3	92,5	92,6	93,1	93,0	93,5	93,5	93,5	93,5	94,1	94,6	95,2
	U	dB(A)	98,0	98,0	98,9	99,0	99,0	99,7	99,7	100,4	100,4	100,4	100,4	100,9	101,0	101,5
Sound pressure level (10 m)	A	dB(A)	65,6	65,6	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,1	67,1	67,6	67,7	68,2
	E	dB(A)	58,6	58,6	59,2	59,4	59,5	59,9	59,9	60,3	60,3	60,3	60,3	60,8	61,0	61,6
	N	dB(A)	59,2	59,2	59,7	59,9	60,0	60,3	60,3	60,6	60,6	60,6	60,6	61,1	61,5	62,0
	U	dB(A)	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,6	67,6	67,6	67,6	68,1	68,1	68,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Sound data calculated in cooling mode (1)															
Sound power level	A	dB(A)	101,1	101,6	101,6	101,6	102,1	102,5	102,5	102,7	102,8	103,4	103,4	103,7	104,2
	E	dB(A)	95,2	95,2	95,4	95,6	96,0	96,2	96,4	96,0	96,5	96,4	96,6	-	-
	N	dB(A)	95,5	96,0	96,2	96,6	96,9	96,9	96,9	96,7	-	-	-	-	-
	U	dB(A)	102,0	102,0	102,4	102,4	102,8	103,1	103,4	103,4	103,7	103,7	103,9	-	-
Sound pressure level (10 m)	A	dB(A)	68,2	68,6	68,6	68,6	69,0	69,2	69,2	69,4	69,4	69,8	69,8	70,0	70,4
	E	dB(A)	62,1	62,0	62,2	62,3	62,7	62,8	62,9	62,5	62,8	62,8	62,8	-	-
	N	dB(A)	62,3	62,5	62,6	62,9	63,1	63,1	63,1	62,8	-	-	-	-	-
	U	dB(A)	68,9	68,9	69,1	69,2	69,5	69,7	69,9	69,8	70,0	70,0	70,2	-	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

FANS DATA

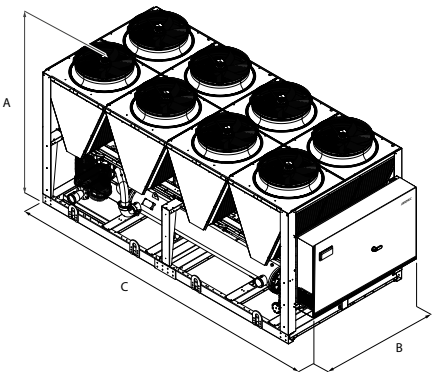
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F																
Fan																
Type	A,E,N,U	type	Axial													
Number	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22
Air flow rate	A	m^3/h	116000	116000	116000	116000	145000	145000	145000	174000	174000	174000	174000	203000	203000	232000
	E	m^3/h	89600	89600	112000	112000	112000	134400	134400	156800	156800	156800	156800	179200	179200	201600
	N	m^3/h	112000	112000	134400	134400	134400	156800	156800	179200	179200	179200	179200	201600	224000	246400
	U	m^3/h	116000	116000	145000	145000	145000	174000	174000	203000	203000	203000	203000	232000	232000	261000

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: P																
Fan																
Type	A,E,N,U	type	Axial													
Number	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22
Air flow rate	A	m^3/h	109600	109600	109600	109600	137000	137000	137000	164400	164400	164400	164400	191800	191800	219200
	E	m^3/h	85600	85600	107000	107000	107000	128400	128400	149800	149800	149800	149800	171200	171200	192600
	N	m^3/h	107000	107000	128400	128400	128400	149800	149800	171200	171200	171200	171200	192600	214000	235400
	U	m^3/h	109600	109600	137000	137000	137000	164400	164400	191800	191800	191800	191800	219200	219200	246600

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F															
Fan															
Type	A,E,N,U	type	Axial												
Number	A	no.	16	18	18	18	20	22	22	24	24	28	28	30	34
	E,U	no.	20	20	22	22	24	26	28	28	30	30	32	-	-
	N	no.	22	26	28	30	32	32	32	34	-	-	-	-	-
Air flow rate	A	m^3/h	232000	261000	261000	261000	290000	319000	319000	348000	348000	406000	406000	435000	493000
	E	m^3/h	224000	224000	246400	246400	268800	291200	313600	313600	336000	336000	358400	-	-
	N	m^3/h	246400	291200	313600	336000	358400	358400	358400	380800	-	-	-	-	-
	U	m^3/h	290000	290000	319000	319000	348000	377000	406000	406000	435000	435000	464000	-	-

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: P															
Fan															
Type	A,E,N,U	type	Axial												
Number	A	no.	16	18	18	18	20	22	22	24	24	28	28	30	34
	E,U	no.	20	20	22	22	24	26	28	28	30	30	32	-	-
	N	no.	22	26	28	30	32	32	32	34	-	-	-	-	-
Air flow rate	A	m^3/h	219200	246600	246600	246600	274000	301400	301400	328800	328800	383600	383600	411000	465800
	E	m^3/h	214000	214000	235400	235400	256800	278200	299600	299600	321000	321000	342400	-	-
	N	m^3/h	235400	278200	299600	321000	342400	342400	342400	363800	-	-	-	-	-
	U	m^3/h	274000	274000	301400	301400	328800	356200	383600	383600	411000	411000	438400	-	-

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights																
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	A	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330	9520
C	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520	10710
	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900	13090

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Dimensions and weights															
	A	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
A	E,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	-	-	-	-	-
	A	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
B	E,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	-	-	-	-	-
	A	mm	9520	10710	10710	10710	11900	13090	13090	14280	14280	16660	16660	17850	20230
C	E,U	mm	11900	11900	13090	13090	14280	15470	16660	16660	17850	17850	19040	-	-
	N	mm	13090	15470	16660	17850	19040	19040	19040	20230	-	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately. For more information, please refer to the technical manual and / or installation.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: F																
Single module unit																
	A	kg	4695	4730	4870	5200	6065	6080	6285	6950	7145	7200	7300	8500	8975	9590
Empty weight	E,U	kg	4855	4875	5435	6025	6380	7025	7045	7625	7715	7785	7880	9145	9605	10475
	N	kg	5370	5390	6065	6655	7010	7560	7585	8175	8265	8340	8430	9930	10905	11630

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: F															
Single module unit															
	A	kg	9655	10475	10525	10945	11580	12265	12305	-	-	-	-	-	-
Empty weight	E,U	kg	11070	11130	12135	12260	-	-	-	-	-	-	-	-	-
	N	kg	11700	-	-	-	-	-	-	-	-	-	-	-	-
Bimodule unit															
	A	kg	-	-	-	-	-	-	-	9590	9655	10475	10525	11580	12305
Empty weight module 1	E,U	kg	-	-	-	-	6630	6630	7170	10475	11070	11130	12135	-	-
	N	kg	-	6210	6995	6995	7730	7730	7775	11630	-	-	-	-	-
	A	kg	-	-	-	-	-	-	-	5225	5225	5765	5765	5930	6590
Empty weight module 2	E,U	kg	-	-	-	-	6630	7170	7170	5755	5755	5810	5820	-	-
	N	kg	-	6995	6995	7730	7730	7775	7775	6455	-	-	-	-	-

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NSM 1402-9603 B

Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 305,8 ÷ 2028,1 kW

- **Microchannel coil**
- **Night mode**
- **Operation up to 50 °C outdoor air**
- **High efficiency also at partial loads**



FREECOOLING

DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature depending on the size and vesion. For more information refer to the dedicated documentations or the selection program Magellano.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:
1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
2. Primary hydraulic circuit for glycol-free systems.

Electronic expansion valve

Electronic thermostatic as standard from size 5202 to 6402 and from 8403 to 9603.
The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

CONTROL

Units include 1 control board for each compressor.
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night mode:** only in the **non-silenced** versions is it possible to set a silenced operating mode, which is useful for example at night for greater acoustic comfort but always guarantees performance even at peak load times.
— Possibility to control two units in a Master-Slave configuration (from size 1402 to 6402)

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save

a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger
AK: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.
KDI: Double thickness evaporator insulation. Provides stand-still protection down to -20°C. Must be ordered in conjunction with options KRS.

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
AER485P1 x no. 2	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP x no. 2	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
AER485P1 x no. 2	A,E,N,U	•	•	•	•	•	•	•						
AER485P1 x no. 3	A								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERBACP x no. 2	A,E,N,U	•	•	•	•	•	•	•						
AERBACP x no. 3	A								•	•	•	•	•	•
	E,U								•	•	•	•		
	N								•					
AERNET	A	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
MULTICHILLER-EVO	A	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					
PRV3	A	•	•	•	•	•	•	•	•	•	•	•	•	•
	E,U	•	•	•	•	•	•	•	•	•	•	•		
	N	•	•	•	•	•	•	•	•					

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	AVX929	AVX929	AVX929	AVX932	AVX933	AVX933	AVX933	AVX934	AVX937	AVX937	AVX937	AVX938	AVX938	AVX942
E, U	AVX929	AVX929	AVX930	AVX933	AVX933	AVX934	AVX934	AVX935	AVX935	AVX935	AVX935	AVX939	AVX939	AVX940
N	AVX930	AVX930	AVX931	AVX931	AVX934	AVX935	AVX935	AVX936	AVX936	AVX936	AVX936	AVX940	AVX941	AVX943

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	AVX942	AVX944	AVX944	AVX944	AVX945	AVX947	AVX947	AVX953	AVX953	AVX957	AVX954	AVX956	AVX955
E, U	AVX941	AVX945	AVX947	AVX947	AVX950	AVX952	AVX948	AVX954	AVX956	AVX956	AVX958	-	-
N	AVX943	AVX946	AVX948	AVX949	AVX951	AVX951	AVX951	AVX955	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A, E, U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A	GP4V	GP4V	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V
E, U	GP4V	GP4V	GP5V	GP5V	GP5V	GP6V	GP6V	GP7V	GP7V	GP7V	GP7V	GP8V	GP8V	GP9V
N	GP5V	GP5V	GP6V	GP6V	GP6V	GP7V	GP7V	GP8V	GP8V	GP8V	GP8V	GP9V	GP10V	GP11V

A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	GP8V	GP9V	GP9V	GP9V	GP10V	GP11V	GP11V	GP4V+GP8V	GP4V+GP8V	GP5V+GP9V	GP5V+GP9V	GP5V+GP10V	GP6V+GP11V
E, U	GP10V	GP10V	GP11V	GP11V	GP6V+GP6V	GP6V+GP7V	GP7V+GP7V	GP5V+GP9V	GP5V+GP10V	GP5V+GP10V	GP6V+GP11V	-	-
N	GP11V	GP6V+GP7V	GP7V+GP7V	GP7V+GP8V	GP8V+GP8V	GP8V+GP8V	GP8V+GP8V	GP6V+GP11V	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	KRS22	KRS22	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23
E, N, U	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A, E, U	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
N	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23

A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	KRS24	KRS24	KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24
E, U	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	KRS23+KRS24	-	-
N	KRS23+KRS23	KRS23+KRS23	KRS23+KRS23	KRS23+KRS24	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
E, N	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
E, N	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

Double thickness evaporator insulation

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
A, E, N, U	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)

(1) Contact us.
A grey background indicates the accessory must be assembled in the factory

Ver	4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
A, E, N, U	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)	KDI (1)

(1) Contact us.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NSM**
4,5,6,7		**Size** 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6503, 6703, 6903, 7203, 8403, 9603
8		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (3)
9		**Model**
	B	Free-cooling glycol free
	G	Free-cooling glycol free plus (4)
10		**Heat recovery**
	D	Desuperheater
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency

Field		Description
12		**Coils / free-cooling coils**
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
	°	Standard
14		**Power supply**
	2	230V ~ 3 50Hz with fuses (5)
	4	230V ~ 3 50Hz with magnet circuit breakers (5)
	8	400V ~ 3 50Hz with magnet circuit breakers
	°	400V ~ 3 50Hz with fuses
15,16		**Integrated hydronic kit**
	00	Without hydronic kit

(1) Water produced up to +4 °C
(2) Water produced from +4 °C ÷ -6 °C
(3) Water produced up to +4 °C.
(4) The Free cooling Plus "G" models are only compatible with "°" and "0" coils.
(5) Available only for size from 1402 to 2202

PERFORMANCE SPECIFICATIONS

NSM - A

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B															
Cooling performance chiller operation (1)															
Cooling capacity	kW	306,5	350,2	396,8	450,5	505,3	522,5	556,5	600,8	649,8	678,4	726,3	813,3	872,8	954,1
Input power	kW	102,8	117,6	136,7	158,3	168,9	180,5	194,5	203,0	220,4	235,0	252,8	269,7	295,6	317,9
Cooling total input current	A	182,0	206,0	231,0	268,0	291,0	311,0	335,0	351,0	378,0	400,0	427,0	451,0	487,0	530,0
EER	W/W	2,98	2,98	2,90	2,85	2,99	2,90	2,86	2,96	2,95	2,89	2,87	3,02	2,95	3,00
Water flow rate system side	l/h	52653	60163	68174	77407	86812	89765	95621	103224	111642	116561	124785	139737	149957	163932
Pressure drop system side	kPa	73	94	100	72	90	96	108	107	117	100	94	81	93	112
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	201,2	207,2	212,6	221,0	271,8	273,9	277,4	334,0	337,2	352,7	355,8	414,1	417,7	460,7
Input power	kW	18,5	18,5	18,5	18,5	24,6	24,6	24,6	32,7	32,7	32,9	32,9	38,1	38,1	42,0
Free cooling total input current	A	33,0	32,0	31,0	31,0	42,0	42,0	42,0	57,0	56,0	56,0	56,0	64,0	63,0	70,0
EER	W/W	10,87	11,19	11,48	11,92	11,06	11,14	11,28	10,20	10,30	10,71	10,81	10,86	10,95	10,97

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G															
Cooling performance chiller operation (1)															
Cooling capacity	kW	305,8	349,3	395,0	447,3	502,1	519,1	552,6	597,2	645,4	674,3	721,9	807,8	865,0	946,8
Input power	kW	103,7	118,8	138,1	160,2	170,8	182,6	197,0	205,3	223,1	238,4	257,1	273,3	299,3	321,8
Cooling total input current	A	184,0	208,0	233,0	271,0	294,0	315,0	339,0	355,0	382,0	405,0	433,0	456,0	492,0	536,0
EER	W/W	2,95	2,94	2,86	2,79	2,94	2,84	2,81	2,91	2,89	2,83	2,81	2,96	2,89	2,94
Water flow rate system side	l/h	52546	60019	67864	76853	86266	89180	94948	102598	110891	115859	124023	138789	148609	162675
Pressure drop system side	kPa	48	64	74	62	78	84	95	70	74	81	74	86	98	68
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	213,5	220,0	226,6	237,8	288,8	291,7	294,5	353,1	360,2	374,3	378,1	439,1	443,5	495,5
Input power	kW	18,3	18,3	18,3	18,3	24,2	24,2	24,2	32,1	32,1	32,3	32,3	37,4	37,4	41,3
Free cooling total input current	A	32,0	32,0	31,0	31,0	42,0	42,0	42,0	55,0	55,0	55,0	54,0	62,0	61,0	69,0
EER	W/W	11,68	12,03	12,39	12,99	11,92	12,04	12,16	11,00	11,22	11,59	11,71	11,74	11,86	12,00

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - A

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B														
Cooling performance chiller operation (1)														
Cooling capacity	kW	996,8	1082,3	1128,3	1167,3	1222,8	1304,9	1346,7	1459,2	1501,9	1659,0	1705,0	1838,1	2028,1
Input power	kW	346,1	365,7	391,9	422,5	438,9	452,7	472,4	492,1	520,2	557,2	583,3	659,0	704,1
Cooling total input current	A	581,0	614,0	655,0	704,0	733,0	761,0	796,0	821,0	872,0	945,0	986,0	1100,0	1198,0
EER	W/W	2,88	2,96	2,88	2,76	2,79	2,88	2,85	2,97	2,89	2,98	2,92	2,79	2,88
Water flow rate system side	l/h	171269	185947	193855	200561	210092	224201	231379	250713	258050	285029	292937	315803	348457
Pressure drop system side	kPa	122	132	143	116	109	125	133	112	127	132	143	108	135
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	464,4	522,4	524,0	526,5	571,2	612,5	614,9	684,4	688,1	798,8	801,4	867,6	965,2
Input power	kW	42,0	46,2	46,2	46,2	50,1	53,8	53,9	60,5	60,5	70,7	70,8	78,9	86,8
Free cooling total input current	A	71,0	77,0	77,0	77,0	84,0	91,0	91,0	101,0	101,0	120,0	120,0	132,0	148,0
EER	W/W	11,06	11,32	11,35	11,41	11,41	11,38	11,41	11,31	11,37	11,29	11,32	10,99	11,12

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G														
Cooling performance chiller operation (1)														
Cooling capacity	kW	988,7	1074,2	1119,1	1156,4	1212,7	1295,2	1336,2	1447,7	1489,6	1646,9	1691,9	1822,8	2013,1
Input power	kW	350,6	370,3	397,1	428,3	444,3	458,0	478,2	498,2	527,1	564,0	590,8	667,1	712,4
Cooling total input current	A	588,0	621,0	663,0	713,0	741,0	769,0	805,0	830,0	882,0	956,0	998,0	1112,0	1211,0
EER	W/W	2,82	2,90	2,82	2,70	2,73	2,83	2,79	2,91	2,83	2,92	2,86	2,73	2,83
Water flow rate system side	l/h	169873	184553	192278	198678	208362	222522	229577	248739	255937	282961	290686	313186	345875
Pressure drop system side	kPa	74	91	98	86	95	109	116	84	84	110	110	101	116
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	500,3	559,0	564,4	569,9	610,4	656,1	662,5	737,9	742,7	856,4	861,8	926,6	1037,6
Input power	kW	41,3	45,5	45,5	45,5	49,3	53,1	53,1	59,6	59,6	69,7	69,7	77,6	85,4
Free cooling total input current	A	69,0	76,0	76,0	76,0	82,0	89,0	89,0	99,0	100,0	118,0	118,0	129,0	145,0
EER	W/W	12,12	12,30	12,42	12,54	12,38	12,36	12,48	12,38	12,46	12,29	12,37	11,95	12,15

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - E

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B															
Cooling performance chiller operation (1)															
Cooling capacity	kW	319,8	365,8	417,7	473,0	509,1	549,8	568,8	618,6	646,3	675,1	715,5	796,7	851,7	929,6
Input power	kW	105,5	123,3	137,5	159,4	178,3	183,3	195,5	205,2	220,4	235,9	253,5	270,8	297,1	320,1
Cooling total input current	A	177,0	206,0	223,0	261,0	295,0	305,0	326,0	342,0	365,0	389,0	415,0	438,0	474,0	517,0
EER	W/W	3,03	2,97	3,04	2,97	2,85	3,00	2,91	3,01	2,93	2,86	2,82	2,94	2,87	2,90
Water flow rate system side	l/h	54946	62848	71763	81260	87462	94455	97732	106280	111042	115993	122937	136886	146332	159723
Pressure drop system side	kPa	62	76	84	78	90	88	94	100	109	91	94	80	92	110
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	186,6	192,0	231,5	241,7	246,1	294,5	297,3	334,0	337,2	351,6	354,9	403,7	407,3	448,1
Input power	kW	15,5	15,5	19,5	19,6	19,6	26,8	26,8	30,6	30,6	31,0	31,0	34,0	34,0	36,8
Free cooling total input current	A	26,0	26,0	32,0	32,0	32,0	44,0	45,0	51,0	51,0	51,0	51,0	55,0	54,0	59,0
EER	W/W	12,01	12,36	11,89	12,34	12,57	11,01	11,11	10,92	11,03	11,35	11,45	11,88	11,98	12,18

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G															
Cooling performance chiller operation (1)															
Cooling capacity	kW	316,7	363,1	414,5	469,5	504,1	545,4	564,0	613,8	640,8	669,8	710,9	790,6	843,5	921,3
Input power	kW	106,6	124,7	138,6	161,1	181,0	185,4	197,8	207,6	223,1	239,2	257,8	274,6	301,1	324,4
Cooling total input current	A	179,0	208,0	225,0	263,0	298,0	308,0	329,0	345,0	369,0	393,0	421,0	443,0	480,0	523,0
EER	W/W	2,97	2,91	2,99	2,91	2,79	2,94	2,85	2,96	2,87	2,80	2,76	2,88	2,80	2,84
Water flow rate system side	l/h	54406	62391	71215	80666	86616	93710	96910	105465	110105	115087	122135	135840	144915	158291
Pressure drop system side	kPa	36	42	54	66	76	54	58	59	65	71	73	47	54	66
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	197,2	203,1	242,3	255,6	258,0	307,4	310,5	349,3	352,8	266,5	373,6	421,8	425,7	470,1
Input power	kW	15,2	15,2	19,1	19,2	19,2	26,1	26,1	29,9	29,9	30,3	30,3	33,3	33,3	36,1
Free cooling total input current	A	26,0	25,0	31,0	31,0	32,0	43,0	44,0	50,0	50,0	50,0	49,0	54,0	53,0	58,0
EER	W/W	12,94	13,32	12,67	13,29	13,42	11,76	11,88	11,68	11,79	12,11	12,35	12,68	12,80	13,02

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - E

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B														
Cooling performance chiller operation (1)														
Cooling capacity	kW	995,2	1051,6	1137,0	1159,2	1217,3	1279,4	1341,6	1434,0	1499,6	1598,6	1684,0	-	-
Input power	kW	339,9	370,0	389,4	418,0	436,6	448,9	461,2	491,1	510,9	568,9	588,3	-	-
Cooling total input current	A	555,0	601,0	632,0	678,0	708,0	732,0	755,0	804,0	832,0	924,0	945,0	-	-
EER	W/W	2,93	2,84	2,92	2,77	2,79	2,85	2,91	2,92	2,93	2,81	2,86	-	-
Water flow rate system side	l/h	170980	180685	195353	199172	209139	219823	230507	246385	257643	274665	289333	-	-
Pressure drop system side	kPa	125	128	130	135	84	115	112	110	121	121	130	-	-
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	495,6	509,3	549,8	551,2	600,1	640,5	682,5	692,0	739,5	761,7	802,2	-	-
Input power	kW	44,0	44,2	46,9	47,0	53,5	57,3	61,5	56,4	63,5	65,6	68,4	-	-
Free cooling total input current	A	72,0	72,0	76,0	76,0	87,0	93,0	100,0	92,0	104,0	107,0	110,0	-	-
EER	W/W	11,27	11,54	11,72	11,73	11,22	11,17	11,14	12,27	11,64	11,60	11,72	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G														
Cooling performance chiller operation (1)														
Cooling capacity	kW	987,5	1041,9	1127,1	1148,0	1206,7	1269,3	1332,0	1421,7	1487,9	1583,2	1668,4	-	-
Input power	kW	344,2	375,3	394,8	424,0	442,2	454,4	466,6	497,6	517,4	577,4	596,9	-	-
Cooling total input current	A	561,0	609,0	640,0	687,0	717,0	740,0	763,0	814,0	842,0	937,0	957,0	-	-
EER	W/W	2,87	2,78	2,86	2,71	2,73	2,79	2,85	2,86	2,88	2,74	2,80	-	-
Water flow rate system side	l/h	169667	179011	193651	197235	207320	218083	228846	244269	255645	272005	286645	-	-
Pressure drop system side	kPa	76	87	83	86	58	70	70	86	86	100	100	-	-
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	523,4	531,6	576,1	581,5	627,1	669,8	712,5	728,1	781,4	795,8	840,2	-	-
Input power	kW	43,0	43,1	46,0	46,0	52,3	56,1	59,8	55,3	62,2	64,2	67,0	-	-
Free cooling total input current	A	70,0	70,0	74,0	74,0	85,0	91,0	98,0	91,0	101,0	104,0	107,0	-	-
EER	W/W	12,17	12,32	12,53	12,65	11,99	11,95	11,91	13,16	12,55	12,40	12,54	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - U

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B															
Cooling performance chiller operation (1)															
Cooling capacity	kW	328,1	378,5	429,3	491,9	531,3	568,6	589,0	638,0	667,8	695,1	735,8	824,8	891,0	967,9
Input power	kW	105,3	121,3	136,2	155,8	172,9	180,0	191,0	202,4	216,1	228,4	242,4	263,0	288,2	311,5
Cooling total input current	A	186,0	212,0	232,0	266,0	297,0	313,0	332,0	353,0	374,0	392,0	413,0	443,0	477,0	523,0
EER	W/W	3,12	3,12	3,15	3,16	3,07	3,16	3,08	3,15	3,09	3,04	3,04	3,14	3,09	3,11
Water flow rate system side	l/h	56372	65027	73755	84508	91287	97691	101204	109611	114731	119419	126414	141715	153088	166304
Pressure drop system side	kPa	66	81	88	83	96	93	99	106	88	95	87	85	99	117
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	207,3	213,5	254,5	275,3	278,0	330,7	333,2	373,6	391,6	395,4	406,8	452,9	456,9	499,3
Input power	kW	19,5	19,5	24,5	26,5	26,5	32,7	32,8	37,6	38,0	38,0	38,1	42,0	42,0	45,8
Free cooling total input current	A	34,0	34,0	42,0	45,0	46,0	57,0	57,0	65,0	66,0	65,0	65,0	71,0	70,0	77,0
EER	W/W	10,62	10,94	10,40	10,40	10,49	10,10	10,17	9,94	10,31	10,41	10,67	10,79	10,88	10,90

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G															
Cooling performance chiller operation (1)															
Cooling capacity	kW	326,9	376,7	427,6	488,8	527,6	565,4	585,6	634,6	664,0	691,7	732,5	820,3	884,7	961,8
Input power	kW	106,3	122,5	137,6	157,4	174,8	181,8	193,0	204,4	218,3	231,1	245,7	266,0	291,3	314,8
Cooling total input current	A	187,0	213,0	234,0	269,0	300,0	316,0	335,0	356,0	377,0	396,0	418,0	447,0	482,0	528,0
EER	W/W	3,08	3,07	3,11	3,10	3,02	3,11	3,03	3,10	3,04	2,99	2,98	3,08	3,04	3,06
Water flow rate system side	l/h	56168	64715	73458	83974	90643	97138	100613	109029	114089	118834	125850	140933	152003	165249
Pressure drop system side	kPa	39	45	58	72	84	59	63	64	70	76	78	51	59	72
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	219,8	228,8	272,7	291,1	297,0	349,6	353,1	394,9	414,0	418,2	430,6	479,9	489,3	530,2
Input power	kW	19,2	19,2	24,1	26,0	26,0	32,1	32,1	36,9	37,3	37,3	37,4	41,3	41,3	45,1
Free cooling total input current	A	34,0	33,0	41,0	44,0	45,0	56,0	56,0	64,0	64,0	64,0	64,0	69,0	68,0	75,0
EER	W/W	11,43	11,90	11,30	11,20	11,42	10,89	11,00	10,71	11,11	11,22	11,51	11,63	11,86	11,77

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - U

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1031,1	1095,0	1181,2	1208,8	1265,8	1326,2	1386,6	1491,1	1554,3	1666,6	1752,7	-	-
Input power	kW	332,0	358,4	379,0	405,3	426,4	440,0	453,5	478,4	498,9	549,8	570,4	-	-
Cooling total input current	A	564,0	605,0	639,0	682,0	718,0	746,0	774,0	812,0	846,0	926,0	954,0	-	-
EER	W/W	3,11	3,06	3,12	2,98	2,97	3,01	3,06	3,12	3,12	3,03	3,07	-	-
Water flow rate system side	l/h	177155	188137	202935	207692	217477	227858	238239	256194	267046	286336	301135	-	-
Pressure drop system side	kPa	119	137	138	145	104	124	113	117	119	137	138	-	-
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	565,8	570,9	615,3	617,2	681,2	721,6	762,0	777,2	843,7	865,6	910,0	-	-
Input power	kW	54,1	54,1	57,9	58,0	67,5	71,3	75,2	72,3	80,6	83,9	87,7	-	-
Free cooling total input current	A	92,0	91,0	98,0	97,0	114,0	121,0	128,0	123,0	137,0	141,0	147,0	-	-
EER	W/W	10,46	10,55	10,62	10,65	10,10	10,12	10,14	10,75	10,47	10,32	10,38	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1025,3	1088,1	1174,0	1200,9	1257,9	1318,5	1379,2	1482,0	1545,4	1655,7	1741,6	-	-
Input power	kW	335,5	362,4	383,1	409,7	430,7	444,3	457,9	483,4	504,1	556,1	576,8	-	-
Cooling total input current	A	569,0	611,0	645,0	688,0	725,0	752,0	780,0	819,0	854,0	936,0	963,0	-	-
EER	W/W	3,06	3,00	3,06	2,93	2,92	2,97	3,01	3,07	3,07	2,98	3,02	-	-
Water flow rate system side	l/h	176150	186945	201699	206322	216119	226541	236963	254617	265517	284475	299229	-	-
Pressure drop system side	kPa	81	94	90	94	63	70	75	85	92	103	113	-	-
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	600,3	606,3	654,1	660,5	720,3	764,2	808,1	827,1	897,3	920,4	968,2	-	-
Input power	kW	53,1	53,1	57,0	57,0	66,1	69,9	73,8	71,0	79,1	82,2	86,0	-	-
Free cooling total input current	A	90,0	90,0	96,0	96,0	111,0	118,0	126,0	120,0	134,0	138,0	144,0	-	-
EER	W/W	11,30	11,41	11,48	11,60	10,90	10,93	10,95	11,64	11,34	11,20	11,25	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - N

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B															
Cooling performance chiller operation (1)															
Cooling capacity	kW	326,0	376,5	424,5	486,3	525,3	559,6	579,7	626,1	655,1	682,6	723,4	811,7	888,8	960,7
Input power	kW	103,6	119,3	134,4	153,8	170,9	178,3	189,4	200,8	214,8	227,9	242,9	263,8	283,0	307,1
Cooling total input current	A	175,0	200,0	218,0	253,0	283,0	297,0	317,0	335,0	357,0	376,0	399,0	427,0	452,0	497,0
EER	W/W	3,15	3,16	3,16	3,16	3,07	3,14	3,06	3,12	3,05	3,00	2,98	3,08	3,14	3,13
Water flow rate system side	l/h	56017	64687	72926	83554	90260	96150	99597	107568	112546	117285	124287	139460	152704	165051
Pressure drop system side	kPa	54	65	67	83	96	92	98	79	86	93	86	84	100	106
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	220,8	232,6	273,9	282,2	286,3	327,6	330,8	378,1	381,7	385,4	396,5	442,9	482,6	528,7
Input power	kW	18,3	19,6	26,5	26,5	27,4	30,6	30,6	33,8	33,8	33,8	34,0	40,8	43,6	46,5
Free cooling total input current	A	31,0	33,0	43,0	44,0	45,0	51,0	51,0	56,0	56,0	56,0	56,0	66,0	70,0	75,0
EER	W/W	12,04	11,88	10,32	10,63	10,44	10,71	10,82	11,17	11,28	11,39	11,66	10,86	11,07	11,37

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G															
Cooling performance chiller operation (1)															
Cooling capacity	kW	325,1	375,2	422,9	483,6	522,0	556,8	576,7	623,1	651,8	679,6	720,3	807,0	882,8	955,1
Input power	kW	104,5	120,4	135,6	155,5	172,9	180,2	191,5	202,9	217,2	230,8	246,4	267,1	286,2	310,3
Cooling total input current	A	176,0	201,0	220,0	255,0	286,0	300,0	320,0	338,0	360,0	381,0	404,0	431,0	457,0	501,0
EER	W/W	3,11	3,12	3,12	3,11	3,02	3,09	3,01	3,07	3,00	2,94	2,92	3,02	3,09	3,08
Water flow rate system side	l/h	55859	64457	72661	83082	89692	95662	99076	107055	111979	116764	123748	138653	151682	164102
Pressure drop system side	kPa	39	46	36	44	51	58	62	40	43	47	46	50	60	72
Cooling performances with free-cooling glycol-free (2)															
Cooling capacity	kW	230,8	243,4	284,6	294,0	301,4	342,3	345,8	395,2	403,2	407,2	414,7	463,0	509,0	554,0
Input power	kW	18,0	19,2	25,6	25,9	26,7	29,9	29,9	33,1	33,1	33,1	33,3	39,8	42,6	45,6
Free cooling total input current	A	30,0	32,0	42,0	43,0	44,0	50,0	50,0	55,0	55,0	55,0	55,0	64,0	68,0	74,0
EER	W/W	12,79	12,66	10,98	11,34	11,27	11,44	11,56	11,93	12,17	12,29	12,46	11,62	11,94	12,15

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

NSM - N

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B														
Cooling performance chiller operation (1)														
Cooling capacity	kW	1004,9	1098,6	1161,7	1218,0	1274,5	1318,1	1361,7	1478,4	-	-	-	-	-
Input power	kW	332,9	349,5	369,2	392,7	416,2	433,5	450,9	472,0	-	-	-	-	-
Cooling total input current	A	544,0	570,0	600,0	639,0	677,0	708,0	740,0	771,0	-	-	-	-	-
EER	W/W	3,02	3,14	3,15	3,10	3,06	3,04	3,02	3,13	-	-	-	-	-
Water flow rate system side	l/h	172652	188754	199587	209274	218966	226456	233947	254013	-	-	-	-	-
Pressure drop system side	kPa	116	112	104	109	72	78	81	105	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	533,7	625,3	661,6	712,1	756,1	767,1	770,8	815,0	-	-	-	-	-
Input power	kW	46,5	57,3	61,2	64,4	67,7	67,7	67,7	73,9	-	-	-	-	-
Free cooling total input current	A	76,0	93,0	99,0	105,0	110,0	111,0	111,0	121,0	-	-	-	-	-
EER	W/W	11,47	10,91	10,82	11,05	11,17	11,34	11,39	11,03	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

Size		4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G														
Cooling performance chiller operation (1)														
Cooling capacity	kW	998,8	1092,7	1155,6	1211,7	1267,7	1310,9	1354,2	1470,0	-	-	-	-	-
Input power	kW	336,7	353,2	373,0	396,5	420,0	437,6	455,3	476,9	-	-	-	-	-
Cooling total input current	A	550,0	575,0	606,0	644,0	682,0	714,0	746,0	778,0	-	-	-	-	-
EER	W/W	2,97	3,09	3,10	3,06	3,02	3,00	2,97	3,08	-	-	-	-	-
Water flow rate system side	l/h	171604	187733	198553	208183	217806	225235	232663	252555	-	-	-	-	-
Pressure drop system side	kPa	79	67	76	76	41	44	47	72	-	-	-	-	-
Cooling performances with free-cooling glycol-free (2)														
Cooling capacity	kW	559,3	653,2	691,6	748,6	798,5	804,6	806,4	852,3	-	-	-	-	-
Input power	kW	45,6	56,1	59,8	63,1	66,3	66,2	66,3	72,3	-	-	-	-	-
Free cooling total input current	A	74,0	91,0	97,0	102,0	108,0	108,0	109,0	118,0	-	-	-	-	-
EER	W/W	12,27	11,65	11,56	11,87	12,05	12,15	12,17	11,79	-	-	-	-	-

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) System side water heat exchanger 12 °C / * °C ; External air 2 °C; glycol hydraulic circuit 30%; primary hydraulic circuit glycol 0%.

ENERGY INDICES (REG. 2016/2281 EU)

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: B																
SEPR - (EN14825: 2018) High temperature with standard fans (1)																
SEPR	A	W/W	6,16	5,97	5,71	5,54	5,80	5,60	5,52	5,67	5,57	5,55	5,52	5,72	5,57	5,66
	E	W/W	6,18	5,87	6,03	5,79	5,54	5,86	5,65	5,80	5,67	5,56	5,51	5,72	5,57	5,64
	N	W/W	6,43	6,20	6,09	5,96	5,71	5,94	5,78	6,01	5,85	5,70	5,61	5,76	5,86	5,88
	U	W/W	6,20	6,02	6,11	6,09	5,85	6,00	5,84	5,96	5,92	5,78	5,71	5,96	5,82	5,86
SEPR - (EN14825: 2018) High temperature with inverter fans (1)																
SEPR	A	W/W	6,16	5,97	5,71	5,54	5,80	5,60	5,52	5,67	5,57	5,55	5,52	5,72	5,57	5,66
	E	W/W	6,18	5,87	6,03	5,79	5,54	5,86	5,65	5,80	5,67	5,56	5,51	5,72	5,57	5,64
	N	W/W	6,43	6,20	6,09	5,96	5,71	5,94	5,78	6,01	5,85	5,70	5,61	5,76	5,86	5,88
	U	W/W	6,20	6,02	6,11	6,09	5,85	6,00	5,84	5,96	5,92	5,78	5,71	5,96	5,82	5,86

(1) Calculation performed with FIXED water flow rate.

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Model: G																
SEPR - (EN14825: 2018) High temperature with standard fans (1)																
SEPR	A	W/W	6,24	6,04	5,75	5,52	5,79	5,58	5,51	5,71	5,62	5,53	5,51	5,64	5,54	5,71
	E	W/W	6,21	5,91	6,07	5,76	5,51	5,87	5,66	5,84	5,71	5,53	5,51	5,71	5,56	5,66
	N	W/W	6,46	6,23	6,14	6,02	5,77	5,99	5,82	6,08	5,93	5,77	5,64	5,78	5,91	5,91
	U	W/W	6,27	6,11	6,19	6,07	5,83	6,05	5,89	6,04	5,93	5,78	5,68	6,01	5,88	5,92
SEPR - (EN14825: 2018) High temperature with inverter fans (1)																
SEPR	A	W/W	6,24	6,04	5,75	5,52	5,79	5,58	5,51	5,71	5,62	5,53	5,51	5,64	5,54	5,71
	E	W/W	6,21	5,91	6,07	5,76	5,51	5,87	5,66	5,84	5,71	5,53	5,51	5,71	5,56	5,66
	N	W/W	6,46	6,23	6,14	6,02	5,77	5,99	5,82	6,08	5,93	5,77	5,64	5,78	5,91	5,91
	U	W/W	6,27	6,11	6,19	6,07	5,83	6,05	5,89	6,04	5,93	5,78	5,68	6,01	5,88	5,92

(1) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: B															
SEPR - (EN14825: 2018) High temperature with standard fans (1)															
SEPR	A	W/W	5,52	5,60	5,53	5,53	5,52	5,52	5,51	5,73	5,60	5,77	5,64	5,52	5,58
	E	W/W	5,61	5,52	5,59	5,54	5,52	5,51	5,60	5,83	5,85	5,55	5,61	-	-
	N	W/W	5,69	5,85	5,82	5,93	5,94	5,87	5,81	6,05	-	-	-	-	-
	U	W/W	5,86	5,72	5,81	5,66	5,62	5,63	5,77	6,04	6,05	5,78	5,85	-	-
SEPR - (EN14825: 2018) High temperature with inverter fans (1)															
SEPR	A	W/W	5,52	5,60	5,53	5,53	5,52	5,52	5,51	5,73	5,60	5,77	5,64	5,52	5,58
	E	W/W	5,61	5,52	5,59	5,54	5,52	5,51	5,60	5,83	5,85	5,55	5,61	-	-
	N	W/W	5,69	5,85	5,82	5,93	5,94	5,87	5,81	6,05	-	-	-	-	-
	U	W/W	5,86	5,72	5,81	5,66	5,62	5,63	5,77	6,04	6,05	5,78	5,85	-	-

(1) Calculation performed with FIXED water flow rate.

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Model: G															
SEPR - (EN14825: 2018) High temperature with standard fans (1)															
SEPR	A	W/W	5,57	5,64	5,57	5,53	5,51	5,50	5,51	5,75	5,64	5,77	5,66	5,51	5,58
	E	W/W	5,65	5,52	5,61	5,55	5,49	5,53	5,62	5,81	5,87	5,51	5,58	-	-
	N	W/W	5,72	5,90	5,84	5,97	5,99	5,91	5,84	6,08	-	-	-	-	-
	U	W/W	5,91	5,76	5,87	5,73	5,67	5,71	5,82	6,09	6,09	5,81	5,87	-	-
SEPR - (EN14825: 2018) High temperature with inverter fans (1)															
SEPR	A	W/W	5,57	5,64	5,57	5,53	5,51	5,50	5,51	5,75	5,64	5,77	5,66	5,51	5,58
	E	W/W	5,65	5,52	5,61	5,55	5,49	5,53	5,62	5,81	5,87	5,51	5,58	-	-
	N	W/W	5,72	5,90	5,84	5,97	5,99	5,91	5,84	6,08	-	-	-	-	-
	U	W/W	5,91	5,76	5,87	5,73	5,67	5,71	5,82	6,09	6,09	5,81	5,87	-	-

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Electric data																
Maximum current (FLA)	A	A	243,9	271,9	299,1	332,5	374,4	395,7	417,0	450,2	474,9	474,9	474,9	531,4	579,4	635,9
	E,U	A	243,9	271,9	307,6	341,0	374,4	404,2	425,5	458,7	483,4	483,4	483,4	539,9	587,9	644,4
	N	A	252,4	280,4	316,1	349,5	382,9	412,7	434,0	467,2	491,9	491,9	491,9	548,4	604,9	667,2
Peak current (LRA)	A	A	265,5	307,3	350,2	388,2	419,8	466,8	484,0	519,5	529,4	529,4	529,4	661,9	701,8	831,3
	E,U	A	265,5	307,3	358,7	396,7	419,8	475,3	492,5	528,0	537,9	537,9	537,9	670,4	710,3	839,8
	N	A	274,0	315,8	367,2	405,2	428,3	483,8	501,0	536,5	546,4	546,4	546,4	678,9	727,3	862,6

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Electric data															
Maximum current (FLA)	A	A	683,9	731,4	770,4	813,4	864,9	913,2	947,2	980,7	1028,7	1123,7	1162,7	1300,2	1419,2
	E,U	A	700,9	739,9	793,2	836,2	887,7	930,2	972,7	997,7	1054,2	1132,2	1179,7	-	-
	N	A	715,2	771,2	818,7	870,2	921,7	955,7	989,7	1023,2	-	-	-	-	-
Peak current (LRA)	A	A	858,2	930,7	953,4	1108,4	1163,9	1290,2	1287,2	1069,4	1096,3	1200,0	1222,7	1480,2	1603,2
	E,U	A	875,2	939,2	976,2	1131,2	1186,7	1307,2	1312,7	1086,4	1121,8	1208,5	1239,7	-	-
	N	A	889,5	970,5	1001,7	1165,2	1220,7	1332,7	1329,7	1111,9	-	-	-	-	-

GENERAL TECHNICAL DATA

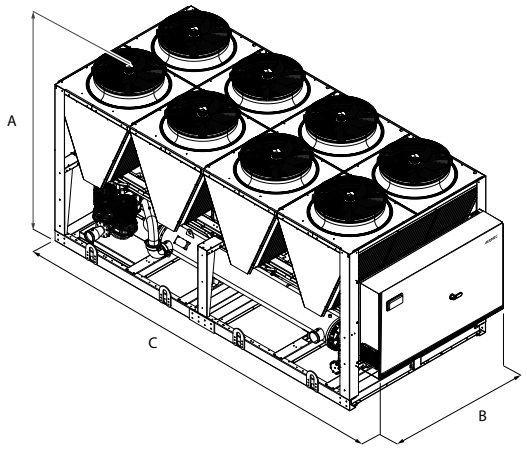
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Compressor																
Type	A,E,N,U	type	Bi-vite													
Compressor regulation	A,E,N,U	Type	On-Off													
Number	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type	R134a													
System side heat exchanger																
Type	A,E,N,U	type	Shell and tube													
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,E,N,U	Type	Grooved joints													
Fan																
Type	A,E,N,U	type	Axial													
Number	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14	16
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16	18
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20	22
Air flow rate	A	m^3/h	116000	116000	116000	116000	145000	145000	145000	174000	174000	174000	174000	203000	203000	232000
	E	m^3/h	89600	89600	112000	112000	112000	134400	134400	156800	156800	156800	156800	179200	179200	201600
	N	m^3/h	112000	112000	134400	134400	134400	156800	156800	179200	179200	179200	179200	201600	224000	246400
	U	m^3/h	116000	116000	145000	145000	145000	174000	174000	203000	203000	203000	203000	232000	232000	261000
Sound data calculated in cooling mode (1)																
Sound power level	A	dB(A)	98,0	98,0	98,0	98,0	99,0	99,0	99,0	99,7	99,7	99,7	99,7	100,4	100,4	101,1
	E	dB(A)	91,0	91,0	91,7	91,9	92,1	92,6	92,5	93,0	93,0	93,0	93,0	93,7	93,9	94,6
	N	dB(A)	91,7	91,7	92,3	92,5	92,6	93,1	93,0	93,5	93,5	93,5	93,5	94,1	94,6	95,2
	U	dB(A)	98,0	98,0	98,9	99,0	99,0	99,7	99,7	100,4	100,4	100,4	100,4	100,9	101,0	101,5
Sound pressure level (10 m)	A	dB(A)	65,6	65,6	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,1	67,1	67,6	67,7	68,2
	E	dB(A)	58,6	58,6	59,2	59,4	59,5	59,9	59,9	60,3	60,3	60,3	60,3	60,8	61,0	61,6
	N	dB(A)	59,2	59,2	59,7	59,9	60,0	60,3	60,3	60,6	60,6	60,6	60,6	61,1	61,5	62,0
	U	dB(A)	65,6	65,6	66,4	66,4	66,4	67,1	67,1	67,6	67,6	67,6	67,6	68,1	68,1	68,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Compressor															
Type	A,E,N,U	type							Bi-vite						
Compressor regulation	A,E,N,U	Type							On-Off						
Number	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Circuits	A	no.	2	2	2	2	2	2	2	3	3	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	3	3	3	3	-	-
	N	no.	2	2	2	2	2	2	2	3	-	-	-	-	-
Refrigerant	A,E,N,U	type							R134a						
System side heat exchanger															
Type	A,E,N,U	type							Shell and tube						
Number	A	no.	1	1	1	1	1	1	1	2	2	2	2	2	2
	E,U	no.	1	1	1	1	2	2	2	2	2	2	2	-	-
	N	no.	1	2	2	2	2	2	2	2	-	-	-	-	-
Connections (in/out)	A,E,N,U	Type							Grooved joints						
Fan															
Type	A,E,N,U	type							Axial						
Number	A	no.	16	18	18	18	20	22	22	24	24	28	28	30	34
	E,U	no.	20	20	22	22	24	26	28	28	30	30	32	-	-
	N	no.	22	26	28	30	32	32	32	34	-	-	-	-	-
Air flow rate	A	m^3/h	232000	261000	261000	261000	290000	319000	319000	348000	348000	406000	406000	435000	493000
	E	m^3/h	224000	224000	246400	246400	268800	291200	313600	313600	336000	336000	358400	-	-
	N	m^3/h	246400	291200	313600	336000	358400	358400	358400	380800	-	-	-	-	-
	U	m^3/h	290000	290000	319000	319000	348000	377000	406000	406000	435000	435000	464000	-	-
Sound data calculated in cooling mode (1)															
Sound power level	A	dB(A)	101,1	101,6	101,6	101,6	102,1	102,5	102,5	102,7	102,8	103,4	103,4	103,7	104,2
	E	dB(A)	95,2	95,2	95,4	95,6	96,0	96,2	96,4	96,0	96,5	96,4	96,6	-	-
	N	dB(A)	95,5	96,0	96,2	96,6	96,9	96,9	96,9	96,7	-	-	-	-	-
	U	dB(A)	102,0	102,0	102,4	102,4	102,8	103,1	103,4	103,4	103,7	103,7	103,9	-	-
Sound pressure level (10 m)	A	dB(A)	68,2	68,6	68,6	68,6	69,0	69,2	69,2	69,4	69,4	69,8	69,8	70,0	70,4
	E	dB(A)	62,1	62,0	62,2	62,3	62,7	62,8	62,9	62,5	62,8	62,8	62,8	-	-
	N	dB(A)	62,3	62,5	62,6	62,9	63,1	63,1	63,1	62,8	-	-	-	-	-
	U	dB(A)	68,9	68,9	69,1	69,2	69,5	69,7	69,9	69,8	70,0	70,0	70,2	-	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602	3902
Dimensions and weights																
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330	9520
	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520	10710
	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900	13090

Size			4202	4502	4802	5202	5602	6002	6402	6503	6703	6903	7203	8403	9603
Dimensions and weights															
A	A	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
	E,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	-	-	-	-	-
B	A	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	E,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	-	-	-	-	-
C	A	mm	9520	10710	10710	10710	11900	13090	13090	14280	14280	16660	16660	17850	20230
	E,U	mm	11900	11900	13090	13090	14280	15470	16660	16660	17850	17850	19040	-	-
	N	mm	13090	15470	16660	17850	19040	19040	19040	20230	-	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately. For more information, please refer to the technical manual and / or installation.

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NSM HWT F

Air-water chiller with free-cooling

Cooling capacity 306 ÷ 2001 kW

- **High efficiency also at partial loads**
- **Microchannel coils**
- **Suitable for Data Center applications**
- **Water produced up to 30 °C**
- **Night mode**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

These are flexible and reliable units which adapt to the most diverse load conditions thanks to the precise design and the use of steady speed compressors together with inverter-controlled variable speed compressors guaranteeing a high energy efficiency level both at full and partial load.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Water produced from 5 °C ÷ 30 °C.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.*

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

Integrated hydronic kit

To obtain a solution that allows you to save money and to facilitate installation. These units can be configured with an integrated hydronic system.
The kit contains the main hydraulic components, and is available in various configurations with a single pump or a standby pump too, so the customer can choose the right useful head.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night Mode:** it is possible to set a silenced operation profile. Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 3: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured

as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger
AK: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
AER485P1 x n° 2 (1)	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
AER485P1 x n° 2 (1)	A,E,N,U	•	•	•	•	•	•	•	•				
AER485P1 x n° 3 (1)	A,E,N,U									•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A, E, U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NSM**
4,5,6,7		**Size** 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6903, 7203, 8403, 9603
8		**Operating field (1)**
	W	Electronic thermostatic expansion valve
9		**Model**
	F	Free-cooling
	P	Free-cooling plus (2)
10		**Heat recovery**
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils / free-cooling coils**
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper (2)
	S	Copper-Tinned copper / Copper -Tinned copper (2)
	V	Copper-painted alumimium / Copper-painted alumimium (2)
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
14		**Power supply**
	°	400V ~ 3 50Hz
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (3)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (3)
		Kit with 2 pumps
	TF	Double pump F
	TG	Double pump G
	TH	Double pump H
	TI	Double pump I
	TJ	Double pump J (3)

(1) Water produced from 5 °C ÷ 30 °C
(2) The Free-Cooling Plus "P" models are only compatible with"°" ed "0"
(3) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NSM HWT FA-PA

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: F														
Cooling performance chiller operation														
Cooling capacity	kW	306,0	351,0	400,0	441,0	479,0	505,0	546,0	589,0	638,0	653,0	687,0	753,0	792,0
Input power	kW	82,0	95,0	109,0	118,0	125,0	135,0	147,0	155,0	167,0	172,0	179,0	192,0	205,0
Cooling total input current	A	146,0	166,0	187,0	200,0	208,0	224,0	242,0	258,0	277,0	290,0	306,0	327,0	348,0
EER	W/W	3,75	3,69	3,69	3,73	3,83	3,73	3,71	3,79	3,81	3,80	3,84	3,92	3,86
Water flow rate system side	l/h	52650	60360	68820	75940	82440	86790	93850	101330	109680	112330	118100	129500	136230
Pressure drop system side	kPa	60	80	95	76	89	99	116	85	91	96	84	93	103
Cooling performances with free-cooling														
Cooling capacity	kW	336,0	351,0	363,0	370,0	449,0	454,0	462,0	542,0	551,0	554,0	559,0	644,0	651,0
Input power	kW	19,3	19,3	19,3	19,3	24,1	24,1	24,1	28,9	28,9	28,9	28,9	33,7	33,7
Free cooling total input current	A	30,0	30,0	30,0	30,0	37,6	37,6	37,6	45,1	45,1	45,1	45,1	52,6	52,6
EER	W/W	17,43	18,20	18,82	19,20	18,63	18,86	19,16	18,74	19,06	19,15	19,32	19,11	19,29
Water flow rate system side	l/h	52650	60360	68820	75940	82440	86790	93850	101330	109680	112330	118100	129500	136230
Pressure drop system side	kPa	87	115	139	129	133	147	171	128	141	147	141	146	161

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: P														
Cooling performance chiller operation														
Cooling capacity	kW	305,0	349,0	398,0	439,0	477,0	502,0	543,0	587,0	635,0	650,0	683,0	749,0	788,0
Input power	kW	82,0	96,0	109,0	120,0	126,0	136,0	148,0	157,0	169,0	174,0	181,0	194,0	207,0
Cooling total input current	A	147,0	167,0	188,0	201,0	210,0	226,0	244,0	260,0	279,0	292,0	308,0	330,0	351,0
EER	W/W	3,70	3,64	3,64	3,68	3,78	3,68	3,66	3,74	3,76	3,74	3,78	3,86	3,80
Water flow rate system side	l/h	52410	60090	68480	75580	82100	86410	93420	100950	109190	111820	117510	128910	135580
Pressure drop system side	kPa	59	79	94	75	89	98	115	84	90	95	83	92	102
Cooling performances with free-cooling														
Cooling capacity	kW	361,0	378,0	391,0	399,0	484,0	490,0	497,0	584,0	594,0	597,0	602,0	694,0	701,0
Input power	kW	19,7	19,7	19,7	19,7	24,6	24,6	24,6	29,5	29,5	29,5	29,5	34,4	34,4
Free cooling total input current	A	30,6	30,6	30,6	30,6	38,2	38,2	38,2	45,9	45,9	45,9	45,9	53,5	53,5
EER	W/W	18,35	19,22	19,89	20,29	19,69	19,93	20,25	19,81	20,15	20,24	20,41	20,19	20,38
Water flow rate system side	l/h	52410	60090	68480	75580	82100	86410	93420	100950	109190	111820	117510	128910	135580
Pressure drop system side	kPa	86	114	138	128	131	145	169	127	139	146	139	145	160

NSM HWT FA-PA

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: F													
Cooling performance chiller operation													
Cooling capacity	kW	853,0	882,0	959,0	1014,0	1082,0	1169,0	1262,0	1327,0	1476,0	1531,0	1758,0	2001,0
Input power	kW	216,0	228,0	244,0	260,0	281,0	295,0	319,0	343,0	373,0	388,0	442,0	512,0
Cooling total input current	A	362,0	377,0	416,0	453,0	478,0	494,0	531,0	567,0	646,0	683,0	740,0	854,0
EER	W/W	3,95	3,87	3,92	3,90	3,86	3,97	3,95	3,87	3,96	3,94	3,97	3,91
Water flow rate system side	l/h	146650	151620	165010	174350	186190	201150	217040	228220	253930	263260	302310	344170
Pressure drop system side	kPa	69	74	91	101	94	110	130	144	116	116	117	138
Cooling performances with free-cooling													
Cooling capacity	kW	735,0	740,0	827,0	836,0	845,0	935,0	1025,0	1033,0	1284,0	1293,0	1402,0	1590,0
Input power	kW	38,5	38,5	43,4	43,4	43,4	48,2	53,0	53,0	67,5	67,5	72,3	81,9
Free cooling total input current	A	60,1	60,1	67,6	67,6	67,6	75,1	82,6	82,6	105,1	105,1	112,7	127,7
EER	W/W	19,07	19,19	19,07	19,27	19,48	19,39	19,33	19,49	19,03	19,17	19,40	19,42
Water flow rate system side	l/h	146650	151620	165010	174350	186190	201150	217040	228220	253930	263260	302310	344170
Pressure drop system side	kPa	119	127	142	158	159	173	194	213	165	165	179	207

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: P													
Cooling performance chiller operation													
Cooling capacity	kW	849,0	878,0	955,0	1009,0	1077,0	1164,0	1256,0	1320,0	1470,0	1524,0	1749,0	1991,0
Input power	kW	218,0	230,0	247,0	262,0	284,0	298,0	322,0	346,0	377,0	392,0	447,0	517,0
Cooling total input current	A	365,0	381,0	420,0	456,0	482,0	498,0	536,0	571,0	652,0	688,0	747,0	861,0
EER	W/W	3,90	3,81	3,87	3,84	3,80	3,91	3,90	3,81	3,90	3,89	3,91	3,85
Water flow rate system side	l/h	146000	150930	164290	173550	185230	200120	215990	227050	252860	262120	300800	342450
Pressure drop system side	kPa	69	73	90	100	93	109	129	142	115	115	115	136
Cooling performances with free-cooling													
Cooling capacity	kW	792,0	797,0	891,0	900,0	910,0	1007,0	1104,0	1113,0	1384,0	1393,0	1510,0	1713,0
Input power	kW	39,3	39,3	44,2	44,2	44,2	49,1	54,0	54,0	68,8	68,8	73,7	83,5
Free cooling total input current	A	61,2	61,2	68,8	68,8	68,8	76,5	84,1	84,1	107,0	107,0	114,7	130,0
EER	W/W	20,16	20,28	20,16	20,36	20,58	20,49	20,42	20,59	20,12	20,25	20,49	20,51
Water flow rate system side	l/h	146000	150930	164290	173550	185230	200120	215990	227050	252860	262120	300800	342450
Pressure drop system side	kPa	118	126	141	156	157	172	192	211	164	164	178	205

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling: System side water heat exchanger 25 °C; External air 12°C

NSM HWT FE-PE

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: F														
Cooling performance chiller operation														
Cooling capacity	kW	315,0	362,0	415,0	456,0	478,0	524,0	551,0	599,0	626,0	641,0	667,0	735,0	772,0
Input power	kW	75,0	91,0	101,0	112,0	120,0	127,0	138,0	145,0	156,0	161,0	169,0	178,0	192,0
Cooling total input current	A	134,0	158,0	175,0	189,0	199,0	210,0	227,0	240,0	258,0	272,0	288,0	303,0	325,0
EER	W/W	4,19	3,97	4,09	4,07	3,98	4,13	4,00	4,12	4,02	3,97	3,95	4,13	4,03
Water flow rate system side	l/h	54220	62220	71300	78430	82240	90170	94830	102950	107680	110230	114670	126390	132800
Pressure drop system side	kPa	42	49	64	76	85	61	66	68	74	79	80	51	58
Cooling performances with free-cooling														
Cooling capacity	kW	267,0	273,0	337,0	342,0	344,0	408,0	411,0	474,0	478,0	479,0	482,0	548,0	551,0
Input power	kW	6,4	6,4	7,9	7,9	7,9	9,5	9,5	11,1	11,1	11,1	11,1	12,7	12,7
Free cooling total input current	A	9,4	9,4	11,8	11,8	11,8	14,1	14,1	16,5	16,5	16,5	16,5	18,8	18,8
EER	W/W	41,99	43,01	42,41	43,05	43,31	42,79	43,10	42,64	42,94	43,08	43,29	43,10	43,35
Water flow rate system side	l/h	54220	62220	71300	78430	82240	90170	94830	102950	107680	110230	114670	126390	132800
Pressure drop system side	kPa	71	86	97	115	127	95	104	102	112	118	122	89	99

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: P														
Cooling performance chiller operation														
Cooling capacity	kW	314,0	360,0	412,0	453,0	474,0	521,0	548,0	595,0	622,0	637,0	662,0	730,0	767,0
Input power	kW	76,0	92,0	102,0	113,0	122,0	128,0	139,0	147,0	157,0	163,0	170,0	180,0	194,0
Cooling total input current	A	134,0	159,0	176,0	190,0	201,0	211,0	229,0	242,0	260,0	274,0	291,0	306,0	328,0
EER	W/W	4,14	3,92	4,03	4,00	3,90	4,07	3,93	4,06	3,96	3,90	3,88	4,06	3,95
Water flow rate system side	l/h	53990	61890	70890	77860	81600	89640	94230	102360	107020	109540	113890	125570	131860
Pressure drop system side	kPa	42	49	63	75	83	60	65	67	73	78	79	51	57
Cooling performances with free-cooling														
Cooling capacity	kW	285,0	292,0	360,0	365,0	367,0	435,0	438,0	506,0	509,0	511,0	513,0	584,0	587,0
Input power	kW	6,5	6,5	8,1	8,1	8,1	9,7	9,7	11,3	11,3	11,3	11,3	12,9	12,9
Free cooling total input current	A	9,6	9,6	11,9	11,9	11,9	14,3	14,3	16,7	16,7	16,7	16,7	19,1	19,1
EER	W/W	44,05	45,10	44,49	45,14	45,38	44,88	45,19	44,73	45,03	45,17	45,36	45,18	45,42
Water flow rate system side	l/h	53990	61890	70890	77860	81600	89640	94230	102360	107020	109540	113890	125570	131860
Pressure drop system side	kPa	70	86	96	113	125	94	102	101	110	116	120	88	98

NSM HWT FE-PE

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: F													
Cooling performance chiller operation													
Cooling capacity	kW	823,0	870,0	932,0	1011,0	1070,0	1152,0	1226,0	1300,0	1423,0	1502,0	-	-
Input power	kW	202,0	210,0	228,0	241,0	260,0	275,0	296,0	318,0	350,0	364,0	-	-
Cooling total input current	A	339,0	348,0	388,0	421,0	443,0	460,0	493,0	526,0	601,0	631,0	-	-
EER	W/W	4,07	4,15	4,09	4,19	4,12	4,19	4,14	4,09	4,07	4,13	-	-
Water flow rate system side	l/h	141610	149590	160240	173870	184060	198120	210870	223620	244770	258380	-	-
Pressure drop system side	kPa	69	78	91	86	94	65	81	81	105	105	-	-
Cooling performances with free-cooling													
Cooling capacity	kW	616,0	680,0	686,0	753,0	759,0	826,0	893,0	960,0	1031,0	1099,0	-	-
Input power	kW	14,3	15,9	15,9	17,5	17,5	19,1	20,7	22,3	23,8	25,4	-	-
Free cooling total input current	A	21,2	23,5	23,5	25,9	25,9	28,2	30,6	32,9	35,3	37,6	-	-
EER	W/W	43,07	42,76	43,17	43,10	43,39	43,32	43,24	43,16	43,27	43,21	-	-
Water flow rate system side	l/h	141610	149590	160240	173870	184060	198120	210870	223620	244770	258380	-	-
Pressure drop system side	kPa	107	114	133	128	140	106	121	121	150	150	-	-

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: P													
Cooling performance chiller operation													
Cooling capacity	kW	818,0	865,0	926,0	1005,0	1063,0	1144,0	1218,0	1292,0	1414,0	1493,0	-	-
Input power	kW	204,0	212,0	230,0	244,0	263,0	278,0	300,0	321,0	354,0	368,0	-	-
Cooling total input current	A	342,0	351,0	392,0	425,0	448,0	464,0	497,0	531,0	607,0	636,0	-	-
EER	W/W	4,00	4,08	4,02	4,12	4,04	4,12	4,07	4,02	3,99	4,06	-	-
Water flow rate system side	l/h	140680	148750	159230	172870	182790	196750	209470	222190	243180	256800	-	-
Pressure drop system side	kPa	68	77	90	85	93	64	80	80	104	104	-	-
Cooling performances with free-cooling													
Cooling capacity	kW	657,0	725,0	732,0	803,0	808,0	880,0	952,0	1024,0	1099,0	1171,0	-	-
Input power	kW	14,5	16,2	16,2	17,8	17,8	19,4	21,0	22,6	24,2	25,9	-	-
Free cooling total input current	A	21,5	23,9	23,9	26,3	26,3	28,7	31,0	33,4	35,8	38,2	-	-
EER	W/W	45,16	44,85	45,26	45,19	45,45	45,40	45,32	45,24	45,35	45,30	-	-
Water flow rate system side	l/h	140680	148750	159230	172870	182790	196750	209470	222190	243180	256800	-	-
Pressure drop system side	kPa	106	113	131	127	139	104	119	120	148	149	-	-

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling: System side water heat exchanger 25 °C; External air 12°C

NSM HWT FU-PU

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: F														
Cooling performance chiller operation														
Cooling capacity	kW	328,0	381,0	435,0	482,0	506,0	550,0	580,0	627,0	657,0	674,0	703,0	772,0	814,0
Input power	kW	84,0	98,0	112,0	121,0	128,0	138,0	148,0	159,0	168,0	172,0	178,0	191,0	203,0
Cooling total input current	A	148,0	170,0	192,0	204,0	212,0	229,0	244,0	263,0	279,0	291,0	305,0	326,0	345,0
EER	W/W	3,93	3,90	3,89	3,99	3,97	3,99	3,92	3,94	3,91	3,91	3,95	4,05	4,02
Water flow rate system side	l/h	56440	65570	74810	82890	87080	94670	99780	107790	113080	115880	120880	132770	139960
Pressure drop system side	kPa	46	54	71	84	94	66	72	74	81	86	87	56	64
Cooling performances with free-cooling														
Cooling capacity	kW	344,0	359,0	437,0	450,0	455,0	533,0	540,0	617,0	625,0	629,0	635,0	719,0	728,0
Input power	kW	19,3	19,3	24,1	24,1	24,1	28,9	28,9	33,7	33,7	33,7	33,7	38,5	38,5
Free cooling total input current	A	30,0	30,0	37,6	37,6	37,6	45,1	45,1	52,6	52,6	52,6	52,6	60,1	60,1
EER	W/W	17,84	18,61	18,16	18,66	18,87	18,43	18,67	18,31	18,54	18,65	18,84	18,66	18,89
Water flow rate system side	l/h	56440	65570	74810	82890	87080	94670	99780	107790	113080	115880	120880	132770	139960
Pressure drop system side	kPa	77	95	107	127	142	104	114	111	122	129	134	97	109

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: P														
Cooling performance chiller operation														
Cooling capacity	kW	327,0	380,0	433,0	480,0	504,0	548,0	578,0	624,0	655,0	671,0	700,0	769,0	810,0
Input power	kW	84,0	99,0	113,0	122,0	129,0	139,0	149,0	160,0	170,0	174,0	180,0	192,0	205,0
Cooling total input current	A	-	-	-	-	-	-	-	-	-	-	-	-	-
EER	W/W	3,88	3,84	3,84	3,93	3,91	3,94	3,87	3,89	3,86	3,86	3,89	4,00	3,96
Water flow rate system side	l/h	56250	65300	74510	82510	86670	94290	99370	107380	112630	115420	120380	132250	139380
Pressure drop system side	kPa	46	54	70	83	93	66	72	73	80	85	86	55	63
Cooling performances with free-cooling														
Cooling capacity	kW	370,0	386,0	471,0	484,0	490,0	574,0	582,0	665,0	674,0	678,0	685,0	775,0	785,0
Input power	kW	19,7	19,7	24,6	24,6	24,6	29,5	29,5	34,4	34,4	34,4	34,4	39,3	39,3
Free cooling total input current	A	-	-	-	-	-	-	-	-	-	-	-	-	-
EER	W/W	18,82	19,66	19,17	19,72	19,94	19,47	19,73	19,34	19,59	19,71	19,91	19,72	19,97
Water flow rate system side	l/h	56250	65300	74510	82510	86670	94290	99370	107380	112630	115420	120380	132250	139380
Pressure drop system side	kPa	77	94	106	126	140	103	113	111	121	128	133	96	108

NSM HWT FU-PU

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: F													
Cooling performance chiller operation													
Cooling capacity	kW	864,0	909,0	978,0	1059,0	1127,0	1213,0	1289,0	1365,0	1495,0	1576,0	-	-
Input power	kW	216,0	228,0	243,0	260,0	276,0	293,0	317,0	341,0	372,0	388,0	-	-
Cooling total input current	A	363,0	378,0	414,0	454,0	472,0	493,0	529,0	566,0	639,0	677,0	-	-
EER	W/W	3,99	3,99	4,02	4,08	4,09	4,14	4,06	4,00	4,02	4,06	-	-
Water flow rate system side	l/h	148610	156340	168140	182140	193790	208610	221670	234730	257070	271060	-	-
Pressure drop system side	kPa	75	84	99	94	103	71	88	88	116	116	-	-
Cooling performances with free-cooling													
Cooling capacity	kW	808,0	886,0	902,0	989,0	1003,0	1091,0	1177,0	1262,0	1359,0	1446,0	-	-
Input power	kW	43,4	48,2	48,2	53,0	53,0	57,8	62,6	67,5	72,3	77,1	-	-
Free cooling total input current	A	67,6	75,1	75,1	82,6	82,6	90,1	97,6	105,1	112,7	120,2	-	-
EER	W/W	18,64	18,38	18,72	18,65	18,92	18,86	18,78	18,71	18,80	18,75	-	-
Water flow rate system side	l/h	148610	156340	168140	182140	193790	208610	221670	234730	257070	271060	-	-
Pressure drop system side	kPa	117	124	145	140	154	116	132	132	166	165	-	-

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: P													
Cooling performance chiller operation													
Cooling capacity	kW	861,0	906,0	974,0	1055,0	1122,0	1208,0	1284,0	1359,0	1489,0	1570,0	-	-
Input power	kW	218,0	230,0	245,0	262,0	278,0	296,0	320,0	344,0	375,0	392,0	-	-
Cooling total input current	A	366,0	381,0	418,0	457,0	475,0	497,0	533,0	570,0	644,0	682,0	-	-
EER	W/W	3,94	3,94	3,97	4,03	4,03	4,08	4,01	3,95	3,97	4,01	-	-
Water flow rate system side	l/h	148030	155780	167500	181460	193010	207750	220780	233810	256070	270020	-	-
Pressure drop system side	kPa	75	84	99	93	102	70	87	87	115	115	-	-
Cooling performances with free-cooling													
Cooling capacity	kW	871,0	954,0	972,0	1066,0	1081,0	1176,0	1268,0	1360,0	1465,0	1558,0	-	-
Input power	kW	44,2	49,1	49,1	54,0	54,0	59,0	63,9	68,8	73,7	78,6	-	-
Free cooling total input current	A	68,8	76,5	76,5	84,1	84,1	91,8	99,4	107,0	114,7	122,3	-	-
EER	W/W	19,70	19,42	19,79	19,71	20,00	19,94	19,85	19,77	19,88	19,82	-	-
Water flow rate system side	l/h	148030	155780	167500	181460	193010	207750	220780	233810	256070	270020	-	-
Pressure drop system side	kPa	117	123	144	139	153	115	131	131	164	164	-	-

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling: System side water heat exchanger 25 °C; External air 12°C

NSM HWT FN-PN

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: F														
Cooling performance chiller operation														
Cooling capacity	kW	324,0	376,0	428,0	473,0	497,0	538,0	567,0	614,0	643,0	659,0	687,0	751,0	803,0
Input power	kW	74,0	88,0	99,0	109,0	116,0	124,0	134,0	142,0	152,0	157,0	163,0	174,0	184,0
Cooling total input current	A	132,0	154,0	172,0	184,0	192,0	206,0	222,0	235,0	252,0	265,0	280,0	297,0	313,0
EER	W/W	4,41	4,27	4,31	4,35	4,29	4,33	4,21	4,32	4,24	4,21	4,22	4,32	4,38
Water flow rate system side	l/h	55800	64730	73570	81410	85540	92510	97450	105570	110670	113400	118220	129100	138190
Pressure drop system side	kPa	46	54	42	49	56	65	71	45	49	53	51	54	64
Cooling performances with free-cooling														
Cooling capacity	kW	318,0	330,0	391,0	401,0	404,0	465,0	470,0	531,0	536,0	539,0	543,0	607,0	670,0
Input power	kW	7,9	7,9	9,5	9,5	9,5	11,1	11,1	12,7	12,7	12,7	12,7	14,3	15,9
Free cooling total input current	A	12,0	12,0	14,0	14,0	14,0	16,0	16,0	19,0	19,0	19,0	19,0	21,0	24,0
EER	W/W	39,96	41,57	41,02	42,00	42,41	41,76	42,22	41,75	42,17	42,36	42,67	42,46	42,16
Water flow rate system side	l/h	55800	64730	73570	81410	85540	92510	97450	105570	110670	113400	118220	129100	138190
Pressure drop system side	kPa	67	81	66	78	87	93	102	72	79	84	84	87	95

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: P														
Cooling performance chiller operation														
Cooling capacity	kW	323,0	374,0	426,0	471,0	494,0	535,0	564,0	611,0	640,0	656,0	683,0	746,0	799,0
Input power	kW	74,0	89,0	100,0	110,0	117,0	125,0	136,0	143,0	153,0	158,0	164,0	175,0	185,0
Cooling total input current	A	132,0	155,0	173,0	185,0	194,0	207,0	224,0	237,0	254,0	267,0	282,0	300,0	316,0
EER	W/W	4,36	4,22	4,26	4,29	4,23	4,27	4,15	4,26	4,18	4,15	4,16	4,26	4,32
Water flow rate system side	l/h	55590	64410	73210	80970	85050	92040	96930	105040	110080	112780	117540	128400	137510
Pressure drop system side	kPa	45	53	42	49	55	64	70	44	49	52	50	54	63
Cooling performances with free-cooling														
Cooling capacity	kW	337,0	352,0	417,0	427,0	431,0	495,0	501,0	566,0	572,0	575,0	579,0	648,0	715,0
Input power	kW	8,1	8,1	9,7	9,7	9,7	11,3	11,3	12,9	12,9	12,9	12,9	14,5	16,2
Free cooling total input current	A	12,0	12,0	14,0	14,0	14,0	17,0	17,0	19,0	19,0	19,0	19,0	21,0	24,0
EER	W/W	41,76	43,58	42,96	44,05	44,49	43,79	44,29	43,78	44,23	44,44	44,76	44,54	44,22
Water flow rate system side	l/h	55590	64410	73210	80970	85050	92040	96930	105040	110080	112780	117540	128400	137510
Pressure drop system side	kPa	66	80	65	77	86	92	101	71	78	83	83	86	94

NSM HWT FN-PN

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: F													
Cooling performance chiller operation													
Cooling capacity	kW	852,0	881,0	969,0	1033,0	1115,0	1198,0	1263,0	1329,0	-	-	-	-
Input power	kW	195,0	207,0	218,0	232,0	249,0	265,0	288,0	311,0	-	-	-	-
Cooling total input current	A	328,0	343,0	374,0	408,0	427,0	447,0	481,0	516,0	-	-	-	-
EER	W/W	4,37	4,26	4,44	4,46	4,49	4,51	4,38	4,27	-	-	-	-
Water flow rate system side	l/h	146560	151590	166730	177640	191820	206010	217280	228590	-	-	-	-
Pressure drop system side	kPa	75	81	80	80	80	45	53	53	-	-	-	-
Cooling performances with free-cooling													
Cooling capacity	kW	731,0	737,0	857,0	921,0	988,0	1056,0	1068,0	1079,0	-	-	-	-
Input power	kW	17,5	17,5	20,7	22,3	23,8	25,4	25,4	25,4	-	-	-	-
Free cooling total input current	A	26,0	26,0	31,0	33,0	35,0	38,0	38,0	38,0	-	-	-	-
EER	W/W	41,84	42,13	41,48	41,37	41,45	41,52	42,01	42,42	-	-	-	-
Water flow rate system side	l/h	146560	151590	166730	177640	191820	206010	217280	228590	-	-	-	-
Pressure drop system side	kPa	105	113	106	106	106	71	84	84	-	-	-	-

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: P													
Cooling performance chiller operation													
Cooling capacity	kW	848,0	877,0	965,0	1028,0	1110,0	1192,0	1257,0	1322,0	-	-	-	-
Input power	kW	197,0	209,0	220,0	234,0	251,0	268,0	291,0	314,0	-	-	-	-
Cooling total input current	A	330,0	346,0	377,0	411,0	430,0	450,0	485,0	520,0	-	-	-	-
EER	W/W	4,31	4,20	4,38	4,40	4,43	4,45	4,32	4,21	-	-	-	-
Water flow rate system side	l/h	145850	150820	165970	176870	190950	205020	216210	227390	-	-	-	-
Pressure drop system side	kPa	74	80	79	79	79	45	53	53	-	-	-	-
Cooling performances with free-cooling													
Cooling capacity	kW	780,0	786,0	914,0	981,0	1053,0	1125,0	1139,0	1151,0	-	-	-	-
Input power	kW	17,8	17,8	21,0	22,6	24,2	25,9	25,9	25,9	-	-	-	-
Free cooling total input current	A	26,0	26,0	31,0	33,0	36,0	38,0	38,0	38,0	-	-	-	-
EER	W/W	43,88	44,20	43,48	43,37	43,45	43,52	44,06	44,51	-	-	-	-
Water flow rate system side	l/h	145850	150820	165970	176870	190950	205020	216210	227390	-	-	-	-
Pressure drop system side	kPa	104	112	105	105	105	70	84	84	-	-	-	-

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling: System side water heat exchanger 25 °C; External air 12°C

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Electric data															
Maximum current (FLA)	A	A	204,0	226,0	251,0	257,0	273,0	290,0	306,0	335,0	355,0	380,0	405,0	428,0	440,0
	E,U	A	204,0	226,0	261,0	267,0	273,0	299,0	316,0	345,0	364,0	390,0	415,0	437,0	450,0
	N	A	214,0	236,0	270,0	277,0	283,0	309,0	325,0	354,0	374,0	399,0	425,0	447,0	469,0
Peak current (LRA)	A	A	277,0	285,0	299,0	336,0	350,0	346,0	359,0	439,0	451,0	515,0	568,0	622,0	592,0
	E,U	A	277,0	285,0	308,0	345,0	350,0	356,0	368,0	449,0	461,0	525,0	578,0	632,0	601,0
	N	A	287,0	295,0	318,0	355,0	360,0	366,0	378,0	458,0	471,0	535,0	588,0	641,0	621,0

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Electric data														
Maximum current (FLA)	A	A	473,0	497,0	538,0	570,0	590,0	620,0	668,0	701,0	831,0	863,0	933,0	1051,0
	E,U	A	483,0	516,0	548,0	595,0	615,0	645,0	688,0	730,0	841,0	882,0	-	-
	N	A	508,0	531,0	583,0	624,0	654,0	683,0	716,0	749,0	-	-	-	-
Peak current (LRA)	A	A	601,0	625,0	680,0	710,0	846,0	886,0	965,0	958,0	902,0	932,0	1137,0	1205,0
	E,U	A	611,0	644,0	690,0	735,0	871,0	911,0	984,0	986,0	911,0	951,0	-	-
	N	A	636,0	659,0	724,0	764,0	910,0	949,0	1013,0	1006,0	-	-	-	-

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

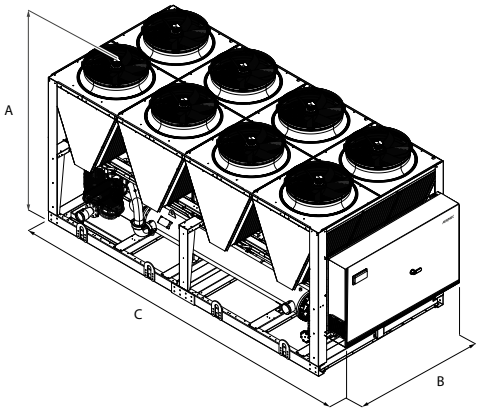
Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Compressor															
Type	A,E,N,U	type	Screw												
Compressor regulation	A,E,N,U	Type	On-Off												
Number	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type	R134a												
System side heat exchanger															
Type	A,E,N,U	type	Shell and tube												
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Inverter fan															
Type	A,E,N,U	type	Axial												
Number	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20
Sound data calculated in cooling mode (1)															
Sound power level	A	dB(A)	97,0	97,0	97,0	97,0	98,0	98,0	98,0	98,0	98,0	99,0	99,0	100,0	101,0
	E	dB(A)	93,0	93,0	93,0	94,0	94,0	93,0	93,0	93,0	93,0	95,0	96,0	98,0	98,0
	N	dB(A)	93,0	93,0	94,0	94,0	94,0	94,0	93,0	93,0	93,0	94,0	96,0	98,0	99,0
	U	dB(A)	97,0	97,0	98,0	98,0	98,0	99,0	99,0	99,0	99,0	99,0	100,0	101,0	102,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Compressor														
Type	A,E,N,U	type	Screw											
Compressor regulation	A,E,N,U	Type	On-Off											
Number	A	no.	2	2	2	2	2	2	2	2	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	2	3	3	-	-
	N	no.	2	2	2	2	2	2	2	2	-	-	-	-
Circuits	A	no.	2	2	2	2	2	2	2	2	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	2	3	3	-	-
	N	no.	2	2	2	2	2	2	2	2	-	-	-	-
Refrigerant	A,E,N,U	type	R134a											
System side heat exchanger														
Type	A,E,N,U	type	Shell and tube											
Number	A	no.	1	1	1	1	1	1	1	1	2	2	2	2
	E	no.	1	1	1	1	1	1	1	1	2	2	-	-
	N	no.	1	1	2	2	2	2	2	2	-	-	-	-
	U	no.	1	1	1	1	1	2	2	2	2	2	-	-
Inverter fan														
Type	A,E,N,U	type	Axial											
Number	A	no.	16	16	18	18	18	20	22	22	28	28	30	34
	E,U	no.	18	20	20	22	22	24	26	28	30	32	-	-
	N	no.	22	22	26	28	30	32	32	32	-	-	-	-
Sound data calculated in cooling mode (1)														
Sound power level	A	dB(A)	101,0	100,0	101,0	101,0	101,0	102,0	102,0	102,0	104,0	104,0	105,0	105,0
	E	dB(A)	98,0	96,0	97,0	97,0	99,0	100,0	100,0	99,0	99,0	99,0	-	-
	N	dB(A)	98,0	97,0	97,0	97,0	99,0	100,0	100,0	99,0	-	-	-	-
	U	dB(A)	101,0	101,0	101,0	102,0	102,0	103,0	103,0	103,0	104,0	104,0	-	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Dimensions and weights															
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330
	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520
	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Dimensions and weights														
A	A	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
	E,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	-	-
	N	mm	2450	2450	2450	2450	2450	2450	2450	2450	-	-	-	-
B	A	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	E,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	-	-
	N	mm	2200	2200	2200	2200	2200	2200	2200	2200	-	-	-	-
C	A	mm	9520	9520	10710	10710	10710	11900	13090	13090	16660	16660	17850	20230
	E,U	mm	10710	11900	11900	13090	13090	14280	15470	16660	17850	19040	-	-
	N	mm	13090	13090	15470	16660	17850	19040	19040	19040	-	-	-	-

For transport reasons, the units with the depth of more than 13090 mm are shipped separately.

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NSM HWT B

Air-cooled chiller with free cooling (glycol-free)

Cooling capacity 306 ÷ 1991 kW

- **High efficiency also at partial loads**
- **Microchannel coils**
- **Suitable for Data Center applications**
- **Water produced up to 30 °C**
- **Night mode**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
These are outdoor units with screw compressors, axial fans, micro-channel coils, and shell and tube heat exchangers
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

These are flexible and reliable units which adapt to the most diverse load conditions thanks to the precise design and the use of steady speed compressors together with inverter-controlled variable speed compressors guaranteeing a high energy efficiency level both at full and partial load.

VERSIONS

A High efficiency
E Silenced high efficiency
N Silenced very high efficiency
U Very high efficiency

FEATURES

Operating field

Water produced from 5 °C ÷ 30 °C.

Unit with 2/3 cooling circuits

Unit with 2/3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.

Condensation control temperature

Fitted as standard with a device for electronic condensation control so that the unit can work even with low temperatures, adapting the air flow rate to the actual system request in order to reduce consumption.

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.

As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

Free cooling with glycol water

Intermediate plate heat exchanger that creates two circuits:
1. Glycol hydraulic circuit (glycol is added to protect the coil from freezing).
2. Primary hydraulic circuit for glycol-free systems.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.
— **Night Mode:** it is possible to set a silenced operation profile. Perfect for night operation since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 3: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger
AK: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
AER485P1 x n° 2 (1)	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•	•

Model	Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
AER485P1 x n° 2 (1)	A,E,N,U	•	•	•	•	•	•	•	•				
AER485P1 x n° 3 (1)	A,E,N,U									•	•	•	•
AERNET	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	A,E,N,U	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Power factor correction

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802
A	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352Q	RIFNSM2502Q	RIFNSM2652Q	RIFNSM2802C
E	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002Q	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
N	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802C	RIFNSM2002Q	RIFNSM2202C	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C
U	RIFNSM1402Q	RIFNSM1602Q	RIFNSM1802Q	RIFNSM2002C	RIFNSM2202Q	RIFNSM2352C	RIFNSM2502C	RIFNSM2652Q	RIFNSM2802C

A grey background indicates the accessory must be assembled in the factory

Ver	3002	3202	3402	3602	3902	4202	4502	4802	5202
A, E, U	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	RIFNSM4502C	RIFNSM4802C	RIFNSM5202C
N	RIFNSM3002C	RIFNSM3202C	RIFNSM3402C	RIFNSM3602C	RIFNSM3902C	RIFNSM4202C	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	5602	6002	6402	6503	6703	6903	7203	8403	9603
A	RIFNSM5602C	RIFNSM6002C	RIFNSM6402C	-	-	-	-	-	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Anti-intrusion grid

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)	GP. (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Heater exchangers

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)	KRS (1)

(1) Contact the factory
A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
A, E, N, U	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

Ver	3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
A, E, N, U	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)	AK (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NSM**
4,5,6,7		**Size** 1402, 1602, 1802, 2002, 2202, 2352, 2502, 2652, 2802, 3002, 3202, 3402, 3602, 3902, 4202, 4502, 4802, 5202, 5602, 6002, 6402, 6903, 7203, 8403, 9603
8		**Operating field (1)**
	W	Electronic thermostatic expansion valve
9		**Model**
	B	Free-cooling glycol free
	G	Free-cooling glycol free plus (2)
10		**Heat recovery**
	°	Without heat recovery
11		**Version**
	A	High efficiency
	E	Silenced high efficiency
	N	Silenced very high efficiency
	U	Very high efficiency
12		**Coils / free-cooling coils**
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper (2)
	S	Copper-Tinned copper / Copper -Tinned copper (2)
	V	Copper-painted alumimium / Copper-painted alumimium (2)
	°	Alluminium microchannel / Copper - aluminium
13		**Fans**
	J	Inverter
14		**Power supply**
	°	400V ~ 3 50Hz
15,16		**Integrated hydronic kit**
		Without hydronic kit
	00	Without hydronic kit

(1) Water produced from 5 °C ÷ 30 °C
(2) The Free-Cooling Plus "P" models are only compatible with"°" ed "0"

PERFORMANCE SPECIFICATIONS

NSM HWT BA-GA

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: B														
Cooling performance chiller operation														
Cooling capacity	kW	306,0	351,0	400,0	441,0	479,0	505,0	546,0	589,0	638,0	653,0	687,0	753,0	792,0
Input power	kW	82,0	95,0	109,0	118,0	125,0	135,0	147,0	155,0	167,0	172,0	179,0	192,0	205,0
Cooling total input current	A	146,0	166,0	187,0	200,0	208,0	224,0	242,0	258,0	277,0	290,0	306,0	327,0	348,0
EER	W/W	3,75	3,69	3,69	3,73	3,83	3,73	3,71	3,79	3,81	3,80	3,84	3,92	3,86
Water flow rate system side	l/h	52824	60556	69042	76187	82709	87074	94164	101663	110040	112699	118488	129925	136678
Pressure drop system side	kPa	91	120	119	91	107	118	139	135	152	133	130	99	110
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	303,0	276,0	281,0	292,0	360,0	363,0	367,0	437,0	441,0	454,0	456,0	541,0	542,0
Input power	kW	22,6	22,6	22,6	22,6	29,7	29,7	29,7	38,6	38,6	38,7	38,7	44,8	44,8
Free cooling total input current	A	36,1	36,1	36,1	36,1	47,0	47,0	47,0	61,5	61,5	61,7	61,7	71,2	71,2
EER	W/W	13,43	12,22	12,46	12,93	12,14	12,23	12,36	11,32	11,43	11,73	11,79	12,07	12,11

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: G														
Cooling performance chiller operation														
Cooling capacity	kW	305,0	349,0	398,0	439,0	477,0	502,0	543,0	587,0	635,0	650,0	683,0	749,0	788,0
Input power	kW	82,0	96,0	109,0	120,0	126,0	136,0	148,0	157,0	169,0	174,0	181,0	194,0	207,0
Cooling total input current	A	147,0	167,0	188,0	201,0	210,0	226,0	244,0	260,0	279,0	292,0	308,0	330,0	351,0
EER	W/W	3,70	3,64	3,64	3,68	3,78	3,68	3,66	3,74	3,76	3,74	3,78	3,86	3,80
Water flow rate system side	l/h	52588	60291	68707	75829	82367	86693	93725	101283	109546	112184	117898	129336	136024
Pressure drop system side	kPa	90	119	118	90	106	117	137	134	151	132	129	98	108
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	314,0	287,0	293,0	305,0	377,0	380,0	384,0	459,0	463,0	478,0	481,0	570,0	572,0
Input power	kW	23,0	22,9	22,9	23,0	30,1	30,1	30,1	39,2	39,2	39,3	39,3	45,5	45,5
Free cooling total input current	A	36,6	36,6	36,6	36,6	47,7	47,7	47,7	62,3	62,3	62,5	62,5	72,1	72,1
EER	W/W	13,67	12,52	12,77	13,30	12,51	12,60	12,74	11,72	11,84	12,18	12,25	12,53	12,58

NSM HWT BA-GA

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: B													
Cooling performance chiller operation													
Cooling capacity	kW	853,0	882,0	959,0	1014,0	1082,0	1169,0	1262,0	1327,0	1476,0	1531,0	1758,0	2001,0
Input power	kW	216,0	228,0	244,0	260,0	281,0	295,0	319,0	343,0	373,0	388,0	442,0	512,0
Cooling total input current	A	362,0	377,0	416,0	453,0	478,0	494,0	531,0	567,0	646,0	683,0	740,0	854,0
EER	W/W	3,95	3,87	3,92	3,90	3,86	3,97	3,95	3,87	3,96	3,94	3,97	3,91
Water flow rate system side	l/h	147129	152124	165550	174920	186802	201811	217758	228975	254763	264131	303311	345300
Pressure drop system side	kPa	128	137	148	165	155	146	171	190	126	141	111	144
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	598,0	599,0	674,0	675,0	675,0	748,0	802,0	807,0	1038,0	1039,0	1134,0	1263,0
Input power	kW	49,8	49,8	55,0	55,0	55,0	60,0	64,9	64,9	84,7	84,7	93,7	103,6
Free cooling total input current	A	78,9	78,9	87,1	87,1	87,1	95,0	102,6	102,6	134,1	134,1	148,7	164,3
EER	W/W	12,03	12,04	12,26	12,28	12,28	12,46	12,36	12,43	12,26	12,27	12,10	12,18

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: G													
Cooling performance chiller operation													
Cooling capacity	kW	849,0	878,0	955,0	1009,0	1077,0	1164,0	1256,0	1320,0	1470,0	1524,0	1749,0	1991,0
Input power	kW	218,0	230,0	247,0	262,0	284,0	298,0	322,0	346,0	377,0	392,0	447,0	517,0
Cooling total input current	A	365,0	381,0	420,0	456,0	482,0	498,0	536,0	571,0	652,0	688,0	747,0	861,0
EER	W/W	3,90	3,81	3,87	3,84	3,80	3,91	3,90	3,81	3,90	3,89	3,91	3,85
Water flow rate system side	l/h	146478	151430	164829	174121	185838	200784	216706	227798	253695	262987	301787	343582
Pressure drop system side	kPa	127	136	147	164	153	144	170	188	125	140	110	143
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	628,0	629,0	708,0	709,0	709,0	785,0	839,0	844,0	1089,0	1090,0	1192,0	1325,0
Input power	kW	50,5	50,5	55,8	55,8	55,8	61,0	66,0	66,0	86,0	86,0	95,1	105,2
Free cooling total input current	A	80,0	80,0	88,3	88,3	88,3	96,4	104,1	104,1	136,0	136,0	150,8	166,6
EER	W/W	12,43	12,45	12,68	12,70	12,70	12,86	12,72	12,80	12,67	12,68	12,54	12,59

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling glycol-free: System side water heat exchanger 25 °C; External air 12 °C

NSM HWT BE-GE

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: B														
Cooling performance chiller operation														
Cooling capacity	kW	315,0	362,0	415,0	456,0	478,0	524,0	551,0	599,0	626,0	641,0	667,0	735,0	772,0
Input power	kW	75,0	91,0	101,0	112,0	120,0	127,0	138,0	145,0	156,0	161,0	169,0	178,0	192,0
Cooling total input current	A	134,0	158,0	175,0	189,0	199,0	210,0	227,0	240,0	258,0	272,0	288,0	303,0	325,0
EER	W/W	4,19	3,97	4,09	4,07	3,98	4,13	4,00	4,12	4,02	3,97	3,95	4,13	4,03
Water flow rate system side	l/h	54400	62421	71530	78692	82506	90469	95144	103288	108035	110595	115049	126808	133234
Pressure drop system side	kPa	81	100	101	95	104	105	116	127	139	121	125	96	106
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	260,0	228,0	276,0	285,0	287,0	343,0	345,0	389,0	391,0	402,0	403,0	469,0	471,0
Input power	kW	10,6	10,6	13,4	13,5	13,5	19,2	19,2	21,9	21,9	22,1	22,1	23,9	23,9
Free cooling total input current	A	16,7	16,6	21,0	21,2	21,2	30,5	30,5	34,5	34,5	34,9	34,9	37,6	37,6
EER	W/W	24,39	21,44	20,58	21,09	21,21	17,84	17,94	17,79	17,87	18,15	18,22	19,61	19,67

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: G														
Cooling performance chiller operation														
Cooling capacity	kW	314,0	360,0	412,0	453,0	474,0	521,0	548,0	595,0	622,0	637,0	662,0	730,0	767,0
Input power	kW	76,0	92,0	102,0	113,0	122,0	128,0	139,0	147,0	157,0	163,0	170,0	180,0	194,0
Cooling total input current	A	134,0	159,0	176,0	190,0	201,0	211,0	229,0	242,0	260,0	274,0	291,0	306,0	328,0
EER	W/W	4,14	3,92	4,03	4,00	3,90	4,07	3,93	4,06	3,96	3,90	3,88	4,06	3,95
Water flow rate system side	l/h	54167	62091	71121	78115	81864	89932	94544	102700	107375	109898	114268	125980	132294
Pressure drop system side	kPa	81	99	99	94	103	103	114	126	138	119	123	94	104
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	270,0	237,0	288,0	298,0	300,0	358,0	360,0	406,0	408,0	419,0	421,0	491,0	492,0
Input power	kW	10,8	10,7	13,5	13,7	13,7	19,4	19,4	22,1	22,1	22,3	22,3	24,1	24,1
Free cooling total input current	A	16,8	16,8	21,2	21,4	21,4	30,8	30,8	34,8	34,8	35,2	35,2	37,9	37,9
EER	W/W	25,10	22,15	21,24	21,80	21,93	18,48	18,59	18,39	18,48	18,80	18,87	20,33	20,39

NSM HWT BE-GE

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: B													
Cooling performance chiller operation													
Cooling capacity	kW	823,0	870,0	932,0	1011,0	1070,0	1152,0	1226,0	1300,0	1423,0	1502,0	-	-
Input power	kW	202,0	210,0	228,0	241,0	260,0	275,0	296,0	318,0	350,0	364,0	-	-
Cooling total input current	A	339,0	348,0	388,0	421,0	443,0	460,0	493,0	526,0	601,0	631,0	-	-
EER	W/W	4,07	4,15	4,09	4,19	4,12	4,19	4,14	4,09	4,07	4,13	-	-
Water flow rate system side	l/h	142081	150081	160772	174443	184665	198768	211564	224359	245581	259231	-	-
Pressure drop system side	kPa	121	135	142	152	170	81	128	110	119	123	-	-
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	515,0	578,0	588,0	633,0	634,0	693,0	742,0	788,0	880,0	924,0	-	-
Input power	kW	25,6	31,3	31,5	33,1	33,1	38,4	41,1	43,7	46,8	48,5	-	-
Free cooling total input current	A	40,1	48,8	49,1	51,6	51,6	61,1	65,0	69,0	73,4	75,9	-	-
EER	W/W	20,11	18,44	18,68	19,09	19,12	18,02	18,06	18,01	18,79	19,06	-	-

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: G													
Cooling performance chiller operation													
Cooling capacity	kW	818,0	865,0	926,0	1005,0	1063,0	1144,0	1218,0	1292,0	1414,0	1493,0	-	-
Input power	kW	204,0	212,0	230,0	244,0	263,0	278,0	300,0	321,0	354,0	368,0	-	-
Cooling total input current	A	342,0	351,0	392,0	425,0	448,0	464,0	497,0	531,0	607,0	636,0	-	-
EER	W/W	4,00	4,08	4,02	4,12	4,04	4,12	4,07	4,02	3,99	4,06	-	-
Water flow rate system side	l/h	141148	149240	159755	173439	183394	197398	210159	222920	243982	257648	-	-
Pressure drop system side	kPa	120	134	140	150	168	80	127	109	118	122	-	-
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	538,0	604,0	615,0	661,0	662,0	724,0	775,0	822,0	920,0	966,0	-	-
Input power	kW	25,8	31,6	31,7	33,4	33,4	38,8	41,4	44,1	46,8	48,9	-	-
Free cooling total input current	A	40,5	49,2	49,4	52,0	52,0	61,5	65,5	69,5	73,9	76,5	-	-
EER	W/W	20,80	19,11	19,38	19,78	19,80	18,67	18,70	18,64	19,65	19,74	-	-

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling glycol-free: System side water heat exchanger 25 °C; External air 12 °C

NSM HWT BU-GU

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: B														
Cooling performance chiller operation														
Cooling capacity	kW	328,0	381,0	435,0	482,0	506,0	550,0	580,0	627,0	657,0	674,0	703,0	772,0	814,0
Input power	kW	84,0	98,0	112,0	121,0	128,0	138,0	148,0	159,0	168,0	172,0	178,0	191,0	203,0
Cooling total input current	A	148,0	170,0	192,0	204,0	212,0	229,0	244,0	263,0	279,0	291,0	305,0	326,0	345,0
EER	W/W	3,93	3,90	3,89	3,99	3,97	3,99	3,92	3,94	3,91	3,91	3,95	4,05	4,02
Water flow rate system side	l/h	56622	65790	75056	83161	87363	94979	100110	108143	113452	116262	121282	133207	140417
Pressure drop system side	kPa	88	112	111	106	117	115	128	139	127	134	130	106	117
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	319,0	287,0	345,0	367,0	369,0	433,0	436,0	488,0	506,0	507,0	538,0	595,0	597,0
Input power	kW	23,6	23,5	29,6	31,5	31,5	38,6	38,6	44,5	44,7	44,7	44,8	49,8	49,8
Free cooling total input current	A	37,3	37,3	46,8	50,1	50,1	61,5	61,5	70,6	71,0	71,0	71,2	78,9	78,9
EER	W/W	13,52	12,20	11,67	11,64	11,72	11,22	11,30	10,96	11,31	11,35	12,01	11,96	12,00

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: G														
Cooling performance chiller operation														
Cooling capacity	kW	327,0	380,0	433,0	480,0	504,0	548,0	578,0	624,0	655,0	671,0	700,0	769,0	810,0
Input power	kW	84,0	99,0	113,0	122,0	129,0	139,0	149,0	160,0	170,0	174,0	180,0	192,0	205,0
Cooling total input current	A	149,0	171,0	194,0	205,0	214,0	231,0	246,0	265,0	281,0	294,0	308,0	328,0	347,0
EER	W/W	3,88	3,84	3,84	3,93	3,91	3,94	3,87	3,89	3,86	3,86	3,89	4,00	3,96
Water flow rate system side	l/h	56434	65512	74759	82781	86955	94601	99699	107739	113006	115799	120780	132683	139835
Pressure drop system side	kPa	87	111	110	105	116	115	127	138	126	132	129	105	116
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	331,0	300,0	360,0	385,0	388,0	455,0	458,0	510,0	531,0	533,0	567,0	624,0	626,0
Input power	kW	23,9	23,9	30,0	32,0	32,0	39,2	39,2	45,1	45,4	45,4	45,5	50,5	50,5
Free cooling total input current	A	37,9	37,8	47,5	50,8	50,8	62,3	62,3	71,6	72,0	72,0	72,1	80,0	80,0
EER	W/W	13,81	12,56	11,98	12,04	12,13	11,61	11,69	11,30	11,70	11,73	12,47	12,36	12,40

NSM HWT BU-GU

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: B													
Cooling performance chiller operation													
Cooling capacity	kW	864,0	909,0	978,0	1059,0	1127,0	1213,0	1289,0	1365,0	1495,0	1576,0	-	-
Input power	kW	216,0	228,0	243,0	260,0	276,0	293,0	317,0	341,0	372,0	388,0	-	-
Cooling total input current	A	363,0	378,0	414,0	454,0	472,0	493,0	529,0	566,0	639,0	677,0	-	-
EER	W/W	3,99	3,99	4,02	4,08	4,09	4,14	4,06	4,00	4,02	4,06	-	-
Water flow rate system side	l/h	149099	156852	168696	182745	194431	209298	222401	235505	257918	271953	-	-
Pressure drop system side	kPa	134	133	156	166	188	112	142	128	131	135	-	-
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	647,0	743,0	746,0	796,0	797,0	885,0	938,0	990,0	1126,0	1177,0	-	-
Input power	kW	54,7	63,8	63,8	68,7	68,7	79,0	84,0	89,0	98,2	103,1	-	-
Free cooling total input current	A	86,6	100,7	100,7	108,3	108,3	125,7	133,4	141,2	155,6	163,2	-	-
EER	W/W	11,83	11,65	11,69	11,60	11,61	11,20	11,17	11,13	11,46	11,41	-	-

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: G													
Cooling performance chiller operation													
Cooling capacity	kW	861,0	906,0	974,0	1055,0	1122,0	1208,0	1284,0	1359,0	1489,0	1570,0	-	-
Input power	kW	218,0	230,0	245,0	262,0	278,0	296,0	320,0	344,0	375,0	392,0	-	-
Cooling total input current	A	366,0	381,0	418,0	457,0	475,0	497,0	533,0	570,0	644,0	682,0	-	-
EER	W/W	3,94	3,94	3,97	4,03	4,03	4,08	4,01	3,95	3,97	4,01	-	-
Water flow rate system side	l/h	148519	156292	168052	182059	193641	208436	221510	234585	256917	270905	-	-
Pressure drop system side	kPa	133	132	155	165	187	111	141	127	130	134	-	-
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	676,0	780,0	783,0	834,0	835,0	931,0	984,0	1036,0	1185,0	1236,0	-	-
Input power	kW	55,5	64,7	64,7	69,7	69,7	80,1	85,2	90,3	99,6	104,6	-	-
Free cooling total input current	A	87,8	102,0	102,0	109,8	109,8	127,3	135,2	143,1	157,6	165,4	-	-
EER	W/W	12,18	12,05	12,11	11,97	11,98	11,62	11,54	11,48	11,90	11,81	-	-

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling glycol-free: System side water heat exchanger 25 °C; External air 12 °C

NSM HWT BN-GN

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: B														
Cooling performance chiller operation														
Cooling capacity	kW	324,0	376,0	428,0	473,0	497,0	538,0	567,0	614,0	643,0	659,0	687,0	751,0	803,0
Input power	kW	74,0	88,0	99,0	109,0	116,0	124,0	134,0	142,0	152,0	157,0	163,0	174,0	184,0
Cooling total input current	A	132,0	154,0	172,0	184,0	192,0	206,0	222,0	235,0	252,0	265,0	280,0	297,0	313,0
EER	W/W	4,41	4,27	4,31	4,35	4,29	4,33	4,21	4,32	4,24	4,21	4,22	4,32	4,38
Water flow rate system side	l/h	55983	64940	73810	81682	85818	92811	97769	105919	111036	113774	118607	129528	138643
Pressure drop system side	kPa	74	93	87	102	113	110	122	111	122	128	125	100	115
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	266,0	278,0	329,0	334,0	337,0	384,0	387,0	439,0	441,0	442,0	467,0	523,0	567,0
Input power	kW	12,0	14,0	19,0	19,0	20,0	22,0	22,0	24,0	24,0	24,0	24,0	29,0	31,0
Free cooling total input current	A	19,1	21,2	30,3	30,3	31,5	34,5	34,5	37,5	37,5	37,5	37,6	45,8	48,3
EER	W/W	21,73	20,57	17,29	17,53	16,94	17,58	17,68	18,41	18,50	18,55	19,52	17,83	18,28

Size		1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Model: G														
Cooling performance chiller operation														
Cooling capacity	kW	323,0	374,0	426,0	471,0	494,0	535,0	564,0	611,0	640,0	656,0	683,0	746,0	799,0
Input power	kW	74,0	89,0	100,0	110,0	117,0	125,0	136,0	143,0	153,0	158,0	164,0	175,0	185,0
Cooling total input current	A	132,0	155,0	173,0	185,0	194,0	207,0	224,0	237,0	254,0	267,0	282,0	300,0	316,0
EER	W/W	4,36	4,22	4,26	4,29	4,23	4,27	4,15	4,26	4,18	4,15	4,16	4,26	4,32
Water flow rate system side	l/h	55770	64623	73447	81232	85330	92341	97251	105389	110441	113149	117928	128821	137959
Pressure drop system side	kPa	74	92	86	101	112	109	121	110	121	127	123	99	113
Cooling performances with free-cooling glycol-free														
Cooling capacity	kW	279,0	292,0	346,0	351,0	354,0	404,0	407,0	461,0	463,0	464,0	491,0	549,0	595,0
Input power	kW	12,4	13,7	19,2	19,2	20,0	22,1	22,1	24,1	24,1	24,1	24,1	29,5	31,3
Free cooling total input current	A	19,2	21,4	30,5	30,5	31,7	34,8	34,8	37,8	37,8	37,8	37,9	46,1	48,6
EER	W/W	22,53	21,40	18,03	18,27	17,67	18,32	18,43	19,17	19,27	19,31	20,33	18,59	19,04

NSM HWT BN-GN

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: B													
Cooling performance chiller operation													
Cooling capacity	kW	852,0	881,0	969,0	1033,0	1115,0	1198,0	1263,0	1329,0	-	-	-	-
Input power	kW	195,0	207,0	218,0	232,0	249,0	265,0	288,0	311,0	-	-	-	-
Cooling total input current	A	328,0	343,0	374,0	408,0	427,0	447,0	481,0	516,0	-	-	-	-
EER	W/W	4,37	4,26	4,44	4,46	4,49	4,51	4,38	4,27	-	-	-	-
Water flow rate system side	l/h	147047	152087	167278	178230	192448	206685	217997	229339	-	-	-	-
Pressure drop system side	kPa	117	125	101	93	102	75	92	92	-	-	-	-
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	617,0	618,0	727,0	770,0	828,0	880,0	887,0	889,0	-	-	-	-
Input power	kW	32,8	32,8	41,1	43,7	45,7	47,7	47,7	47,7	-	-	-	-
Free cooling total input current	A	51,0	51,0	65,0	69,0	72,0	75,0	75,0	75,0	-	-	-	-
EER	W/W	18,81	18,85	17,68	17,59	18,12	18,46	18,60	18,64	-	-	-	-

Size		3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Model: G													
Cooling performance chiller operation													
Cooling capacity	kW	848,0	877,0	965,0	1028,0	1110,0	1192,0	1257,0	1322,0	-	-	-	-
Input power	kW	197,0	209,0	220,0	234,0	251,0	268,0	291,0	314,0	-	-	-	-
Cooling total input current	A	330,0	346,0	377,0	411,0	430,0	450,0	485,0	520,0	-	-	-	-
EER	W/W	4,31	4,20	4,38	4,40	4,43	4,45	4,32	4,21	-	-	-	-
Water flow rate system side	l/h	146331	151317	166517	177452	191576	205700	216918	228136	-	-	-	-
Pressure drop system side	kPa	116	124	100	92	101	74	91	91	-	-	-	-
Cooling performances with free-cooling glycol-free													
Cooling capacity	kW	647,0	649,0	764,0	809,0	870,0	925,0	932,0	934,0	-	-	-	-
Input power	kW	33,1	33,1	41,4	44,1	46,1	48,1	48,1	48,1	-	-	-	-
Free cooling total input current	A	51,4	51,4	65,5	69,5	72,5	75,5	75,5	75,5	-	-	-	-
EER	W/W	19,56	19,61	18,44	18,34	18,87	19,22	19,37	19,41	-	-	-	-

Cooling performance chiller operation: System side water heat exchanger 25 °C/20 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%

Cooling performances with free-cooling glycol-free: System side water heat exchanger 25 °C; External air 12 °C

ELECTRIC DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Electric data															
Maximum current (FLA)	A	A	206,0	228,0	253,0	265,0	289,0	306,0	324,0	362,0	384,0	400,0	415,0	449,0	472,0
	E	A	207,0	229,0	265,0	277,0	289,0	322,0	339,0	372,0	394,0	410,0	426,0	457,0	480,0
	N	A	215,0	240,0	280,0	292,0	305,0	332,0	349,0	381,0	404,0	419,0	434,0	472,0	503,0
	U	A	207,0	229,0	265,0	280,0	292,0	322,0	339,0	372,0	395,0	410,0	426,0	457,0	480,0
Peak current (LRA)	A	A	279,0	269,0	308,0	346,0	362,0	395,0	406,0	457,0	472,0	490,0	500,0	536,0	551,0
	E	A	279,0	269,0	317,0	354,0	362,0	403,0	415,0	466,0	480,0	499,0	509,0	545,0	560,0
	N	A	288,0	280,0	332,0	369,0	378,0	414,0	425,0	475,0	490,0	508,0	518,0	559,0	583,0
	U	A	279,0	269,0	317,0	357,0	365,0	403,0	415,0	466,0	481,0	499,0	509,0	545,0	560,0

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Electric data														
Maximum current (FLA)	A	A	504,0	527,0	569,0	602,0	619,0	645,0	698,0	737,0	877,0	910,0	976,0	1111,0
	E	A	512,0	550,0	583,0	631,0	648,0	681,0	730,0	779,0	894,0	936,0	-	-
	N	A	541,0	564,0	624,0	667,0	693,0	719,0	758,0	797,0	-	-	-	-
	U	A	512,0	550,0	583,0	631,0	648,0	683,0	731,0	779,0	899,0	941,0	-	-
Peak current (LRA)	A	A	590,0	611,0	643,0	665,0	857,0	883,0	963,0	990,0	866,0	888,0	1072,0	1204,0
	E	A	598,0	628,0	651,0	687,0	879,0	906,0	980,0	1016,0	875,0	905,0	-	-
	N	A	627,0	642,0	692,0	723,0	924,0	945,0	1009,0	1034,0	-	-	-	-
	U	A	598,0	628,0	651,0	687,0	879,0	909,0	982,0	1016,0	880,0	910,0	-	-

Data calculated without hydronic kit and accessories.

GENERAL TECHNICAL DATA

Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Compressor															
Type	A,E,N,U	type	Screw												
Compressor regulation	A,E,N,U	Type	On-Off												
Number	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E,N,U	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E,N,U	type	R134a												
System side heat exchanger															
Type	A,E,N,U	type	Shell and tube												
Number	A,E,N,U	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Inverter fan															
Type	A,E,N,U	type	Axial												
Number	A	no.	8	8	8	8	10	10	10	12	12	12	12	14	14
	E,U	no.	8	8	10	10	10	12	12	14	14	14	14	16	16
	N	no.	10	10	12	12	12	14	14	16	16	16	16	18	20
Sound data calculated in cooling mode (1)															
Sound power level	A	dB(A)	97,1	97,1	97,4	97,3	98,1	98,0	97,8	98,4	98,4	98,7	99,3	100,4	100,8
	E	dB(A)	92,7	93,0	93,4	93,6	93,8	93,4	92,8	92,7	92,5	94,9	96,4	97,6	98,4
	N	dB(A)	92,8	93,1	93,9	93,8	93,9	93,7	93,2	93,0	92,8	94,3	96,0	97,9	98,7
	U	dB(A)	97,3	97,4	98,4	98,3	98,4	98,8	98,7	99,1	99,1	99,5	100,1	101,2	101,6

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

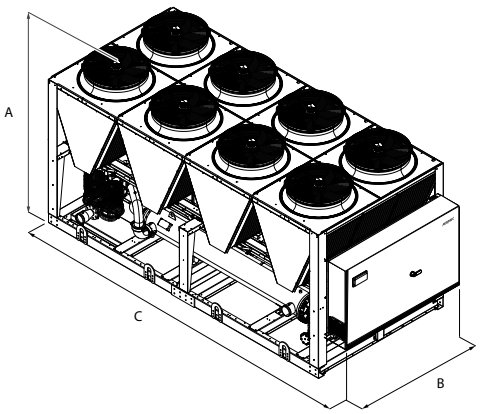
Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Compressor														
Type	A,E,N,U	type	Screw											
Compressor regulation	A,E,N,U	Type	On-Off											
Number	A	no.	2	2	2	2	2	2	2	2	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	2	3	3	-	-
	N	no.	2	2	2	2	2	2	2	2	-	-	-	-
Circuits	A	no.	2	2	2	2	2	2	2	2	3	3	3	3
	E,U	no.	2	2	2	2	2	2	2	2	3	3	-	-
	N	no.	2	2	2	2	2	2	2	2	-	-	-	-
Refrigerant	A,E,N,U	type	R134a											
System side heat exchanger														
Type	A,E,N,U	type	Shell and tube											
Number	A	no.	1	1	1	1	1	1	1	1	1	1	1	1
	E,U	no.	1	1	1	1	1	2	2	2	2	2	-	-
	N	no.	1	1	2	2	2	2	2	2	-	-	-	-
Inverter fan														
Type	A,E,N,U	type	Axial											
Number	A	no.	16	16	18	18	18	20	22	22	28	28	30	34
	E,U	no.	18	20	20	22	22	24	26	28	30	32	-	-
	N	no.	22	22	26	28	30	32	32	32	-	-	-	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Sound data calculated in cooling mode (1)														
Sound power level	A	dB(A)	100,8	100,4	100,8	100,9	101,4	102,3	102,3	101,9	103,7	103,8	105,0	104,8
	E	dB(A)	97,6	96,4	96,7	97,0	98,9	100,3	99,5	98,7	98,7	98,9	-	-
	N	dB(A)	97,9	96,8	97,0	97,3	98,7	100,1	99,5	98,7	-	-	-	-
	U	dB(A)	101,5	101,4	101,4	101,8	102,3	103,2	103,1	102,9	104,0	104,3	-	-

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1402	1602	1802	2002	2202	2352	2502	2652	2802	3002	3202	3402	3602
Dimensions and weights															
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	5160	5160	5160	5160	6350	6350	6350	7140	7140	7140	7140	8330	8330
	E,U	mm	5160	5160	6350	6350	6350	7140	7140	8330	8330	8330	8330	9520	9520
	N	mm	6350	6350	7140	7140	7140	8330	8330	9520	9520	9520	9520	10710	11900

Size			3902	4202	4502	4802	5202	5602	6002	6402	6903	7203	8403	9603
Dimensions and weights														
A	A,E,N,U	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E,N,U	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A	mm	9520	9520	10710	10710	10710	11900	13090	13090	16660	16660	17850	20230
	E,U	mm	10710	11900	11900	13090	13090	14280	15470	16660	17850	19040	-	-
	N	mm	13090	13090	15470	16660	17850	19040	19040	19040	-	-	-	-

■ *For transport reasons, the units with the depth of more than 13090 mm are shipped separately.*

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NSMI 1251-6102 F

Air-water chiller with free-cooling

Cooling capacity 286 ÷ 1280 kW

- **High efficiency also at partial loads**
- **Microchannel coil**
- **Low electrical consumption**



DESCRIPTION

Air-cooled outdoor chiller designed to meet air conditioning needs in residential/commercial complexes or industrial applications.
Outdoor units with high-efficiency screw compressors axial fans, microchannel external coils and plant side shell and tube heat exchanger.
In the unit with desuperheater, it is also possible to produce free-hot water.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 50 °C external air temperature. Unit can produce chilled water (up to -6 °C).

Units mono or dual-circuit

Unit with 1–2 refrigerant circuits.
The single circuit units have the inverter compressor, while the dual-circuit have an asynchronous compressor on/off switch and an inverter,the combination provides both high efficiency at part load and full load

Aluminium microchannel coils

The microchannel condensing aluminum coils ensure high levels of efficiency, reduced quantities of refrigerant and lower unit weight. The treatment "O" available as configurator it ensures high resistance to corrosion even in the most aggressive environments.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.

Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.*

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

Low noise version

Silenced versions feature a special compressor jacket which ensures a further noise reduction of approximately 4 dB.

CONTROL PCO[5]

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Further features:
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save

a log file with all the connected unit datas in the personal terminal for post analysis.
FB1: Air filter to protect the micro-channel coils. Formed of a frame and a composite baffle in micro-expanded aluminium mesh, with particularly low pressure drops.

MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_: Anti-intrusion grid kit
KRS: Electric heater for the heat exchanger

ACCESSORIES COMPATIBILITY

Model	Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
AER485P1	A,E	•	•	•												
AER485P1 x no. 2	A,E				•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	A,E	•	•	•												
AERBACP x no. 2	A,E				•	•	•	•	•	•	•	•	•	•	•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FB1	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A, E	GP4V	GP4V	GP5V	GP5V	GP6V	GP7V	GP7V	GP7V	GP8V	GP9V	GP10V	GP11V	GP11V	GP11V	GP11V

A grey background indicates the accessory must be assembled in the factory

Antivibration - NSMI free-cooling

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Integrated hydronic kit: 00															
A	AVX991	AVX992	AVX993	AVX966	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX989	AVX990	AVX990	AVX990	AVX990
E	AVX991	AVX992	AVX994	AVX966	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX989	AVX990	AVX990	AVX990	AVX990

Antivibration - NSMI free-cooling plus

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Integrated hydronic kit: 00															
A	AVX991	AVX992	AVX993	AVX966	AVX970	AVX995	AVX995	AVX995	AVX996	AVX988	AVX989	AVX990	AVX990	AVX990	AVX990
E	AVX991	AVX992	AVX994	AVX966	AVX970	AVX995	AVX995	AVX999	AVX996	AVX988	AVX989	AVX990	AVX990	AVX990	AVX990

Heater exchangers

Ver	1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
A	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	-	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24
E	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS23	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24	KRS24

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3,4	**NSMI**
5,6,7,8	**Size** 1251, 1601, 1801, 2352, 2652, 2802, 3202, 3402, 3802, 4102, 4402, 4802, 5202, 5702, 6102
9	**Model**
F	Free-cooling
P	Free-cooling plus (1)
10	**Heat recovery**
D	With desuperheater (2)
°	Without heat recovery
11	**Version**
A	High efficiency
E	Silenced high efficiency
12	**Coils / free-cooling coils**
0	Painted alluminium microchannel / Copper painted aluminium
R	Copper-copper/Copper-copper
S	Copper-Tinned copper / Copper -Tinned copper
V	Copper-painted alumimium / Copper-painted alumimium
°	Alluminium microchannel / Copper - aluminium
13	**Fans**
J	Inverter
°	Standard
14	**Power supply**
°	400V ~ 3 50Hz with magnet circuit breakers
15,16	**Integrated hydronic kit**
00	Without hydronic kit
	Kit with n° 1 pump
PA	Pump A
PB	Pump B
PC	Pump C
PD	Pump D
PE	Pump E
PF	Pump F
PG	Pump G
PH	Pump H
PI	Pump I
PJ	Pump J (3)
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump
DB	Pump B + stand-by pump
DC	Pump C + stand-by pump
DD	Pump D + stand-by pump
DE	Pump E + stand-by pump
DF	Pump F + stand-by pump
DG	Pump G + stand-by pump
DH	Pump H + stand-by pump
DI	Pump I + stand-by pump
DJ	Pump J + stand-by pump (3)
	Kit with 2 pumps
TF	Double pump F
TG	Double pump G
TH	Double pump H
TI	Double pump I
TJ	Double pump J (3)
17	**Refrigerant gas**
°	R134a

(1) The Free-Cooling Plus "P" models are only compatible with"°" ed "0"
(2) The temperature of the water in the heat exchanger inlet must never drop below 35°C.
(3) For all configurations including pump J please contact the factory.

PERFORMANCE SPECIFICATIONS

NSMI - free-cooling (FA/FE - PA/PE)

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Model: F																	
Cooling performance chiller operation (1)																	
Cooling capacity	A,E	kW	286,5	385,6	455,6	496,5	587,5	649,6	718,4	784,3	832,8	929,0	989,0	1096,3	1164,2	1208,4	1280,3
Input power	A,E	kW	96,6	126,7	157,5	177,7	206,3	221,2	244,7	272,7	280,5	324,3	343,8	368,4	417,3	436,6	477,9
Cooling total input current	A,E	A	166,0	212,0	261,0	309,0	356,0	381,0	417,0	456,0	470,0	547,0	580,0	644,0	692,0	728,0	761,0
EER	A,E	W/W	2,97	3,04	2,89	2,79	2,85	2,94	2,94	2,88	2,97	2,86	2,88	2,98	2,79	2,77	2,68
Water flow rate system side	A,E	l/h	49230	66245	78283	85309	100931	111607	123424	134748	143088	159614	169917	188349	200020	207622	219967
Pressure drop system side	A,E	kPa	52	78	75	48	67	68	76	46	54	68	79	80	90	94	107
Cooling performances with free-cooling (2)																	
Cooling capacity	A,E	kW	254,5	276,0	340,9	346,5	414,6	649,6	488,1	495,1	559,2	628,2	692,4	762,8	771,1	775,7	782,2
Input power	A,E	kW	15,0	15,0	18,7	18,7	22,5	26,2	26,2	26,2	30,0	33,7	37,5	41,2	41,2	41,2	41,2
Free cooling total input current	A,E	A	26,0	25,0	31,0	33,0	39,0	45,0	45,0	44,0	50,0	57,0	63,0	72,0	68,0	69,0	66,0
EER	A,E	W/W	19,97	18,41	18,19	18,49	18,43	18,22	18,60	18,87	18,65	18,62	18,47	18,50	18,70	18,81	18,97
Water flow rate system side	A,E	l/h	49230	66245	78283	85309	100931	111607	123424	134748	143088	159614	169917	188349	200020	207622	219967
Pressure drop system side	A,E	kPa	80	121	128	88	109	109	124	94	99	108	125	127	143	157	169

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Model: P																	
Cooling performance chiller operation (1)																	
Cooling capacity	A,E	kW	285,5	383,5	453,4	493,5	584,0	646,4	714,7	778,5	827,8	923,5	983,6	1090,1	1156,6	1200,5	1270,3
Input power	A,E	kW	97,4	127,8	158,9	179,7	208,6	223,4	247,5	275,8	283,4	327,8	347,4	372,4	421,9	441,5	483,8
Cooling total input current	A,E	A	168,0	214,0	263,0	312,0	360,0	385,0	421,0	461,0	474,0	553,0	585,0	644,0	692,0	728,0	761,0
EER	A,E	W/W	2,93	3,00	2,85	2,75	2,80	2,89	2,89	2,82	2,92	2,82	2,83	2,93	2,74	2,72	2,63
Water flow rate system side	A,E	l/h	49048	65887	77903	84789	100332	111060	122801	133758	142233	158667	168998	187289	198712	206254	218254
Pressure drop system side	A,E	kPa	51	78	74	47	67	67	75	45	53	67	79	79	89	92	105
Cooling performances with free-cooling (2)																	
Cooling capacity	A,E	kW	271,8	296,0	365,5	371,4	444,5	512,7	523,2	530,1	599,3	673,3	742,3	817,7	826,2	830,9	837,1
Input power	A,E	kW	15,2	15,2	19,0	19,0	22,8	26,7	26,7	26,7	30,5	34,3	38,1	41,9	41,9	41,9	41,9
Free cooling total input current	A,E	A	26,0	25,0	32,0	33,0	39,0	46,0	45,0	45,0	51,0	58,0	64,0	72,0	69,0	69,0	66,0
EER	A,E	W/W	17,84	19,43	19,19	19,50	19,45	19,23	19,63	19,89	19,67	19,64	19,49	19,52	19,72	19,83	19,98
Water flow rate system side	A,E	l/h	49048	65887	77903	84789	100332	111060	122801	133758	142233	158667	168998	187289	198712	206254	218254
Pressure drop system side	A,E	kPa	80	120	127	87	108	108	123	93	98	107	123	125	141	155	166

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Model: F																	
SEPR - (EN14825: 2018) High temperature with standard fans (1)																	
SEPR	A,E	W/W	6,95	6,32	6,23	6,60	6,73	7,06	6,85	6,65	6,98	6,74	6,83	7,24	7,11	7,28	7,05
SEPR - (EN14825: 2018) High temperature with inverter fans (1)																	
SEPR	A,E	W/W	6,95	6,32	6,23	6,60	6,73	7,06	6,85	6,65	6,98	6,74	6,83	7,24	7,11	7,28	7,05

(1) Calculation performed with FIXED water flow rate.

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Model: P																	
SEPR - (EN14825: 2018) High temperature with standard fans (1)																	
SEPR	A,E	W/W	7,02	6,39	6,31	6,69	6,83	7,19	6,93	6,69	7,06	6,82	6,93	7,30	7,15	7,31	7,05
SEPR - (EN14825: 2018) High temperature with inverter fans (1)																	
SEPR	A,E	W/W	7,02	6,39	6,31	6,69	6,83	7,19	6,93	6,69	7,06	6,82	6,93	7,30	7,15	7,31	7,05

(1) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Electric data																	
Maximum current (FLA)	A,E	A	259,9	299,9	388,4	452,7	485,9	534,4	534,4	582,4	670,9	727,4	774,9	874,2	917,2	1002,2	1036,2
Peak current (LRA)	A,E	A	59,9	59,9	68,4	582,4	617,9	666,4	666,4	790,4	878,9	1008,4	1080,0	1180,2	1335,2	1420,2	1532,2

GENERAL TECHNICAL DATA

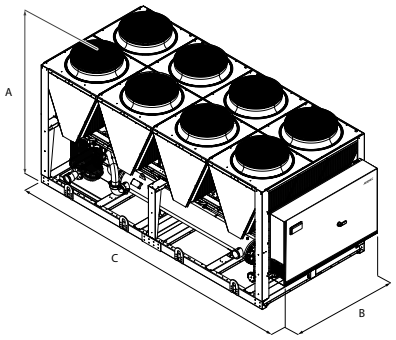
Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Compressor																	
Type	A,E	type	Screw														
Compressor regulation	A,E	Type	I	I	I	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off	I+On/Off
Number	A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Circuits	A,E	no.	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	A,E	type	R134a														
System side heat exchanger																	
Type	A,E	type	Shell and tube														
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections																	
Connections (in/out)	A,E	Type	Grooved joints														
Sizes (in/out)	A,E	Ø	5″	6″	6″	6″	6″	6″	6″	8″	8″	8″	8″	10″	10″	10″	10″
Fan																	
Type	A,E	type	Axial														
Fan motor	A,E	type	Asynchronous with phase cut														
Number	A,E	no.	8	8	10	10	12	14	14	14	16	18	20	22	22	22	22
Air flow rate	A,E	m^3/h	109600	109600	137000	137000	164400	191800	191800	191800	219200	146600	274000	301400	301400	301400	301400

Sound data

Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Sound data calculated in cooling mode (1)																	
Sound power level	A	dB(A)	98,1	99,2	99,4	99,4	99,7	100,7	100,7	101,1	101,2	101,3	101,9	103,6	103,8	103,8	103,9
	E	dB(A)	94,2	96,0	96,3	95,7	96,2	96,6	96,6	97,8	97,9	98,3	98,6	100,2	100,2	100,2	100,3

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			1251	1601	1801	2352	2652	2802	3202	3402	3802	4102	4402	4802	5202	5702	6102
Dimensions and weights																	
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	4760	4760	5950	6400	7140	8330	8330	8330	9520	10710	11900	13090	13090	13090	13090

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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TBA 1300-3350 F

Air-water chiller with free-cooling

Cooling capacity 317,2 ÷ 1223,6 kW

- **High efficiency also at partial loads**
- **Microchannel coil**
- **Low peak current (only 6 Amps!)**
- **Evaporator with low refrigerant charge**
- **Available also with R513A (XP10) refrigerant**



DESCRIPTION

Air-cooled chiller designed to meet air conditioning needs in residential / commercial complexes or industrial applications.
These are outdoor units with oil free centrifugal compressor, axial fans, micro-channel coils, and shell and tube heat exchangers.
The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 43°C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Units mono or dual-circuit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Oil free centrifugal compressor

Two-stage oil-free centrifugal compressor with magnetic levitation and inverter.
Compressor features:
— Operates without oil as bearings are magnetic levitation type
— Continuous load modulation by varying rpm (from 30% to 100%)
— Low peak currents (only 6 Amps!)

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.*

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO[5]

Units include 1 control board for each circuit.
Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Further features:
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

CONFIGURATOR

Field		Description
1,2,3		**TBA**
4,5,6,7		**Size** 1300, 1350, 2300, 2325, 2350, 3300, 3320, 3340, 3350
8		**Model**
	F	Free-cooling
	P	Free-cooling plus (1)
9		**Heat recovery**
	°	Without heat recovery
10		**Version**
	A	High efficiency
	E	Silenced high efficiency
11		**Coils / free-cooling coils**
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
12		**Fans**
	J	Inverter
13		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
14,15		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (2)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (2)
		Kit with inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed
	IG	Pump G equipped with inverter device to work at fixed speed
	IH	Pump H equipped with inverter device to work at fixed speed
	II	Pump I equipped with inverter device to work at fixed speed
	IJ	Pump J equipped with inverter device to work at fixed speed (2)
		Kit with n°1 pump + stand-by pump both equipped wih inverter device to work at fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
	JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (2)
		Kit with double pump both equipped with inverter device to work at fixed speed
	KF	Doble pump F with inverter device to work at fixed speed
	KG	Doble pump G with inverter device to work at fixed speed
	KH	Doble pump H with inverter device to work at fixed speed
	KI	Doble pump I with inverter device to work at fixed speed
	KJ	Doble pump J with inverter device to work at fixed speed (2)
		Kit with double pumps
	TF	Double pump F
	TG	Double pump G
	TH	Double pump H
	TI	Double pump I
	TJ	Double pump J (2)
16		**Refrigerant gas**
	G	R513A (XP10)
	°	R134a

(1) The Free-Cooling Plus "P" models are only compatible with"°" ed "0"
(2) For all configurations including pump J please contact the factory.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350
AER485P1	A,E	•	•	•		•	•		•	•
AER485P1 x no. 2	A,E				•			•		
AERBACP	A,E	•	•	•		•	•		•	•
AERBACP x no. 2	A,E				•			•		
AERNET	A,E	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,E	•	•	•	•	•	•	•	•	•

Antivibration

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350
A, E	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Anti-intrusion grid

Ver	1300	1350	2300	2325	2350	3300	3320	3340	3350
A, E	GP3T	GP4T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T	GP11T

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Model: F											
Cooling performance chiller operation (1)											
Cooling capacity	A,E	kW	317,2	419,2	634,5	736,4	838,4	934,7	1065,0	1149,0	1223,6
Input power	A,E	kW	91,6	121,8	182,8	214,3	244,4	267,3	311,2	337,8	365,9
Cooling total input current	A,E	A	147,5	198,3	295,0	345,8	396,7	427,5	498,3	559,2	604,2
EER	A,E	W/W	3,46	3,44	3,47	3,44	3,43	3,50	3,42	3,40	3,34
Water flow rate system side	A,E	l/h	54505	72025	109011	126530	144050	160596	182983	197414	210235
Pressure drop system side	A,E	kPa	65	32	70	54	45	69	72	66	52
Cooling performances with free-cooling (2)											
Cooling capacity	A,E	kW	297,2	395,5	594,4	692,7	791,1	888,3	994,1	1085,0	1100,1
Input power	A,E	kW	11,3	15,0	22,5	26,3	30,0	33,8	37,5	41,3	41,3
Free cooling total input current	A,E	A	17,5	23,3	35,0	40,8	46,7	52,5	58,3	64,2	64,2
EER	A,E	W/W	26,41	26,36	26,41	26,38	26,36	26,31	26,50	26,30	26,66
Water flow rate system side	A,E	l/h	54505	72025	109011	126530	144050	160596	182983	197414	210235
Pressure drop system side	A,E	kPa	118	78	130	103	99	127	138	117	109

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Model: P											
Cooling performance chiller operation (1)											
Cooling capacity	A,E	kW	317,2	419,2	634,5	736,4	838,4	934,7	1065,0	1149,0	1206,6
Input power	A,E	kW	93,1	123,9	185,8	217,9	248,6	271,6	316,4	343,6	366,0
Cooling total input current	A,E	A	147,9	198,8	295,7	346,7	397,6	428,6	499,6	560,5	605,5
EER	A,E	W/W	3,41	3,38	3,42	3,38	3,37	3,44	3,37	3,34	3,30
Water flow rate system side	A,E	l/h	54505	72025	109011	126530	144050	160596	182983	197414	207315
Pressure drop system side	A,E	kPa	65	32	70	54	45	69	72	66	50
Cooling performances with free-cooling (2)											
Cooling capacity	A,E	kW	319,4	425,1	638,8	744,5	850,2	954,8	1068,2	1166,2	1181,8
Input power	A,E	kW	11,5	15,3	23,0	26,8	30,7	34,5	38,4	42,2	42,2
Free cooling total input current	A,E	A	17,9	18,8	35,7	36,7	37,6	53,6	44,6	65,5	80,5
EER	A,E	W/W	27,76	27,71	27,76	27,73	27,71	27,66	27,85	27,64	28,01
Water flow rate system side	A,E	l/h	54505	72025	109011	126530	144050	160596	182983	197414	207315
Pressure drop system side	A,E	kPa	114	74	126	99	95	123	134	113	102

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Model: F											
SEER - (EN14825:2018) 12/7 with inverter fans (1)											
SEER	A,E	W/W	5,06	5,14	5,21	5,17	5,30	5,40	5,32	5,26	5,23
Seasonal efficiency	A,E	%	199,3%	202,7%	205,5%	203,6%	208,8%	212,8%	209,6%	207,2%	206,1%
SEPR - (EN14825: 2018) High temperature with inverter fans (2)											
SEPR	A,E	W/W	8,65	8,51	8,79	8,32	8,53	9,04	9,34	8,89	8,58

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Model: P											
SEER - (EN14825:2018) 12/7 with inverter fans (1)											
SEER	A,E	W/W	4,98	5,06	5,14	5,09	5,21	5,32	5,11	5,18	5,17
Seasonal efficiency	A,E	%	196,3%	199,4%	202,5%	200,4%	205,5%	209,7%	201,2%	204,0%	203,7%
SEPR - (EN14825: 2018) High temperature with inverter fans (2)											
SEPR	A,E	W/W	8,91	8,45	8,88	8,53	8,65	9,18	8,99	9,06	8,81

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Electric data											
Maximum current (FLA)	A,E	A	165,0	249,0	329,0	413,0	498,0	493,0	577,0	737,0	737,0
Peak current (LRA)	A,E	A	36,0	45,0	210,0	305,0	315,0	384,0	479,0	575,0	575,0

GENERAL TECHNICAL DATA

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Compressor											
Type	A,E	type					Centrifugal				
Compressor regulation	A,E	Type					Inverter				
Number	A,E	no.	1	1	2	2	2	3	3	3	3
Circuits	A,E	no.	1	1	1	2	1	1	2	1	1
Refrigerant	A,E	type					R134a				
Refrigerant charge (1)	A,E	kg	81,5	165,7	163,0	253,8	295,8	275,2	317,2	327,9	397,9
System side heat exchanger											
Type	A,E	type					Shell and tube				
Number	A,E	no.	1	1	1	1	1	1	1	1	1
Hydraulic connections											
Connections (in/out)	A,E	Type					Grooved joints				
Size (in)	A,E	Ø	3″	4″	4″	5″	5″	5″	5″	6″	6″
Size (out)	A,E	Ø	3″	4″	4″	5″	5″	5″	5″	6″	6″
Sound data calculated in cooling mode (2)											
Sound power level	A	dB(A)	88,3	90,0	91,3	92,8	93,1	93,1	94,1	95,5	95,5
	E	dB(A)	82,3	84,0	85,3	86,8	87,1	87,1	88,1	89,5	89,5
Sound pressure level (10 m)	A	dB(A)	56,1	57,6	58,7	60,0	60,2	60,1	61,0	62,3	62,3
	E	dB(A)	50,1	51,6	52,7	54,0	54,2	54,1	55,0	56,3	56,3

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

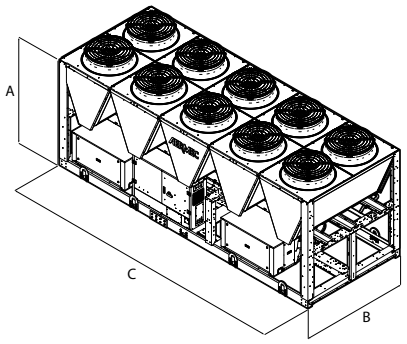
General data - fans (F model)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Fan											
Type	A,E	type					Axial				
Fan motor	A,E	type					Inverter				
Number	A,E	no.	6	8	12	14	16	18	20	22	22
Air flow rate	A,E	m^3/h	93180	124240	186360	217420	248480	279540	310600	341660	341660

General data - fans (P model)

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Fan											
Type	A,E	type					Axial				
Fan motor	A,E	type					Inverter				
Number	A,E	no.	6	8	12	14	16	18	20	22	22
Air flow rate	A,E	m^3/h	88680	118240	177360	206920	236480	266040	295600	325160	325160

DIMENSIONS



Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ											
Dimensions and weights											
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3570	4760	7140	8330	9520	10710	11900	13090	13090

Model F

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Integrated hydronic kit: 00											
Weights											
Empty weight	A	kg	3290	4330	5860	7050	8020	8490	9820	10310	10670
	E	kg	3370	4440	6030	7250	8240	8740	10100	10610	10970
Weight functioning	A	kg	3570	4720	6380	7680	8790	9270	10720	11270	11710
	E	kg	3650	4830	6550	7880	9010	9520	11000	11570	12010

Model P

Size			1300	1350	2300	2325	2350	3300	3320	3340	3350
Integrated hydronic kit: 00											
Weights											
Empty weight	A	kg	3380	4460	6050	7270	8270	8780	10140	10650	11020
	E	kg	3470	4570	6220	7470	8490	9020	10410	10960	11320
Weight functioning	A	kg	3700	4910	6650	8000	9150	9680	11180	11760	12220
	E	kg	3790	5020	6820	8200	9370	9920	11450	12070	12520

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TBG 1230-4310 F

Air-water chiller with free-cooling

Cooling capacity 238 ÷ 1110 kW

- **HFO R1234ze refrigerant gas**
- **High efficiency also at partial loads**
- **Microchannel coil**
- **Low peak current (only 6 Amps!)**
- **Evaporator with low refrigerant charge**



DESCRIPTION

Air-cooled chiller designed to meet air conditioning needs in residential / commercial complexes or industrial applications.
These are outdoor units with oil free centrifugal compressor, axial fans, micro-channel coils, and shell and tube heat exchangers.
The base, the structure and the panels are made of steel treated with polyester paint RAL 9003.

VERSIONS

A High efficiency
E Silenced high efficiency

FEATURES

Operating field

Operation at full load up to 43°C external air temperature depending on size and version. For further details refer to the selection software/technical documentation.

Units mono or dual-circuit

The units according to the size are mono or dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Oil free centrifugal compressor

Two-stage oil-free centrifugal compressor with magnetic levitation and inverter.
Compressor features:
— Operates without oil as bearings are magnetic levitation type
— Continuous load modulation by varying rpm (from 30% to 100%)
— Low peak currents (only 6 Amps!)

Aluminium microchannel coils

The whole range uses microchannel condenser coils allowing reduction of refrigerant charge but keeping the same high efficiency.

Free-cooling water coils

These units also have a water coil dedicated to free-cooling mode.
Free-cooling offers significant energy saving in applications that require cooling all year round.
As soon as the outside air temperature allows, a valve makes the water flow towards the free-cooling battery which is cooled directly by the air. The compressors are completely shut down, if possible, leading to considerable electrical savings.

■ *A "P" free-cooling plus model with the oversized water battery can be chosen for applications in which a higher free-cooling performance is required.*

Integrated hydronic kit

Integrated hydronic kit containing the main hydraulic components; available with various configurations, to obtain a solution that allows you to save money and to facilitate installation.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:
da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430;
with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

CONTROL PCO^5

Units include 1 control board for each circuit.
Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Further features:
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

CONFIGURATOR

Field		Description
1,2,3		**TBG**
4,5,6,7		**Size** 1230, 1310, 2230, 2270, 2310, 3270, 3280, 3310, 4270, 4310
8		**Model**
	F	Free-cooling
	P	Free-cooling plus (1)
9		**Heat recovery**
	°	Without heat recovery
10		**Version**
	A	High efficiency
	E	Silenced high efficiency
11		**Coils / free-cooling coils**
	0	Painted alluminium microchannel / Copper painted aluminium
	R	Copper-copper/Copper-copper
	S	Copper-Tinned copper / Copper -Tinned copper
	V	Copper-painted alumimium / Copper-painted alumimium
	°	Alluminium microchannel / Copper - aluminium
12		**Fans**
	J	Inverter
13		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
14,15		**Integrated hydronic kit**
	00	Without hydronic kit
		Kit with n° 1 pump
	PA	Pump A
	PB	Pump B
	PC	Pump C
	PD	Pump D
	PE	Pump E
	PF	Pump F
	PG	Pump G
	PH	Pump H
	PI	Pump I
	PJ	Pump J (2)
		Pump n° 1 pump + stand-by pump
	DA	Pump A + stand-by pump
	DB	Pump B + stand-by pump
	DC	Pump C + stand-by pump
	DD	Pump D + stand-by pump
	DE	Pump E + stand-by pump
	DF	Pump F + stand-by pump
	DG	Pump G + stand-by pump
	DH	Pump H + stand-by pump
	DI	Pump I + stand-by pump
	DJ	Pump J + stand-by pump (2)
		Kit with inverter pump to fixed speed
	IA	Pump A equipped with inverter device to work at fixed speed
	IB	Pump B equipped with inverter device to work at fixed speed
	IC	Pump C equipped with inverter device to work at fixed speedr
	ID	Pump D equipped with inverter device to work at fixed speed
	IE	Pump E equipped with inverter device to work at fixed speed
	IF	Pump F equipped with inverter device to work at fixed speed
	IG	Pump G equipped with inverter device to work at fixed speed
	IH	Pump H equipped with inverter device to work at fixed speed
	II	Pump I equipped with inverter device to work at fixed speed
	IJ	Pump J equipped with inverter device to work at fixed speed (2)
		Kit with n°1 pump + stand-by pump both equipped wih inverter device to work at fixed speed
	JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed
	JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed
	JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed
	JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed
	JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed
	JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed
	JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed
	JH	Pump H+stand-by pump, both equipped with inverter to work at fixed speed
	JI	Pump I+stand-by pump, both equipped with inverter to work at fixed speed
	JJ	Pump J+stand-by pump, both equipped with inverter to work at fixed speed (2)
		Kit with double pump both equipped with inverter device to work at fixed speed
	KF	Doble pump F with inverter device to work at fixed speed
	KG	Doble pump G with inverter device to work at fixed speed
	KH	Doble pump H with inverter device to work at fixed speed
	KI	Doble pump I with inverter device to work at fixed speed
	KJ	Doble pump J with inverter device to work at fixed speed (2)
		Kit with double pumps
	TF	Double pump F
	TG	Double pump G
	TH	Double pump H
	TI	Double pump I
	TJ	Double pump J (2)

(1) The Free-Cooling Plus "P" models are only compatible with"°" ed "0"
(2) For all configurations including pump J please contact the factory.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

GP_T: Anti-intrusion grid kit

ACCESSORIES COMPATIBILITY

Model	Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
AER485P1	A,E	•	•	•		•		•	•		
AER485P1 x no. 2	A,E				•		•			•	•
AERBACP	A,E	•	•	•		•		•	•		
AERBACP x no. 2	A,E				•		•			•	•
AERNET	A,E	•	•	•	•	•	•	•	•	•	•

Antivibration

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ										
A, E	AVX591	AVX. (1)	AVX1187	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

Anti-intrusion grid

Ver	1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
A, E	GP3T	GP4T	GP5T	GP6T	GP7T	GP8T	GP9T	GP10T	GP11T	GP11T

A grey background indicates the accessory must be assembled in the factory

PERFORMANCE SPECIFICATIONS

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: F												
Cooling performance chiller operation (1)												
Cooling capacity	A,E	kW	237,9	328,6	453,2	526,8	623,2	730,8	798,8	907,5	1019,7	1110,3
Input power	A,E	kW	68,6	95,3	130,6	153,1	181,1	211,4	231,7	260,0	294,0	328,1
Cooling total input current	A,E	A	112,5	158,3	214,2	255,0	300,8	346,7	387,5	433,3	489,2	549,2
EER	A,E	W/W	3,47	3,45	3,47	3,44	3,44	3,46	3,45	3,49	3,47	3,38
Water flow rate system side	A,E	l/h	40879	56452	77865	90518	107064	125557	137237	155924	175196	190769
Pressure drop system side	A,E	kPa	48	51	45	54	50	55	54	63	46	56
Cooling performances with free-cooling (2)												
Cooling capacity	A,E	kW	275,5	371,6	478,0	568,6	665,9	766,4	855,5	956,3	1057,8	1079,5
Input power	A,E	kW	11,3	15,0	18,8	22,5	26,3	30,0	33,8	37,5	41,3	41,3
Free cooling total input current	A,E	A	17,5	23,3	29,2	35,0	40,8	46,7	52,5	58,3	64,2	64,2
EER	A,E	W/W	24,49	24,77	25,49	25,27	25,36	25,54	25,34	25,50	25,64	26,16
Water flow rate system side	A,E	l/h	40879	56452	77865	90518	107064	125557	137237	155924	175196	190769
Pressure drop system side	A,E	kPa	81	93	86	97	87	97	98	113	88	105

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: P												
Cooling performance chiller operation (1)												
Cooling capacity	A,E	kW	237,9	328,6	453,2	526,8	623,1	730,8	798,8	907,5	1019,7	1110,3
Input power	A,E	kW	69,6	96,9	132,6	155,8	184,3	214,7	235,6	265,7	296,9	337,7
Cooling total input current	A,E	A	112,5	158,3	214,2	255,0	300,8	346,7	387,5	433,3	489,2	549,2
EER	A,E	W/W	3,42	3,39	3,42	3,38	3,38	3,40	3,39	3,42	3,43	3,29
Water flow rate system side	A,E	l/h	40879	56452	77865	90518	107064	125557	137237	155924	175196	190769
Pressure drop system side	A,E	kPa	48	51	45	54	50	55	54	63	46	56
Cooling performances with free-cooling (2)												
Cooling capacity	A,E	kW	295,4	398,2	514,2	610,9	714,2	823,8	919,0	1029,7	1136,1	1160,9
Input power	A,E	kW	11,5	15,4	19,2	23,0	26,9	30,7	34,5	38,3	42,2	42,2
Free cooling total input current	A,E	A	17,5	23,3	29,2	35,0	40,8	46,7	52,5	58,3	64,2	64,2
EER	A,E	W/W	25,70	25,90	26,80	26,50	26,60	26,90	26,60	26,90	26,90	27,50
Water flow rate system side	A,E	l/h	40879	56452	77864	90517	107064	125557	137236	155924	175196	190768
Pressure drop system side	A,E	kPa	78	91	83	94	84	94	95	110	84	101

(1) System side water heat exchanger 12 °C/7 °C; External air 35 °C; Chiller operation 100%; Free-cooling 0%
(2) Acqua scambiatore lato utenza 12 °C / * °C ; Aria esterna 2 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: F												
SEER - (EN14825:2018) 12/7 with inverter fans (1)												
SEER	A,E	W/W	5,40	5,47	5,72	5,35	5,72	5,53	5,64	5,67	5,66	5,49
Seasonal efficiency	A,E	%	213,1%	215,7%	225,9%	210,9%	225,8%	218,0%	222,6%	223,7%	223,4%	216,4%
SEPR - (EN14825: 2018) High temperature with inverter fans (2)												
SEPR	A,E	W/W	9,45	9,36	9,37	8,49	9,15	9,31	9,45	9,50	9,47	9,13

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: P												
SEER - (EN14825:2018) 12/7 with inverter fans (1)												
SEER	A,E	W/W	5,33	5,58	5,65	5,27	5,63	5,45	5,56	5,56	5,63	5,34
Seasonal efficiency	A,E	%	210,3%	220,0%	222,8%	207,6%	222,2%	214,9%	219,2%	219,3%	222,3%	210,7%
SEPR - (EN14825: 2018) High temperature with inverter fans (2)												
SEPR	A,E	W/W	9,36	9,24	9,27	8,55	9,21	9,34	9,35	9,35	9,43	8,93

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Electric data												
Maximum current (FLA)	A,E	A	125,0	189,0	239,0	304,0	368,0	418,0	538,0	547,0	597,0	707,0
Peak current (LRA)	A,E	A	36,0	45,0	161,0	230,0	239,0	355,0	424,0	433,0	549,0	608,0

GENERAL TECHNICAL DATA

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Compressor												
Type	A,E	type	Centrifugal									
Compressor regulation	A,E	Type	Inverter									
Number	A,E	no.	1	1	2	2	2	3	3	3	4	4
Circuits	A,E	no.	1	1	1	2	1	2	1	1	2	2
Refrigerant	A,E	type	R1234ze									
Refrigerant charge (1)	A,E	kg	81,5	120,1	152,3	187,1	197,8	264,5	275,2	285,9	327,9	327,9
System side heat exchanger												
Type	A,E	type	Shell and tube									
Number	A,E	no.	1	1	1	1	1	1	1	1	1	1
Hydraulic connections												
Connections (in/out)	A,E	Type	Grooved joints									
Size (in)	A,E	Ø	3"	3"	4"	4"	5"	5"	5"	5"	6"	6"
Size (out)	A,E	Ø	3"	3"	4"	4"	5"	5"	5"	5"	6"	6"
Sound data calculated in cooling mode (2)												
Sound power level	A	dB(A)	86,3	88,9	88,8	90,5	91,7	91,6	93,1	93,3	93,3	94,2
	E	dB(A)	83,3	85,9	85,8	87,5	88,7	88,6	90,1	90,3	90,3	91,2
Sound pressure level (10 m)	A	dB(A)	54,1	56,5	56,3	57,9	58,9	58,7	60,1	60,2	60,1	61,0
	E	dB(A)	51,1	53,5	53,3	54,9	55,9	55,7	57,1	57,2	57,1	58,0

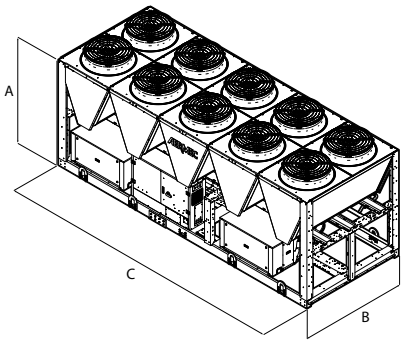
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

General data - fans

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: F												
Inverter fan												
Type	A,E	type	Axial									
Fan motor	A,E	type	Inverter									
Number	A,E	no.	6	8	10	12	14	16	18	20	22	22
Air flow rate	A,E	m^3/h	93150	124200	155250	186300	217350	248400	279450	310500	341550	341550

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Model: P												
Inverter fan												
Type	A,E	type	Axial									
Fan motor	A,E	type	Inverter									
Number	A,E	no.	6	8	10	12	14	16	18	20	22	22
Air flow rate	A,E	m^3/h	88800	118400	148000	177600	207200	236800	266400	296000	325600	325600

DIMENSIONS



Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, KF, KG, KH, KI, KJ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, TF, TG, TH, TI, TJ												
Dimensions and weights												
A	A,E	mm	2450	2450	2450	2450	2450	2450	2450	2450	2450	2450
B	A,E	mm	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
C	A,E	mm	3570	4760	5950	7140	8330	9520	10710	11900	13090	13090

Model F

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00												
Weights												
Empty weight	A	kg	3250	4110	5220	6180	6770	8130	8720	9400	10960	11220
	E	kg	3330	4220	5360	6350	6960	8350	8960	9670	11270	11520
Weight functioning	A	kg	3510	4450	5630	6700	7360	8820	9500	10250	11920	12190
	E	kg	3590	4560	5770	6870	7550	9040	9740	10520	12230	12490

Model P

Size			1230	1310	2230	2270	2310	3270	3280	3310	4270	4310
Integrated hydronic kit: 00												
Weights												
Empty weight	A	kg	3340	4240	5380	6370	6990	8380	9000	9710	11310	11570
	E	kg	3430	4350	5520	6540	7180	8600	9250	9990	11610	11870
Weight functioning	A	kg	3640	4640	5860	6970	7680	9180	9900	10700	12420	12690
	E	kg	3730	4750	6000	7140	7870	9400	10150	10980	12720	12990

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WATER / WATER CHILLERS AND HEAT PUMPS

Aermec plant engineering really comes into its own in the field of machines and technology for centralised systems. Aermec offer a full range of chillers and heat pumps from the small domestic system up to that of the large size for the service industry.

The cooling capacity range is extremely wide, and the fittings solutions are equally diverse, for scroll, screw or centrifugal compressor applications.

The careful selection of materials and the close attention paid to every detail of assembly coupled with the huge selection of accessories complete the industry-leading products designed for use in this sector, making Aermec units a real "must" in the world of Italian and European climate control.

WATER / WATER CHILLERS AND HEAT PUMPS

			Air flow rate (m³/h)	Cool. Cap. (kW)	Heat. Cap. (kW)	Page
	Units with scroll compressors					
	VENICE-H	Reversible water-cooled heat pump, gas side	-	6,9-,9,7	8,3-11,7	720
	WRL 026H-161H	Reversible water-cooled heat pump, gas side	-	6,0-40,0	8,0-48,0	723
	WRL 026-161	Water cooled heat pump reversible water side	-	6,6-44,2	7,5-48,0	730
	WRL 180H-650H	Reversible water-cooled heat pump, gas side	-	44,9-157,4	53,0-183,3	736
	WRL 180-650	Water cooled heat pump reversible water side	-	49,0-174,0	55,0-192,0	740
	WRK	Reversible water-cooled heat pump, gas side	-	38,9-165,9	48,5-207,7	745
	WWB 0300-0900	Water-water heat pumps only	-	-	56,7-265,9	753
new	**WWBG**	Water-water heat pumps only	-	-	77,2-,138,2	758
	WWM	Water cooled heat pump reversible water side	-	96	110	763
	NXW 0503-1654	Water cooled heat pump reversible water side	-	111-511	127-582	769
	NXW 0503H - 1654H	Reversible water-cooled heat pump, gas side	-	106-477	125-565	774
new	**NGW-0500-2600**	Water cooled heat pump reversible water side	-	116,3-790,2	131,3-904,6	779
new	**NGW-0350H-2600H**	Reversible water-cooled heat pump, gas side	-	107,0-746,4	126,3-879,3	784
	Units with screw compressors					
	WS 0601-2802	Water cooled heat pump reversible water side	-	147-700	164-778	790
	HWS 0601 - 2802	Water cooled heat pump reversible water side	-	147-369	165-778	794
	HWSG	Water cooled heat pump reversible water side	-	110-396	122-595	799
	WSH	Reversible water-cooled heat pump, gas side	-	165,8-269,7	183,3-300,3	803
	WFGI	Water cooled heat pump reversible water side	-	217-1765	243-1960	807
	WFGN	Water cooled heat pump reversible water side	-	136-1727	153-1921	817
	WFI	Water cooled heat pump reversible water side	-	291-2406	326-2664	824
	WFN	Water cooled heat pump reversible water side	-	182-2349	205-2610	833
	Units with centrifugal compressors					
	WMX	Water/water chiller (with R134a)	-	280,1-324,2	-	841
	WMG	Water/water chiller (with R1234ze)	-	282,3-312,4	-	844
	WTX	Water/water chiller	-	222,9-1958,4	-	847
	WTG	Water/water chiller (with R1234ze)	-	246,6-1959,4	-	852

VENICE-H

Reversible water-cooled heat pump, gas side

Cooling capacity 6,9 ÷ 9,7 kW
Heating capacity 8,3 ÷ 11,7 kW

- **Compact dimensions**
- **Quick & easy installation**



DESCRIPTION

The water-cooled heat pumps are reversible units for the production of chilled and hot water. They are indoor units with scroll compressors, system side heat exchangers and a plate source, which fully meet the needs of the residential market: reduced size, easy installation, low noise levels.

FEATURES

— Cycle reversal on refrigerant circuit
— All versions are equipped with circulation pump, water tank, water filter and safety valve
— Complies with safety (EC) directive
— Differential pressure switch on the external circuit standard on heat pumps
— Flow-switch supplied in series only on the DHW side exchanger.
— Microprocessor control
— Control panel
— Plate heat exchanger
— Compact dimensions
— Metallic protective cabinet with rustproofing polyester paint RAL 9003
— Protection rating IP 24

ACCESSORIES

PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
VPH: Pressure switch valve with bypass solenoid valve, during cooling mode operation the bypass valve is closed so the water flows exclusively through the circuit with the pressure switch. During heating mode operation the water flows through both branches of the circuit.
VT: Anti-vibration supports.

ACCESSORIES COMPATIBILITY

Accessory	VENICE 20H	VENICE 30H
PR3	•	•

Pressure switch valve

Accessory	VENICE 20H	VENICE 30H
VPH10	•	
VPH11		•

Antivibration

Accessory	VENICE 20H	VENICE 30H
VT7	•	•

PERFORMANCE SPECIFICATIONS

		VENICE 20H	VENICE 30H
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	kW	6,9	9,7
Input power	kW	1,9	2,6
Cooling total input current	A	9,0	13,0
EER	W/W	3,62	3,72
Water flow rate system side	l/h	1185	1667
Useful head system side	kPa	63	59
Water flow rate source side	l/h	1495	2095
Pressure drop source side	kPa	18	12
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	8,3	11,7
Input power	kW	2,3	3,2
Heating total input current	A	12,0	16,0
COP	W/W	3,66	3,70
Water flow rate system side	l/h	1450	2027
Useful head system side	kPa	48	41
Water flow rate source side	l/h	1791	2505
Pressure drop source side	kPa	25	17

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

		VENICE 20H	VENICE 30H
SEER - 12/7 (EN14825: 2018) (1)			
SEER	W/W	3,66	4,02
Seasonal efficiency	%	143,4	157,8
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)			
Pdesignh	kW	11	16
SCOP	W/W	4,20	4,33
ηsh	%	160,00	165,00
Efficiency energy class		A++	A++

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

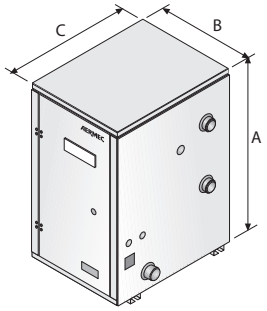
ELECTRIC DATA

		VENICE 20H	VENICE 30H
Power supply			
Power supply		230V~50Hz	230V~50Hz
Electric data			
Maximum current (FLA)	A	15,0	24,0
Peak current (LRA)	A	61,0	100,0

GENERAL TECHNICAL DATA

		VENICE 20H	VENICE 30H
Compressor			
Type	type	Scroll	Scroll
Number	no.	1	1
Circuits	no.	1	1
Refrigerant	type	R407C	R407C
System side heat exchanger			
Type	type	Brazed plate	Brazed plate
Number	no.	1	1
Connections (in/out)	Type	Gas M	Gas M
Sizes (in/out)	Ø	1"	1"
Source side heat exchanger			
Type	type	Brazed plate	Brazed plate
Number	no.	1	1
Connections (in/out)	Type	Gas M	Gas M
Sizes (in/out)	Ø	1"	1"
Sound data			
Sound power level	dB(A)	56,0	57,0
Sound pressure level	dB(A)	48,0	49,0

DIMENSIONS



		VENICE 20H	VENICE 30H
Dimensions and weights			
A	mm	625	625
B	mm	404	404
C	mm	504	504
Empty weight	kg	103	109

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume
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WRL 026H - 161H

Reversible water-cooled heat pump, gas side

Cooling capacity 6 ÷ 40 kW
Heating capacity 8 ÷ 48 kW

- **High efficiency**
- **Production of hot water up to 60 °C**
- **Production of domestic hot water priority**
- **Suitable for geothermal applications**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Indoor units with hermetic scroll compressors and plate heat exchangers.
In the configuration with desuperheater, it is also possible to produce free-hot water.
The technological choices made, always oriented to the highest quality, ensure very easy installation. In fact the electrical and hydraulic connections are all located in the upper part of the unit, facilitating the installation and maintenance operations and also reducing the technical gaps and their position in as little space as possible.

VERSIONS

° Without storage tank
A With storage tank

FEATURES

Operating field

Operation at full power with domestic hot water for the system up to 60 °C. (for more information, refer to the technical documentation).

Plug and play

All the units are equipped with scroll compressors and plate heat exchangers; the base and panelling are made of steel treated with RAL 9003 polyester paints.
The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible.
The heat pump can be supplied with all the components required for its installation in new systems and to replace other heat generators. It can be combined with low temperature emission systems such as floor heating or fan coils, but also with conventional radiators.

Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).

To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).
Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

CONTROL MPC

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
KSAE: External air sensor.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SSM: Probe to be used with the mixer valve in applications with radiant panels. The probe requires the VMF-CRP area accessory as well.
TAH: Ambient terminal with temperature and humidity probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump and dehumidifier consent.
TAT: Ambient terminal with temperature probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump.
VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
VPHL: Pressure switch valve with bypass solenoid valve, during cooling mode operation the bypass valve is closed so the water flows exclusively

through the circuit with the pressure switch. During heating mode operation the water flows through both branches of the circuit.

ACCESSORIES COMPATIBILITY

Model	026	031	041	051	071	081	101	141	161
AER485P1	•	•	•	•	•	•	•	•	•
AERBACP	•	•	•	•	•	•	•	•	•
KSAE	•	•	•	•	•	•	•	•	•
PGD1	•	•	•	•	•	•	•	•	•
SGD	•	•	•	•	•	•	•	•	•
SSM	•	•	•	•	•	•	•	•	•
TAH	•	•	•	•	•	•	•	•	•
TAT	•	•	•	•	•	•	•	•	•

Antivibration

Version	Integrated hydronic kit, source side	System side - pumps	026	031	041	051	071
°	°, B, I, U, V	°, N, P	VT9	VT9	VT9	VT9	VT9
A	°, B, I, U, V	°, N, P	VT15	VT15	VT15	VT15	VT15

Version	Integrated hydronic kit, source side	System side - pumps	081	101	141	161
°	°, B, I, U, V	°, N, P	VT9	VT15	VT15	VT15
A	°, B, I, U, V	°, N, P	VT15	VT15A	VT15A	VT15A

Pressure switch valve

Ver	026	031	041	051	071	081	101	141	161
°, A	VPHL1	VPHL1	VPHL2	VPHL2	VPHL3	VPHL3	VPHL4	VPHL4	VPHL4

CONFIGURATOR

Field	Description
1,2,3	**WRL**
4,5,6	**Size** 026, 031, 041, 051, 071, 081, 101, 141, 161
7	**Operating field**
X	Electronic thermostatic expansion valve
8	**Model**
H	Reversible heat pump, gas side
9	**Version**
°	Without storage tank
A	With storage tank
10	**Heat recovery**
°	Without heat recovery
11	**Integrated hydronic kit, source side**
B	On-off pump (1)
I	Inverter pump (2)
U	Pump high head (3)
V	Applications with bore hole water
°	Without hydronic kit
12	**System side - pumps**
N	Pump high head (3)
P	Pump (4)
°	Without hydronic kit
13	**Recovery side - pumps**
°	Without hydronic kit
14	**Soft-start**
S	With soft-start
°	Without soft-start
15	**Power supply**
M	230V~ 50Hz (5)
°	400V~3N 50Hz

(1) For size WRL 051 ÷ 081. The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate.
(2) Only for WRL 026 ÷ 081
(3) Only for WRL 101 ÷ 161
(4) In sizes WRL 026 ÷ 081, it's an inverter circulator; for other sizes, it's an on-off pump.
(5) Only for WRL 026 ÷ 041

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

WRL - (H°) - (400V 3N ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,3	8,1	10,4	13,7	17,8	20,3	27,6	35,4	40,4
Input power	kW	1,6	2,3	2,3	3,0	4,2	5,0	6,1	8,5	10,1
Cooling total input current	A	4,0	4,0	6,0	7,0	9,0	10,0	13,0	17,0	19,0
EER	W/W	3,98	3,47	4,52	4,51	4,18	4,08	4,49	4,15	4,01
Water flow rate source side	l/h	1346	1782	2178	2870	3759	4312	5763	7501	8611
Pressure drop source side	kPa	13	16	19	20	24	27	28	37	44
Water flow rate system side	l/h	1085	1396	1798	2367	3058	3492	4748	6098	6964
Pressure drop system side	kPa	9	11	13	14	16	18	20	24	29
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,9	9,5	12,4	16,4	20,9	24,0	32,7	41,7	47,6
Input power	kW	2,1	2,4	3,0	4,0	5,2	6,1	8,1	10,5	12,3
Heating total input current	A	4,8	4,8	6,6	8,3	10,0	12,0	16,0	20,0	23,0
COP	W/W	3,84	3,96	4,08	4,07	4,01	3,94	4,05	3,97	3,87
Water flow rate source side	l/h	1714	2086	2759	3635	4611	5291	7248	9196	10445
Pressure drop source side	kPa	34	34	46	43	50	59	52	62	73
Water flow rate system side	l/h	1364	1644	2151	2842	3616	4165	5669	7217	8246
Pressure drop system side	kPa	20	18	28	28	32	38	35	43	51

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Technical data WRL (H°) - (230V ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,3	7,9	10,3	-	-	-	-	-	-
Input power	kW	1,7	1,9	2,4	-	-	-	-	-	-
Cooling total input current	A	9,0	11,0	14,0	-	-	-	-	-	-
EER	W/W	3,74	4,13	4,28	-	-	-	-	-	-
Water flow rate source side	l/h	1363	1678	2179	-	-	-	-	-	-
Pressure drop source side	kPa	14	16	19	-	-	-	-	-	-
Water flow rate system side	l/h	1085	1362	1781	-	-	-	-	-	-
Pressure drop system side	kPa	9	10	13	-	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,9	9,9	12,6	-	-	-	-	-	-
Input power	kW	2,1	2,6	3,3	-	-	-	-	-	-
Heating total input current	A	10,0	13,0	17,0	-	-	-	-	-	-
COP	W/W	3,85	3,89	3,82	-	-	-	-	-	-
Water flow rate source side	l/h	1717	2173	2745	-	-	-	-	-	-
Pressure drop source side	kPa	34	36	46	-	-	-	-	-	-
Water flow rate system side	l/h	1366	1723	2186	-	-	-	-	-	-
Pressure drop system side	kPa	20	22	29	-	-	-	-	-	-

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

WRL - (H°) - (400V 3N ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
Cooling performance 23 °C / 18 °C (1)										
Cooling capacity	kW	8,3	10,0	13,5	17,5	23,9	27,4	34,9	47,8	54,5
Input power	kW	1,6	1,9	2,4	3,3	4,4	5,2	6,6	9,0	10,7
Cooling total input current	A	4,1	3,0	6,0	7,6	9,2	10,0	14,0	17,0	19,0
EER	W/W	5,22	5,34	5,54	5,35	5,39	5,25	5,31	5,32	5,11
Water flow rate source side	l/h	1681	2039	2719	3547	4844	5557	7089	9679	11092
Pressure drop source side	kPa	20	21	30	31	40	45	42	62	73
Water flow rate system side	l/h	1428	1737	2330	3022	4136	4730	6040	8270	9438
Pressure drop system side	kPa	16	17	22	23	29	33	32	44	53
Heating performance 30 °C / 35 °C (2)										
Heating capacity	kW	8,1	10,1	13,0	17,0	22,6	25,8	34,1	45,0	50,8
Input power	kW	1,6	1,9	2,5	3,2	4,3	5,1	6,4	8,7	10,3
Heating total input current	A	3,7	3,7	5,2	6,4	8,4	9,7	12,0	16,0	19,0
COP	W/W	5,03	5,38	5,29	5,33	5,24	5,06	5,31	5,18	4,91
Water flow rate source side	l/h	1397	1751	2246	2934	3893	4456	5888	7770	8761
Pressure drop source side	kPa	21	20	30	30	37	43	38	50	58
Water flow rate system side	l/h	1901	2418	3098	4045	5363	6102	8125	10710	11951
Pressure drop system side	kPa	42	46	58	53	68	78	65	84	95

(1) Date 14511:2022; Water user side 23 °C / 18 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 30 °C / 35 °C; Water source side 10 °C / 5 °C

WRL (H°) - (230V ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
Cooling performance 23 °C / 18 °C (1)										
Cooling capacity	kW	8,3	10,1	13,3	-	-	-	-	-	-
Input power	kW	1,6	2,0	2,5	-	-	-	-	-	-
Cooling total input current	A	8,1	11,0	14,0	-	-	-	-	-	-
EER	W/W	5,05	5,18	5,27	-	-	-	-	-	-
Water flow rate source side	l/h	1690	2070	2699	-	-	-	-	-	-
Pressure drop source side	kPa	22	24	29	-	-	-	-	-	-
Water flow rate system side	l/h	1428	1755	2295	-	-	-	-	-	-
Pressure drop system side	kPa	16	17	22	-	-	-	-	-	-
Heating performance 30 °C / 35 °C (2)										
Heating capacity	kW	8,2	10,2	13,1	-	-	-	-	-	-
Input power	kW	1,6	1,9	2,6	-	-	-	-	-	-
Heating total input current	A	8,1	9,7	13,0	-	-	-	-	-	-
COP	W/W	5,05	5,27	5,01	-	-	-	-	-	-
Water flow rate source side	l/h	1409	1767	2263	-	-	-	-	-	-
Pressure drop source side	kPa	21	23	31	-	-	-	-	-	-
Water flow rate system side	l/h	1919	2430	3082	-	-	-	-	-	-
Pressure drop system side	kPa	42	45	58	-	-	-	-	-	-

(1) Date 14511:2022; Water user side 23 °C / 18 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 30 °C / 35 °C; Water source side 10 °C / 5 °C

ENERGY INDICES (REG. 2016/2281 EU)

WRL - (H°) - (400V 3N ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	3,64	3,39	4,31	4,53	4,20	4,13	4,81	4,49	4,36
Seasonal efficiency	%	142,7%	132,4%	169,4%	178,1%	165,1%	162,3%	189,4%	176,5%	171,4%
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	10	12	16	21	26	31	42	53	61
ηsh	%	141.0%	145.0%	151.0%	152.0%	151.0%	150.0%	175.0%	173.0%	167.0%
SCOP	W/W	3,73	3,83	3,98	4,00	3,98	3,95	4,58	4,53	4,38
Efficiency energy class		A++	A++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (3)										
Pdesignh	kW	11	14	17	23	30	35	45	60	68
ηsh	%	195.0%	210.0%	207.0%	212.0%	211.0%	205.0%	233.0%	226.0%	212.0%
SCOP	W/W	5,08	5,45	5,38	5,50	5,48	5,33	6,03	5,85	5,50
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

WRL - (H°) - (230V ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	3,48	3,80	4,15	-	-	-	-	-	-
Seasonal efficiency	%	136,2%	148,8%	163,1%	-	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	10	13	16	-	-	-	-	-	-
ηsh	%	142.0%	145.0%	142.0%	-	-	-	-	-	-
SCOP	W/W	3,75	3,83	3,75	-	-	-	-	-	-
Efficiency energy class		A++	A++	A++	-	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (3)										
Pdesignh	kW	11	14	17	-	-	-	-	-	-
ηsh	%	198.0%	212.0%	199.0%	-	-	-	-	-	-
SCOP	W/W	5,15	5,50	5,18	-	-	-	-	-	-
Efficiency energy class		A+++	A+++	A+++	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

WRL - (H ABP) - (400V 3N ~ 50Hz)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	4,47	4,07	5,37	5,40	4,96	4,85	5,17	4,75	4,67
Seasonal efficiency	%	175,9%	159,7%	211,8%	213,1%	195,3%	190,9%	203,7%	186,8%	183,9%
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	10	12	16	21	26	30	41	52	60
ηsh	%	151.0%	155.0%	161.0%	161.0%	157.0%	155.0%	173.0%	170.0%	166.0%
SCOP	W/W	3,98	4,08	4,23	4,23	4,13	4,08	4,53	4,45	4,35
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (3)										
Pdesignh	kW	10	13	17	22	30	34	44	59	66
ηsh	%	223.0%	238.0%	222.0%	237.0%	222.0%	210.0%	232.0%	230.0%	216.0%
SCOP	W/W	5,78	6,15	5,75	6,13	5,75	5,45	6,00	5,95	5,60
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

WRL - (H ABP) - (230V ~ 50Hz)

Size			026	031	041	051	071	081	101	141	161
Power supply: M											
SEER - 12/7 (EN14825: 2018) (1)											
SEER		W/W	4,21	4,63	5,14	-	-	-	-	-	-
Seasonal efficiency		%	165,5%	182,3%	202,7%	-	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)											
Pdesignh		kW	10	13	16	-	-	-	-	-	-
ηsh		%	152.0%	156.0%	152.0%	-	-	-	-	-	-
SCOP		W/W	4,00	4,10	4,00	-	-	-	-	-	-
Efficiency energy class			A+++	A+++	A+++	-	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (3)											
Pdesignh		kW	11	13	17	-	-	-	-	-	-
ηsh		%	228.0%	243.0%	214.0%	-	-	-	-	-	-
SCOP		W/W	5,90	6,28	5,55	-	-	-	-	-	-
Efficiency energy class			A+++	A+++	A+++	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Size			026	031	041	051	071	081	101	141	161
Power supply: °											
Electric data											
Maximum current (FLA)		A	8,5	9,0	11,0	13,0	20,0	23,0	23,0	37,0	43,0
Peak current (LRA)		A	34,0	37,0	50,0	66,0	75,0	75,0	88,0	91,0	94,0

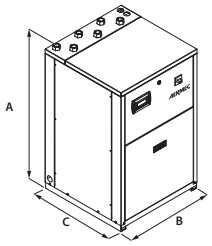
Size			026	031	041	051	071	081	101	141	161
Power supply: M											
Electric data											
Maximum current (FLA)		A	19,0	22,0	26,0	-	-	-	-	-	-
Peak current (LRA)		A	63,0	84,0	99,0	-	-	-	-	-	-

GENERAL TECHNICAL DATA

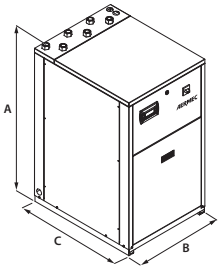
Size			026	031	041	051	071	081	101	141	161
Compressor											
Type	°,A	type					Scroll				
Number	°,A	no.	1	1	1	1	1	1	2	2	2
Circuits	°,A	no.	1	1	1	1	1	1	1	1	1
Refrigerant	°,A	type					R410A				
Source side heat exchanger											
Type	°,A	type					Brazed plate				
Number	°,A	no.	1	1	1	1	1	1	1	1	1
System side heat exchanger											
Type	°,A	type					Brazed plate				
Number	°,A	no.	1	1	1	1	1	1	1	1	1
Source side hydraulic connections											
Connections (in/out)	°,A	Type					Gas - F				
Sizes (in/out)	°,A	Ø					1" 1/4				
System side hydraulic connections											
Connections (in/out)	°,A	Type					Gas - F				
Sizes (in/out)	°,A	Ø					1" 1/4				
Sound data calculated in cooling mode (1)											
Sound power level	°,A	dB(A)	55,5	57,0	57,5	59,0	60,0	60,5	62,0	63,0	63,5
Sound pressure level (10 m)	°	dB(A)	24,3	25,8	26,3	27,7	28,7	29,2	30,6	31,6	32,1
	A	dB(A)	24,1	25,6	26,1	27,6	28,6	29,1	30,5	31,5	32,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

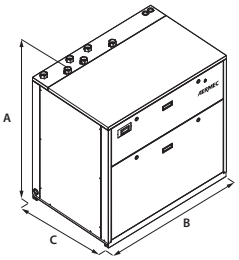
DIMENSIONS



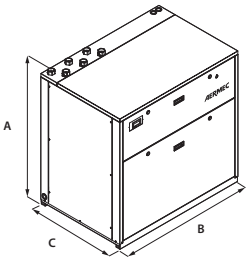
WRL 026-041



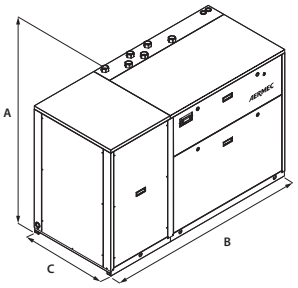
WRL 051-081



WRL 101-161



WRL-A 026-081



WRL-A 101-161

Size			026	031	041	051	071	081	101	141	161
Dimensions and weights											
A	°	mm	976	976	976	1126	1126	1126	1126	1126	1126
	A	mm	1126	1126	1126	1126	1126	1126	1126	1126	1126
B	°	mm	605	605	605	605	605	605	1155	1155	1155
	A	mm	1155	1155	1155	1155	1155	1155	1755	1755	1755
C	°	mm	603	603	603	773	773	773	773	773	773
	A	mm	773	773	773	773	773	773	773	773	773
Empty weight	°	kg	120	125	130	150	170	180	260	270	280
	A	kg	190 (1)	200 (1)	210 (1)	230 (1)	250 (1)	260 (1)	340 (1)	350 (1)	360 (1)

(1) Units with two heat exchangers and storage tank, without pumps

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume
responsibility or liability for errors or omissions.

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www.aermec.com

WRL 026 -161

Water cooled heat pump reversible water side

Cooling capacity 6,6 ÷ 44,2 kW
Heating capacity 7,5 ÷ 48,0 kW

- **High efficiency**
- **Suitable for geothermal applications**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Indoor units with hermetic scroll compressors and plate heat exchangers.
In the configuration with desuperheater, it is also possible to produce free-hot water.
The technological choices made, always oriented to the highest quality, ensure very easy installation.
In fact, the electrical and hydraulic connections are all located at the top of the unit making it easy to install and maintain, also reducing the technical areas and their placement in the smallest space possible.

VERSIONS

° Without storage tank
A With storage tank

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

Plug and play

All the units are equipped with scroll compressors and plate heat exchangers; the base and panelling are made of steel treated with RAL 9003 polyester paints.
The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible.
The heat pump can be supplied with all the components required for its installation in new systems and to replace other heat generators. It can be combined with low temperature emission systems such as floor heating or fan coils, but also with conventional radiators.

Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).
To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).
Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

MODUCONTROL CONTROL

The command panel of the unit allows the rapid setting of the working parameters of the machine, and their visualisation. The display consists of 4 figures and various LEDs for indicating the type of operational mode, the visualisation of the parameters set and of any alarms triggered. The card stores all the default settings and any modifications.
The regulation using an outside air temperature sensor (accessory) allows a dynamic control of the water temperature produced by increasing the energy efficiency of the system.

ACCESSORIES

AERBAC-MODU: Ethernet communication Interface for protocols Bacnet/IP, Modbus TCP/IP, SNMP. The accessory is supplied with the unit and must be installed on an external electrical panel.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
KSAE: External air sensor.
MODU-485BL: RS-485 interface for supervision systems with MODBUS protocol.
PR3: Simplified remote panel. This makes it possible to carry out the unit's basic controls with the signalling of alarms. Can be made remote with shielded cable up to 150 m.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
VT: Anti-vibration supports.
VPL: Pressure switch valve complete with connections, piloted directly in relation to condensation pressure; the valve modulates the volume of water needed to cool the condenser, thereby maintaining the condensation temperature unchanged.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *For the installation of the PR4 remote panel, the MODU-485BL communication interface is indispensable.*

ACCESSORIES COMPATIBILITY

Model	Ver	026	031	041	051	071	081	101	141	161
AERBAC-MODU	°,A	•	•	•	•	•	•	•	•	•
AERSET	°,A	•	•	•	•	•	•	•	•	•
KSAE	°,A	•	•	•	•	•	•	•	•	•
MODU-485BL	°,A	•	•	•	•	•	•	•	•	•
PR3	°,A	•	•	•	•	•	•	•	•	•
SGD	°,A	•	•	•	•	•	•	•	•	•

Antivibration

Version	Integrated hydronic kit, source side	System side - pumps	026	031	041	051	071
°	°	°	VT9	VT9	VT9	VT9	VT9
°	B, I, U, V	N, P	VT9	VT9	VT9	VT9	VT9
A	°, B, I, U, V	°, N, P	VT15	VT15	VT15	VT15	VT15

Version	Integrated hydronic kit, source side	System side - pumps	081	101	141	161
°	°	°	VT9	VT15	VT15	VT15
°	U	N, P	VT9	VT15	VT15	VT15
°	B, I, V	N, P	VT9	VT15	VT15	-
A	°, B, I, U, V	°, N, P	VT15	VT15A	VT15A	VT15A

- not available

PR4

Model	Ver	026	031	041	051	071	081	101	141	161
PR4	°,A	•	•	•	•	•	•	•	•	•

Pressure switch valve

Ver	026	031	041	051	071	081	101	141	161
°, A	VPL1	VPL1	VPL2	VPL2	VPL3	VPL3	VPL4	VPL4	VPL4

CONFIGURATOR

Configuration options

Field		Description
1,2,3		**WRL**
4,5,6		**Size** 026, 031, 041, 051, 071, 081, 101, 141, 161
7		**Operating field**
	Y	Low temperature mechanic thermostatic valve (1)
	°	Standard mechanic thermostatic valve (2)
8		**Model**
	E	Evaporating unit (3)
	°	Heat pump reversible on the water side
9		**Version**
	°	Without storage tank
	A	With storage tank
10		**Heat recovery**
	D	With desuperheater
	°	Without heat recovery
11		**Integrated hydronic kit, source side**
	B	On-off pump (4)
	I	Inverter pump (5)
	U	Pump high head (6)
		Applications with bore hole water
	V	2-way modulating valve
	°	Without hydronic kit
12		**System side - pumps**
	N	Pump high head (6)
	P	On-off pump (4)
	°	Without hydronic kit
13		**Recovery side - pumps**
	°	Without Pumps
14		**Soft-start**
	S	With soft-start
	°	Without soft-start
15		**Power supply**
	M	230V~ 50Hz (7)
	°	400V~3N 50Hz

(1) Water produced from 4 °C ÷ - 8 °C
(2) Water produced from 4 °C ÷ 18 °C
(3) Shipped with holding charge only
(4) For size WRL 051 ÷ 081. The speed of the inverter pump must be set upon commissioning, according to the useful static pressure required; once it has been set, the pump will work at a constant flow rate.
(5) Only for WRL 026 ÷ 081
(6) Only for WRL 101 ÷ 161
(7) Only for WRL 026 ÷ 041

PERFORMANCE SPECIFICATIONS

WRL - °

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,6	8,3	11,3	-	-	-	-	-	-
Input power	kW	1,5	1,8	2,5	-	-	-	-	-	-
Cooling total input current	A	7,2	9,2	12,0	-	-	-	-	-	-
EER	W/W	4,30	4,50	4,56	-	-	-	-	-	-
Water flow rate source side	l/h	1386	1731	2359	-	-	-	-	-	-
Pressure drop source side	kPa	28	29	36	-	-	-	-	-	-
Water flow rate system side	l/h	1137	1430	1955	-	-	-	-	-	-
Pressure drop system side	kPa	15	17	23	-	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,6	9,4	12,5	-	-	-	-	-	-
Input power	kW	2,0	2,4	3,1	-	-	-	-	-	-
Heating total input current	A	9,3	12,0	15,0	-	-	-	-	-	-
COP	W/W	3,86	3,89	4,05	-	-	-	-	-	-
Water flow rate source side	l/h	1662	2053	2778	-	-	-	-	-	-
Pressure drop source side	kPa	32	35	46	-	-	-	-	-	-
Water flow rate system side	l/h	1319	1626	2171	-	-	-	-	-	-
Pressure drop system side	kPa	25	26	30	-	-	-	-	-	-

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,7	8,4	11,3	14,7	19,3	21,9	29,5	38,5	43,9
Input power	kW	1,5	1,8	2,6	3,1	4,0	4,7	6,2	8,1	9,5
Cooling total input current	A	3,1	2,6	4,9	6,4	7,4	9,1	13,0	15,0	18,0
EER	W/W	4,49	4,74	4,39	4,70	4,77	4,63	4,72	4,75	4,62
Water flow rate source side	l/h	1396	1735	2375	3054	3978	4538	6100	7947	9077
Pressure drop source side	kPa	28	30	35	32	40	46	42	57	66
Water flow rate system side	l/h	1154	1447	1955	2541	3320	3770	5078	6638	7555
Pressure drop system side	kPa	15	17	23	21	26	30	25	34	38
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,7	9,3	12,6	16,3	21,0	24,0	32,5	42,1	48,0
Input power	kW	1,9	2,3	3,2	4,0	5,1	5,9	8,0	10,2	12,0
Heating total input current	A	4,1	3,4	6,1	8,2	9,2	11,0	16,0	18,0	23,0
COP	W/W	3,93	4,04	3,94	4,05	4,17	4,04	4,06	4,14	4,02
Water flow rate source side	l/h	1680	2053	2767	3602	4708	5325	7200	9414	10671
Pressure drop source side	kPa	32	34	46	42	52	60	50	68	76
Water flow rate system side	l/h	1326	1607	2181	2819	3647	4159	5629	7284	8315
Pressure drop system side	kPa	25	26	30	27	34	39	36	48	55

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

WRL - °

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	3,77	4,13	4,27	-	-	-	-	-	-
Seasonal efficiency	%	147,9%	162,0%	167,6%	-	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	11	14	17	-	-	-	-	-	-
SCOP	W/W	5,15	5,50	5,18	-	-	-	-	-	-
ηsh	%	198.0%	212.0%	199.0%	-	-	-	-	-	-
Efficiency energy class		A+++	A+++	A+++	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	3,93	4,29	4,13	4,51	4,66	4,52	4,93	4,93	4,75
Seasonal efficiency	%	154,0%	168,5%	162,1%	177,3%	183,3%	177,8%	194,1%	194,0%	187,1%
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	11	14	17	23	30	35	45	60	68
SCOP	W/W	5,08	5,45	5,38	5,50	5,48	5,33	6,03	5,85	5,50
ηsh	%	195.0%	210.0%	207.0%	212.0%	211.0%	205.0%	233.0%	226.0%	212.0%
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

PERFORMANCE SPECIFICATIONS

WRL ABP

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,7	8,4	11,4	-	-	-	-	-	-
Input power	kW	1,5	1,8	2,4	-	-	-	-	-	-
Cooling total input current	A	7,8	9,9	12,0	-	-	-	-	-	-
EER	W/W	4,54	4,75	4,80	-	-	-	-	-	-
Water flow rate source side	l/h	1386	1731	2359	-	-	-	-	-	-
Useful head source side	kPa	59	54	36	-	-	-	-	-	-
Water flow rate system side	l/h	1137	1430	1955	-	-	-	-	-	-
Useful head system side	kPa	74	70	56	-	-	-	-	-	-
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,5	9,3	12,4	-	-	-	-	-	-
Input power	kW	1,9	2,3	3,0	-	-	-	-	-	-
Heating total input current	A	9,9	13,0	15,0	-	-	-	-	-	-
COP	W/W	3,97	4,01	4,17	-	-	-	-	-	-
Water flow rate source side	l/h	1662	2053	2778	-	-	-	-	-	-
Useful head source side	kPa	52	43	16	-	-	-	-	-	-
Water flow rate system side	l/h	1319	1626	2171	-	-	-	-	-	-
Useful head system side	kPa	63	59	45	-	-	-	-	-	-

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	6,8	8,5	11,4	14,9	19,4	22,0	29,8	38,9	44,2
Input power	kW	1,4	1,7	2,5	3,1	3,9	4,6	6,3	8,1	9,4
Cooling total input current	A	3,7	3,3	5,6	7,5	8,6	10,0	14,0	17,0	20,0
EER	W/W	4,75	5,02	4,62	4,84	4,93	4,78	4,75	4,79	4,69
Water flow rate source side	l/h	1396	1735	2375	3054	3978	4538	6100	7947	9077
Useful head source side	kPa	59	53	36	63	43	28	116	137	125
Water flow rate system side	l/h	1154	1447	1955	2541	3320	3770	5078	6638	7555
Useful head system side	kPa	74	70	56	79	66	56	148	164	157
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	7,6	9,2	12,5	16,1	20,9	23,8	32,2	41,6	47,6
Input power	kW	1,9	2,2	3,1	3,9	4,9	5,8	8,0	10,1	11,8
Heating total input current	A	4,7	4,0	6,7	9,3	10,0	13,0	18,0	20,0	25,0
COP	W/W	4,05	4,17	4,05	4,11	4,24	4,09	4,01	4,13	4,04
Water flow rate source side	l/h	1680	2053	2767	3602	4708	5325	7200	9414	10671
Useful head source side	kPa	52	43	16	46	20	4	90	121	109
Water flow rate system side	l/h	1326	1607	2181	2819	3647	4159	5629	7284	8315
Useful head system side	kPa	63	59	46	70	54	41	130	148	138

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

Size			026	031	041	051	071	081	101	141	161
Power supply: M											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	°	kW	6,6	8,3	11,3	-	-	-	-	-	-
	A	kW	6,7	8,4	11,4	-	-	-	-	-	-
Input power	°	kW	1,5	1,8	2,5	-	-	-	-	-	-
	A	kW	1,5	1,8	2,4	-	-	-	-	-	-
Cooling total input current	°	A	7,2	9,2	12,0	-	-	-	-	-	-
	A	A	7,8	9,9	12,0	-	-	-	-	-	-
EER	°	W/W	4,30	4,50	4,56	-	-	-	-	-	-
	A	W/W	4,54	4,75	4,80	-	-	-	-	-	-
Water flow rate system side	°,A	l/h	1137	1430	1955	-	-	-	-	-	-
Pressure drop system side	°,A	kPa	15	17	23	-	-	-	-	-	-

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			026	031	041	051	071	081	101	141	161
Power supply: °											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	°	kW	6,7	8,4	11,3	14,7	19,3	21,9	29,5	38,5	43,9
	A	kW	6,8	8,5	11,4	14,9	19,4	22,0	29,8	38,9	44,2
Input power	°	kW	1,5	1,8	2,6	3,1	4,0	4,7	6,2	8,1	9,5
	A	kW	1,4	1,7	2,5	3,1	3,9	4,6	6,3	8,1	9,4
Cooling total input current	°	A	3,1	2,6	4,9	6,4	7,4	9,1	13,0	15,0	18,0
	A	A	3,7	3,3	5,6	7,5	8,6	10,0	14,0	17,0	20,0
EER	°	W/W	4,49	4,74	4,39	4,70	4,77	4,63	4,72	4,75	4,62
	A	W/W	4,75	5,02	4,62	4,84	4,93	4,78	4,75	4,79	4,69
Water flow rate system side	°,A	l/h	1154	1447	1955	2541	3320	3770	5078	6638	7555
Pressure drop system side	°,A	kPa	15	17	23	21	26	30	25	34	38

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

WRL ABP

Size		026	031	041	051	071	081	101	141	161
Power supply: M										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	4,73	5,20	5,22	-	-	-	-	-	-
Seasonal efficiency	%	186,3%	205,1%	205,6%	-	-	-	-	-	-
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	11	13	17	-	-	-	-	-	-
SCOP	W/W	5,90	6,28	5,55	-	-	-	-	-	-
ηsh	%	228.0%	243.0%	214.0%	-	-	-	-	-	-
Efficiency energy class		A+++	A+++	A+++	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

Size		026	031	041	051	071	081	101	141	161
Power supply: °										
SEER - 12/7 (EN14825: 2018) (1)										
SEER	W/W	5,00	5,37	5,22	5,38	5,62	5,30	5,31	5,27	5,21
Seasonal efficiency	%	196,9%	211,7%	205,8%	212,0%	221,7%	208,8%	209,2%	207,7%	205,5%
UE 811/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 70 kW (2)										
Pdesignh	kW	10	13	17	22	30	34	44	59	66
SCOP	W/W	5,78	6,15	5,75	6,13	5,75	5,45	6,00	5,95	5,60
ηsh	%	223.0%	238.0%	222.0%	237.0%	222.0%	210.0%	232.0%	230.0%	216.0%
Efficiency energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

Electric data

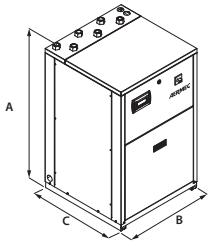
Size			026	031	041	051	071	081	101	141	161
Electric data											
Maximum current (FLA)	°	A	8,0	8,0	15,0	17,0	21,0	22,0	32,0	40,0	41,0
	M	A	18,0	21,0	34,0	-	-	-	-	-	-
Peak current (LRA)	°	A	34,0	37,0	65,0	75,0	75,0	75,0	90,0	94,0	95,0
	M	A	63,0	84,0	119,0	-	-	-	-	-	-

GENERAL TECHNICAL DATA

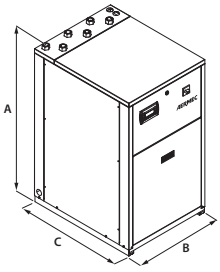
Size			026	031	041	051	071	081	101	141	161
Compressor											
Type	°,A	type					Scroll				
Number	°,A	no.	1	1	1	1	1	1	2	2	2
Circuits	°,A	no.	1	1	1	1	1	1	1	1	1
Refrigerant	°,A	type					R410A				
Refrigerant charge (1)	°,A	kg	0,8	0,9	1,2	1,6	1,9	2,0	3,6	4,4	4,7
Source side heat exchanger											
Type	°,A	type					Brazed plate				
Number	°,A	no.	1	1	1	1	1	1	1	1	1
System side heat exchanger											
Type	°,A	type					Brazed plate				
Number	°,A	no.	1	1	1	1	1	1	1	1	1
Source side hydraulic connections											
Connections (in/out)	°,A	Type					Gas-F				
Sizes (in/out)	°,A	Ø					1"1/4				
System side hydraulic connections											
Connections (in/out)	°,A	Type					Gas-F				
Sizes (in/out)	°,A	Ø					1"1/4				
Sound data calculated in cooling mode (2)											
Sound power level	°,A	dB(A)	55,5	57,0	57,5	59,0	60,0	60,5	62,0	63,0	63,5
Sound pressure level (10 m)	°	dB(A)	24,3	25,8	26,3	27,7	28,7	29,2	30,6	31,6	32,1
	A	dB(A)	24,1	25,6	26,1	27,6	28,6	29,1	30,5	31,5	32,0

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

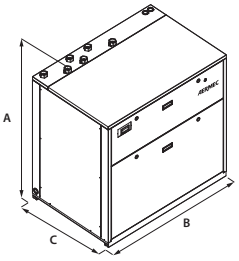
DIMENSIONS



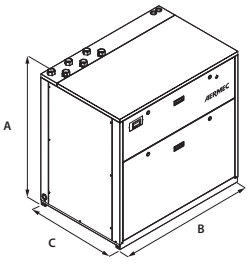
WRL 026-041



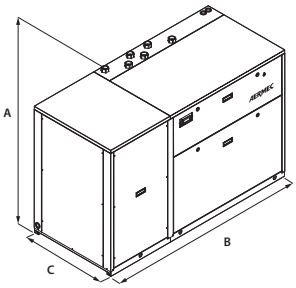
WRL 051-081



WRL 101-161



WRL-A 026-081



WRL-A 101-161

Size			026	031	041	051	071	081	101	141	161
Dimensions and weights											
A	°	mm	976	976	976	1126	1126	1126	1126	1126	1126
	A	mm	1126	1126	1126	1126	1126	1126	1126	1126	1126
B	°	mm	605	605	605	605	605	605	1155	1155	1155
	A	mm	1155	1155	1155	1155	1155	1155	1755	1755	1755
C	°	mm	603	603	603	773	773	773	773	773	773
	A	mm	773	773	773	773	773	773	773	773	773
Empty weight	°	kg	120	125	130	150	170	180	260	270	280
	A	kg	190 (1)	200 (1)	210 (1)	230 (1)	250 (1)	260 (1)	340 (1)	350 (1)	360 (1)

(1) Units with two heat exchangers and storage tank, without pumps

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WRL 180H - 650H

Reversible water-cooled heat pump, gas side

Cooling capacity 44,9 ÷ 157,4 kW
Heating capacity 53,0 ÷ 183,3 kW

- **High efficiency**
- **Suitable for geothermal applications**
- **Production of hot water up to 55 °C**





EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Indoor units with hermetic scroll compressors and plate heat exchangers.
In the configuration with desuperheater, it is also possible to produce free-hot water.
The technological choices made, always oriented to the highest quality, ensure very easy installation. In fact the electrical and hydraulic connections are all located in the upper part of the unit, facilitating the installation and maintenance operations and also reducing the technical gaps and their position in as little space as possible.

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

Plug and play

All the units are equipped with scroll compressors and plate heat exchangers; the base and panelling are made of steel treated with RAL 9003 polyester paints.
The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible.
The heat pump can be supplied with all the components required for its installation in new systems and to replace other heat generators. It can be combined with low temperature emission systems such as floor heating or fan coils, but also with conventional radiators.

Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).
To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).

Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

CONTROL MPC

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
KSAE: External air sensor.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SSM: Probe to be used with the mixer valve in applications with radiant panels. The probe requires the VMF-CRP area accessory as well.
TAH: Ambient terminal with temperature and humidity probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump and dehumidifier consent.
TAT: Ambient terminal with temperature probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump.
VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the

VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

ACCESSORIES COMPATIBILITY

Model	Ver	180	200	300	400	500	550	600	650
AER485P1	°	•	•	•	•	•	•	•	•
AERNET	°	•	•	•	•	•	•	•	•
KSAE	°	•	•	•	•	•	•	•	•
PGD1	°	•	•	•	•	•	•	•	•
SGD	°	•	•	•	•	•			
SSM	°	•	•	•	•	•	•	•	•
TAH	°	•	•	•	•	•	•	•	•
TAT	°	•	•	•	•	•	•	•	•
VMF-CRP	°	•	•	•	•	•	•	•	•

Antivibration

System side - pumps	Integrated hydronic kit, source side	180	200	300	400	500	550	600	650
°, N, P	°, B, F, I, U, V	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15

PR4

Model	Ver	180	200	300	400	500	550	600	650
PR4	°	•	•	•	•	•	•	•	•

CONFIGURATOR

Field	Description
1,2,3	**WRL**
4,5,6	**Size** 180, 200, 300, 400, 500, 550, 600, 650
7	**Operating field**
X	Electronic thermostatic expansion valve
Y	Low temperature mechanic thermostatic valve (1)
°	Standard mechanic thermostatic valve (2)
8	**Model**
H	Reversible heat pump, gas side
9	**Version**
°	Standard
10	**Heat recovery**
D	With desuperheater
°	Without heat recovery
11	**Integrated hydronic kit, source side**
B	On-off pump
F	Single low-head inverter pump
I	High-head inverter pump
U	Pump high head
	Applications with bore hole water
V	2-way modulating valve
°	Without hydronic kit
12	**System side - pumps**
N	Pump high head
P	Pump low head
°	Without hydronic kit
13	**Field for future development**
°	Field for future development
14	**Soft-start**
S	With soft-start
°	Without soft-start
15	**Power supply**
°	400V ~ 3N 50Hz

(1) Water produced from 4 °C ÷ - 8 °C
(2) Water produced from 4 °C ÷ 18 °C

PERFORMANCE SPECIFICATIONS

WRL - °

Size			180	200	300	400	500	550	600	650
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	°	kW	44,9	59,6	64,8	79,5	93,0	120,1	140,1	157,4
Input power	°	kW	10,8	14,7	16,3	18,6	20,1	27,6	31,4	35,8
Cooling total input current	°	A	20,0	25,0	28,0	32,0	36,0	52,0	60,0	69,0
EER	°	W/W	4,15	4,06	3,97	4,27	4,63	4,34	4,46	4,39
Water flow rate source side	°	l/h	9520	12659	13823	16682	19331	25177	29250	32920
Pressure drop source side	°	kPa	31	52	51	74	34	56	57	71
Water flow rate system side	°	l/h	7732	10274	11168	13711	16013	20686	24139	27112
Pressure drop system side	°	kPa	22	37	36	52	25	40	40	38
Heating performance 40 °C / 45 °C (2)										
Heating capacity	°	kW	53,0	70,9	76,6	92,6	106,4	143,7	164,2	183,3
Input power	°	kW	12,9	17,7	19,1	22,6	24,0	33,1	37,2	42,7
Heating total input current	°	A	23,0	29,0	31,0	37,0	41,0	56,0	64,0	74,0
COP	°	W/W	4,10	4,00	4,01	4,10	4,44	4,34	4,41	4,30
Water flow rate source side	°	l/h	11777	15734	17011	20840	24211	32704	37512	41689
Pressure drop source side	°	kPa	49	89	92	132	61	107	101	126
Water flow rate system side	°	l/h	9190	12277	13264	16046	18452	24913	28485	31788
Pressure drop system side	°	kPa	30	52	49	72	32	58	56	70

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ELECTRIC DATA

Size			180	200	300	400	500	550	600	650
Electric data										
Maximum current (FLA)	°	A	32,6	41,8	45,2	52,1	59,0	99,0	112,0	125,0
Peak current (LRA)	°	A	119,0	123,0	125,0	167,0	174,0	265,0	310,0	323,0

ENERGY INDICES (REG. 2016/2281 EU)

Size			180	200	300	400	500	550	600	650
SEER - 12/7 (EN14825: 2018) (1)										
SEER	°	W/W	4,25	4,04	4,15	4,38	5,04	4,62	4,80	4,69
Seasonal efficiency	°	%	166,9%	158,5%	162,8%	172,3%	198,4%	181,7%	188,9%	184,5%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)										
Pdesignh	°	kW	68	91	98	119	137	185	212	236
ηsh	°	%	173.0%	170.0%	170.0%	175.0%	189.0%	186.0%	189.0%	184.0%
SCOP	°	W/W	4,53	4,45	4,45	4,58	4,93	4,85	4,93	4,80
Efficiency energy class	°		A+++	-	-	-	-	-	-	-
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)										
Pdesignh	°	kW	79	-	-	-	-	-	-	-
ηsh	°	%	222.0%	-	-	-	-	-	-	-
SCOP	°	W/W	5,75	-	-	-	-	-	-	-
Efficiency energy class	°		A+++	-	-	-	-	-	-	-

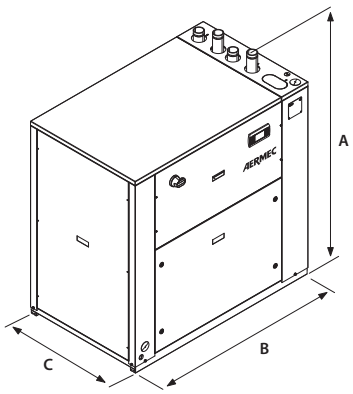
(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

GENERAL TECHNICAL DATA

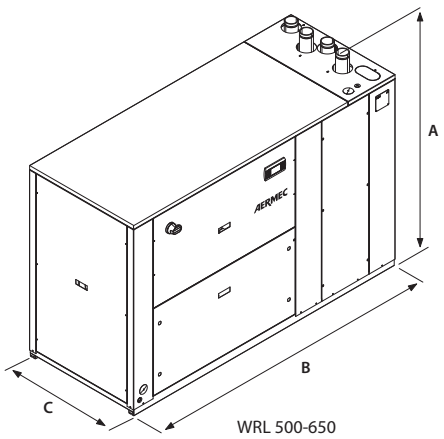
Size			180	200	300	400	500	550	600	650
Compressor										
Type	°	type				Scroll				
Compressor regulation	°	Type				On-Off				
Number	°	no.	2	2	2	2	2	2	2	2
Circuits	°	no.	1	1	1	1	1	1	1	1
Refrigerant	°	type				R410A				
Source side heat exchanger										
Type	°	type				Brazed plate				
Number	°	no.	1	1	1	1	1	1	1	1
System side heat exchanger										
Type	°	type				Brazed plate				
Number	°	no.	1	1	1	1	1	1	1	1
Source side hydraulic connections										
Connections (in/out)	°	Type				Grooved joints				
Sizes (in/out)	°	Ø	2"	2"	2"	2"	2" 1/2	2" 1/2	2" 1/2	2" 1/2
System side hydraulic connections										
Connections (in/out)	°	Type				Grooved joints				
Sizes (in/out)	°	Ø	2"	2"	2"	2"	2" 1/2	2" 1/2	2" 1/2	2" 1/2
Sound data calculated in cooling mode (1)										
Sound power level	°	dB(A)	61,1	61,8	62,9	71,1	67,6	79,1	79,1	79,1
Sound pressure level (10 m)	°	dB(A)	29,6	30,3	31,4	39,6	36,0	47,5	47,5	47,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



WRL 180-400



WRL 500-650

Size			180	200	300	400	500	550	600	650
Dimensions and weights										
A	°	mm	1380	1380	1380	1380	1380	1380	1380	1380
B	°	mm	1320	1320	1320	1320	2060	2060	2060	2060
C	°	mm	845	845	845	845	845	845	845	845
Empty weight	°	kg	370	370	381	388	522	598	708	753

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www.aermec.com

WRL 180 - 650

Water cooled heat pump reversible water side

Cooling capacity 49 ÷ 174 kW
Heating capacity 55 ÷ 192 kW

- **High efficiency**
- **Suitable for geothermal applications**
- **Production of hot water up to 55 °C**





EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Indoor units with hermetic scroll compressors and plate heat exchangers.
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FEATURES

Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

Plug and play

All the units are equipped with scroll compressors and plate heat exchangers; the base and panelling are made of steel treated with RAL 9003 polyester paints.
The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible.
The heat pump can be supplied with all the components required for its installation in new systems and to replace other heat generators. It can be combined with low temperature emission systems such as floor heating or fan coils, but also with conventional radiators.

Version with Integrated hydronic kit

The standard unit is supplied with a water filter, differential pressure switch and safety valve already installed on the service and source side (and also on the recovery side, if present).
To obtain a solution that offers economic savings and facilitates installation, these units can be configured with an integrated hydronic kit on both hydraulic sides (service and source).

Low-head and high-head pumps are available, along with a modulating 2-way valve that can only be applied on the source side to reduce consumption in applications with groundwater.

CONTROL MPC

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
KSAE: External air sensor.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
SSM: Probe to be used with the mixer valve in applications with radiant panels. The probe requires the VMF-CRP area accessory as well.
TAH: Ambient terminal with temperature and humidity probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump and dehumidifier consent.
TAT: Ambient terminal with temperature probe - 230V AC flush-mounting model that can command an On-Off valve or a zone pump.
VMF-CRP: Accessory module for controlling boilers, heat recover units and pumps (if associated with VMF-E5 / RCC panels); if associated with the

VMF-E6 panel, the VMF-CRP modules will be able to manage heat recovery units, RAS, boiler, sanitary management, I/O control, pumps.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

ACCESSORIES COMPATIBILITY

Ver	180	200	300	400	500	550	600	650
Model: E, K, °								
°	AER485P1, AERNET, KSAE, PGD1, SGD, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SGD, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SGD, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SGD, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SGD, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SSM, TAH, TAT, VMF-CRP	AER485P1, AERNET, KSAE, PGD1, SSM, TAH, TAT, VMF-CRP

PR4

Model	Ver	180	200	300	400	500	550	600	650
PR4	°,E,K	•	•	•	•	•	•	•	•

Antivibration

Integrated hydronic kit, source side	System side - pumps	180	200	300	400	500	550	600	650
°, B, F, I, U, V	°, N, P	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15

CONFIGURATOR

Field		Description
1,2,3		**WRL**
4,5,6		**Size** 180, 200, 300, 400, 500, 550, 600, 650
7		**Operating field**
	X	Electronic thermostatic expansion valve
	Y	Low temperature mechanic thermostatic valve (1)
	°	Standard mechanic thermostatic valve (2)
8		**Model**
	E	Evaporating unit (3)
	K	Heat pump reversible on the water side with low pressure drops
	°	Heat pump reversible on the water side
9		**Version**
	°	Standard
10		**Heat recovery**
	D	With desuperheater
	°	Without heat recovery
11		**Integrated hydronic kit, source side**
	B	On-off pump
	F	Single low-head inverter pump
	I	High-head inverter pump
	U	Pump high head
		Applications with bore hole water
	V	2-way modulating valve
	°	Without hydronic kit
12		**System side - pumps**
	N	Pump high head
	P	Pump low head
	°	Without hydronic kit
13		**Field for future development**
	°	Field for future development
14		**Soft-start**
	S	With soft-start
	°	Without soft-start
15		**Power supply**
	°	400V~3N 50Hz

(1) Water produced from 4 °C ÷ - 8 °C
(2) Water produced from 4 °C ÷ 18 °C
(3) Shipped with holding charge only

PERFORMANCE SPECIFICATIONS

WRL - E

Size		180	200	300	400	500	550	600	650
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	46,0	60,1	69,6	80,1	90,6	121,3	140,2	158,7
Input power	kW	12,4	16,0	18,5	19,8	23,1	29,6	34,1	38,5
Cooling total input current	A	23,0	29,0	32,0	36,0	42,0	56,0	65,0	74,0
EER	W/W	3,71	3,76	3,76	4,05	3,92	4,10	4,11	4,12
Water flow rate system side	l/h	7903	10326	11958	13762	15566	20841	24088	27266
Pressure drop system side	kPa	23	39	39	56	25	42	47	57

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

WRL - °

Size		180	200	300	400	500	550	600	650
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	49,7	64,3	74,4	85,9	99,8	129,5	150,1	169,0
Input power	kW	10,8	14,4	16,8	18,3	20,4	27,0	31,0	35,7
Cooling total input current	A	20,0	25,0	29,0	62,0	36,0	51,0	59,0	68,0
EER	W/W	4,59	4,47	4,42	4,69	4,90	4,80	4,84	4,73
Water flow rate source side	l/h	10336	13418	15531	17725	20550	26664	30860	34836
Pressure drop source side	kPa	27	46	62	81	32	52	57	72
Water flow rate system side	l/h	8549	11082	12824	14822	17186	22296	25844	29025
Pressure drop system side	kPa	27	43	46	60	30	49	53	67
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	55,8	72,6	84,1	95,6	110,7	143,6	166,1	187,7
Input power	kW	13,2	17,6	20,5	22,4	24,8	32,9	37,9	43,9
Heating total input current	A	24,0	30,0	34,0	38,0	44,0	61,0	71,0	82,0
COP	W/W	4,24	4,13	4,10	4,27	4,46	4,36	4,38	4,27
Water flow rate source side	l/h	12542	16257	18813	21745	25213	32709	37914	42683
Pressure drop source side	kPa	58	93	99	129	65	105	114	144
Water flow rate system side	l/h	9685	12580	14561	16557	19196	24909	28816	32553
Pressure drop system side	kPa	24	40	55	71	28	45	50	63

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WRL - K

Size		180	200	300	400	500	550	600	650
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	kW	49,7	66,3	76,7	88,6	99,8	133,5	154,6	174,1
Input power	kW	10,8	14,4	16,9	18,3	20,4	26,7	30,8	35,6
Cooling total input current	A	20,0	25,0	29,0	32,0	36,0	51,0	59,0	68,0
EER	W/W	4,59	4,61	4,55	4,85	4,50	5,00	5,02	4,90
Water flow rate source side	l/h	10336	13753	15919	18173	20550	27338	31642	35716
Pressure drop source side	kPa	27	48	65	85	32	55	60	76
Water flow rate system side	l/h	8549	11414	13209	15267	17186	22965	26619	29967
Pressure drop system side	kPa	27	34	42	48	30	24	33	41
Heating performance 40 °C / 45 °C (2)									
Heating capacity	kW	55,8	74,3	86,1	97,9	110,7	147,1	170,1	192,1
Input power	kW	13,2	17,5	20,5	22,2	24,8	32,3	37,3	43,1
Heating total input current	A	24,0	30,0	34,0	38,0	44,0	61,0	71,0	82,0
COP	W/W	4,24	4,24	4,20	4,40	4,46	4,56	4,56	4,46
Water flow rate source side	l/h	12542	16745	19337	22397	25213	33690	39052	43963
Pressure drop source side	kPa	58	73	90	103	65	52	71	88
Water flow rate system side	l/h	9685	12876	14904	16953	19196	25504	29507	33331
Pressure drop system side	kPa	24	42	57	74	28	48	52	66

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

WRL °

Size		180	200	300	400	500	550	600	650
SEER - 12/7 (EN14825: 2018) (1)									
SEER	W/W	4,65	4,55	4,54	4,74	5,31	5,04	5,12	4,97
Seasonal efficiency	%	182,8%	178,9%	178,5%	186,4%	209,3%	198,7%	201,7%	195,8%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)									
Pdesignh	kW	68	91	98	119	137	185	212	236
ηsh	%	173.0%	170.0%	170.0%	175.0%	189.0%	186.0%	189.0%	184.0%
SCOP	W/W	4,53	4,45	4,45	4,58	4,93	4,85	4,93	4,80
Efficiency energy class		A+++	-	-	-	-	-	-	-
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)									
Pdesignh	kW	79	-	-	-	-	-	-	-
ηsh	%	222.0%	-	-	-	-	-	-	-
SCOP	W/W	5,75	-	-	-	-	-	-	-
Efficiency energy class		A+++	-	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

WRL K

Size		180	200	300	400	500	550	600	650
SEER - 12/7 (EN14825: 2018) (1)									
SEER	W/W	4,65	4,71	4,67	4,90	5,31	5,31	5,35	5,19
Seasonal efficiency	%	182,8%	185,3%	183,6%	192,9%	209,3%	209,2%	210,9%	204,6%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)									
Pdesignh	kW	68	91	98	119	137	185	212	236
ηsh	%	173.0%	170.0%	170.0%	175.0%	189.0%	186.0%	189.0%	184.0%
SCOP	W/W	4,53	4,45	4,45	4,58	4,93	4,85	4,93	4,80
Efficiency energy class		A+++	-	-	-	-	-	-	-
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)									
Pdesignh	kW	79	-	-	-	-	-	-	-
ηsh	%	222.0%	-	-	-	-	-	-	-
SCOP	W/W	5,75	-	-	-	-	-	-	-
Efficiency energy class		A+++	-	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)
(3) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

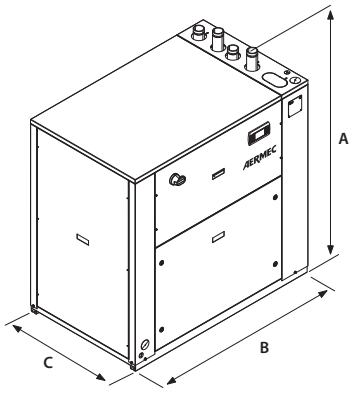
Size			180	200	300	400	500	550	600	650
Electric data										
Maximum current (FLA)	°,E,K	A	32,6	41,8	45,2	52,1	59,0	99,0	112,0	125,0
Peak current (LRA)	°,E,K	A	119,0	123,0	125,0	167,0	174,0	265,0	310,0	323,0

GENERAL TECHNICAL DATA

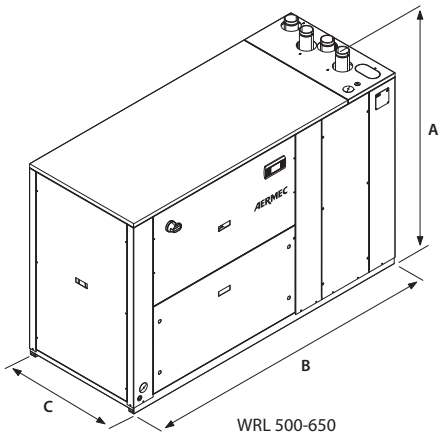
Size			180	200	300	400	500	550	600	650
Compressor										
Type	°,E,K	type	Scroll							
Compressor regulation	°,E,K	Type	On-Off							
Number	°,E,K	no.	2	2	2	2	2	2	2	2
Circuits	°,E,K	no.	1	1	1	1	1	1	1	1
Refrigerant	°,E,K	type	R410A							
Refrigerant charge (1)	°,K	kg	6,0	7,0	6,8	7,2	9,0	14,5	16,8	16,5
	E	kg	Holding charge	Holding charge	Holding charge	Holding charge	Holding charge	Holding charge	Holding charge	Holding charge
Source side heat exchanger										
Type	°,K	type	Brazed plate							
	E	type								
Number	°,K	no.	1	1	1	1	1	1	1	1
	E	no.	-	-	-	-	-	-	-	-
System side heat exchanger										
Type	°,E,K	type	Brazed plate							
Number	°,E,K	no.	1	1	1	1	1	1	1	1
Source side hydraulic connections										
Connections (in/out)	°,K	Type	Grooved joints							
	E	Type								
Sizes (in/out)	°,K	Ø	2"	2"	2"	2"	2" 1/2	2" 1/2	2" 1/2	2" 1/2
	E	Ø								
System side hydraulic connections										
Connections (in/out)	°,E,K	Type	Grooved joints							
Sizes (in/out)	°,E,K	Ø	2"	2"	2"	2"	2" 1/2	2" 1/2	2" 1/2	2" 1/2
Sound data calculated in cooling mode (2)										
Sound power level	°,E,K	dB(A)	61,1	61,8	62,9	71,1	67,6	79,1	79,1	79,1
Sound pressure level (10 m)	°,E,K	dB(A)	29,6	30,3	31,4	39,6	36,0	47,5	47,5	47,5

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



WRL 180-400



WRL 500-650

Size			180	200	300	400	500	550	600	650
Dimensions and weights										
A	°,E,K	mm	1380	1380	1380	1380	1380	1380	1380	1380
B	°,E,K	mm	1320	1320	1320	1320	2060	2060	2060	2060
C	°,E,K	mm	845	845	845	845	845	845	845	845
Empty weight	°,K	kg	375	375	381	388	518	594	670	715
	E	kg	-	-	-	-	-	-	-	-

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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WRK

Reversible water-cooled heat pump, gas side

Cooling capacity 38,9 ÷ 165,9 kW
Heating capacity 48,5 ÷ 207,7 kW

- **Optimised for heating in centralised systems.**
- **Production of hot water at high temperature up to 68°C.**
- **Independent from the gas network.**
- **DHW production.**



DESCRIPTION
Water source heat pump with reverse cycle valve. The unit can produce chilled and hot water but it is optimized for high temperature hot water production, making it a perfect solution for DHW applications. It can also work with low source temperatures which make it possible to work with geothermal applications.

VERSIONS
° Standard
L Standard silenced

FEATURES

Extended operating range
Particular attention has been given to winter operation, ensuring the production of hot water up to 68°C.

Plug and play
All units are equipped with scroll compressors with steam injection and brazed plate heat exchangers. The base and panels are made of steel treated with polyester paints RAL 9003.
The heat pump can be supplied with all the components required for its installation in new systems and in retrofit applications. It can be combined with low temperature emission systems such as in floor radiant heating or fan coils, but also with conventional radiators.

Integrated hydronic kit
Integrated hydronic kit containing the main hydraulic components; available with various configurations with one or two pumps, high or low head, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO_5
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— Possibility to control two units in a Master-Slave configuration
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES
AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
PGD1: Allows you to control the unit at a distance.
SGD: Electronic expansion that enables connecting to the photovoltaic system and heat pumps to accumulate heat in the DHW tank or in the heating system during the photovoltaic production phase and release it at times when heating demand is highest.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.
The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

FACTORY FITTED ACCESSORIES
DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
T6: Double safety valve with exchange cock, both on the high and low pressure branches.

ACCESSORIES COMPATIBILITY

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
AER485P1	°						•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•
AERBACP	°						•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•
AERNET	°						•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•
PGD1	°						•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•
SGD	°						•	•			
	L	•	•	•	•	•	•	•			

Antivibration

Version	System side - pumps	Integrated hydronic kit, source side	0200	0280	0300	0330	0350
°	°	°, J, K, Q, R, U, V, W, Z	-	-	-	-	-
°	M	°, J, K, U, W	-	-	-	-	-
°	N	°, Q, R, V, Z	-	-	-	-	-
°	O	°, J, K, U, W	-	-	-	-	-
°	P	°, Q, R, V, Z	-	-	-	-	-
L	°	°, J, K, Q, R, U, V, W, Z	-	-	-	-	-
L	M	°, J, K, U, W	-	-	-	-	-
L	N	°, Q, R, V, Z	-	-	-	-	-
L	O	°, J, K, U, W	-	-	-	-	-
L	P	°, Q, R, V, Z	-	-	-	-	-

Version	System side - pumps	Integrated hydronic kit, source side	0500	0550	0600	0650	0700
°	°	°	AVX345	AVX342	AVX342	AVX342	AVX342
°	°, M	J, K, U, W	AVX343	AVX343	AVX343	AVX343	AVX343
°	N	°	AVX343	AVX343	AVX343	AVX343	AVX343
°	O	J, K, U, W	AVX343	AVX343	AVX343	AVX343	AVX343
°	P	°	AVX343	AVX343	AVX343	AVX343	AVX343
°	°	Q, R, V, Z	AVX313	AVX343	AVX343	AVX343	AVX343
°	M, O	°	AVX313	AVX343	AVX343	AVX343	AVX343
°	N, P	Q, R, V, Z	AVX343	AVX343	AVX343	AVX344	AVX344
L	°	°	AVX345	AVX342	AVX342	AVX342	AVX342
L	°, M	J, K, U, W	AVX343	AVX343	AVX343	AVX343	AVX343
L	N	°	AVX343	AVX343	AVX343	AVX343	AVX343
L	O	J, K, U, W	AVX343	AVX343	AVX343	AVX343	AVX343
L	P	°	AVX343	AVX343	AVX343	AVX343	AVX343
L	°	Q, R, V, Z	AVX313	AVX343	AVX343	AVX343	AVX343
L	M, O	°	AVX313	AVX343	AVX343	AVX343	AVX343
L	N, P	Q, R, V, Z	AVX343	AVX343	AVX343	AVX344	AVX344

- not available

Version	System side - pumps	Integrated hydronic kit, source side	0200	0280	0300	0330	0350
°	°	°, J, K, Q, R, U, V, W, Z	-	-	-	-	-
°	M	°, J, K, U, W	-	-	-	-	-
°	N	°, Q, R, V, Z	-	-	-	-	-
°	O	°, J, K, U, W	-	-	-	-	-
°	P	°, Q, R, V, Z	-	-	-	-	-
L	°	°	VT9	VT9	VT9	VT9	VT9
L	°	J, K, Q, R, U, V, W, Z	VT15	VT15	VT15	VT15	VT15
L	M	°, J, K, U, W	VT15	VT15	VT15	VT15	VT15
L	N	°, Q, R, V, Z	VT15	VT15	VT15	VT15	VT15
L	O	°, J, K, U, W	VT15	VT15	VT15	VT15	VT15
L	P	°, Q, R, V, Z	VT15	VT15	VT15	VT15	VT15

Version	System side - pumps	Integrated hydronic kit, source side	0500	0550	0600	0650	0700
°	°	°, J, K, Q, R, U, V, W, Z	-	-	-	-	-
°	M	°, J, K, U, W	-	-	-	-	-
°	N	°, Q, R, V, Z	-	-	-	-	-
°	O	°, J, K, U, W	-	-	-	-	-
°	P	°, Q, R, V, Z	-	-	-	-	-
L	°	°, J, K, Q, R, U, V, W, Z	-	-	-	-	-
L	M	°, J, K, U, W	-	-	-	-	-
L	N	°, Q, R, V, Z	-	-	-	-	-
L	O	°, J, K, U, W	-	-	-	-	-
L	P	°, Q, R, V, Z	-	-	-	-	-

- not available

PR4

Model	Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
PR4	°						•	•	•	•	•
	L	•	•	•	•	•	•	•	•	•	•

Electronic device for peak current reduction.

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
°	-	-	-	-	-	DREWRK0500 (1)	DREWRK0550 (1)	DREWRK0600 (1)	DREWRK0650 (1)	DREWRK0700 (1)
L	DREWRK0200 (1)	DREWRK0280 (1)	DREWRK0300 (1)	DREWRK0330 (1)	DREWRK0350 (1)	DREWRK0500 (1)	DREWRK0550 (1)	DREWRK0600 (1)	DREWRK0650 (1)	DREWRK0700 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Power factor correction.

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
°	-	-	-	-	-	RIFWRK0500	RIFWRK0550	RIFWRK0600	RIFWRK0650	RIFWRK0700
L	RIFWRK0200	RIFWRK0280	RIFWRK0300	RIFWRK0330	RIFWRK0350	RIFWRK0500	RIFWRK0550	RIFWRK0600	RIFWRK0650	RIFWRK0700

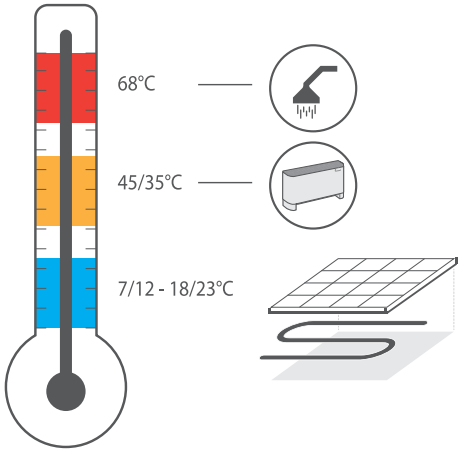
A grey background indicates the accessory must be assembled in the factory

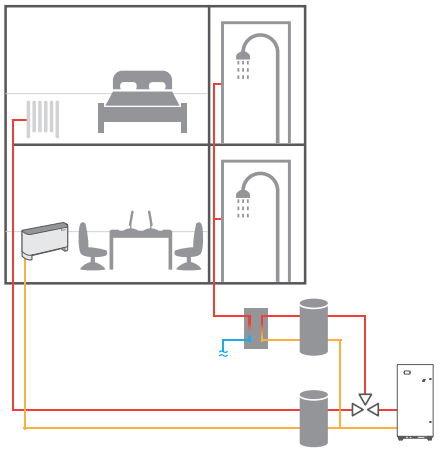
Double safety valve.

Ver	0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
°	-	-	-	-	-	T6WRK2	T6WRK2	T6WRK2	T6WRK2	T6WRK2
L	T6WRK1	T6WRK1	T6WRK1	T6WRK1	T6WRK1	T6WRK2	T6WRK2	T6WRK2	T6WRK2	T6WRK2

A grey background indicates the accessory must be assembled in the factory

APPLICATION EXAMPLES





WRK units are used in building renovations, where centralised boilers need replacing, while maintaining the existing distribution system and terminals (e.g. radiators) at the same time, to ensure the production of domestic hot water. This situation is typical when operating in contexts such as public buildings, but also in the case of centralised residential systems such as condominiums, where costs must be limited without changing the distribution system, while also offering a renewable energy source, represented precisely by heat pumps. Being able to upgrade a building without involving the distribution system also eliminates the inconveniences associated with the renovation of the premises, ensuring the continuity of the property's use, saving time and money.

CONFIGURATOR

Field		Description
1,2,3		**WRK**
4,5,6,7		**Size** 0200, 0280, 0300, 0330, 0350, 0500, 0550, 0600, 0650, 0700
8		**Operating field**
	°	Standard mechanic thermostatic valve
9		**Model**
	H	Heat pump
10		**Version**
	°	Standard
	L	Standard silenced (1)
11		**Evaporator**
	°	Standard
12		**Heat recovery**
	D	With desuperheater
	°	Without heat recovery
13		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
14		**System side - pumps**
	M	Single pump low head
	N	Pump low head + stand-by pump
	O	Single pump high head
	P	Pump high head + stand-by pump
	°	Without hydronic kit
15		**Integrated hydronic kit, source side (2)**
	J	Single low-head inverter pump
	K	Single high-head inverter pump
	Q	Single high-head inverter pump + stand-by pump
	R	Single low-head inverter pump + stand-by pump
	U	Single pump low head
	V	Pump low head + stand-by pump
	W	Single pump high head
	Z	Pump high head + stand-by pump
	°	Without hydronic kit
16		**Field for future development**
	°	Field for future development

(1) The size 0200-0280-0300-0330-0350 only available in low noise version (L)
(2) Heat pumps R and Q are availables only for sizes 0500÷0700

PERFORMANCE SPECIFICATIONS 12 °C/ 7 °C - 40 °C/ 45 °C

WRK - H°

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	-	-	-	-	-	96,2	110,9	130,0	145,8	166,1
Input power	kW	-	-	-	-	-	21,5	24,0	28,6	33,3	37,4
Cooling total input current	A	-	-	-	-	-	48,0	50,0	62,0	86,0	89,0
EER	W/W	-	-	-	-	-	4,47	4,63	4,55	4,38	4,44
Water flow rate source side	l/h	-	-	-	-	-	20140	23075	27128	30634	34797
Pressure drop source side	kPa	-	-	-	-	-	25	25	25	24	25
Water flow rate system side	l/h	-	-	-	-	-	16552	19082	22366	25077	28566
Pressure drop system side	kPa	-	-	-	-	-	17	17	17	16	17
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	-	-	-	-	-	120,8	137,7	163,1	187,1	207,9
Input power	kW	-	-	-	-	-	26,4	29,7	35,4	41,2	45,4
Heating total input current	A	-	-	-	-	-	52,0	56,0	69,0	92,0	95,0
COP	W/W	-	-	-	-	-	4,58	4,64	4,61	4,55	4,58
Water flow rate source side	l/h	-	-	-	-	-	27658	31618	37369	42704	47563
Pressure drop source side	kPa	-	-	-	-	-	49	49	50	47	50
Water flow rate system side	l/h	-	-	-	-	-	20958	23884	28290	32459	36068
Pressure drop system side	kPa	-	-	-	-	-	28	27	28	27	28

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WRK - HL

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity	kW	38,9	54,4	65,0	74,1	83,5	96,2	110,9	130,0	145,8	166,1
Input power	kW	8,6	12,0	14,3	16,8	18,8	21,5	24,0	28,6	33,3	37,4
Cooling total input current	A	20,0	25,0	31,0	43,0	45,0	48,0	50,0	62,0	86,0	89,0
EER	W/W	4,54	4,54	4,54	4,41	4,43	4,47	4,63	4,55	4,38	4,44
Water flow rate source side	l/h	8131	11358	13570	15551	17498	20140	23075	27128	30634	34797
Pressure drop source side	kPa	19	23	24	25	26	25	25	25	24	25
Water flow rate system side	l/h	6699	9362	11186	12754	14363	16552	19082	22366	25077	28566
Pressure drop system side	kPa	13	16	16	17	17	17	17	17	16	17
Heating performance 40 °C / 45 °C (2)											
Heating capacity	kW	48,4	68,6	81,6	93,4	104,0	120,8	137,7	163,1	187,1	207,9
Input power	kW	10,6	14,8	17,8	20,8	22,9	26,4	29,7	35,4	41,2	45,4
Heating total input current	A	21,0	28,0	35,0	46,0	48,0	52,0	45,0	69,0	92,0	95,0
COP	W/W	4,57	4,62	4,58	4,48	4,54	4,58	4,64	4,61	4,55	4,58
Water flow rate source side	l/h	11062	15751	18684	21290	23771	27658	31618	37369	42704	47563
Pressure drop source side	kPa	37	45	47	49	50	49	49	50	47	50
Water flow rate system side	l/h	8397	11904	14149	16207	18041	20958	23884	28290	32459	36068
Pressure drop system side	kPa	21	26	27	28	29	28	27	28	27	28

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

PERFORMANCE SPECIFICATIONS 23 °C/ 18 °C - 30 °C/ 35 °C

WRK - H°

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	-	-	-	-	-	126,3	144,8	169,8	189,7	217,3
Input power	kW	-	-	-	-	-	21,7	23,3	29,3	33,4	39,0
Cooling total input current	A	-	-	-	-	-	47,0	47,0	62,0	84,0	91,0
EER	W/W	-	-	-	-	-	5,82	6,20	5,80	5,69	5,58
Water flow rate source side	l/h	-	-	-	-	-	25317	28767	34057	38166	43828
Pressure drop source side	kPa	-	-	-	-	-	39	39	40	37	40
Water flow rate system side	l/h	-	-	-	-	-	21826	25015	29337	32770	37528
Pressure drop system side	kPa	-	-	-	-	-	29	29	29	28	29
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	-	-	-	-	-	116,4	132,7	155,6	178,3	198,1
Input power	kW	-	-	-	-	-	20,7	23,0	27,5	32,1	35,4
Heating total input current	A	-	-	-	-	-	42,0	44,0	54,0	73,0	75,0
COP	W/W	-	-	-	-	-	5,62	5,77	5,66	5,56	5,60
Water flow rate source side	l/h	-	-	-	-	-	16656	19095	22309	25455	28334
Pressure drop source side	kPa	-	-	-	-	-	18	18	18	17	18
Water flow rate system side	l/h	-	-	-	-	-	20118	22943	26905	30825	34248
Pressure drop system side	kPa	-	-	-	-	-	25	25	25	24	25

(1) Date 14511:2022; Water user side 23 °C / 18 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 30 °C / 35 °C; Water source side 10 °C / 5 °C

WRK - HL

Size		0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Cooling performance 23 °C / 18 °C (1)											
Cooling capacity	kW	50,9	71,0	84,9	96,4	109,2	126,3	144,8	169,8	189,7	217,3
Input power	kW	8,8	11,7	14,7	16,9	19,8	21,7	23,3	29,3	33,4	39,0
Cooling total input current	A	20,0	24,0	31,0	42,0	46,0	47,0	47,0	62,0	84,0	91,0
EER	W/W	5,81	6,10	5,78	5,69	5,53	5,82	6,20	5,80	5,69	5,58
Water flow rate source side	l/h	10217	14150	17036	19386	22038	25317	28767	34057	38166	43828
Pressure drop source side	kPa	30	36	37	39	41	39	39	40	37	40
Water flow rate system side	l/h	8796	12274	14672	16662	18865	21826	25015	29337	32770	37528
Pressure drop system side	kPa	22	27	28	29	30	29	29	29	28	29
Heating performance 30 °C / 35 °C (2)											
Heating capacity	kW	46,4	66,1	77,8	89,0	100,1	116,4	132,7	155,6	178,3	198,1
Input power	kW	8,3	11,5	13,8	16,2	18,2	20,7	23,0	27,5	32,1	35,4
Heating total input current	A	17,0	22,0	28,0	36,0	39,0	42,0	44,0	54,0	73,0	75,0
COP	W/W	5,60	5,76	5,66	5,51	5,49	5,62	5,77	5,66	5,56	5,60
Water flow rate source side	l/h	6629	9514	11157	12694	14269	16656	19095	22309	25455	28334
Pressure drop source side	kPa	13	17	17	17	18	18	18	18	17	18
Water flow rate system side	l/h	8016	11435	13458	15390	17310	20118	22943	26905	30825	34248
Pressure drop system side	kPa	19	24	24	25	26	25	25	25	24	25

(1) Date 14511:2022; Water user side 23 °C / 18 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 30 °C / 35 °C; Water source side 10 °C / 5 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
SEER - 12/7 (EN14825: 2018) (1)												
SEER	°	W/W	-	-	-	-	-	5,33	5,46	5,28	5,38	5,28
	L	W/W	4,75	5,14	5,04	5,04	4,97	5,33	5,46	5,28	5,38	5,28
Seasonal efficiency	°	%	-	-	-	-	-	210,2%	215,4%	208,2%	212,2%	208,2%
	L	%	187,0%	202,6%	198,6%	198,6%	195,8%	210,2%	215,4%	208,2%	212,2%	208,2
UE 811/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 70 kW (2)												
Efficiency energy class	°		-	-	-	-	-	-	-	-	-	-
	L		A+++	-	-	-	-	-	-	-	-	-
Pdesignh	°	kW	-	-	-	-	-	157	179	212	244	271
	L	kW	63	89	106	122	135	157	179	212	244	271
ηsh	°	%	-	-	-	-	-	191.0%	195.0%	194.0%	193.0%	192.0%
	L	%	181.0%	187.0%	185.0%	181.0%	182.0%	191.0%	195.0%	194.0%	193.0%	192.0%
SCOP	°	W/W	-	-	-	-	-	4,98	5,08	5,05	5,03	5,00
	L	W/W	4,73	4,88	4,83	4,73	4,75	4,98	5,08	5,05	5,03	5,00

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Electric data												
Maximum current (FLA)	°	A	-	-	-	-	-	75,0	84,0	104,0	130,0	132,0
	L	A	32,0	42,0	52,0	65,0	66,0	75,0	84,0	104,0	130,0	132,0
Peak current (LRA)	°	A	-	-	-	-	-	216,0	181,0	218,0	271,5	273,0
	L	A	144,0	139,0	166,0	206,5	207,0	216,0	181,0	218,0	271,5	273,0

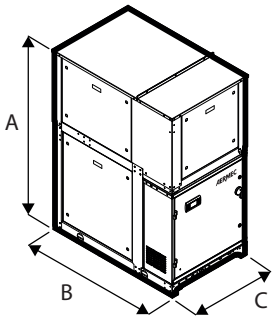
GENERAL TECHNICAL DATA

Size			0200	0280	0300	0330	0350	0500	0550	0600	0650	0700
Compressor												
Type	°	type	-	-	-	-	-	Scroll	Scroll	Scroll	Scroll	Scroll
	L	type	Scroll									
Number	°	no.	-	-	-	-	-	3	4	4	4	4
	L	no.	2	2	2	2	2	3	4	4	4	4
Circuits	°	no.	-	-	-	-	-	2	2	2	2	2
	L	no.	2	2	2	2	2	2	2	2	2	2
Refrigerant	°	type	-	-	-	-	-	R410A	R410A	R410A	R410A	R410A
	L	type	R410A									
Refrigerant charge (1)	°	kg	-	-	-	-	-	13,0	16,0	18,0	22,0	24,0
	L	kg	6,0	8,0	9,0	10,0	11,0	13,0	16,0	18,0	22,0	24,0
Source side heat exchanger												
Type	°,L	type	Brazed plate									
Number	°	no.	-	-	-	-	-	1	1	1	1	1
	L	no.	1	1	1	1	1	1	1	1	1	1
System side heat exchanger												
Type	°,L	type	Brazed plate									
Number	°	no.	-	-	-	-	-	1	1	1	1	1
	L	no.	1	1	1	1	1	1	1	1	1	1
Source side hydraulic connections												
Connections (in/out)	°,L	Type	Grooved joints									
Sizes (in/out)	°	Ø	-	-	-	-	-	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
	L	Ø	2 1/2"									
System side hydraulic connections												
Connections (in/out)	°,L	Type	Grooved joints									
Sizes (in/out)	°	Ø	-	-	-	-	-	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
	L	Ø	2 1/2"									
Sound data calculated in cooling mode (2)												
Sound power level	°	dB(A)	-	-	-	-	-	81,6	82,2	81,6	82,7	83,4
	L	dB(A)	71,6	73,9	72,4	74,0	75,6	76,3	77,0	75,9	77,5	78,0
Sound pressure level (10 m)	°	dB(A)	-	-	-	-	-	49,9	50,5	49,9	51,0	51,7
	L	dB(A)	40,1	42,4	40,9	42,5	44,1	44,6	45,3	44,2	45,8	46,3

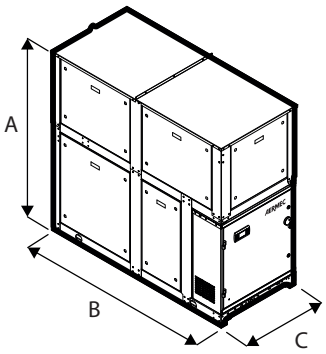
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

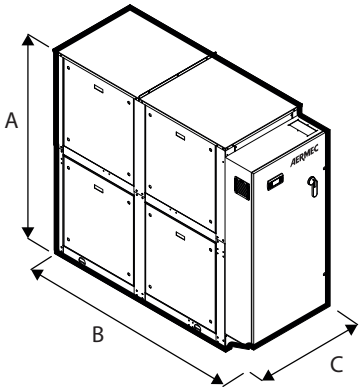
WRK 0350 °



WRK 0350 U-V-W-Z-J-R-K-Q



WRK 0700 °



Size			0200	0280	0300	0330	0350
Dimensions and weights without hydronic kit							
A	°	mm	-	-	-	-	-
	L	mm	1675	1675	1675	1675	1675
B	°	mm	-	-	-	-	-
	L	mm	1265	1265	1265	1265	1265
C	°	mm	-	-	-	-	-
	L	mm	800	800	800	800	800
Dimensions and weights with pump/s							
A	°	mm	-	-	-	-	-
	L	mm	1675	1675	1675	1675	1675
B	°	mm	-	-	-	-	-
	L	mm	1890	1890	1890	1890	1890
C	°	mm	-	-	-	-	-
	L	mm	800	800	800	800	800

Size			0500	0550	0600	0650	0700
Dimensions and weights without hydronic kit							
A	°	mm	1840	1840	1840	1840	1840
	L	mm	1885	1885	1885	1885	1885
B	°,L	mm	2155	2155	2155	2155	2155
C	°,L	mm	800	800	800	800	800
Dimensions and weights with pump/s							
A	°	mm	1840	1840	1840	1840	1840
	L	mm	1885	1885	1885	1885	1885
B	°,L	mm	3090	3090	3090	3090	3090
C	°,L	mm	800	800	800	800	800

	Version	System side - pumps	Integrated hydronic kit, source side		0200	0280	0300	0330	0350
Empty weight	°	°/M/N/O/P	°/J/K/Q/R/U/V/W/Z	kg	-	-	-	-	-
	L	°	°	kg	495	550	565	570	580
	L	°	J/K/U/W	kg	665	720	735	740	750
	L	°	Q/R/V/Z	kg	690	745	760	765	775
	L	N/P	°	kg	690	745	760	765	775
	L	M/O	°	kg	665	720	730	740	750
	L	M/O	J/K/U/W	kg	695	755	765	775	785
	L	M	Q/R/V/Z	kg	-	-	-	-	-
	L	N	J/K/U/W	kg	-	-	-	-	-
	L	O	Q/R/V/Z	kg	-	-	-	-	-
	L	P	J/K/U/W	kg	-	-	-	-	-
	L	N/P	Q/R/V/Z	kg	750	805	820	825	835

- not available

	Version	System side - pumps	Integrated hydronic kit, source side		0500	0550	0600	0650	0700
Empty weight	°	°	°	kg	755	840	865	890	920
	°	°	J/K/U/W	kg	935	1020	1045	1085	1115
	°	°	Q/R/V/Z	kg	1005	1090	1115	1170	1200
	°	M/O	°	kg	900	985	1010	1045	1075
	°	M/O	J/K/U/W	kg	990	1075	1100	1150	1180
	°	M	Q/R/V/Z	kg	-	-	-	-	-
	°	N	J/K/U/W	kg	-	-	-	-	-
	°	O	Q/R/V/Z	kg	-	-	-	-	-
	°	P	J/K/U/W	kg	-	-	-	-	-
	°	N/P	°	kg	970	1055	1080	1125	1155
	°	N/P	Q/R/V/Z	kg	1130	1215	1240	1315	1340
	L	°	°	kg	930	1015	1040	1065	1095
	L	°	J/K/U/W	kg	1155	1240	1265	1305	1335
	L	°	Q/R/V/Z	kg	1225	1310	1335	1390	1420
	L	M/O	°	kg	1120	1205	1230	1265	1295
	L	M/O	J/K/U/W	kg	1210	1295	1320	1370	1400
	L	M	Q/R/V/Z	kg	-	-	-	-	-
	L	N	J/K/U/W	kg	-	-	-	-	-
	L	O	Q/R/V/Z	kg	-	-	-	-	-
	L	P	J/K/U/W	kg	-	-	-	-	-
	L	N/P	°	kg	1190	1275	1300	1345	1375
	L	N/P	Q/R/V/Z	kg	1350	1435	1460	1535	1560

- not available

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WWB 0300-0900

Water-water heat pumps only

Heating capacity 56,7 ÷ 265,9 kW

- **Optimised to produce high temperature hot water**
- **Can be used with any air or water cooled heat pump**
- **Max. processed water temperature: 80 °C**
- **Max inlet temperature on source side: 45 °C**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

WWB is a range of irreversible water-water heat pumps that produce high temperature water with a low or medium temperature source.
Internal unit suitable for use in centralised residential systems, in systems that serve hotels and other forms of accommodation, and for applications in the tertiary and industrial sectors.

FEATURES

Maximum energy efficiency

Aermec, which has focused for years on energy efficiency, designed the WWB units with the aim of guaranteeing high efficiency both with full and partial loads.

Operating field

With its wide operating range, it can be integrated with numerous applications and is a valid alternative to boilers and all conventional systems used to produce high temperature hot water since it also uses existing systems.
Production of hot water up to 80 °C (Max inlet temperature on source side 45 °C).

Constructional characteristics of unit

— Optimised plate heat exchangers with low pressure drops.
— 2 cooling circuits, 1 compressor per circuit.
— Scroll compressors for high condensing temperatures.
— Compact size for easier installation.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

CONTROL

Control unit accessible externally with touch-screen user interface, multilingual display of all operating parameters.
Optimised control logic for use with low and medium temperature heat pumps.
Complies with safety (EC) and electromagnetic compatibility directives.

Removable slide-out electrical panel with opening side (LH/RH side) configurator option

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
VT: Anti-vibration supports.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Model	Ver	0300	0330	0350	0550	0600	0700	0800	0900
AER485P1	L	•	•	•	•	•	•	•	•
AERBACP	L	•	•	•	•	•	•	•	•
AERNET	L	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	L	•	•	•	•	•	•	•	•
PGD1	L	•	•	•	•	•	•	•	•

MULTICHILLER_EVO: Contact the factory for compatibility of the accessory with the type of implant envisaged.

Antivibration

Ver	0300	0330	0350	0550	0600	0700	0800	0900
L	VT9	VT9	VT9	VT9	VT15	VT15	VT15	VT15

Power factor correction

Ver	0300	0330	0350	0550	0600	0700	0800	0900
L	RIFWWB0300	RIFWWB0330	RIFWWB0350	RIFWWB0550	RIFWWB0600	RIFWWB0700	RIFWWB0800	RIFWWB0900

A grey background indicates the accessory must be assembled in the factory

PR4

Model	Ver	0300	0330	0350	0550	0600	0700	0800	0900
PR4	L	•	•	•	•	•	•	•	•

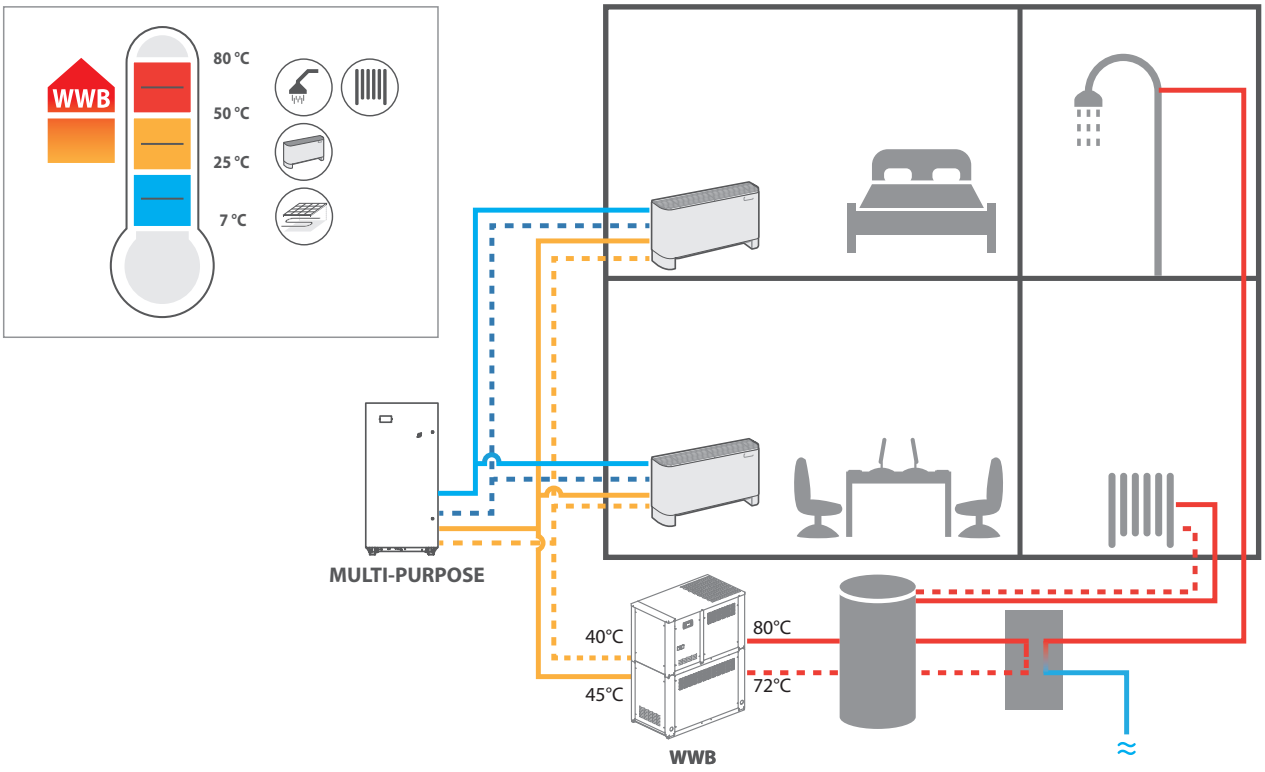
CONFIGURATOR

Field		Description
1,2,3		**WWB**
4,5,6,7		**Size** 0300, 0330, 0350, 0550, 0600, 0700, 0800, 0900
8		**Operating field (1)**
	X	Standard
9		**Model**
	H	Heat pump
10		**Version**

Field		Description
	L	Silenced
11		**Power supply**
	S	400V ~ 3 50Hz with Soft-Start
	°	400V ~ 3 50Hz
12		**Electrical panel version**
	R	Reverse opening (RH)
	°	Standard opening (LH)

(1) Evaporator water up to +5°C. Electronic thermostatic valve as standard.

Example of four-pipe system



PERFORMANCE SPECIFICATIONS

Size			0300	0330	0350	0550	0600	0700	0800	0900
Heating performances (Water user side 70 °C / 78 °C; Water source side 45 °C / 40 °C) (1)										
Heating capacity	L	kW	70,3	77,7	93,2	114,6	143,7	181,7	220,5	265,9
Input power	L	kW	16,7	18,0	21,6	27,7	34,7	44,3	55,4	66,4
Heating total input current	L	A	29,0	30,0	36,0	46,0	61,0	71,0	89,0	104,0
COP	L	W/W	4,22	4,31	4,33	4,14	4,14	4,11	3,98	4,00
Water flow rate system side	L	l/h	7721	8537	10243	12592	15787	19973	24229	29221
Pressure drop system side	L	kPa	18	22	31	21	33	24	35	24
Water flow rate source side	L	l/h	9339	10400	12491	15141	18986	23950	28791	34785
Pressure drop source side	L	kPa	12	15	10	15	8	12	16	23
Heating performances (Water user side 70 °C / 78 °C; Water source side 35 °C / 30 °C) (2)										
Heating capacity	L	kW	56,7	62,7	75,2	92,4	115,9	146,5	177,8	214,4
Input power	L	kW	16,3	17,6	21,0	27,0	33,9	43,2	54,0	64,7
Heating total input current	L	A	28,0	29,0	35,0	45,0	59,0	70,0	87,0	102,0
COP	L	W/W	3,48	3,56	3,58	3,42	3,42	3,39	3,29	3,31
Water flow rate system side	L	l/h	6228	6886	8262	10157	12734	16110	19543	23570
Pressure drop system side	L	kPa	12	14	20	14	22	15	23	16
Water flow rate source side	L	l/h	7008	7820	9396	11340	14221	17924	21486	25974
Pressure drop source side	L	kPa	7	9	6	8	4	7	9	13
Heating performances (Water user side 47 °C / 55 °C; Water source side 10 °C / 7 °C) (3)										
Heating capacity	L	kW	35,6	39,4	47,3	58,1	72,9	92,2	111,8	134,8
Input power	L	kW	9,8	10,6	12,7	16,3	20,4	26,1	32,6	39,1
Input current	L	A	16,9	17,8	21,4	27,4	35,9	42,1	52,7	61,8
COP	L	W/W	3,62	3,71	3,73	3,56	3,57	3,53	3,43	3,45
Water flow rate system side	L	l/h	3881	4291	5148	6329	7935	10039	12178	14688
Pressure drop system side	L	kPa	5	6	8	8	8	6	9	6
Water flow rate source side	L	l/h	7405	8259	9923	11988	15034	18952	22733	27478
Pressure drop source side	L	kPa	8	10	6	9	5	7	10	15

(1) Date 14511:2022; Water user side 70 °C / 78 °C; Water source side 45 °C / 40 °C
(2) Date 14511:2022; Water user side 70 °C / 78 °C; Water source side 35 °C / 30 °C
(3) Date 14511:2022; Water user side 47 °C / 55 °C; Water source side 10 °C / 7 °C

ENERGY DATA

Size			0300	0330	0350	0550	0600	0700	0800	0900
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)										
Pdesignh	L	kW	46	51	61	76	95	120	145	175
ηsh	L	%	176,00	180,00	180,00	175,00	174,00	174,00	169,00	175,00
SCOP	L	W/W	4,60	4,70	4,70	4,58	4,55	4,55	4,43	4,48
Efficiency energy class	L		A++	A++	A++	-	-	-	-	-

(1) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Size			0300	0330	0350	0550	0600	0700	0800	0900
Power supply: S										
Electric data										
Maximum current (FLA)	L	A	30,9	32,2	38,2	50,2	64,6	79,8	94,6	113,7
Peak current (LRA)	L	A	53,4	60,5	66,3	81,1	101,9	129,9	156,1	180,9

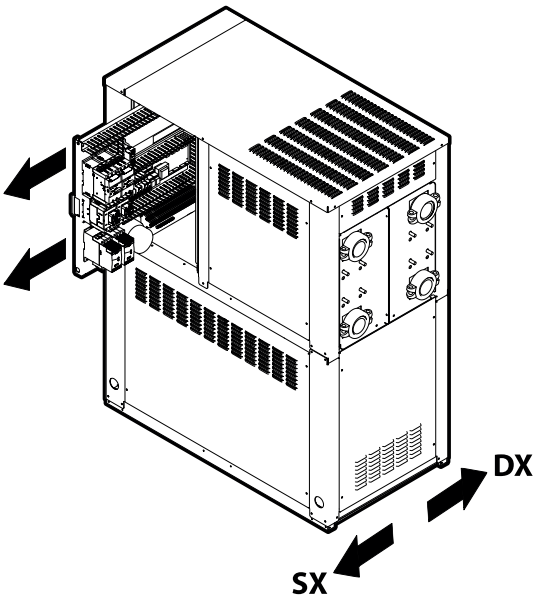
Size			0300	0330	0350	0550	0600	0700	0800	0900
Power supply: °										
Electric data										
Maximum current (FLA)	L	A	30,9	32,2	38,2	50,2	64,6	79,8	94,6	113,7
Peak current (LRA)	L	A	110,4	127,1	137,1	165,1	206,3	264,9	319,3	366,9

GENERAL TECHNICAL DATA

Size			0300	0330	0350	0550	0600	0700	0800	0900
Compressor										
Type	L	type				Scroll				
Compressor regulation	L	Type				On-Off				
Number	L	no.	2	2	2	2	2	2	2	2
Circuits	L	no.	2	2	2	2	2	2	2	2
Refrigerant	L	type				R134a				
Refrigerant load circuit 1 (1)	L	kg	2,8	2,8	3,6	4,4	6,5	7,7	8,0	9,9
Refrigerant load circuit 2 (1)	L	kg	2,8	2,8	3,5	4,3	6,3	7,5	7,8	9,7
Source side heat exchanger										
Type	L	type				Brazed plate				
Number	L	no.	1	1	1	1	1	1	1	1
Connections (in/out)	L	Type				Grooved joints				
Sizes (in/out)	L	Ø	2″	2″	2″	2″	2″	2″1/2	2″1/2	2″1/2
System side heat exchanger										
Type	L	type				Brazed plate				
Number	L	no.	1	1	1	1	1	1	1	1
Connections (in/out)	L	Type				Grooved joints				
Sizes (in/out)	L	Ø	2″	2″	2″	2″	2″	2″1/2	2″1/2	2″1/2
Sound data calculated in cooling mode (2)										
Sound power level	L	dB(A)	71,8	71,8	71,8	75,1	78,3	79,3	80,4	82,4
Sound pressure level (10 m)	L	dB(A)	40,2	40,2	40,2	43,5	46,7	47,7	48,9	50,9

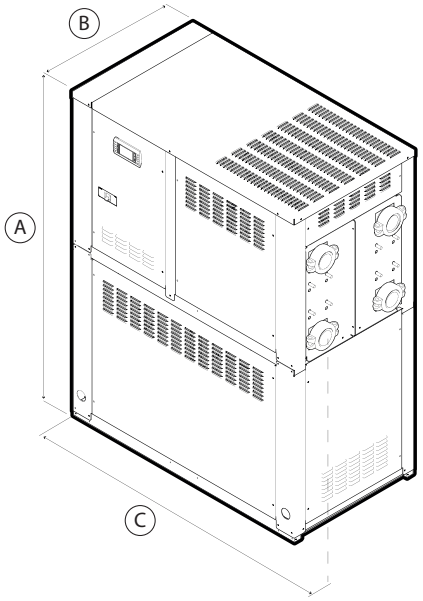
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Removal of electrical panel



Electrical panel version	Configurator option
Sx - LH side	° (Standard)
Dx - RH side	R

DIMENSIONS



Size			0300	0330	0350	0550	0600	0700	0800	0900
Dimensions and weights										
A	L	mm	1650	1650	1650	1650	1650	1650	1650	1650
B	L	mm	710	710	710	710	710	710	710	710
C	L	mm	1300	1300	1300	1300	1300	1300	1300	1300
Weights										
Weight empty + packaging	L	kg	420	425	440	455	500	715	760	820
Weight functioning	L	kg	415	420	440	460	510	730	775	840

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responsibility or liability for errors or omissions.

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WWBG

Water-water heat pumps only

Heating capacity 77,2 ÷ 138,2 kW

- **Optimised to produce high temperature hot water**
- **Can be used with any air or water cooled heat pump**
- **Max. processed water temperature: 80 °C**
- **Max inlet temperature on source side: 45 °C**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

WWBG is a range of irreversible water-water heat pumps that produce high temperature water with a low or medium temperature source.
Internal unit suitable for use in centralised residential systems, in systems that serve hotels and other forms of accommodation, and for applications in the tertiary and industrial sectors.

FEATURES

Maximum energy efficiency

Aermec, which has focused for years on energy efficiency, designed the WWBG units with the aim of guaranteeing high efficiency both with full and partial loads.

Operating field

With its wide operating range, it can be integrated with numerous applications and is a valid alternative to boilers and all conventional systems used to produce high temperature hot water since it also uses existing systems.
Production of hot water up to 80 °C (Max inlet temperature on source side 45 °C).

Constructional characteristics of unit

— Optimised plate heat exchangers with low pressure drops.
— 2 cooling circuits, 1 compressor per circuit.
— Scroll compressors for high condensing temperatures.
— Compact size for easier installation.

The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit.

R513A (XP10) refrigerant gas

Thanks to the R513A (XP10) refrigerant, the environmental impact of the units is significantly reduced.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.

CONTROL

Control unit accessible externally with touch-screen user interface, multilingual display of all operating parameters.
Optimised control logic for use with low and medium temperature heat pumps.
Complies with safety (EC) and electromagnetic compatibility directives.
Removable slide-out electrical panel with opening side (LH/RH side) configurator option

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
VT: Anti-vibration supports.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES COMPATIBILITY

Model	Ver	0330	0350	0550	0600
AER485P1	L	•	•	•	•
AERBACP	L	•	•	•	•
AERNET	L	•	•	•	•
MULTICHILLER-EVO	L	•	•	•	•
PGD1	L	•	•	•	•

MULTICHILLER_EVO: Contact the factory for compatibility of the accessory with the type of implant envisaged.

Antivibration

Ver	0330	0350	0550	0600
L	VT9	VT9	VT9	VT15

PR4

Model	Ver	0330	0350	0550	0600
PR4	L	•	•	•	•

Power factor correction

Ver	0330	0350	0550	0600
L	RIFWWBG0330	RIFWWBG0350	RIFWWBG0550	RIFWWBG0600

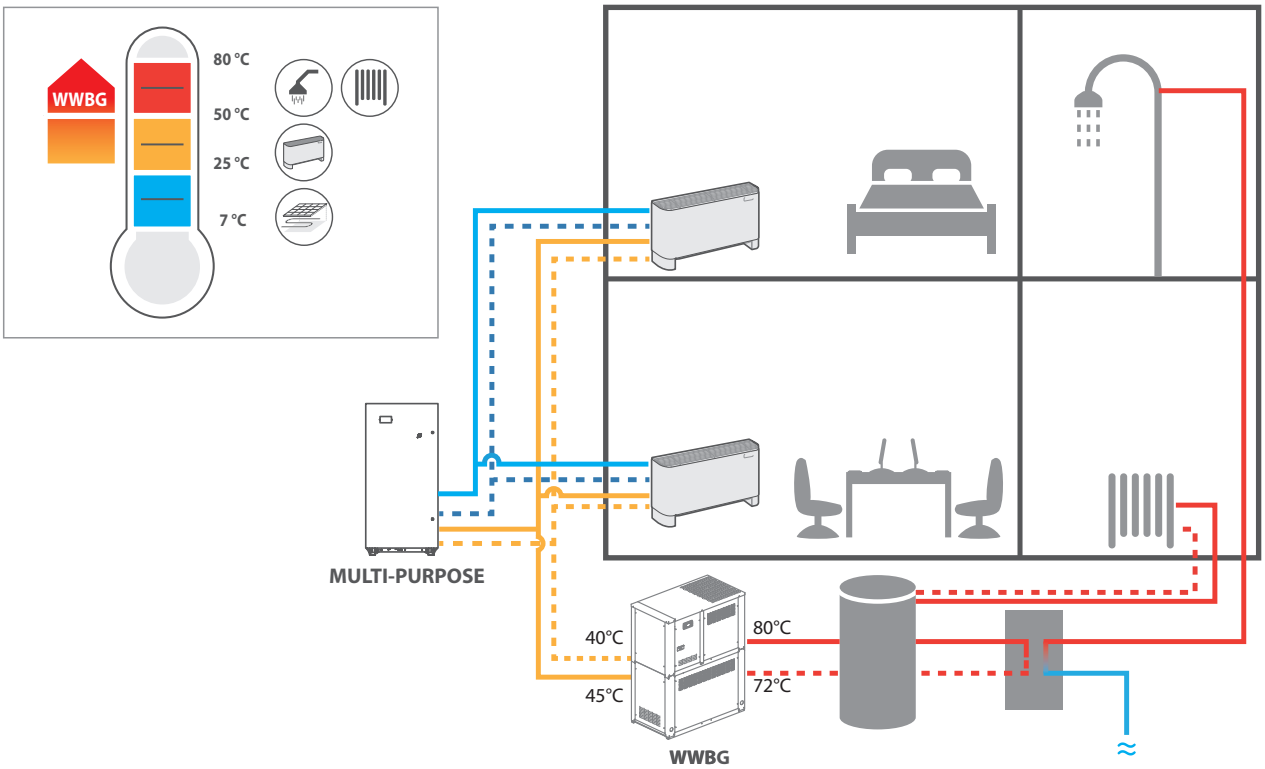
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3,4	**WWBG**
5,6,7,8	**Size** 0330, 0350, 0550, 0600
9	**Operating field**
X	Standard
10	**Model**
H	Heat pump
11	**Version**
L	Silenced

Field	Description
12	**Power supply**
S	400V ~ 3 50Hz with Soft-Start
°	400V ~ 3 50Hz
13	**Electrical panel version**
R	Reverse opening (RH)
°	Standard opening (LH)
14	**Leak detector**
G	with leak detector
°	Without leak detector

Example of four-pipe system



PERFORMANCE SPECIFICATIONS

Size			0330	0350	0550	0600
Heating performances (Water user side 70 °C / 78 °C; Water source side 45 °C / 40 °C) (1)						
Heating capacity	L	kW	77,2	92,5	115,4	138,2
Input power	L	kW	18,4	21,9	28,0	33,6
COP	L	W/W	4,19	4,22	4,13	4,11
Water flow rate system side	L	l/h	8485	10161	12667	15166
Pressure drop system side	L	kPa	10	14	21	31
Water flow rate source side	L	l/h	10279	12336	15279	18264
Pressure drop source side	L	kPa	15	10	15	7
Heating performances (Water user side 70 °C / 78 °C; Water source side 35 °C / 30 °C) (2)						
Heating capacity	L	kW	63,0	75,4	94,1	112,7
Input power	L	kW	18,2	21,6	27,6	33,1
COP	L	W/W	3,46	3,49	3,41	3,40
Water flow rate system side	L	l/h	6922	8289	10334	12372
Pressure drop system side	L	kPa	6	9	14	20
Water flow rate source side	L	l/h	7806	9373	11588	13845
Pressure drop source side	L	kPa	9	6	9	4
Heating performances (Water user side 47 °C / 55 °C; Water source side 10 °C / 7 °C) (3)						
Heating capacity	L	kW	40,0	47,9	59,8	71,6
Input power	L	kW	11,3	13,4	17,1	20,6
COP	L	W/W	3,53	3,57	3,48	3,48
Water flow rate system side	L	l/h	4343	5200	6483	7761
Pressure drop system side	L	kPa	3	4	6	8
Water flow rate source side	L	l/h	8505	10210	12631	15094
Pressure drop source side	L	kPa	10	7	10	5

(1) Date 14511:2022; Water user side 70 °C / 78 °C; Water source side 45 °C / 40 °C
(2) Date 14511:2022; Water user side 70 °C / 78 °C; Water source side 35 °C / 30 °C
(3) Date 14511:2022; Water user side 47 °C / 55 °C; Water source side 10 °C / 7 °C

ENERGY DATA

Size			0330	0350	0550	0600
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)						
Pdesignh	L	kW	51	61	76	91
ηsh	L	%	175,00	177,00	173,00	172,00
SCOP	L	W/W	4,58	4,62	4,53	4,51
Efficiency energy class	L		A+++	A+++	-	-

(1) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

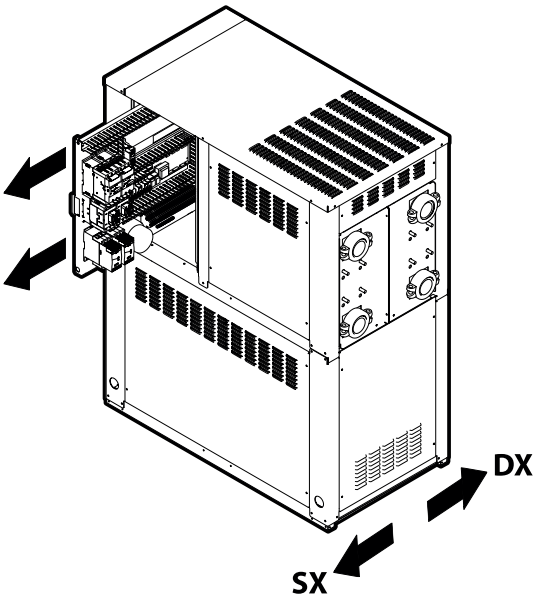
Size			0330	0350	0550	0600
Electric data						
Maximum current (FLA)	L	A	40,0	46,0	60,0	72,0
Peak current (LRA)	L	A	131,0	141,0	170,0	210,0
Peak current with Soft-start	L	A	66,0	71,0	85,0	105,0

GENERAL TECHNICAL DATA

Size			0330	0350	0550	0600
Compressor						
Type	L	type		Scroll		
Compressor regulation	L	Type		On-Off		
Number	L	no.	2	2	2	2
Circuits	L	no.	2	2	2	2
Refrigerant	L	type		R513A (XP10)		
Refrigerant load circuit 1 (1)	L	kg	3,1	3,4	4,2	5,8
Refrigerant load circuit 2 (1)	L	kg	3,1	3,4	4,2	5,8
Source side heat exchanger						
Type	L	type		Brazed plate		
Number	L	no.	1	1	1	1
Connections (in/out)	L	Type		Grooved joints		
Sizes (in/out)	L	Ø		2"		
System side heat exchanger						
Type	L	type		Brazed plate		
Number	L	no.	1	1	1	1
Connections (in/out)	L	Type		Grooved joints		
Sizes (in/out)	L	Ø		2"		
Sound data calculated in heating mode (2)						
Sound power level	L	dB(A)	71,8	71,8	76,1	78,3
Sound pressure level (10 m)	L	dB(A)	40,2	40,2	44,5	46,7
Sound pressure level (1 m)	L	dB(A)	55,7	55,7	60,0	62,2

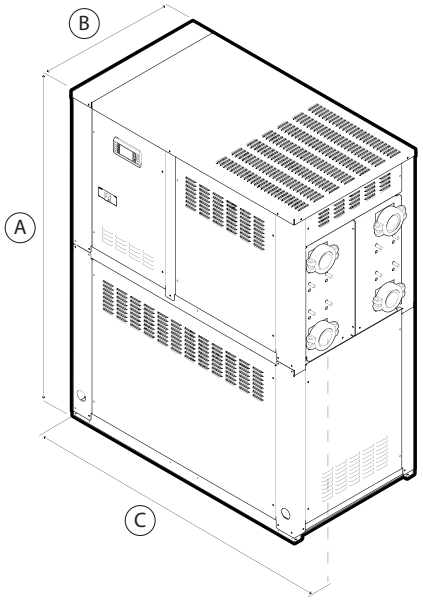
(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Removal of electrical panel



Electrical panel version	Configurator option
Sx - LH side	° (Standard)
Dx - RH side	R

DIMENSIONS



Size			0330	0350	0550	0600
Dimensions and weights						
A	L	mm	1650	1650	1650	1650
B	L	mm	710	710	710	710
C	L	mm	1300	1300	1300	1300
Weights						
Weight empty + packaging	L	kg	430	445	455	500
Weight functioning	L	kg	430	445	460	510

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www.aermec.com

WWM

Water cooled heat pump reversible water side

Cooling capacity 96 kW
Heating capacity 110 kW

- Compact module
- Single or dual refrigerant circuit
- Reliable and modular
- Max 2 levels of stackable units
- Up to 36 connectable units (see the modularity options)
- Easy installation and maintenance



DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
These are indoor units with hermetic scroll compressors, system side heat exchanger and plate source.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

FEATURES

The precise choice of components, the special configuration, and the possibility to connect several independent modules and manage them as if they were a single unit are all aspects that guarantee maximum output at full load, whilst ensuring continuous adaptation to the real service needs.
Bus Bar, to facilitate the electrical connections.

Modularity

Thanks to its modular construction, the installation can be adapted to suit specific system development needs whilst guaranteeing improved safety and reliability.
As a result, the cooling capacity can be easily increased over time, at a limited cost.
WWM consists of independent 96 kW modules that can be linked together to reach a capacity of 3456 kW.
With WWM, you can combine up to 36 units designed to minimise the overall dimensions.
The modules are easy to install and link together from the hydronic point of view, thanks to the connections with grooved joints.

Refrigerant circuit

The refrigerant circuit can easily be disconnected from the unit, maintaining all the functions of the hydronic circuit to ensure correct system operation.

Hydraulic components

WWM version PN10 has the **switch**; WWM version PN21 mounts the **transmitter**.
Fitted as standard, with **butterfly shut-off valves** on both hydronic lines for disconnecting the circuit when maintenance needs to be carried out.
In the event of a variable flow rate, the **motorised hydronic valves** can intercept one module or more in order to reduce the flow rate when there is a low thermal load level.

Very quiet

The WWM units stand out for their quiet operation.
Accurate unit sound-proofing, using good-quality sound absorbent material, means all the units work at low noise levels.

Units in parallel

The MULTICHILLER_EVO (accessory) allows up to 9 units to be managed in parallel mode.
This accessory allow to maximise the total efficency to the system under to work load, external air temperature conditions and water produced.
Each unit has its own electrical panel, guaranteeing continuity even if one module malfunctions or goes into lockout.

CONTROL

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The adjustment system includes the complete management of alarms and the alarm log.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
KWWM: Kit containing 4 caps with a diameter of 6" for the water manifolds.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

FACTORY FITTED ACCESSORIES

CRATE_WWMH-A: Special crate for transport

CRATE_WWM°: Special crate for transport
KITIDRO_WWM: Water filter with connection pipe (diameter 6") with drain tap and additional bulb well (diameter ½") available to the installer.
KREC_WWM: Cable entries box in order to facilitate the electrical installation.

ACCESSORIES COMPATIBILITY

Accessory	WWM05001H	WWM05001°	WWM05002H	WWM05002°
AER485P1	•	•	•	•
AERBACP	•	•	•	•
AERNET	•	•	•	•
KWWM	•	•	•	•
MULTICHILLER-EVO	•	•	•	•

For the control with MULTICHILLER EVO, nr.1 accessory AER485P1 is mandatory for every WWM of the system.

PR4

Accessory	WWM05001H	WWM05001°	WWM05002H	WWM05002°
PR4	•	•	•	•

Special crate for transport

Accessory	WWM05001H	WWM05001°	WWM05002H	WWM05002°
CRATE_WWMH-A	•	•	•	
CRATE_WWM°		•		•

■ *CRATE_WWM°: 100 kg, CRATE_WWMH-A: 130 kg*

Cable entries box

Accessory	WWM05001H	WWM05001°	WWM05002H	WWM05002°
KREC_WWM	•	•	•	•

Water filter

Accessory	WWM05001H	WWM05001°	WWM05002H	WWM05002°
KITIDRO_WWM	•	•	•	•

CONFIGURATOR

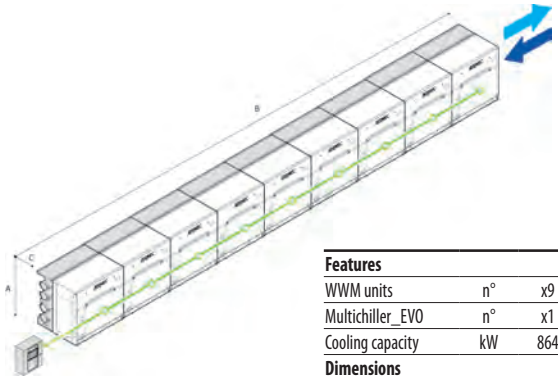
Field		Description
1,2,3		**WWM**
4,5,6,7		**Size** 0500
8		**Operating field (1)**
	°	Standard mechanic thermostatic valve
9		**Model**
	1	Single refrigerant circuit
	2	Double refrigerant circuit
10		**Hydraulic pressure rating**
	1	145 psi (PN10)
	3	300 psi (PN21)
11		**Hydraulic headers kit**
	H	6" Headers kit - PN21 standard carbon steel pipes declared in accordance with EN 10255
	°	No headers provided

Field		Description
12		**Power connection**
	B	With bus bars
	°	Without bus bars
13		**Power supply**
	°	400V ~ 3 50Hz with magnet circuit breakers
14		**Electrical panel SCCR**
	°	10 kA control panel
15		**Peak current reduction**
	R	With power factor device (2)
	°	Without power factor device
16		**Field for future development**
	°	-

(1) Water produced up to +4 °C
(2) Factory installed

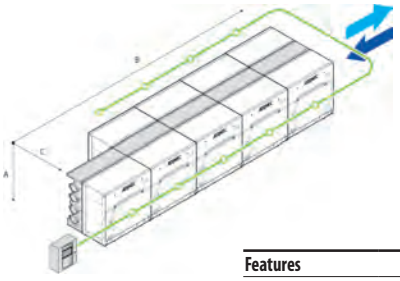
MODULARITY OPTIONS

CONFIGURATION 1: IN LINE



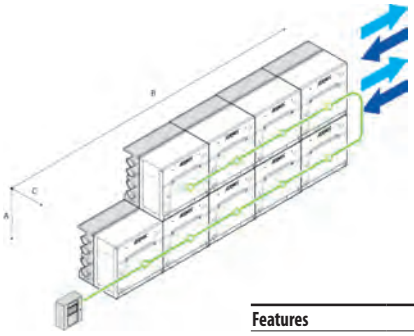
Features		
WWM units	n°	x9
Multichiller_EVO	n°	x1
Cooling capacity	kW	864
Dimensions		
A	mm	1300
B	mm	11970
C	mm	1150

CONFIGURATION 2: BACK TO BACK



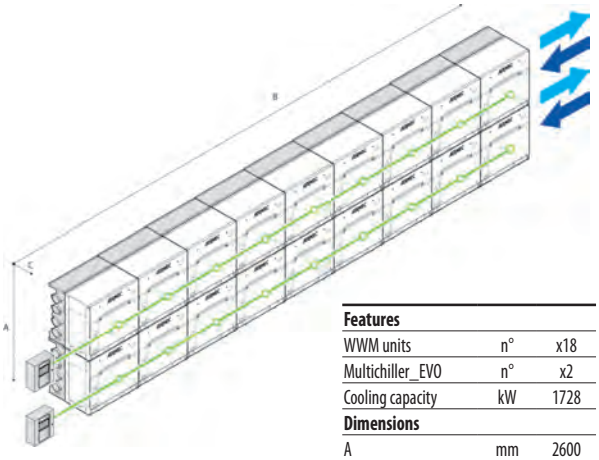
Features		
WWM units	n°	x9
Multichiller_EVO	n°	x1
Cooling capacity	kW	864
Dimensions		
A	mm	1300
B	mm	6650
C	mm	1850

CONFIGURATION 3.1: STACK IN LINE



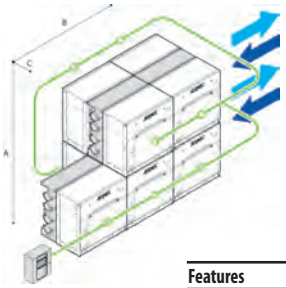
Features		
WWM units	n°	x9
Multichiller_EVO	n°	x1
Cooling capacity	kW	864
Dimensions		
A	mm	2600
B	mm	6650
C	mm	1150

CONFIGURATION 3.2: STACK IN LINE



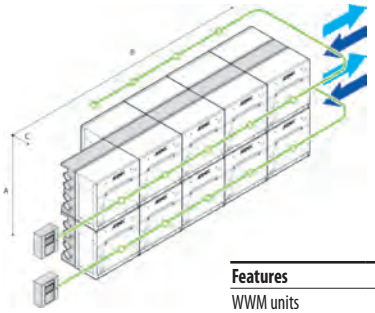
Features		
WWM units	n°	x18
Multichiller_EVO	n°	x2
Cooling capacity	kW	1728
Dimensions		
A	mm	2600
B	mm	11970
C	mm	1150

CONFIGURATION4.1: STACK IN LINE BACK TO BACK



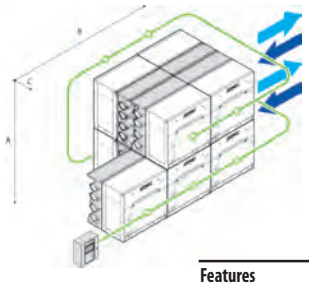
Features		
WWM units	n°	x9
Multichiller_EVO	n°	x1
Cooling capacity	kW	864
Dimensions		
A	mm	2600
B	mm	3990
C	mm	1850

CONFIGURATION 4.2: STACK IN LINE BACK TO BACK



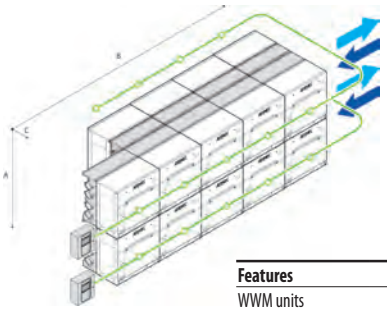
Features		
WWM units	n°	x18
Multichiller_EVO	n°	x2
Cooling capacity	kW	1728
Dimensions		
A	mm	2600
B	mm	6650
C	mm	1850

CONFIGURATION 5.1:
STACK IN LINE BACK TO BACK DOUBLE



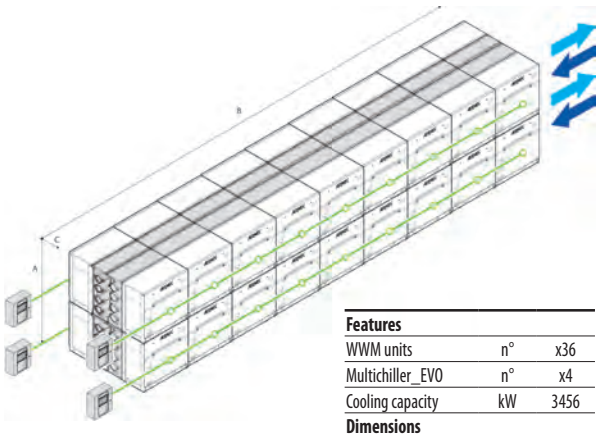
Features		
WWM units	n°	x9
Multichiller_EVO	n°	x1
Cooling capacity	kW	864
Dimensions		
A	mm	2600
B	mm	3990
C	mm	2300

CONFIGURATION 5.2:
STACK IN LINE BACK TO BACK DOUBLE



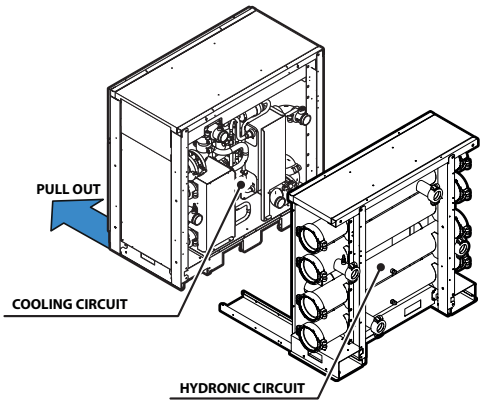
Features		
WWM units	n°	x18
Multichiller_EVO	n°	x2
Cooling capacity	kW	1728
Dimensions		
A	mm	2600
B	mm	6650
C	mm	2300

CONFIGURATION 5.3:
STACK IN LINE BACK TO BACK DOUBLE



Features		
WWM units	n°	x36
Multichiller_EVO	n°	x4
Cooling capacity	kW	3456
Dimensions		
A	mm	2600
B	mm	11970
C	mm	2300

EASY MAINTENANCE



PERFORMANCE SPECIFICATIONS

WWM - Single refrigerant circuit "1" - Double refrigerant circuit "2"

		WWM05001°	WWM05002°
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	kW	96,0	95,2
Input power	kW	20,3	20,0
Cooling total input current	A	40,0	40,0
EER	W/W	4,74	4,76
Water flow rate source side	l/h	20046	19895
Pressure drop source side	kPa	34	23
Water flow rate system side	l/h	16528	16384
Pressure drop system side	kPa	24	17
Heating performance 40 °C / 45 °C (2)			
Heating capacity	kW	109,2	110,0
Input power	kW	24,8	24,1
Heating total input current	A	48,0	48,0
COP	W/W	4,41	4,57
Water flow rate system side	l/h	18943	19092
Pressure drop system side	kPa	30	21
Water flow rate source side	l/h	24430	24809
Pressure drop source side	kPa	52	39

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY DATA

		WWM05001°	WWM05002°
SEER - 12/7 (EN14825:2018) with standard fans (1)			
SEER	W/W	6,12	5,37
Seasonal efficiency	%	241,8%	211,8%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)			
Pdesignh	kW	138	140
SCOP	W/W	4,83	4,68
ηsh	%	185.0%	179.0%

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

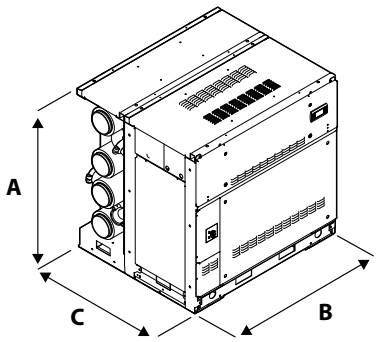
		WWM05001°	WWM05002°
Electric data			
Maximum current (FLA)	A	62,0	62,0
Peak current (LRA)	A	148,9	148,9

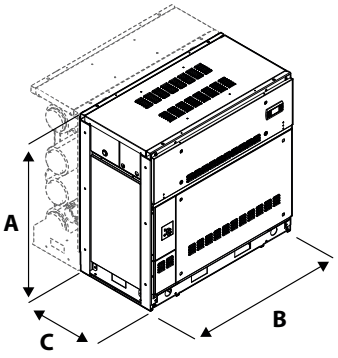
GENERAL TECHNICAL DATA

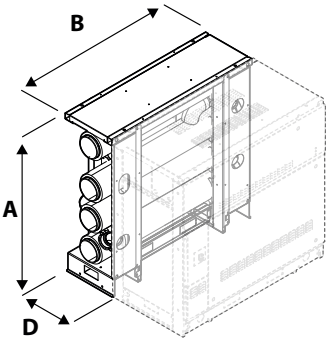
		WWM05001°	WWM05002°
Compressor			
Type	type	Scroll	Scroll
Number	no.	2	2
Circuits	no.	1	2
Refrigerant	type	R410A	R410A
Source side heat exchanger			
Type	type	Brazed plate	Brazed plate
Number	no.	1	1
Connections (in/out)	Type	Grooved joints	Grooved joints
Sizes (in/out)	Ø	6"	6"
System side heat exchanger			
Type	type	Brazed plate	Brazed plate
Number	no.	1	1
Connections (in/out)	Type	Grooved joints	Grooved joints
Sizes (in/out)	Ø	6"	6"
Sound data calculated in cooling mode (1)			
Sound power level	dB(A)	81,0	81,0
Sound pressure level (10 m)	dB(A)	49,5	49,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS







		WWM05001°	WWM05001H	WWM05002°	WWM05002H
Dimensions and weights					
A	mm	1300	1300	1300	1300
B	mm	1330	1330	1330	1330
C	mm	775	1150	775	1150
D	mm	-	452	-	452
Weights					
Weight empty + packaging	kg	700	930	700	930
Weight functioning	kg	711	1042	711	1042
Empty weight + packaging (with bus bars)	kg	736	966	736	966
Weight functioning (with bus bars)	kg	747	1078	747	1078
Hydraulic headers kit					
Weight empty + packaging	kg	-	230	-	230
Weight functioning	kg	-	330	-	330

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www.aermec.com

NXW 0503 - 1654

Water cooled heat pump reversible water side

Cooling capacity 111 ÷ 511 kW
Heating capacity 127 ÷ 582 kW

- **Options of 1 or 2 pumps on both source and user side.**
- **Reversible on hydraulic side in heat pump**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Indoor units with hermetic scroll compressors and plate heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18 °C, and the possibility to produce also negative temperature water down to -10°C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Option integrated hydronic kit, source and user side

The built-in hydronic module includes the main water circuit components; it is available in varius configurations with one or two pumps with high or low head both on the system side and the source side, to obtain a solution that allows you to save money and to facilitate installation.

CONTROL PCO

Microprocessor adjustment, with display LCD which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and the ad adjustment includes complete management of the alarms and their log.
You also have the possibility to:
— Check two units in parallel Master-Slave
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
AVX: Spring anti-vibration supports.
DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

ACCESSORIES COMPATIBILITY

Model	Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
AER485P1	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

Antivibration

Version	System side - pumps	Integrated hydronic kit, source side	0503	0553	0604	0654	0704	0754	0804
°	°	°	AVX319	AVX319	AVX301	AVX301	AVX301	AVX303	AVX310
°	°	J, K, U, W	AVX320	AVX320	AVX320	AVX320	AVX320	AVX312	AVX651
°	M, O	°	AVX320	AVX320	AVX320	AVX320	AVX320	AVX312	AVX651
°	°	V, Z	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
°	M	J, K, U, V, W, Z	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
°	N	°, J, K, U, W	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
°	O	J, K, U, V, W, Z	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
°	P	°, J, K, U, W	AVX320	AVX320	AVX309	AVX309	AVX309	AVX312	AVX651
°	N, P	V, Z	AVX309	AVX309	AVX310	AVX310	AVX310	AVX312	AVX651
L	°	°	AVX309	AVX309	AVX310	AVX303	AVX303	AVX310	AVX314
L	°	J, K, U, W	AVX321	AVX321	AVX311	AVX311	AVX651	AVX651	AVX652
L	M, O	°	AVX321	AVX321	AVX311	AVX311	AVX651	AVX651	AVX652
L	°	V, Z	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	M	J, K, U, W	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	N	°	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	O	J, K, U, W	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	P	°	AVX311	AVX311	AVX311	AVX311	AVX651	AVX651	AVX652
L	M	V, Z	AVX311	AVX311	AVX312	AVX312	AVX651	AVX651	AVX652
L	N	J, K, U, W	AVX311	AVX311	AVX312	AVX312	AVX651	AVX651	AVX652
L	O	V, Z	AVX311	AVX311	AVX312	AVX312	AVX651	AVX651	AVX652
L	P	J, K, U, W	AVX311	AVX311	AVX312	AVX312	AVX651	AVX651	AVX652
L	N, P	V, Z	AVX312	AVX312	AVX312	AVX310	AVX651	AVX651	AVX652

Version	System side - pumps	Integrated hydronic kit, source side	0904	1004	1254	1404	1504	1654
°	°	°	AVX314	AVX316	AVX316	AVX315	AVX330	AVX330
°	°	J, K, U, W	AVX655	AVX653	AVX654	AVX654	AVX334	AVX337
°	M, N, O	°	AVX655	AVX653	AVX654	AVX654	AVX334	AVX337
°	°	V, Z	AVX655	AVX653	AVX654	AVX654	AVX337	-
°	M, O	J, K, U, W	AVX665	AVX653	AVX654	AVX654	AVX337	AVX335
°	M, O	V, Z	AVX655	AVX653	AVX654	AVX654	AVX340	-
°	N	J, K, U, W	AVX665	AVX653	AVX654	AVX654	AVX340	AVX335
°	N	V, Z	AVX665	AVX653	AVX654	AVX654	AVX335	-
°	P	°	AVX655	AVX653	AVX654	AVX654	-	-
°	P	J, K, U, V, W, Z	AVX665	AVX653	AVX654	AVX654	-	-
L	°	°	AVX314	AVX315	AVX315	AVX317	AVX331	AVX331
L	°	J, K, U, W	AVX653	AVX654	AVX659	AVX659	AVX335	AVX338
L	M, O	°	AVX653	AVX654	AVX659	AVX659	AVX335	AVX338
L	°	V, Z	AVX653	AVX654	AVX659	AVX659	AVX338	-
L	M	J, K, U, W	AVX653	AVX654	AVX659	AVX659	AVX338	AVX339
L	N	°	AVX653	AVX654	AVX659	AVX659	AVX338	AVX339
L	O	J, K, U, W	AVX653	AVX654	AVX659	AVX659	AVX338	AVX339
L	M, N, O	V, Z	AVX653	AVX654	AVX659	AVX659	AVX339	-
L	N	J, K, U, W	AVX653	AVX654	AVX659	AVX659	AVX339	AVX341
L	P	°, J, K, U, V, W, Z	AVX653	AVX654	AVX659	AVX659	-	-

- not available

PR4

Model	Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
PR4	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

Power factor correction

Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
°, L	RIF98	RIF98	RIF95	RIF95	RIF95	RIF95	RIF95	RIF96	RIF97	RIF97	RIF97	RIF97	RIF97

A grey background indicates the accessory must be assembled in the factory

Device for peak current reduction

Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
°, L	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)	DRE751 (1)	DRE801 (1)	DRE901 (1)	DRE1001 (1)	DRE1251 (1)	DRE1401 (1)	DRE1500 (1)	DRE1650 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**NXW**
4,5,6,7	**Size** 0503, 0553, 0604, 0654, 0704, 0754, 0804, 0904, 1004, 1254, 1404, 1504, 1654
8	**Operating field**
X	Electronic thermostatic expansion valve
Y	Low temperature mechanic thermostatic valve (1)
°	Standard mechanic thermostatic valve (2)
9	**Model**
K	Heat pump reversible on the water side with low pressure drops (3)
°	Heat pump reversible on the water side
10	**Version**
°	Standard
L	Standard silenced
11	**Evaporator**
E	Evaporating unit (4)
°	Standard
12	**Heat recovery**
D	With desuperheater (5)
T	With total recovery (6)
°	Without heat recovery
13	**Power supply**
5	500V ~ 3 50Hz with magnet circuit breakers (7)
°	400V ~ 3 50Hz with magnet circuit breakers
14	**System side - pumps**
M	Single pump low head
N	Pump low head + stand-by pump
O	Single pump high head
P	Pump high head + stand-by pump (8)
°	Without hydronic kit
15	**Integrated hydronic kit, source side**
J	Single low-head inverter pump (8)
K	Single high-head inverter pump (8)
U	Single pump low head
V	Pump low head + stand-by pump (9)
W	Pump high head
Z	Pump high head + stand-by pump (9)
°	Without hydronic kit

(1) Water produced from 4 °C ÷ -10 °C; for the avalability with the heat recovery we advise you to contact us
(2) Water produced from 4 °C ÷ 18 °C
(3) Only for sizes from 0704 ÷ 0904
(4) Shipped with holding charge only.
(5) The desuperheater must be isolated in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(6) Options not available for condensing unit, and for models with pump/s
(7) Only for 0804 ÷ 1004 sizes
(8) Not available for size 1504 ÷ 1654
(9) Not available for size 1654

PERFORMANCE SPECIFICATIONS

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	°,L	kW	111,8	120,7	148,7	166,7	188,7	222,7	257,6	291,6	325,7	354,6	384,6	453,9	511,4
Input power	°,L	kW	23,0	24,8	30,6	34,4	38,9	45,6	53,0	60,3	66,5	72,6	78,7	92,3	104,0
Cooling total input current	°,L	A	48,0	51,0	58,0	63,0	86,0	94,0	102,0	120,0	138,0	140,0	143,0	160,0	178,0
EER	°,L	W/W	4,87	4,86	4,86	4,85	4,85	4,88	4,86	4,84	4,90	4,88	4,89	4,92	4,92
Water flow rate source side	°,L	l/h	23047	24886	30656	34332	38866	45790	52970	60075	67065	73041	79190	93374	105103
Pressure drop source side	°,L	kPa	25	29	29	37	37	45	60	38	29	34	36	36	47
Water flow rate system side	°,L	l/h	19243	20789	25600	28692	32472	38314	44327	50169	56011	60993	66147	78063	87938
Pressure drop system side	°,L	kPa	30	35	32	40	43	47	49	55	35	36	36	36	40
Heating performance 40 °C / 45 °C (2)															
Heating capacity	°,L	kW	127,6	137,8	170,0	190,3	215,4	253,7	293,5	332,9	371,5	404,7	438,7	517,1	582,0
Input power	°,L	kW	27,6	29,9	36,3	40,9	46,4	54,5	63,3	72,3	79,0	86,2	93,3	109,5	123,4
Heating total input current	°,L	A	57,0	60,0	68,0	73,0	100,0	109,0	119,0	140,0	161,0	163,0	166,0	186,0	207,0
COP	°,L	W/W	4,62	4,61	4,69	4,66	4,64	4,66	4,64	4,60	4,70	4,69	4,70	4,72	4,71
Water flow rate source side	°,L	l/h	29340	31697	39235	43975	49768	58721	67938	76891	85844	93480	101380	119642	134776
Pressure drop source side	°,L	kPa	70	81	75	94	101	110	115	129	82	85	85	85	94
Water flow rate system side	°,L	l/h	22142	23905	29490	33021	37384	44030	50933	57790	64513	70265	76175	89802	101065
Pressure drop system side	°,L	kPa	23	27	27	34	34	42	55	35	27	31	33	33	43

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°,L	W/W	5,50	5,85	5,79	5,77	5,84	5,81	5,52	6,30	6,42	6,37	6,38	6,49	6,48
Seasonal efficiency	°,L	%	217,0%	231,0%	228,6%	227,8%	230,6%	229,4%	217.8%	248,8%	253,8%	251,6%	252,0%	256,4%	256,2%
SEPR - (EN 14825: 2018) High temperature (2)															
SEPR	°	W/W	-	-	-	-	-	-	-	7,90	7,90	7,80	7,80	8,00	8,00
	L	W/W	-	-	-	-	-	-	-	7,93	7,90	7,78	7,80	8,00	8,02
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (3)															
Pdesignh	°,L	kW	164	177	218	244	277	326	377	-	-	-	-	-	-
SCOP	°,L	W/W	5,10	5,05	5,18	5,10	5,10	5,10	5,08	-	-	-	-	-	-
ηsh	°,L	%	196.0%	194.0%	199.0%	196.0%	196.0%	196.0%	195.0%	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

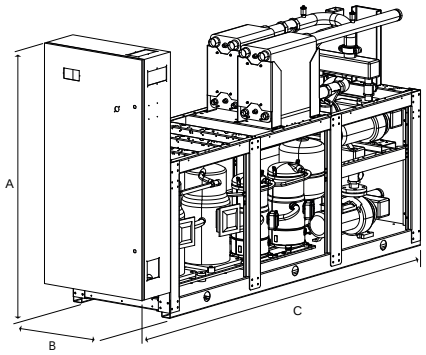
Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Electric data															
Maximum current (FLA)	°,L	A	75,0	80,0	96,0	107,0	122,0	146,0	169,0	193,0	217,0	231,0	248,0	267,0	296,0
Peak current (LRA)	°,L	A	240,0	245,0	227,0	238,0	289,0	319,0	341,0	398,0	422,0	490,0	504,0	601,0	630,0

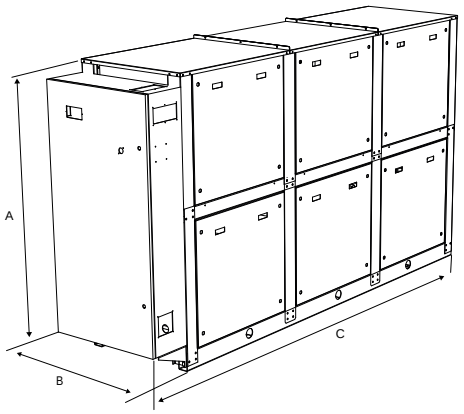
GENERAL TECHNICAL DATA

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Compressor															
Type	°,L	type	Scroll												
Compressor regulation	°,L	Type	On-Off												
Number	°,L	no.	3	3	4	4	4	4	4	4	4	4	4	4	4
Circuits	°,L	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,L	type	R410A												
Refrigerant charge (1)	°,L	kg	13,2	12,5	15,6	15,6	18,0	22,0	26,0	33,0	38,0	44,0	44,0	46,0	53,0
Source side heat exchanger															
Type	°,L	type	Brazed plate												
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type	Grooved joints												
Size (in)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"	3"
Size (out)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"	3"
System side heat exchanger															
Type	°,L	type	Brazed plate												
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type	Grooved joints												
Size (in)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"
Size (out)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"
Sound data calculated in cooling mode (2)															
Sound power level	°	dB(A)	78,0	79,0	79,0	80,0	82,0	86,0	88,0	88,0	88,0	90,0	90,0	93,0	95,0
	L	dB(A)	72,0	73,0	73,0	74,0	76,0	80,0	82,0	82,0	82,0	84,0	84,0	86,0	87,0
Sound pressure level (10 m)	°	dB(A)	46,4	47,4	47,4	48,4	50,4	54,3	56,3	56,3	56,3	58,3	58,3	61,3	63,3
	L	dB(A)	40,3	41,3	41,3	42,3	44,3	48,3	50,3	50,3	50,3	52,3	52,3	54,3	55,3

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS





Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Dimensions and weights															
A	°	mm	1835	1835	1835	1835	1835	1775	1775	1820	1820	1820	1820	1820	1820
	L	mm	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
B	°,L	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
C	°	mm	1795	1795	1795	1795	1795	2420	2420	2420	2420	2420	2420	2420	2420
	L	mm	2090	2090	2090	2090	2090	2420	2420	2420	2420	2420	2420	2420	2420
Dimensions and weights with pump/s															
A	°	mm	1775	1775	1775	1775	1775	1775	1775	1820	1820	1820	1820	1820	1820
	L	mm	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
B	°,L	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
C	°,L	mm	3020	3020	3020	3020	3020	3480	3480	3480	3480	3480	3480	3480	3480
Dimensions and weights															
Empty weight	°	kg	578	582	682	690	727	882	989	1180	1417	1461	1539	1613	1721
	L	kg	750	755	854	863	900	1054	1187	1378	1615	1659	1737	1811	1919

The weight of the unit does not include the hydronic kit and accessories.

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NXW

Reversible water-cooled heat pump, gas side

Cooling capacity 106 ÷ 477 kW
Heating capacity 125 ÷ 565 kW

- **Installation versatility also for geothermal applications.**
- **Options of 1 or 2 pumps on both source and user side.**
- **Production of hot water up to 55 °C**



DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
These are indoor units with hermetic scroll compressors, system side heat exchanger and plate source.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water 4-18°C, and the possibility to produce also negative temperature water down to -8°C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

Dual-circuit unit

The units are dual-circuit, to ensure maximum efficiency both at full load and at partial load.

Option integrated hydronic kit, source and user side

Possibility of integrated hydronic kit containing the main hydraulic components and available with various configurations.

CONTROL PCO

Microprocessor adjustment, with display LCD which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and the ad adjustment includes complete management of the alarms and their log.
You also have the possibility to:
— Check two units in parallel Master-Slave
— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
AVX: Spring anti-vibration supports.
DRE: Electronic device for peak current reduction.
RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

■ *The accessory PR4 should only be combined with the RS485 communication interface when the serial port is occupied by another device.*

ACCESSORIES COMPATIBILITY

Model	Ver	0503	0553	0604	0654	0704	0754	0804
AER485P1	°,L	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•	•
PGD1	°,L	•	•	•	•	•	•	•

Model	Ver	0904	1004	1254	1404	1504	1654
AER485P1	°,L	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•
PGD1	°,L	•	•	•	•	•	•

Antivibration

Version	System side - pumps	Integrated hydronic kit, source side	0503	0553	0604	0654	0704	0754	0804
°	°	°	AVX319	AVX319	AVX301	AVX301	AVX302	AVX310	AVX310
°	°	J, K, U, W	AVX320	AVX320	AVX320	AVX309	AVX309	AVX651	AVX651
°	M, O	°	AVX320	AVX320	AVX320	AVX309	AVX309	AVX651	AVX651
°	°	V, Z	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
°	M	J, K, U, W	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
°	N	°	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
°	O	J, K, U, W	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
°	P	°	AVX320	AVX320	AVX303	AVX309	AVX311	AVX651	AVX651
°	M	V, Z	AVX309	AVX309	AVX303	AVX311	AVX312	AVX651	AVX651
°	N	J, K, U, W	AVX309	AVX309	AVX303	AVX311	AVX312	AVX651	AVX651
°	O	V, Z	AVX309	AVX309	AVX303	AVX311	AVX312	AVX651	AVX651
°	P	J, K, U, W	AVX309	AVX309	AVX303	AVX311	AVX312	AVX651	AVX651
°	N, P	V, Z	AVX309	AVX309	AVX312	AVX312	AVX312	AVX651	AVX651
L	°	°	AVX309	AVX309	AVX310	AVX303	AVX304	AVX314	AVX314
L	°	J, K, U, W	AVX311	AVX311	AVX311	AVX311	AVX651	AVX652	AVX665
L	M, O	°	AVX311	AVX311	AVX311	AVX311	AVX651	AVX652	AVX665
L	°	V, Z	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	M	J, K, U, W	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	N	°	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	O	J, K, U, W	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	P	°	AVX311	AVX311	AVX312	AVX313	AVX651	AVX652	AVX665
L	M	V, Z	AVX312	AVX312	AVX312	AVX313	AVX651	AVX652	AVX665
L	N	J, K, U, V, W, Z	AVX312	AVX312	AVX312	AVX313	AVX651	AVX652	AVX665
L	O	V, Z	AVX312	AVX312	AVX312	AVX313	AVX651	AVX652	AVX665
L	P	J, K, U, V, W, Z	AVX312	AVX312	AVX312	AVX313	AVX651	AVX652	AVX665

Version	System side - pumps	Integrated hydronic kit, source side	0904	1004	1254	1404	1504	1654
°	°	°	AVX314	AVX316	AVX315	AVX317	AVX330	AVX331
°	°	J, K, U, W	AVX665	AVX654	AVX654	AVX654	AVX337	AVX336
°	M, O	°	AVX665	AVX654	AVX654	AVX654	AVX337	AVX336
°	°	V, Z	AVX665	AVX654	AVX654	AVX654	AVX336	-
°	M	J, K, U, W	AVX665	AVX654	AVX654	AVX654	AVX336	AVX335
°	N	°	AVX665	AVX654	AVX654	AVX654	AVX336	AVX335
°	O	J, K, U, W	AVX665	AVX654	AVX654	AVX654	AVX336	AVX335
°	M, O	V, Z	AVX665	AVX654	AVX654	AVX654	AVX335	-
°	N	J, K, U, W	AVX665	AVX654	AVX654	AVX654	AVX335	AVX339
°	N	V, Z	AVX665	AVX654	AVX654	AVX654	-	-
°	P	°, J, K, U, V, W, Z	AVX665	AVX654	AVX654	AVX654	-	-
L	°	°	AVX315	AVX317	AVX317	AVX318	AVX331	AVX333
L	°	J, K, U, W	AVX653	AVX659	AVX659	AVX659	AVX338	AVX338
L	°	V, Z	AVX653	AVX659	AVX659	AVX659	AVX338	AVX341
L	M	°, J, K, U, W	AVX653	AVX659	AVX659	AVX659	AVX338	AVX341
L	N	°	AVX653	AVX659	AVX659	AVX659	AVX338	AVX341
L	O	°, J, K, U, W	AVX653	AVX659	AVX659	AVX659	AVX338	AVX341
L	M, O	V, Z	AVX653	AVX659	AVX659	AVX659	AVX339	-
L	N	J, K, U, W	AVX653	AVX659	AVX659	AVX659	AVX339	AVX341
L	N	V, Z	AVX653	AVX659	AVX659	AVX659	AVX341	-
L	P	°, J, K, U, V, W, Z	AVX653	AVX659	AVX659	AVX659	-	-

- not available

PR4

Model	Ver	0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
PR4	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

Power factor correction

Ver	0503	0553	0604	0654	0704	0754	0804
°, L	RIF98	RIF98	RIF95	RIF95	RIF95	RIF95	RIF95

A grey background indicates the accessory must be assembled in the factory

Ver	0904	1004	1254	1404	1504	1654
°, L	RIF96	RIF97	RIF97	RIF97	RIF97	RIF97

A grey background indicates the accessory must be assembled in the factory

Device for peak current reduction

Ver	0503	0553	0604	0654	0704	0754	0804
°, L	DRE501 (1)	DRE551 (1)	DRE601 (1)	DRE651 (1)	DRE701 (1)	DRE751 (1)	DRE801 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

Ver	0904	1004	1254	1404	1504	1654
°, L	DRE901 (1)	DRE1001 (1)	DRE1251 (1)	DRE1401 (1)	DRE1500 (1)	DRE1650 (1)

(1) Only for supplies of 400V 3N ~ 50Hz and 400V 3 ~ 50Hz. x 2 or x 3 (if present) indicates the quantity to be ordered.
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**NXW**
4,5,6,7		**Size** 0503, 0553, 0604, 0654, 0704, 0754, 0804, 0904, 1004, 1254, 1404, 1504, 1654
8		**Operating field (1)**
	X	Electronic thermostatic expansion valve
	°	Standard mechanic thermostatic valve
9		**Model**
	H	Heat pump
10		**Version**
	°	Standard
	L	Standard silenced
11		**Evaporator**
	°	Standard
12		**Heat recovery**
	D	With desuperheater (2)
	°	Without heat recovery
13		**Power supply**
	5	500V ~ 3 50Hz with magnet circuit breakers (3)
	°	400V ~ 3 50Hz with magnet circuit breakers
14		**System side - pumps**
	M	Single pump low head
	N	Pump low head + stand-by pump
	O	Single pump high head
	P	Pump high head + stand-by pump (4)
	°	Without hydronic kit
15		**Integrated hydronic kit, source side**
	J	Single low-head inverter pump
	K	Single high-head inverter pump
	U	Single pump low head
	V	Pump low head + stand-by pump (5)
	W	Pump high head
	Z	Pump high head + stand-by pump (5)
	°	Without hydronic kit

(1) Water produced from 4 °C ÷ 18 °C
(2) The desuperheater must be isolated in heating mode. In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(3) Only for 0804 ÷ 1004 sizes
(4) The hydronic kit P is not available for sizes 1504 and 1654
(5) The hydronic kits V and Z are not available for size 1654

PERFORMANCE SPECIFICATIONS

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	°,L	kW	105,9	113,8	140,8	159,8	180,7	211,6	242,7	277,7	313,6	341,7	369,7	423,6	477,0
Input power	°,L	kW	23,8	25,7	31,1	35,3	40,2	47,1	54,2	62,2	70,4	76,6	82,7	94,8	106,7
Cooling total input current	°,L	A	49,0	52,0	60,0	65,0	87,0	95,0	104,0	122,0	140,0	144,0	147,0	164,0	183,0
EER	°,L	W/W	4,45	4,43	4,52	4,52	4,50	4,49	4,47	4,47	4,45	4,46	4,47	4,47	4,47
Water flow rate source side	°,L	l/h	22173	23854	29402	33334	37744	44198	50635	58078	65694	71514	77333	88547	99702
Pressure drop source side	°,L	kPa	25	29	28	35	35	42	55	36	28	32	34	41	44
Water flow rate system side	°,L	l/h	18212	19586	24225	27490	31098	36424	41750	47764	53949	58759	63570	72837	82027
Pressure drop system side	°,L	kPa	17	20	19	24	24	29	38	24	19	22	24	29	30
Heating performance 40 °C / 45 °C (2)															
Heating capacity	°,L	kW	125,4	135,8	165,8	187,6	210,4	269,6	310,2	325,2	365,6	399,8	434,0	500,6	565,2
Input power	°,L	kW	27,9	30,2	36,8	41,8	46,9	55,6	64,6	72,6	80,8	88,6	96,4	111,2	124,9
Heating total input current	°,L	A	54,0	57,0	66,0	72,0	94,0	105,0	115,0	135,0	154,0	160,0	165,0	181,0	202,0
COP	°,L	W/W	4,49	4,49	4,51	4,49	4,48	4,85	4,80	4,48	4,52	4,51	4,50	4,50	4,52
Water flow rate source side	°,L	l/h	28545	30928	37776	42774	47928	62567	71944	74067	83306	91109	98905	114256	129207
Pressure drop source side	°,L	kPa	43	49	46	58	58	46	61	58	46	52	58	66	71
Water flow rate system side	°,L	l/h	21762	23561	28776	32552	36508	46797	53844	56470	63485	69420	75355	86926	98135
Pressure drop system side	°,L	kPa	24	28	26	33	32	31	40	33	26	30	32	41	43

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°,L	W/W	5,39	5,38	5,53	5,60	5,38	5,60	5,27	5,77	5,88	5,94	5,97	6,43	6,44
Seasonal efficiency	°,L	%	212,6%	212,2%	218,2%	221,0%	212,2%	221,0%	207.8%	227,8%	232,2%	234,5%	235,6%	254,2%	254,7%
SEPR - (EN 14825: 2018) High temperature (2)															
SEPR	°,L	W/W	-	-	-	-	-	-	-	7,03	7,06	7,06	7,03	-	-
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (3)															
Pdesignh	°,L	kW	161	175	213	241	271	320	368	-	-	-	-	-	-
SCOP	°,L	W/W	4,95	4,93	4,95	4,93	4,93	4,90	4,80	-	-	-	-	-	-
ηsh	°,L	%	190.0%	189.0%	190.0%	189.0%	189.0%	188.0%	184.0%	-	-	-	-	-	-

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

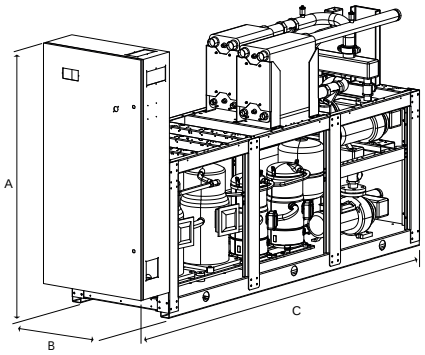
Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Electric data															
Maximum current (FLA)	°,L	A	75,0	80,0	96,0	107,0	122,0	146,0	169,0	193,0	217,0	231,0	248,0	267,0	296,0
Peak current (LRA)	°,L	A	240,0	245,0	227,0	238,0	289,0	319,0	341,0	398,0	422,0	490,0	504,0	601,0	630,0

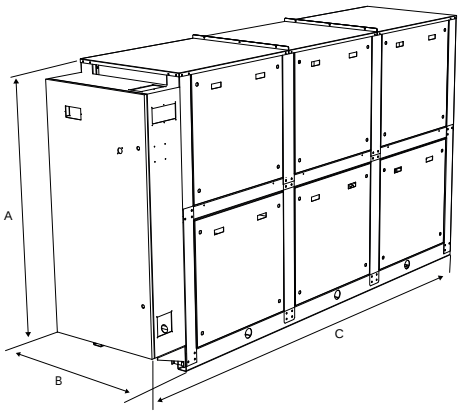
GENERAL TECHNICAL DATA

Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Compressor															
Type	°,L	type	Scroll												
Compressor regulation	°,L	Type	On-Off												
Number	°,L	no.	3	3	4	4	4	4	4	4	4	4	4	4	4
Circuits	°,L	no.	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°,L	type	R410A												
Refrigerant charge (1)	°,L	kg	13,0	13,0	17,0	17,0	20,0	22,0	26,0	36,0	54,0	54,0	58,0	60,0	62,0
Source side heat exchanger															
Type	°,L	type	Brazed plate												
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type	Grooved joints												
Size (in)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"	3"
Size (out)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"	3"
System side heat exchanger															
Type	°,L	type	Brazed plate												
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,L	Type	Grooved joints												
Size (in)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"	3"
Size (out)	°,L	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"	3"	3"	3"	3"	3"
Sound data calculated in cooling mode (2)															
Sound power level	°	dB(A)	78,0	79,0	79,0	80,0	82,0	86,0	88,0	88,0	88,0	90,0	90,0	93,0	95,0
	L	dB(A)	72,0	73,0	73,0	74,0	76,0	80,0	82,0	82,0	82,0	84,0	84,0	86,0	87,0
Sound pressure level (10 m)	°	dB(A)	46,4	47,4	47,4	48,4	50,4	54,3	56,3	56,3	56,3	58,3	58,3	61,3	63,3
	L	dB(A)	40,3	41,3	41,3	42,3	44,3	48,3	50,3	50,3	50,3	52,3	52,3	54,3	55,3

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS





Size			0503	0553	0604	0654	0704	0754	0804	0904	1004	1254	1404	1504	1654
Dimensions and weights															
A	°	mm	1835	1835	1835	1835	1835	1775	1775	1820	1820	1820	1820	1820	1820
	L	mm	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
B	°,L	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
C	°	mm	1795	1795	1795	1795	1795	2420	2420	2420	2420	2420	2420	2420	2420
	L	mm	2090	2090	2090	2090	2090	2420	2420	2420	2420	2420	2420	2420	2420
Dimensions and weights with pump/s															
A	°	mm	1775	1775	1775	1775	1775	1775	1775	1820	1820	1820	1820	1820	1820
	L	mm	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
B	°,L	mm	800	800	800	800	800	800	800	800	800	800	800	800	800
C	°,L	mm	3020	3020	3020	3020	3020	3480	3480	3480	3480	3480	3480	3480	3480
Dimensions and weights															
Empty weight	°	kg	628	633	734	743	791	948	1042	1275	1545	1577	1657	1687	1825
	L	kg	801	805	907	915	963	1121	1240	1473	1743	1774	1855	1885	2023

The weight of the unit does not include the hydronic kit and accessories.

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume
responsibility or liability for errors or omissions.

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NGW 0500-2600

Water cooled heat pump reversible water side

Cooling capacity 116,3 ÷ 790,2 kW
Heating capacity 131,3 ÷ 904,6 kW

- **Production of hot water up to 60 °C**
- **Options of 1 or 2 pumps on both source and user side.**
- **Reversible on hydraulic side in heat pump**



DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Units with hermetic scroll compressors and plate heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

FEATURES

Operating field

Full load functioning with production of chilled water from -2 to 20 °C, with the possibility of also producing water at negative temperatures down to -10 °C at the evaporator and hot water at the condenser up to 60 °C.
(for more information, refer to the technical documentation).

Compressors

The compressors, optimised for low compression ratios in tandem and trio two-circuit configuration, ensure high efficiency especially at part loads, enabling them to exceed the minimum seasonal energy efficiency requirements for the design of low energy systems in both winter and summer.

Dual-circuit unit

The units are two-circuit to ensure continuity of operation in case one of the circuits fails.

Option integrated hydronic kit, source and user side

The hydronic kit is available in different configurations with one or two pumps, both on the evaporator and condenser side, in order to have a cost-saving solution that also facilitates final installation.

Refrigerant HFC R32

Thanks to the R32 refrigerant (A2L slightly flammable), the environmental impact of the units is significantly reduced.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.
The unit is fitted with:

— Refrigerant gas detector and safety valves with exchange valve as standard
— Electrical control board completely separate from compressor compartment
— Only the version with hood is available

The machine can be installed in class 3 areas according to EN 378-3.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

CONTROL

Microprocessor control, complete with a 6-button multifunction keypad for simple and intuitive navigation between the various screens, making it possible to edit the operating parameters and fully manage alarms and their history.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
SI485: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AVX: Spring anti-vibration supports.
SAENGW: External air probe for climate control curve.
KITFILTRO_2"1/2: The kit, supplied in a wooden crate, contains all the necessary elements for quick and efficient installation: water filter, 2"1/2 flexible coupling and insulation shell.
KITFILTRO_4": The kit, supplied in a wooden crate, contains all the necessary elements for quick and efficient installation: Y-water filter, 4" pipe, flexible coupling and insulation shell.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with SI485 communication interface when the serial port is occupied by another device.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

ACCESSORIES COMPATIBILITY

Accessories

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
AERNET	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SI485	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
PR4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with SI485 communication interface when the serial port is occupied by another device.

Antivibration

Hydronic kit integrated on chilled water utility side	Integrated hydronic kit, source side	0500	0550	0600	0650	0700	0750	0800	0900	1000
00	00	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380
00	IA, IB, IC, ID, IE, IF, IG, JA, JB, JC, JD, JE, JF, JG, UA, UB, UC, UD, UE, UF, UG, VA, VB, VC, VD, VE, VF, VG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX381	AVX381	AVX381	AVX381
DA, DB, DC, DD, DE, DF, DG	00, IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX381	AVX381	AVX381	AVX381
PA, PB, PC, PD, PE, PF, PG	00, IA, IB, IC, ID, IE, IF, IG, JA, JB, JC, JD, JE, JF, JG, UA, UB, UC, UD, UE, UF, UG, VA, VB, VC, VD, VE, VF, VG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX381	AVX381	AVX381	AVX381
DA, DB, DC, DD, DE, DF, DG	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX391	AVX382	AVX382	AVX382

Hydronic kit integrated on chilled water utility side	Integrated hydronic kit, source side	1200	1400	1500	1600	1800	2000	2200	2450	2600
00	00	AVX389	AVX389	AVX389	AVX389	AVX389	AVX393	AVX390	AVX390	AVX390
00	IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX381	AVX381	AVX383	AVX383	AVX383	AVX384	AVX384	AVX386	AVX386
PA, PB, PC, PD, PE, PF, PG	00	AVX381	AVX381	AVX383	AVX383	AVX383	AVX384	AVX384	AVX386	AVX386
00	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX381	AVX381	AVX382	AVX383	AVX383	AVX384	AVX384	AVX385	AVX385
DA, DB, DC, DD, DE, DF, DG	00	AVX381	AVX381	AVX382	AVX383	AVX383	AVX384	AVX384	AVX385	AVX385
PA, PB, PC, PD, PE, PF, PG	IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX381	AVX381	AVX382	AVX383	AVX383	AVX384	AVX384	AVX385	AVX385
DA, DB, DC, DD, DE, DF, DG	IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX381	AVX382	AVX382	AVX383	AVX383	AVX384	AVX385	AVX385	AVX385
PA, PB, PC, PD, PE, PF, PG	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX381	AVX382	AVX382	AVX383	AVX383	AVX384	AVX385	AVX385	AVX385
DA, DB, DC, DD, DE, DF, DG	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX382	AVX382	AVX382	AVX392	AVX392	AVX385	AVX385	AVX385	AVX387

Device for peak current reduction

0500	0550	0600	0650	0700	0750	0800	0900	1000
DRENGW0500	DRENGW0550	DRENGW0600	DRENGW0650	DRENGW0700	DRENGW0750	DRENGW0800	DRENGW0900	DRENGW1000

A grey background indicates the accessory must be assembled in the factory

1200	1400	1500	1600	1800	2000	2200	2450	2600
DRENGW1200	DRENGW1400	DRENGW1500	DRENGW1600	DRENGW1800	DRENGW2000	DRENGW2200	DRENGW2450	DRENGW2600

A grey background indicates the accessory must be assembled in the factory

water filter kit

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
KITFILTRO_2"1/2	•	•	•	•	•	•												

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
KITFILTRO_4"							•	•	•	•	•	•	•	•	•	•	•	•

CONFIGURATOR

Configuration options

Field	Description
1,2,3	**NGW**
4,5,6,7	**Size** 0500, 0550, 0600, 0650, 0700, 0750, 0800, 0900, 1000, 1200, 1400, 1500, 1600, 1800, 2000, 2200, 2450, 2600
8	**Operating field**
X	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
9	**Model**
°	Heat pump reversible on the water side
10	**Evaporator**
E	Evaporating unit
°	Standard
11	**Heat recovery**
D	With desuperheater
°	Without heat recovery
12	**Power supply**
°	400V ~ 3 50Hz with magnet circuit breakers
13,14	**Hydronic kit integrated on chilled water utility side**
00	Without hydronic kit
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump (3)
DB	Pump B + stand-by pump (3)
DC	Pump C + stand-by pump (3)
DD	Pump D + stand-by pump (4)
DE	Pump E + stand-by pump (4)
DF	Pump F + stand-by pump (4)
DG	Pump G + stand-by pump (4)
	Kit with n° 1 pump
PA	Pump A (3)
PB	Pump B (3)
PC	Pump C (3)
PD	Pump D (4)
PE	Pump E (4)
PF	Pump F (4)
PG	Pump G (4)
15,16	**Integrated hydronic kit, source side**
00	Without hydronic kit
	Kit with n° 1 inverter pump to fixed speed
IA	Pump A equipped with inverter device to work at fixed speed (3)
IB	Pump B equipped with inverter device to work at fixed speed (3)
IC	Pump C equipped with inverter device to work at fixed speedr (3)
ID	Pump D equipped with inverter device to work at fixed speed (4)
IE	Pump E equipped with inverter device to work at fixed speed (4)
IF	Pump F equipped with inverter device to work at fixed speed (4)
IG	Pump G equipped with inverter device to work at fixed speed (4)
	Kit with n° 1 inverter pump + stand-by pump to fixed speed
JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (3)
JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed (3)
JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed (3)
JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed (4)
JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed (4)
JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (4)
JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (4)
	Kit with n° 1 pump
UA	Pump A (3)

Field	Description
UB	Pump B (3)
UC	Pump C (3)
UD	Pump D (4)
UE	Pump E (4)
UF	Pump F (4)
UG	Pump G (4)
	Pump n° 1 pump + stand-by pump
VA	Pump A + stand-by pump (3)
VB	Pump B + stand-by pump (3)
VC	Pump C + stand-by pump (3)
VD	Pump D + stand-by pump (4)
VE	Pump E + stand-by pump (4)
VF	Pump F + stand-by pump (4)
VG	Pump G + stand-by pump (4)

(1) Water produced from -2 °C ÷ 20 °C
(2) Water produced from -10 °C ÷ 10 °C
(3) Only for 0500 - 0750 sizes
(4) Only for 0800 - 2600 sizes

PERFORMANCE SPECIFICATIONS

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Cooling performance 12 °C / 7 °C (1)																				
Cooling capacity	°	kW	116,3	126,3	142,0	157,8	174,4	208,3	242,3	272,8	310,2	333,6	385,4	430,0	488,0	532,0	614,8	703,9	747,1	790,2
Input power	°	kW	23,1	25,8	28,6	32,0	35,4	41,8	48,3	55,2	61,1	68,2	78,4	89,9	99,2	110,8	128,0	144,9	156,9	169,0
Cooling total input current	°	A	46,0	50,0	56,0	63,0	69,0	82,0	92,0	102,0	112,0	122,0	139,0	158,0	174,0	193,0	223,0	252,0	271,0	290,0
EER	°	W/W	5,02	4,91	4,97	4,93	4,93	4,98	5,02	4,94	5,08	4,89	4,92	4,78	4,92	4,80	4,80	4,86	4,76	4,67
Water flow rate source side	°	l/h	23858	26011	29172	32446	35868	42774	49770	56140	63592	68752	79371	88890	100428	109848	126942	145015	154345	163659
Pressure drop source side	°	kPa	26	30	33	33	35	35	23	27	23	28	30	38	36	42	45	49	56	63
Water flow rate system side	°	l/h	20000	21737	24440	27149	30009	35846	41678	46918	53358	57360	66276	73940	83902	91467	105717	121028	128461	135873
Pressure drop system side	°	kPa	18	21	23	23	25	25	15	19	16	20	21	27	25	30	32	35	39	43

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Heating performance 40 °C / 45 °C (1)																				
Heating capacity	°	kW	131,3	144,6	160,4	178,4	197,7	236,2	275,0	308,6	348,8	377,8	437,4	490,5	553,8	606,7	700,9	800,5	852,7	904,6
Input power	°	kW	29,5	33,4	36,2	40,5	44,9	53,0	61,0	68,9	76,7	85,8	99,0	113,7	125,5	140,1	161,4	182,2	197,5	212,2
COP	°	W/W	4,46	4,33	4,43	4,41	4,40	4,45	4,50	4,48	4,55	4,40	4,42	4,31	4,41	4,33	4,34	4,39	4,32	4,26
Water flow rate system side	°	l/h	22789	25088	27829	30948	34307	40989	47727	53585	60562	65594	75963	85177	96178	105356	121721	139011	148077	157091
Pressure drop system side	°	kPa	24	28	30	30	32	32	21	24	21	26	28	35	33	39	42	45	51	58
Water flow rate source side	°	l/h	29818	32608	36390	40424	44800	53701	62474	70101	79473	85435	99053	110507	125500	136976	158407	181617	192771	204032
Pressure drop source side	°	kPa	41	48	51	52	55	57	33	42	37	44	48	59	56	68	71	78	87	98

(1) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Energy index

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
SEER - 12/7 (EN14825: 2018) (1)																				
SEER	°	W/W	7,45	7,37	7,46	7,57	7,62	7,15	7,68	7,47	7,83	7,76	7,90	7,73	7,98	7,71	7,93	7,93	7,80	7,63
Seasonal efficiency	°	%	295,1	291,8	295,4	299,9	301,9	282,9	304,2	295,7	310,2	307,3	313	306,3	316,3	305,4	314	314,1	309,1	302,1
SEER - 23/18 (EN 14825: 2018)																				
SEER	°	W/W	10,71	10,82	10,79	11,02	11,06	9,83	10,66	10,29	11,04	10,96	11,37	11,04	11,80	11,35	11,68	12,21	11,84	11,43
Seasonal efficiency	°	%	425,30	429,80	428,50	437,90	439,20	390,20	423,30	408,50	438,50	435,50	451,70	438,80	469,00	451,10	464,00	485,20	470,50	454,10
SEPR - (EN 14825: 2018) High temperature (2)																				
SEPR	°	W/W	7,71	7,60	7,81	7,80	7,54	7,38	7,76	7,52	7,93	7,66	7,89	7,41	7,84	7,50	7,86	7,74	7,62	7,42
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)																				
SCOP	°	W/W	6,71	6,61	6,51	6,62	6,84	6,60	7,03	6,85	7,06	6,86	6,96	6,71	6,83	6,67	6,63	7,01	6,79	6,73
ηsh	°	%	260,20	256,30	252,50	256,60	265,40	255,80	273,00	265,80	274,20	266,50	270,30	260,50	265,30	258,90	257,20	272,40	263,70	261,30
Pdesignh	°	kW	138	151	169	187	207	247	287	324	367	397	458	513	579	634	732	836	890	943
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (4)																				
SCOP	°	W/W	4,91	4,78	4,82	4,93	4,93	4,80	5,04	4,96	5,00	4,85	4,93	4,80	4,86	4,74	4,83	5,40	5,31	5,27
ηsh	°	%	188,50	183,30	184,90	189,30	189,00	184,10	193,70	190,20	191,80	186,00	189,30	184,10	186,20	181,50	185,20	207,90	204,20	202,60
Pdesignh	°	kW	128	141	156	174	192	229	267	300	340	369	425	478	539	591	684	777	829	880

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for low temperature applications (35 °C)
(4) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Electric data

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Electric data																				
Maximum current (FLA)	°	A	73,0	81,0	89,0	99,0	108,0	127,0	145,0	163,0	181,0	198,0	228,0	258,0	288,0	318,0	367,0	416,0	446,0	476,0
Peak current (LRA)	°	A	239,0	204,0	210,0	265,0	274,0	293,0	359,0	377,0	395,0	412,0	538,0	568,0	598,0	628,0	677,0	726,0	756,0	786,0

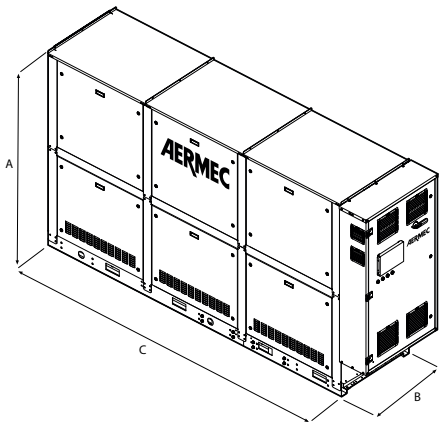
GENERAL TECHNICAL DATA

General data

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Compressor																				
Type	°	type	Scroll																	
Compressor regulation	°	Type	On-Off																	
Number	°	no.	3	4	4	4	4	4	4	4	4	4	4	4	4	4	5	6	6	6
Circuits	°	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	°	type	R32																	
Refrigerant load circuit 1 (1)	°	kg	6,0	6,0	7,0	8,0	9,0	11,0	11,0	11,0	14,0	14,0	15,0	15,0	19,0	19,0	23,0	28,0	28,0	28,0
Refrigerant load circuit 2 (1)	°	kg	6,0	6,0	7,0	8,0	9,0	11,0	11,0	11,0	14,0	14,0	15,0	15,0	19,0	19,0	23,0	28,0	28,0	28,0
Source side heat exchanger																				
Type	°	type	Brazed plate																	
Number	°	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°	Type	Grooved joints																	
Size (in)	°	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
Size (out)	°	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
System side heat exchanger																				
Type	°	type	Brazed plate																	
Number	°	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°	Type	Grooved joints																	
Size (in)	°	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
Size (out)	°	Ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
Sound data calculated in cooling mode (2)																				
Sound power level	°	dB(A)	79,0	80,0	80,0	80,0	81,0	82,0	82,0	83,0	84,0	85,0	87,0	88,0	90,0	91,0	91,0	91,0	92,0	92,0
Sound pressure level (10 m)	°	dB(A)	47,3	48,3	48,3	48,3	49,3	50,2	50,2	51,2	52,2	53,2	55,2	56,2	58,2	59,2	59,1	59,1	60,1	60,1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Dimensions and weights

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Dimensions and weights																				
A	°	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
B	°	mm	800	800	800	800	800	850	850	850	850	850	850	850	850	850	900	900	900	900
C	°	mm	2090	2090	2090	2090	2090	2500	2500	2500	2500	2500	2500	2500	2500	2500	3600	3600	3600	3600
Empty weight	°	kg	920	980	995	1015	1040	1095	1225	1285	1405	1470	1585	1655	1860	1970	2330	2550	2610	2670
Dimensions and weights with pump/s																				
A	°	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
B	°	mm	800	800	800	800	800	850	850	850	850	850	850	850	900	900	900	900	900	900
C	°	mm	2950	2950	2950	2950	2950	3600	3600	3600	3600	3600	3600	3600	3600	3600	4700	4700	4700	4700

The weight of the unit does not include the hydronic kit and accessories.

■ *For the version with hydronic kit please contact headquarters.*

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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NGW 0500H-2600H

Reversible water-cooled heat pump, gas side

Cooling capacity 107 ÷ 746,4 kW
Heating capacity 126,3 ÷ 879,3 kW

- **Production of hot water up to 60 °C**
- **Installation versatility also for geothermal applications.**
- **Options of 1 or 2 pumps on both source and user side.**
- **Reversible in heat pump on refrigerant circuit.**



DESCRIPTION

Water-water offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Units with hermetic scroll compressors and plate heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

FEATURES

Operating field

Full load functioning with production of chilled water from -2 to 20 °C, with the possibility of also producing water at negative temperatures down to -10 °C at the evaporator and hot water at the condenser up to 60 °C.
(for more information, refer to the technical documentation).

Compressors

The compressors, optimised for low compression ratios in tandem and trio two-circuit configuration, ensure high efficiency especially at part loads, enabling them to exceed the minimum seasonal energy efficiency requirements for the design of low energy systems in both winter and summer.

Dual-circuit unit

The units are two-circuit to ensure continuity of operation in case one of the circuits fails.

Option integrated hydronic kit, source and user side

The hydronic kit is available in different configurations with one or two pumps, both on the evaporator and condenser side, in order to have a cost-saving solution that also facilitates final installation.

Refrigerant HFC R32

Thanks to the R32 refrigerant (A2L slightly flammable), the environmental impact of the units is significantly reduced.
Combining a reduced refrigerant load with a low global warming potential (GWP), these units boast low equivalent CO_2 values.
The unit is fitted with:

— Refrigerant gas detector and safety valves with exchange valve as standard
— Electrical control board completely separate from compressor compartment
— Only the version with hood is available

The machine can be installed in class 3 areas according to EN 378-3.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy seasonal efficiency of the unit.

CONTROL

Microprocessor control, complete with a 6-button multifunction keypad for simple and intuitive navigation between the various screens, making it possible to edit the operating parameters and fully manage alarms and their history.

— The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
— The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
SI485: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AVX: Spring anti-vibration supports.
SAENGW: External air probe for climate control curve.
KITFILTRO_2"1/2: The kit, supplied in a wooden crate, contains all the necessary elements for quick and efficient installation: water filter, 2"1/2 flexible coupling and insulation shell.
KITFILTRO_4": The kit, supplied in a wooden crate, contains all the necessary elements for quick and efficient installation: Y-water filter, 4" pipe, flexible coupling and insulation shell.

PR4: Remote panel with LCD display and touch keyboard that allows carrying out the basic controls, the programming of time ranges and the signalling of the alarms of a single unit.

The accessory PR4 should only be combined with SI485 communication interface when the serial port is occupied by another device.

FACTORY FITTED ACCESSORIES

DRE: Electronic device for peak current reduction.

ACCESSORIES COMPATIBILITY

Accessories

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
AERNET	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SI485	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Remote panel

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
PR4	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

The accessory PR4 should only be combined with SI485 communication interface when the serial port is occupied by another device.

Antivibration

Hydronic kit integrated on chilled water utility side	Integrated hydronic kit, source side	0500	0550	0600	0650	0700	0750	0800	0900	1000
00	00	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380	AVX380
00	IA, IB, IC, ID, IE, IF, IG, JA, JB, JC, JD, JE, JF, JG, UA, UB, UC, UD, UE, UF, UG, VA, VB, VC, VD, VE, VF, VG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX381	AVX381	AVX381	AVX381
DA, DB, DC, DD, DE, DF, DG	00, IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX381	AVX381	AVX381	AVX381
PA, PB, PC, PD, PE, PF, PG	00, IA, IB, IC, ID, IE, IF, IG, JA, JB, JC, JD, JE, JF, JG, UA, UB, UC, UD, UE, UF, UG, VA, VB, VC, VD, VE, VF, VG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX381	AVX381	AVX381	AVX381
DA, DB, DC, DD, DE, DF, DG	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX380	AVX380	AVX380	AVX380	AVX380	AVX391	AVX382	AVX382	AVX382

Hydronic kit integrated on chilled water utility side	Integrated hydronic kit, source side	1200	1400	1500	1600	1800	2000	2200	2450	2600
00	00	AVX389	AVX389	AVX389	AVX389	AVX389	AVX393	AVX390	AVX390	AVX390
00	IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX381	AVX381	AVX383	AVX383	AVX383	AVX384	AVX384	AVX386	AVX386
PA, PB, PC, PD, PE, PF, PG	00	AVX381	AVX381	AVX383	AVX383	AVX383	AVX384	AVX384	AVX386	AVX386
00	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX381	AVX381	AVX382	AVX383	AVX383	AVX384	AVX384	AVX385	AVX385
DA, DB, DC, DD, DE, DF, DG	00	AVX381	AVX381	AVX382	AVX383	AVX383	AVX384	AVX384	AVX385	AVX385
PA, PB, PC, PD, PE, PF, PG	IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX381	AVX381	AVX382	AVX383	AVX383	AVX384	AVX384	AVX385	AVX385
DA, DB, DC, DD, DE, DF, DG	IA, IB, IC, ID, IE, IF, IG, UA, UB, UC, UD, UE, UF, UG	AVX381	AVX382	AVX382	AVX383	AVX383	AVX384	AVX385	AVX385	AVX385
PA, PB, PC, PD, PE, PF, PG	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX381	AVX382	AVX382	AVX383	AVX383	AVX384	AVX385	AVX385	AVX385
DA, DB, DC, DD, DE, DF, DG	JA, JB, JC, JD, JE, JF, JG, VA, VB, VC, VD, VE, VF, VG	AVX382	AVX382	AVX382	AVX392	AVX392	AVX385	AVX385	AVX385	AVX387

External air sensor

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
SAENGW	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Device for peak current reduction

0500	0550	0600	0650	0700	0750	0800	0900	1000
DRENGW0500	DRENGW0550	DRENGW0600	DRENGW0650	DRENGW0700	DRENGW0750	DRENGW0800	DRENGW0900	DRENGW1000

A grey background indicates the accessory must be assembled in the factory

1200	1400	1500	1600	1800	2000	2200	2450	2600
DRENGW1200	DRENGW1400	DRENGW1500	DRENGW1600	DRENGW1800	DRENGW2000	DRENGW2200	DRENGW2450	DRENGW2600

A grey background indicates the accessory must be assembled in the factory

Water filter kit

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
KITFILTRO_2"1/2	•	•	•	•	•	•												

Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
KITFILTRO_4"							•	•	•	•	•	•	•	•	•	•	•	•

CONFIGURATOR

Configuration options

Field	Description
1,2,3	**NGW**
4,5,6,7	**Size** 0500, 0550, 0600, 0650, 0700, 0750, 0800, 0900, 1000, 1200, 1400, 1500, 1600, 1800, 2000, 2200, 2450, 2600
8	**Operating field**
X	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
9	**Model (3)**
H	Reversible heat pump, gas side
10	**Evaporator**
°	Standard
11	**Heat recovery**
D	With desuperheater
°	Without heat recovery
12	**Power supply**
°	400V ~ 3 50Hz with magnet circuit breakers
13,14	**Hydronic kit integrated on chilled water utility side**
00	Without hydronic kit
	Pump n° 1 pump + stand-by pump
DA	Pump A + stand-by pump (4)
DB	Pump B + stand-by pump (4)
DC	Pump C + stand-by pump (4)
DD	Pump D + stand-by pump (5)
DE	Pump E + stand-by pump (5)
DF	Pump F + stand-by pump (5)
DG	Pump G + stand-by pump (5)
	Kit with n° 1 pump
PA	Pump A (4)
PB	Pump B (4)
PC	Pump C (4)
PD	Pump D (5)
PE	Pump E (5)
PF	Pump F (5)
PG	Pump G (5)
15,16	**Integrated hydronic kit, source side**
00	Without hydronic kit
	Kit with n° 1 inverter pump to fixed speed
IA	Pump A equipped with inverter device to work at fixed speed (4)
IB	Pump B equipped with inverter device to work at fixed speed (4)
IC	Pump C equipped with inverter device to work at fixed speedr (4)
ID	Pump D equipped with inverter device to work at fixed speed (5)
IE	Pump E equipped with inverter device to work at fixed speed (5)
IF	Pump F equipped with inverter device to work at fixed speed (5)
IG	Pump G equipped with inverter device to work at fixed speed (5)
	Kit with n° 1 inverter pump + stand-by pump to fixed speed
JA	Pump A+stand-by pump, both equipped with inverter to work at fixed speed (4)
JB	Pump B+stand-by pump, both equipped with inverter to work at fixed speed (4)
JC	Pump C+stand-by pump, both equipped with inverter to work at fixed speed (4)
JD	Pump D+stand-by pump, both equipped with inverter to work at fixed speed (5)
JE	Pump E+stand-by pump, both equipped with inverter to work at fixed speed (5)
JF	Pump F+stand-by pump, both equipped with inverter to work at fixed speed (5)
JG	Pump G+stand-by pump, both equipped with inverter to work at fixed speed (5)
	Kit with n° 1 pump
UA	Pump A (4)
UB	Pump B (4)

Field	Description
UC	Pump C (4)
UD	Pump D (5)
UE	Pump E (5)
UF	Pump F (5)
UG	Pump G (5)
	Pump n° 1 pump + stand-by pump
VA	Pump A + stand-by pump (4)
VB	Pump B + stand-by pump (4)
VC	Pump C + stand-by pump (4)
VD	Pump D + stand-by pump (5)
VE	Pump E + stand-by pump (5)
VF	Pump F + stand-by pump (5)
VG	Pump G + stand-by pump (5)

(1) Water produced from -2 °C ÷ 20 °C
(2) Water produced from -10 °C ÷ 10 °C
(3) Not available for the condenserless "E"
(4) Only for 0500 - 0750 sizes
(5) Only for 0800 - 2600 sizes

PERFORMANCE SPECIFICATIONS

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Cooling performance 12 °C / 7 °C (1)																				
Cooling capacity	H	kW	107,0	116,5	131,0	145,6	161,0	192,0	224,1	252,8	285,3	312,6	361,4	405,2	458,1	501,6	578,8	661,4	703,9	746,4
Input power	H	kW	24,4	27,0	29,9	33,5	37,1	44,1	50,3	57,2	63,9	70,9	81,5	92,5	103,0	114,1	132,0	150,0	161,2	172,6
Cooling total input current	H	A	46,0	50,0	56,0	63,0	69,0	82,0	92,0	102,0	112,0	122,0	139,0	158,0	174,0	193,0	223,0	252,0	271,0	290,0
EER	H	W/W	4,38	4,31	4,38	4,35	4,34	4,35	4,45	4,42	4,47	4,41	4,43	4,38	4,45	4,40	4,39	4,41	4,37	4,33
Water flow rate source side	H	l/h	22477	24529	27493	30595	33839	40348	46960	53028	59761	65602	75759	85059	95925	105189	121421	138586	147677	156768
Pressure drop source side	H	kPa	25	29	31	32	33	33	20	25	22	26	28	36	33	40	42	46	52	59
Water flow rate system side	H	l/h	18406	20041	22537	25048	27701	33030	38529	43476	49070	53766	62145	69667	78757	86242	99517	113722	121034	128345
Pressure drop system side	H	kPa	16	19	20	21	22	22	13	17	14	17	19	23	22	26	28	30	34	39

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Heating performance 40 °C / 45 °C (1)																				
Heating capacity	H	kW	126,3	137,9	153,5	171,3	189,8	226,8	263,2	296,7	333,6	365,9	423,3	476,1	537,1	589,7	680,3	775,8	827,5	879,3
Input power	H	kW	30,7	34,0	37,6	42,0	46,5	55,3	62,6	70,9	78,9	87,4	100,4	114,0	126,9	140,5	162,7	185,1	199,0	213,0
COP	H	W/W	4,11	4,06	4,08	4,08	4,08	4,10	4,20	4,18	4,23	4,19	4,21	4,18	4,23	4,20	4,18	4,19	4,16	4,13
Water flow rate source side	H	l/h	28011	30483	34010	37920	42038	50310	58607	66067	74467	81529	94494	106176	120167	131791	151939	173447	184814	196191
Pressure drop source side	H	kPa	35	42	44	45	47	48	28	36	31	38	41	51	49	58	62	67	76	86
Water flow rate system side	H	l/h	21919	23928	26641	29720	32926	39358	45687	51511	57935	63543	73504	82679	93270	102408	118150	134728	143707	152693
Pressure drop system side	H	kPa	22	26	27	27	29	29	17	22	19	23	24	31	29	35	37	40	46	52

(1) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Energy index

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
SEER - 12/7 (EN14825: 2018) (1)																				
SEER	H	W/W	6,48	6,44	6,55	6,59	6,61	6,36	6,68	6,56	6,73	6,60	6,76	6,75	6,86	6,74	6,78	6,83	6,89	6,84
Seasonal efficiency	H	%	256,10	254,70	259,10	260,60	261,30	251,50	264,10	259,30	266,30	261,00	267,50	267,00	271,30	266,40	268,20	270,00	272,40	270,50
SEER - 23/18 (EN 14825: 2018)																				
SEER	H	W/W	9,24	9,35	9,44	9,48	9,49	8,75	9,30	9,06	9,49	9,22	9,56	9,56	9,86	9,67	9,73	9,68	9,70	9,90
Seasonal efficiency	H	%	366,40	370,90	374,50	376,30	376,60	346,80	368,90	359,30	376,40	365,60	379,20	379,50	391,30	383,90	386,30	384,10	385,10	393,00
SEPR - (EN 14825: 2018) High temperature (2)																				
SEPR	H	W/W	6,83	6,75	6,84	6,93	6,79	6,70	6,89	6,80	6,95	6,67	6,93	6,95	7,15	6,92	6,95	7,04	7,14	6,94
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)																				
SCOP	H	W/W	5,41	5,55	5,45	5,58	5,54	5,41	5,62	5,63	5,77	5,78	5,81	5,75	5,85	5,82	5,80	5,74	5,75	5,69
ηsh	H	%	208,40	214,00	210,00	215,00	213,60	208,20	216,90	217,10	222,60	223,00	224,50	221,90	225,90	224,60	224,10	221,70	221,90	219,50
Pdesignh	H	kW	126	138	154	171	190	226	263	296	333	365	423	475	536	589	679	774	826	877
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (4)																				
SCOP	H	W/W	4,70	4,72	4,75	4,87	4,83	4,72	4,86	4,82	4,87	4,84	4,87	4,85	4,87	4,80	4,85	5,00	4,95	4,94
ηsh	H	%	180,10	180,70	181,90	186,90	185,30	180,80	186,30	184,90	186,70	185,40	186,60	185,80	186,90	183,80	186,00	192,00	189,90	189,50
Pdesignh	H	kW	121	133	148	164	183	218	252	286	321	352	406	456	514	565	652	742	797	848

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.
(3) Efficiencies for low temperature applications (35 °C)
(4) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

Electric data

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Electric data																				
Maximum current (FLA)	H	A	73,0	81,0	89,0	99,0	108,0	127,0	145,0	163,0	181,0	198,0	228,0	258,0	288,0	318,0	367,0	416,0	446,0	476,0
Peak current (LRA)	H	A	239,0	204,0	210,0	265,0	274,0	293,0	359,0	377,0	395,0	412,0	538,0	568,0	598,0	628,0	677,0	726,0	756,0	786,0

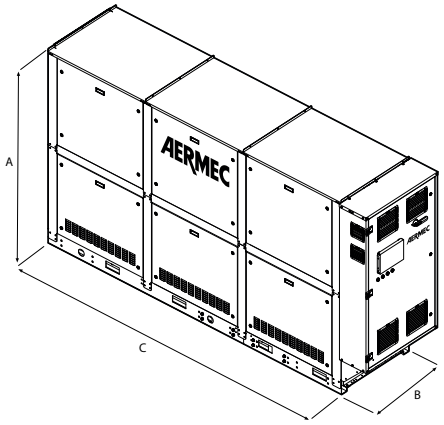
GENERAL TECHNICAL DATA

General data

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Compressor																				
Type	H	type	Scroll																	
Compressor regulation	H	Type	On-Off																	
Number	H	no.	3	4	4	4	4	4	4	4	4	4	4	4	4	4	5	6	6	6
Circuits	H	no.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Refrigerant	H	type	R32																	
Refrigerant load circuit 1 (1)	H	kg	6,0	6,0	7,0	8,0	9,0	11,0	11,0	11,0	14,0	14,0	15,0	15,0	19,0	19,0	23,0	28,0	28,0	28,0
Refrigerant load circuit 2 (1)	H	kg	6,0	6,0	7,0	8,0	9,0	11,0	11,0	11,0	14,0	14,0	15,0	15,0	19,0	19,0	23,0	28,0	28,0	28,0
Source side heat exchanger																				
Type	H	type	Brazed plate																	
Number	H	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	H	Type	Grooved joints																	
Size (in)	H	Ø	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″
Size (out)	H	Ø	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″
System side heat exchanger																				
Type	H	type	Brazed plate																	
Number	H	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	H	Type	Grooved joints																	
Size (in)	H	Ø	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″
Size (out)	H	Ø	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	2″1/2	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″	4″
Sound data calculated in cooling mode (2)																				
Sound power level	H	dB(A)	79,0	80,0	80,0	80,0	81,0	82,0	82,0	83,0	84,0	85,0	87,0	88,0	90,0	91,0	91,0	91,0	92,0	92,0
Sound pressure level (10 m)	H	dB(A)	47,3	48,3	48,3	48,3	49,3	50,2	50,2	51,2	52,2	53,2	55,2	56,2	58,2	59,2	59,1	59,1	60,1	60,1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Dimensions and weights

Size			0500	0550	0600	0650	0700	0750	0800	0900	1000	1200	1400	1500	1600	1800	2000	2200	2450	2600
Dimensions and weights																				
A	H	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
B	H	mm	800	800	800	800	800	850	850	850	850	850	850	850	850	850	900	900	900	900
C	H	mm	2090	2090	2090	2090	2090	2500	2500	2500	2500	2500	2500	2500	2500	2500	3600	3600	3600	3600
Empty weight	H	kg	920	980	995	1015	1040	1095	1225	1285	1405	1470	1585	1655	1860	1970	2330	2550	2610	2670
Dimensions and weights with pump/s																				
A	H	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
B	H	mm	800	800	800	800	800	850	850	850	850	850	850	850	900	900	900	900	900	900
C	H	mm	2950	2950	2950	2950	2950	3600	3600	3600	3600	3600	3600	3600	3600	3600	4700	4700	4700	4700

The weight of the unit does not include the hydronic kit and accessories.

■ *For the version with hydronic kit please contact headquarters.*

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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WS

Water cooled heat pump reversible water side

Cooling capacity 147 ÷ 700 kW
Heating capacity 164 ÷ 778 kW

- **High efficiency all in Class A Eurovent**
- **Optimised for low condenser temperatures**
- **Optimised for geothermal applications**
- **Available also with R513A (XP10) refrigerant**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water from 4 to 16°C, and the possibility to produce negative temperature water (down to -6°C) on the evaporator and hot water (up to 50 °C) on the condenser.
(for more information, refer to the technical documentation).

Units mono or dual-circuit

Depending on the size, the units are one-circuit or two-circuit models to ensure maximum efficiency with full loads as well as partial loads and guarantee operation continuity if one of the circuits stop.
They are equipped with screw compressors and system and source side plate heat exchangers.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
Adjustment includes complete management of the alarms and their log.
Possibility to control two units in a Master-Slave configuration
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
AKW: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
AER485P1	°,L	•	•	•	•	•								
AER485P1 x n° 2 (1)	°,L						•	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

	Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Evaporator: E														
	°, L	AVX651	AVX651	AVX652	AVX652	AVX656	AVX658	AVX658	AVX658	AVX659	AVX667	AVX661	AVX661	AVX661
Evaporator: °														
	°, L	AVX651	AVX651	AVX652	AVX652	AVX656	AVX658	AVX658	AVX658	AVX659	AVX667	AVX661	AVX661	AVX661

Power factor correction

Ver	0601	0701	0801	0901	1101	1202	1402
°, L	-	RIF161	RIF161	RIF201	RIF241	RIF161 x2	RIF161 x2

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	1602	1802	2002	2202	2502	2802
°, L	RIF161 x2	RIF201 x 2	RIF201+RIF241	RIF241 x2	RIF301 x2	RIF301 x2

A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	0601	0701	0801	0901	1101	1202	1402
L	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

Ver	1602	1802	2002	2202	2502	2802
L	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2		**WS**
3,4,5,6		**Size** 0601, 0701, 0801, 0901, 1101, 1202, 1402, 1602, 1802, 2002, 2202, 2502, 2802
7		**Operating field**
	X	Electronic thermostatic expansion valve (1)
	Y	Low temperature mechanic thermostatic valve (2)
	Z	Low temperature electronic thermostatic valve (2)
	°	Standard mechanic thermostatic valve (1)
8		**Model**
	°	Heat pump reversible on the water side
9		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery (4)
	°	Without heat recovery
10		**Version**
	°	Standard
	L	Standard silenced
11		**Evaporator**
	E	Evaporating unit (5)
	°	Standard
12		**Power supply**
	2	230V ~ 3 50Hz with fuses
	4	230V ~ 3 50Hz with magnet circuit breakers
	5	500V ~ 3 50Hz with fuses
	8	400V ~ 3 50Hz with magnet circuit breakers
	9	500V ~ 3 50Hz with magnet circuit breakers
	°	400V ~ 3 50Hz with fuses

(1) Water produced from 4 °C ÷ 16 °C
(2) Water produced from 4 °C ÷ -6 °C; for the avalability with the heat recovery we advise you to contact us
(3) In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) Option not available for condenserless unit.
(5) Shipped with holding charge only.

PERFORMANCE SPECIFICATIONS

WS - °/L

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	°/L	kW	147,7	186,9	212,2	233,8	299,0	308,6	369,1	421,6	469,8	545,6	599,8	654,3	700,4
Input power	°/L	kW	29,1	36,6	81,8	46,0	58,7	605,6	72,8	83,2	92,7	106,7	117,2	128,1	136,8
Cooling total input current	°/L	A	56,0	67,0	74,0	83,0	95,0	110,0	133,0	149,0	167,0	179,0	190,0	219,0	235,0
EER	°/L	W/W	5,08	5,11	5,07	5,08	5,09	5,10	5,07	5,06	5,07	5,11	5,12	5,11	5,12
Water flow rate source side	°/L	l/h	30238	38269	43508	47922	61258	63078	75593	86332	96177	111478	122506	133608	142894
Pressure drop source side	°/L	kPa	33	23	22	22	25	47	36	39	43	48	52	58	65
Water flow rate system side	°/L	l/h	25421	32148	36495	40212	51431	53088	63476	72492	80788	93813	103143	112508	120438
Pressure drop system side	°/L	kPa	23	17	15	16	18	33	25	27	30	33	35	39	44
Heating performance 40 °C / 45 °C (2)															
Heating capacity	°/L	kW	164,9	208,7	237,3	261,4	334,0	343,7	412,1	470,6	524,2	607,2	667,2	727,6	778,0
Input power	°/L	kW	36,8	46,3	52,9	58,1	74,2	76,9	92,2	105,5	117,7	135,5	148,8	162,8	174,1
Heating total input current	°/L	A	70,0	84,0	94,0	105,0	120,0	138,0	168,0	188,0	210,0	225,0	240,0	275,0	296,0
COP	°/L	W/W	4,48	4,51	4,49	4,50	4,50	4,47	4,47	4,46	4,46	4,48	4,48	4,47	4,47
Water flow rate system side	°/L	l/h	28611	36218	41197	45370	57987	59660	71552	81718	91025	105442	115854	126347	135087
Pressure drop system side	°/L	kPa	29	21	19	20	23	42	32	35	38	43	46	52	58
Water flow rate source side	°/L	l/h	37525	47456	53873	59360	75920	78366	93702	107011	119257	138485	152256	166081	177787
Pressure drop source side	°/L	kPa	49	37	33	34	39	73	54	59	65	72	77	85	96

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Performance specifications Evaporating units

WS - E

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Evaporator: E															
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	°/L	kW	134,5	167,9	189,2	216,7	264,4	276,7	333,2	381,0	431,7	489,8	542,5	591,7	629,6
Input power	°/L	kW	34,7	42,2	48,2	55,0	67,0	69,3	84,4	96,5	109,9	122,0	134,1	146,8	157,0
Cooling total input current	°/L	A	63,0	75,0	85,0	96,0	111,0	127,0	151,0	170,0	192,0	207,0	222,0	252,0	270,0
EER	°/L	W/W	3,88	3,98	3,92	3,94	3,94	3,99	3,95	3,95	3,93	4,01	4,05	4,03	4,01
Water flow rate system side	°/L	l/h	23108	28849	32512	37238	45248	47546	57251	65458	74169	84147	93212	101661	108175
Pressure drop system side	°/L	kPa	18	13	12	12	14	25	19	20	23	25	27	30	34

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
SEER - 12/7 (EN14825: 2018) (1)															
SEER	°/L	W/W	5,58	5,80	6,09	6,04	5,96	6,22	6,24	6,39	6,39	6,38	6,38	6,42	6,39
Seasonal efficiency	°/L	%	220,2%	229,0%	240,6%	238.6%	235,2%	245,7%	246,6%	252,5%	252,6%	252,1%	252,2%	253,9%	252,7%
SEPR - (EN 14825: 2018) High temperature (2)															
SEPR	°/L	W/W	-	-	-	-	7,77	7,97	7,99	8,11	8,01	8,04	8,01	8,05	8,01
UE 813/2013 performance in average ambient conditions (average) - 35 °C - Pdesignh ≤ 400 kW (3)															
Pdesignh	°/L	kW	229	290	330	363	-	-	-	-	-	-	-	-	-
SCOP	°/L	W/W	5,98	6,10	6,30	6,25	-	-	-	-	-	-	-	-	-
ηsh	°/L	%	231.0%	236.0%	244.0%	242.0%	-	-	-	-	-	-	-	-	-

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.
(3) Efficiencies for low temperature applications (35 °C)

ELECTRIC DATA

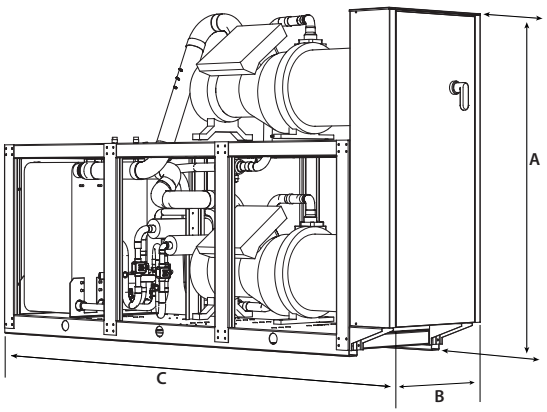
Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Electric data															
Maximum current (FLA)	°/L	A	90,7	98,0	112,0	128,0	156,0	168,0	196,0	224,0	256,0	284,0	312,0	354,0	380,0
Peak current (LRA)	°/L	A	147,0	140,0	163,0	192,0	246,0	194,1	198,5	228,0	262,6	316,6	324,7	388,1	448,1

GENERAL TECHNICAL DATA

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Compressor															
Type	°,L	type							Screw						
Compressor regulation	°,L	Type							On-Off						
Number	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Circuits	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Refrigerant	°,L	type							R134a						
Refrigerant charge (1)	°,L	kg	18,0	22,0	22,0	25,0	38,0	36,0	42,0	44,0	50,0	59,0	68,0	70,0	80,0
System side heat exchanger															
Type	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Source side heat exchanger															
Type	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections															
Connections (in/out)	°,L	Type							Grooved joints						
Sizes (in/out)	°,L	Ø							3"						
Source side hydraulic connections															
Connections (in/out)	°,L	Type							Grooved joints						
Sizes (in/out)	°,L	Ø							3"						
Sound data calculated in cooling mode (2)															
Sound power level	°	dB(A)	86,1	86,8	87,1	87,8	87,1	89,1	89,8	90,1	90,8	90,5	90,1	91,3	91,8
	L	dB(A)	78,1	78,8	79,1	79,9	78,1	81,1	81,8	82,1	82,9	82,1	81,1	83,4	84,1
Sound pressure level (10 m)	°	dB(A)	54,3	55,0	55,3	56,0	55,3	57,2	57,9	58,3	59,0	58,6	58,2	59,3	59,9
	L	dB(A)	46,3	47,0	47,3	48,1	46,3	49,2	50,0	50,2	51,0	50,2	49,2	51,5	52,2

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Dimensions and weights															
A	°	mm	1775	1775	1775	1775	1775	1975	1975	1975	2005	1985	2065	2065	2065
	L	mm	1775	1775	1775	1775	1775	2120	2120	2120	2120	2120	2120	2120	2120
B	°,L	mm	810	810	810	810	810	810	810	810	810	810	810	810	810
C	°,L	mm	2960	2960	2960	2960	3360	2960	2960	2960	2960	3360	3360	3360	3360
Empty weight	°	kg	1101	1251	1301	1357	1788	1738	2071	2140	2212	2648	3050	3131	3131
	L	kg	1229	1379	1429	1485	1934	1966	2299	2368	2440	2905	3307	3388	3388

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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HWS

Water cooled heat pump reversible water side

Cooling capacity 147 ÷ 369 kW
Heating capacity 165 ÷ 778 kW

- **High efficiency all in Class A Eurovent**
- **Unit optimised for high condenser temperatures.**
- **Optimised for geothermal applications**
- **Available also with R513A (XP10) refrigerant**



DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water 4-16 °C, and the possibility to produce also hot water for the condenser up to 60 °C.
(for more information, refer to the technical documentation).

Units mono or dual-circuit

Depending on the size, the units are one-circuit or two-circuit models to ensure maximum efficiency with full loads as well as partial loads and guarantee operation continuity if one of the circuits stop.
They are equipped with screw compressors and system and source side plate heat exchangers.

Integral acoustic enclosure

For all versions, if required, it is available the integral acoustic enclosure, which can further reduce the sound level.

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
Adjustment includes complete management of the alarms and their log.
Possibility to control two units in a Master-Slave configuration
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
AKW: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
AER485P1	°,L	•	•	•	•	•								
AER485P1 x n° 2 (1)	°,L						•	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Heat recovery	Evaporator	0601	0701	0801	0901	1101
°	°	°	AVX651	AVX651	AVX652	AVX652	AVX656
°	°, D	E	-	AVX668	AVX668	AVX668	AVX669
°	D	°	-	AVX651	AVX652	AVX652	AVX654
°	T	°	-	AVX652	AVX655	AVX655	AVX657
L	°	°	AVX651	AVX651	AVX652	AVX652	AVX656
L	°, D	E	-	AVX668	AVX668	AVX668	AVX669
L	D	°	-	AVX651	AVX652	AVX652	AVX654
L	T	°	-	AVX652	AVX655	AVX655	AVX657

Version	Heat recovery	Evaporator	1202	1402	1602	1802	2002
°	°	°	AVX658	AVX658	AVX658	AVX659	AVX667
°	°	E	-	AVX670	AVX670	AVX670	AVX671
°	D	°	AVX658	AVX658	-	-	-
°	D	E	-	AVX670	-	-	-
°	T	°	-	AVX662	-	-	-
L	°	°	AVX658	AVX658	AVX658	AVX659	AVX667
L	°	E	-	AVX670	AVX670	AVX670	AVX671
L	D	°	AVX658	AVX658	-	-	-
L	D	E	-	AVX670	-	-	-
L	T	°	-	AVX662	-	-	-

Version	Heat recovery	Evaporator	2202	2502	2802
°	°	°	AVX661	AVX661	AVX661
°	°	E	AVX672	AVX672	AVX672
°	D	°, E	-	-	-
°	T	°	-	-	-
L	°	°	AVX661	AVX661	AVX661
L	°	E	AVX672	AVX672	AVX672
L	D	°, E	-	-	-
L	T	°	-	-	-

- not available

Power factor correction

Ver	0601	0701	0801	0901	1101	1202	1402
°, L	-	RIF161	RIF161	RIF201	RIF241	-	RIF161 x2

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	1602	1802	2002	2202	2502	2802
°, L	RIF161 x2	RIF201 x 2	RIF201+RIF241	RIF241 x2	RIF301 x2	RIF301 x2

A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
L	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)	AKW (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**HWS**
4,5,6,7		**Size** 0601, 0701, 0801, 0901, 1101, 1202, 1402, 1602, 1802, 2002, 2202, 2502, 2802
8		**Operating field**
	X	Electronic thermostatic expansion valve
	°	Standard mechanic thermostatic valve
9		**Model**
	°	Heat pump reversible on the water side
10		**Heat recovery**
	D	With desuperheater (1)
	T	With total recovery (2)
	°	Without heat recovery
11		**Version**
	°	Standard
	L	Standard silenced

Field		Description
12		**Evaporator**
	E	Evaporating unit (3)
	°	Standard
13		**Power supply**
	2	230V ~ 3 50Hz with fuses
	4	230V ~ 3 50Hz with magnet circuit breakers
	5	500V ~ 3 50Hz with fuses
	8	400V ~ 3 50Hz with magnet circuit breakers
	9	500V ~ 3 50Hz with magnet circuit breakers
	°	400V ~ 3 50Hz with fuses

(1) The temperature of the water in the heat exchanger inlet must never drop below 35°C. The desuperheater is not available for sizes 0601 and 1202.
(2) The desuperheater and total recovery are not available for sizes 0601 and 1202; T are not compatible with E.
(3) Shipped with holding charge only. Option not available for size 0601 and 1202.

PERFORMANCE SPECIFICATIONS

HWS - °/L

Size			0601	0701	0801	0901	1101	1202	1402
Cooling performance 12 °C / 7 °C (1)									
Cooling capacity	°/L	kW	146,7	178,8	212,7	233,7	293,7	293,7	356,6
Input power	°/L	kW	31,7	38,0	43,2	49,2	59,7	63,5	76,8
Cooling total input current	°/L	A	56,0	66,0	74,0	82,0	101,0	112,0	132,0
EER	°/L	W/W	4,63	4,70	4,92	4,75	4,92	4,62	4,64
Water flow rate source side	°/L	l/h	30474	37085	43795	48419	60454	60948	73996
Pressure drop source side	°/L	kPa	40	27	27	26	31	53	50
Water flow rate system side	°/L	l/h	25256	30754	36596	40204	50513	50513	61337
Pressure drop system side	°/L	kPa	29	20	20	19	23	38	36
Heating performance 40 °C / 45 °C (2)									
Heating capacity	°/L	kW	163,9	199,3	234,8	260,1	324,0	327,5	397,5
Input power	°/L	kW	38,0	45,4	51,6	58,8	71,4	76,3	92,2
Heating total input current	°/L	A	66,0	78,0	88,0	97,0	120,0	133,0	157,0
COP	°/L	W/W	4,31	4,39	4,55	4,42	4,54	4,29	4,31
Water flow rate source side	°/L	l/h	36968	45016	53566	58847	73936	73936	89780
Pressure drop source side	°/L	kPa	62	43	43	41	49	81	77
Water flow rate system side	°/L	l/h	28421	34581	40752	45134	56255	56843	69010
Pressure drop system side	°/L	kPa	35	23	23	23	27	46	43

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Size			1602	1802	2002	2202	2502	2802
Heating performance 40 °C / 45 °C (1)								
Heating capacity	°/L	kW	465,7	522,8	584,8	646,9	730,9	799,6
Input power	°/L	kW	104,0	121,3	133,2	145,1	165,9	181,5
Heating total input current	°/L	A	176,0	195,0	218,0	241,0	277,0	280,0
COP	°/L	W/W	4,48	4,31	4,39	4,46	4,41	4,40
Water flow rate source side	°/L	l/h	106378	118198	133036	147873	166735	182932
Pressure drop source side	°/L	kPa	86	88	96	103	114	137
Water flow rate system side	°/L	l/h	80851	90770	101543	112315	126902	138328
Pressure drop system side	°/L	kPa	48	50	54	58	65	79

(1) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Performance specifications Evaporating units

HWS - E

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Evaporator: E															
Cooling performance 12 °C / 7 °C (1)															
Cooling capacity	°/L	kW	-	163,0	192,0	212,0	263,0	-	326,0	385,0	428,0	481,0	539,0	601,0	676,0
Input power	°/L	kW	-	41,0	47,0	54,0	66,0	-	82,0	93,0	108,0	120,0	132,0	146,0	159,0
Cooling total input current	°/L	A	-	72,0	81,0	90,0	113,0	-	144,0	162,0	180,0	204,0	226,0	254,0	272,0
EER	°/L	W/W	-	3,98	4,09	3,93	3,98	-	3,98	4,14	3,96	4,01	4,08	4,12	4,25
Water flow rate system side	°/L	l/h	-	28005	32988	36424	45186	-	56011	66147	73535	82641	92606	103259	116144
Pressure drop system side	°/L	kPa	-	20	20	19	23	-	36	40	41	45	48	53	62

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0601	0701	0801	0901	1101	1202	1402
SEER - 12/7 (EN14825: 2018) (1)									
SEER	°,L	W/W	5,01	5,28	5,57	5,43	5,59	5,36	5,42
Seasonal efficiency	°,L	%	197,4%	208,2%	219.8%	214.2%	220,6%	211,4%	213,6%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)									
Pdesignh	°,L	kW	215	257	293	330	-	-	-
SCOP	°,L	W/W	4,55	4,60	4,73	4,58	-	-	-
ηsh	°,L	%	174.0%	176.0%	181.0%	175.0%	-	-	-

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

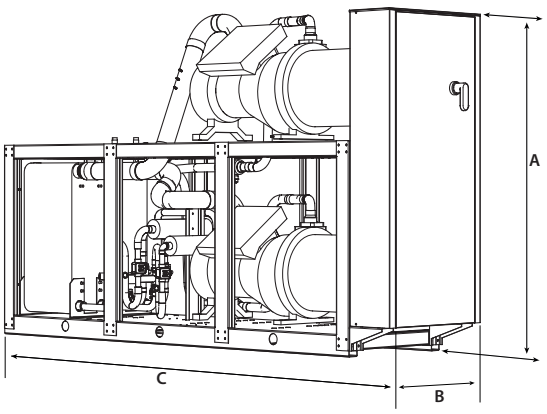
Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Electric data															
Maximum current (FLA)	°,L	A	105,0	124,0	144,0	162,0	182,0	210,0	248,0	288,0	324,0	344,0	364,0	430,0	430,0
Peak current (LRA)	°,L	A	180,0	163,0	192,0	229,0	300,0	285,0	287,0	336,0	391,0	462,0	482,0	575,0	575,0

GENERAL TECHNICAL DATA

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Compressor															
Type	°,L	type							Screw						
Compressor regulation	°,L	Type							On-Off						
Number	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Circuits	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Refrigerant	°,L	type							R134a						
System side heat exchanger															
Type	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Source side heat exchanger															
Type	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections															
Connections (in/out)	°,L	Type							Grooved joints						
Sizes (in/out)	°,L	Ø							3"						
Source side hydraulic connections															
Connections (in/out)	°,L	Type							Grooved joints						
Sizes (in/out)	°,L	Ø							3"						
Sound data calculated in cooling mode (1)															
Sound power level	°	dB(A)	85,0	86,0	86,0	86,0	92,0	88,0	89,0	89,0	89,0	93,0	95,0	95,0	95,0
	L	dB(A)	77,0	78,0	78,0	78,0	84,0	80,0	81,0	81,0	81,0	85,0	87,0	87,0	87,0
Sound pressure level (10 m)	°	dB(A)	53,2	54,2	54,2	54,2	60,2	56,2	57,2	57,2	57,2	61,1	63,1	63,1	63,1
	L	dB(A)	45,2	46,2	46,2	46,2	52,2	48,1	49,1	49,1	49,1	53,1	55,1	55,1	55,1

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Dimensions and weights															
A	°	mm	1775	1775	1775	1775	1775	1975	1975	1975	2005	1985	2065	2065	2065
	L	mm	1775	1775	1775	1775	1775	2120	2120	2120	2120	2120	2120	2120	2120
B	°¸L	mm	810	810	810	810	810	810	810	810	810	810	810	810	810
C	°¸L	mm	2960	2960	2960	2960	3360	2960	2960	2960	2960	3360	3360	3360	3360
Empty weight	°¸L	kg	1101	1251	1301	1357	1788	1738	2028	2097	2169	2598	3000	3095	3095

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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HWSG

Water cooled heat pump reversible water side

Cooling capacity 110 ÷ 396 kW
Heating capacity 122 ÷ 595 kW

- **Use of the new ecological gas R1234ze**
- **Unit optimised for high condenser temperatures.**
- **Production of hot water from condenser up to 65° C.**



DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
L Standard silenced

FEATURES

Operating field

Production of chilled water up to 4°C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 65°C.

Units mono or dual-circuit

Depending on the size, the units are one-circuit or two-circuit models to ensure maximum efficiency with full loads as well as partial loads and guarantee operation continuity if one of the circuits stop.
They are equipped with screw compressors and system and source side plate heat exchangers dedicated to use of the new HFO R1234ze gas.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:
ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430, with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL

pCO^5 control type
Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
Adjustment includes complete management of the alarms and their log.
Possibility to control two units in a Master-Slave configuration
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

ACCESSORIES COMPATIBILITY

Model	Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
AER485P1	°,L	•	•	•	•	•								
AER485P1 x n° 2 (1)	°,L						•	•	•	•	•	•	•	•
AERBACP	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•
PRV3	°,L	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Ver	0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
°, L	AVX651	AVX651	AVX652	AVX652	AVX656	AVX658	AVX658	AVX658	AVX659	AVX667	AVX661	AVX661	AVX661

CONFIGURATOR

Field	Description
1,2,3,4	**HWSG**
5,6,7,8	**Size** 0601, 0701, 0801, 0901, 1101, 1202, 1402, 1602, 1802, 2002, 2202, 2502, 2802
9	**Operating field**
X	Electronic thermostatic expansion valve (1)
Z	Low temperature electronic thermostatic valve (2)
10	**Model**
°	Optimised for high condenser temperatures
11	**Heat recovery**
D	With desuperheater (3)
T	With total recovery (3)
°	Without heat recovery
12	**Version**
°	Standard
L	Standard silenced
13	**Evaporator**
°	Standard
14	**Power supply**
°	400V ~ 3 50Hz with fuses

(1) Water produced from 4 °C ÷ 16 °C
(2) Water produced from -5 °C ÷ 4 °C
(3) Order management

PERFORMANCE SPECIFICATIONS

HWSG - °/L

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002
Cooling performance 12 °C / 7 °C (1)												
Cooling capacity	°,L	kW	110,5	135,1	156,5	176,0	215,8	221,7	271,4	315,9	354,9	396,8
Input power	°,L	kW	23,2	27,7	31,3	35,6	43,2	46,2	57,0	63,9	73,6	80,7
Cooling total input current	°,L	A	48,0	55,0	61,0	66,0	82,0	96,0	111,0	122,0	132,0	149,0
EER	°,L	W/W	4,77	4,87	5,00	4,94	4,99	4,80	4,76	4,94	4,82	4,92
Water flow rate system side	°,L	l/h	19007	23236	26907	30255	37102	38143	46690	54329	61030	68240
Pressure drop system side	°,L	kPa	16	11	10	11	12	24	32	21	23	25
Water flow rate source side	°,L	l/h	22875	27903	32183	36261	44378	45808	56089	64986	73289	81668
Pressure drop source side	°,L	kPa	23	16	15	15	17	34	47	31	34	36
Heating performance 40 °C / 45 °C (2)												
Heating capacity	°,L	kW	122,8	149,7	172,4	194,4	237,8	245,8	301,0	348,2	393,1	437,6
Input power	°,L	kW	27,7	33,1	37,3	42,5	51,6	55,2	68,3	76,4	88,0	96,5
Heating total input current	°,L	A	58,0	65,0	72,0	78,0	97,0	114,0	131,0	145,0	157,0	176,0
COP	°,L	W/W	4,43	4,52	4,62	4,57	4,61	4,45	4,41	4,56	4,47	4,53
Water flow rate system side	°,L	l/h	21319	25989	29942	33756	41288	42668	52248	60463	68263	75995
Pressure drop system side	°,L	kPa	20	14	13	13	15	29	41	27	30	31
Water flow rate source side	°,L	l/h	27820	34012	39384	44285	54307	55832	68342	79522	89331	99885
Pressure drop source side	°,L	kPa	35	24	22	23	26	50	69	46	50	54

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Size			2202	2502	2802
Heating performance 40 °C / 45 °C (1)					
Heating capacity	°,L	kW	488,6	540,8	595,5
Input power	°,L	kW	106,1	119,3	131,9
Heating total input current	°,L	A	196,0	225,0	240,0
COP	°,L	W/W	4,60	4,53	4,52
Water flow rate system side	°,L	l/h	84852	93902	103410
Pressure drop system side	°,L	kPa	34	37	45
Water flow rate source side	°,L	l/h	112042	123541	136133
Pressure drop source side	°,L	kPa	58	62	75

(1) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002
SEER - 12/7 (EN14825: 2018) (1)												
Seasonal efficiency	°,L	%	205,9%	214,4%	222,6%	221,7%	221,9%	210,8%	211,5%	228,3%	223,0%	226,4%
SEER	°,L	W/W	5,22	5,44	5,64	5,62	5,62	5,35	5,36	5,78	5,65	5,74
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)												
Pdesignh	°,L	kW	155	188	217	245	299	309	379	-	-	-
SCOP	°,L	W/W	4,52	4,62	4,72	4,69	4,69	4,63	4,60	-	-	-
ηsh	°,L	%	173.0%	177.0%	181.0%	179.0%	181.0%	177.0%	176.0%	-	-	-

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

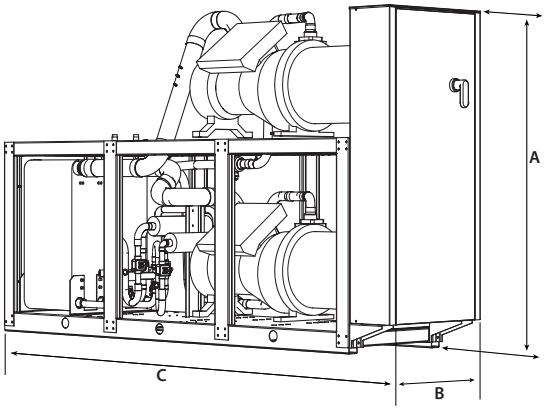
Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Electric data															
Maximum current (FLA)	°,L	A	75,6	95,6	104,4	115,9	143,2	151,2	191,2	208,8	231,8	259,1	286,4	323,8	352,0
Peak current (LRA)	°,L	A	180,0	163,0	192,0	229,0	267,0	255,6	258,6	296,4	344,9	372,2	410,2	475,9	490,0

GENERAL TECHNICAL DATA

Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Compressor															
Type	°,L	type							Screw						
Compressor regulation	°,L	Type							On/Off						
Number	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Circuits	°,L	no.	1	1	1	1	1	2	2	2	2	2	2	2	2
Refrigerant	°,L	type							R1234ze						
Refrigerant load circuit 1 (1)	°,L	kg	18,0	20,0	22,0	25,0	38,0	18,0	20,5	21,5	25,0	25,0	33,0	35,0	39,0
Refrigerant load circuit 2 (1)	°,L	kg	-	-	-	-	-	18,0	20,0	22,0	25,0	30,0	18,0	20,5	21,5
System side heat exchanger															
Type	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
Source side heat exchanger															
Type	°,L	type							Brazed plate						
Number	°,L	no.	1	1	1	1	1	1	1	1	1	1	1	1	1
System side hydraulic connections															
Connections (in/out)	°,L	Type							Grooved joints						
Size (in) (2)	°,L	Ø							3″						
Size (out) (2)	°,L	Ø							3″						
Source side hydraulic connections															
Connections (in/out)	°,L	Type							Grooved joints						
Size (in)	°,L	Ø							3″						
Size (out)	°,L	Ø							3″						
Sound data calculated in cooling mode (3)															
Sound power level	°	dB(A)	87,0	86,0	86,0	86,0	92,0	89,0	90,0	89,0	89,0	93,0	95,0	95,0	95,0
	L	dB(A)	78,9	78,0	78,0	78,0	84,0	81,0	81,9	81,0	81,0	85,0	87,0	87,0	87,0
Sound pressure level (10 m)	°	dB(A)	55,2	54,2	54,2	54,2	60,2	57,2	58,1	57,2	57,2	61,1	63,1	63,1	63,1
	L	dB(A)	47,1	46,2	46,2	46,2	52,2	49,1	50,0	49,1	49,1	53,1	55,1	55,1	55,1

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.
(2) Size
(3) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0601	0701	0801	0901	1101	1202	1402	1602	1802	2002	2202	2502	2802
Dimensions and weights															
A	°	mm	1775	1775	1775	1775	1775	1975	1975	1975	2005	1985	2065	2065	2065
	L	mm	1775	1775	1775	1775	1775	2120	2120	2120	2120	2120	2120	2120	2120
B	°,L	mm	810	810	810	810	810	810	810	810	810	810	810	810	810
C	°,L	mm	2960	2960	2960	2960	3360	2960	2960	2960	2960	3360	3360	3360	3360
Empty weight	°	kg	1101	1251	1301	1357	1788	1738	2028	2097	2169	2598	3000	3095	3095
	L	kg	1229	1379	1429	1485	1934	1966	2256	2325	2397	2855	3257	3352	3352

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WSH

Reversible water-cooled heat pump, gas side

Cooling capacity 165,8 ÷ 269,7 kW
Heating capacity 183,3 ÷ 300,3 kW

- **Reversing valve**
- **Optional electronic expansion valve which allows: cooling down to -6 °C**
- **Modulating capacity control 25-100%**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
High-efficiency screw compressors, with silent functioning and with cooling capacity adjustment via continuous modulation from 40 to 100%. (25-100% with electronic valve OPTION which is to be requested when placing the order)
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
L Standard silenced

FEATURES

Operating field

Full-load operation with the production of chilled water 4-16 °C, and the possibility to produce also negative temperature water down to -6 °C for the evaporator and hot water for the condenser up to 55 °C.
(for more information, refer to the technical documentation).

CONTROL PCO_5

Microprocessor adjustment, with keyboard and LCD display,for easy access on the unit is a menu available in several languages.
Adjustment includes complete management of the alarms and their log.
Possibility to control two units in a Master-Slave configuration
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PRV3: Allows you to control the chiller at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.
AKW: Acoustic kit that lowers the noise level even further, thanks to the special coating on the panelling or on those components that produce the most noise in the unit. Available for the low noise version only.

ACCESSORIES COMPATIBILITY

Model	Ver	0701	0801	0901	1101
AER485P1	°,L	•	•	•	•
AERBACP	°,L	•	•	•	•
AERNET	°,L	•	•	•	•
MULTICHILLER-EVO	°,L	•	•	•	•
PRV3	°,L	•	•	•	•

Antivibration

Ver	0701	0801	0901	1101
°, L	AVX665	AVX665	AVX665	AVX666

Power factor correction

Ver	0701	0801	0901	1101
°, L	RIF161	RIF161	RIF201	RIF241

A grey background indicates the accessory must be assembled in the factory

Acoustic kit

Ver	0701	0801	0901	1101
L	AKW (1)	AKW (1)	AKW (1)	AKW (1)

(1) Available only in low noise version
A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**WSH**
4,5,6,7		**Size** 0701, 0801, 0901, 1101, 1402, 1602, 1802, 2002, 2202, 2502
8		**Operating field**
	X	Low temperature electronic thermostatic valve (1)
	°	Standard mechanic thermostatic valve (2)
9		**Model**
	°	Reversible heat pump, gas side
10		**Heat recovery**
	D	With desuperheater (3)
	°	Without heat recovery
11		**Version**
	°	Standard
	L	Standard silenced
12		**Condenser**
	°	PED regulation
13		**Power supply**
	2	230V ~ 3 50Hz with fuses
	4	230V ~ 3 50Hz with magnet circuit breakers (4)
	5	500V ~ 3 50Hz with fuses
	8	400V ~ 3 50Hz with magnet circuit breakers
	9	500V ~ 3 50Hz with magnet circuit breakers
	°	400V ~ 3 50Hz

(1) Water produced up to +4 °C. For different temperature please contact the factory.
(2) Water produced up to +4 °C
(3) In cooling mode, a water temperature no lower than 35°C must always be guaranteed on the heat exchanger inlet.
(4) Not available for size 2502

PERFORMANCE SPECIFICATIONS

WSH - °/L

Size			0701	0801	0901	1101
Cooling performance 12 °C / 7 °C (1)						
Cooling capacity	°,L	kW	165,8	195,7	216,7	269,7
Input power	°,L	kW	37,1	42,3	48,3	58,8
Cooling total input current	°,L	A	65,0	73,0	81,0	100,0
EER	°,L	W/W	4,47	4,63	4,48	4,59
Water flow rate source side	°,L	l/h	34669	40687	45310	56133
Pressure drop source side	°,L	kPa	30	31	30	36
Water flow rate system side	°,L	l/h	28521	33675	37283	46389
Pressure drop system side	°,L	kPa	23	24	22	27
Heating performance 40 °C / 45 °C (2)						
Heating capacity	°,L	kW	183,3	210,3	237,3	300,3
Input power	°,L	kW	45,4	51,6	58,7	74,4
Heating total input current	°,L	A	81,0	91,0	101,0	131,0
COP	°,L	W/W	4,04	4,08	4,05	4,03
Water flow rate source side	°,L	l/h	40419	46517	52342	66297
Pressure drop source side	°,L	kPa	42	42	39	51
Water flow rate system side	°,L	l/h	31805	36498	41190	52140
Pressure drop system side	°,L	kPa	24	23	23	29

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0701	0801	0901	1101
SEER - 12/7 (EN14825: 2018) (1)						
SEER	°,L	W/W	5,04	5,47	5,29	5,11
Seasonal efficiency	°,L	%	198,6%	215,8%	208.6%	201,3%
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (2)						
Pdesignh	°,L	kW	249	285	322	-
SCOP	°,L	W/W	4,20	4,25	4,23	-
ηsh	°,L	%	160.0%	162.0%	161.0%	-

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Efficiencies for average temperature applications (55 °C)

ELECTRIC DATA

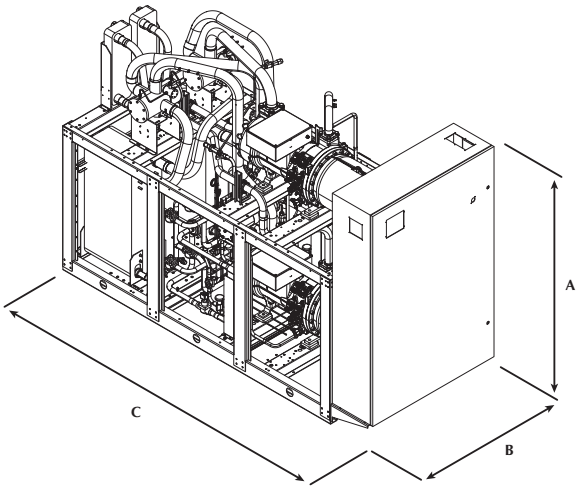
Size			0701	0801	0901	1101
Electric data						
Maximum current (FLA)	°,L	A	124,0	144,0	162,0	182,0
Peak current (LRA)	°,L	A	163,0	192,0	229,0	300,0

GENERAL TECHNICAL DATA

Size			0701	0801	0901	1101
Compressor						
Type	°,L	type		Bi-vite		
Compressor regulation	°,L	Type		On-Off		
Number	°,L	no.	1	1	1	1
Circuits	°,L	no.	1	1	1	1
Refrigerant	°,L	type		R134a		
System side heat exchanger						
Type	°,L	type		Brazed plate		
Number	°,L	no.	1	1	1	1
Connections (in/out)	°,L	Type		Grooved joints		
Sizes (in/out)	°,L	Ø		3″		
Source side heat exchanger						
Type	°,L	type		Brazed plate		
Number	°,L	no.	1	1	1	1
Connections (in/out)	°,L	Type		Grooved joints		
Sizes (in/out)	°,L	Ø		3″		
Sound data calculated in cooling mode (1)						
Sound power level	°	dB(A)	86,0	86,0	86,0	92,0
	L	dB(A)	78,0	78,0	78,0	84,0
Sound pressure level (10 m)	°	dB(A)	54,1	54,1	54,1	60,1
	L	dB(A)	46,1	46,1	46,1	52,1

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			0701	0801	0901	1101
Dimensions and weights						
A	°	mm	2050	2050	2050	2050
	L	mm	2120	2120	2120	2120
B	°,L	mm	809	809	809	809
C	°,L	mm	2960	2960	2960	3360
Empty weight	°	kg	1391	1443	1506	1946
	L	kg	1622	1674	1737	2206

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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WFGI

Water cooled heat pump reversible water side

Cooling capacity 217 ÷ 1765 kW
Heating capacity 243 ÷ 1960 kW

- **Production of hot water from condenser up to 65° C.**
- **Production of negative chilled water down to -8°C.**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency

FEATURES

Operating field

Production of chilled water up to 20 °C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 65 °C depending on the model.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10°C.

Mono, bi-tri circuit unit

Unit with 1-2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.
All units are equipped with an inverter compressor combined with an on-off compressor (two-circuit sizes) or two on/off compressors (three-circuit sizes), with R1234ze (A2L) refrigerant.
The R515B refrigerant with this type of gas is also available on the configurator. Performances do not vary when the refrigerant gas available on the configurator varies.
For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO_5

Microprocessor adjustment, with 4.3", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Adjustment includes complete management of the alarms and their log.
The possibility to controll several units in Master - Slave parallel mode up to a maximum of 4 compressors.
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 3: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	A	•	•	•	•	•	•	•		•		•										
AER485P1 x n° 2 (1)	A								•		•		•	•	•	•	•	•				
AER485P1 x n° 3 (1)	°,A																		•	•	•	•
AERBACP	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°																		•	•	•	•
	A	•	•	•	•	•	•	•		•		•										
AERSET	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Set-up	Heat recovery	1101	1251	1401
°	°, L	°, D, T	-	-	-
A	°	°	AVX680	AVX680	AVX681
A	L	°	AVX681	AVX681	AVX681
A	°, L	D, T	-	-	-

Version	Set-up	Heat recovery	1601	1801	2101
°	°, L	°, D, T	-	-	-
A	°	°	AVX687	AVX687	AVX682
A	L	°	AVX682	AVX682	AVX682
A	°, L	D, T	-	-	-

Version	Set-up	Heat recovery	2401	2502	2801
°	°, L	°, D, T	-	-	-
A	°	°	AVX685	AVX673	AVX683
A	L	°	AVX683	AVX674	AVX683
A	°, L	D, T	-	AVX674	-

Version	Set-up	Heat recovery	2802	3201	3202
°	°, L	°, D, T	-	-	-
A	°, L	°	AVX674	AVX683	AVX679
A	°, L	D, T	AVX674	-	AVX679

Version	Set-up	Heat recovery	3602	4202	4802
°	°, L	°, D, T	-	-	-
A	°	°, D	AVX679	AVX679	AVX678
A	L	°	AVX679	AVX679	AVX678
A	°	T	AVX679	AVX678	AVX678
A	L	D, T	AVX679	AVX678	AVX678

Version	Set-up	Heat recovery	5602	6402	6703
°	°, L	°, D, T	-	-	Contact us.
A	°, L	°, D, T	AVX678	AVX678	Contact us.

Version	Set-up	Heat recovery	7203	8403	9603
°	°, L	°, D, T	Contact us.	Contact us.	Contact us.
A	°, L	°, D, T	Contact us.	Contact us.	Contact us.

- not available

Power factor correction

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	-	-	-	-	-	-	-	RIFWFI2502	-	RIFWFI2802	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	RIFWFI6703	RIFWFI7203	RIFWFI8403	RIFWFI9603
A	RIFWFI3202	RIFWFI3602	RIFWFI4202	RIFWFI4802	RIFWFI5602	RIFWFI6402	RIFWFI6703	RIFWFI7203	RIFWFI8403	RIFWFI9603

A grey background indicates the accessory must be assembled in the factory

For the size of the units with the RIF accessory we ask you to contact the headquarters.

Isolating kit

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15	ISG1	ISG15

A grey background indicates the accessory must be assembled in the factory

Ver	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	ISG7	ISG8	ISG8	ISG8
A	ISG2	ISG2	ISG2	ISG3	ISG3	ISG3	ISG7	ISG8	ISG8	ISG8

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3,4		**WFGI**
5,6,7,8		**Size** 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
9		**Model**
	H	Optimised for high condensation
	°	Standard condensation
10		**Version**
	°	Standard (1)
	A	High efficiency
11		**Operating field**
	X	Electronic thermostatic expansion valve
	Z	Double electronic thermostatic for low temperature
12		**Set-up**
	K	Super low noise with hood (2)
	L	Silenced with hood
	°	Standard without hood

Field		Description
13		**Heat recovery**
	D	With desuperheater (3)
	T	With total recovery (3)
	°	Without heat recovery
14		**Evaporator**
	°	Standard
15		**Power supply**
	8	400V ~ 3 50Hz with magnet circuit breakers (4)
	°	400V ~ 3 50Hz with fuses
16		**Refrigerant gas (5)**
	G	R515B
	°	R1234ze

(1) Only for sizes from 6703 to 9603
(2) Only for units with R515B
(3) Not available for the condenserless "E"
(4) Not available for 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2801, 3201 size
(5) Performances do not vary when the refrigerant gas available on the configurator varies.

MODEL PERFORMANCE DATA (°) - FOR TEMPERATURES WATER PRODUCED UP TO +55°C

WFGI 1101 - 3201 - model (°) version A - gas R1234ze

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	216,8	255,6	285,6	324,6	366,2	407,0	484,9	545,9	586,5
Input power	kW	41,8	50,3	55,3	62,1	73,8	83,3	92,6	102,6	112,2
Cooling total input current	A	74,0	87,0	95,0	106,0	125,0	140,0	152,0	170,0	187,0
EER	W/W	5,19	5,08	5,17	5,23	4,96	4,89	5,24	5,32	5,23
Water flow rate source side	l/h	44248	52351	58332	66233	75332	83987	98906	111058	119737
Pressure drop source side	kPa	30	33	29	26	22	21	24	24	21
Water flow rate system side	l/h	37296	43987	49124	55816	62963	69984	83363	93854	100830
Pressure drop system side	kPa	22	24	24	15	18	13	20	26	14
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	243,2	292,8	321,7	365,6	419,7	467,2	540,0	606,5	655,5
Input power	kW	55,2	66,1	70,6	77,1	94,3	106,3	118,0	131,1	142,3
Heating total input current	A	97,0	114,0	120,0	131,0	159,0	178,0	193,0	215,0	236,0
COP	W/W	4,41	4,43	4,56	4,74	4,45	4,40	4,58	4,63	4,61
Water flow rate system side	l/h	42220	50823	55848	63486	72879	81140	93796	105337	113866
Pressure drop system side	kPa	27	31	27	23	20	20	22	22	19
Water flow rate source side	l/h	55079	66427	73525	84200	95108	105386	123347	139074	149713
Pressure drop source side	kPa	48	56	54	34	41	29	45	58	32

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGI 2502 - 9603 - model (°) version A - gas R1234ze

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	506,3	571,0	664,9	737,9	869,3	989,2	1096,6	1223,1	1323,2	1463,2	1605,2	1765,9
Input power	kW	96,8	107,6	125,2	143,4	166,7	185,8	206,7	234,8	238,3	265,7	299,4	337,5
Cooling total input current	A	171,0	192,0	215,0	245,0	273,0	311,0	346,0	396,0	407,0	468,0	519,0	591,0
EER	W/W	5,23	5,31	5,31	5,15	5,22	5,32	5,30	5,21	5,55	5,51	5,36	5,23
Water flow rate source side	l/h	102932	115945	135099	150773	177155	200809	223021	249142	267794	296179	326287	360505
Pressure drop source side	kPa	61	55	46	30	45	50	36	51	11	24	23	22
Water flow rate system side	l/h	87066	98181	114326	126885	149451	170077	188509	210265	227441	251516	275910	303500
Pressure drop system side	kPa	45	35	33	41	32	44	34	43	26	31	29	17
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	564,4	631,4	731,6	821,0	966,2	1093,4	1212,3	1370,1	1454,7	1611,8	1770,0	1960,8
Input power	kW	124,9	136,1	155,8	181,8	211,1	235,7	260,5	299,0	300,1	334,7	374,9	420,6
Heating total input current	A	218,0	241,0	264,0	306,0	343,0	390,0	431,0	498,0	507,0	582,0	643,0	732,0
COP	W/W	4,52	4,64	4,70	4,52	4,58	4,64	4,65	4,58	4,85	4,82	4,72	4,66
Water flow rate system side	l/h	97998	109633	127054	142602	167814	189909	210585	237978	252762	280014	307509	340678
Pressure drop system side	kPa	56	50	41	27	41	45	32	46	10	22	20	20
Water flow rate source side	l/h	129450	145407	168838	187634	221376	252011	278815	314719	336930	373381	407768	449226
Pressure drop source side	kPa	99	76	73	89	70	96	73	96	56	69	63	37

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGI 6703 - 9603 - model (°) version ° - gas R1234ze

Size		6703	7203	8403	9603
Model: °					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	1309,2	1445,9	1559,4	1729,0
Input power	kW	242,2	267,6	299,6	340,9
Cooling total input current	A	396,0	475,0	525,0	588,0
EER	W/W	5,40	5,40	5,20	5,07
Water flow rate source side	l/h	265488	293277	318297	354161
Pressure drop source side	kPa	44	39	34	41
Water flow rate system side	l/h	225045	248539	268020	297184
Pressure drop system side	kPa	27	29	22	26
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1443,5	1597,2	1729,1	1928,5
Input power	kW	304,0	336,2	373,6	425,5
Heating total input current	A	493,0	592,0	650,0	729,0
COP	W/W	4,75	4,75	4,63	4,53
Water flow rate system side	l/h	250744	277455	300382	335030
Pressure drop system side	kPa	39	35	30	37
Water flow rate source side	l/h	333379	368962	396107	439877
Pressure drop source side	kPa	59	64	49	58

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
SEER - 12/7 (EN14825: 2018) (1)										
Seasonal efficiency	%	343,60	349,90	351,60	353,90	361,00	361,00	360,80	362,20	361,40
SEER	W/W	8,67	8,82	8,87	8,92	9,10	9,10	9,10	9,13	9,11
SEPR - (EN 14825: 2018) High temperature (2)										
SEPR	W/W	9,70	9,80	9,60	9,30	9,80	9,40	9,50	9,20	9,10

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °														
SEER - 12/7 (EN14825: 2018) (1)														
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	335.7%	337.9%	329.7%	326.0%
	A	%	340.8%	345.4%	342.7%	347.3%	346.2%	347.8%	355.7%	349.1%	355.8%	353.7%	354.5%	349.3%
SEER	°	W/W	-	-	-	-	-	-	-	-	8,47	8,52	8,32	8,23
	A	W/W	8,60	8,71	8,64	8,76	8,73	8,77	8,97	8,80	8,97	8,92	8,94	8,81
SEPR - (EN 14825: 2018) High temperature (2)														
SEPR	°	W/W	-	-	-	-	-	-	-	-	8,80	8,70	8,60	8,70
	A	W/W	9,30	9,40	8,90	9,00	9,10	9,10	9,20	9,20	8,90	8,90	9,00	9,00

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			1101	1251	1401
Model: °					
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)					
Pdesignh	°	kW	-	-	-
	A	kW	300,00	368,00	399,00
SCOP	°	W/W	-	-	-
	A	W/W	5,25	5,25	5,33
ηsh	°	%	-	-	-
	A	%	202,00	202,00	205,00

(1) Efficiencies for average temperature applications (55 °C)

Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
Electric data																							
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	682,4	765,6	849,2	957,6
	A	A	158,9	180,6	184,4	201,3	220,8	247,5	280,9	309,0	315,2	331,4	342,7	368,6	408,3	456,2	523,3	582,2	663,0	682,4	765,4	849,2	957,6
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1063,0	1177,0	1391,0	1583,0
	A	A	23,0	23,0	23,0	23,0	23,0	23,0	23,0	498,0	23,0	592,0	23,0	641,0	689,0	837,0	934,0	1124,0	1287,0	1063,0	1177,0	1391,0	1583,0

MODEL PERFORMANCE DATA (H) - FOR TEMPERATURES WATER PRODUCED UP TO +65°C

WFGI 1101 - 3201 - model (H) version A - gas R1234ze

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
Cooling performance 12 °C / 7 °C (1)										
Cooling capacity	kW	220,0	254,8	289,6	327,4	357,5	399,0	482,6	542,2	593,6
Input power	kW	41,7	49,5	57,4	64,3	73,6	83,0	96,5	109,7	118,6
Cooling total input current	A	76,0	87,0	99,0	109,0	123,0	138,0	158,0	181,0	197,0
EER	W/W	5,28	5,14	5,04	5,09	4,85	4,81	5,00	4,94	5,00
Water flow rate source side	l/h	44780	52069	59378	67087	73813	82562	99166	111592	122023
Pressure drop source side	kPa	30	33	29	26	22	21	24	24	21
Water flow rate system side	l/h	37844	43840	49813	56306	61471	68609	82982	93228	102044
Pressure drop system side	kPa	22	24	24	15	18	13	20	26	14
Heating performance 40 °C / 45 °C (2)										
Heating capacity	kW	242,3	283,1	322,4	364,4	402,1	448,3	537,9	604,7	657,2
Input power	kW	50,8	60,1	69,5	77,0	88,8	100,0	114,2	129,4	134,3
Heating total input current	A	91,0	105,0	118,0	130,0	148,0	165,0	186,0	211,0	222,0
COP	W/W	4,77	4,71	4,64	4,73	4,53	4,48	4,71	4,67	4,89
Water flow rate system side	l/h	42056	49149	55968	63270	69832	77853	93424	105035	114165
Pressure drop system side	kPa	27	29	26	23	19	19	22	22	19
Water flow rate source side	l/h	55990	65269	74006	83856	91549	101626	123761	139042	152399
Pressure drop source side	kPa	48	54	54	33	40	28	45	59	32

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGI 2502 - 9603 - model (H) version A - gas R1234ze

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	511,3	581,3	664,4	741,3	869,2	988,5	1083,6	1218,4	1312,3	1450,5	1588,3	1759,4
Input power	kW	100,0	114,5	129,9	146,9	170,3	191,3	214,6	243,5	249,2	279,2	314,2	360,4
Cooling total input current	A	182,0	205,0	225,0	248,0	291,0	326,0	370,0	411,0	449,0	491,0	556,0	651,0
EER	W/W	5,11	5,08	5,11	5,04	5,10	5,17	5,05	5,00	5,27	5,20	5,06	4,88
Water flow rate source side	l/h	104337	118851	135775	151933	177734	201586	222077	249762	267707	296196	325814	363151
Pressure drop source side	kPa	61	55	46	30	45	50	36	51	11	24	23	22
Water flow rate system side	l/h	87940	99961	114232	127463	149434	169953	186288	209453	225564	249326	273015	302384
Pressure drop system side	kPa	45	35	33	41	32	44	34	43	26	31	29	17
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	563,1	641,8	731,2	822,8	961,9	1089,6	1200,8	1381,7	1445,1	1599,5	1759,3	1964,0
Input power	kW	120,6	137,4	154,1	177,9	203,8	229,4	255,3	289,7	297,6	333,6	372,8	425,2
Heating total input current	A	216,0	243,0	263,0	295,0	344,0	385,0	434,0	479,0	530,0	579,0	651,0	763,0
COP	W/W	4,67	4,67	4,75	4,63	4,72	4,75	4,70	4,77	4,86	4,79	4,72	4,62
Water flow rate system side	l/h	97770	111434	126975	142910	167067	189246	208586	239997	251090	277882	305657	341230
Pressure drop system side	kPa	54	49	41	26	40	44	31	47	10	22	20	20
Water flow rate source side	l/h	130239	148043	169179	189222	222144	252647	276929	320765	334856	370130	405298	448896
Pressure drop source side	kPa	99	76	73	90	70	96	74	100	56	69	64	37

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGI 6703 - 9603 - model (H) version ° - gas R1234ze

Size		6703	7203	8403	9603
Model: H					
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	1298,6	1433,8	1544,1	1739,6
Input power	kW	252,7	280,5	312,9	362,4
Cooling total input current	A	449,0	491,0	553,0	649,0
EER	W/W	5,14	5,11	4,93	4,80
Water flow rate source side	l/h	265376	293300	317856	359510
Pressure drop source side	kPa	44	39	34	41
Water flow rate system side	l/h	223228	246460	265406	299001
Pressure drop system side	kPa	27	29	22	26
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1433,5	1584,7	1718,0	1945,1
Input power	kW	300,7	334,3	369,6	428,4
Heating total input current	A	530,0	579,0	649,0	761,0
COP	W/W	4,77	4,74	4,65	4,54
Water flow rate system side	l/h	249013	275290	298460	337909
Pressure drop system side	kPa	39	35	30	36
Water flow rate source side	l/h	331388	365876	394002	443875
Pressure drop source side	kPa	59	64	49	58

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
SEER - 12/7 (EN14825: 2018) (1)										
Seasonal efficiency	%	314,30	316,20	304,40	314,40	296,40	301,70	310,30	314,20	317,80
SEER	W/W	7,93	7,98	7,69	7,94	7,49	7,62	7,83	7,93	8,02
SEPR - (EN 14825: 2018) High temperature (2)										
SEPR	W/W	9,10	9,00	8,70	8,90	8,40	8,40	8,80	8,60	8,90

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H														
SEER - 12/7 (EN14825: 2018) (1)														
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	287.7%	286.9%	287.6%	281.6%
	A	%	294.9%	295.7%	300.5%	291.4%	301.0%	304.5%	309.3%	298.9%	302.4%	297.7%	302.9%	295.0%
SEER	°	W/W	-	-	-	-	-	-	-	-	7,27	7,25	7,27	7,12
	A	W/W	7,45	7,47	7,59	7,36	7,60	7,69	7,81	7,55	7,64	7,52	7,65	7,45
SEPR - (EN 14825: 2018) High temperature (2)														
SEPR	°	W/W	-	-	-	-	-	-	-	-	8,20	8,20	8,30	8,30
	A	W/W	8,60	8,60	8,50	8,60	8,50	8,60	8,50	8,60	8,60	8,50	8,70	8,70

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			1101	1251	1401
Model: H					
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)					
Pdesignh	°	kW	-	-	-
	A	kW	296,00	348,00	395,00
SCOP	°	W/W	-	-	-
	A	W/W	5,45	5,43	5,23
ηsh	°	%	-	-	-
	A	%	210,00	209,00	201,00

(1) Efficiencies for average temperature applications (55 °C)

Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H																							
Electric data																							
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	853,0	939,0	1047,0	1178,0
	A	A	155,0	177,0	201,0	222,0	262,0	296,0	349,0	343,0	390,0	389,0	415,0	422,0	488,0	559,0	644,0	719,0	797,0	853,0	939,0	1047,0	1178,0
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1179,0	1297,0	1527,0	1737,0
	A	A	23,0	23,0	23,0	23,0	23,0	23,0	23,0	494,0	23,0	545,0	23,0	661,0	730,0	885,0	1002,0	1198,0	1357,0	1179,0	1297,0	1527,0	1737,0

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

Model performance data (°) - for condensing temperatures up to 55°C

Model output data WFGI° - AE - gas R1234ze

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
Cooling performance 12 °C / 7 °C - gas R1234ze (1)										
Cooling capacity	kW	198,0	231,1	256,8	292,1	326,6	363,6	437,8	493,2	519,6
Input power	kW	51,6	61,8	66,8	75,1	88,4	100,0	109,4	123,5	136,2
Cooling total input current	A	92,0	108,0	115,0	128,0	151,0	168,9	184,0	206,0	227,0
EER	W/W	3,83	3,74	3,85	3,89	3,69	3,64	4,00	3,99	3,82
Evaporator water flow rate	l/h	34021	39713	44127	50189	56115	62473	75211	84731	89274
Pressure drop evaporator side	kPa	17	20	19	12	15	11	17	21	12
Length of refrigerant lines from/to 0 - 10 m										
Gas line (C1)	Ø	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling capacity	kW	453,9	510,4	593,1	659,9	765,6	890,9	975,6	1082,9	1179,9	1316,9	1449,4	1574,0
Input power	kW	116,3	128,9	149,1	172,3	195,5	215,5	242,5	277,6	290,6	321,6	361,5	409,6
Cooling total input current	A	207,0	229,0	256,0	293,0	327,0	370,0	411,0	471,0	488,0	555,0	616,0	700,0
EER	W/W	3,90	3,96	3,98	3,83	3,92	4,13	4,02	3,90	4,06	4,09	4,01	3,84
Evaporator water flow rate	l/h	77982	87695	101893	113381	131535	153062	167617	186047	202720	226251	249032	270431
Pressure drop evaporator side	kPa	36	28	26	33	27	35	26	33	20	26	25	14
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model output data WFGI° - °E - gas R1234ze

Size		6703	7203	8403	9603
Model: °					
Cooling performance 12 °C / 7 °C - gas R1234ze (1)					
Cooling capacity	kW	1146,9	1278,8	1388,3	1517,0
Input power	kW	291,2	322,2	361,3	409,8
Cooling total input current	A	489,0	556,0	615,0	700,0
EER	W/W	3,94	3,97	3,84	3,70
Evaporator water flow rate	l/h	197057	219704	238518	260630
Pressure drop evaporator side	kPa	20	23	17	21
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model performance data (H) - for condensing temperatures up to 60°C

Model output data - model WFGIH - AE - gas R1234ze

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
Cooling performance 12 °C / 7 °C - gas R1234ze (1)										
Cooling capacity	kW	198,0	231,1	256,8	292,1	326,6	363,6	437,8	493,2	519,6
Input power	kW	51,6	61,8	66,8	75,1	88,4	100,0	109,4	123,5	136,2
Cooling total input current	A	92,0	108,0	115,0	128,0	151,0	168,9	184,0	206,0	227,0
EER	W/W	3,83	3,74	3,85	3,89	3,69	3,64	4,00	3,99	3,82
Evaporator water flow rate	l/h	34021	39713	44127	50189	56115	62473	75211	84731	89274
Pressure drop evaporator side	kPa	17	20	19	12	15	11	17	21	12
Length of refrigerant lines from/to 0 - 10 m										
Gas line (C1)	Ø	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling capacity	kW	453,9	510,4	593,1	659,9	765,6	890,9	975,6	1082,9	1179,9	1316,9	1449,4	1574,0
Input power	kW	116,3	128,9	149,1	172,3	195,5	215,5	242,5	277,6	290,6	321,6	361,5	409,6
Cooling total input current	A	207,0	229,0	256,0	293,0	327,0	370,0	411,0	471,0	488,0	555,0	616,0	700,0
EER	W/W	3,90	3,96	3,98	3,83	3,92	4,13	4,02	3,90	4,06	4,09	4,01	3,84
Evaporator water flow rate	l/h	77982	87695	101893	113381	131535	153062	167617	186047	202720	226251	249032	270431
Pressure drop evaporator side	kPa	36	28	26	33	27	35	26	33	20	26	25	14
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model output data - model WFGIH - °E - gas R1234ze

Size		6703	7203	8403	9603
Model: H					
Cooling performance 12 °C / 7 °C - gas R1234ze (1)					
Cooling capacity	kW	1146,9	1278,8	1388,3	1517,0
Input power	kW	291,2	322,2	361,3	409,8
Cooling total input current	A	489,0	556,0	615,0	700,0
EER	W/W	3,94	3,97	3,84	3,70
Evaporator water flow rate	l/h	197057	219704	238518	260630
Pressure drop evaporator side	kPa	20	23	17	21
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

GENERAL TECHNICAL DATA

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Compressor																							
Type	°,A	type	Screw																				
Compressor regulation	°,A	Type	I	I	I	I	I	I	I	I / 1	I	I / 1	I	I / 1	I / 1	I / 1	I / 1	I / 1	I / 1	I / 1	I / 1	I / 1	I / 1
Number	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Circuits	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Refrigerant	°,A	type	R1234ze																				
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	59,0	57,0	72,0	66,0	61,0	85,0	81,0	50,0	110,0	53,0	104,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	-	-	-	-	-	-	-	50,0	-	53,0	-	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 3 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
System side heat exchanger																							
Type	°,A	type	Shell and tube																				
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Type	Grooved joints																				
Source side heat exchanger																							
Type	°,A	type	Shell and tube																				
Number	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Connections (in/out)	°,A	Type	Grooved joints																				

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

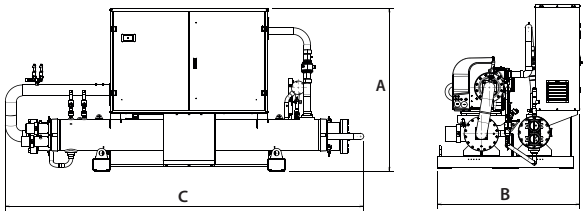
Sound data calculated with functioning in cooling mode - R1234ze gas

Size		1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Refrigerant gas: °																						
Standard equipment																						
Sound power level (1)	dB(A)	94,0	95,8	96,1	97,0	97,1	97,2	97,3	97,3	97,3	97,7	98,0	98,8	98,8	98,9	98,9	99,3	100,0	99,5	100,6	101,0	102,0
Silenced equipment																						
Sound power level (1)	dB(A)	90,0	91,8	92,1	93,0	93,1	93,2	93,3	93,3	93,3	93,7	94,0	94,8	94,8	94,9	94,9	95,3	96,0	95,5	96,6	97,0	98,0

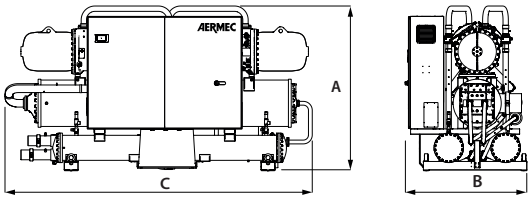
(1) Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

DIMENSIONS

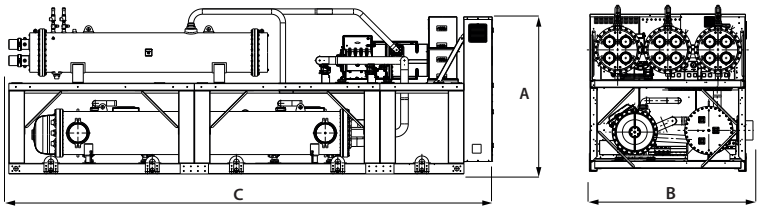
1101 - 3201



2502 - 6402



6703 - 9603



Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H, °																							
Dimensions and weights - standard configuration																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1510	1560	1610	1610	1610	1610	1610	1645	1630	1645	1630	1675	1675	1685	1875	1875	2000	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4380	4380	4395	4500	4580	4580	5650	5650	5650	5650
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8740	9680	9900	10000
	A	kg	2020	2030	2230	2410	2450	2670	3090	3710	3530	3980	3570	5160	5220	5710	6440	6680	6770	9730	11440	11980	12060
Dimensions and weights - quiet configuration																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1525	1560	1610	1610	1610	1615	1615	1645	1630	1645	1630	1675	1675	1685	1875	1875	2000	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4630	4630	4600	5015	5060	5060	5650	6840	6840	6840
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9270	10240	10510	10610
	A	kg	2180	2190	2390	2570	2610	2830	3280	4020	3720	4290	3760	5500	5560	6050	6810	7080	7170	10260	12000	12590	12670

■ *For the sizes of D-T-E versions please contact the factory.*

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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www.aermec.com

WFGN

Water cooled heat pump reversible water side

Cooling capacity 136 ÷ 1727 kW
Heating capacity 153 ÷ 1921 kW

- **Production of hot water up to 55°C.**
- **Production of negative chilled water down to -8°C.**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency

FEATURES

Operating field

Production of chilled water up to 16 °C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 55 °C.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10°C.

Mono, bi-tri circuit unit

Unit with 1-2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.
They are equipped with screw compressors and system and source side shell and tube heat exchangers dedicated to use of the new HFO R1234ze gas (A2L).
The R515B refrigerant with this type of gas is also available on the configurator. Performances do not vary when the refrigerant gas available on the configurator varies.
For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO_5

Microprocessor adjustment, with 4.3", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Adjustment includes complete management of the alarms and their log.
The possibility to controll several units in Master - Slave parallel mode up to a maximum of 4 compressors.
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 3: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
AERSET: It makes it possible to automatically compensate for the operation setting of the unit to which it is connected, based on a 0-10V MODBUS input signal. Mandatory accessory MODU-485BL.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	A	•	•	•	•	•	•	•	•	•	•		•		•										
AER485P1 x n° 2 (1)	A											•		•		•	•	•	•	•	•				
AER485P1 x n° 3 (1)	°,A																					•	•	•	•
AERBACP	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERSET	A	•	•	•	•	•	•	•	•	•	•		•		•										
MULTICHILLER-EVO	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Set-up	Heat recovery	0701	0801	0901	1101	1251
°	°, L	°, D, T	-	-	-	-	-
A	°, L	°	AVX680	AVX680	AVX680	AVX681	AVX681
A	°, L	D, T	-	-	-	-	-

Version	Set-up	Heat recovery	1401	1601	1801	2101	2401
°	°, L	°, D, T	-	-	-	-	-
A	°	°	AVX681	AVX682	AVX682	AVX683	AVX683
A	L	°	AVX681	AVX682	AVX685	AVX683	AVX683
A	°, L	D, T	-	-	-	-	-

Version	Set-up	Heat recovery	2502	2801	2802	3201	3202
°	°, L	°, D, T	-	-	-	-	-
A	°	°	AVX673	AVX683	AVX674	AVX683	AVX679
A	L	°	AVX674	AVX683	AVX674	AVX683	AVX678
A	°	D	AVX674	-	AVX674	-	AVX679
A	°	T	AVX674	-	AVX674	-	AVX678
A	L	D, T	AVX674	-	AVX674	-	AVX678

Version	Set-up	Heat recovery	3602	4202	4802	5602	6402
°	°, L	°, D, T	-	-	-	-	-
A	°	°, D	AVX679	AVX678	AVX678	AVX678	AVX678
A	°	T	AVX678	AVX678	AVX678	AVX678	AVX678
A	L	°, D	AVX678	AVX678	AVX678	AVX678	AVX678
A	L	T	AVX678	AVX678	AVX676	AVX676	AVX676

Version	Set-up	Heat recovery	6703	7203	8403	9603
°	°, L	°, D, T	Contact us.	Contact us.	Contact us.	Contact us.
A	°, L	°, D, T	Contact us.	Contact us.	Contact us.	Contact us.

Power factor correction

Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801
A	RIFWFN0701	RIFWFN0801	RIFWFN0901	RIFWFN1101	RIFWFN1251	RIFWFN1401	RIFWFN1601	RIFWFN1801	RIFWFN2101	RIFWFN2401	RIFWFN2502	RIFWFN2801

Ver	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	-	-	RIFWFN6703	RIFWFN7203	RIFWFN8403	RIFWFN9603
A	RIFWFN2802	RIFWFN3201	RIFWFN3202	RIFWFN3602	RIFWFN4202	RIFWFN4802	RIFWFN5602	RIFWFN6402	RIFWFN6703	RIFWFN7203	RIFWFN8403	RIFWFN9603

For the size of the units with the RIF accessory we ask you to contact the headquarters.

Isolating kit

Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801
A	ISG10	ISG10	ISG10	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15

Ver	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	-	-	ISG5	ISG5	ISG6	ISG6
A	ISG1	ISG15	ISG2	ISG2	ISG2	ISG3	ISG3	ISG3	ISG7	ISG8	ISG8	ISG8

CONFIGURATOR

Field	Description
1,2,3,4	**WFGN**
5,6,7,8	**Size** 0701, 0801, 0901, 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
9	**Model**
°	Heat pump reversible on the water side
10	**Version**
°	Standard (1)
A	High efficiency
11	**Operating field**
X	Electronic thermostatic expansion valve
Z	Double electronic thermostatic for low temperature
12	**Set-up**
K	Super low noise with hood (2)
L	Silenced with hood
°	Standard
13	**Heat recovery**
D	With desuperheater (3)
T	With total recovery (3)
°	Without heat recovery
14	**Evaporator**
E	Evaporating unit
°	Standard
15	**Power supply**
2	230V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit (4)
4	230V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit (4)
5	500V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit (4)
8	400V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit
9	500V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit (4)
°	400V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit
16	**Refrigerant gas (5)**
G	R515B
°	R1234ze

(1) Only for sizes from 6703 to 9603
(2) Only for units with R515B
(3) Not available for the condenserless "E"
(4) The 230V and 500V power supplies are only available for sizes 0701 - 0801 - 0901 - 1101 - 1251 - 1401 - 2502 - 2802
(5) Performances do not vary when the refrigerant gas available on the configurator varies.

PERFORMANCE SPECIFICATIONS

WFGN 0701-3201 - version A - gas R1234ze

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	136,1	154,8	173,8	221,3	239,8	272,3	335,7	370,1	434,3	490,7	545,3	596,9
Input power	kW	26,0	29,7	33,8	41,4	45,0	51,2	61,5	69,0	78,1	88,5	100,0	109,9
Cooling total input current	A	52,0	57,0	63,0	70,0	83,0	96,0	107,0	119,0	130,0	156,0	173,0	193,0
EER	W/W	5,24	5,21	5,15	5,35	5,33	5,32	5,46	5,37	5,56	5,55	5,45	5,43
Water flow rate system side	l/h	23410	26632	29906	38077	41247	46844	57740	63636	74675	84359	93748	102619
Pressure drop system side	kPa	22	25	24	22	21	22	16	20	15	21	25	15
Water flow rate source side	l/h	27751	31586	35551	44983	48779	55416	68103	75234	87855	99259	110576	121174
Pressure drop source side	kPa	21	20	19	24	21	18	18	18	19	19	19	18
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	153,1	172,4	196,2	245,2	267,2	303,2	369,1	408,3	478,4	547,5	601,0	663,0
Input power	kW	32,6	37,2	42,4	51,8	56,4	64,2	76,0	85,4	96,3	109,6	123,2	137,5
Heating total input current	A	64,0	71,0	79,0	87,0	103,0	119,0	131,0	146,0	160,0	191,0	210,0	240,0
COP	W/W	4,69	4,63	4,63	4,74	4,73	4,73	4,86	4,78	4,97	4,99	4,88	4,82
Water flow rate system side	l/h	26569	29919	34065	42555	46384	52636	64078	70908	83096	95098	104400	115170
Pressure drop system side	kPa	20	18	17	22	19	16	16	16	17	18	17	17
Water flow rate source side	l/h	35233	39544	45008	56537	61580	69831	85443	94274	111358	127787	139586	153205
Pressure drop source side	kPa	49	55	55	48	47	48	34	44	34	48	57	34

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGN 2502-9603 - version A - gas R1234ze

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	489,1	556,6	675,8	750,2	879,3	995,4	1100,3	1217,3	1315,3	1454,9	1594,7	1727,0
Input power	kW	91,4	103,5	125,1	138,3	159,8	180,3	202,1	225,0	236,7	262,9	296,7	326,6
Cooling total input current	A	166,0	192,0	214,0	237,0	261,0	312,0	346,0	388,0	386,0	466,0	515,0	577,0
EER	W/W	5,35	5,38	5,40	5,42	5,50	5,52	5,45	5,41	5,56	5,53	5,38	5,29
Water flow rate system side	l/h	84115	95704	116204	128995	151168	171142	189154	209277	226089	250084	274117	296820
Pressure drop system side	kPa	42	33	34	42	35	44	33	41	25	31	30	17
Water flow rate source side	l/h	99161	112842	136932	152026	177654	200961	222817	246414	266044	294386	324122	352026
Pressure drop source side	kPa	53	50	49	31	51	51	42	62	19	18	18	21
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	545,1	618,4	747,2	833,5	967,0	1093,6	1204,7	1333,7	1457,0	1601,3	1761,4	1921,0
Input power	kW	116,1	130,9	155,9	173,0	198,3	224,8	248,9	277,7	293,3	326,6	365,9	400,0
Heating total input current	A	208,0	240,0	264,0	291,0	320,0	383,0	421,0	473,0	473,0	571,0	627,0	702,0
COP	W/W	4,70	4,73	4,79	4,82	4,88	4,87	4,84	4,80	4,97	4,90	4,81	4,80
Water flow rate system side	l/h	94650	107376	129767	144768	167936	189943	209256	231650	253135	278220	306025	333765
Pressure drop system side	kPa	49	45	44	28	45	46	37	55	17	16	16	19
Water flow rate source side	l/h	126174	143007	173413	193793	225352	255129	279883	310087	339613	372508	407744	443369
Pressure drop source side	kPa	95	74	77	96	79	98	73	91	56	70	66	37

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFGN 6703-9603 - version ° - gas R1234ze

Size		6703	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	1300,7	1439,0	1554,8	1692,4
Input power	kW	239,3	265,4	297,1	329,6
Cooling total input current	A	396,0	475,0	525,0	588,0
EER	W/W	5,44	5,42	5,23	5,13
Water flow rate system side	l/h	223578	247357	267235	290895
Pressure drop system side	kPa	26	29	22	26
Water flow rate source side	l/h	263609	291721	317119	346049
Pressure drop source side	kPa	39	39	33	39
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1444,7	1588,0	1725,3	1890,3
Input power	kW	296,0	328,4	364,3	404,7
Heating total input current	A	485,0	583,0	639,0	716,0
COP	W/W	4,88	4,83	4,74	4,67
Water flow rate system side	l/h	250963	275857	299728	328385
Pressure drop system side	kPa	36	35	29	35
Water flow rate source side	l/h	335840	368447	397507	434518
Pressure drop source side	kPa	59	65	48	58

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801
SEER - 12/7 (EN14825: 2018) (1)												
SEER	W/W	6,71	6,96	6,87	6,43	6,80	6,79	6,69	6,69	7,01	6,99	6,58
Seasonal efficiency	%	265,30	275,30	271,70	254,00	269,00	268,40	264,60	264,70	277,20	276,70	260,30
SEPR - (EN 14825: 2018) High temperature (2)												
SEPR	W/W	8,20	8,00	8,20	8,00	8,00	8,00	8,00	7,90	8,10	8,10	8,10

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			6703	7203	8403	9603
SEER - 12/7 (EN14825: 2018) (1)						
SEER	°,A	W/W	7,11	7,14	7,03	6,94
Seasonal efficiency	°,A	%	281,30	282,50	278,30	274,40
SEPR - (EN 14825: 2018) High temperature (2)						
SEPR	°,A	W/W	8,10	8,20	8,20	8,30

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Size			0701	0801	0901	1101	1251	1401
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)								
Pdesignh	°	kW	-	-	-	-	-	-
	A	kW	197,00	219,00	253,00	312,00	339,00	384,00
SCOP	°	W/W	-	-	-	-	-	-
	A	W/W	4,65	4,70	4,65	4,75	5,00	4,98
ηsh	°	%	-	-	-	-	-	-
	A	%	178,00	180,00	178,00	182,00	192,00	191,00

(1) Efficiencies for average temperature applications (55 °C)

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

WFGN - version AE - gas R1234ze

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Evaporator: E													
Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling capacity	kW	121,0	137,5	154,5	196,6	214,1	243,2	297,4	329,0	390,9	442,4	480,9	529,0
Input power	kW	31,4	35,9	40,9	50,0	54,7	62,2	74,1	83,1	93,9	106,2	119,1	131,5
Cooling total input current	A	58,0	65,0	73,0	83,0	97,0	111,0	125,0	140,0	154,0	183,0	203,0	226,0
EER	W/W	3,85	3,83	3,77	3,93	3,92	3,91	4,02	3,96	4,16	4,17	4,04	4,02
Evaporator water flow rate	l/h	20792	23621	26548	33776	36780	41778	51103	56534	67168	76005	110092	90893
Pressure drop evaporator side	kPa	31	35	35	31	31	32	22	29	22	30	35	21
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	42,0	54,0	54,0	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	28,0	35,0	35,0	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-	-	-	-

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Evaporator: E													
Cooling performance 12 °C / 7 °C - gas R1234ze (1)													
Cooling capacity	kW	435,2	495,4	598,4	665,6	796,3	895,9	964,3	1068,0	1165,6	1325,4	1443,9	1565,4
Input power	kW	109,2	124,2	148,1	164,9	188,7	212,3	238,2	262,9	279,7	316,3	354,8	392,2
Cooling total input current	A	193,0	222,0	250,0	279,0	310,0	365,0	405,0	451,0	459,0	545,0	603,0	673,0
EER	W/W	3,99	3,99	4,04	4,04	4,22	4,22	4,05	4,06	4,17	4,19	4,07	3,99
Evaporator water flow rate	l/h	74770	85110	102813	114362	136819	153933	165685	183500	200259	227721	248077	268953
Pressure drop evaporator side	kPa	60	48	49	63	50	63	45	56	34	46	43	24
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

WFGN - version °E - gas R1234ze

Size			6703	7203	8403	9603
Evaporator: E						
Cooling performance 12 °C / 7 °C - gas R1234ze (1)						
Cooling capacity		kW	1129,2	1283,0	1378,4	1504,1
Input power		kW	282,3	319,1	356,8	394,8
Cooling total input current		A	463,0	549,0	606,0	676,0
EER		W/W	4,00	4,02	3,86	3,81
Evaporator water flow rate		l/h	194017	220439	236821	258428
Pressure drop evaporator side		kPa	35	41	30	36
Length of refrigerant lines from/to 0 - 10 m						
Gas line (C1)		Ø	76,0	88,9	88,9	88,9
Gas line (C2)		Ø	76,0	88,9	88,9	88,9
Gas line (C3)		Ø	76,0	88,9	88,9	88,9
Liquid line (C1)		Ø	54,0	54,0	54,0	54,0
Liquid line (C2)		Ø	54,0	54,0	54,0	54,0
Liquid line (C3)		Ø	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

ELECTRIC DATA

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402
Electric data																					
Maximum current (FLA)	A	106,0	119,0	136,0	162,0	183,0	208,0	243,0	275,0	305,0	350,0	365,0	389,0	416,0	427,0	486,0	549,0	609,0	700,0	777,0	854,0
Peak current (LRA)	A	163	192	229	300	314	341	436	465	586	650	440	805	486	917	601	650	792	890	1070	1210

Size		6703	7203	8403	9603
Electric data					
Maximum current (FLA)	°,A	A	913,0	1050,0	1166,0	1281,0
Peak current (LRA)	°,A	A	998	1129	1334	1502

GENERAL TECHNICAL DATA

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
Compressor																
Type	°,A	type								Screw						
Compressor regulation	°,A	Type								On-Off						
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	2	1	2	1
Circuits	°,A	no.	1	1	1	1	1	1	1	1	1	1	2	1	2	1
Refrigerant	°,A	type								R1234ze						
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A	kg	41,0	41,0	38,0	59,0	57,0	72,0	66,0	61,0	85,0	81,0	50,0	110,0	53,0	104,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	A	kg	-	-	-	-	-	-	-	-	-	-	50,0	-	53,0	-
Refrigerant load circuit 3 (1)	°,A	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-
System side heat exchanger																
Type	°,A	type								Shell and tube						
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Type								Grooved joints						
Source side heat exchanger																
Type	°,A	type								Shell and tube						
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	2	1	2	1
Connections (in/out)	°,A	Type								Grooved joints						

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Compressor												
Type	°,A	type						Screw				
Compressor regulation	°,A	Type						On-Off				
Number	°,A	no.	2	2	2	2	2	2	3	3	3	3
Circuits	°,A	no.	2	2	2	2	2	2	3	3	3	3
Refrigerant	°,A	type						R1234ze				
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 3 (1)	°	kg	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	-	-	-	-	-	-	106,0	104,0	110,0	120,0
System side heat exchanger												
Type	°,A	type						Shell and tube				
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Type						Grooved joints				
Source side heat exchanger												
Type	°,A	type						Shell and tube				
Number	°,A	no.	2	2	2	2	2	2	3	3	3	3
Connections (in/out)	°,A	Type						Grooved joints				

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

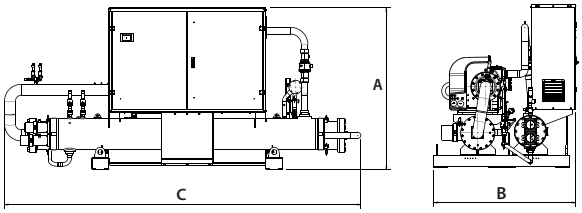
SOUND DATA

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Refrigerant gas: °																										
Standard equipment																										
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	97,0	97,2	99,5	100,0
	A	dB(A)	87,7	88,0	87,7	89,1	90,3	91,3	90,5	90,7	93,2	92,5	93,5	94,8	94,0	94,2	94,0	94,5	95,0	95,5	97,5	98,0	97,0	97,2	99,5	100,0
Silenced equipment																										
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	93,0	93,2	95,5	96,0
	A	dB(A)	83,7	84,0	83,7	85,1	86,3	87,3	86,5	86,7	89,2	88,5	89,5	90,8	90,0	90,2	90,0	90,5	91,0	91,5	93,5	94,0	93,0	93,2	95,5	96,0

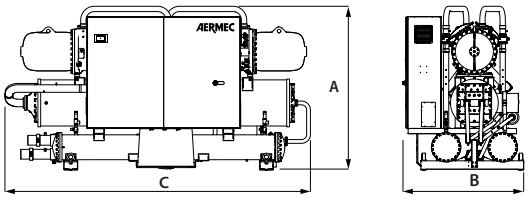
(1) Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

DIMENSIONS

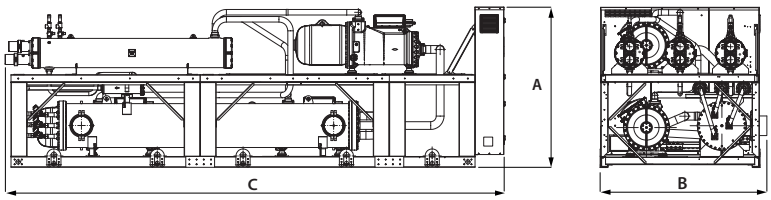
0701 - 3201



2502 - 6402



6703 - 9603



Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402
Set-up: L																					
Dimensions and weights																					
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	2000	1920	2075	1920	2195	2195	2340	2432	2440	2432
B	mm	1450	1450	1450	1540	1600	1610	1610	1610	1630	1630	1500	1645	1500	1645	1575	1575	1585	1775	1775	1820
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4320	4290	4345	4290	4650	4650	4600	5015	5150	5150
Empty weight	kg	1770	1790	1790	2280	2290	2510	3120	3170	3450	3510	4120	4030	4410	4080	6050	6120	6670	7040	7420	7490

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402
Set-up: °																					
Dimensions and weights																					
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	2000	1920	2075	1920	2195	2195	2340	2432	2440	2432
B	mm	1450	1450	1450	1510	1550	1610	1610	1610	1610	1610	1500	1630	1500	1630	1575	1575	1585	1775	1775	1820
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4320	4290	4345	4290	4380	4380	4395	4535	4605	4605
Empty weight	kg	1610	1630	1630	2120	2130	2350	2940	2980	3260	3320	3810	3820	4100	3870	5690	5750	6300	6670	6970	7070

Size			6703	7203	8403	9603
Set-up: L						
Dimensions and weights						
A	°,A	mm	2250	2250	2250	2250
B	°,A	mm	2200	2200	2200	2200
C	°	mm	5650	5650	5650	5650
	A	mm	6840	6840	6840	6840
Empty weight	°	kg	9890	10470	10760	10830
	A	kg	10880	12230	12950	12990

Size			6703	7203	8403	9603
Set-up: °						
Dimensions and weights						
A	°,A	mm	2250	2250	2250	2250
B	°,A	mm	2200	2200	2200	2200
C	°	mm	5650	5650	5650	5650
	A	mm	6840	6840	6840	6840
Empty weight	°	kg	9330	9910	10130	10200
	A	kg	10320	11670	12270	12360

■ *For the sizes of D-T-E versions please contact the factory.*

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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www.aermec.com

WFI

Water cooled heat pump reversible water side

Cooling capacity 291 ÷ 2406 kW
Heating capacity 326 ÷ 2664 kW

- **Condenser side hot water production up to 60°C.**
- **Production of negative chilled water down to -8°C.**
- **Available also with R513A refrigerant**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency

FEATURES

Operating field

Production of chilled water up to 16°C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 60°C depending on the model.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10°C.

Mono, bi-tri circuit unit

Unit with 1-2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.
All units are equipped with an inverter compressor combined with an on-off compressor (two-circuit sizes) or two on/off compressors (three-circuit sizes) with R134a refrigerant.
The R513A (XP10) refrigerant with this type of gas is also available on the configurator. On average, the units have a yield > 2% and an EER < 3% compared to the same size with R134a.
For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO_5

Microprocessor adjustment, with 4.3", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Adjustment includes complete management of the alarms and their log.
The possibility to controll several units in Master - Slave parallel mode up to a maximum of 4 compressors.
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 3: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	A	•	•	•	•	•	•	•		•		•										
AER485P1 x n° 2 (1)	A								•		•		•	•	•	•	•	•				
AER485P1 x n° 3 (1)	°,A																		•	•	•	•
AERBACP	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°																		•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Set-up	Heat recovery	1101	1251	1401
°	°, K, L	°, D, T	-	-	-
A	°	°	AVX680	AVX680	AVX681
A	K	°	AVX681	AVX681	AVX688
A	L	°	AVX681	AVX681	AVX681
A	°, K, L	D, T	-	-	-

Version	Set-up	Heat recovery	1601	1801	2101
°	°, K, L	°, D, T	-	-	-
A	°	°	AVX687	AVX687	AVX682
A	K	°	AVX682	AVX682	AVX685
A	L	°	AVX682	AVX682	AVX682
A	°, K, L	D, T	-	-	-

Version	Set-up	Heat recovery	2401	2502	2801
°	°, K, L	°, D, T	-	-	-
A	°	°	AVX685	AVX673	AVX683
A	K	°	AVX683	Contact us.	AVX683
A	L	°	AVX683	AVX674	AVX683
A	°, L	D, T	-	AVX674	-
A	K	D, T	-	Contact us.	-

Version	Set-up	Heat recovery	2802	3201	3202
°	°, K, L	°, D, T	-	-	-
A	°, L	°	AVX674	AVX683	AVX679
A	K	°	Contact us.	AVX683	Contact us.
A	°, L	D, T	AVX674	-	AVX679
A	K	D, T	Contact us.	-	Contact us.

Version	Set-up	Heat recovery	3602	4202	4802
°	°, K, L	°, D, T	-	-	-
A	°	°, D	AVX679	AVX679	AVX678
A	L	°	AVX679	AVX679	AVX678
A	K	°, D, T	Contact us.	Contact us.	Contact us.
A	°	T	AVX679	AVX678	AVX678
A	L	D, T	AVX679	AVX678	AVX678

Version	Set-up	Heat recovery	5602	6402	6703
°	°, K, L	°, D, T	-	-	Contact us.
A	°, L	°, D, T	AVX678	AVX678	Contact us.
A	K	°, D, T	Contact us.	Contact us.	Contact us.

Version	Set-up	Heat recovery	7203	8403	9603
°	°, K, L	°, D, T	Contact us.	Contact us.	Contact us.
A	°, K, L	°, D, T	Contact us.	Contact us.	Contact us.

- not available

Power factor correction

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	-	-	-	-	-	-	-	RIFWFI2502	-	RIFWFI2802	-

The accessory cannot be fitted on the configurations indicated with -
A grey background indicates the accessory must be assembled in the factory

Ver	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	RIFWFI6703	RIFWFI7203	RIFWFI8403	RIFWFI9603
A	RIFWFI3202	RIFWFI3602	RIFWFI4202	RIFWFI4802	RIFWFI5602	RIFWFI6402	RIFWFI6703	RIFWFI7203	RIFWFI8403	RIFWFI9603

A grey background indicates the accessory must be assembled in the factory

For the size of the units with the RIF accessory we ask you to contact the headquarters.

Isolating kit

Ver	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201
A	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15	ISG1	ISG15

A grey background indicates the accessory must be assembled in the factory

Ver	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	ISG5	ISG5	ISG6	ISG6
A	ISG2	ISG2	ISG2	ISG3	ISG3	ISG3	ISG7	ISG8	ISG8	ISG8

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field	Description
1,2,3	**WFI**
4,5,6,7	**Size** 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
8	**Model**
H	Optimised for high condensation
°	Standard condensation
9	**Version**
°	Standard (1)
A	High efficiency
10	**Operating field**
X	Electronic thermostatic expansion valve (2)
Z	Double electronic thermostatic for low temperature (3)
11	**Set-up**
K	Super silenced
L	Silenced with hood
°	Standard without hood
12	**Heat recovery**
D	With desuperheater (4)
T	With total recovery (4)
°	Without heat recovery
13	**Evaporator**
°	Standard
14	**Power supply**
8	400V ~ 3 50Hz with magnet circuit breakers (5)
°	400V ~ 3 50Hz with fuses
15	**Refrigerant gas**
G	R513A (XP10) (6)
°	R134a

(1) Only for sizes from 6703 to 9603
(2) Water produced from 0 °C ÷ 16 °C
(3) Water produced from -8 °C up to 10 °C
(4) Not available for the condenserless "E"
(5) Not available for 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2801, 3201 size
(6) For further details refer to the technical documentation or to the Magellano selection program.

MODEL PERFORMANCE DATA (°) - FOR TEMPERATURES WATER PRODUCED UP TO +55°C

WFI 1101 - 3201 - model (°) version A - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
Cooling performance 12 °C / 7 °C - gas R134a (1)										
Cooling capacity	kW	291,4	339,7	388,2	433,5	496,2	552,0	635,3	714,7	783,3
Input power	kW	55,9	66,5	75,6	85,1	98,6	111,6	122,5	138,9	148,8
Cooling total input current	A	95,0	111,0	125,0	140,0	161,0	181,0	199,0	223,0	241,0
EER	W/W	5,21	5,11	5,13	5,09	5,03	4,95	5,19	5,15	5,26
Water flow rate source side	l/h	59350	69394	79271	88730	101760	113566	129637	145972	159590
Pressure drop source side	kPa	42	41	36	32	30	30	33	33	31
Water flow rate system side	l/h	50123	58428	66772	74535	85331	94907	109229	122894	134668
Pressure drop system side	kPa	38	43	45	27	32	24	35	45	26
Heating performances 40 °C / 45 °C - gas R134a (2)										
Heating capacity	kW	326,0	387,7	437,0	490,2	566,3	631,1	707,9	798,2	873,1
Input power	kW	74,3	88,1	97,5	106,3	126,9	143,0	156,9	178,5	189,7
Heating total input current	A	125,0	144,0	158,0	173,0	204,0	230,0	251,0	281,0	305,0
COP	W/W	4,39	4,40	4,48	4,61	4,46	4,41	4,51	4,47	4,60
Water flow rate system side	l/h	56587	67319	75890	85131	98344	109614	122953	138630	151661
Pressure drop system side	kPa	39	39	33	29	28	28	30	29	28
Water flow rate source side	l/h	74024	88235	99938	112439	128897	142918	161620	182106	199956
Pressure drop source side	kPa	83	98	101	61	74	54	76	98	57

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 2502 - 9603 - model (°) version A - gas R134a

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	670,0	757,4	889,1	1002,3	1143,6	1304,6	1441,8	1621,2	1771,2	1940,6	2167,0	2406,5
Input power	kW	127,4	144,9	168,9	192,8	218,4	244,5	275,3	309,9	327,6	362,0	410,0	458,2
Cooling total input current	A	214,0	244,0	277,0	315,0	351,0	399,0	446,0	497,0	527,0	597,0	667,0	751,0
EER	W/W	5,26	5,23	5,26	5,20	5,24	5,34	5,24	5,23	5,41	5,36	5,29	5,25
Water flow rate source side	l/h	136129	154084	180866	204404	232973	264813	293658	330152	359034	393872	440716	490182
Pressure drop source side	kPa	55	58	48	46	44	47	48	48	38	31	32	40
Water flow rate system side	l/h	115215	130225	152866	172295	196591	224275	247834	278670	304461	333577	372486	413608
Pressure drop system side	kPa	53	43	38	27	31	44	31	39	45	54	57	33
Heating performances 40 °C / 45 °C - gas R134a (2)													
Heating capacity	kW	746,2	839,5	979,7	1112,5	1270,4	1441,8	1597,0	1815,3	1951,6	2145,2	2391,0	2664,3
Input power	kW	165,1	183,8	210,4	242,5	276,5	310,2	346,1	394,1	414,4	459,6	518,3	573,6
Heating total input current	A	273,0	305,0	341,0	394,0	441,0	499,0	556,0	624,0	656,0	743,0	826,0	931,0
COP	W/W	4,52	4,57	4,66	4,59	4,59	4,65	4,61	4,61	4,71	4,67	4,61	4,64
Water flow rate system side	l/h	129578	145788	170162	193225	220670	250442	277422	315345	339051	372698	415418	462891
Pressure drop system side	kPa	50	51	42	41	40	42	43	44	34	28	28	36
Water flow rate source side	l/h	171302	192864	225753	254786	291203	332319	366559	417106	451025	495203	550498	612203
Pressure drop source side	kPa	118	95	82	60	67	97	69	88	98	118	125	73

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 6703 - 9603 - model (°) version ° - gas R134a

Size		6703	7203	8403	9603
Model: °					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1723,4	1905,7	2114,5	2327,9
Input power	kW	331,7	366,9	409,8	463,6
Cooling total input current	A	522,0	592,0	659,0	744,0
EER	W/W	5,20	5,19	5,16	5,02
Water flow rate source side	l/h	350768	387913	431371	476493
Pressure drop source side	kPa	73	69	58	71
Water flow rate system side	l/h	296246	327572	363441	400118
Pressure drop system side	kPa	47	51	39	46
Heating performances 40 °C / 45 °C - gas R134a (2)					
Heating capacity	kW	1909,4	2114,9	2342,8	2593,9
Input power	kW	418,2	463,2	513,0	581,3
Heating total input current	A	651,0	737,0	817,0	922,0
COP	W/W	4,57	4,57	4,57	4,46
Water flow rate system side	l/h	331680	367403	407019	450652
Pressure drop system side	kPa	65	62	52	63
Water flow rate source side	l/h	438855	486287	537130	592236
Pressure drop source side	kPa	103	112	85	102

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
SEER - 12/7 (EN14825: 2018) . refrigerant gas R134a (1)																							
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	319,80	319,20	318,20	313,60
	A	%	337,10	343,20	342,80	348,90	348,20	350,10	347,00	339,20	351,20	340,00	355,00	341,70	340,20	337,90	340,30	343,50	344,30	343,10	341,00	340,50	342,50
SEER	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,07	8,06	8,03	7,92
	A	W/W	8,50	8,66	8,65	8,80	8,78	8,83	8,75	8,56	8,86	8,58	8,95	8,62	8,58	8,52	8,58	8,66	8,68	8,65	8,60	8,59	8,64
SEPR - (EN 14825: 2018) High temperature - refrigerant gas R134a (2)																							
SEPR	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,60	8,60	8,40	8,40
	A	W/W	9,40	9,40	9,30	8,70	9,30	8,90	9,10	9,10	9,00	9,00	8,90	8,90	8,80	8,90	8,80	8,90	8,90	9,00	8,80	8,60	8,80

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
Gas R134a																							
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	862,9	965,5	1077,5	1211,4
	A	A	163,0	189,0	206,0	226,0	262,0	300,0	329,0	354,5	371,0	395,1	405,0	447,5	511,1	576,7	647,2	724,3	824,0	862,9	965,5	1077,5	1211,4
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1176,0	1301,0	1533,0	1744,0
	A	A	23,0	23,0	23,0	23,0	23,0	23,0	23,0	506,0	23,0	550,0	23,0	666,0	730,0	889,0	982,0	1179,0	1355,0	1176,0	1301,0	1533,0	1744,0

MODEL PERFORMANCE DATA (H) - FOR TEMPERATURES WATER PRODUCED UP TO +60°C

WFI 1101 - 3201 - model (H) version A - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
Cooling performance 12 °C / 7 °C - gas R134a (1)										
Cooling capacity	kW	294,7	338,4	389,7	436,1	479,8	540,5	637,9	703,6	781,8
Input power	kW	57,3	67,1	79,0	87,4	98,3	110,3	127,2	142,1	162,7
Cooling total input current	A	98,0	112,0	129,0	143,0	159,0	177,0	206,0	228,0	262,0
EER	W/W	5,15	5,05	4,94	4,99	4,88	4,90	5,02	4,95	4,80
Water flow rate source side	l/h	60130	69281	80074	89564	98879	111372	130851	144597	161585
Pressure drop source side	kPa	44	41	37	32	30	30	33	32	33
Water flow rate system side	l/h	50692	58217	67029	74994	82505	92934	109677	120988	134409
Pressure drop system side	kPa	39	44	46	26	32	24	35	43	27
Heating performances 40 °C / 45 °C - gas R134a (2)										
Heating capacity	kW	325,5	376,9	434,9	486,7	538,4	604,0	709,5	783,3	871,3
Input power	kW	70,4	82,2	96,5	105,2	119,3	133,5	151,5	168,8	185,2
Heating total input current	A	118,0	135,0	155,0	170,0	190,0	212,0	241,0	265,0	295,0
COP	W/W	4,63	4,58	4,51	4,63	4,51	4,52	4,68	4,64	4,71
Water flow rate system side	l/h	56513	65431	75521	84523	93497	104898	123224	136049	151346
Pressure drop system side	kPa	39	37	33	29	27	27	29	29	29
Water flow rate source side	l/h	74998	86674	99584	111688	122874	137657	163575	180444	200734
Pressure drop source side	kPa	86	97	100	58	71	52	78	97	59

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 2502 - 9603 - model (H) version A - gas R134a

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	672,4	770,8	886,7	999,1	1145,7	1305,1	1454,0	1620,1	1770,6	1939,2	2161,5	2375,7
Input power	kW	132,4	153,1	173,5	195,9	224,6	254,6	288,9	327,3	340,1	376,7	435,1	482,5
Cooling total input current	A	226,0	257,0	285,0	316,0	364,0	415,0	475,0	543,0	567,0	621,0	715,0	806,0
EER	W/W	5,08	5,04	5,11	5,10	5,10	5,13	5,03	4,95	5,21	5,15	4,97	4,92
Water flow rate source side	l/h	137384	157768	181226	204349	234273	266548	297970	332858	360998	396033	443977	488997
Pressure drop source side	kPa	53	55	48	48	49	48	50	46	36	32	32	38
Water flow rate system side	l/h	115641	132532	152452	171756	196959	224366	249941	278496	304349	333335	371531	408313
Pressure drop system side	kPa	54	44	36	27	32	44	32	40	46	54	51	30
Heating performances 40 °C / 45 °C - gas R134a (2)													
Heating capacity	kW	741,6	852,1	975,8	1106,1	1267,8	1441,2	1611,1	1842,1	1948,7	2138,6	2398,1	2642,8
Input power	kW	160,3	184,4	206,0	235,2	268,6	305,3	343,0	388,6	408,5	453,9	520,2	571,4
Heating total input current	A	268,0	305,0	334,0	376,0	431,0	490,0	558,0	633,0	669,0	732,0	838,0	945,0
COP	W/W	4,63	4,62	4,74	4,70	4,72	4,72	4,70	4,74	4,77	4,71	4,61	4,62
Water flow rate system side	l/h	128783	147970	169486	192116	220216	250335	279872	320004	338539	371554	416652	459154
Pressure drop system side	kPa	47	48	42	42	44	43	44	42	32	28	29	33
Water flow rate source side	l/h	171266	196282	225782	254976	292792	333536	371554	426498	451814	494844	551546	606152
Pressure drop source side	kPa	118	96	80	60	71	97	71	93	101	118	113	66

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFI 6703 - 9603 - model (H) version ° - gas R134a

Size		6703	7203	8403	9603
Model: H					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1706,6	1904,2	2109,2	2298,6
Input power	kW	343,5	381,7	434,3	486,5
Cooling total input current	A	561,0	616,0	705,0	796,0
EER	W/W	4,97	4,99	4,86	4,72
Water flow rate source side	l/h	349811	390073	434460	475234
Pressure drop source side	kPa	73	70	59	70
Water flow rate system side	l/h	293360	327313	362530	395080
Pressure drop system side	kPa	47	51	38	46
Heating performances 40 °C / 45 °C - gas R134a (2)					
Heating capacity	kW	1891,1	2108,3	2348,6	2571,3
Input power	kW	411,1	457,6	515,2	578,0
Heating total input current	A	662,0	727,0	826,0	933,0
COP	W/W	4,60	4,61	4,56	4,45
Water flow rate system side	l/h	328503	366257	408016	446727
Pressure drop system side	kPa	64	62	52	62
Water flow rate source side	l/h	435501	485905	538185	586506
Pressure drop source side	kPa	104	112	85	101

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

Energy indices (Reg. 2016/2281 EU)

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H																							
SEER - 12/7 (EN14825: 2018) . refrigerant gas R134a (1)																							
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	279,70	281,00	284,80	278,60
	A	%	306,80	310,90	296,50	309,10	297,30	306,60	308,50	298,00	314,60	297,10	315,60	301,30	295,40	301,80	303,60	307,30	298,00	297,80	295,60	296,90	297,50
SEER	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,07	7,10	7,20	7,04
	A	W/W	7,75	7,85	7,49	7,80	7,51	7,74	7,79	7,53	7,94	7,50	7,97	7,61	7,46	7,62	7,67	7,76	7,53	7,52	7,47	7,50	7,51
SEPR - (EN 14825: 2018) High temperature - refrigerant gas R134a (2)																							
SEPR	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,40	8,30	8,20	8,10
	A	W/W	9,20	9,10	9,10	8,50	9,00	8,60	8,80	8,80	8,80	8,80	8,70	8,60	8,40	8,60	8,50	8,60	8,60	8,70	8,60	8,40	8,50

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with VARIABLE water flow rate.

Electric data

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H																							
Gas R134a																							
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	954,0	1052,0	1180,0	1290,0
	A	A	165,0	190,0	216,0	237,0	274,0	308,0	356,0	378,0	387,0	428,0	418,0	473,0	535,0	616,0	704,0	787,0	864,0	954,0	1357,0	1180,0	1290,0
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1234,0	1357,0	1595,0	1784,0
	A	A	23,0	23,0	23,0	23,0	23,0	23,0	23,0	507,0	23,0	560,0	23,0	676,0	742,0	897,0	1009,0	1203,0	1359,0	1234,0	1052,0	1595,0	1784,0

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

Model performance data (°) - for condensing temperatures up to 55°C

Model output data - model WFI° - AE - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: °										
Cooling performance 12 °C / 7 °C - gas R134a (1)										
Cooling capacity	kW	261,4	307,5	351,6	393,3	441,4	493,3	571,6	642,9	693,1
Input power	kW	68,4	80,8	90,0	100,3	117,7	133,8	145,8	164,9	178,0
Cooling total input current	A	119,0	139,0	152,0	168,0	197,0	222,0	240,0	269,0	292,0
EER	W/W	3,82	3,81	3,91	3,92	3,75	3,69	3,92	3,90	3,89
Evaporator water flow rate	l/h	44906	52830	60402	67574	75833	84756	98206	110455	119091
Pressure drop evaporator side	kPa	31	36	37	21	27	20	28	36	21
Length of refrigerant lines from/to 0 - 10 m										
Gas line (C1)	Ø	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	603,1	688,5	797,4	899,3	1008,4	1169,8	1287,8	1439,2	1558,1	1742,4	1896,4	2110,0
Input power	kW	152,9	171,4	198,1	229,9	259,8	287,4	323,9	364,6	386,3	431,2	481,0	540,3
Cooling total input current	A	261,4	292,5	330,2	380,6	424,7	476,4	532,4	600,3	631,3	709,7	792,6	891,2
EER	W/W	3,94	4,02	4,03	3,91	3,88	4,07	3,98	3,95	4,03	4,04	3,94	3,91
Evaporator water flow rate	l/h	103615	118287	137003	154508	173247	200980	221262	247268	267705	299365	325826	362526
Pressure drop evaporator side	kPa	43	35	29	22	25	35	25	31	35	43	39	24
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model output data - model WFI° - °E - gas R134a

Size		6703	7203	8403	9603
Model: °					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1515,4	1689,7	1833,1	2021,9
Input power	kW	387,7	429,0	481,0	541,3
Cooling total input current	A	633,0	713,0	793,0	893,0
EER	W/W	3,91	3,94	3,81	3,74
Evaporator water flow rate	l/h	260358	290307	314947	347392
Pressure drop evaporator side	kPa	37	40	29	35
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model performance data (H) - for condensing temperatures up to 60°C

Model output data - model WFIH - AE - gas R134a

Size		1101	1251	1401	1601	1801	2101	2401	2801	3201
Model: H										
Cooling performance 12 °C / 7 °C - gas R134a (1)										
Cooling capacity	kW	260,1	304,6	351,5	393,7	432,7	485,1	579,1	638,3	697,1
Input power	kW	65,4	76,0	88,4	97,7	111,1	123,1	143,8	158,6	176,5
Cooling total input current	A	113,0	129,0	148,0	162,0	180,0	200,0	235,0	257,0	290,0
EER	W/W	3,98	4,01	3,98	4,03	3,89	3,94	4,03	4,02	3,95
Evaporator water flow rate	l/h	44694	52328	60399	67637	74335	83339	99495	109670	119762
Pressure drop evaporator side	kPa	31	35	37	21	26	19	29	36	21
Length of refrigerant lines from/to 0 - 10 m										
Gas line (C1)	Ø	54,0	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	602,3	690,5	794,5	897,8	1009,4	1177,8	1297,5	1436,1	1566,5	1750,8	1908,3	2101,3
Input power	kW	147,9	170,4	193,3	218,4	248,4	284,6	324,0	361,7	383,8	424,1	485,5	536,4
Cooling total input current	A	256,5	291,2	322,9	358,5	412,8	473,1	536,1	602,7	646,0	707,3	806,6	899,1
EER	W/W	4,07	4,05	4,11	4,11	4,06	4,14	4,01	3,97	4,08	4,13	3,93	3,92
Evaporator water flow rate	l/h	103477	118635	136501	154254	173418	202354	222930	246737	269151	300804	327864	361031
Pressure drop evaporator side	kPa	43	35	29	22	25	36	26	31	36	44	40	24
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Model output data - model WFIH - °E - gas R134a

Size			6703	7203	8403	9603
Model: H						
Cooling performance 12 °C / 7 °C - gas R134a (1)						
Cooling capacity		kW	1524,4	1698,4	1844,7	2016,4
Input power		kW	383,7	425,2	483,3	533,7
Cooling total input current		A	645,8	709,0	803,3	895,1
EER		W/W	3,97	3,99	3,82	3,78
Evaporator water flow rate		l/h	261912	291802	316947	346444
Pressure drop evaporator side		kPa	38	40	29	35
Length of refrigerant lines from/to 0 - 10 m						
Gas line (C1)		Ø	76,0	88,9	88,9	88,9
Gas line (C2)		Ø	76,0	88,9	88,9	88,9
Gas line (C3)		Ø	76,0	88,9	88,9	88,9
Liquid line (C1)		Ø	54,0	54,0	54,0	54,0
Liquid line (C2)		Ø	54,0	54,0	54,0	54,0
Liquid line (C3)		Ø	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

GENERAL TECHNICAL DATA

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Compressor																							
Type	°,A	type	Screw																				
Compressor regulation	°,A	Type	I	I	I	I	I	I	I	I+1	I	I+1	I	1+I	1+I	1+I	1+I	1+I	1+I	2+I	2+I	2+I	2+I
Number	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Circuits	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Refrigerant	°,A	type	R134a																				
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
	A	kg	59,0	57,0	72,0	66,0	61,0	85,0	81,0	50,0	110,0	53,0	104,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
	A	kg	-	-	-	-	-	-	-	50,0	-	53,0	-	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 3 (1)	°,A	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
System side heat exchanger																							
Type	°,A	type	Shell and tube																				
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Type	Grooved joints																				
Source side heat exchanger																							
Type	°,A	type	Shell and tube																				
Number	°,A	no.	1	1	1	1	1	1	1	2	1	2	1	2	2	2	2	2	2	3	3	3	3
Connections (in/out)	°,A	Type	Grooved joints																				

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Sound data calculated with functioning in cooling mode - R134a gas

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H																							
Standard equipment																							
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99,5	100,6	101,0	102,0
	A	dB(A)	94,0	95,8	96,1	97,0	97,1	97,2	97,3	97,3	97,3	97,7	98,0	98,8	98,8	98,9	98,9	99,3	100,0	99,5	100,6	101,0	102,0
Silenced equipment																							
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	94,4	94,6	94,6	94,9
	A	dB(A)	86,1	88,0	88,2	89,1	89,2	89,3	89,3	89,5	89,3	90,0	89,8	91,6	91,9	92,7	92,4	92,5	92,6	94,4	94,6	94,6	94,9
Super silenced equipment																							
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	91,5	91,6	91,6	91,9
	A	dB(A)	83,1	85,0	85,3	86,2	86,3	86,4	86,3	86,5	86,4	87,0	86,8	88,6	89,0	89,7	89,5	89,6	90,0	91,5	91,6	91,6	91,9

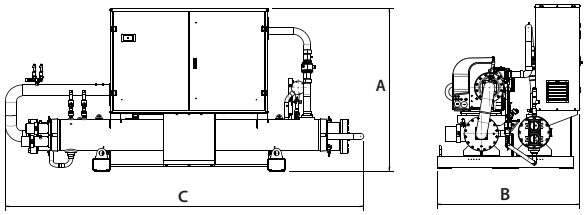
(1) Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: °																							
Standard equipment																							
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	99,2	98,9	100,0	100,5
	A	dB(A)	94,0	95,8	96,1	97,0	97,1	97,2	97,3	96,9	97,3	97,4	98,0	97,9	98,0	98,8	98,8	98,6	98,9	99,2	98,9	100,0	100,5
Silenced equipment																							
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92,3	91,3	92,8	93,0
	A	dB(A)	86,1	88,0	88,2	89,1	89,2	89,3	89,3	89,3	89,3	89,6	89,8	90,3	90,5	91,5	91,1	91,2	91,3	92,3	91,3	92,8	93,0
Super silenced equipment																							
Sound power level (1)	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	89,4	88,4	89,8	90,0
	A	dB(A)	83,1	85,0	85,3	86,2	86,3	86,4	86,3	86,3	86,4	86,7	86,8	87,4	87,5	88,5	88,1	88,2	88,8	89,4	88,4	89,8	90,0

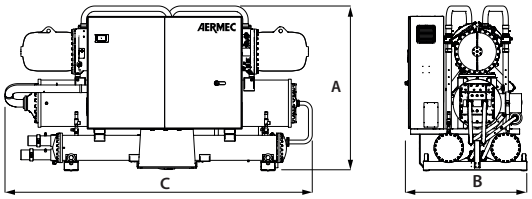
(1) Sound power: calculated in agreement with the Standard UNI EN ISO 9614-2, in compliance with that requested by Eurovent certification.

DIMENSIONS

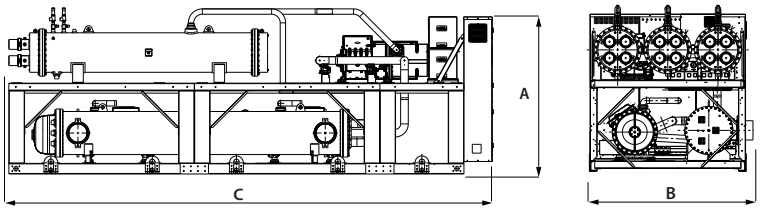
1101 - 3201



2502 - 6402



6703 - 9603



Unit dimensions and weights °/H in standard configuration

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H, °																							
Dimensions and weights - standard configuration																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1510	1560	1610	1610	1610	1610	1610	1645	1630	1600	1630	1675	1675	1685	1875	1900	1950	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4380	4380	4395	4500	4580	4580	5650	5650	5650	5650
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8740	9680	9900	10000
	A	kg	2020	2030	2230	2410	2450	2670	3090	3710	3530	3980	3570	5160	5220	5710	6440	6680	6770	9730	11440	11980	12060

Unit dimensions and weights °/H in silenced configuration

Size			1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Model: H, °																							
Dimensions and weights - quiet configuration																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1525	1560	1610	1610	1610	1615	1615	1645	1630	1600	1630	1675	1675	1685	1875	1900	1950	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4630	4630	4600	5015	5060	5060	5650	6840	6840	6840
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9270	10240	10510	10610
	A	kg	2180	2190	2390	2570	2610	2830	3280	4020	3720	4290	3760	5500	5560	6050	6810	7080	7170	10260	12000	12590	12670
Super silenced equipment dimensions and weights																							
A	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2250	2250	2250	2250
	A	mm	1720	1790	1865	1865	1865	1887	1887	2131	1920	2131	1920	2195	2195	2340	2455	2440	2432	2250	2250	2250	2250
B	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	2200	2200	2200
	A	mm	1525	1560	1610	1610	1610	1615	1615	1645	1630	1600	1630	1675	1675	1685	1875	1900	1950	2200	2200	2200	2200
C	°	mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5650	5650	5650	5650
	A	mm	3460	3463	3585	4100	4100	4140	4240	4320	4290	4345	4290	4630	4630	4600	5015	5060	5060	5650	5650	5650	5650
Empty weight	°	kg	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9890	10890	11230	11330
	A	kg	2370	2380	2580	2760	2800	3020	3500	4400	3940	4670	3980	5910	5970	6460	7240	7550	7640	10880	12650	13310	13390

■ *For the sizes of D-T-E versions please contact the factory.*

Aermec reserves the right to make any modiÿcations deemed necessary.
All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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WFN

Water cooled heat pump reversible water side

Cooling capacity 182 ÷ 2349 kW
Heating capacity 205 ÷ 2610 kW

- **Production of hot water up to 55°C.**
- **Production of negative chilled water down to -8°C.**



DESCRIPTION

Units for internal installation offering chilled/hot water, designed to mit air conditioning needs in residential/commercial complexes or industrial applications.
Compact and flexible, perfect alignment to the requested load thanks to an accurate control algorithm.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.

VERSIONS

° Standard
A High efficiency

FEATURES

Operating field

Production of chilled water up to 16 °C of water produced on the evaporator side, but also suitable for use in heat pump mode with condenser water temperature up to 55 °C.

With option Z (double electronic expansion valve) the unit is capable to produce chilled water temperature from -8°C up to 10°C.

Mono, bi-tri circuit unit

Unit with 2-3 refrigerant circuits designed to provide maximum efficiency at full load, ensuring high efficiency at partial loads also and ensuring continuity in case one of the circuits stops.
They are equipped with screw compressors and system and source side shell and tube heat exchangers with R134a refrigerant.
The R513A (XP10) refrigerant with this type of gas is also available on the configurator. On average, the units have a yield > 2% and an EER < 3% compared to the same size with R134a.
For further details refer to the technical documentation or to the Magellano selection program.

Electronic expansion valve

The possibility to use electronic expansion valve, offers significant benefits, especially when the chiller is working with partial loads, increasing the energy efficiency of the unit. Standard for all sizes.

CONTROL PCO_5

Microprocessor adjustment, with 4.3", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.
Adjustment includes complete management of the alarms and their log.
The possibility to controll several units in Master - Slave parallel mode up to a maximum of 4 compressors.
The presence of a programmable timer allows functioning time periods and a possible second set-point to be set.
The temperature control takes place with the integral proportional logic, based on the water output temperature.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 2: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AER485P1 x n° 3: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
PGD1: Allows you to control the unit at a distance.
AVX: Spring anti-vibration supports.

FACTORY FITTED ACCESSORIES

RIF: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ISG: Insulation kit for condensers. Mandatory accessory for machine functioning in heat pump; standard in units with desuperheater or with heat recovery.

ACCESSORIES COMPATIBILITY

Model	Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
AER485P1	A	•	•	•	•	•	•	•	•	•	•		•		•										
AER485P1 x n° 2 (1)	A											•		•		•	•	•	•	•	•				
AER485P1 x n° 3 (1)	°,A																					•	•	•	•
AERBACP	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERNET	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°																					•	•	•	•
	A	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) x Indicates the quantity of accessories to match.

Antivibration

Version	Set-up	Heat recovery	0701	0801	0901	1101	1251
°	°, K, L	°, D, T	-	-	-	-	-
A	°, K, L	°	AVX680	AVX680	AVX680	AVX681	AVX681
A	°, K, L	D, T	-	-	-	-	-

Version	Set-up	Heat recovery	1401	1601	1801	2101	2401
°	°, K, L	°, D, T	-	-	-	-	-
A	°	°	AVX681	AVX682	AVX682	AVX683	AVX683
A	K	°	AVX688	AVX683	AVX683	AVX683	AVX683
A	L	°	AVX681	AVX682	AVX685	AVX683	AVX683
A	°, K, L	D, T	-	-	-	-	-

Version	Set-up	Heat recovery	2502	2801	2802	3201	3202
°	°, K, L	°, D, T	-	-	-	-	-
A	°	°	AVX673	AVX683	AVX674	AVX683	AVX679
A	K	°	Contact us.	AVX686	Contact us.	AVX686	Contact us.
A	L	°	AVX674	AVX683	AVX674	AVX683	AVX678
A	°	D	AVX674	-	AVX674	-	AVX679
A	°	T	AVX674	-	AVX674	-	AVX678
A	L	D, T	AVX674	-	AVX674	-	AVX678
A	K	D, T	Contact us.	-	Contact us.	-	Contact us.

Version	Set-up	Heat recovery	3602	4202	4802	5602	6402
°	°, K, L	°, D, T	-	-	-	-	-
A	°	°, D	AVX679	AVX678	AVX678	AVX678	AVX678
A	K	°, D, T	Contact us.	Contact us.	Contact us.	Contact us.	Contact us.
A	°	T	AVX678	AVX678	AVX678	AVX678	AVX678
A	L	°, D	AVX678	AVX678	AVX678	AVX678	AVX678
A	L	T	AVX678	AVX678	AVX676	AVX676	AVX676

Version	Set-up	Heat recovery	6703	7203	8403	9603
°	°, K, L	°, D, T	Contact us.	Contact us.	Contact us.	Contact us.
A	°, K, L	°, D, T	Contact us.	Contact us.	Contact us.	Contact us.

- not available

Power factor correction

Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801
A	RIFWFN0701	RIFWFN0801	RIFWFN0901	RIFWFN1101	RIFWFN1251	RIFWFN1401	RIFWFN1601	RIFWFN1801	RIFWFN2101	RIFWFN2401	RIFWFN2502	RIFWFN2801

A grey background indicates the accessory must be assembled in the factory

Ver	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	-	-	RIFWFN6703	RIFWFN7203	RIFWFN8403	RIFWFN9603
A	RIFWFN2802	RIFWFN3201	RIFWFN3202	RIFWFN3602	RIFWFN4202	RIFWFN4802	RIFWFN5602	RIFWFN6402	RIFWFN6703	RIFWFN7203	RIFWFN8403	RIFWFN9603

A grey background indicates the accessory must be assembled in the factory

Isolating kit

Ver	0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2502	2801	2802	3201	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ISG5	ISG5	ISG6	ISG6
A	ISG10	ISG10	ISG10	ISG10	ISG11	ISG12	ISG13	ISG13	ISG14	ISG14	ISG1	ISG15	ISG1	ISG15	ISG2	ISG2	ISG2	ISG3	ISG3	ISG3	ISG7	ISG8	ISG8	ISG8

A grey background indicates the accessory must be assembled in the factory

CONFIGURATOR

Field		Description
1,2,3		**WFN**
4,5,6,7		**Size** 0701, 0801, 0901, 1101, 1251, 1401, 1601, 1801, 2101, 2401, 2502, 2801, 2802, 3201, 3202, 3602, 4202, 4802, 5602, 6402, 6703, 7203, 8403, 9603
8		**Model**
	°	Heat pump reversible on the water side
9		**Version**
	°	Standard (1)
	A	High efficiency
10		**Operating field**
	X	Electronic thermostatic expansion valve (2)
	Z	Double electronic thermostatic for low temperature (3)
11		**Set-up**
	K	Super silenced
	L	Silenced with hood
	°	Standard
12		**Heat recovery**
	D	With desuperheater (4)
	T	With total recovery (4)
	°	Without heat recovery

Field		Description
13		**Evaporator**
	E	Evaporating unit
	°	Standard
14		**Power supply**
	2	230V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit (5)
	4	230V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit (5)
	5	500V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit
	8	400V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit
	9	500V/3/50Hz with magnet circuit breakers on compressors and auxiliary circuit (5)
	°	400V/3/50Hz with fuses on compressors and magnet circuit breakers on auxiliary circuit (5)
15		**Refrigerant gas**
	G	R513A (XP10)
	°	R134a

(1) Only for sizes from 6703 to 9603
(2) Water produced from 0 °C ÷ 16 °C
(3) Water produced from -8 °C up to 10 °C
(4) Not available for the condenserless "E"
(5) The 230V and 500V power supplies are only available for sizes 0701 - 0801 - 0901 - 1101 - 1251 - 1401 - 2502 - 2802

PERFORMANCE SPECIFICATIONS

WFN 0701 - 3201 - version A - gas R134a

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	182,1	207,2	232,9	295,9	322,1	370,3	448,8	504,1	579,3	655,9	719,6	788,4
Input power	kW	35,2	40,2	45,6	55,9	60,5	68,8	83,9	95,0	106,4	120,6	136,6	149,7
Cooling total input current	A	63,0	71,0	79,0	91,0	104,0	120,0	138,0	156,0	170,0	200,0	223,0	248,0
EER	W/W	5,18	5,16	5,11	5,30	5,32	5,38	5,35	5,31	5,45	5,44	5,27	5,27
Water flow rate system side	l/h	31347	35658	40063	50900	55401	63688	77171	86683	99596	112777	123733	135542
Pressure drop system side	kPa	40	46	46	40	40	41	28	35	27	37	45	27
Water flow rate source side	l/h	37125	42261	47577	60109	65418	75101	91161	102491	117368	132862	146434	160587
Pressure drop source side	kPa	37	37	34	44	37	33	33	33	33	34	33	32
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	204,8	230,6	262,5	327,5	358,1	410,4	494,2	556,2	639,5	733,2	796,8	879,7
Input power	kW	44,4	50,8	57,8	70,4	76,6	87,1	104,0	118,2	131,8	150,4	169,5	188,1
Heating total input current	A	78,0	88,0	98,0	113,0	130,0	149,0	170,0	191,0	209,0	246,0	272,0	308,0
COP	W/W	4,61	4,54	4,54	4,65	4,68	4,71	4,75	4,70	4,85	4,87	4,70	4,68
Water flow rate system side	l/h	35533	40021	45575	56858	62177	71260	85815	96600	111065	127339	138391	152791
Pressure drop system side	kPa	34	33	31	40	33	29	30	29	30	31	29	29
Water flow rate source side	l/h	47178	52944	60295	75577	82711	94940	114197	128417	148521	170834	184231	202358
Pressure drop source side	kPa	90	101	103	88	89	91	61	78	61	85	101	60

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFN 2502 - 9603 - version A - gas R134a

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)													
Cooling capacity	kW	652,3	746,8	905,7	1024,5	1164,3	1325,5	1446,9	1589,7	1721,1	1960,7	2149,5	2349,3
Input power	kW	121,4	137,8	167,7	189,5	213,7	242,9	270,4	296,6	317,6	359,9	406,3	445,4
Cooling total input current	A	208,0	239,0	275,0	310,0	341,0	401,0	447,0	493,0	509,0	598,0	667,0	739,0
EER	W/W	5,37	5,42	5,40	5,41	5,45	5,46	5,35	5,36	5,42	5,45	5,29	5,28
Water flow rate system side	l/h	112179	128411	155723	176117	200144	227870	248717	273259	295856	337027	369472	403784
Pressure drop system side	kPa	51	41	38	29	33	45	32	38	83	55	51	30
Water flow rate source side	l/h	132175	151199	183520	207646	235653	268115	293728	322600	348857	396964	437212	478412
Pressure drop source side	kPa	49	50	49	49	50	49	48	46	34	32	32	36
Heating performance 40 °C / 45 °C (2)													
Heating capacity	kW	726,4	828,1	1001,4	1138,6	1283,2	1459,8	1589,2	1809,3	1911,8	2159,8	2376,5	2610,0
Input power	kW	154,8	174,8	209,3	234,9	264,8	302,9	332,5	371,1	396,0	450,7	504,3	547,7
Heating total input current	A	260,0	298,0	339,0	381,0	418,0	492,0	545,0	606,0	624,0	733,0	812,0	900,0
COP	W/W	4,69	4,74	4,78	4,85	4,85	4,82	4,78	4,88	4,83	4,79	4,71	4,77
Water flow rate system side	l/h	126142	143812	173923	197757	222889	253571	276062	314312	332129	375231	412895	453465
Pressure drop system side	kPa	45	45	44	45	45	44	43	44	31	28	28	32
Water flow rate source side	l/h	168271	191878	232387	264585	298364	339696	368017	421779	444410	502013	549582	603144
Pressure drop source side	kPa	114	92	85	65	73	101	70	91	97	122	112	66

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

WFN 6703 - 9603 - version ° - gas R134a

Size		6703	7203	8403	9603
Cooling performance 12 °C / 7 °C (1)					
Cooling capacity	kW	1691,1	1925,6	2120,1	2310,0
Input power	kW	322,4	364,9	407,2	452,6
Cooling total input current	A	505,0	594,0	660,0	733,0
EER	W/W	5,00	5,00	5,00	5,00
Water flow rate system side	l/h	290696	330989	364406	397041
Pressure drop system side	kPa	46	52	39	46
Water flow rate source side	l/h	343740	390980	431894	471655
Pressure drop source side	kPa	70	70	58	69
Heating performance 40 °C / 45 °C (2)					
Heating capacity	kW	1885,5	2129,2	2348,8	2575,2
Input power	kW	401,0	454,4	501,6	558,6
Heating total input current	A	619,0	728,0	803,0	893,0
COP	W/W	5,00	5,00	5,00	5,00
Water flow rate system side	l/h	327527	369895	408061	447398
Pressure drop system side	kPa	64	63	52	62
Water flow rate source side	l/h	436659	493020	542047	593071
Pressure drop source side	kPa	105	115	86	103

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Date 14511:2022; Water user side 40 °C / 45 °C; Water source side 10 °C / 7 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Refrigerant gas: °														
SEER - 12/7 (EN14825: 2018) . refrigerant gas R134a (1)														
SEER	°	W/W	-	-	-	-	-	-	-	-	-	-	-	-
	A	W/W	6,64	6,87	6,80	6,55	6,76	6,83	6,79	6,85	6,94	6,94	6,62	6,75
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	-	-	-	-
	A	%	262,60	271,70	269,00	259,00	267,50	270,00	268,40	270,90	274,50	274,50	261,70	267,10

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Refrigerant gas: °														
SEER - 12/7 (EN14825: 2018) . refrigerant gas R134a (1)														
SEER	°	W/W	-	-	-	-	-	-	-	-	6,85	7,02	6,98	6,88
	A	W/W	7,06	7,19	7,07	7,23	7,24	7,18	7,01	7,14	7,37	7,44	7,31	7,34
Seasonal efficiency	°	%	-	-	-	-	-	-	-	-	270.8%	277.7%	276.2%	272.3%
	A	%	279.5%	284.6%	279.8%	296.3%	286.5%	284.3%	277.3%	282.4%	291.9%	294.5%	289.5%	290.4%

(1) Calculation performed with VARIABLE water flow rate and VARIABLE outlet temperature.

Size			0701	0801	0901	1101
Refrigerant gas: °						
UE 813/2013 performance in average ambient conditions (average) - 55 °C - Pdesignh ≤ 400 kW (1)						
Pdesignh	°	kW	-	-	-	-
	A	kW	264,00	294,00	339,00	417,00
SCOP	°	W/W	-	-	-	-
	A	W/W	4,58	4,63	4,55	4,73
ηsh	°	%	-	-	-	-
	A	%	175,00	177,00	174,00	181,00

(1) Efficiencies for average temperature applications (55 °C)

PERFORMANCE SPECIFICATIONS EVAPORATING UNITS

WFN - AE- gas R134a

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Evaporator: E													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	162,7	185,3	208,6	264,5	289,4	331,9	398,9	449,2	519,2	588,2	640,8	701,8
Input power	kW	41,4	47,2	53,8	65,8	71,8	81,7	98,8	111,7	125,2	141,5	158,8	175,4
Cooling total input current	A	74,0	83,0	94,0	109,0	124,0	141,0	164,0	185,0	203,0	236,0	263,0	290,0
EER	W/W	3,93	3,92	3,88	4,02	4,03	4,06	4,04	4,02	4,15	4,16	4,03	4,00
Evaporator water flow rate	l/h	27948	31843	35845	45444	49721	57032	68528	77175	89209	101057	110092	120581
Pressure drop evaporator side	kPa	32	36	37	32	32	33	22	28	22	30	36	21
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	42,0	54,0	54,0	54,0	67,0	67,0	67,0	76,0	76,0	89,0	89,0	89,0
Gas line (C2)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Gas line (C3)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Liquid line (C1)	Ø	28,0	35,0	35,0	35,0	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	-	-	-	-	-	-	-	-	-	-	-	-
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	-	-	-	-

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Evaporator: E													
Cooling performance 12 °C / 7 °C - gas R134a (1)													
Cooling capacity	kW	584,6	668,6	803,3	911,8	1043,5	1186,8	1284,6	1414,9	1544,3	1758,8	1912,5	2076,9
Input power	kW	143,3	163,2	196,5	222,8	249,8	283,2	317,9	349,1	373,7	422,6	474,7	523,3
Cooling total input current	A	246,7	282,2	326,3	368,7	405,5	472,6	525,9	578,3	606,7	705,8	785,6	867,1
EER	W/W	4,08	4,10	4,09	4,09	4,18	4,19	4,04	4,05	4,13	4,16	4,03	3,97
Evaporator water flow rate	l/h	100443	114870	138020	156649	179280	203906	220716	243093	265322	302189	328596	356829
Pressure drop evaporator side	kPa	41	33	30	23	27	36	25	30	35	44	40	23
Length of refrigerant lines from/to 0 - 10 m													
Gas line (C1)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	67,0	67,0	67,0	76,0	76,0	88,9	88,9	88,9	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	-	-	-	-	-	-	-	42,0	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	42,0	42,0	42,0	42,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	-	-	-	-	-	-	-	-	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

WFN - °E - gas R134a

Size		6703	7203	8403	9603
Evaporator: E					
Cooling performance 12 °C / 7 °C - gas R134a (1)					
Cooling capacity	kW	1500,1	1704,7	1830,1	1998,5
Input power	kW	375,4	424,4	474,7	524,9
Cooling total input current	A	609,0	708,0	786,0	869,0
EER	W/W	4,00	4,02	3,86	3,81
Evaporator water flow rate	l/h	257735	292888	314432	343357
Pressure drop evaporator side	kPa	36	41	29	35
Length of refrigerant lines from/to 0 - 10 m					
Gas line (C1)	Ø	76,0	88,9	88,9	88,9
Gas line (C2)	Ø	76,0	88,9	88,9	88,9
Gas line (C3)	Ø	76,0	88,9	88,9	88,9
Liquid line (C1)	Ø	54,0	54,0	54,0	54,0
Liquid line (C2)	Ø	54,0	54,0	54,0	54,0
Liquid line (C3)	Ø	54,0	54,0	54,0	54,0

(1) Service side water 12 °C / 7 °C; Condensing temperature 45 °C

ELECTRIC DATA

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Electric data													
Maximum current (FLA)	A	106,0	119,0	136,0	162,0	183,0	208,0	243,0	275,0	305,0	350,0	389,0	427,0
Peak current (LRA)	A	166,0	195,0	232,0	303,0	317,0	344,0	439,0	468,0	589,0	653,0	808,0	920,0

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Electric data														
Maximum current (FLA)	°	A	-	-	-	-	-	-	-	-	913,0	1050,0	1166,0	1281,0
	A	A	365,0	416,0	486,0	549,0	609,0	700,0	777,0	854,0	913,0	1050,0	1166,0	1281,0
Peak current (LRA)	°	A	-	-	-	-	-	-	-	-	1198,0	1353,0	1585,0	1774,0
	A	A	500,0	552,0	682,0	743,0	894,0	1003,0	1197,0	1347,0	1198,0	1353,0	1585,0	1774,0

GENERAL TECHNICAL DATA

WFN - A

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Compressor													
Type	type	Screw											
Compressor regulation	Type	On-Off											
Number	no.	1	1	1	1	1	1	1	1	1	1	1	1
Circuits	no.	1	1	1	1	1	1	1	1	1	1	1	1
Refrigerant	type	R134a											
Refrigerant load circuit 1 (1)	kg	41,0	41,0	38,0	59,0	57,0	72,0	66,0	61,0	85,0	81,0	110,0	104,0
System side heat exchanger													
Type	type	Shell and tube											
Number	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	Type	Grooved joints											
Sizes (in/out)	Ø	4″	4″	4″	4″	5″	6″	6″	6″	6″	6″	8″	8″
Source side heat exchanger													
Type	type	Shell and tube											
Number	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	Type	Grooved joints											
Sizes (in/out)	Ø	3″	3″	3″	3″	4″	4″	4″	4″	5″	5″	6″	6″

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Compressor														
Type	°,A	type	Screw											
Compressor regulation	°,A	Type	On-Off											
Number	°,A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Circuits	°,A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Refrigerant	°,A	type	R134a											
Refrigerant load circuit 1 (1)	°	kg	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	50,0	53,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 2 (1)	°	kg	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	50,0	53,0	81,0	71,0	70,0	123,0	124,0	121,0	106,0	104,0	110,0	120,0
Refrigerant load circuit 3 (1)	°	kg	-	-	-	-	-	-	-	-	107,0	115,0	136,0	157,0
	A	kg	-	-	-	-	-	-	-	-	106,0	104,0	110,0	120,0
System side heat exchanger														
Type	°,A	type	Shell and tube											
Number	°,A	no.	1	1	1	1	1	1	1	1	1	1	1	1
Connections (in/out)	°,A	Type	Grooved joints											
Sizes (in/out)	°,A	Ø	8"	8"	8"	8"	10"	10"	10"	10"	10"	10"	10"	10"
Source side heat exchanger														
Type	°,A	type	Shell and tube											
Number	°,A	no.	2	2	2	2	2	2	2	2	3	3	3	3
Connections (in/out)	°,A	Type	Grooved joints											
Sizes (in/out)	°	Ø	-	-	-	-	-	-	-	-	5"	5"	6"	6"
	A	Ø	4"	4"	4"	4"	5"	6"	6"	6"	-	-	-	-

(1) The load indicated in the table is an estimated and preliminary value. The final value of the refrigerant load is indicated on the unit's technical label. For further information contact the office.

SOUND DATA

Sound data calculated with functioning in cooling mode - R134a gas

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Set-up: K														
Sound data calculated in cooling mode (1)														
Sound power level	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-
	A	dB(A)	78,0	78,2	77,9	79,8	80,4	80,9	81,1	81,5	84,3	82,6	85,1	84,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Set-up: L														
Sound data calculated in cooling mode (1)														
Sound power level	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-
	A	dB(A)	81,0	81,2	80,9	82,8	83,4	83,9	84,1	84,5	87,3	85,5	88,1	87,5

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Set-up: °														
Sound data calculated in cooling mode (1)														
Sound power level	°	dB(A)	-	-	-	-	-	-	-	-	-	-	-	-
	A	dB(A)	87,7	88,0	87,7	89,1	90,3	91,3	90,5	90,7	93,2	92,5	87,4	84,9

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Set-up: K														
Sound data calculated in cooling mode (1)														
Sound power level	°	dB(A)	-	-	-	-	-	-	-	-	88,1	87,3	89,8	90,3
	A	dB(A)	83,6	83,6	84,5	85,2	86,1	85,6	87,8	88,3	88,1	87,3	89,8	90,3

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Set-up: L														
Sound data calculated in cooling mode (1)														
Sound power level	°	dB(A)	-	-	-	-	-	-	-	-	91,1	90,2	92,8	93,3
	A	dB(A)	86,6	86,6	87,5	88,2	89,1	88,5	90,8	91,3	91,1	90,2	92,8	93,3

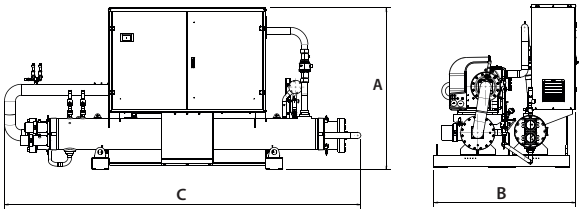
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Set-up: °														
Sound data calculated in cooling mode (1)														
Sound power level	°	dB(A)	-	-	-	-	-	-	-	-	97,0	97,2	99,5	100,0
	A	dB(A)	93,5	94,0	94,0	94,5	95,0	95,5	97,5	98,0	97,0	97,2	99,5	100,0

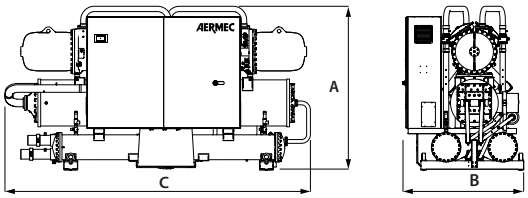
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

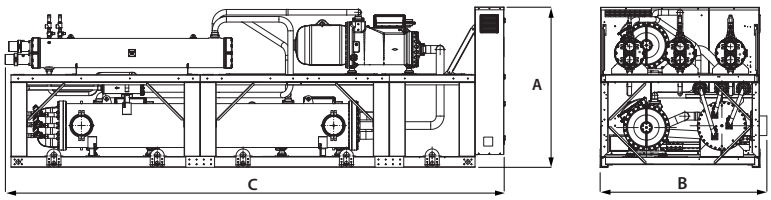
0701 - 3201



2502 - 6402



6703 - 9603



WFN 0701-9603 ver. A

Size		0701	0801	0901	1101	1251	1401	1601	1801	2101	2401	2801	3201
Dimensions and weights - standard configuration													
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	1920	1920
B	mm	1450	1450	1450	1510	1550	1610	1610	1610	1610	1610	1630	1630
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4290	4290
Empty weight	kg	1610	1630	1630	2120	2130	2350	2940	2980	3260	3320	3820	3870
Dimensions and weights - quiet configuration													
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	1920	1920
B	mm	1450	1450	1450	1540	1600	1610	1610	1610	1630	1630	1645	1645
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4290	4290
Empty weight	kg	1770	1790	1790	2280	2290	2510	3120	3170	3450	3510	4030	4080
Super silenced equipment dimensions and weights													
A	mm	1720	1720	1720	1720	1790	1865	1865	1865	1887	1887	1920	1920
B	mm	1450	1450	1450	1540	1600	1610	1610	1610	1630	1630	1645	1645
C	mm	3480	3480	3480	3470	3445	3560	4100	4100	4140	4252	4290	4290
Empty weight	kg	1960	1980	1980	2470	2480	2700	3340	3390	3670	3730	4280	4330

Size		2502	2802	3202	3602	4202	4802	5602	6402	6703	7203	8403	9603
Dimensions and weights - standard configuration													
A	mm	2000	2075	2195	2195	2340	2432	2440	2432	2250	2250	2250	2250
B	mm	1500	1500	1575	1575	1585	1845	1800	1800	2200	2200	2200	2200
C	mm	4320	4345	4380	4380	4395	4535	4605	4605	6840	6840	6840	6840
Empty weight	kg	3810	4100	5690	5750	6300	6670	6970	7070	10320	11670	12270	12360
Dimensions and weights - quiet configuration													
A	mm	2000	2075	2195	2195	2340	2432	2440	2432	2250	2250	2250	2250
B	mm	1500	1500	1575	1575	1585	1845	1800	1800	2200	2200	2200	2200
C	mm	4320	4345	4650	4650	4600	5015	5150	5150	6840	6840	6840	6840
Empty weight	kg	4120	4410	6050	6120	6670	7040	7420	7490	10880	12230	12950	12990
Super silenced equipment dimensions and weights													
A	mm	2000	2075	2195	2195	2340	2432	2440	2432	2250	2250	2250	2250
B	mm	1500	1500	1575	1575	1585	1845	1800	1800	2200	2200	2200	2200
C	mm	4320	4345	4650	4650	4600	5015	5150	5150	6840	6840	6840	6840
Empty weight	kg	4500	4790	6480	6550	7100	7470	7890	7990	11530	12880	13650	13740

WFN 6703-9603 ver. °

Size		6703	7203	8403	9603
Dimensions and weights - standard configuration					
A	mm	2250	2250	2250	2250
B	mm	2200	2200	2200	2200
C	mm	5650	5650	5650	5650
Empty weight	kg	9330	9910	10130	10200
Dimensions and weights - quiet configuration					
A	mm	2250	2250	2250	2250
B	mm	2200	2200	2200	2200
C	mm	5650	5650	5650	5650
Empty weight	kg	9890	10470	10760	10830
Super silenced equipment dimensions and weights					
A	mm	2250	2250	2250	2250
B	mm	2200	2200	2200	2200
C	mm	5650	5650	5650	5650
Empty weight	kg	10540	11120	11510	11580

■ *For the sizes of D-T-E versions please contact the factory.*

■ *For the size of the units with the RIF accessory we ask you to contact the headquarters.*

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WMX

Water-water chiller

Cooling capacity 280,1 ÷ 324,2 kW

- **High efficiency also at partial loads ESEER 8,4**
- **Compact design**
- **Extremely flexible and reliable**



DESCRIPTION

Indoor unit for the production of chilled water, equipped with magnetic levitation centrifugal compressors and system side, flooded source heat exchangers that guarantee a 50% reduction of the refrigerant load in comparison to conventional flooded heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
The technological choices made, always oriented to the highest quality and efficiency can reach 5.71 EER values (class A for the working conditions Eurovent).

EFFICIENCY

A High efficiency
U Very high efficiency
Both units can be silenced.

FEATURES

— 5 times lighter than an equivalent screw compressor.
— Extremely compact wide to allow access through a standard doorway.
— High efficiency with generously sizes heat exchanger.

Two-stage, oil-free centrifugal compressor with latest-generation magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.
Provided with inverter technology that permits capacity modulation down to 30% A version.
Built-in device to reduce starting current (only 6 Amps!)

Operating field

Water produced from 20 °C up to 45 °C on Condenser side and from 5 °C up to 20 °C on Evaporator side.

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

CONFIGURATOR

Field	Description
1,2,3	**WMX**
4,5,6	**Size** 300
7	**Efficiency**
A	High efficiency
U	Very high efficiency
8	**Version**
°	Standard
L	Silenced

PERFORMANCE SPECIFICATIONS

Size			300
Efficiency: A			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	°,L	kW	324,2
Input power	°,L	kW	60,3
Cooling total input current	°,L	A	94,0
EER	°,L	W/W	5,37
Water flow rate system side	°,L	l/h	55761
Pressure drop system side	°,L	kPa	34
Water flow rate source side	°,L	l/h	65750
Pressure drop source side	°,L	kPa	41

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			300
Efficiency: U			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	°,L	kW	280,1
Input power	°,L	kW	48,9
Cooling total input current	°,L	A	78,0
EER	°,L	W/W	5,72
Water flow rate system side	°,L	l/h	48180
Pressure drop system side	°,L	kPa	25
Water flow rate source side	°,L	l/h	56338
Pressure drop source side	°,L	kPa	30

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			300
SEER - 12/7 (EN14825: 2018) (1)			
SEER	A	W/W	8,99
	U	W/W	9,04
Seasonal efficiency	A	%	356,6%
	U	%	358,5%
SEPR - (EN 14825: 2018) High temperature (2)			
SEPR	A	W/W	9,70
	U	W/W	10,35

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			300
Efficiency: A, U			
Electric data			
Maximum current (FLA)	°,L	A	135,0
Peak current (LRA)	°,L	A	6,0

GENERAL TECHNICAL DATA

Size			300
Efficiency: A, U			
Compressor			
Type	°,L	type	Centrifugal
Compressor regulation	°,L	Type	Inverter
Number	°,L	no.	1
Circuits	°,L	no.	1
Refrigerant	°,L	type	R134a
Source side heat exchanger			
Type	°,L	type	Shell and tube - flooded compact
Number	°,L	no.	1
Connections (in/out)	°,L	Type	Grooved joints
Sizes (in/out)	°,L	Ø	4"
System side heat exchanger			
Type	°,L	type	Shell and tube - flooded compact with Spray system
Number	°,L	no.	1
Connections (in/out)	°,L	Type	Grooved joints
Sizes (in/out)	°,L	Ø	4"

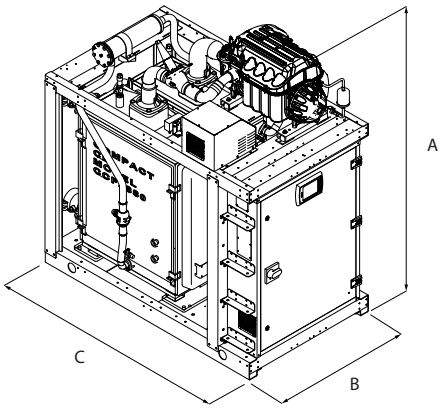
Size			300
Efficiency: A			
Sound data calculated in cooling mode (1)			
Sound power level	°	dB(A)	90,0
	L	dB(A)	84,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			300
Efficiency: U			
Sound data calculated in cooling mode (1)			
Sound power level	°	dB(A)	85,0
	L	dB(A)	78,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			300
Efficiency: A, U			
Dimensions and weights			
A	°	mm	1905
	L	mm	1942
B	°,L	mm	1041
C	°,L	mm	1770
Empty weight	°	kg	2025
	L	kg	2210

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WMG

Water-water chiller

Cooling capacity 282,3 ÷ 312,4 kW

- **High efficiency also at partial loads ESEER 8,4**
- **Compact design**
- **Extremely flexible and reliable**



DESCRIPTION

Indoor unit for the production of chilled water, equipped with magnetic levitation centrifugal compressors and system side, flooded source heat exchangers that guarantee a 50% reduction of the refrigerant load in comparison to conventional flooded heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
The technological choices made, always oriented to the highest quality and efficiency can reach 5.71 EER values (class A for the working conditions Eurovent).

EFFICIENCY

A High efficiency
U Very high efficiency
Both units can be silenced.

FEATURES

— 5 times lighter than an equivalent screw compressor.
— Extremely compact wide to allow access through a standard doorway.
— High efficiency with generously sizes heat exchanger.

HFO R1234ze refrigerant gas

HFO R1234ze is a mixture featuring:
da ODP = 0 e GWP (Global Warming Potential) = 7, R134a GWP = 1430; with thermodynamic properties that guarantee and sometimes improve efficiencies achieved with HFC refrigerants.

Two-stage, oil-free centrifugal compressor with latest-generation magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.
Provided with inverter technology that permits capacity modulation down to 30% A version.
Built-in device to reduce starting current (only 6 Amps!)

Operating field

Water produced from 20 °C up to 55 °C on Condenser side and from 5 °C up to 20 °C on Evaporator side.

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
AERNET: The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 control boards). Also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.

CONFIGURATOR

Field		Description
1,2,3		WMG
4,5,6		Size 300
7		Efficiency
	A	High efficiency
	U	Very high efficiency
8		Version
	°	Standard
	L	Silenced

PERFORMANCE SPECIFICATIONS

Size			300
Efficiency: A			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	°,L	kW	312,4
Input power	°,L	kW	57,6
Cooling total input current	°,L	A	85,0
EER	°,L	W/W	5,42
Water flow rate system side	°,L	l/h	53731
Pressure drop system side	°,L	kPa	31
Water flow rate source side	°,L	l/h	63303
Pressure drop source side	°,L	kPa	36

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			300
Efficiency: U			
Cooling performance 12 °C / 7 °C (1)			
Cooling capacity	°,L	kW	282,3
Input power	°,L	kW	49,1
Cooling total input current	°,L	A	74,0
EER	°,L	W/W	5,75
Water flow rate system side	°,L	l/h	48548
Pressure drop system side	°,L	kPa	25
Water flow rate source side	°,L	l/h	56739
Pressure drop source side	°,L	kPa	29

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size			300
SEER - 12/7 (EN14825: 2018) (1)			
SEER	A	W/W	8,88
	U	W/W	8,91
Seasonal efficiency	A	%	352,0%
	U	%	353,4%
SEPR - (EN 14825: 2018) High temperature (2)			
SEPR	A	W/W	9,96
	U	W/W	10,37

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			300
Efficiency: A, U			
Electric data			
Maximum current (FLA)	°,L	A	150,0
Peak current (LRA)	°,L	A	6,0

GENERAL TECHNICAL DATA

Size			300
Efficiency: A, U			
Compressor			
Type	°,L	type	Centrifugal
Compressor regulation	°,L	Type	Inverter
Number	°,L	no.	1
Circuits	°,L	no.	1
Refrigerant	°,L	type	R1234ze
Source side heat exchanger			
Type	°,L	type	Shell and tube - flooded compact
Number	°,L	no.	1
Connections (in/out)	°,L	Type	Grooved joints
Sizes (in/out)	°,L	Ø	4"
System side heat exchanger			
Type	°,L	type	Shell and tube - flooded compact with Spray system
Number	°,L	no.	1
Connections (in/out)	°,L	Type	Grooved joints
Sizes (in/out)	°,L	Ø	4"

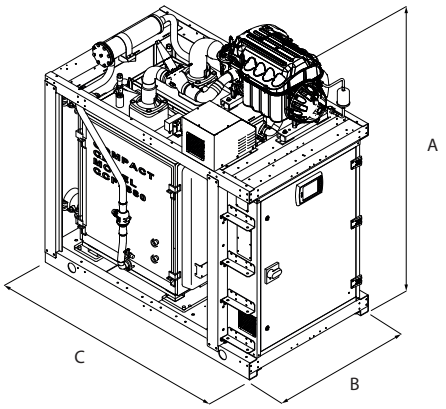
Size			300
Efficiency: A			
Sound data calculated in cooling mode (1)			
Sound power level	°	dB(A)	90,0
	L	dB(A)	85,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			300
Efficiency: U			
Sound data calculated in cooling mode (1)			
Sound power level	°	dB(A)	84,0
	L	dB(A)	78,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS



Size			300
Efficiency: A, U			
Dimensions and weights			
A	°	mm	1905
	L	mm	1942
B	°,L	mm	1041
C	°,L	mm	1770
Empty weight	°	kg	2065
	L	kg	2250

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WTX

Water-water chiller

Cooling capacity 222,9 ÷ 1958,4 kW

- **High efficiency ESEER up to 9**
- **Extended operating range**
- **Possibility of selecting between heat exchangers with 1 or 2 passes on water side**



DESCRIPTION

Indoor unit producing chilled water equiped with magnetic levitation centrifugal compressors and shell & tube heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
The technological choices made always focus on maximum quality and efficiency, thereby achieving EER > 6 values (class A for Eurovent operating conditions).

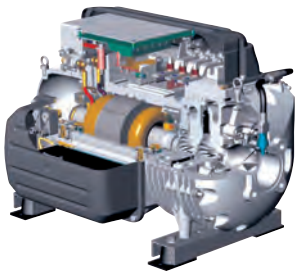
EFFICIENCY

A High efficiency
U Very high efficiency
Both units can be silenced.

FEATURES

Two-stage, oil-free centrifugal compressor with latest-generation magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.
The compressor is equipped with an inverter for continuous load modulation by varying rpm (from 30% to 100%).
Built-in device to reduce starting current (only 6 Amps!)



Operating field

Water produced from 15 °C up to 50 °C on Condenser side and from 5 °C up to 25 °C on Evaporator side.

Flooded Evaporator with subcooler

Subcooler effect
— Superheats compressor gas intake;
— Subcools thermostatic valve fluid intake;
— Increases chiller yield and ensures gas suction from compressor.
Condenser
— With refrigerant on shell side and water on pipe side

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

ACCESSORIES COMPATIBILITY

Model	Ver	1300	1350	2300	2350	3300	3325	3350	4325	4350
AER485P1	A,U	•	•	•	•	•	•	•	•	•
AERBACP	A,U	•	•	•	•	•	•	•	•	•
FL	A,U	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,U	•	•	•	•	•	•	•	•	•

With the MULTICHILLER_EVO accessory, it is necessary to add AER485P1 for each connected unit.

Antivibration

Ver	1300	1350	2300	2350	3300	3325	3350	4325	4350
A, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

CONFIGURATOR

Field	Description
1,2,3	**WTX**
4,5,6,7	**Size** 1300, 1350, 2300, 2350, 3300, 3325, 3350, 4325, 4350
8	**Efficiency**
A	High efficiency
U	Very high efficiency
9	**Exchanger**
1	One pass on water side (1)
2	Two passes on water side
10	**Version**
°	Standard
L	Silenced
11	**Power supply**
°	400V ~ 3 50Hz with circuit breakers on compressors and auxiliary circuit

(1) Option available only for size from 3300 to 4350.

EXCHANGERS

Over-sized tube core exchangers ensure excellent performances at full and partial loads.

Flooded evaporator: with level adjustment through an electronic valve controlled by a level sensor.

Backflow condenser: with refrigerant on shell side and water on tube side.

From size 1300 to 2350, heat exchangers have 2 passes on the water side

Starting from size WTX 3300, heat exchangers are available as versions with one or two passes on the water side, to meet any plant installation requirement. **The dimensions of the two configurations ensure similar performances** (same approach to heat exchangers). **The difference is that the version with two passes on the water side due offers the convenience of water connections all on the same side**, against a generally higher but nonetheless limited drop in pressure compared to the version with one pass on the water side.



PERFORMANCE SPECIFICATIONS

WTX - A

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity		kW	-	-	-	-	1054,4	1214,3	1466,1	1716,2 (2)	1955,0 (2)
Input power		kW	-	-	-	-	211,4	219,9	281,6	315,3	375,1
Cooling total input current		A	-	-	-	-	317,0	356,0	435,0	503,0	580,0
EER		W/W	-	-	-	-	4,99	5,52	5,21	5,44	5,21
Water flow rate system side		l/h	-	-	-	-	181266	208751	252017	294970	336022
Pressure drop system side		kPa	-	-	-	-	32	39	31	24	31
Water flow rate source side		l/h	-	-	-	-	218376	247239	301544	350417	402059
Pressure drop source side		kPa	-	-	-	-	31	38	31	42	31

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Sizes 4325 and 4350 not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity		kW	351,3	488,5	702,8	899,4	1054,3	1215,9	1466,0	1715,9 (2)	1958,4 (2)
Input power		kW	70,8	94,3	141,8	164,1	212,6	220,6	283,8	318,8	380,0
Cooling total input current		A	106,0	145,0	212,0	255,0	317,0	356,0	435,0	503,0	580,0
EER		W/W	4,96	5,18	4,96	5,48	4,96	5,51	5,17	5,38	5,15
Water flow rate system side		l/h	60422	84006	120844	154630	181266	209053	252017	294970	336647
Pressure drop system side		kPa	32	30	40	33	54	77	54	60	82
Water flow rate source side		l/h	72792	100515	145584	183481	218376	247235	301544	350417	402062
Pressure drop source side		kPa	31	33	35	28	28	35	33	41	53

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Sizes 4325 and 4350 not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

WTX - U

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity		kW	-	-	-	-	669,0	869,6	1002,7	1179,6	1336,9
Input power		kW	-	-	-	-	112,2	144,9	166,9	195,3	222,3
Cooling total input current		A	-	-	-	-	180,0	237,0	273,0	316,0	364,0
EER		W/W	-	-	-	-	5,96	6,00	6,01	6,04	6,01
Water flow rate system side		l/h	-	-	-	-	115004	149476	172333	202737	229777
Pressure drop system side		kPa	-	-	-	-	12	18	14	10	14
Water flow rate source side		l/h	-	-	-	-	135049	175273	202156	237660	269542
Pressure drop source side		kPa	-	-	-	-	12	17	13	17	13

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity		kW	222,9	334,1	445,9	559,7	669,0	840,1	1006,1	1191,4	1342,6
Input power		kW	37,5	55,9	75,1	94,3	112,5	140,7	167,2	198,4	223,4
Cooling total input current		A	60,0	91,0	120,0	158,0	180,0	237,0	273,0	316,0	364,0
EER		W/W	5,95	5,98	5,94	5,93	5,95	5,97	6,02	6,01	6,01
Water flow rate system side		l/h	38335	57444	76669	96214	115004	144425	172942	204799	230804
Pressure drop system side		kPa	12	13	16	12	21	32	24	26	37
Water flow rate source side		l/h	45016	67385	90033	113067	135049	169344	202690	240041	270255
Pressure drop source side		kPa	12	14	13	10	10	15	14	18	23

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ENERGY INDICES (REG. 2016/2281 EU)

Size				1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1												
SEER - 12/7 (EN14825: 2018) (1)												
SEER		A	W/W	-	-	-	-	8,25	8,64	8,78	8,76	8,95
		U	W/W	-	-	-	-	9,70	9,54	9,85	9,59	9,92
Seasonal efficiency		A	%	-	-	-	-	326,8%	342,6%	348,2%	347,2%	354,8%
		U	%	-	-	-	-	384,8%	378,4%	390,8%	380,6%	393,7%
SEPR - (EN 14825: 2018) High temperature (2)												
SEPR		A	W/W	-	-	-	-	8,75	9,92	9,33	9,71	9,35
		U	W/W	-	-	-	-	11,80	11,36	11,44	11,49	11,47

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2											
SEER - 12/7 (EN14825: 2018) (1)											
SEER	A	W/W	8,40	8,59	8,19	8,76	8,03	8,34	8,45	8,32	8,39
	U	W/W	9,69	9,07	9,47	9,73	9,54	9,31	9,66	9,28	9,60
Seasonal efficiency	A	%	332,9%	340,6%	324,5%	347,3%	318,1%	330,4%	334,9%	329,8%	332,6%
	U	%	384,4%	359,9%	375,6%	386,3%	378,6%	369,5%	383,5%	368,1%	380,8%
SEPR - (EN 14825: 2018) High temperature (2)											
SEPR	A	W/W	8,26	9,17	8,25	9,70	8,64	9,75	9,17	9,48	9,08
	U	W/W	11,65	11,34	11,62	11,17	11,70	11,20	11,37	11,30	11,31

(1) Calculation performed with FIXED water flow rate and VARIABLE outlet temperature.
(2) Calculation performed with FIXED water flow rate.

ELECTRIC DATA

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Electric data											
Maximum current (FLA)	A,U	A	135,0	210,0	270,0	420,0	405,0	405,0	630,0	630,0	630,0
Peak current (LRA)	A,U	A	6,0	6,0	141,0	216,0	276,0	276,0	426,0	426,0	426,0

GENERAL TECHNICAL DATA

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Compressor											
Type	A,U	type					Centrifugal - Oil Free				
Compressor regulation	A,U	Type					Inverter				
Number	A,U	no.	1	1	2	2	3	3	3	4	4
Circuits	A,U	no.	1	1	1	1	1	1	1	1	1
Refrigerant	A,U	type					R134a				

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1											
System side heat exchanger											
Type	A,U	type	-	-	-	-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	-	-	-	-	1	1	1	1	1
Connections (in/out)	A,U	Type	-	-	-	-	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints
Sizes (in/out)	A,U	Ø	-	-	-	-	6″	10″	10″	6″	8″
Source side heat exchanger											
Type	A,U	type	-	-	-	-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	-	-	-	-	1	1	1	1	1
Connections (in/out)	A,U	Type	-	-	-	-	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints
Sizes (in/out)	A,U	Ø	-	-	-	-	6″	6″	10″	8″	8″

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2											
System side heat exchanger											
Type	A,U	type	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,U	Type	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints
Sizes (in/out)	A,U	Ø	5″	5″	5″	6″	6″	10″	6″	8″	8″
Source side heat exchanger											
Type	A,U	type	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	1	1	1	1	1	1	1	1	1
Connections (in/out)	A,U	Type	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints
Sizes (in/out)	A,U	Ø	5″	5″	6″	6″	6″	6″	8″	8″	8″

SOUND DATA

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Efficiency: A											
Sound data calculated in cooling mode (1)											
Sound power level	°	dB(A)	90,0	91,0	93,0	93,5	96,0	95,5	97,0	98,5	100,0
	L	dB(A)	84,0	85,0	87,0	87,5	90,0	89,5	91,0	92,5	94,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Efficiency: U											
Sound data calculated in cooling mode (1)											
Sound power level	°	dB(A)	87,0	88,0	90,0	88,0	90,0	91,0	94,0	94,0	97,0
	L	dB(A)	81,0	82,0	84,0	82,0	84,0	85,0	88,0	88,0	91,0

(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Efficiency: A											
Sound data calculated in cooling mode (1)											
Sound power level	°	dB(A)	90,0	91,0	93,0	93,5	96,0	95,5	97,0	98,5	100,0
	L	dB(A)	84,0	85,0	87,0	87,5	90,0	89,5	91,0	92,5	94,0

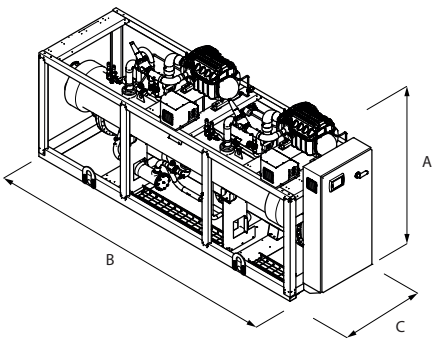
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Efficiency: U											
Sound data calculated in cooling mode (1)											
Sound power level	°	dB(A)	87,0	88,0	90,0	88,0	90,0	91,0	94,0	94,0	97,0
	L	dB(A)	81,0	82,0	84,0	82,0	84,0	85,0	88,0	88,0	91,0

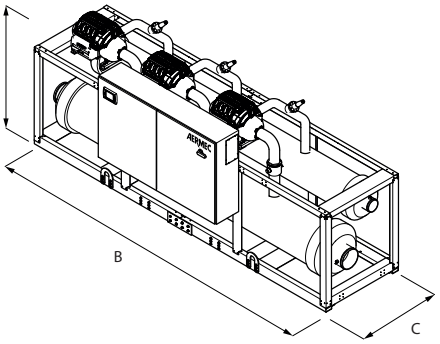
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

WTX 1300 - 2350



WTX 3300 - 4350



Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 1											
Dimensions and weights											
A	A,U	mm	-	-	-	-	1970	2010	2010	2010	2280
B	A,U	mm	-	-	-	-	4966	4966	4966	4966	4966
C	A,U	mm	-	-	-	-	1640	1640	1640	1640	1732
Empty weight	A,U	kg	-	-	-	-	4090	4430	5120	5690	6640
Weight functioning	A,U	kg	-	-	-	-	4430	4810	5620	6250	7450

Size			1300	1350	2300	2350	3300	3325	3350	4325	4350
Exchanger: 2											
Dimensions and weights											
A	A,U	mm	1850	1950	1970	2010	2240	2280	2280	2280	2280
B	A,U	mm	3040	3040	3340	3440	3990	3990	3990	4966	4966
C	A,U	mm	1000	1000	1240	1240	1732	1732	1836	1836	1836
Empty weight	A,U	kg	2190	2370	2770	3390	5440	5730	6630	7200	7380
Weight functioning	A,U	kg	2350	2560	3010	3740	6170	6480	7540	8160	8400

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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WTG

Water-water chiller

Cooling capacity 246,6 ÷ 1959,4 kW

- **Extended operating range**
- **Possibility of selecting between heat exchangers with 1 or 2 passes on water side**



EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

DESCRIPTION

Indoor unit producing chilled water equiped with magnetic levitation centrifugal compressors and shell & tube heat exchangers.
The base, the structure and the panels are made of galvanized steel treated with polyester paint RAL 9003.
The technological choices made always focus on maximum quality and efficiency, thereby achieving EER > 6 values (class A for Eurovent operating conditions).

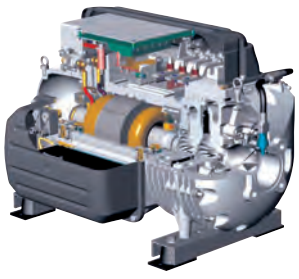
EFFICIENCY

A High efficiency
U Very high efficiency
Both units can be silenced.

FEATURES

Two-stage, oil-free centrifugal compressor with latest-generation magnetic levitation

Oil-free operation without mechanical friction it is possible thanks to the use of magnetic levitation bearings that also ensure the total absence of vibration and low frequency noise.
The compressor is equipped with an inverter for continuous load modulation by varying rpm (from 30% to 100%).
Built-in device to reduce starting current (only 6 Amps!)



Operating field

Water produced from 15 °C up to 50 °C on Condenser side and from 5 °C up to 25 °C on Evaporator side.

Flooded Evaporator

Evaporator
— Low charge content
Condenser
— With refrigerant on shell side and water on pipe side

Acoustic chiller enclosure (option)

in galvanised sheet metal of suitable thickness insulated on the inside with sound-proofing material.

CONTROL

Microprocessor adjustment, with 7", touch screen keyboard, which allows to navigate intuitively among the various screens, allowing to modify the operating parameters and graphically view the progress of some variables in real time and the ad adjustment includes complete management of the alarms and their log.

ACCESSORIES

AER485P1: RS-485 interface for supervising systems with MODBUS protocol. 1 accessory is provided for each unit control board.
AERBACP: Ethernet communication interface for Bacnet/IP, Modbus TCP/IP, SNMP protocols. 1 accessory is provided for each unit control board.
FL: Flow switch.
MULTICHILLER-EVO: Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel (max. no. 9), always ensuring constant flow rate to the evaporators.
AVX: Spring anti-vibration supports.

ACCESSORIES COMPATIBILITY

Model	Ver	1310	1490	2310	2490	3310	3400	3490	4400	4490
AER485P1	A,U	•	•	•	•	•	•	•	•	•
AERBACP	A,U	•	•	•	•	•	•	•	•	•
FL	A,U	•	•	•	•	•	•	•	•	•
MULTICHILLER-EVO	A,U	•	•	•	•	•	•	•	•	•

■ *With the MULTICHILLER_EVO accessory, it is necessary to add AER485P1 for each connected unit.*

Antivibration

Ver	1310	1490	2310	2490	3310	3400	3490	4400	4490
A, U	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)	AVX. (1)

(1) Contact us.

CONFIGURATOR

Field	Description
1,2,3	**WTG**
4,5,6,7	**Size** 1310, 1490, 2310, 2490, 3310, 3400, 3490, 4400, 4490
8	**Version**
A	High efficiency
U	Very high efficiency
9	**Exchanger**
1	One pass on water side
2	Two passes on water side
10	**Set-up**
L	Silenced
°	Standard
11	**Power supply**
°	400V ~ 3 50Hz with circuit breakers on compressors and auxiliary circuit
12	**Refrigerant gas**
°	R1234ze

EXCHANGERS

Over-sized tube core exchangers ensure excellent performances at full and partial loads.

Flooded evaporator: with level adjustment through an electronic valve controlled by a level sensor.

Backflow condenser: with refrigerant on shell side and water on tube side.

■ *From size 1310 to 2490, heat exchangers have 2 passes on the water side*

Starting from size WTG 3310, heat exchangers are available as versions with one or two passes on the water side, to meet any plant installation requirement. **The dimensions of the two configurations ensure similar performances** (same approach to heat exchangers). **The difference is that the version with two passes on the water side due offers the convenience of water connections all on the same side**, against a generally higher but nonetheless limited drop in pressure compared to the version with one pass on the water side.



PERFORMANCE SPECIFICATIONS

WTG - A

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 1											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity		kW	-	-	-	-	1049,5	1199,4	1409,4	1679,3 (2)	1955,0 (2)
Input power		kW	-	-	-	-	194,3	202,4	245,0	286,4	334,3
Cooling total input current		A	-	-	-	-	310,0	324,0	389,0	457,0	532,0
EER		W/W	-	-	-	-	5,40	5,93	5,75	5,86	5,85
Water flow rate system side		l/h	-	-	-	-	180402	206174	242254	288643	336022
Pressure drop system side		kPa	-	-	-	-	24	32	27	29	28
Water flow rate source side		l/h	-	-	-	-	213103	240238	283553	336857	392518
Pressure drop source side		kPa	-	-	-	-	23	23	24	27	19

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Sizes 4400 and 4490 not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 2											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity		kW	349,7	469,7	699,6	899,3	1049,3	1199,2	1409,2	1679,2 (2)	1958,5 (2)
Input power		kW	66,4	81,4	132,2	158,8	196,5	204,4	248,0	290,2	339,1
Cooling total input current		A	106,0	130,0	211,0	250,0	310,0	324,0	389,0	457,0	532,0
EER		W/W	5,27	5,77	5,29	5,66	5,34	5,87	5,68	5,79	5,78
Water flow rate system side		l/h	60134	80751	120268	154630	180402	206174	242254	288643	336647
Pressure drop system side		kPa	24	14	22	50	45	49	40	44	46
Water flow rate source side		l/h	71250	94518	142500	181033	213103	240238	283553	336857	393148
Pressure drop source side		kPa	23	18	23	32	33	32	42	47	39

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C
(2) Sizes 4400 and 4490 not included in the EUROVENT certification programme because Cooling capacity > 1500 kW

WTG - U

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 1											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity		kW	-	-	-	-	736,7	869,6	999,1	1159,6	1336,9
Input power		kW	-	-	-	-	120,2	140,2	153,5	186,2	211,9
Cooling total input current		A	-	-	-	-	205,0	233,0	254,0	311,0	349,0
EER		W/W	-	-	-	-	6,13	6,20	6,51	6,23	6,31
Water flow rate system side		l/h	-	-	-	-	126626	149476	171729	199301	229777
Pressure drop system side		kPa	-	-	-	-	12	17	14	14	13
Water flow rate source side		l/h	-	-	-	-	147066	173222	197868	230962	265867
Pressure drop source side		kPa	-	-	-	-	16	22	18	19	18

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 2											
Cooling performance 12 °C / 7 °C (1)											
Cooling capacity		kW	246,4	334,3	492,9	669,8	736,6	869,5	999,1	1159,5	1342,8
Input power		kW	40,1	50,9	80,1	105,5	120,7	140,3	154,1	187,0	212,7
Cooling total input current		A	69,0	85,0	137,0	173,0	205,0	233,0	254,0	311,0	349,0
EER		W/W	6,15	6,57	6,16	6,35	6,10	6,20	6,48	6,20	6,31
Water flow rate system side		l/h	42371	57462	84741	115160	126626	149476	171729	199301	230804
Pressure drop system side		kPa	12	7	11	28	22	26	20	21	22
Water flow rate source side		l/h	49186	66178	98371	132989	147066	173222	197868	230962	266902
Pressure drop source side		kPa	11	9	11	17	16	16	20	22	18

(1) Date 14511:2022; Water user side 12 °C / 7 °C; Water source side 30 °C / 35 °C

ELECTRIC DATA

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Electric data											
Maximum current (FLA)	A,U	A	150,0	217,0	300,0	434,0	450,0	651,0	651,0	868,0	868,0
Peak current (LRA)	A,U	A	6,0	6,0	156,0	223,0	306,0	440,0	440,0	657,0	657,0

GENERAL TECHNICAL DATA

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Compressor											
Type	A,U	type					Centrifugal - Oil Free				
Compressor regulation	A,U	Type					Inverter				
Number	A,U	no.	1	1	2	2	3	3	3	4	4
Circuits	A,U	no.	1	1	1	1	1	1	1	1	1
Refrigerant	A,U	type					R1234ze				

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 1											
System side heat exchanger											
Type	A,U	type	-	-	-	-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	-	-	-	-	1	1	1	1	1
Source side heat exchanger											
Type	A,U	type	-	-	-	-	Shell and tube	Shell and tube	Shell and tube	Shell and tube	Shell and tube
Number	A,U	no.	-	-	-	-	1	1	1	1	1

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 2											
System side heat exchanger											
Type	A,U	type					Shell and tube				
Number	A,U	no.	1	1	1	1	1	1	1	1	1
Source side heat exchanger											
Type	A,U	type					Shell and tube				
Number	A,U	no.	1	1	1	1	1	1	1	1	1

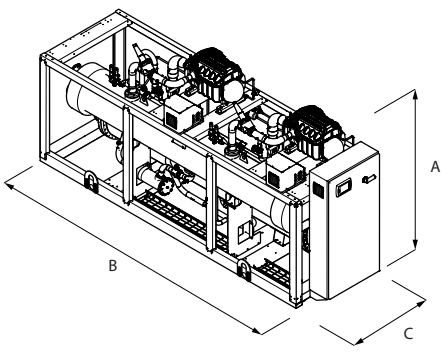
SOUND DATA

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Set-up: °											
Sound data calculated in cooling mode (1)											
Sound power level	A	dB(A)	89,0	91,0	92,0	94,0	94,0	93,0	96,0	94,0	97,0
	U	dB(A)	86,0	88,0	89,0	91,0	91,0	93,0	93,0	94,0	94,0

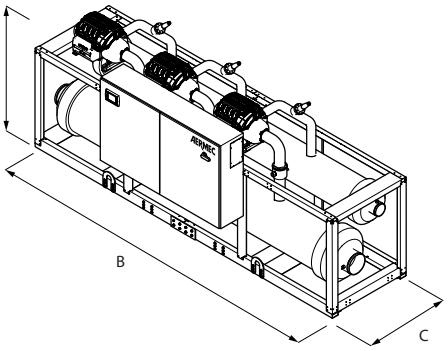
(1) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification. Sound pressure (cold functioning) measured in free field, 10m away from the unit external surface (in compliance with UNI EN ISO 3744).

DIMENSIONS

WTG 1310 - 2490



WTG 3310 - 4490



Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 1											
Dimensions and weights											
A	A,U	mm	-	-	-	-	2010	2010	2010	2280	2280
B	A,U	mm	-	-	-	-	4966	4966	4966	4966	4966
C	A,U	mm	-	-	-	-	1640	1640	1640	1732	1732

Size			1310	1490	2310	2490	3310	3400	3490	4400	4490
Exchanger: 2											
Dimensions and weights											
A	A,U	mm	1850	1970	2010	2280	2280	2280	2280	2280	2280
B	A,U	mm	3040	3040	3340	4390	3990	3990	4966	4966	4966
C	A,U	mm	1000	1240	1240	1332	1732	1836	1836	1836	1836

Aermec reserves the right to make any modiÿcations deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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