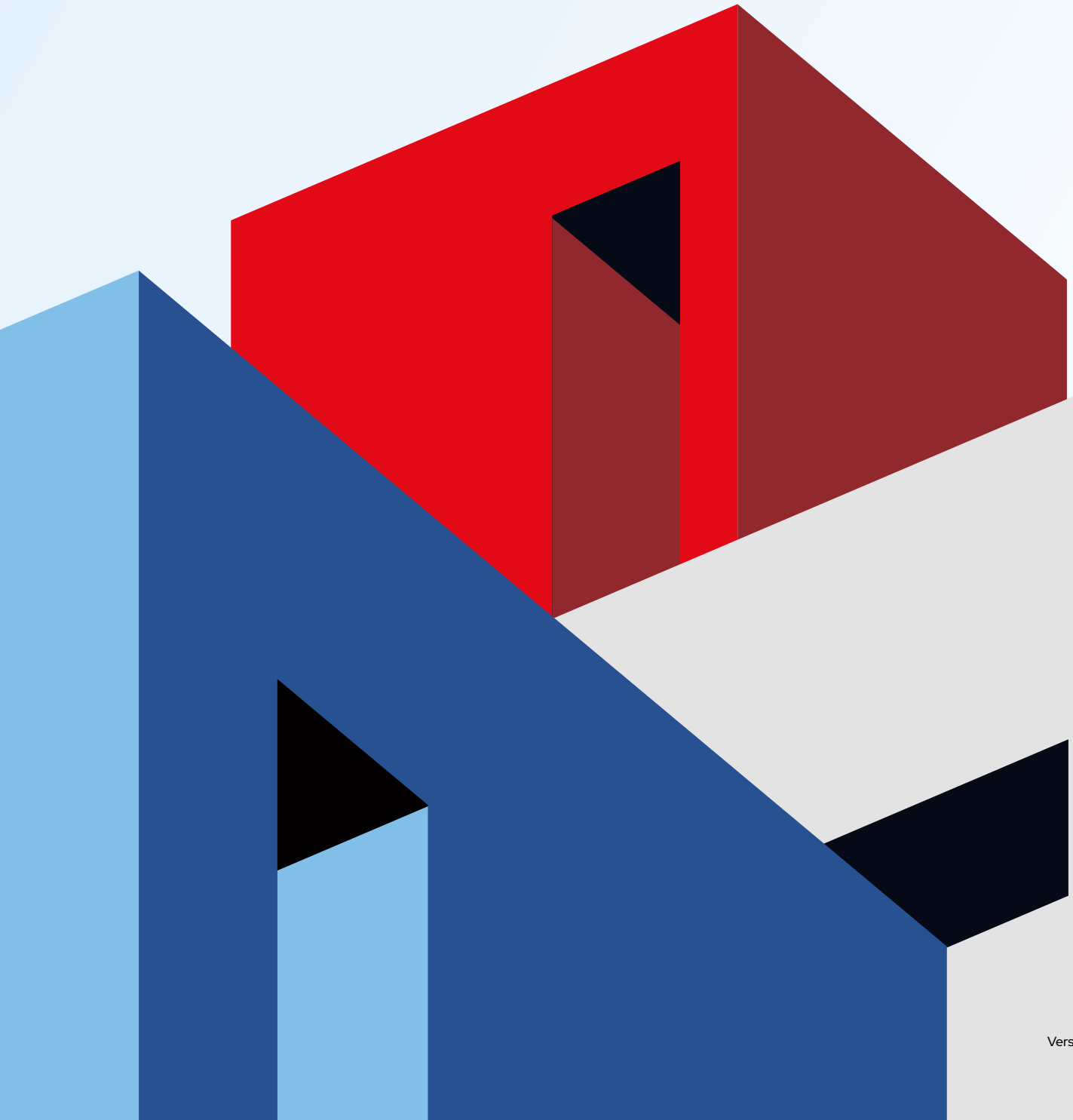
MAXA HEATING & COOLING

General Catalogue 2026

Residential, Commercial, Industrial



Version 26.01

Index

Inverter Heat Pumps & Chillers

R290 10

i-290 0106÷0118 10
i-290 0121÷0127 17
i-290 0240÷0250 23

R32 30

i-32V5 30
i-32V5C Midi 38
i-32V5H Midi 43
ACT 49
ACT 120/220 51
i-HPV5H 53

Storage Tanks, DHW Cylinders & Instantaneous DHW Heaters

Puffroller & PuffrollerOut 84
B-Puffroller 86
Caddy 88
Barrel 90
Hybridroller 92
Hydrofull 94
Aqua Speedy 99

On/Off Heat Pumps & Chillers

R290 NEW 100

HWA2-A 0270÷04170 102
HWA2-AH 0270÷04170 109

Heat Pump & Chiller Controls/Supervisors

e-Pro 142
e-Lite 143
Hi-TV415 144
i-CR2 145
Connect Box 146
Maxa Das 147

Hydronic Terminals

Controls for hydronic terminals 148
Grimper Fan 153
VE: VMI, VMF, OMP, OMI 157
VE: VII, VIF, OIP, OII 161
MI A3 174
HCA1 - HCA1/4 176
HCN 179
HCNP 182
HCNA 187

A clear vision, a solid path
Technology and innovation for over 30 years

At Maxa, we design, build, and distribute heating and air conditioning systems with a clear goal in mind: to offer solutions that improve people's comfort and contribute to a more sustainable future.
This is not just a statement of intent, but the mission that has guided every decision we have made since the company was founded.

Founded in 1992 thanks to the entrepreneurial intuition of Luciano Tredicesimo Ferroli, Maxa has grown to become one of the top five Italian companies in the production of heat pumps. A journey built on innovation, quality, and strategic vision.
Today, under the leadership of his sons Paolo, David, and Simone, Maxa continues to evolve, maintaining its original values and focusing on cutting-edge technologies, Made in Italy production, and attention to the environment.

Every day, our team works passionately to develop solutions that combine energy efficiency, comfort, and sustainability, responding to the needs of a constantly changing market.

1992

The Beginnings

In 1992, the MAXA project began, entering the residential air conditioning sector, which was in its infancy at the time.
The first warehouse and workshop is inaugurated in Villanova di San Bonifacio.
Growth continues thanks to the economic development of the air conditioning market, and in 2004 we become a joint-stock company.

2005

The Expansion

Since 2005, the decision has been made to expand sales activities abroad, thus beginning a process of growth that has led Maxa to become a well-known brand on international markets.

2010

Our production

In 2010, the first production line for 5 to 15 kW inverter heat pumps was opened, riding the first signs of renewal in the heating market with alternative products to boilers, and supported by the possibility of exploiting new environmentally friendly technologies.
Since 2011, Maxa has been equipped with an M1 climate chamber for testing units with up to 100 kW of cooling capacity on chillers and heat pumps.

2016

The expansion

A process of growth and expansion began in Maxa's production department, leading us in 2016, following the construction of the fifth line, to develop the production of heat pumps up to 115 kW.
All this makes it necessary to expand the company and build a new 7,100 m² factory, in addition to the existing 7,800 m².

2024

Innovation

In 2019, we inaugurated eight production lines.
In 2023, three new lines of heat pumps using R290 gas were introduced and the new M2 climate chamber was inaugurated for in-depth performance testing.
In 2024, the historic payoff line "Air Conditioning" is replaced with the more appropriate and modern "Heating and Cooling."
The reason for the change lies in the need to further strengthen our identity as a Made in Italy manufacturer in the heating and cooling sector.

2025

The New Plant

At the beginning of 2025, work began on the construction of a new 7,100 m² facility, which will house the new logistics center and electronics production laboratories. The expansion of the facility represents a concrete step toward the future.

Innovation, Performance, Reliability
Our commitment to the future of air conditioning

With a vision focused on excellence and sustainability, we design and manufacture solutions for residential, commercial, industrial, and tertiary air conditioning.

Thanks to a department **Research & Development** At the cutting edge, our product range is among the most comprehensive and competitive in Europe, offering increasingly efficient and sustainable technologies.

What truly sets us apart is our production capacity. We have:

- **8 production lines** dedicated to the production of inverter heat pumps, designed to respond flexibly and quickly to market demands;
- **2 climate-controlled rooms** (M1 and M2) capable of testing units up to 800 kW, ensuring maximum precision in performance verification. A strategic asset that allows us to confidently declare what our products are capable of doing.

A strategic investment in the future

Our headquarters in Arcole covers a total area of 42,000 square meters, housing offices, a 7,000-square-meter warehouse for storing finished products and spare parts, and a 7,800-square-meter production area that houses our eight production lines.

Between 2025 and 2026, this industrial hub will undergo a major expansion: an additional 6,600 square meters will be added to further enhance production and logistics capacity.
A strategic investment that not only strengthens our operational efficiency, but also allows us to respond more quickly and flexibly to market needs, integrate new technologies, and consolidate our role as a leader in the HVAC sector.

The expansion of the plant represents a concrete step towards the future, with the aim of guaranteeing quality, innovation, and constant availability of our products.

Maxa constantly invests in quality control through modern testing procedures and advanced monitoring systems to ensure maximum performance, efficiency and reliability of all HVAC units.
Among the main Eurovent *(Verification of certificate validity: www.eurovent-certification.com)*, EHPA, HP Keymark, ISO 9001:2015, Heat Pump Austria.

i-290 Inverter Heat Pumps

Efficiency, Comfort and Environmental Sustainability

Solutions that maximize energy efficiency for heating, cooling, and domestic hot water production, ensuring a high level of environmental sustainability.
The use of **natural refrigerant R290** enables high performance with full respect for the environment, ensuring comfort and energy savings in residential, commercial and industrial applications.
The range is designed to adapt to diverse application contexts: **14 models** are available, with capacities from **6 to 50 kW**, offering versatility, reliability, and tailored performance.

78°C

Maximum water supply temperature up to 78°C, guaranteed on a continuous basis.

-20/+46°C

Perfect for any climate thanks to the wide operating range from -20°C to +46°C.

350 kW

Single units of 6 to 50 kW which, when configured in cascade, can reach a maximum of 350 kW.

A+++

Energy efficiency class up to A+++.

GWP = 0,02

R290 eco-friendly gas with very low climate impact, for sustainable applications.

Design

Unique design and modern aesthetics facilitate architectural integration in every context.

Made In Italy

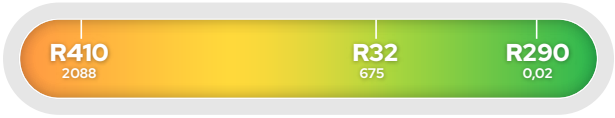
Range conceived, designed and produced by Maxa in the Arcole plant (Italy).

Easy Plug

All components have been arranged to facilitate the installation operations as much as possible.

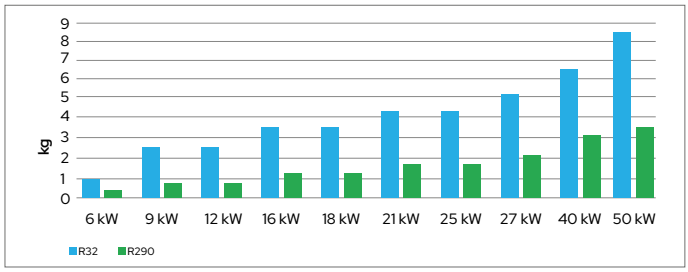
Maximum respect for the environment

The eco-friendly gas R290, with an extremely low GWP of just 0.02 (Global Warming Potential), drastically reduces environmental impact compared to traditional gases, delivering a concrete improvement in environmental sustainability. This means that the environmental impact of R290 gas on global warming is very low.



Reduced refrigerant charge

The i-290 heat pumps ensure a significantly reduced refrigerant charge compared to traditional R32 solutions. For the same heating capacity, the amount of R290 required is considerably lower, with values that remain limited even in the higher-capacity models.



High level of safety

The i-290 heat pumps guarantee high safety standards. In sizes from 0106 to 0127, the use of **antispark components** always ensures safe operation of the heat pump. In the larger sizes, 0240 and 0250, the use of **leak detection sensors**, installed directly inside the heat pumps, determines their overall safety.

The i-290 heat pumps up to size 0127 are also equipped as standard with a **air separator** that continuously removes any air and gas present in the hydraulic circuit.
The internal filter creates turbulence, promoting the separation of micro-bubbles, which are then automatically expelled by a float valve. This component improves efficiency, reduces noise and extends the service life of the system.

Ease of Installation

The heat pumps in the i-290 range are designed for quick and straightforward commissioning. Thanks to the hydraulic connections located at the rear of the heat pump, where the electrical service terminal blocks are also positioned, installation and commissioning are significantly simplified.

Solution suitable for every system

The i-290 range can be perfectly and rapidly integrated both into new buildings and in combination with existing systems, allowing highly efficient operation with both radiant underfloor systems and traditional systems with high-temperature water. Numerous accessories and configurations make it possible to customize the equipment of each heat pump.

Assured performance all year round

The indispensable comfort ensured by domestic water systems, and the resulting increase in demand for domestic hot water, are perfectly met by i-290 technology, which confirms and extends the application range of heat pumps designed for this purpose. The i-290 range makes it possible to produce technical hot water under any outdoor temperature condition, from +46°C down to -20°C.

i-290 0106÷0118

Monobloc inverter air-to-water reversible heat pump with R290

6 kW÷18 kW

The latest evolution of MAXA's full inverter heat pump technology uses the eco-friendly refrigerant gas R290. This new evolutionary step further simplifies the design of systems fully managed by the heat pump alone. In fact, thanks to the 75°C maximum water temperature achievable with the i-290 range, application on systems requiring high supply temperatures is also very straightforward. Finally, the direct replacement of existing systems that previously operated with combustion appliances is very manageable.

MADE IN ITALY

R290 REFRIGERANT 0.02 GWP

75°C OUTLET WATER Supply Temperature

A+++ ENERGY EFFICIENCY CLASS

WI-FI AS STANDARD WITH e-PRO CONTROL

CASCADE MANAGEMENT FOR UP TO 7 UNITS

MODBUS AVAILABLE AS STANDARD

FULL INVERTER SYSTEM

SILENCED VERSION

COIL ANTICORROSION TREATMENT

Construction Features

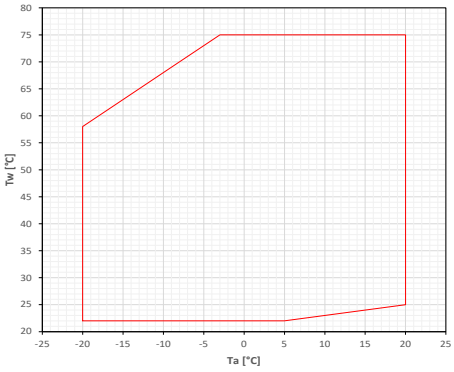
- Proprietary control system with microcontroller-based regulation, superheat control logic via electronic expansion valve.
- Compressor: Twin Rotary DC inverter.
- Fans: axial type with brushless DC motor.
- Source heat exchanger: finned coil with copper tubes and aluminum fins with hydrophilic coating.
- User plate heat exchanger with AISI 304 stainless steel brazed plates, featuring low pressure drop on the water side.
- Refrigerant circuit made of copper tubing, including: condensing pressure control, electronic thermostatic valve, reversing valve, high-pressure switch, liquid separator, pressure tapping point, bidirectional metal mesh filters, high- and low-pressure transducers.
- Integrated hydraulic circuit with high-efficiency variable-speed brushless circulator, flow meter, deaerator with air vent valve, 3-bar overpressure valve, and system filling and drain cock.
- The SL version ensures reduced sound emissions, particularly with regard to standard EN12102-1:2022. The reduction of the sound power level under A7/W55 conditions is between 2 and 4 dB(A).

Logics and Controls:

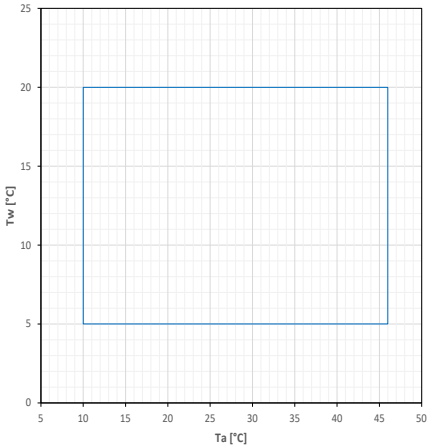
- All units can operate in three different modes: heating, cooling, and domestic hot water, with specific programs that maximize performance in all conditions, including optional control via climatic compensation curve.
- The i-290 series units are capable of managing mixing valves, diverting valves and secondary-side circulation pumps; they are also able to control the solar thermal system, any integration with external heat sources, and integration with external Home/Building Automation or Home Automation systems.
- ModBus RTU available as standard.
- All units in the i-290 series (0106/0118) are supplied as standard with the e-Pro wired controller, providing complete control of the heat pump both locally and remotely via connectivity, once connected to the Wi-Fi network.
- Thanks to the MyMaxa app, you can associate one or more MAXA heat pump installations with your user profile and thus obtain full remote control of them.

Operating Areas

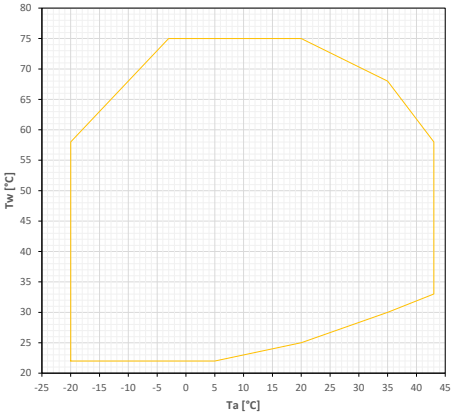
Hot



Cold



DHW



Tw: water temperature - Ta: outdoor air temperature

Accessories

Factory-installed

- **KA** - Antifreeze kit (heat exchanger + base) – includes the use of a self-heating cable that is glued to the base of the unit near the condenser coil, and a PET heater positioned on the plate heat exchanger face.
- **KA3** - Antifreeze kit (base only) - provides exclusively for the use of a self-heating cable that is applied to the base of the unit near the condensing coil.
- **TR2** - Anti-corrosion treatment for coils – thanks to the treatment, the coil becomes flexible to withstand thermal expansion and contraction, mechanically resistant, protected against UV rays and dirt-repellent. Heat transfer losses are very limited. The treatment ensures coil protection in virtually all environmental conditions: from coastal to rural areas, from industrial to urban zones. The treatment withstands 6000 h according to ASTM B117.
- **TR2C4** - Anti-corrosion treatment on coil and sheet metal – includes a TR2-type treatment on the coil and, in addition, the hot-dip galvanized steel panels are painted so as to make them suitable for unit installation in C4H environments, in accordance with UNI EN 12944. The external fastening hardware is made of AISI 304 material, class A2. The treatment also includes the fan protection grille, while the galvanized sheets inside the unit (electrical panel casing and inductances) are excluded.
- **RP** - Coil protective grilles – wire mesh to prevent foreign objects from entering the coil and to protect the coil from accidental contact with objects or people.

Provided separately

- **SAS** - Domestic hot water probe / Remote system probe – in some system configurations (e.g. heat pump in parallel with the boiler on the same hydronic circuit and diverter valve for boiler exclusion), it may be necessary to enable a system temperature probe so that the unit controller can correctly manage the operation. The remote system probe controls the heat pump temperature only during the compressor start-up phase; shutdown is managed by the probe located on the heat pump flow line.
- **SPS** - Solar panel probe for GI3 – probe required to measure the temperature of the solar panels when the unit is integrated with a solar thermal system.
- **AG** - Anti-vibration kit – designed to prevent transmission of vibrations to the structure; must be installed under the unit, in the dedicated mounting holes.
- **VRC** - Condensate drip tray – galvanized sheet metal container to be installed at the base of the unit for collecting condensate water.
- **FY** - Y-strainer – contains a stainless steel mesh screen (500 µm filtration) that collects solid materials present in the water. Filtration prevents blockage and/or damage to the devices installed downstream of the strainer. Alternatively, it is possible to install a dirt separator that ensures a filtration level not greater than 1 mm (in this case, it is no longer necessary to install the Y-strainer).
- **FD** - Dirt separator – allows the heavier impurities present in the hydraulic circuit to be stopped and retained, as they are captured by a synthetic filter mesh and collected in a settling chamber. A magnetic device located inside the body of the dirt separator also makes it possible to trap ferromagnetic particles.
- **VDIS2** - Diverting valve – 3-way motorized ball valve DN (1"1/4) Kvs 19.2, 1" ½ MMM connections, complete with actuator.
- **ACT** - Technical storage tank (see dedicated section).
- **VSA** - Anti-freeze thermal discharge valve – a valve capable of opening at 0°C to prevent ice formation inside the pipes.
- **RP** - Coil protection grilles – wire mesh to prevent foreign objects from entering the coil and to protect the coil from accidental contact with objects or people (supplied as a separate accessory and to be installed by the installer).
- **e-LITE**** - Color touch-screen wired controller, which can be used as a remote keypad for the heat pump, as it replicates the functions of the on-board unit display. It is equipped with local temperature sensing and time scheduling.
- **Hi-TV415**** - Color touchscreen wired remote controller for centralized management of a chiller/heat pump cascade, for up to 7 units.
- **Connect Box**** - Wi-Fi communication gateway for the Maxa Connect App.
- **GI3**** - External system management module - enables management of the following functions: recirculation pump control, plant-side mixing valve control, solar thermal integration control.
- **ISK**** - USB/RS485 serial converter – interface device capable of reading and writing control registers via the RS485 standard and converting them to a USB port that can be connected to any supervision system.
- **LNC**** - LAN-Wi-Fi router – device that allows the unit to be connected to a local network via Ethernet cable or Wi-Fi coverage for remote monitoring.
- **OVPN**** - 3G LAN-Wi-Fi router with VPN tunnel – device that allows the unit to be connected remotely with an industrial router using the secure OPENVPN service.

** Accessories not usable simultaneously

e-PRO
Wi-Fi multifunction remote controller
STANDARD

e-LITE
Multifunction remote controller
ACCESSORY

Hi-TV415
Touch screen remote controller for cascade management (max 7 units)
ACCESSORY

			0106	0109	0109 T **	0112
Cooling	Cooling capacity (1)	kW	5,43	8,57	8,57	10,7
	Power input (1)	kW	1,95	2,77	2,77	3,75
	EER (1)	W/W	2,79	3,09	3,09	2,85
	Cooling capacity (2)	kW	5,62	9,15	9,15	12,6
	Power input (2)	kW	1,25	1,93	1,93	2,83
	EER (2)	W/W	4,48	4,75	4,75	4,44
	SEER (5)	W/W	4,77	5,41	5,41	4,72
	Water flow rate (1)	L/s	0,26	0,40	0,40	0,49
	Pressure drops in the heat exchanger on the user side (1)	kPa	7,8	5,1	5,1	7,5
	Nominal available head (1)	kPa	65,7	57,3	57,3	81,2
Heating	Heating capacity (3)	kW	6,24	9,07	9,07	12,6
	Input power (3)	kW	1,31	1,99	1,99	2,61
	COP (3)	W/W	4,76	4,56	4,56	4,83
	Heating capacity (4)	kW	5,97	8,74	8,74	11,6
	Power input (4)	kW	1,91	2,85	2,85	3,60
	COP (4)	W/W	3,12	3,07	3,07	3,22
	Heating capacity (12)	kW	4,50	7,93	7,93	8,52
	Power input (12)	kW	1,61	2,66	2,66	3,01
	COP (12)	W/W	2,81	2,98	2,98	2,84
	Heating capacity (11)	kW	5,87	9,05	9,05	12,0
	Power input (11)	kW	2,29	3,40	3,40	4,60
	COP (11)	W/W	2,57	2,66	2,66	2,62
	SCOP (6)	W/W	4,74	5,07	5,07	4,71
	Water flow rate (3)	L/s	0,29	0,44	0,44	0,58
	Pressure drops in the user-side heat exchanger (3)	kPa	9,6	6,2	6,2	10,5
	Nominal useful head (3)	kPa	63,6	53,0	53,0	79,5
	Energy efficiency water 35°C / 55°C	Class	A+++/A++	A+++/A+++	A+++/A+++	A+++/A++
Compressor	Type		Twin Rotary DC Inverter			
	Refrigerant oil (type)	A	PZ46M	PZ46M	PZ46M	PZ46M
	Number of compressors	no.	1	1	1	1
	Oil charge (quantity)	L	0,45	0,52	0,52	0,90
Refrigerant	Type		R290			
	Refrigerant charge (7)	kg	0,43	0,75	0,75	1,00
	Refrigerant quantity in tonnes of CO_2 equivalent (7)	Ton	0,000009	0,000015	0,000015	0,000020
	Design pressure (high/low) heat pump mode	bar	30,3/0,3	30,3/0,3	30,3/0,3	30,3/0,3
	Design pressure (high/low) chiller mode	bar	30,3/2	30,3/2	30,3/2	30,3/2
Outdoor zone fans	Type		Brushless DC Motor			
	Number	no.	1	1	1	2
Internal heat exchanger	Internal heat exchanger type		Plate type			
	No. of indoor heat exchangers	no.	1	1	1	1
	Water content	L	0,94	1,69	1,69	1,69
Hydraulic circuit	Water content of the hydronic circuit	L	2,2	2,2	2,2	3,7
	Maximum water-side pressure	bar	3	3	3	3
	Hydraulic connections	inch	G1"	G1"	G1"	G1"
	Minimum water volume (8)	L	65	95	95	125
	Maximum circulator power	kW	0,095	0,095	0,095	0,14
	Maximum absorbed current of circulator	A	0,7	0,7	0,7	1,2
Sound data	Sound power level Lw (9)	dB(A)	57	57	57	59
	Sound pressure at 1 m distance Lp1 (10)	dB(A)	42	43	43	44
	Sound pressure at 10 m distance Lp10 (10)	dB(A)	26	27	27	28
Sound data SL version	Sound power level Lw (9)	dB(A)	55	55	55	57
	Sound pressure at 1 m distance Lp1 (10)	dB(A)	40	40	40	42
	Sound pressure at 10 m distance Lp10 (10)	dB(A)	24	26	26	26
Electrical data	Power supply		230V/1/50Hz		400V/3/50Hz	230V/1/50Hz
	Maximum absorbed power	kW	2,9	4,4	4,4	5,1
	Maximum absorbed current	A	14,4	21,4	6,7	25,8
	Maximum power input with antifreeze kit	kW	3,0	4,6	4,6	5,3
	Maximum current draw with antifreeze kit	A	15,0	22,0	7,3	26,4

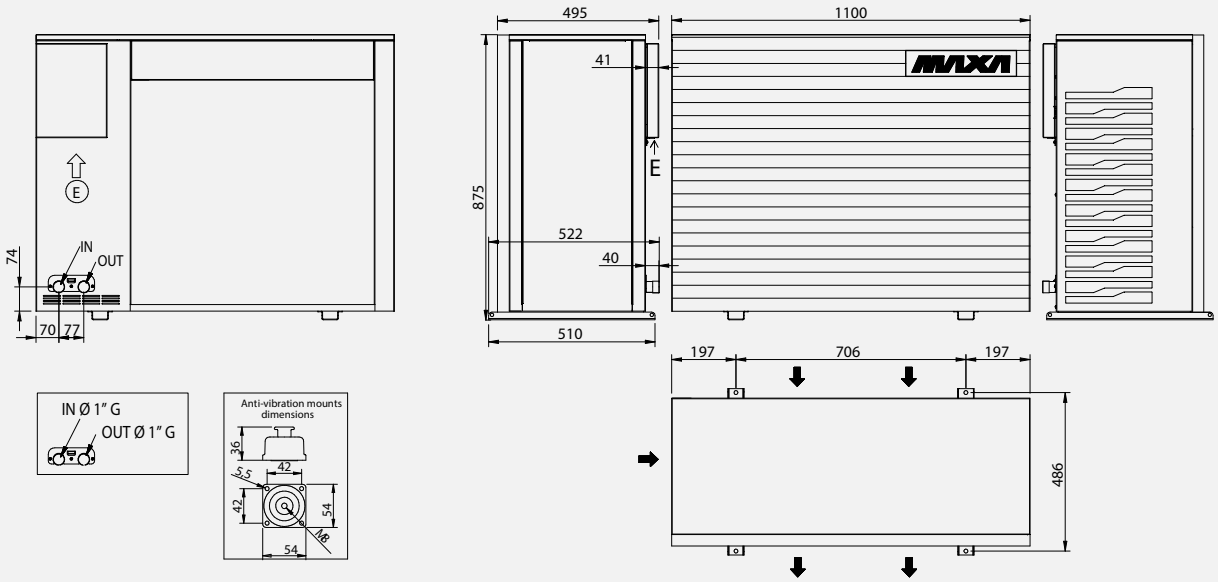
(1) Cooling: outdoor air temperature 35 °C; inlet/outlet water temperature 12/7 °C.
(2) Cooling: outdoor air temperature 35 °C; inlet/outlet water temperature 23/18 °C.
(3) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; inlet/outlet water temperature 30/35 °C.
(4) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; water inlet/outlet temp. 47/55 °C.
(5) Cooling: low temperature, variable output, constant flow rate.
(6) Heating: average climate conditions; Tbiv = -7 °C; low temperature, variable output, constant flow rate.
(7) Indicative data, subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) Calculated for a 10 °C decrease in system water temperature with a defrost cycle lasting 6 minutes.
(9) Sound power: heating mode according to EN 12102:2022 Annex A; value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1, in compliance with Eurovent certification requirements.
(10) Sound pressure: value calculated from the sound power level in condition (9) using standard UNI EN ISO 3744:2010.
(11) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; inlet/outlet water temperature 55/65 °C.
(12) Heating: outdoor air temperature -7 °C d.b. -8 °C w.b.; water inlet/outlet temp. 30/35 °C.
** Preliminary data. Available from: summer 2026

			0112 T **	0114 **	0115	0118
Cooling	Cooling capacity (1)	kW	10,7	11,60	12,4	13,8
	Power input (1)	kW	3,92	3,60	3,71	4,34
	EER (1)	W/W	2,73	3,22	3,35	3,16
	Cooling capacity (2)	kW	12,2	11,7	12,9	13,9
	Power input (2)	kW	2,93	2,40	2,40	2,69
	EER (2)	W/W	4,16	4,88	5,37	5,18
	SEER (5)	W/W	4,56	4,93	5,02	5,04
	Water flow rate (1)	L/s	0,49	0,55	0,57	0,66
	Pressure drops in the heat exchanger on the user side (1)	kPa	7,5	10,6	11,7	16,0
	Nominal available head (1)	kPa	81,2	85,0	79,7	73,5
Heating	Heating capacity (3)	kW	12,3	14,8	16,3	18,7
	Input power (3)	kW	2,67	3,06	3,30	4,05
	COP (3)	W/W	4,61	4,84	4,94	4,62
	Heating capacity (4)	kW	11,3	13,7	15,2	17,4
	Power input (4)	kW	3,70	5,10	4,52	5,32
	COP (4)	W/W	3,05	3,17	3,37	3,27
	Heating capacity (12)	kW	8,68	10,7	12,94	12,56
	Power input (12)	kW	3,02	3,49	4,44	4,38
	COP (12)	W/W	2,87	3,07	2,91	2,88
	Heating capacity (11)	kW	12,3	13,3	14,7	16,7
	Power input (11)	kW	4,75	5,10	5,17	6,04
	COP (11)	W/W	2,59	2,58	2,83	2,76
	SCOP (6)	W/W	4,63	4,91	4,85	4,76
	Water flow rate (3)	L/s	0,58	0,71	0,78	0,87
	Pressure drops in the user-side heat exchanger (3)	kPa	10,5	17,4	22,0	27,8
	Nominal useful head (3)	kPa	79,5	77,2	66,8	59,8
	Energy efficiency water 35°C / 55°C	Class	A+++/A++	A+++/A++	A+++/A++	A+++/A++
Compressor	Type		Twin Rotary DC Inverter			
	Refrigerant oil (type)	A	VG60	VG60	PZ46M	PZ46M
	Number of compressors	no.	1	1	1	1
	Oil charge (quantity)	L	0,9	0,9	0,9	0,9
Refrigerant	Type		R290			
	Refrigerant charge (7)	kg	1,00	1,27	1,27	1,27
	Refrigerant quantity in tonnes of CO_2 equivalent (7)	Ton	0,000020	0,000025	0,000025	0,000025
	Design pressure (high/low) heat pump mode	bar	30,3/0,3	30,3/0,3	30,3/0,3	30,3/0,3
	Design pressure (high/low) chiller mode	bar	30,3/2	30,3/2	30,3/2	30,3/2
Outdoor zone fans	Type		Brushless DC Motor			
	Number	no.	2	2	2	2
Internal heat exchanger	Internal heat exchanger type		Plate type			
	No. of indoor heat exchangers	no.	1	1	1	1
	Water content	L	1,69	1,69	1,69	1,69
Hydraulic circuit	Water content of the hydronic circuit	L	3,7	3,7	3,7	3,7
	Maximum water-side pressure	bar	3	3	3	3
	Hydraulic connections	inch	G1"	G1"	G1"	G1"
	Minimum water volume (8)	L	125	155	155	155
	Maximum circulator power	kW	0,14	0,14	0,14	0,14
	Maximum absorbed current of circulator	A	1,2	1,2	1,2	1,2
Sound data	Sound power level Lw (9)	dB(A)	59	62	62	62
	Sound pressure at 1 m distance Lp1 (10)	dB(A)	44	47	47	47
	Sound pressure at 10 m distance Lp10 (10)	dB(A)	28	31	31	31
Sound data SL version	Sound power level Lw (9)	dB(A)	57	57	57	57
	Sound pressure at 1 m distance Lp1 (10)	dB(A)	42	42	42	42
	Sound pressure at 10 m distance Lp10 (10)	dB(A)	26	26	26	26
Electrical data	Power supply		400V/3/50Hz	230V/1/50Hz	400V/3/50Hz	
	Maximum absorbed power	kW	5,2	6,4	7,7	8,2
	Maximum absorbed current	A	9,5	28,5	15,8	16,5
	Maximum power input with antifreeze kit	kW	5,3	6,5	7,9	8,3
	Maximum current draw with antifreeze kit	A	10,1	29,1	16,4	17,1

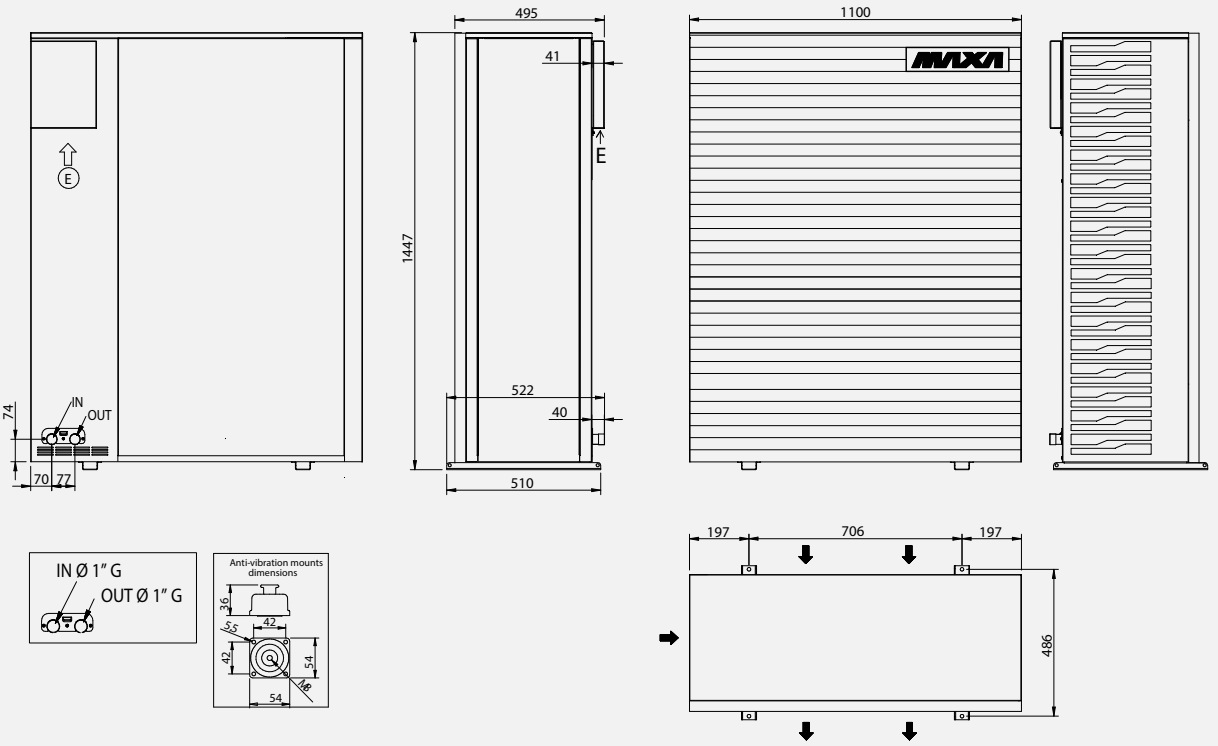
(1) Cooling: outdoor air temperature 35 °C; inlet/outlet water temperature 12/7 °C.
(2) Cooling: outdoor air temperature 35 °C; inlet/outlet water temperature 23/18 °C.
(3) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; inlet/outlet water temperature 30/35 °C.
(4) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; water inlet/outlet temp. 47/55 °C.
(5) Cooling: low temperature, variable output, constant flow rate.
(6) Heating: average climate conditions; Tbiv = -7 °C; low temperature, variable output, constant flow rate.
(7) Indicative data, subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) Calculated for a 10 °C decrease in system water temperature with a defrost cycle lasting 6 minutes.
(9) Sound power: heating mode according to EN 12102:2022 Annex A; value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1, in compliance with Eurovent certification requirements.
(10) Sound pressure: value calculated from the sound power level in condition (9) using standard UNI EN ISO 3744:2010.
(11) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; inlet/outlet water temperature 55/65 °C.
(12) Heating: outdoor air temperature -7 °C d.b. -8 °C w.b.; water inlet/outlet temp. 30/35 °C.
** Preliminary data. Available from: summer 2026

Dimensional Drawings

i-290 0106 / 0109 / 0109 T



i-290 0112 / 0112 T / 0114 / 0115 / 0118



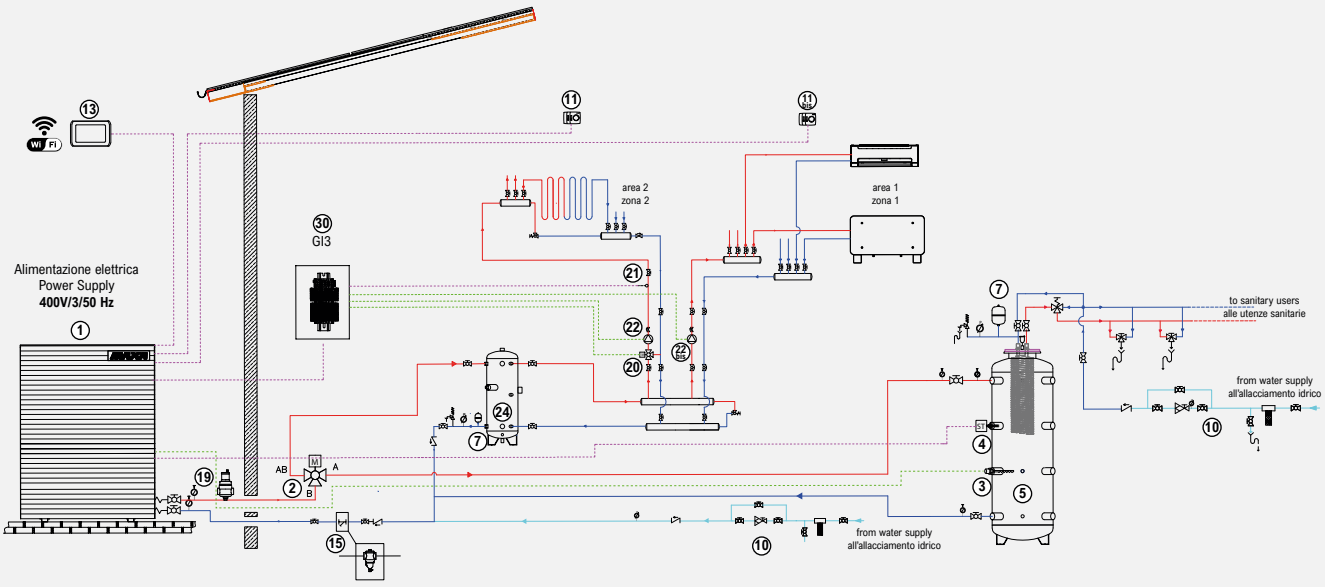
		0106	0109	0109 T	0112	0112 T	0114	0115	0118
L	mm	1105	1105	1105	1105	1105	1105	1105	1105
P	mm	512	512	512	512	512	512	512	512
H	mm	870	870	870	1440	1440	1440	1440	1440
Shipping weight	Kg	117	119	129	170	179	184	188	188

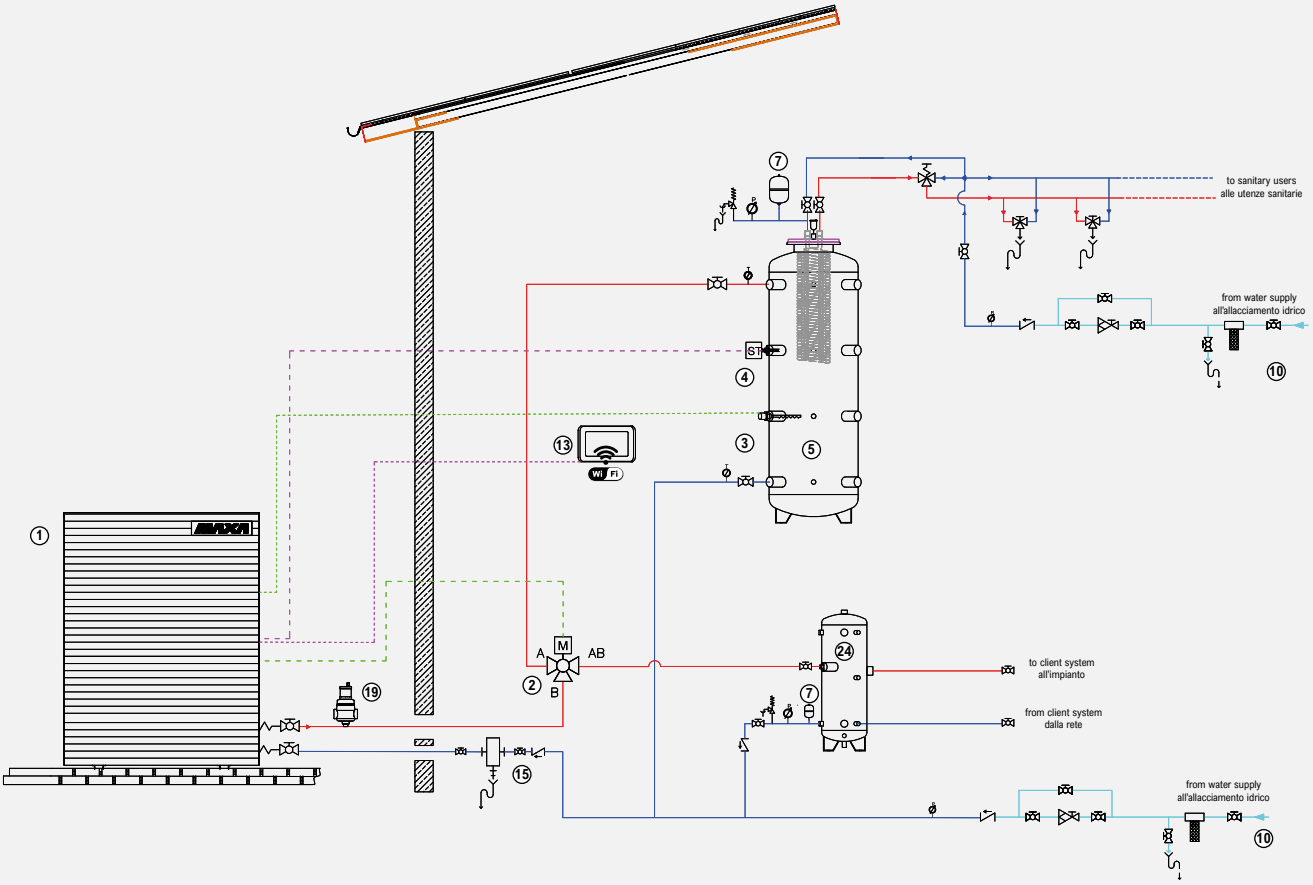
E: Power supply input

Dimensions in mm

System Diagram - Standard Application

1	i-290 heat pump	7	Expansion vessel	15	Y-strainer / Dirt separator filter (FD)	22	Mixed circuit pump (zone 2)
2	3-way DHW/system valve (VDIS)	10	Water connection	19	Degasser	22bis	Direct circuit pump (zone 1)
3	DHW electric heater	11	Local thermostat (zone 1)	20	Mixing valve	24	Technical water tank (Puffroller)
4	DHW temperature sensor (SAS)	11bis	Local thermostat (zone 2)	21	Mixed circuit water sensor	30	GI3 - External extension module
5	DHW Tank (Caddy)	13	e-PRO control				





Purely indicative and non-binding diagram; for the construction of the system, it is necessary to refer to a design prepared by a qualified technician.

i-290 0121÷0127

Monobloc inverter air-to-water reversible heat pump with R290

21 kW÷27 kW

Range of heat pumps from 21 to 27 kW, equipped with eco-friendly R290 refrigerant gas, representing the most advanced evolution of full inverter technology.
The 21 to 27 kW range is able to reach a maximum water temperature of 78°C; this feature allows it to be combined with a wide variety of heating systems. Ideal for replacing combustion-based systems, it ensures simple installation and optimal energy efficiency, with a reduced environmental impact.

MADE IN ITALY | R290 REFRIGERANT 0.02 GWP | 78°C OUTLET WATER Supply Temperature | A+++ ENERGY EFFICIENCY CLASS | WI-FI AS STANDARD WITH e-PRO CONTROL | CASCADE MANAGEMENT FOR UP TO 7 UNITS | FULL INVERTER SYSTEM | SUPER SILENCED VERSION | SCROLL INVERTER

Construction Features

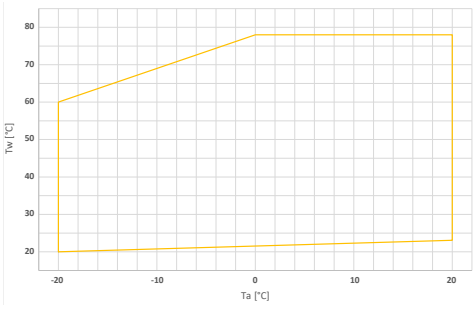
- Proprietary control system with microcontroller-based regulation, superheat control logic via electronic expansion valve.
- Compressors: DC inverter scroll.
- Fans: axial type with brushless DC motor.
- Source heat exchanger: optimized with a finned coil circuit, copper tubes and aluminum fins.
- User plate heat exchanger with AISI 304 stainless steel brazed plates, featuring low pressure drop on the water side.
- Refrigerant circuit made of copper tubing, including: condensation control, electronic thermostatic valve, reversing valve, high-pressure switch, liquid separator, liquid receiver, pressure tapping point, unidirectional filter-drier, high- and low-pressure transducers.
- Integrated hydraulic circuit with high-efficiency variable-speed brushless circulator, flow meter, deaerator with air vent valve, 6 bar overpressure valve, and system filling and drain cock.

Logics and Controls:

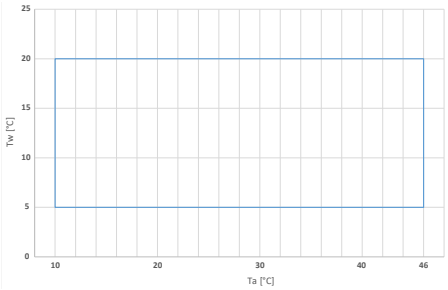
- All units can operate in three different modes: heating, cooling, and domestic hot water, with specific programs that maximize performance in all conditions, including optional control via climatic compensation curve.
- The i-290 series units are capable of managing mixing valves, diverting valves and secondary-side circulation pumps; they are also able to control the solar thermal system, any integration with external heat sources, and integration with external Home/Building Automation or Home Automation systems.
- ModBus RTU available as “CM” accessory.
- All units in the i-290 (0121/0127) series are equipped as standard with the e-Pro wired controller, providing full control of the heat pump both locally and remotely via connectivity, once connected to the Wi-Fi network.
- Thanks to the MyMaxa app, you can associate one or more MAXA heat pump installations with your user profile and thus obtain full remote control of them.

Operating Areas

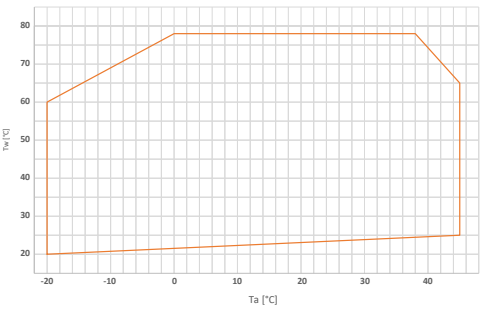
Hot



Cold



DHW



Tw: water temperature - Ta: outdoor air temperature

Accessories

Factory-installed

- **KA *** - Anti-freeze kit (heat exchanger + base) – uses a self-heating cable that is bonded to the base of the unit near the condensing coil, and a PET heater positioned on the plate heat exchanger face.
- **KA3 *** - Anti-freeze kit (base only) - provides exclusively for the use of a self-heating cable applied to the base of the unit near the condenser coil.
- **TR2** - Anti-corrosion treatment for coils – thanks to the treatment, the coil becomes flexible to withstand thermal contractions and expansions, mechanically resistant, protected against UV rays and repellent to dirt. Heat transfer losses are very limited. The treatment guarantees protection of the coils under virtually all environmental conditions: from coastal to rural areas, from industrial to urban zones. The treatment withstands 6000 h in accordance with ASTM B117.
- **TR2C4** - Anti-corrosion treatment on coil and sheet metal – includes a TR2-type treatment of the coil and, in addition, the hot-dip galvanized steel panels are painted to make them suitable for unit installation in C4H environments, in accordance with UNI EN 12944. The external fastening hardware is made of AISI 304, class A2. The treatment also includes the fan protection grille, while the galvanized sheet metal inside the unit (electrical panel casing and inductors) is excluded.
- **RP** - Coil protective grilles – wire mesh to prevent foreign objects from entering the coil and to protect the coil from accidental contact with objects or people.
- **CM** - BMS connectivity setup – ModBus protocol included – accessory that enables the connection of the unit to external controllers via serial cable with RS-485 electrical standard and ModBus RTU protocol.
- **SSL** - thanks to the use of dedicated acoustic panels, ensures low noise emissions, particularly with regard to the EN12102-1:2022 standard. The reduction of the sound power level under A7/W55 conditions reaches 7 dB(A).

Provided separately

- **SAS** - DHW sensor / Remote system sensor – in some system configurations (e.g. heat pump in parallel with the boiler on the same hydronic circuit and diverter valve for exclusion) it may be necessary to enable a system temperature sensor so that the unit-mounted controller can correctly manage operation.

  The remote system sensor controls the heat pump temperature only during the compressor start-up phase; shutdown is managed by the sensor installed on the heat pump flow line.
- **SPS** - Solar panel probe for GI3 – probe required to measure the temperature of the solar panels when the unit is integrated with a solar thermal system.
- **AG** - Anti-vibration kit – designed to prevent transmission of vibrations to the structure; must be installed under the unit, in the dedicated mounting holes.
- **VRC** - Condensate drip tray – galvanized sheet metal container to be installed at the base of the unit for collecting condensate water.
- **FY** - Y-strainer – contains a stainless steel mesh screen (500 µm filtration) that collects solid materials present in the water. Filtration prevents blockage and/or damage to the devices installed downstream of the strainer. Alternatively, it is possible to install a dirt separator that ensures a filtration level not greater than 1 mm (in this case, it is no longer necessary to install the Y-strainer).
- **FD** - Dirt separator – allows the heavier impurities present in the hydraulic circuit to be stopped and retained, as they are captured by a synthetic filter mesh and collected in a settling chamber. A magnetic device located inside the body of the dirt separator also makes it possible to trap ferromagnetic particles.
- **VDIS3** - Diverter valve – 3-way motorized ball valve Kvs 20.8, 1" 1/4 F connections, complete with actuator.
- **ACT** - Technical storage tank (see dedicated section)
- **VSA** - Anti-freeze thermal discharge valve – a valve capable of opening at 0°C to prevent ice formation inside the pipes.
- **RP** - Coil protection grilles – wire mesh to prevent foreign objects from entering the coil and to protect the coil from accidental contact with objects or people (supplied as a separate accessory and to be installed by the installer).
- **e-LITE**** - Color touch-screen wired controller, which can be used as a remote keypad for the heat pump, as it replicates the functions of the on-board unit display. It is equipped with local temperature sensing and time scheduling.
- **Hi-TV415**** - Color touchscreen wired remote controller for centralized management of a chiller/heat pump cascade, for up to 7 units.
- **Connect Box**** - Wi-Fi communication gateway for the Maxa Connect App.
- **GI3**** - External system management module - enables management of the following functions: recirculation pump control, plant-side mixing valve control, solar thermal integration control.
- **ISK**** - USB/RS485 serial converter – interface device capable of reading and writing control registers via the RS485 standard and converting them to a USB port that can be connected to any supervision system.
- **LNC**** - LAN-Wi-Fi router – device that allows the unit to be connected to a local network via Ethernet cable or Wi-Fi coverage for remote monitoring.
- **OVPN**** - 3G LAN-Wi-Fi router with VPN tunnel – device that allows the unit to be connected remotely with an industrial router using the secure OPENVPN service.

e-PRO
Wi-Fi multifunction remote controller
STANDARD

e-LITE
Multifunction remote controller
ACCESSORY

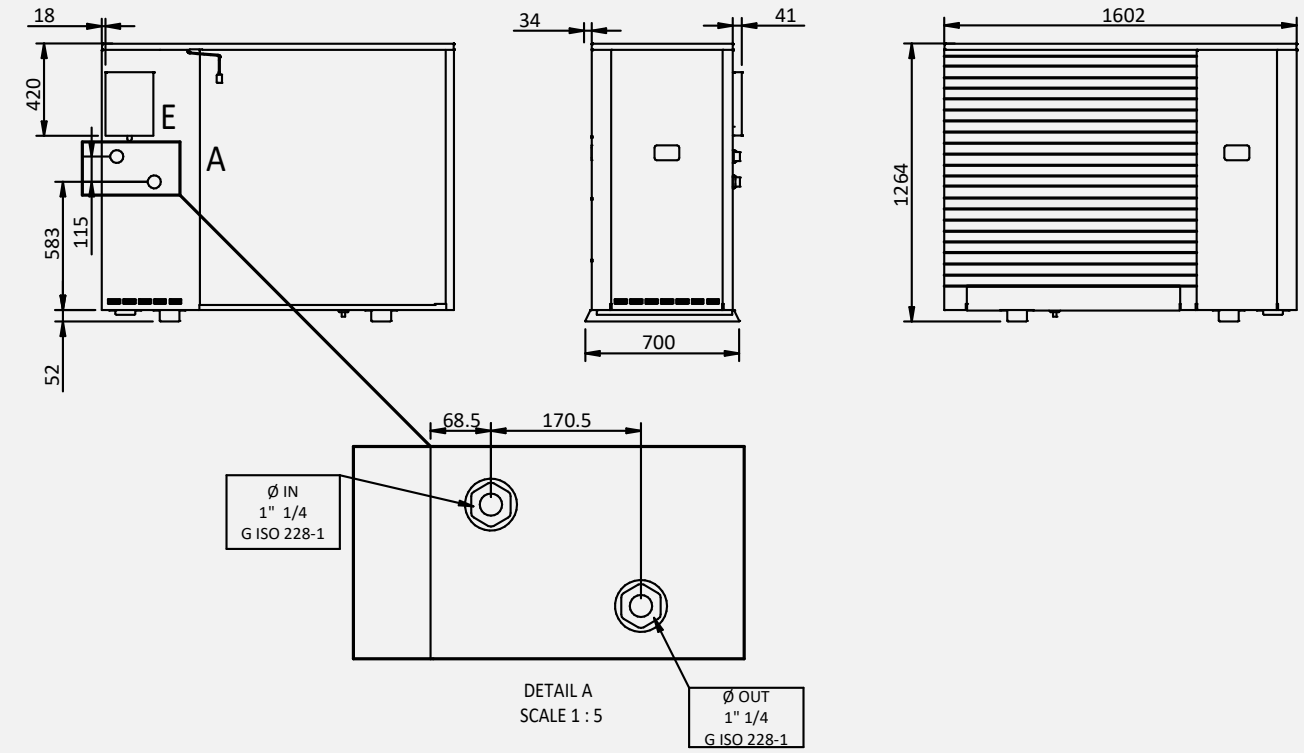
Hi-TV415
Touch screen remote controller for cascade management (max 7 units)
ACCESSORY

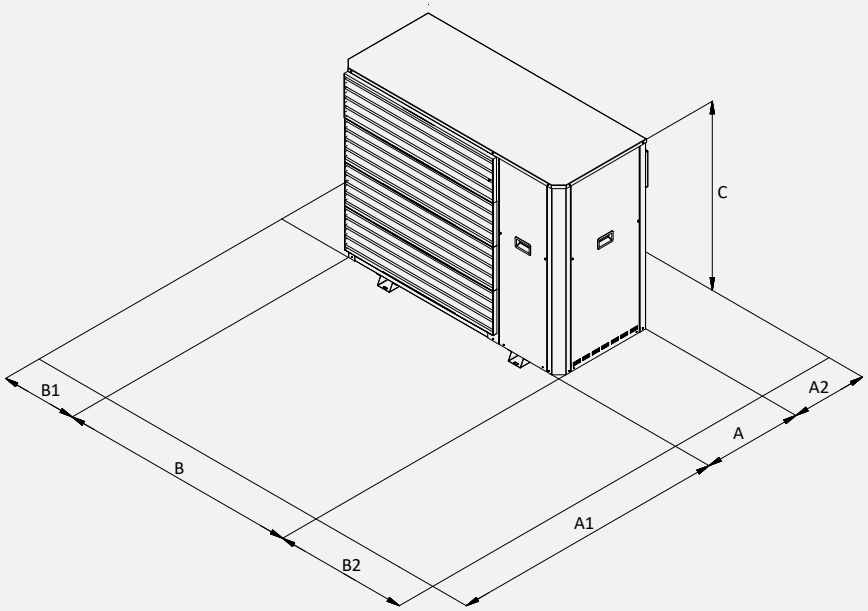
			0121	0123	0125	0127
Cooling	Cooling capacity (1)	kW	17,4	18,9	19,8	22,3
	Power input (1)	kW	5,26	5,89	6,19	7,19
	EER (1)	W/W	3,31	3,21	3,20	3,10
	Cooling capacity (2)	kW	19,6	21,0	25,3	27,9
	Power input (2)	kW	4,02	4,38	5,32	6,43
	EER (2)	W/W	4,88	4,79	4,76	4,34
	SEER (5)	W/W	5,27	5,27	4,94	4,84
	Water flow rate (1)	L/s	0,83	0,90	0,95	1,07
Heating	Heating capacity (3)	kW	21,0	22,8	24,8	27,0
	Input power (3)	kW	4,31	4,78	5,37	6,21
	COP (3)	W/W	4,87	4,77	4,62	4,35
	Heating capacity (4)	kW	19,6	21,6	23,2	26,3
	Power input (4)	kW	6,13	6,79	7,66	8,74
	COP (4)	W/W	3,20	3,18	3,03	3,01
	Heating capacity (12)	kW	19,7	21,2	24,1	25,8
	Power input (12)	kW	7,38	7,97	9,56	10,3
	COP (12)	W/W	2,67	2,66	2,52	2,50
	Thermal power (13)	kW	17,5	18,6	19,5	21,1
	Power input (13)	kW	6,05	6,71	7,19	7,55
	COP (13)	W/W	2,89	2,77	2,71	2,79
	SCOP (6)	W/W	4,86	4,72	4,49	4,46
	Water flow rate (4)	L/s	0,59	0,65	0,69	0,79
	Energy efficiency - water 35°C / 55°C - low / medium temperature	Class	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Compressor	Type	-	Scroll DC Inverter			
	Number	-	1	1	1	1
	Refrigerant oil (type)	-	PZ46M	PZ46M	PZ46M	PZ46M
	Refrigerant oil (quantity)	mL	900	900	900	900
	Refrigerant circuits	-	1			
Refrigerant	Type	-	R290			
	Refrigerant quantity (7)	kg	1,7	1,7	2,1	2,1
	Refrigerant quantity in tons of CO_2 equivalent (7)	Ton	0,000034	0,000034	0,000042	0,000042
	Operating pressure in chiller (high/low)	bar	30,3 / 1,7			
	Operating pressure in heat pump mode (high/low)	bar	30,3 / 0,7			
Ventilation	Type	-	EC			
	Number	-	1			
	Rated power (1)	kW	0,40	0,43	0,59	0,58
	Maximum absorbed power	kW	0,83	0,83	0,83	0,83
	Maximum absorbed current	A	1,2	1,2	1,2	1,2
	Nominal air flow rate	m³/h	12520	12810	13770	13780
Internal heat exchanger	Internal heat exchanger type	-	Plate / BPHE			
	No. of indoor heat exchangers	-	1	1	1	1
	Water content	L	1,71	1,71	2,07	2,07
Hydraulic circuit	Available head (1)	kPa	128	121	128	117
	Available head (4)	kPa	150	146	149	142
	Water content of hydronic circuit	L	3,6	3,6	4,0	4,0
	Maximum hydronic circuit pressure (safety valve setting)	bar	6	6	6	6
	Hydraulic connections	inch	1" 1/4 M	1" 1/4 M	1" 1/4 M	1" 1/4 M
	Minimum water volume (8)	L	175	175	220	225
	Rated pump power (1)	kW	0,350	0,350	0,350	0,350
	Maximum absorbed pump power	kW	0,350	0,350	0,350	0,350
	Maximum absorbed pump current	A	2,5	2,5	2,5	2,5
Sound data	Sound power level Lw (9) std / SSL	dB(A)	72 / 70	73 / 71	75 / 73	76 / 74
	Sound pressure Lp1 (10) std / SSL	dB(A)	41 / 39	42 / 40	44 / 42	45 / 43
	Sound power Lw (11) std / SSL	dB(A)	64 / 57	64 / 57	65 / 58	65 / 58
Electrical data	Power supply	-	400V/3P+N+T/50Hz			
	Maximum absorbed power	kW	11	11	13	13
	Maximum absorbed current	A	19	19	21	21
	Maximum power input with antifreeze kit	kW	11	11	13	13
	Maximum current draw with antifreeze kit	A	19	19	22	22

Performance referred to the following conditions, in accordance with standard UNI EN 14511:2022:
(1) Cooling: outdoor air temperature 35 °C; inlet/outlet water temperature 12/7 °C.
(2) Cooling: outdoor air temperature 35 °C; inlet/outlet water temperature 23/18 °C.
(3) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; inlet/outlet water temperature 30/35 °C.
(4) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; water inlet/outlet temp. 47/55 °C.
(5) Cooling: low temperature, variable output, constant flow rate.
(6) Heating: average climate conditions; Tbiv = -7 °C; low temperature, variable output, constant flow rate.
(7) Indicative data subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) Calculated for a 10 °C decrease in system water temperature with a defrost cycle lasting 6 minutes.
(9) Sound power: mode (1); value determined on the basis of measurements carried out in accordance with standard UNI EN ISO 9614-1.
(10) Sound pressure: value calculated from the sound power level in condition (9) using standard UNI EN ISO 3744:2010.
(11) Sound power: heating mode according to EN 12102:2022 Annex A; value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1, in compliance with the requirements of Eurovent certification.
(12) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; water inlet/outlet temp. 55/65 °C.
(13) Heating: outdoor air temperature -7 °C d.b. -8 °C w.b.; inlet/outlet water temp. 30/35 °C.
Note: the performance data shown are indicative and may be subject to change. Furthermore, the capacities declared at points (1), (2), (3) and (4) refer to the instantaneous output according to UNI EN 14511:2022. The data declared at points (5) and (6) are determined according to UNI EN 14825:2022.

Dimensional Drawings

i-290 0121 / 0127





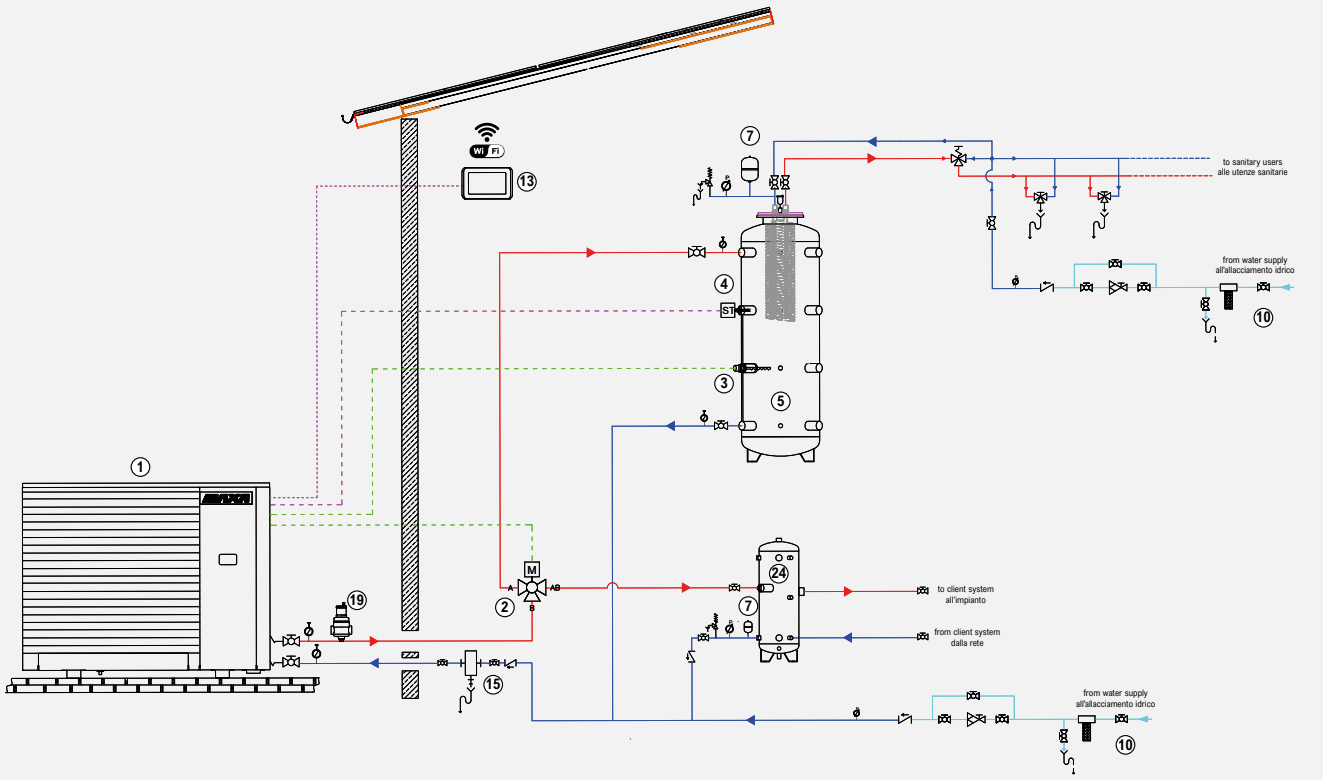
Clearances		A1	A2	B1	B2
0121	mm	1500	400	400	500
0123	mm	1500	400	400	500
0125	mm	1500	400	400	500
0127	mm	1500	400	400	500

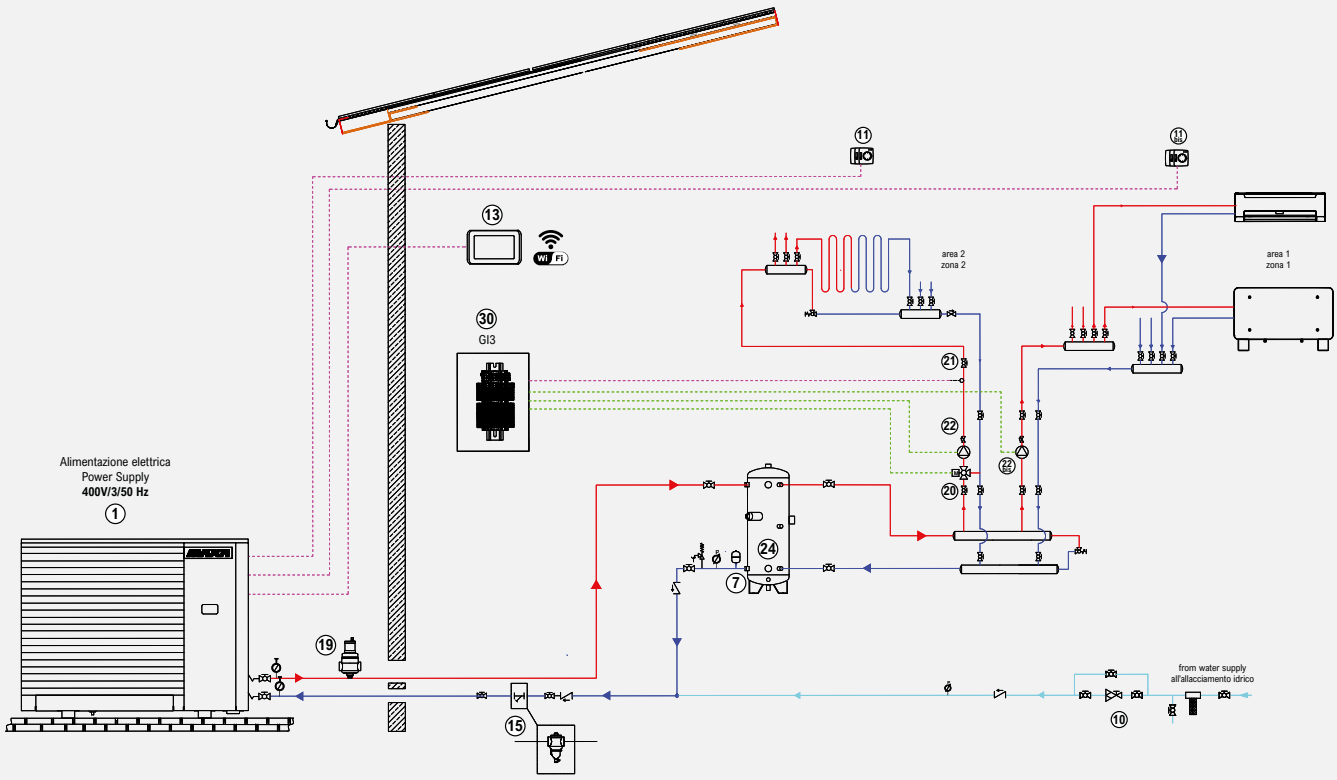
		0121	0123	0125	0127
L	mm	1610	1610	1610	1610
P	mm	710	710	710	710
H	mm	1270	1270	1270	1270
Shipping weight	kg	276	276	285	285

Dimensions in mm

System Diagram - Standard Application

1	i-290 0123 heat pump	7	Expansion vessel	15	Y-strainer / Dirt separator filter (FD)	22	Mixed circuit pump (zone 2)
2	3-way DHW/system valve (VDIS3)	10	Water connection	19	Degasser	22bis	Direct circuit pump (zone 1)
3	DHW electric heater	11	Local thermostat (zone 1)	20	Mixing valve	24	Technical water tank
4	DHW temperature sensor (SAS)	11bis	Local thermostat (zone 2)	21	Mixed circuit water sensor	30	GI3 - External extension module
5	DHW Tank (Caddy)	13	e-PRO control				





Purely indicative and non-binding diagram; for the construction of the system, it is necessary to refer to a design prepared by a qualified technician.

i-290 0240÷0250

Monobloc inverter air-to-water reversible heat pump with R290

40 kW÷50 kW

Sizes i-290 0240 and 0250 represent the latest evolution in MAXA full inverter heat pump technology. By using the environmentally friendly R290 refrigerant, it is possible to achieve the final evolutionary step that further simplifies the design of systems fully managed by the heat pump alone. In fact, thanks to a maximum temperature of 78°, direct application on systems requiring high supply temperatures is also very straightforward.

MADE IN ITALY

R290 — REFRIGERANT 0.02 GWP

78°C — OUTLET WATER Supply Temperature

A++ — ENERGY EFFICIENCY CLASS

WI-FI OPTIONAL

CASCADE MANAGEMENT FOR UP TO 7 UNITS

EXTRA SUPER SILENCED VERSION

SCROLL INVERTER

Construction Features

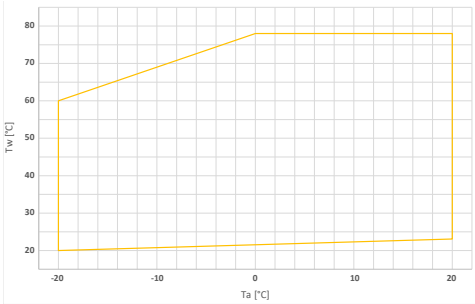
- Proprietary control system with microcontroller-based regulation, superheat control logic via electronic expansion valve.
- Compressors: DC inverter scroll.
- Fans: axial type with brushless DC motor.
- Source heat exchanger: copper tubes and aluminum fins with hydrophilic coating.
- User plate heat exchanger with AISI 304 stainless steel brazed plates, featuring low pressure drop on the water side.
- Refrigerant circuit made of copper tubing, including: 4-way reversing valve, electronic expansion valve, liquid separator, liquid receiver, high-pressure switch, pressure transducers, filter-drier, liquid sight glass with moisture indicator.
- Hydraulic circuit includes: plate heat exchanger, flow switch, safety valve (6 bar) and manual air vent valve.
- On request (optional), additional components such as a tank and circulation pump can be installed on board the unit.
- Electrical circuit equipped with a three-phase relay for overvoltage and undervoltage monitoring plus phase loss/sequence control. It indicates the presence of all three phases in the correct sequence and whether all three line-to-line voltages are within the set limits.
- Electrical circuit equipped with a digital input that can be activated by an external contact to reduce the sound power level by acting on the ventilation. This mode is particularly recommended for night-time operation.
- Presence of a leak detection sensor that ensures a high level of safety

Logics and Controls:

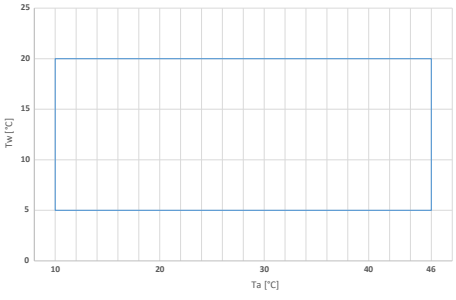
- All units can operate in three different modes: heating, cooling, and domestic hot water, with specific programs that maximize performance in all conditions, including optional control via climatic compensation curve.
- The i-290 series units are capable of managing mixing valves, diverting valves and secondary-side circulation pumps; they are also able to control the solar thermal system, any integration with external heat sources, and integration with external Home/Building Automation or Home Automation systems.
- The i-290 0240-0250 series can be fully managed via the onboard unit display.
- The range is compatible with the various MAXA remote control models, in particular: **e-Lite**, suitable for local control of a single heat pump; **Hi-TV415**, suitable for local control of a cascade of heat pumps; **e-Pro**, which enables both local and remote control of a single heat pump; or **CONNECT BOX**, which functions as a gateway between the heat pump and the local Wi-Fi network.

Operating Areas

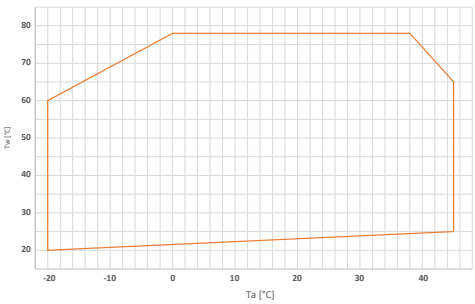
Hot



Cold



DHW



Tw: water temperature - Ta: outdoor air temperature

Accessories

Factory-installed

- **KA1** - Anti-freeze heater on: heat exchanger and pump - Electric heater installed on the front side of the plate heat exchanger, which is activated when the water temperature inside the exchanger drops below +4°C. If the selected hydronic kit includes the pump, this component will also be equipped with a heater that protects it from ice formation.
- **TR2** - Cu/Al coil with Silver Line surface treatment. Finned coil heat exchangers with copper tubes and aluminium fins, subjected to treatment with a special polyurethane-based paint for corrosion protection. The protection provides the coil with flexibility to withstand thermal contraction and expansion, UV resistance, and makes it dirt-repellent. The treatment ensures coil protection under virtually all environmental conditions: from marine to rural environments, from industrial to urban areas. For specific instructions on cleaning coils treated in this way, refer to the relevant chapter in the user-installer manual. The treatment withstands 6000 h according to ASTM B117.
- **TR2C4** - Anti-corrosion treatment on coil and sheet metal – includes a TR2-type treatment of the coil and, additionally, the hot-dip galvanized steel panels are painted so as to make them suitable for installation of the unit in C4H environments, in accordance with UNI EN 12944. The fastening hardware is suitable for installation in C4H environments.
- **RP** - Coil protection grid. Grids installed to protect finned coils. The grilles are used to protect the heat exchanger from accidental contact. They are especially recommended in locations where people or animals could damage, or be injured by, the finned heat exchanger. They can also be installed after the unit has been delivered.
- **CM** - BMS connectivity setup – ModBus protocol included – accessory that enables the connection of the unit to external controllers via serial cable with RS-485 electrical standard and ModBus RTU protocol.
- **IM** - Circuit breakers on compressors - Overcurrent switches applied to compressors, protecting components from faults caused by possible current spikes.
- **PS** - Fixed-speed AC circulation pump.
- **PSI** - AC circulation pump controlled via external inverter installed in the electrical panel.
- **PSEC** - Single EC pump equipped with integrated frequency converter (high head).
- **PS-SI** - Fixed-speed AC circulation pump with integrated 400-liter tank and 24-liter expansion vessel.
- **PSI-SI** - AC circulation pump controlled via external inverter installed in the electrical panel, with integrated 400-litre tank and 24-litre expansion vessel.
- **PSEC-SI** - Single EC pump equipped with integrated frequency converter (high head), with integrated 400-liter tank and 24-liter expansion vessel.
- **GL** - Packaging with wooden crate. Special packaging consisting of a wooden crate to protect the unit during transport. Optional; it is recommended for long-distance shipments (for example, container transport) or when the unit is stored in a warehouse where it may be subject to accidental damage. The boards that make up the structure comply with ISPM15 regulations.
- **SL** - Silenced Version. Involves the installation of sound-absorbing covers on the compressors, significantly reducing the unit's sound pressure level and ensuring quieter operation without altering performance.
- **SSL** - Super Silent Version. Maintains the features of the SL and incorporates an optimized diffuser that increases fan efficiency. This allows the fan speed to be reduced, lowering sound pressure and optimizing energy consumption, ensuring improved acoustic comfort.
- **EXSL** - Extra Silenced Version. Adds an additional sound-absorbing cover on the tandem compressors to the SL configuration, achieving a further noise reduction for applications that are particularly sensitive to acoustic impact.
- **EXSSL** - Extra Super Silenced version. Includes all SSL solutions and adds additional sound-absorbing cladding on the tandem compressors, for the maximum level of noise reduction available in the range.

Provided separately

- **SAS** - Domestic hot water probe / Remote system probe – in some system configurations (e.g. heat pump in parallel with the boiler on the same hydronic circuit and diverter valve for boiler exclusion), it may be necessary to enable a system temperature probe so that the unit controller can correctly manage the operation. The remote system probe controls the heat pump temperature only during the compressor start-up phase; shutdown is managed by the probe located on the heat pump flow line.
- **SPS** - Solar panel probe for GI3 – probe required to measure the temperature of the solar panels when the unit is integrated with a solar thermal system.
- **AG** - Anti-vibration kit – designed to prevent transmission of vibrations to the structure; must be installed under the unit, in the dedicated mounting holes.
- **FY** - Y-strainer – contains a stainless steel mesh screen (500 µm filtration) that collects solid materials present in the water. Filtration prevents blockage and/or damage to the devices installed downstream of the strainer. Alternatively, it is possible to install a dirt separator that ensures a filtration level not greater than 1 mm (in this case, it is no longer necessary to install the Y-strainer).
- **FD-DA** - Air Separator Kit - Use as air separator (installation in the system supply line): component that allows continuous capture and expulsion of air and any other gases dissolved in the water of the hydraulic circuit. The removal efficiency of this device is very high, allowing the elimination of non-condensable gases present in the circuits down to the level of microbubbles. Use as dirt separator (installation in the return pipe, before the inlet to the heat pump): allows blocking and retaining the heavier impurities present in the hydraulic circuit, which are captured by a synthetic filter mesh and collected in a settling chamber. A magnetic device located inside the body of the dirt separator also allows interception of ferromagnetic particles.
- **VDIS4** - Three-way diverting valve for DHW production. Valve that diverts the water flow produced by the heat pump between the system and a buffer tank for the production of domestic hot water. Three-way motorized ball valve, DN (1"1/2), Kvs 28, complete with actuator, insulation shell and spacer, ensuring correct operation even with glycolated water. The power cable from the actuator is 1 metre long.

** Accessories not usable simultaneously

Accessories

Provided separately

- **VSA** - Anti-freeze thermal discharge valve – a valve capable of opening at 0°C to prevent ice formation inside the pipes.
- **RP** - Coil protection grilles – wire mesh to prevent foreign objects from entering the coil and to protect the coil from accidental contact with objects or people (supplied as a separate accessory and to be installed by the installer).
- **RV** - Grooved connection joint. Carbon steel stub pipe featuring, on one side, a grooved connection complete with clamp for connection to the heat pump, and on the other side a G 1" 1/2 M threaded connection. The kit consists of 2 stub pipes and 2 grooved clamps.
- **GI3**** - External system management module - enables management of the following functions: recirculation pump control, plant-side mixing valve control, solar thermal integration control.
- **ISK**** - USB/RS485 serial converter – interface device capable of reading and writing control registers via the RS485 standard and converting them to a USB port that can be connected to any supervision system.
- **LNC**** - LAN-Wi-Fi router – device that allows the unit to be connected to a local network via Ethernet cable or Wi-Fi coverage for remote monitoring.
- **OVPN**** - 3G LAN-Wi-Fi router with VPN tunnel – device that allows the unit to be connected remotely with an industrial router using the secure OPENVPN service.
- **e-LITE**** - Color touch-screen wired controller, which can be used as a remote keypad for the heat pump, as it replicates the functions of the on-board unit display. It is equipped with local temperature sensing and time scheduling.
- **e-Pro**** - Color touch-screen Wi-Fi wired controller that allows both local and remote control via the MyMaxa app.
- **Hi-TV415**** - Color touchscreen wired remote controller for centralized management of a chiller/heat pump cascade, for up to 7 units.
- **Connect Box**** - Wi-Fi communication gateway for the Maxa Connect App.

** Accessories not usable simultaneously

e-PRO*
Wi-Fi multifunction remote controller
ACCESSORY

e-LITE
Multifunction remote controller
ACCESSORY

Hi-TV415
Touch screen remote controller for cascade management (max 7 units)
ACCESSORY

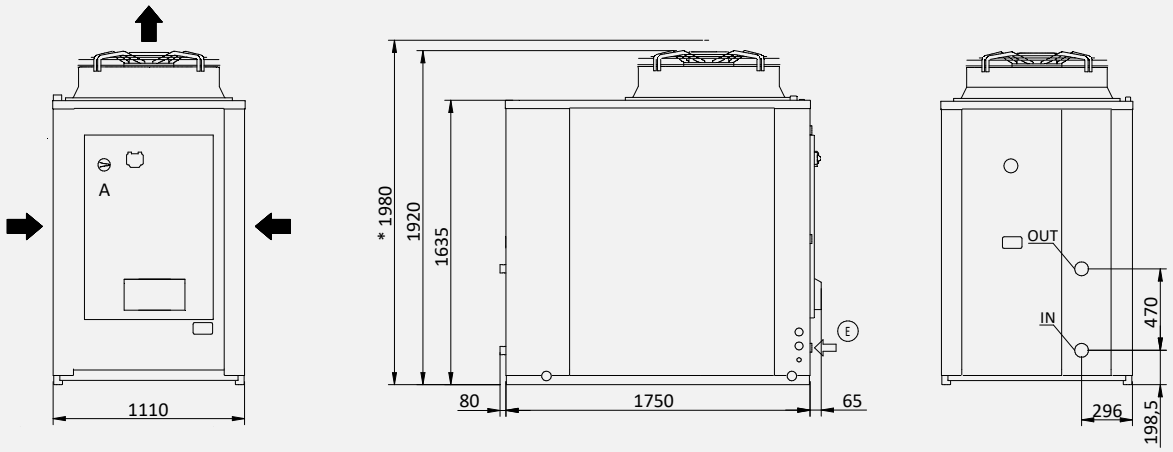
* Energy measurements not available

			0240	0250
Cooling	Cooling capacity (1)	kW	28,9	34,1
	Power input (1)	kW	9,20	11,0
	E.E.R. (1)	W/W	3,14	3,10
	Cooling capacity (2)	kW	34,5	37,0
	Power input (2)	kW	8,1	8,5
	E.E.R. (2)	W/W	4,26	4,34
	SEER (5)	W/W	4,86	4,80
	Water flow rate (1)	L/s	1,38	1,63
	Pressure drops on the hydronic circuit side (1)	kPa	24	26
Heating	Heating capacity (3)	kW	40,1	50,0
	Input power (3)	kW	9,8	11,9
	C.O.P. (3)	W/W	4,10	4,20
	Heating capacity (4)	kW	38,0	47,9
	Power input (4)	kW	13,1	16,5
	C.O.P. (4)	W/W	2,90	2,90
	Heating capacity (12)	kW	38,4	45,8
	Power input (12)	kW	16,0	18,8
	C.O.P. (12)	W/W	2,40	2,44
	Thermal power (13)	kW	34,6	38,1
	Power input (13)	kW	13,78	15,2
	C.O.P. (13)	W/W	2,51	2,52
	SCOP (6)	W/W	4,19	4,19
	Water flow rate (4)	L/s	1,14	1,43
	Pressure drops on the hydronic circuit side (4)	kPa	20	26
	Energy efficiency - water 35°C / 55°C	Class	A++ / A++	A++ / A++
Compressor	Type		Scroll DC Inverter	
	Number		2	2
	Refrigerant oil (type)		PZ46M	PZ46M
	Refrigerant oil (quantity)	mL	1800	1800
	Refrigerant circuits		1	1
Refrigerant	Type		R290	
	Refrigerant quantity (7)	kg	3,15	3,50
	Refrigerant quantity in tons of CO_2 equivalent (7)	Ton	0,000063	0,000070
	Design pressure (high/low) chiller model	bar	30,3 / 1,7	
	Design pressure (high/low) heat pump model	bar	30,3 / 0,7	
Outdoor zone fans	Type		EC	
	Number		1	
	Rated power (1)	kW	0,62	0,69
	Maximum absorbed power	kW	1,95	1,95
	Maximum absorbed current	A	3,3	3,3
	Nominal air flow rate	m³/h	17080	18490
Internal heat exchanger	Internal heat exchanger type		Plate / BPHE	
	No. of indoor heat exchangers		1	1
	Water content	L	2,80	3,48
Hydraulic circuit	Water content of the hydronic circuit	L	4,5	5,2
	Maximum pressure of hydronic kit (safety valve setting)	bar	6	6
	Hydraulic connections	inch	1" 1/2 (DN 40)	1" 1/2 (DN 40)
	Minimum water volume (8)	L	365	415
Sound data	Sound power (9)	dB(A)	82	83
	Sound power level Lw SL configuration (9)	dB(A)	81	82
	Sound power level Lw EXSL configuration (9)	dB(A)	80	81
	Sound power level Lw SSL configuration (9)	dB(A)	79	80
	Sound power level Lw EXSSL configuration (9)	dB(A)	78	79
	Sound pressure level (10) at 1 m	dB(A)	64/63/62/62/61	64/64/63/62/62
	Sound power (11) STD-SL-EXSL	dB(A)	74	75
	Sound power level Lw configuration SSL-EXSSL (11)	dB(A)	73	74
Electrical data	Power supply		400V/3P+N+T/50Hz	
	Maximum absorbed power	kW	23	27
	Maximum absorbed current	A	37	44
	Maximum power input with antifreeze kit	kW	23	27
	Maximum current draw with antifreeze kit	A	38	45

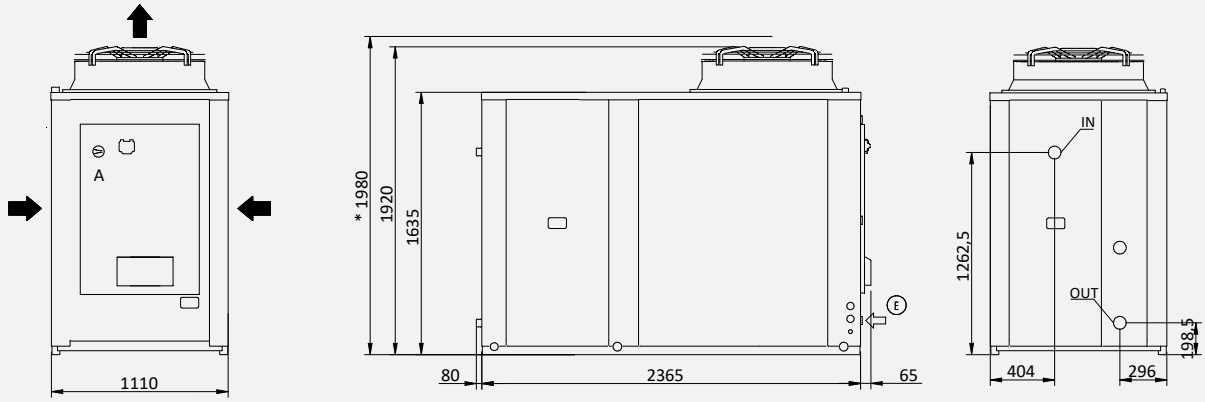
(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 23/18°C
(3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; inlet/outlet water temperature 30/35°C.
(4) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; inlet/outlet water temperature 47/55°C
(5) Cooling: low temperature, variable output, constant flow rate.
(6) Heating: average climatic conditions; Tbiv = -7°C; low temperature, variable water outlet, fixed flow rate.
(7) Indicative data, subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) The indicated volume refers to the total required; the designer must ensure this requirement is met by taking into account the amount already present inside the unit, depending on the selected hydronic kit (please check this value in the technical data sheet).
(9) Sound power: mode (1); value determined on the basis of measurements carried out in accordance with standard UNI EN ISO 9614-1.
(10) Sound pressure: calculated from the sound power level using ISO 3744:2010, considering the units operating in free field conditions.
(11) Sound power: heating mode according to EN 12102:2022 Annex A; value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1, in compliance with the requirements of Eurovent certification.
(12) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; water inlet/outlet temp. 55/65 °C.
(13) Heating: outdoor air temperature -7 °C d.b. -8 °C w.b.; inlet/outlet water temp. 30/35 °C.

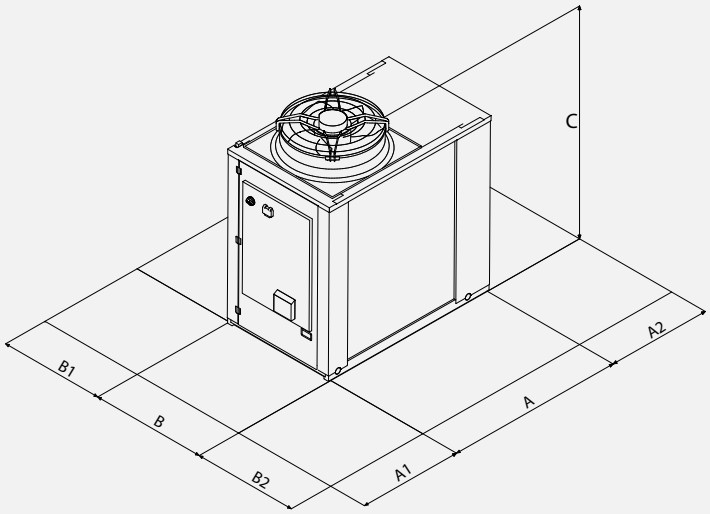
Dimensional Drawings

i-290 0240 / 0250



Version with tank kit





Clearances		A1	A2	B1	B2
0240	mm	1200	1000	1500	1500
0250	mm	1200	1000	1500	1500

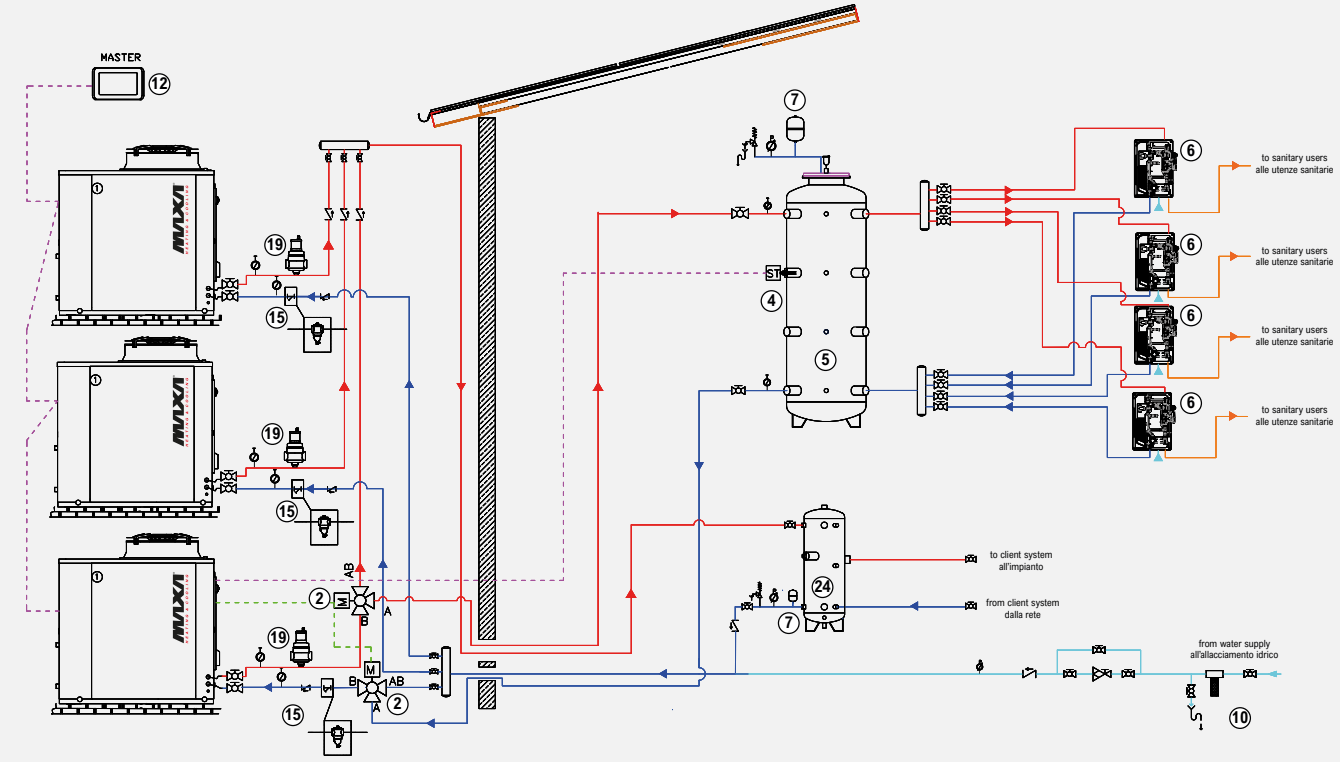
		0240	0250
L	mm	1895	1895
L (with tank)	mm	2510	2510
P	mm	1110	1110
H	mm	1920	1920
H (SSL)	mm	1980	1980
Shipping weight	kg	510	525

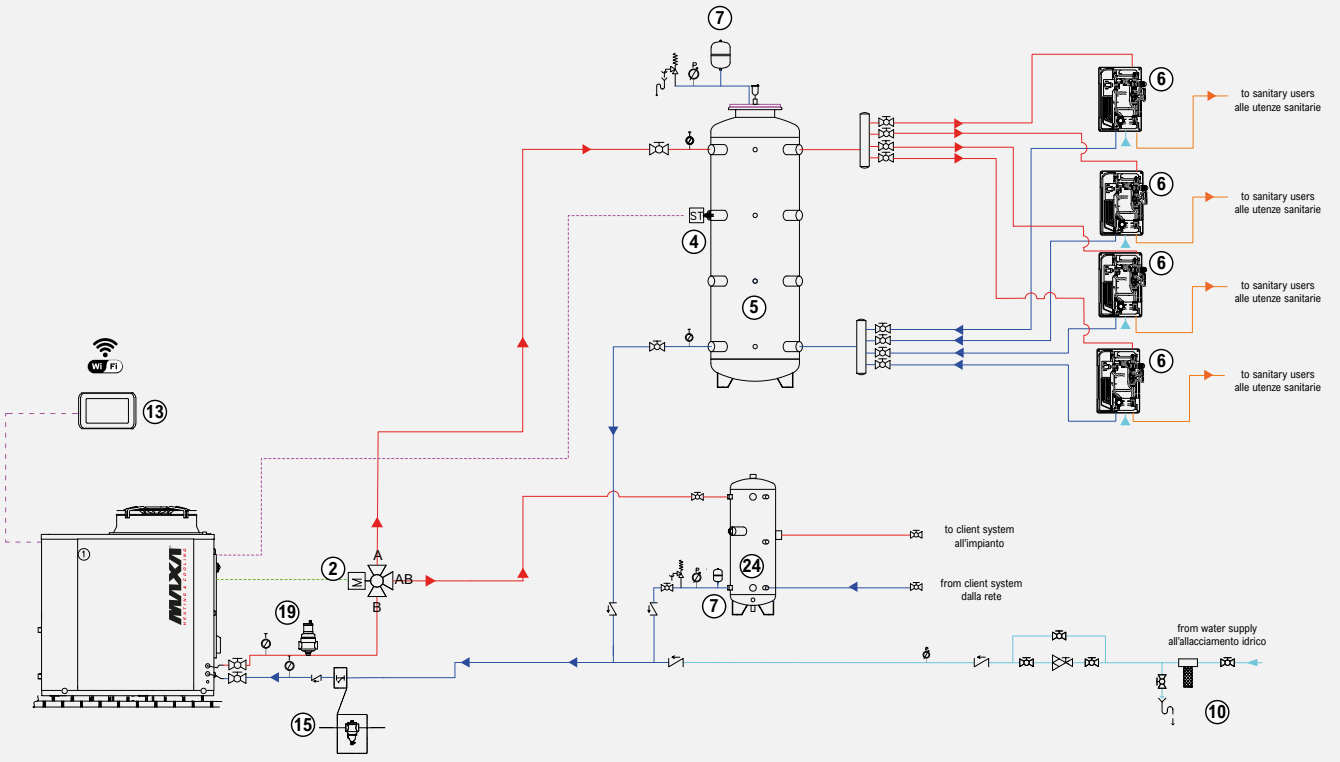
IN/OUT: 1" 1/2 Grooved
E: Power supply input

Dimensions in mm

System Diagram - Standard Application

1	i-290 0240-0250 heat pump	5	DHW tank (Puffroller)	10	Water connection	15	Y-strainer
2	3-way DHW/system valve (VDIS4)	6	Fast DHW heater	12	Hi-TV415 Control	19	FD-DA
4	DHW temperature sensor (SAS)	7	Expansion vessel	13	e-PRO control	24	Technical water tank (Puffroller)





Purely indicative and non-binding diagram; for the construction of the system, it is necessary to refer to a design prepared by a qualified technician.

i-32V5

Monobloc R32 air-to-water reversible inverter heat pump

6 kW÷18 kW

11 models: the most compact and high-performance on the market!
The use of inverter technology together with DC brushless motors ensures extremely high overall energy efficiency, both by reducing the specific consumption of each motor and thanks to the high modulation capability.
Extensive use of these technologies on all components results in high COP and EER values, with a significant increase in efficiency at partial loads.

MADE IN ITALY	R32 REFRIGERANT 675 GWP	60°C OUTLET WATER Supply Temperature	A+++ ENERGY EFFICIENCY CLASS	WI-FI OPTIONAL	CASCADE MANAGEMENT FOR UP TO 7 UNITS	MODBUS AVAILABLE AS STANDARD	SILENCED VERSION	COIL ANTICORROSION TREATMENT	FULL INVERTER SYSTEM

Construction Features

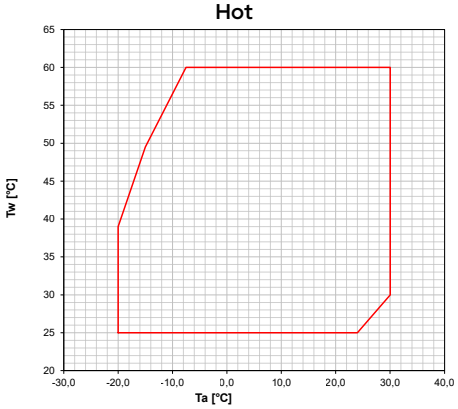
- Proprietary control system with microcontroller-based regulation, superheat control logic via electronic expansion valve.
- Compressors: Twin Rotary DC inverter
- Fans: axial type with brushless DC motor
- Source heat exchanger: optimized with a circuit and a finned coil with copper tubes and aluminum fins with hydrophilic treatment.
- User plate heat exchanger with AISI 304 stainless steel brazed plates, featuring low pressure drop on the water side.
- Refrigerant circuit made of copper tubing, including: condensing control, electronic thermostatic valve, 4-way reversing valve, high-pressure switches, liquid separator and receiver, service and control valves, high- and low-pressure transducers.
- Integrated hydraulic circuit with high-efficiency variable-speed brushless circulator, flow switch, air vent valve, overpressure valve (6 bar), pressure gauge, and system filling and drain cock.
- The KA version provides for the installation of a heating cable on the base of the heat pump at the condenser coil and a PET heater positioned on the plate heat exchanger. The technical and performance data are identical to those of the standard version.
- The SL version, in winter operating mode, features a maximum sound power limited to 53 dB(A), which can be reached under certain conditions.

Logics and Controls:

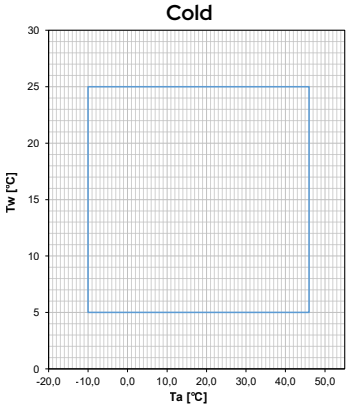
- All units can operate in three different modes: heating, cooling, and domestic hot water, with specific programs that maximize performance in all conditions, including optional control via climatic compensation curve.
- The units of the V5 series are capable of managing mixing valves, diverting valves, and secondary-side circulation pumps; they are also able to control the solar thermal system, any integration with external heat sources, and integration with external Home/Building Automation or Home Automation systems. The entire i-32V5 series can be controlled remotely (accessory HI-TV415).
- Standard RS485 Modbus protocol.

Operating Areas

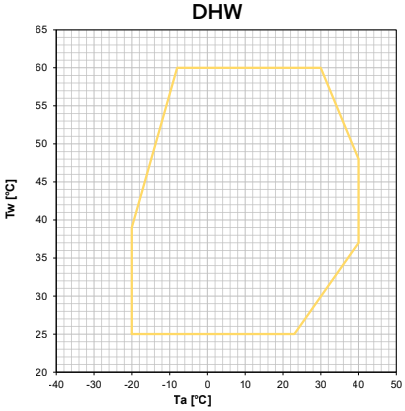
Hot



Cold



DHW



Tw: water temperature - Ta: outdoor air temperature

Accessories

Factory-installed

- **TR2** - Anti-corrosion treatment for coils – thanks to the treatment, the coil becomes flexible to withstand thermal expansion and contraction, mechanically resistant, protected against UV rays and dirt-repellent. Heat transfer losses are very limited. The treatment ensures coil protection in virtually all environmental conditions: from coastal to rural areas, from industrial to urban zones. The treatment withstands 6000 h according to ASTM B117.
- **GI *** - System management module - enables management of the following functions: management of the booster pump with the aid of a room thermostat (not supplied); management of the mixing valve on the system side in both heating and cooling modes; management of solar-thermal integration.
- **CM** - BMS connectivity setup – ModBus protocol included – accessory that enables the connection of the unit to external controllers via serial cable with RS-485 electrical standard and ModBus RTU protocol.

Provided separately

- **SAS** - Domestic hot water probe / Remote system probe – in some system configurations (e.g. heat pump in parallel with the boiler on the same hydronic circuit and diverter valve for boiler exclusion), it may be necessary to enable a system temperature probe so that the unit controller can correctly manage the operation. The remote system probe controls the heat pump temperature only during the compressor start-up phase; shutdown is managed by the probe located on the heat pump flow line.
- **SPS** - Solar panel probe for GI3 – probe required to measure the temperature of the solar panels when the unit is integrated with a solar thermal system.
- **GI3**** - External system management module - enables management of the following functions: recirculation pump control, plant-side mixing valve control, solar thermal integration control.
- **AG** - Anti-vibration kit – designed to prevent transmission of vibrations to the structure; must be installed under the unit, in the dedicated mounting holes.
- **VRC** - Condensate drip tray – galvanized sheet metal container to be installed at the base of the unit for collecting condensate water.
- **FY** - Y-strainer – contains a stainless steel mesh screen (500 µm filtration) that collects solid materials present in the water. Filtration prevents blockage and/or damage to the devices installed downstream of the strainer. Alternatively, it is possible to install a dirt separator that ensures a filtration level not greater than 1 mm (in this case, it is no longer necessary to install the Y-strainer).
- **FD** - Dirt separator – allows the heavier impurities present in the hydraulic circuit to be stopped and retained, as they are captured by a synthetic filter mesh and collected in a settling chamber. A magnetic device located inside the body of the dirt separator also makes it possible to trap ferromagnetic particles.
- **VDIS2** - Diverting valve – 3-way motorized ball valve DN (1"1/4) Kvs 19.2, 1" ½ MMM connections, complete with actuator.
- **ACT** - Technical storage tank (see dedicated section).
- **VSA** - Anti-freeze thermal discharge valve – a valve capable of opening at 0°C to prevent ice formation inside the pipes.
- **ISK**** - USB/RS485 serial converter – interface device capable of reading and writing control registers via the RS485 standard and converting them to a USB port that can be connected to any supervision system.
- **LNC**** - LAN-Wi-Fi router – device that allows the unit to be connected to a local network via Ethernet cable or Wi-Fi coverage for remote monitoring.
- **OVPN**** - 3G LAN-Wi-Fi router with VPN tunnel – device that allows the unit to be connected remotely with an industrial router using the secure OPENVPN service.
- **i-CR2**** - Wall-mounted remote control – Modbus remote controller with negative LCD and capacitive keys. The device is intended to be used as a remote unit keypad with local temperature sensing and replicates the functions of the on-board unit controller.
- **e-LITE**** - Color touch-screen wired controller, which can be used as a remote keypad for the heat pump, as it replicates the functions of the on-board unit display. It is equipped with local temperature sensing and time scheduling.
- **e-Pro**** - Color touch-screen Wi-Fi wired controller that allows both local and remote control via the MyMaxa app.
- **Hi-TV415**** - Color touchscreen wired remote controller for centralized management of a chiller/heat pump cascade, for up to 7 units.
- **Connect Box**** - Wi-Fi communication gateway for the Maxa Connect App.

* Factory-mounted accessory available only for sizes 10-12-14-16
** Accessories not usable simultaneously

Versions

- i-32V5/KA - Reversible heat pump with kit
- i-32V5SL - Silenced reversible heat pump
- i-32V5SL/KA - Soundproofed reversible heat pump with integrated antifreeze kit

e-PRO
Wi-Fi multifunction remote controller
ACCESSORY

e-LITE
Multifunction remote controller
ACCESSORY

Hi-TV415
Touch screen remote controller for cascade management (max 7 units)
ACCESSORY

i-32V5			06A	08A	10	10T A	12
Cooling	Cooling capacity (1)	kW	5,19	6,14	7,53	7,53	8,51
	Power input (1)	kW	1,64	1,97	2,39	2,39	2,79
	E.E.R. (1)	W/W	3,16	3,12	3,15	3,15	3,05
	Cooling capacity (2)	kW	6,37	8,03	9,50	9,50	11,6
	Power input (2)	kW	1,30	1,79	2,15	2,15	2,79
	E.E.R. (2)	W/W	4,90	4,49	4,41	4,41	4,16
	SEER (5)	W/W	4,42	4,51	4,34	4,34	4,43
	Water flow rate (1)	L/s	0,25	0,29	0,36	0,36	0,41
	Pressure drops in the heat exchanger on the user side (1)	kPa	3,2	5,3	6,9	6,9	8,8
Heating	Heating capacity (3)	kW	6,13	7,81	10,1	10,1	11,8
	Input power (3)	kW	1,25	1,71	2,28	2,28	2,73
	C.O.P. (3)	W/W	4,90	4,57	4,43	4,43	4,32
	Heating capacity (4)	kW	5,97	7,71	9,76	9,76	11,5
	Power input (4)	kW	1,58	2,11	2,80	2,80	3,33
	C.O.P. (4)	W/W	3,78	3,65	3,48	3,48	3,44
	SCOP (6)	W/W	4,46	4,46	4,53	4,53	4,47
	Water flow rate (4)	L/s	0,29	0,37	0,47	0,47	0,55
	Pressure drops in the heat exchanger on the user side (4)	kPa	4,4	8,6	9,7	9,7	13,1
	Energy efficiency water 35°C / 55°C		A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++
Compressor	Type		Twin Rotary DC Inverter				
	Number of compressors		1	1	1	1	1
	Refrigerant oil (type)		ESTER OIL VG74				
	Refrigerant oil (quantity)	L	0,62	0,62	1	1	1
	Refrigerant circuits		1	1	1	1	1
Refrigerant	Type		R32	R32	R32	R32	R32
	Refrigerant quantity (7)	kg	0,97	0,97	2,5	2,5	2,5
	Tons of CO_2 equivalent (7)	Ton	0,7	0,7	1,7	1,7	1,7
	Design pressure (high/low) heat pump model	bar	42,8/1,3	42,8/1,3	42,8/1,3	42,8/1,3	42,8/1,3
	Design pressure (high/low) chiller model	bar	42,8/3,5	42,8/3,5	42,8/3,5	42,8/3,5	42,8/3,5
Outdoor zone fans	Type		Brushless DC Motor				
	Number		1	1	1	1	1
Internal heat exchanger	Internal heat exchanger type		Plate type				
	No. of indoor heat exchangers		1	1	1	1	1
	Water content	L	0,6	0,6	1,2	1,2	1,2
Hydronic circuit	Available head (1)	kPa	74,9	71,0	68,9	68,9	63,4
	Water content of the hydronic circuit	L	1,14	1,14	1,8	1,8	1,8
	Maximum water-side pressure	bar	6	6	6	6	6
	Hydraulic connections	inch	1"M	1"M	1"M	1"M	1"M
	Minimum water volume (8)	L	40	40	50	50	60
	Maximum circulator power	kW	0,095	0,095	0,075	0,075	0,075
	Maximum absorbed current of circulator	A	0,66	0,66	0,38	0,38	0,38
	Energy Efficiency Index (EEI) circulator		≤ 0,21	≤ 0,21	≤ 0,21	≤ 0,21	≤ 0,21
Sound emissions	Sound power level Lw (9)	dB(A)	64	64	64	64	65
	Sound power level Lw (10)	dB(A)	62	62	63	63	63
Electrical data	Power supply		230V/1/50Hz			400V/3P +N+PE/50Hz	230V/1/50Hz
	Maximum absorbed power	kW	3,4	4,1	4,6	4,6	5,1
	Maximum absorbed current	A	15,5	18,7	20,2	6,6	22,1
	Maximum power input with antifreeze kit	kW	3,5	4,2	4,8	4,8	5,2
	Maximum current draw with antifreeze kit	A	15,9	19,1	20,7	7,0	22,7

(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 23/18°C.
(3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 30/35°C
(4) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 40/45°C.
(5) Cooling: low temperature, variable output, constant flow rate.
(6) Heating: average climatic conditions; Tbiv = -7°C; low temperature, variable output, constant flow rate.
(7) Indicative data subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) Calculated for a reduction in system water temperature of 20°C with a defrost cycle lasting 6 minutes.
(9) Sound power: heating mode condition (3) according to EN 12102-1:2013; value determined on the basis of measurements carried out in accordance with standard UNI EN ISO 9614-1.
(10) Sound power: heating mode at partial load according to Annex A of EN 12102:2017; value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1, in compliance with the requirements of the Eurovent and Heat Pump Keymark certifications.
The reported performance data are indicative and may be subject to change. Furthermore, the capacities declared at points (1), (2), (3) and (4) shall be understood as referring to the instantaneous power in accordance with UNI EN 14511. The data declared at points (5) and (6) are determined in accordance with UNI EN 14825.

i-32V5			12T A	14	14T A	16	16T A	18T A
Cooling	Cooling capacity (1)	kW	8,51	11,5	11,5	13,8	13,8	15,0
	Power input (1)	kW	2,79	3,53	3,53	4,38	4,38	4,88
	E.E.R. (1)	W/W	3,05	3,25	3,25	3,15	3,15	3,08
	Cooling capacity (2)	kW	11,6	14,0	14,0	15,8	15,8	17,1
	Power input (2)	kW	2,79	2,59	2,59	3,15	3,15	3,59
	E.E.R. (2)	W/W	4,16	5,40	5,40	5,02	5,02	4,76
	SEER (5)	W/W	4,43	4,77	4,77	4,94	4,94	5,05
	Water flow rate (1)	L/s	0,41	0,55	0,55	0,66	0,66	0,71
	Pressure drops in the heat exchanger on the user side (1)	kPa	8,8	12,9	12,9	17,5	17,5	20,6
Heating	Heating capacity (3)	kW	11,8	14,1	14,1	16,3	16,3	17,9
	Input power (3)	kW	2,73	2,91	2,91	3,49	3,49	4,07
	C.O.P. (3)	W/W	4,32	4,85	4,85	4,67	4,67	4,40
	Heating capacity (4)	kW	11,5	13,6	13,6	15,8	15,8	17,3
	Power input (4)	kW	3,33	3,55	3,55	4,24	4,24	4,92
	C.O.P. (4)	W/W	3,44	3,82	3,82	3,72	3,72	3,52
	SCOP (6)	W/W	4,47	4,48	4,48	4,58	4,58	4,46
	Water flow rate (4)	L/s	0,55	0,65	0,65	0,76	0,76	0,83
	Pressure drops in the heat exchanger on the user side (4)	kPa	13,1	13,0	13,0	17,6	17,6	21,0
	Energy efficiency water 35°C / 55°C		A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++
Compressor	Type		Twin Rotary DC Inverter					
	Number of compressors		1	1	1	1	1	1
	Refrigerant oil (type)		ESTER OIL VG74					
	Refrigerant oil (quantity)	L	1	1,4	1,4	1,4	1,4	1,4
	Refrigerant circuits		1	1	1	1	1	1
Refrigerant	Type		R32	R32	R32	R32	R32	R32
	Refrigerant quantity (7)	kg	2,5	3,2	3,2	3,5	3,5	3,5
	Tons of CO_2 equivalent (7)	Ton	1,7	2,2	2,2	2,4	2,4	2,4
	Design pressure (high/low) heat pump model	bar	42,8/1,3	42,8/1,3	42,8/1,3	42,8/1,3	42,8/1,3	42,8/1,3
	Design pressure (high/low) chiller model	bar	42,8/3,5	42,8/3,5	42,8/3,5	42,8/3,5	42,8/3,5	42,8/3,5
Outdoor zone fans	Type		Brushless DC Motor					
	Number		1	2	2	2	2	2
Internal heat exchanger	Internal heat exchanger type		Plate type					
	No. of indoor heat exchangers		1	1	1	1	1	1
	Water content	L	1,2	1,7	1,7	1,7	1,7	1,7
Hydronic circuit	Available head (1)	kPa	63,4	75,0	75,0	62,3	62,3	55,6
	Water content of the hydronic circuit	L	1,8	3,0	3,0	3,0	3,0	3,0
	Maximum water-side pressure	bar	6	6	6	6	6	6
	Hydraulic connections	inch	1"M	1"M	1"M	1"M	1"M	1"M
	Minimum water volume (8)	L	60	60	60	70	70	70
	Maximum circulator power	kW	0,075	0,14	0,14	0,14	0,14	0,14
	Maximum absorbed current of circulator	A	0,38	1,10	1,10	1,10	1,10	1,10
	Energy Efficiency Index (EEI) circulator		≤ 0,21	≤ 0,23	≤ 0,23	≤ 0,23	≤ 0,23	≤ 0,23
Sound emissions	Sound power level Lw (9)	dB(A)	65	68	68	68	68	68
	Sound power level Lw (10)	dB(A)	63	66	66	66	66	66
Electrical data	Power supply		400V/3P +N+PE/50Hz	230V/1/50Hz	400V/3P +N+PE/50Hz	230V/1/50Hz	400V/3P +N+PE/50Hz	400V/3P +N+PE/50Hz
	Maximum absorbed power	kW	5,1	6,6	6,6	7,0	7,0	8,3
	Maximum absorbed current	A	7,3	28,6	9,5	30,4	10,1	12,0
	Maximum power input with antifreeze kit	kW	5,2	6,7	6,7	7,1	7,1	8,5
	Maximum current draw with antifreeze kit	A	7,5	29,2	9,7	31,0	10,3	12,2

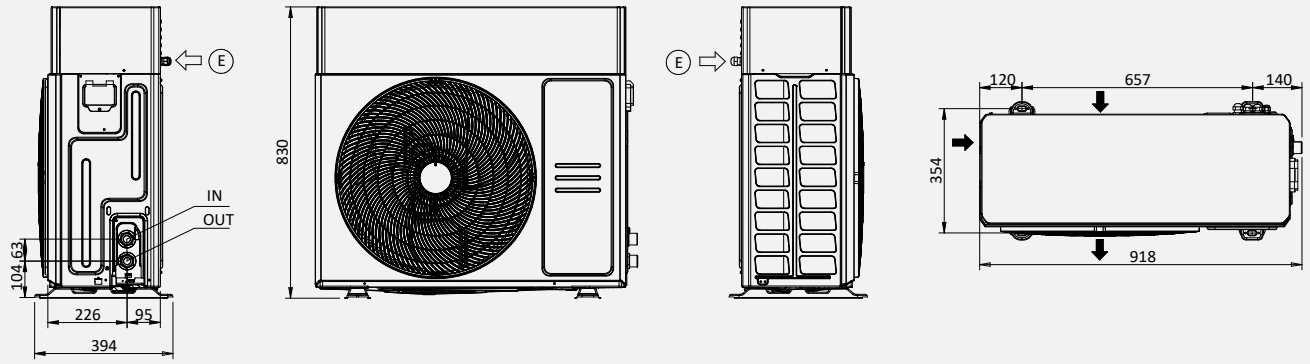
(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 23/18°C.
(3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 30/35°C
(4) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 40/45°C.
(5) Cooling: low temperature, variable output, constant flow rate.
(6) Heating: average climatic conditions; Tbiv = -7°C; low temperature, variable output, constant flow rate.
(7) Indicative data subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) Calculated for a reduction in system water temperature of 20°C with a defrost cycle lasting 6 minutes.
(9) Sound power: heating mode condition (3) according to EN 12102-1:2013; value determined on the basis of measurements carried out in accordance with standard UNI EN ISO 9614-1.
(10) Sound power: heating mode at partial load according to Annex A of EN 12102:2017; value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1, in compliance with the requirements of the Eurovent and Heat Pump Keymark certifications.
The reported performance data are indicative and may be subject to change. Furthermore, the capacities declared at points (1), (2), (3) and (4) shall be understood as referring to the instantaneous power in accordance with UNI EN 14511. The data declared at points (5) and (6) are determined in accordance with UNI EN 14825.

i-32V5 SL			08A SL	12 SL	12T A SL	16 SL	16T A SL
Cooling	Cooling capacity (1)	kW	6,14	8,51	8,51	13,8	13,8
	Power input (1)	kW	1,97	2,79	2,79	4,38	4,38
	E.E.R. (1)	W/W	3,12	3,05	3,05	3,15	3,15
	Cooling capacity (2)	kW	8,03	11,6	11,6	15,8	15,8
	Power input (2)	kW	1,79	2,79	2,79	3,15	3,15
	E.E.R. (2)	W/W	4,49	4,16	4,16	5,02	5,02
	SEER (5)	W/W	4,51	4,43	4,43	4,94	4,94
	Water flow rate (1)	L/s	0,29	0,41	0,41	0,66	0,66
	Pressure drops in the heat exchanger on the user side (1)	kPa	5,3	8,8	8,8	17,5	17,5
Heating	Heating capacity (3)	kW	4,78	7,35	7,35	8,65	8,65
	Input power (3)	kW	0,95	1,52	1,52	1,68	1,68
	C.O.P. (3)	W/W	5,03	4,84	4,84	5,15	5,15
	Heating capacity (4)	kW	4,72	7,14	7,14	8,37	8,37
	Power input (4)	kW	1,18	1,85	1,85	2,04	2,04
	C.O.P. (4)	W/W	3,88	3,85	3,85	4,10	4,10
	SCOP (6)	W/W	4,57	4,58	4,58	4,82	4,82
	Water flow rate (4)	L/s	0,22	0,34	0,34	0,40	0,40
	Pressure drops in the heat exchanger on the user side (4)	kPa	2,9	6,1	6,1	8,1	8,1
	Energy efficiency water 35°C / 55°C		A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++
Compressor	Type		Twin Rotary DC Inverter				
	Number of compressors		1	1	1	1	1
	Refrigerant oil (type)		ESTER OIL VG74				
	Refrigerant oil (quantity)	L	0,62	1	1	1,4	1,4
	Refrigerant circuits		1	1	1	1	1
Refrigerant	Type		R32	R32	R32	R32	R32
	Refrigerant quantity (7)	kg	2,5	2,5	2,5	3,5	3,5
	Tons of CO_2 equivalent (7)	Ton	0,7	1,7	1,7	2,4	2,4
	Design pressure (high/low) heat pump model	bar	42,8/1,3	42,8/1,3	42,8/1,3	42,8/1,3	42,8/1,3
	Design pressure (high/low) chiller model	bar	42,8/3,5	42,8/3,5	42,8/3,5	42,8/3,5	42,8/3,5
Outdoor zone fans	Type		Brushless DC Motor				
	Number		1	1	1	2	2
Internal heat exchanger	Internal heat exchanger type		Plate type				
	No. of indoor heat exchangers		1	1	1	1	1
	Water content	L	0,6	1,2	1,2	1,7	1,7
Hydraulic circuit	Available head (1)	kPa	71,0	63,4	63,4	62,3	62,3
	Water content of the hydronic circuit	L	1,1	1,8	1,8	3,0	3,0
	Maximum water-side pressure	bar	6	6	6	6	6
	Hydraulic connections	inch	1"M	1"M	1"M	1"M	1"M
	Minimum water volume (8)	L	40	60	60	70	70
	Maximum circulator power	kW	0,10	0,08	0,08	0,14	0,14
	Maximum absorbed current of circulator	A	0,66	0,38	0,38	1,10	1,10
	Energy Efficiency Index (EEI) circulator		≤ 0,21	≤ 0,21	≤ 0,21	≤ 0,23	≤ 0,23
Sound emissions	Sound power level Lw (9)	dB(A)	53	53	53	53	53
	Sound power level Lw (10)	dB(A)	53	53	53	53	53
Electrical data	Power supply		230V/1/50Hz		400V/3P +N+PE/50Hz	230V/1/50Hz	400V/3P +N+PE/50Hz
	Maximum absorbed power	kW	4,1	5,1	5,1	7,0	7,0
	Maximum absorbed current	A	18,7	22,1	7,3	30,4	10,1
	Maximum power input with antifreeze kit	kW	4,2	5,2	5,2	7,1	7,1
	Maximum current draw with antifreeze kit	A	19,1	22,7	7,5	31,0	10,3

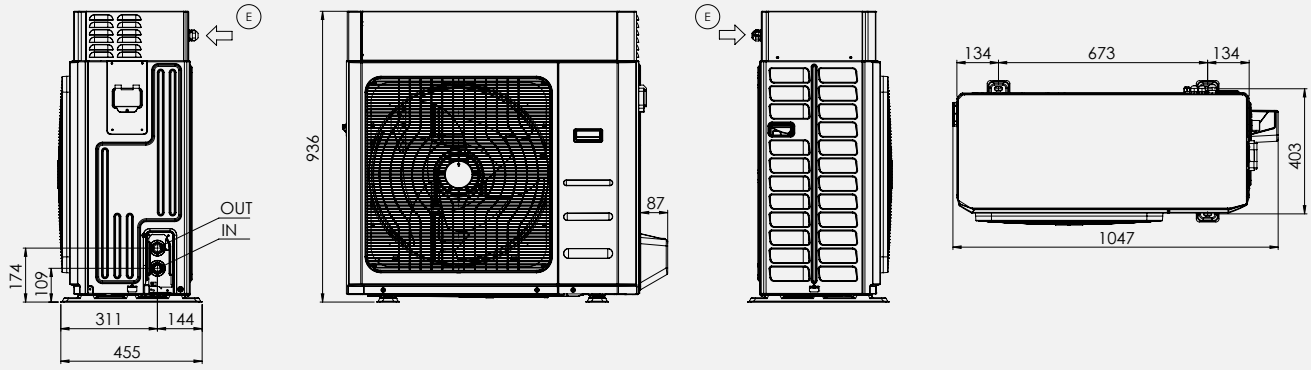
(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 23/18°C.
(3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 30/35°C.
(4) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 40/45°C.
(5) Cooling: low temperature, variable output, constant flow rate.
(6) Heating: average climatic conditions; Tbiv = -7°C; low temperature, variable output, constant flow rate.
(7) Indicative data subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) Calculated for a reduction in system water temperature of 20°C with a defrost cycle lasting 6 minutes.
(9) Sound power: heating mode condition (3) according to EN 12102-1:2013; value determined on the basis of measurements carried out in accordance with standard UNI EN ISO 9614-1.
(10) Sound power: heating mode at partial load according to Annex A of EN 12102:2017; value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1, in compliance with the requirements of the Eurovent and Heat Pump Keymark certifications.
The reported performance data are indicative and may be subject to change. Furthermore, the capacities declared at points (1), (2), (3) and (4) shall be understood as referring to the instantaneous power in accordance with UNI EN 14511. The data declared at points (5) and (6) are determined in accordance with UNI EN 14825.

Dimensional Drawings

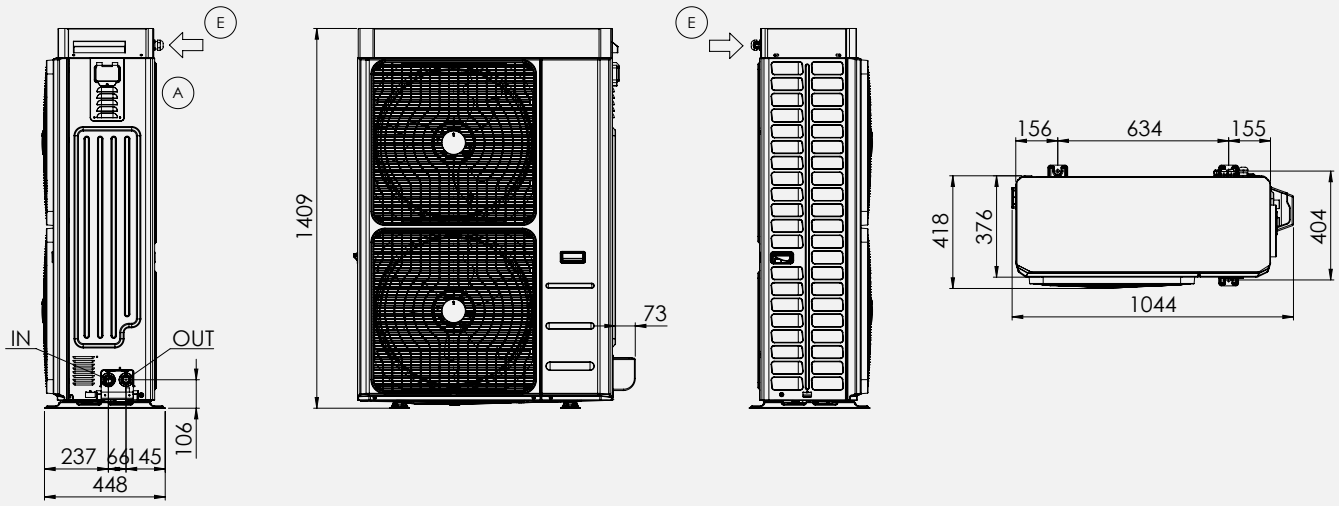
i-32V5 06A / 08A / SL08A



i-32V5 10 / 10T A / 12 / SL12 / 12T A / SL12T A



i-32V5 14 / 14T A / 16 / SL16 / 16T A / SL16T A / 18T A



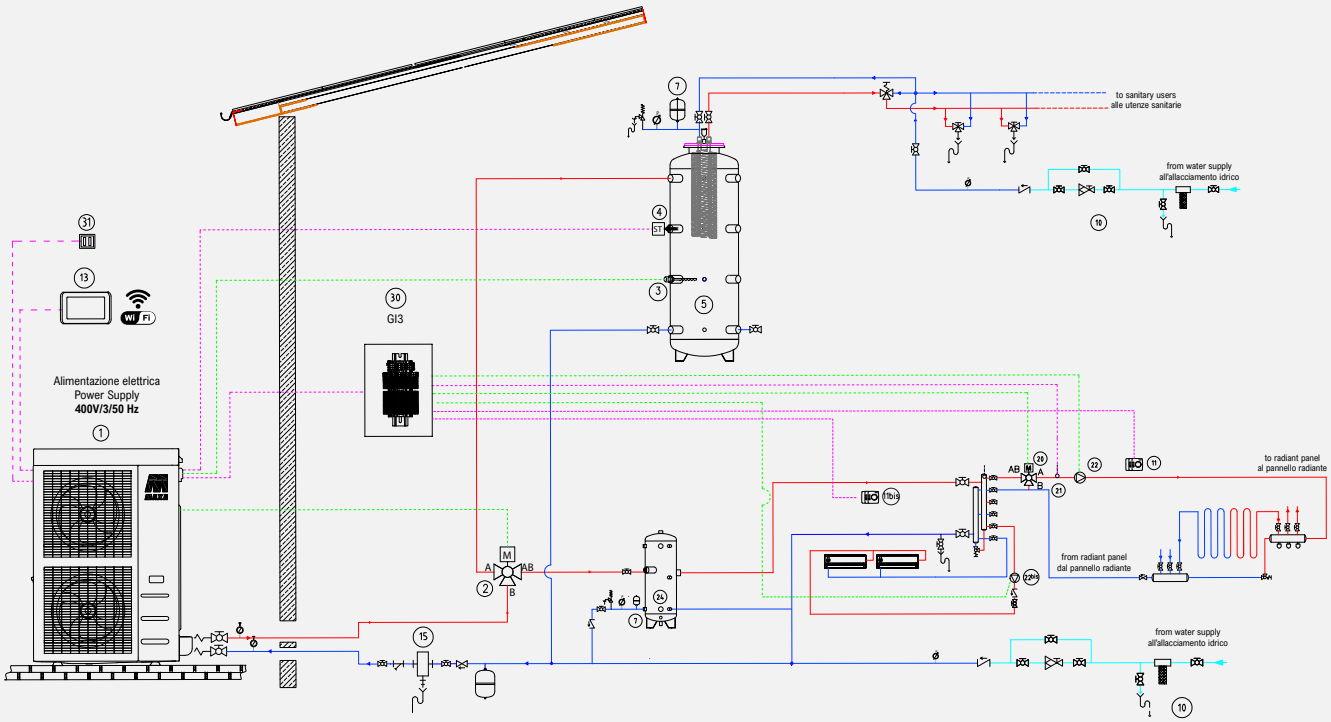
		06A 08A / SL08A		10 / 10T A 12 / SL12 / 12T A / SL12T A				14	14T A	16 SL16	16T A SL16T A	18T A
L	mm	918	918	1.047	1.047	1.047	1.047	1.044	1.044	1.044	1.044	1.044
P	mm	394	394	455	455	455	455	455	455	455	455	455
H	mm	830	830	936	936	936	936	1.409	1.409	1.409	1.409	1.409
Shipping weight	kg	77	77	110	110	110	110	134	148	140	154	154

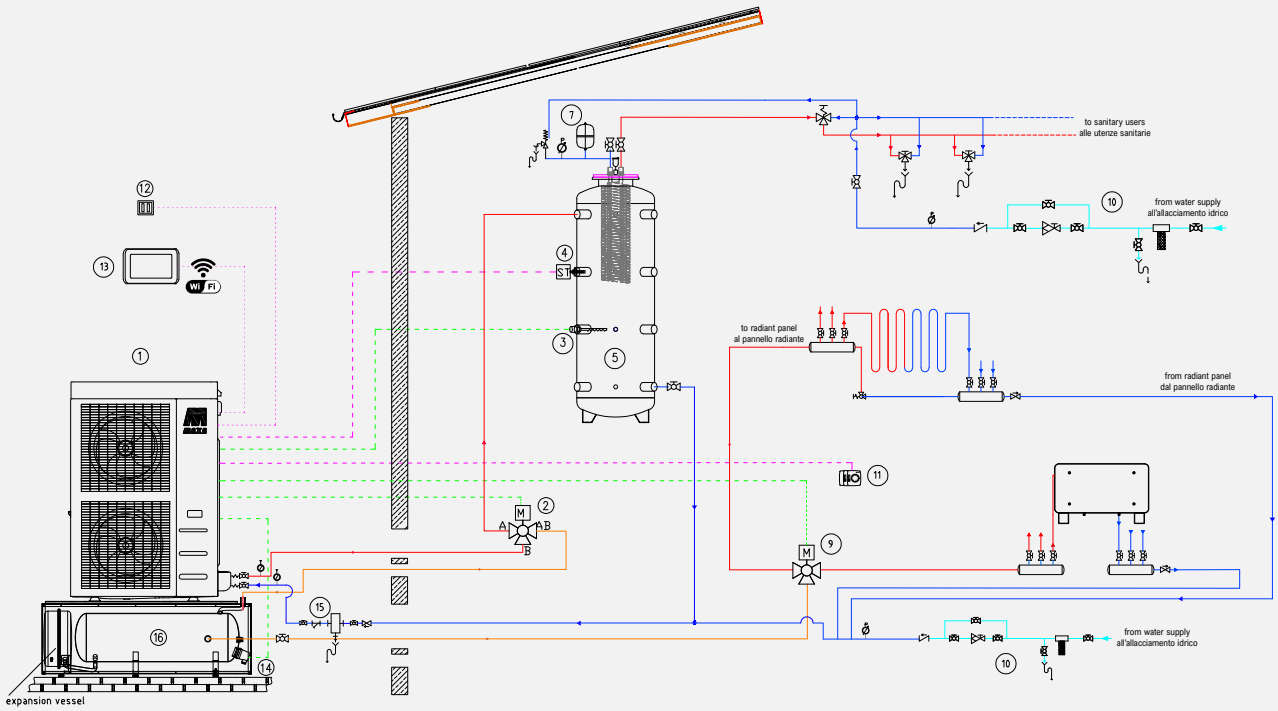
IN/OUT: 1"M G
E: Power supply input

Dimensions in mm

System Diagram - Standard Application

1	i-32V5 heat pump	9	Summer/Winter valve	15	Y-strainer / Dirt separator filter (FD)	24	Technical water tank
2	3-way DHW/system valve (VDIS2)	10	Water connection	16	Technical buffer tank ACT	30	GI3 - Hardware expansion module
3	DHW electric heater	11	Local thermostat (zone 1)	20	Mixing valve	31	Season change summer/winter
4	DHW temperature sensor (SAS)	11bis	Local thermostat (zone 2)	21	Mixed circuit water sensor		
5	DHW Tank (Caddy)	13	e-PRO control	22	Mixed circuit pump		
7	Expansion vessel	14	Electric heater ACT	22bis	Direct circuit pump		





Purely indicative and non-binding diagram; for the construction of the system, it is necessary to refer to a design prepared by a qualified technician.

i-32V5C Midi

Air-cooled inverter monobloc R32 water chiller

21 kW÷32 kW

The chillers of the i-32V5C Midi range have been designed for residential and commercial applications.
The use of brushless inverter compressor technology, combined with the electronic expansion valve, the variable-speed circulator and fan, optimizes energy consumption and the operating efficiency of the refrigeration components.

MADE IN ITALY | R32 REFRIGERANT 675 GWP | WI-FI OPTIONAL | CASCADE MANAGEMENT FOR UP TO 7 UNITS | FULL INVERTER SYSTEM | SILENCED VERSION | VERSION BT | ACCESSORY DS

DC inverter twin-rotary hermetic compressor, specifically designed for operation with R32, equipped with thermal protection and mounted on rubber anti-vibration supports.

Casing: structure made of hot-dip galvanized steel sheet profiles and panels, polyester powder coated, RAL 7035 textured finish, weather-resistant.

User Side Heat Exchanger: brazed plate heat exchanger in AISI 304 stainless steel, coated with black flexible closed-cell elastomeric foam.

Source Side Heat Exchanger: the air heat exchangers are made entirely of aluminum using microchannel technology.

Fans: axial type with brushless DC motor, with airfoil-profile blades. They are statically and dynamically balanced.

Refrigeration Circuit:

- Filter drier;
- Shut-off valve on the liquid line;
- Liquid flow and moisture indicator;
- Electronic expansion valve
- Charge connections;
- High-pressure safety pressure switches
- High and low pressure transducers

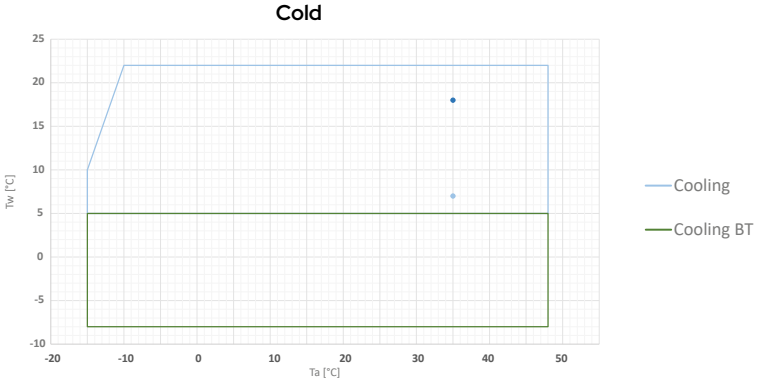
Standard Components

- Electronic circulator
- EEV - electronic thermostatic valve
- Liquid indicator
- Water-side safety valve
- Drain valve
- Flow switch (flow presence signaling)
- Clean remote on/off contact
- Dynamic setpoint
- Three-phase relay for phase sequence/failure monitoring
- Fan speed controller (ECM fans)
- 2nd setpoint

Electrical Panel and Control: fully manufactured and wired in compliance with IEC 60335-2-40.

Operating Areas

Cold



Tw: water temperature - Ta: outdoor air temperature

Accessories

Factory-installed

- **KA1** - Anti-freeze heater on: heat exchanger and pump - Electric heater installed on the front side of the plate heat exchanger, which is activated when the water temperature inside the exchanger drops below +4°C. If the selected hydronic kit includes the pump, this component will also be equipped with a heater that protects it from ice formation.
- **TR1** - Microchannel coil with Aero surface treatment. The treatment consists in the application by spraying of a special water-based coating made of new resins with very high chemical resistance. The product is flexible to withstand thermal contractions and expansions, UV-resistant, dirt-repellent, mechanically resistant, with very limited heat transfer losses and practically no effects on air-side pressure drops. The treatment withstands 6000 h according to ASTM B117.
- **TR1C4** - Anti-corrosion treatment on coil and sheet metal – includes a TR1-type treatment on the coil and, in addition, the hot-dip galvanized steel panels are painted so as to make them suitable for unit installation in C4H environments, according to UNI EN 12944. The external fastening hardware is made of AISI 304 material, class A2.
- **GI -** System management module - allows the management of the following functions: management of the booster circulation pump with the aid of a room thermostat (not supplied); management of the mixing valve on the system side in both heating and cooling modes; management of solar-thermal integration.
- **CM** - BMS connectivity setup – ModBus protocol included – accessory that enables the connection of the unit to external controllers via serial cable with RS-485 electrical standard and ModBus RTU protocol.
- **RP** - Coil protective grilles – wire mesh to prevent foreign objects from entering the coil and to protect the coil from accidental contact with objects or people.
- **IM** - Circuit breakers on compressors - Overcurrent switches applied to compressors, protecting components from faults caused by possible current spikes.
- **DS** - The unit with desuperheater includes the addition of a brazed-plate heat exchanger made of AISI 316 stainless steel, factory-insulated, a variable-speed circulator, and a remote temperature sensor. The desuperheater allows partial recovery of the condensation heat.
- **SL** - thanks to the use of dedicated acoustic panels, it ensures low sound emissions.

Provided separately

- **AG** - Anti-vibration kit – designed to prevent transmission of vibrations to the structure; must be installed under the unit, in the dedicated mounting holes.
- **VRC** - Condensate drip tray – galvanized sheet metal container to be installed at the base of the unit for collecting condensate water.
- **FY** - Y-strainer – contains a stainless steel mesh screen (500 µm filtration) that collects solid materials present in the water. Filtration prevents blockage and/or damage to the devices installed downstream of the strainer. Alternatively, it is possible to install a dirt separator that ensures a filtration level not greater than 1 mm (in this case, it is no longer necessary to install the Y-strainer).
- **FD** - Dirt separator – allows the heavier impurities present in the hydraulic circuit to be stopped and retained, as they are captured by a synthetic filter mesh and collected in a settling chamber. A magnetic device located inside the body of the dirt separator also makes it possible to trap ferromagnetic particles.
- **VDIS3** - Diverter valve – 3-way motorized ball valve Kvs 20.8, F 1" 1/4 connections, complete with actuator.
- **ACT** - Technical storage tank (see dedicated section).
- **VSA** - Anti-freeze thermal discharge valve – a valve capable of opening at 0°C to prevent ice formation inside the pipes.
- **ISK**** - USB/RS485 serial converter – interface device capable of reading and writing control registers via the RS485 standard and converting them to a USB port that can be connected to any supervision system.
- **LNC**** - LAN-Wi-Fi router – device that allows the unit to be connected to a local network via Ethernet cable or Wi-Fi coverage for remote monitoring.
- **OVPN**** - 3G LAN-Wi-Fi router with VPN tunnel – device that allows the unit to be connected remotely with an industrial router using the secure OPENVPN service.
- **i-CR2**** - Wall-mounted remote control – Modbus remote controller with negative LCD and capacitive keys. The device is intended to be used as a remote unit keypad with local temperature sensing and replicates the functions of the on-board unit controller.
- **e-LITE**** - Color touch-screen wired controller, which can be used as a remote keypad for the heat pump, as it replicates the functions of the on-board unit display. It is equipped with local temperature sensing and time scheduling.
- **Hi-TV415**** - Color touchscreen wired remote controller for centralized management of a chiller/heat pump cascade, for up to 7 units.
- **Connect Box**** - Wi-Fi communication gateway for the Maxa Connect App.

** Accessories not usable simultaneously

Versions

- i-32V5C Midi - Chiller standard version
- i-32V5C-BT Midi - The BT version of the unit allows the operating range of the water temperature to be extended down to -8°C. In this case it is necessary to use a mixture of water and glycol.

e-LITE
Multifunction remote controller
ACCESSORY

Hi-TV415
Touch screen remote controller for cascade management (max 7 units)
ACCESSORY

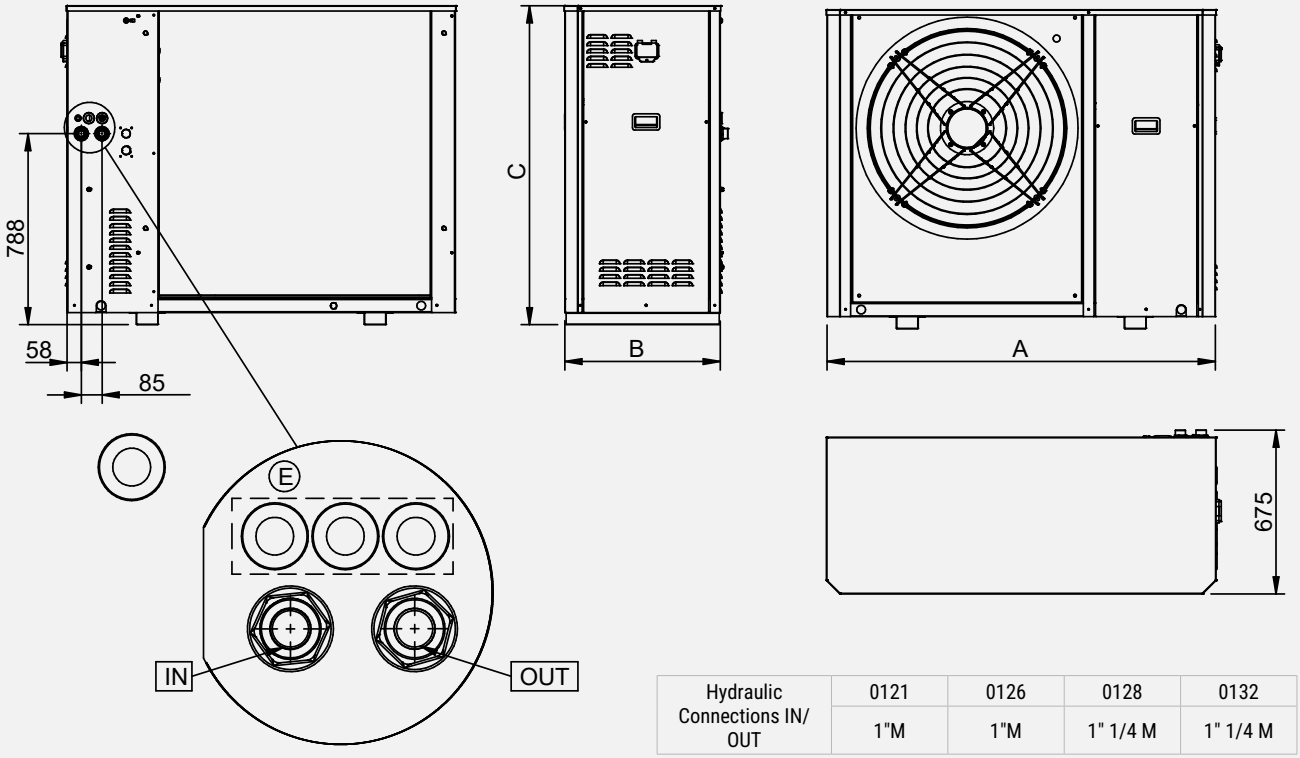
			0121	0126	0128	0132
Cooling	Cooling capacity (1)	kW	20,7	25,8	28,1	31,8
	Power input (1)	kW	5,92	8,03	8,29	10,2
	E.E.R. (1)	W/W	3,50	3,21	3,39	3,13
	Cooling capacity (2)	kW	21,6	25,5	28,4	32,8
	Power input (2)	kW	4,30	5,28	5,77	7,09
	E.E.R. (2)	W/W	5,02	4,83	4,92	4,63
	SEER (3)	W/W	5,19	5,07	5,43	5,06
	IPLV (4)		5,56	5,55	5,73	5,54
	Cooling capacity (8)	kW	10,7	13,8	14,9	17,2
	Power input (8)	kW	6,05	7,66	7,92	9,47
	E.E.R. (8)	W/W	1,77	1,80	1,88	1,82
	Water flow rate (1)	L/s	0,99	1,23	1,34	1,52
	Pressure drops in the heat exchanger on the user side (1)	kPa	37,5	53,1	39,2	47,8
Compressor	Type		Twin Rotary DC Inverter			
	Number of compressors		1	1	1	1
	Refrigerant oil (type)		FW68S or equivalent			
	Refrigerant oil (quantity)	L	1,5	1,5	1,5	1,5
	Refrigerant circuits		1	1	1	1
Refrigerant	Type		R32	R32	R32	R32
	Refrigerant quantity (5)	kg	1,8	1,8	2,2	2,2
	Refrigerant quantity in tons of CO_2 equivalent (5)	Ton	1,22	1,22	1,49	1,49
	Design pressure (high/low) chiller model	bar	42,8/3,5	42,8/3,5	42,8/3,5	42,8/3,5
Outdoor zone fans	Type		Brushless DC Motor			
	Number		1	1	1	1
	Rated power (1)	kW	0,27	0,31	0,70	0,73
	Maximum absorbed power	kW	0,83	0,83	0,83	0,83
	Maximum absorbed current	A	1,45	1,45	1,45	1,45
	Nominal air flow rate	m³/h	8091	8407	12873	12836
Internal heat exchanger	Internal heat exchanger type		Plate type			
	No. of indoor heat exchangers		1	1	1	1
	Water content	L	1,7	1,7	2,1	2,1
Hydraulic circuit	Available head (1)	kPa	79,1	55,8	66,3	50,2
	Water content of the hydronic circuit	L	2,4	2,4	3,4	3,4
	Maximum pressure of hydronic kit (safety valve setting)	bar	6	6	6	6
	Hydraulic connections	inch	1"M	1"M	1"1/4 M	1"1/4 M
	Minimum water volume (6)	L	110	110	110	110
	Maximum circulator power	kW	0,31	0,31	0,31	0,31
	Maximum absorbed current of circulator	A	1,37	1,37	1,37	1,37
	Energy Efficiency Index (EEI) circulator		≤ 0,23	≤ 0,23	≤ 0,23	≤ 0,23
Sound emissions	Sound power level Lw (7) std/SL	dB(A)	73 / 69	74 / 70	75 / 71	76 / 72
Electrical data	Power supply		400V/3P+N+PE/50Hz			
	Maximum absorbed power	kW	9,88	10,3	11,1	11,7
	Maximum absorbed current	A	19,0	19,7	20,9	21,9
	Maximum power input with antifreeze kit	kW	9,95	10,4	11,1	11,8
	Maximum current draw with antifreeze kit	A	19,0	19,7	20,9	21,9

(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 23/18°C.
(3) Cooling: low temperature, variable output, constant flow rate.
(4) Calculated according to AHRI 551/591 (SI) standard.
(5) Indicative data subject to change. For the correct data, always refer to the technical nameplate on the unit.
(6) Calculated for a decrease in the system water temperature of 10°C with a defrost cycle lasting 6 minutes.
Minimum required volume in the primary circuit.

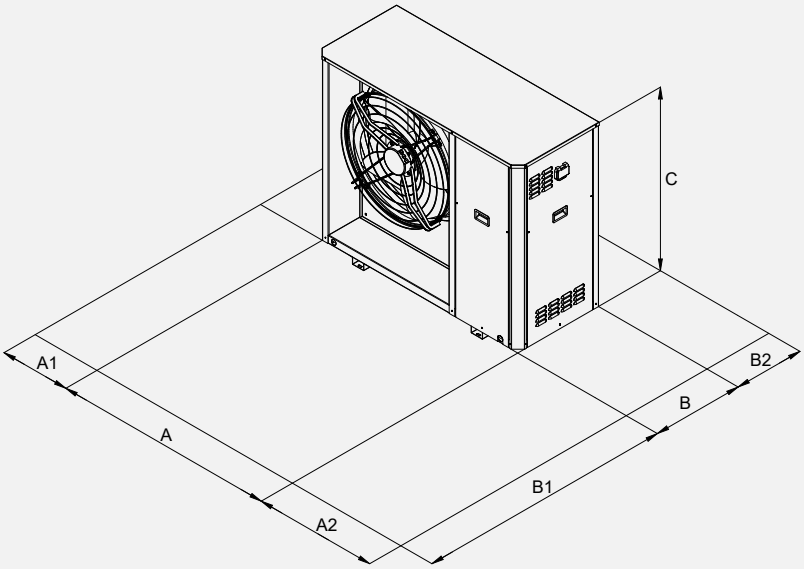
(7) Sound power: condition (3); value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1, in compliance with the requirements of Eurovent certification.
(8) Cooling BT version: outdoor air temperature 35°C; inlet/outlet water temperature -3/-8°C. Fluid treated with 35% ethylene glycol
The stated performance data are indicative and may be subject to change. Furthermore, the capacities declared at points (1), (2), (8) refer to the instantaneous power in accordance with UNI EN 14511. The value declared at point (3) is determined in accordance with UNI EN 14825.

Dimensional Drawings

i-32V5C Midi 0121 / 0126 / 0128 / 0132



Hydraulic Connections IN/ OUT	0121	0126	0128	0132
	1"M	1"M	1" 1/4 M	1" 1/4 M



Clearances		A1	A2	B1	B2
0121	mm	400	500	1500	400
0126	mm	400	500	1500	400
0128	mm	400	500	1500	400
0132	mm	400	500	1500	400

		0121	0126	0128	0132
L	mm	1600	1600	1600	1600
P	mm	680	680	680	680
H	mm	1315	1315	1315	1315
Shipping weight	kg	215	215	225	225

Dimensions in mm

i-32V5H Midi

Reversible air-to-water inverter monobloc heat pumps with R32

21 kW÷32 kW

The heat pumps in the i-32V5H Midi range have been designed for residential and commercial applications; they are extremely versatile and suitable for operation in heat pump mode with hot water production for space heating and domestic hot water use at a temperature of 60°C. The use of brushless inverter compressor technology, combined with the electronic expansion valve, the variable-speed circulator and fan, optimizes energy consumption and the operating efficiency of the refrigeration components.

MADE IN ITALY	R32 REFRIGERANT 675 GWP	60°C OUTLET WATER Supply Temperature	A++ ENERGY EFFICIENCY CLASS	WI-FI OPTIONAL	CASCADE MANAGEMENT FOR UP TO 7 UNITS	FULL INVERTER SYSTEM	SILENCED VERSION	VERSION BT

DC inverter twin-rotary hermetic compressor, specifically designed for operation with R32, equipped with thermal protection and mounted on rubber anti-vibration supports.

Cabinet: Suitable outdoor installation structure made of thick hot-dip galvanized steel sheet profiles, polyester powder coated, RAL 7035 textured finish, weather resistant.

User Side Heat Exchanger: brazed-plate heat exchanger in AISI 304 stainless steel, insulated with black flexible closed-cell elastomeric foam.

Source Side Heat Exchanger: the air exchangers are made of copper tubes and aluminum fins.

Electrical Panel and Control: fully manufactured and wired in compliance with IEC 60335-2-40.

Fans: axial type with airfoil blades. They are statically and dynamically balanced and supplied complete with protection grille and inlet/outlet air nozzle with double flared profile, specially shaped to increase efficiency and reduce noise. The electric motor used is modulated with a directly coupled EC brushless motor and equipped with integrated thermal protection.

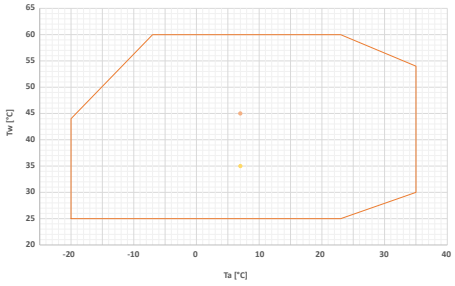
The motor has an IP 54 protection rating according to CEI EN 60529.

Standard Components

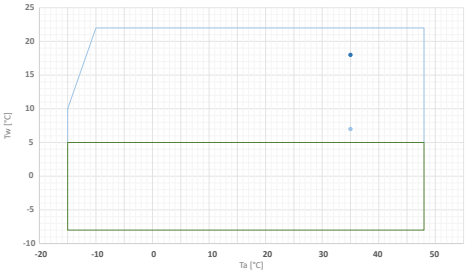
- Electronic circulator
- EEV - electronic thermostatic valve
- Liquid indicator
- Water-side safety valve
- Drain valve
- Flow switch (flow presence signaling)
- Clean remote on/off contact
- Dynamic setpoint
- Three-phase relay for phase sequence/failure monitoring
- Fan speed controller (ECM fans)
- 2nd setpoint

Operating Areas

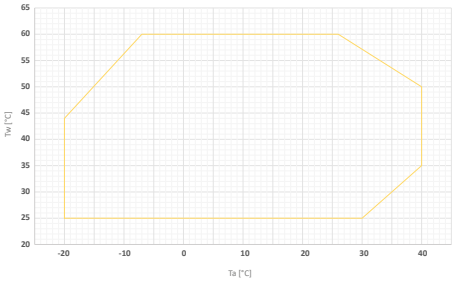
Hot



Cold



DHW



Cooling — Cooling BT

Tw: water temperature - Ta: outdoor air temperature

Accessories

Factory-installed

- **KA** - Antifreeze kit (heat exchanger + base) – includes the use of a self-heating cable that is glued to the base of the unit near the condenser coil, and a PET heater positioned on the plate heat exchanger face.
- **TR2** - Anti-corrosion treatment for coils – thanks to the treatment, the coil becomes flexible to withstand thermal expansion and contraction, mechanically resistant, protected against UV rays and dirt-repellent. Heat transfer losses are very limited. The treatment ensures coil protection in virtually all environmental conditions: from coastal to rural areas, from industrial to urban zones. The treatment withstands 6000 h according to ASTM B117.
- **TR2C4** - Anti-corrosion treatment on coil and sheet metal – includes a TR2-type treatment on the coil and, in addition, the hot-dip galvanized steel panels are painted so as to make them suitable for unit installation in C4H environments, in accordance with UNI EN 12944. The external fastening hardware is made of AISI 304 material, class A2. The treatment also includes the fan protection grille, while the galvanized sheets inside the unit (electrical panel casing and inductances) are excluded.
- **GI -** System management module - allows the management of the following functions: management of the booster circulation pump with the aid of a room thermostat (not supplied); management of the mixing valve on the system side in both heating and cooling modes; management of solar-thermal integration.
- **CM** - BMS connectivity setup – ModBus protocol included – accessory that enables the connection of the unit to external controllers via serial cable with RS-485 electrical standard and ModBus RTU protocol.
- **RP** - Coil protective grilles – wire mesh to prevent foreign objects from entering the coil and to protect the coil from accidental contact with objects or people.
- **IM** - Circuit breakers on compressors - Overcurrent switches applied to compressors, protecting components from faults caused by possible current spikes.
- **DS** - The unit with desuperheater includes the addition of a brazed-plate heat exchanger made of AISI 316 stainless steel, factory-insulated, a variable-speed circulator, and a remote temperature sensor. The desuperheater allows partial recovery of the condensation heat.
- **SL** - thanks to the use of dedicated acoustic panels, it ensures low sound emissions.

Provided separately

- **SAS** - Domestic hot water probe / Remote system probe – in some system configurations (e.g. heat pump in parallel with the boiler on the same hydronic circuit and diverter valve for boiler exclusion), it may be necessary to enable a system temperature probe so that the unit controller can correctly manage the operation. The remote system probe controls the heat pump temperature only during the compressor start-up phase; shutdown is managed by the probe located on the heat pump flow line.
- **SPS** - Solar panel probe for GI3 – probe required to measure the temperature of the solar panels when the unit is integrated with a solar thermal system.
- **AG** - Anti-vibration kit – designed to prevent transmission of vibrations to the structure; must be installed under the unit, in the dedicated mounting holes.
- **VRC** - Condensate drip tray – galvanized sheet metal container to be installed at the base of the unit for collecting condensate water.
- **FY** - Y-strainer – contains a stainless steel mesh screen (500 µm filtration) that collects solid materials present in the water. Filtration prevents blockage and/or damage to the devices installed downstream of the strainer. Alternatively, it is possible to install a dirt separator that ensures a filtration level not greater than 1 mm (in this case, it is no longer necessary to install the Y-strainer).
- **FD** - Dirt separator – allows the heavier impurities present in the hydraulic circuit to be stopped and retained, as they are captured by a synthetic filter mesh and collected in a settling chamber. A magnetic device located inside the body of the dirt separator also makes it possible to trap ferromagnetic particles.
- **VDIS3** - Diverter valve – 3-way motorized ball valve Kvs 20.8, F 1" 1/4 connections, complete with actuator.
- **ACT** - Technical storage tank (see dedicated section).
- **VSA** - Anti-freeze thermal discharge valve – a valve capable of opening at 0°C to prevent ice formation inside the pipes.
- **ISK**** - USB/RS485 serial converter – interface device capable of reading and writing control registers via the RS485 standard and converting them to a USB port that can be connected to any supervision system.
- **LNC**** - LAN-Wi-Fi router – device that allows the unit to be connected to a local network via Ethernet cable or Wi-Fi coverage for remote monitoring.
- **OVPN**** - 3G LAN-Wi-Fi router with VPN tunnel – device that allows the unit to be connected remotely with an industrial router using the secure OPENVPN service.
- **i-CR2**** - Wall-mounted remote control – Modbus remote controller with negative LCD and capacitive keys. The device is intended to be used as a remote unit keypad with local temperature sensing and replicates the functions of the on-board unit controller.
- **e-LITE**** - Color touch-screen wired controller, which can be used as a remote keypad for the heat pump, as it replicates the functions of the on-board unit display. It is equipped with local temperature sensing and time scheduling.
- **e-Pro**** - Color touch-screen Wi-Fi wired controller that allows both local and remote control via the MyMaxa app.
- **Hi-TV415**** - Color touchscreen wired remote controller for centralized management of a chiller/heat pump cascade, for up to 7 units.
- **Connect Box**** - Wi-Fi communication gateway for the Maxa Connect App.

** Accessories not usable simultaneously

Versions

- i-32V5H Midi - Reversible heat pump standard version
- i-32V5H-BT Midi - Reversible heat pump BT version (for low water temperatures)

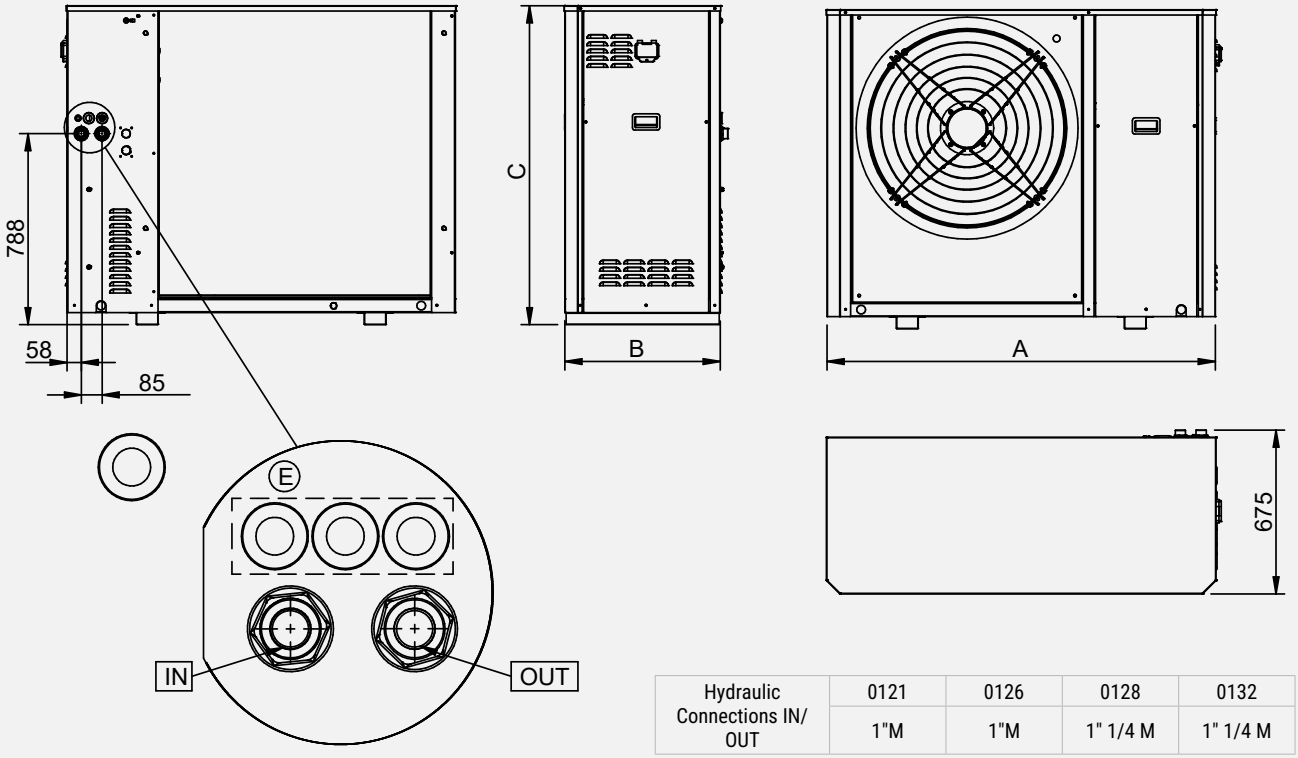
			0121	0126	0128	0132
Cooling	Cooling capacity (1)	kW	17,7	18,7	24,2	26,0
	Power input (1)	kW	5,87	6,19	7,98	8,65
	E.E.R. (1)	W/W	3,02	3,02	3,03	3,01
	Cooling capacity (2)	kW	22,0	25,8	29,0	31,4
	Power input (2)	kW	4,44	5,50	6,36	7,08
	E.E.R. (2)	W/W	4,95	4,68	4,56	4,44
	SEER (5)	W/W	4,44	4,55	4,76	4,81
	Cooling capacity (10)	kW	9,21	9,83	13,0	14,0
	Power input (10)	kW	5,94	6,14	7,77	8,33
	E.E.R. (10)	W/W	1,55	1,60	1,67	1,68
	Water flow rate (1)	L/s	0,8	0,9	1,2	1,2
	Pressure drops in the heat exchanger on the user side (1)	kPa	32,5	34,5	31,2	34,2
Heating	Heating capacity (3)	kW	21,3	26,0	28,0	32,1
	Input power (3)	kW	4,92	6,44	6,35	7,84
	C.O.P. (3)	W/W	4,33	4,04	4,41	4,09
	Heating capacity (4) min/nom/max	kW	21,2	25,8	28,3	32,7
	Power input (4)	kW	6,36	7,86	8,21	9,90
	C.O.P. (4)	W/W	3,34	3,28	3,45	3,30
	SCOP (6)	W/W	4,20	4,05	4,29	4,02
	Water flow rate (4)	L/s	1,0	1,2	1,4	1,6
	Pressure drops in the heat exchanger on the user side (4)	kPa	37,9	53,1	41,4	50,6
	Energy efficiency water 35°C / 55°C	Class	A++/A++	A++/A++	A++/A++	A++/A++
Compressor	Type		Twin Rotary DC Inverter			
	Number of compressors		1	1	1	1
	Refrigerant oil (type)		FW68S or equivalent			
	Refrigerant oil (quantity)	L	1,5	1,5	1,5	1,5
	Refrigerant circuits		1	1	1	1
Refrigerant	Type		R32	R32	R32	R32
	Refrigerant quantity (7)	kg	4,3	4,3	5,1	5,1
	Refrigerant quantity in tons of CO_2 equivalent (7)	Ton	2,90	2,90	3,44	3,44
	Design pressure (high/low) heat pump model	bar	42,8/1,3	42,8/1,3	42,8/1,3	42,8/1,3
	Design pressure (high/low) chiller model	bar	42,8/3,5	42,8/3,5	42,8/3,5	42,8/3,5
Outdoor zone fans	Type		Brushless DC Motor			
	Number		1	1	1	1
	Rated power (1)	kW	0,26	0,26	0,50	0,62
	Maximum absorbed power	kW	0,83	0,83	0,83	0,83
	Maximum absorbed current	A	1,45	1,45	1,45	1,45
	Nominal air flow rate (1)	m³/h	10769	10847	12209	13202
Internal heat exchanger	Internal heat exchanger type		Plate type			
	No. of indoor heat exchangers		1	1	1	1
	Water content	L	1,7	1,7	2,1	2,1
Hydraulic circuit	Available head (1)	kPa	90,0	86,5	81,4	74,7
	Water content of the hydronic circuit	L	2,4	2,4	3,4	3,4
	Maximum pressure of hydronic kit (safety valve setting)	bar	6	6	6	6
	Hydraulic connections	inch	1"M	1"M	1"1/4 M	1"1/4 M
	Minimum water volume (8)	L	110	110	110	110
	Maximum circulator power	kW	0,31	0,31	0,31	0,31
	Maximum absorbed current of circulator	A	1,37	1,37	1,37	1,37
	Energy Efficiency Index (EEI) circulator		≤ 0,23	≤ 0,23	≤ 0,23	≤ 0,23
Sound emissions	Sound power level Lw (9) standard / SL	dB(A)	72 / 68	74 / 70	75 / 71	76 / 72
	Sound power level Lw (11) standard / SL	dB(A)	65 / 63	65 / 63	67 / 65	67 / 65
Electrical data	Power supply		400V/3P+N+T/50Hz			
	Maximum absorbed power	kW	12,3	12,3	14,7	14,7
	Maximum absorbed current	A	22,9	22,9	26,8	26,8
	Maximum power input with antifreeze kit	kW	12,5	12,5	14,8	14,8
	Maximum current draw with antifreeze kit	A	23,3	23,3	27,1	27,1

(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; water inlet/outlet temperature 23/18°C.
(3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 30/35°C.
(4) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 40/45°C.
(5) Cooling: low temperature, variable output, constant flow rate.
(6) Heating: average climatic conditions; Tbiv = -7°C; low temperature, variable output, constant flow rate.
(7) Indicative data subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) Calculated for a 10°C decrease in the system water temperature with a defrost cycle lasting 6 minutes.
Minimum required volume in the primary circuit.

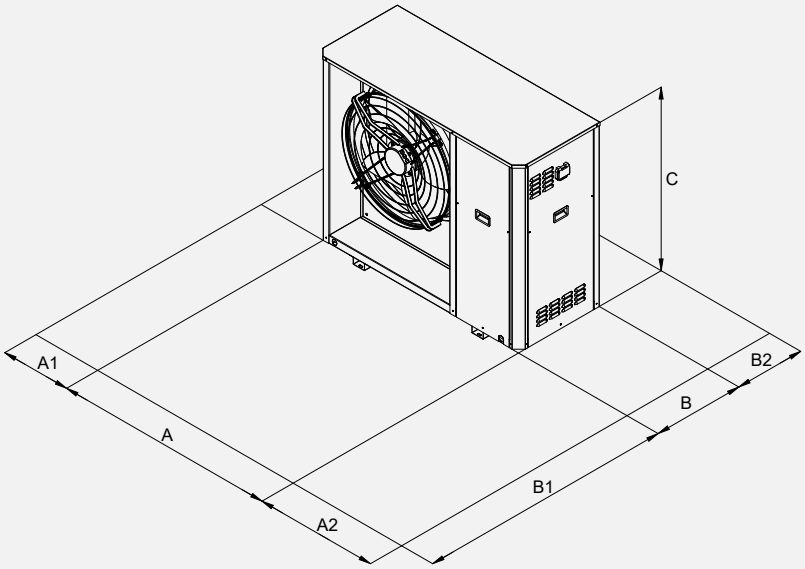
(9) Sound power: heating mode condition (3) according to EN 12102-1:2013; value determined on the basis of measurements carried out in accordance with standard UNI EN ISO 9614-1.
(10) Cooling BT version: outdoor air temperature 35°C; inlet/outlet water temperature -3/-8°C. Fluid treated with 35% ethylene glycol
(11) Sound power: heating mode at partial load in accordance with Annex A of EN 12102:2017; value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1, in compliance with the requirements of the Eurovent and Heat Pump Keymark certifications.
N.B. The performance data shown are indicative and may be subject to change. Furthermore, the capacities stated at points (1), (2), (3) and (4) are to be understood as referring to the instantaneous power according to UNI EN 14511. The data stated at points (5) and (6) are determined in accordance with UNI EN 14825.

Dimensional Drawings

i-32V5 H Midi 0121 / 0126 / 0128 / 0132



Hydraulic Connections IN/ OUT	0121	0126	0128	0132
	1"M	1"M	1" 1/4 M	1" 1/4 M



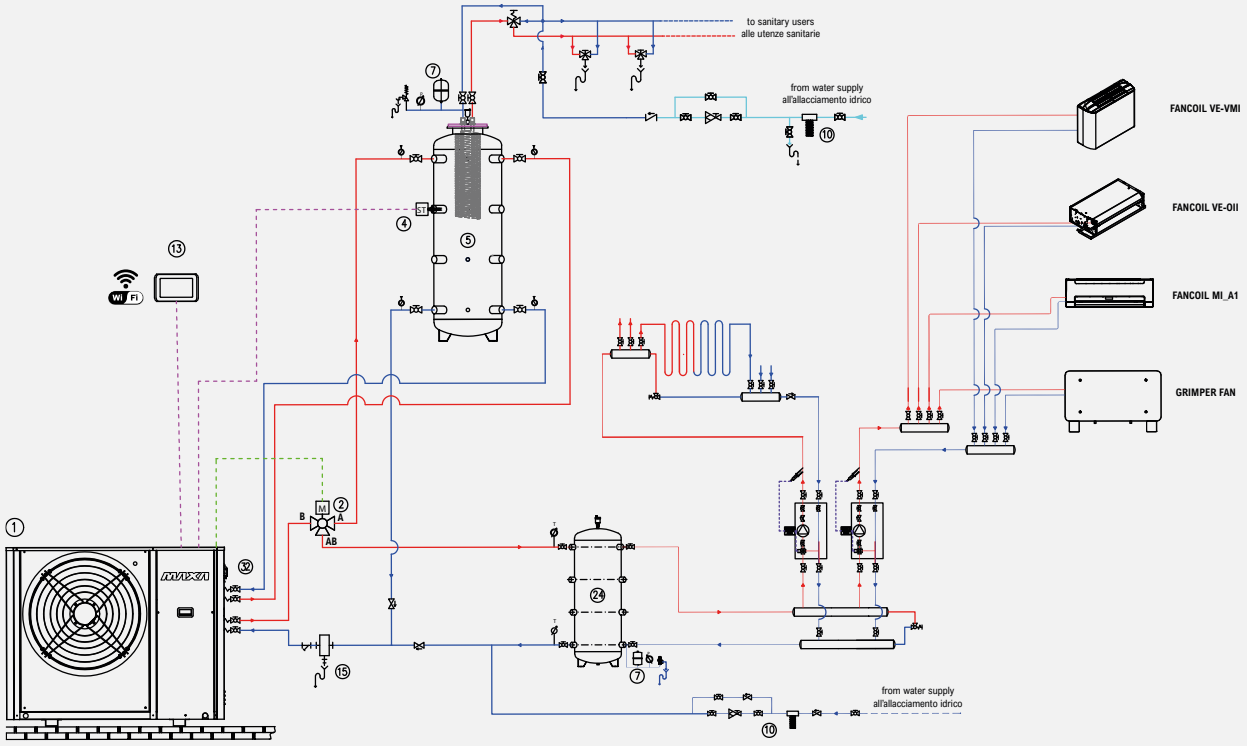
Clearances		A1	A2	B1	B2
0121	mm	400	500	1500	400
0126	mm	400	500	1500	400
0128	mm	400	500	1500	400
0132	mm	400	500	1500	400

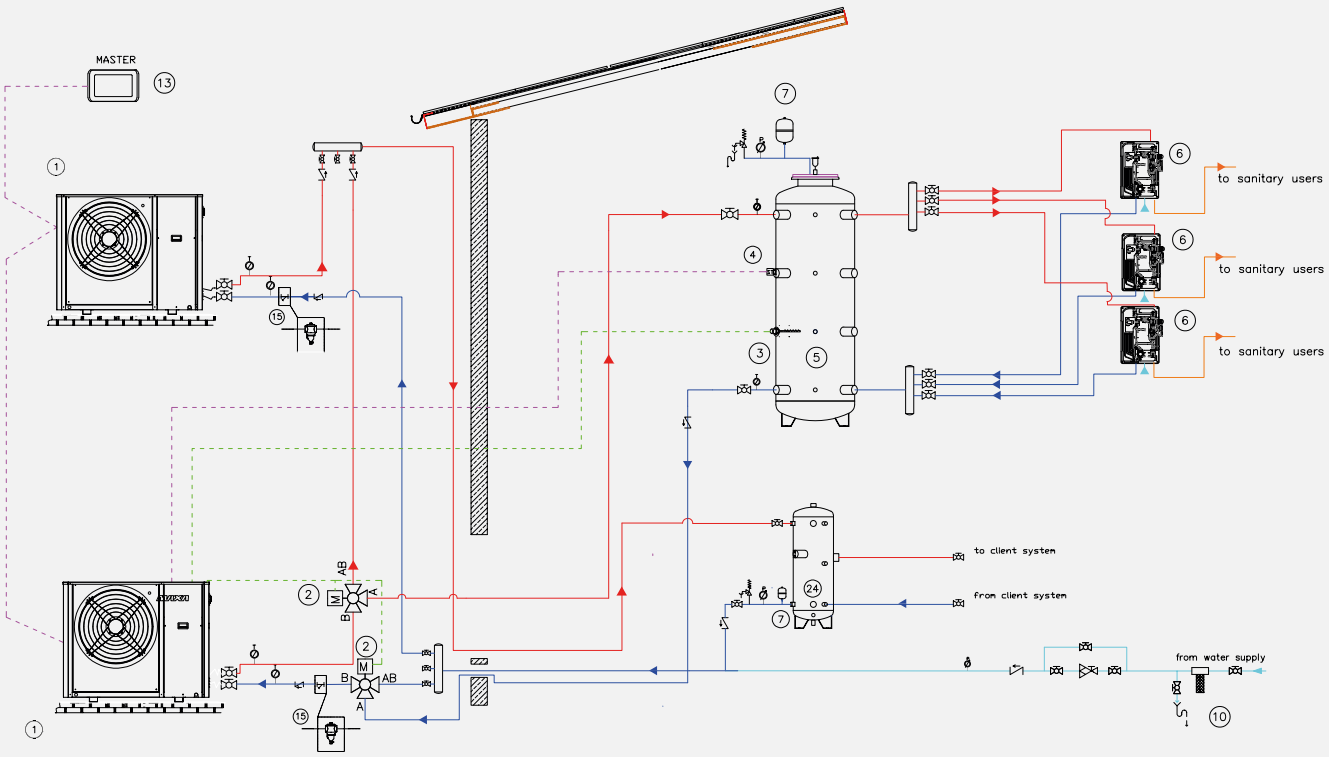
		0121	0126	0128	0132
L	mm	1600	1600	1600	1600
P	mm	680	680	680	680
H	mm	1315	1315	1315	1315
Shipping weight	kg	250	250	265	265

Dimensions in mm

System Diagram - Standard Application

1	i-32V5 Midi heat pump	5	DHW storage tank	12	Hi-TV415 Control	24	Technical water tank (Puffroller)
2	3-way DHW/system valve (VDIS)	6	Fast DHW heater	13	e-Pro control	32	Desuperheater (DS)
3	DHW electric heater	7	Expansion vessel	15	Y-strainer / Dirt separator filter (FD)		
4	DHW temperature sensor (SAS)	10	Water connection				





Purely indicative and non-binding diagram; for the construction of the system, it is necessary to refer to a design prepared by a qualified technician.

Price list

i-32V5H Midi			0121	0126	0128	0132
i-32V5H Midi	Reversible inverter monobloc heat pump	€	14.850	15.193	16.220	16.678
i-32V5H Midi/BT	Reversible inverter monobloc heat pump for low-temperature operation	€	16.221	16.580	17.663	18.144
WEEE		€	4	4	4	4
FACTORY-MOUNTED ACCESSORIES						
CM	Serial communication module for Modbus	code	0110490076			
		€	813			
DS (1)	Partial recovery (only with GI module) desuperheater with integrated electronic pump	€	1.675		1.861	
DSFR	Phase sequence and phase loss monitoring device + undervoltage and overvoltage relay	€	Standard			
GI	System management module	€	470			
IM	Main miniature circuit breaker	€	281			
KA	Heat exchanger resistance + base	€	192			
RP	Battery protection nets	code	0131212401	0131212501	0131212601	0131212701
		€	496			
SL	Silenced version	€	692			
TR2	Cu/Al coil with Silver Line anti-corrosion treatment	€	1.916	2.091		
TR2C4	Cu/Al coil and sheet metal with anti-corrosion treatment	€	4.532	4.707		
ACCESSORIES SUPPLIED SEPARATELY						
e-PRO*	Wired Remote control, Wi-Fi connected	code	010022520010			
		€	450			
e-LITE*	Multifunction touch screen wired control	code	0110490101			
		€	450			
Hi-TV415*	Centralized multifunction touch screen remote control (WEEE €0.02)	code	010312300001			
		€	640			
Connect Box *	Heat pump communication gateway and MAXA CONNECT	code	0110490103			
		€	309			
i-CR2*	Wall-mounted remote control (WEEE €0.02)	€	319			
AG	Anti-vibration support	code	015908010050			
		€	233			
FD	Dirt separator filter	code	0119100081			
		€	412			
FY	Y-strainer	code	0171212401	0171212501	0171212601	017121 2701
		€	89	89	89	89
SAS	Remote system sensor - Domestic hot water storage sensor	code	0110321000001			
		€	47			
SPS	Solar panel sensor	code	CH-CC-EN-ST-0015			
		€	101			
VDIS3	Three-way diverting valve for domestic hot water production in a thermal storage tank	code	0110490102			
		€	436			

(1) GI already included
For accessories of the DAS monitoring system (ISK, LNC, OVPN), see chapter “Connection devices for Maxa DAS supervision system”
* Accessories that cannot be used simultaneously
WEEE for Italian market only.

ACT

Buffer tank for hot water and chilled water

50-75-95 L

The technical storage tank called ACT consists of a horizontally mounted cylindrical vessel, available in three different capacities.
The tank is thermally insulated so that it can operate with both hot and cold water and is equipped with hydraulic connections arranged to promote a uniform flow throughout the entire tank.
The ACT storage tank is closed with a supporting frame and powder-coated metal sheet panels in the same color as the units of the i-32V5 series. The supply includes both the fixing screws between the heat pump and the ACT frame and the adjustable feet for leveling the assembly. Several accessories are available, such as various sizes of electric heaters complete with their own electrical panel and the expansion vessel.

ACT is suitable for supporting the i-32V5 series.

Electric heating element (optional)

Insulating panel

Construction Features

- Inertial buffer tank with a capacity of 50, 75 and 95 litres.
- Compact dimensions and single structure for all storage tank sizes.
- Anti-vibration mounts between inertia base and heat pump (standard supply)
- No. 1 flexible-extendable fitting for connecting the buffer tank to the heat pump (standard supply)
- Height-adjustable feet (standard)
- Anti-corrosion painting of the storage tank.
- Insulation in EDILFIBER, a newly designed thermal insulator consisting of polyester fiber panels, predominantly produced from recycled municipal separated waste collection (PET bottle collection), and therefore environmentally friendly.
- Polyurethane powder-coated sheet metal.
- Water filling/draining valve.
- 18-litre expansion vessel (optional, factory-installed).
- Electric heaters rated 1.2 kW (single-phase), 2, 3 and 4.5 kW, available in both single-phase and three-phase versions, managed in integration and/or replacement mode, with dual safety level consisting of an automatic reset thermostat and a manual reset thermostat to protect both the system and the user (optional, factory-installed).

Accessories

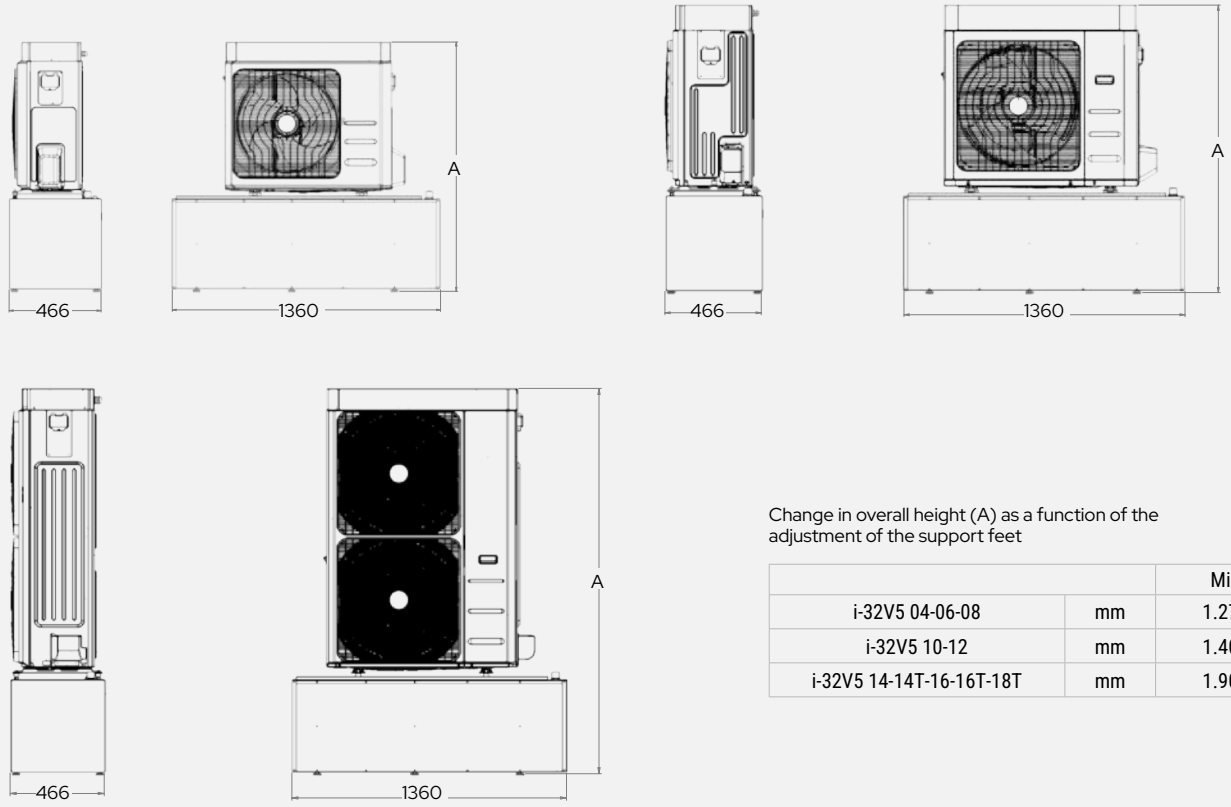
Factory-installed

- **RE1.2M**: Single-phase 1.2 kW electric heater
- **RE2.0M**: Single-phase 2 kW electric heater
- **RE3.0M**: Single-phase 3 kW electric heater
- **RE4.5M**: 4.5 kW single-phase electric heater
- **RE2.0T**: Three-phase electric heater 2 kW
- **RE3.0T**: 3 kW three-phase electric heater
- **RE4.0T**: Three-phase electric heater 4.0 kW
- **VE18AT**: 18 l expansion vessel

			50	75	95
ACT	Useful capacity	L	50	75	95
	Insulation thickness	mm	50	50	50
	Thermal conductivity coefficient	W/mK	0,04	0,04	0,04
	Max operating temp.	°C	95	95	95
	Maximum operating pressure	bar	6	6	6
	Max test pressure	bar	3	3	3
	Curb weight	kg	60	65	69
	Operating weight	kg	110	140	165
	Dimensions	mm	1360x466x504 (527)		

Dimensional Drawings

ACT 50-75-95 L



Change in overall height (A) as a function of the adjustment of the support feet

		Min
i-32V5 04-06-08	mm	1.270
i-32V5 10-12	mm	1.400
i-32V5 14-14T-16-16T-18T	mm	1.900

Dimensions in mm

ACT 120/220

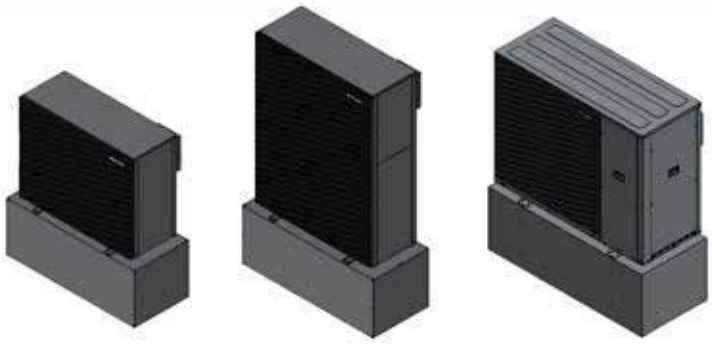
Buffer tank for hot water and chilled water

120–220 L

The technical storage tank named ACT consists of a horizontally positioned cylindrical tank, available in different capacities. The tank is thermally insulated with expanded polyurethane foam, so that it can operate with both hot and cold water.

ACT offers the option of installing hydraulic connections positioned to promote a uniform flow inside the tank, allowing it to be used both as an in-line buffer tank and as a hydraulic separator. The ACT storage unit constitutes a supporting structure and is completed with RAL 7043 coloured panels. ACT includes both the fastening hardware between the heat pump and the frame, and the adjustable feet for leveling the assembly.

ACT is suitable for supporting various heat pump models: the i-290 series from 0106 to 0127, i-32V5, i-32V5 Midi.
Some accessories are available, such as: various sizes of electric heaters equipped with their own electrical panel, expansion vessels, and the antifreeze valve.



Construction Features

- Inertial buffer tank with a capacity of 120 and 220 litres.
- Compact dimensions with two different configurations and sizes.
- Compact dimensions with two different configurations and sizes.
- Sturdy frame suitable for supporting various heat pump models: the i-290 series from 0106 to 0127, i-32V5, i-32V5 Midi.
- Anti-vibration mounts between ACT and heat pump (standard)
- Connection fittings between ACT and heat pump (optional, supplied separately)
- Height-adjustable feet (standard)
- Anti-corrosion finish of the storage tank
- Expanded polyurethane foam insulation
- Water filling/drain valve (standard supply)
- Air vent (supplied separately)
- Multiple expansion vessel models (optional, supplied separately)
- 5 models of supplementary electric heaters, both single-phase and three-phase (optional, supplied separately)
- Anti-freeze kit, thermal anti-freeze drain valve, suitable for protecting systems without glycol inside the piping (optional, supplied separately)

Accessories

- **RE1.0M**: Single-phase electric heater 1.0 kW
- **RE2.0M**: Single-phase 2 kW electric heater
- **RE3.0M**: Single-phase 3 kW electric heater
- **RE4.0M**: Single-phase electric heater 4.0 kW
- **RE3.0T**: 3 kW three-phase electric heater
- **RE5.0T**: Three-phase electric heater 5.0 kW
- **ANTIFREEZE KIT:** Antifreeze protection. Protects the unit and the system against possible damage caused by an unexpected drop in the operating temperature of the process water close to freezing point, by draining the system.
- **VE7AT**: 7 l expansion vessel (ACT 90, 120)
- **VE12AT:** 12 l expansion vessel (ACT 170)
- **VE15AT**: 15 l expansion vessel (ACT 220)
- **KF1:** Mounting Kit i-32V5 (06A ~ 18T A)
- **KF2:** i-290 Fastening Kit (0106 ~ 0118)
- **KF3:** i-32V5 Midi mounting kit (0121 ~ 0132), i-290 (0121 ~ 0127)
- Hydraulic kit consisting of double insulated copper pipe with tailpiece, plus shut-off valve with insulating shell (supplied separately)
- Air vent (supplied separately)

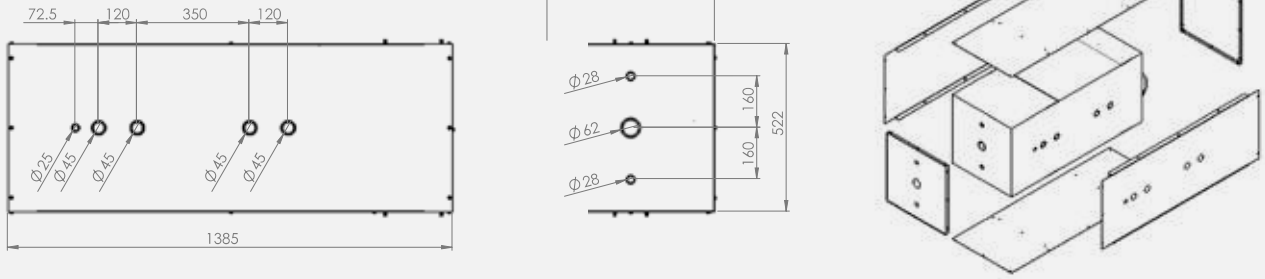
Electric heaters cannot be installed when combined with i-290 range heat pumps.

			120	220
ACT	Useful capacity	Lt	120	220
	Coeff. Thermal Conductivity	W/mK	0,023	0,023
	Insulation thickness	mm	55	55
	Tmax operating	°C	95	95
	Pmax operating	Bar	3	3
	Pmax test	Bar	6	6
	Curb weight	kg	20	30
	Operating weight	kg	140	250
	Dimensions (WxDxH)	Mm	1385x522x522	1732x745x622
	Expansion vessel volume	Lt	7	15
	Suggested pairing		i-290 0112 i-32V5 12-14	i-290 0125-127 i-32V5 Midi 0126-0132

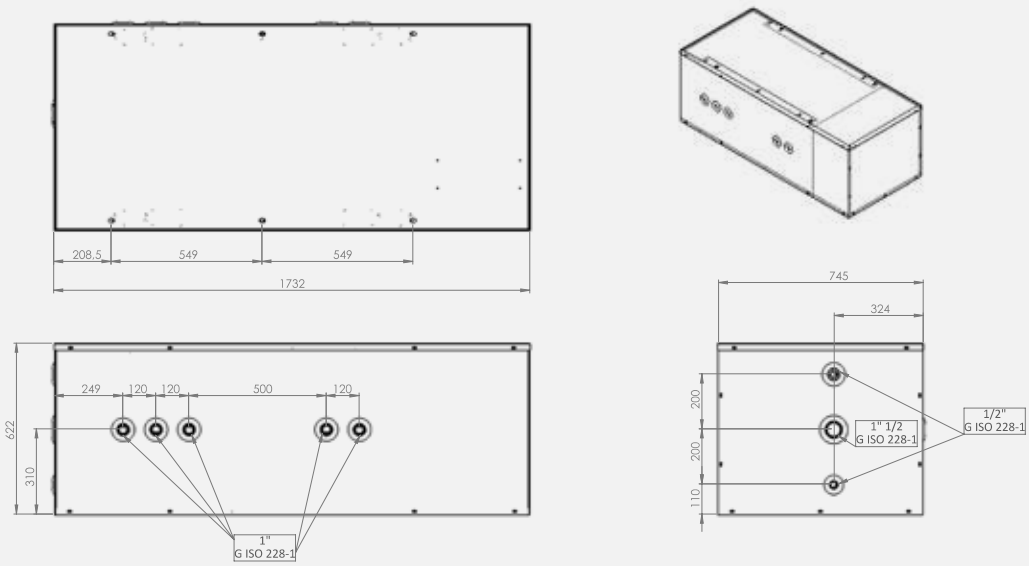
Preliminary data

Dimensional Drawings

ACT 120 L



ACT 220 L



Dimensions in mm

i-HPV5H

Reversible air-to-water inverter heat pumps with axial fan, R32 refrigerant

40 kW÷70 kW

Compressors: DC inverter models are hermetic scroll type, specifically designed to operate with R32 refrigerant gas.

Carpentry: suitable structure for outdoor installation made of thick profiles in hot-dip galvanized steel sheet, polyester powder-coated, RAL 7035 textured finish.

User Side Heat Exchanger: brazed plate heat exchanger in AISI 304 stainless steel, coated with black flexible closed-cell elastomeric foam.

MADE IN ITALY | R32 REFRIGERANT 675 GWP | 58°C OUTLET WATER Supply Temperature | A++ ENERGY EFFICIENCY CLASS | WI-FI OPTIONAL | CASCADE MANAGEMENT FOR UP TO 7 UNITS | SCROLL INVERTER | SILENCED VERSION | ACCESSORY DS | VERSION BT

Source Side Heat Exchanger: the air heat exchangers are made of copper tubes and aluminum fins. The tubes are mechanically expanded into the aluminum fins to increase the heat transfer coefficient.

Fan: the fan is of the axial type with airfoil-profile blades. The electric motor used is controlled with modulation.

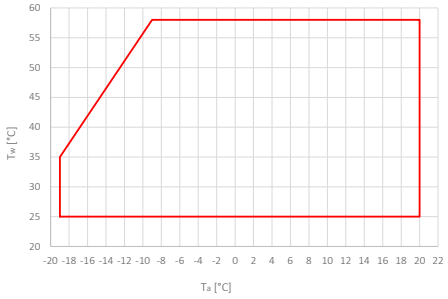
Refrigerant Circuit: is made of copper piping, brazed and factory-assembled in accordance with EN 13134.
Includes: drier filter; shut-off valve on the liquid line; liquid and humidity sight glass; electronic expansion valve; charging ports; high-pressure safety pressure switch; high and low pressure transducers; cycle reversing valve; receiver and liquid separator; non-return valves; fan silent mode. Digital input that can be activated by an external contact, allowing the sound power level to be reduced by acting on the ventilation.

Electrical Panel and Control: fully manufactured and wired in compliance with IEC 60335-2-40. Includes:

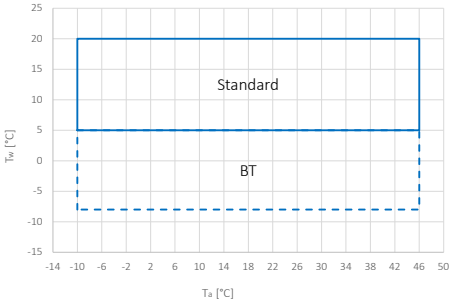
- Main isolator with door interlock;
- Isolation transformer for control power supply
- Thermal protection fuses for compressor drivers, EC fan, and pump inverter (where present);
- Automatic circuit breaker for compressor protection (optional);
- Driver for modulating compressor control;
- Phase sequence control relay
- Phase sequence control relay with minimum/ maximum voltage trip setting (optional)
- Thermostatically controlled ventilation inside the electrical panel.
- Interface terminal with alphanumeric display;
- Display function for set values, analog inputs, fault codes, alarm history, and parameter index;
- On/off button and alarm reset;
- Provision for Modbus connectivity (CM accessory).
- Three-phase relay for over- and undervoltage monitoring + phase loss/sequence.

Operating Areas

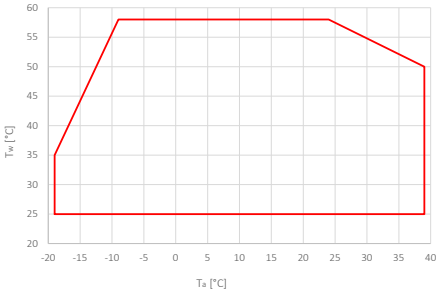
Hot



Cold



DHW



Tw: water temperature - Ta: outdoor air temperature

Accessories

Factory-installed

- **KA1** - Antifreeze protection on: heat exchanger and pump. Electric heating element located on the front side of the plate heat exchanger, which is activated when the water temperature inside the exchanger drops below +4°C.
- **KA2** - Antifreeze heater on: heat exchanger, pump and tank – includes KA1. In addition to accessory KA1, an immersion heater is added in the tank. The kit consists of: an AISI 321 sheathed electric heater, a parameterizable digital temperature controller, and a contactor.
- **TR2*** ** - Anti-corrosion coil treatment – thanks to the treatment, the coil becomes flexible to withstand thermal contraction and expansion, mechanically resistant, protected against UV rays, and dirt-repellent.
- **TR2C4*** ** - Anti-corrosion treatment on coil and sheet metal – includes a TR2-type treatment on the coil and, in addition, the hot-dip galvanized steel panels are painted to make them suitable for unit installations in C4H environments, in accordance with UNI EN 12944. The external fastening hardware is made of AISI304, class A2. The treatment also includes the fan protection grille.
- **RP** - Coil protection grilles – wire mesh to prevent foreign objects from entering the coil and to protect the coil from accidental contact with objects or people (they can also be requested as a separate accessory).
- **C *** - Ductable version. With the ductable version, the same diffuser used in the SSL version is employed to obtain a higher fan head, allowing the ducting of the air discharge. The figure shows an example of a possible ducted installation.
- **C(S) *** - Ductable version with cowls. In addition to the ductable version, thermo-acoustic cowls are installed on the compressors.
- **SL *** - Silent version. The silent unit (equipped with SL accessory) features an innovative thermo-acoustic jacket on the compressors. This insulation allows a noise reduction of up to 10% at certain compressor rotation frequencies.
- **SSL** * - Super silenced version. The super silenced unit (equipped with the SSL accessory) includes, in addition to the thermo-acoustic jacket on the compressors, a special fan with diffuser. This component increases fan efficiency, allowing speed reduction and consequently lowering sound pressure levels and energy consumption. In this way, significant amounts of electrical energy can be saved for each fan.
- **DS** - The unit with desuperheater includes the addition of a brazed-plate heat exchanger made of AISI 316 stainless steel, factory-insulated, a variable-speed circulator, and a remote temperature sensor. The desuperheater allows partial recovery of the condensation heat.
- **BT** - The BT accessory allows the operating range of the water temperature to be extended down to -8°C. In this case, it is necessary to use a mixture of water and glycol.
- **IM** - Circuit breakers on compressors - Overcurrent switches applied to compressors, protecting components from faults caused by possible current spikes.
- **GI -** System management module - allows the management of the following functions: management of the booster circulation pump with the aid of a room thermostat (not supplied); management of the mixing valve on the system side in both heating and cooling modes; management of solar-thermal integration.
- **CM** - BMS connectivity setup – ModBus protocol included – accessory that enables the connection of the unit to external controllers via serial cable with RS-485 electrical standard and ModBus RTU protocol.
- **RFM** - Discharge and suction shut-off valve for compressors Shut-off valve installed on the compressor suction and discharge lines; it simplifies maintenance by avoiding the need to recover the refrigerant from the entire unit during servicing.
- **TE2** - Special mechanical seal for pump with glycol content above 25% and below 50% For water-glycol mixtures with a glycol weight percentage above 25% and up to 50%, a different mechanical seal is used to ensure correct operation of the pump.
- **PS****: Fixed-speed AC circulation pump
- **PSI****: AC circulation pump controlled via external inverter installed in the electrical panel
- **PSEC****: Single EC pump equipped with integrated frequency converter (high head)
- **PS-SI****: Fixed-speed AC circulation pump with integrated 400-litre tank and 24-litre expansion vessel
- **PSI-SI****: AC circulation pump controlled via an external inverter installed in the electrical panel, with integrated 400-liter tank and 24-liter expansion vessel
- **PSEC-SI****: Single EC pump equipped with integrated frequency converter (high head), with integrated 400-litre tank and 24-litre expansion vessel
- **GL** - Packaging with wooden crate. Special packaging consisting of a wooden crate to protect the unit during transport. Optional; it is recommended for long-distance shipments (for example, container transport) or when the unit is stored in a warehouse where it may be subject to accidental damage. The boards that make up the structure comply with ISPM15 regulations.

* Accessories that cannot be used simultaneously
** Accessories not usable simultaneously
*** Accessories not usable simultaneously

Accessories

Provided separately

- **SAS** - Domestic hot water probe / Remote system probe – in some system configurations (e.g. heat pump in parallel with the boiler on the same hydronic circuit and diverter valve for boiler exclusion), it may be necessary to enable a system temperature probe so that the unit controller can correctly manage the operation. The remote system probe controls the heat pump temperature only during the compressor start-up phase; shutdown is managed by the probe located on the heat pump flow line.
- **AG** - Anti-vibration kit – designed to prevent transmission of vibrations to the structure; must be installed under the unit, in the dedicated mounting holes.
- **FY** - Y-strainer – contains a stainless steel mesh screen (500 µm filtration) that collects solid materials present in the water. Filtration prevents blockage and/or damage to the devices installed downstream of the strainer. Alternatively, it is possible to install a dirt separator that ensures a filtration level not greater than 1 mm (in this case, it is no longer necessary to install the Y-strainer).
- **FD-DA** - Air Separator Kit - Use as air separator (installation in the system supply line): component that allows continuous capture and expulsion of air and any other gases dissolved in the water of the hydraulic circuit. The removal efficiency of this device is very high, allowing the elimination of non-condensable gases present in the circuits down to the level of microbubbles. Use as dirt separator (installation in the return pipe, before the inlet to the heat pump): allows blocking and retaining the heavier impurities present in the hydraulic circuit, which are captured by a synthetic filter mesh and collected in a settling chamber. A magnetic device located inside the body of the dirt separator also allows interception of ferromagnetic particles.
- **VDIS4** - Three-way diverting valve for DHW production. Valve that diverts the water flow produced by the heat pump between the system and a buffer tank for the production of domestic hot water. Three-way motorized ball valve, DN (1"1/2), Kvs 28, complete with actuator, insulation shell and spacer, ensuring correct operation even with glycolated water. The power cable from the actuator is 1 metre long.
- **RV** - Grooved connection joint. To facilitate installation to the system, a short length of carbon steel pipe can be supplied which has, on one side, a grooved connection compatible with the one on the unit and equipped with the appropriate clamp for making the connection, and on the other side a G 1" 1/2 M threaded connection. The kit consists of 2 pipe sections and 2 grooved connections for connecting the pipe sections to the unit.
- **ISK**** - USB/RS485 serial converter – interface device capable of reading and writing control registers via the RS485 standard and converting them to a USB port that can be connected to any supervision system.
- **LNC**** - LAN-Wi-Fi router – device that allows the unit to be connected to a local network via Ethernet cable or Wi-Fi coverage for remote monitoring.
- **OVPN**** - 3G LAN-Wi-Fi router with VPN tunnel – device that allows the unit to be connected remotely with an industrial router using the secure OPENVPN service.
- **i-CR2**** - Wall-mounted remote control – Modbus remote controller with negative LCD and capacitive keys. The device is intended to be used as a remote unit keypad with local temperature sensing and replicates the functions of the on-board unit controller.
- **e-LITE**** - Color touch-screen wired controller, which can be used as a remote keypad for the heat pump, as it replicates the functions of the on-board unit display. It is equipped with local temperature sensing and time scheduling.
- **Hi-TV415**** - Color touchscreen wired remote controller for centralized management of a chiller/heat pump cascade, for up to 7 units.
- **Connect Box**** - Wi-Fi communication gateway for the Maxa Connect App.
- **e-Pro**** - Color touch-screen Wi-Fi wired controller that allows both local and remote control via the MyMaxa app.
- **VSA** - Anti-freeze drain valve. Accessory that protects the unit in case of low outdoor air temperatures.

** Accessories not usable simultaneously

e-PRO*
Wi-Fi multifunction remote controller
ACCESSORY

e-LITE
Multifunction remote controller
ACCESSORY

Hi-TV415
Touch screen remote controller for cascade management (max 7 units)
ACCESSORY

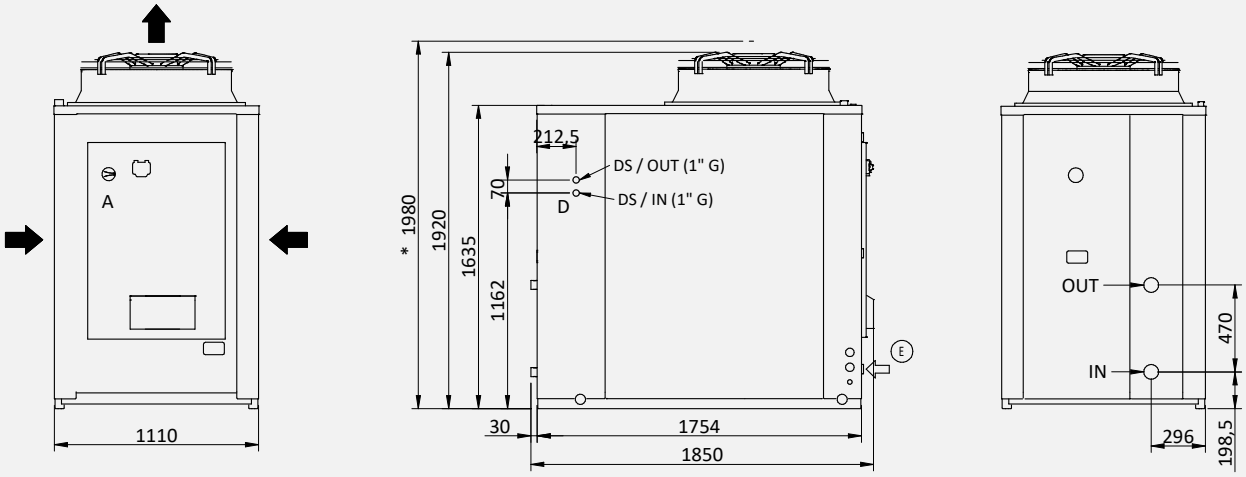
* Energy measurements not available

			0140	0250	0260	0270
Cooling	Cooling capacity (1)	kW	29,7	36,2	48	52,7
	Power input (1)	kW	9,62	11,8	15,6	17,8
	E.E.R. (1)	W/W	3,09	3,07	3,08	2,96
	Cooling capacity (2)	kW	37,2	55,1	65,1	65,6
	Power input (2)	kW	9,05	13,3	15,7	16,9
	E.E.R. (2)	W/W	4,11	4,14	4,15	3,88
	SEER (5)	W/W	4,66	4,63	4,74	4,68
	Water flow rate (1)	L/s	1,42	1,73	2,30	2,52
	Pressure drops on the hydronic circuit side (1)	kPa	21	26	36	36
Heating	Heating capacity (3)	kW	40,1	50,4	61,6	66,8
	Input power (3)	kW	10,0	12,5	15,3	16,6
	C.O.P. (3)	W/W	4,01	4,03	4,03	4,02
	Heating capacity (4)	kW	40,7	49,9	59,7	66,7
	Power input (4)	kW	12,7	15,6	18,6	20,7
	C.O.P. (4)	W/W	3,20	3,20	3,21	3,22
	Heating capacity (12)	kW	38,4	48,3	56,2	61,9
	Power input (12)	kW	14,2	18,1	21,8	23,9
	C.O.P. (12)	W/W	2,70	2,67	2,58	2,59
	SCOP (6)	W/W	4,24	4,28	3,91	3,94
	Water flow rate (4)	L/s	1,95	2,39	2,86	3,19
	Pressure drops on the hydronic circuit side (4)	kPa	37	49	58	56
	Energy efficiency - water 35°C / 55°C	Class	A++ / A++	A++ / A++	A++ / A++	A++ / A++
Compressor	Type		Scroll DC Inverter			
	Number		1	2	2	2
	Refrigerant oil (type)		FW68S	FW68S	FW68S	FW68S
	Refrigerant oil (quantity)	mL	1900	3800	3800	3800
	Refrigerant circuits		1	1	1	1
Refrigerant	Type		R32			
	Refrigerant quantity (7)	kg	6,5	8,5	11,7	12,0
	Refrigerant quantity in tons of CO_2 equivalent (7)	Ton	4,4	5,7	7,9	8,1
	Design pressure (high/low) heat pump model	bar	46 / 27,6			
	Design pressure (high/low) chiller model	bar	46 / 27,6			
Outdoor zone fans	Type		EC			
	Number		1			
	Rated power (1)	kW	1,95	1,95	3,1	3,1
	Maximum absorbed power	kW	1,95	1,95	3,1	3,1
	Maximum absorbed current	A	4,8	4,8	4,8	4,8
	Nominal air flow rate	L/s	4368	5431	6417	5547
Internal heat exchanger	Internal heat exchanger type		Plate / BPHE			
	No. of indoor heat exchangers		1	1	1	1
	Water content	L	3,05	3,54	4,27	5,12
Hydraulic circuit	Water content of the hydronic circuit	L	5	5	6	7
	Maximum pressure of hydronic kit (safety valve setting)	bar	6	6	6	6
	Grooved-type hydraulic connections	inch	1" 1/2 (DN 40)	1" 1/2 (DN 40)	1" 1/2 (DN 40)	1" 1/2 (DN 40)
	Minimum water volume (8)	L	286	389	490	522
	Rated pump power (1)	kW	-	-	-	-
	Maximum absorbed pump power	kW	-	-	-	-
	Maximum absorbed pump current	A	-	-	-	-
Sound data	Sound power level Lw (9)	dB(A)	77	83	84	84
	Sound power level Lw SL configuration (9)	dB(A)	76	82	83	83
	Sound power level Lw SSL configuration (9)	dB(A)	75	81	82	82
	Sound power level Lw (13)	dB(A)	74	75	80	81
Electrical data	Power supply		400V/3P+N+T/50Hz			
	Maximum absorbed power	kW	22	31	37	41
	Maximum absorbed current	A	35	49	59	65
	Maximum power input with antifreeze kit	kW	23	31	38	41
	Maximum current draw with antifreeze kit	A	36	51	61	67

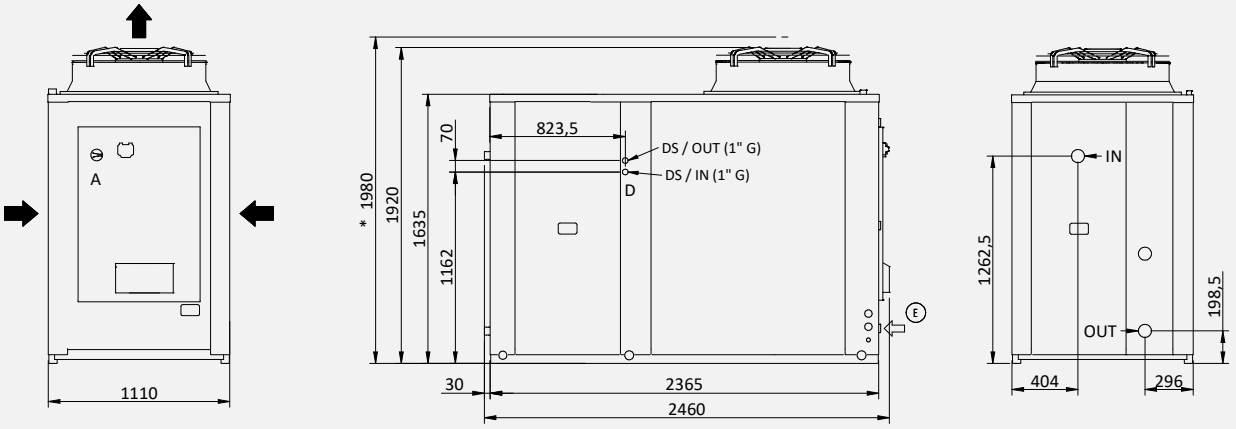
(1) Cooling: outdoor air temperature 35 °C; inlet/outlet water temperature 12/7 °C.
(2) Cooling: outdoor air temperature 35 °C; inlet/outlet water temperature 23/18 °C.
(3) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; inlet/outlet water temperature 30/35 °C.
(4) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; inlet/outlet water temperature 40/45 °C.
(5) Cooling: water inlet/outlet temperature 7/12°C.
(6) Heating: average climatic conditions; Tbiv = -7 °C; low temperature, variable output, constant flow rate.
(7) Indicative data subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) The indicated volume refers to the total required; the designer must ensure this requirement is met by taking into account the amount already present inside the unit, depending on the selected hydronic kit (please check this value in the technical data sheet).
(9) Sound power: heating mode condition (3) according to EN 12102-1:2013; value determined on the basis of measurements carried out in accordance with standard UNI EN ISO 9614-1.
(10) Heating: outdoor air temperature 7 °C d.b., 6 °C w.b.; inlet/outlet water temperature 47/55 °C.
(11) Sound power: heating mode at partial load in accordance with Annex A of EN 12102:2017; value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1, in compliance with the requirements of the Eurovent and Heat Pump Keymark certifications.
(**) for PS/PSI pump kit
N.B. The performance data shown are indicative and may be subject to change. Furthermore, the capacities stated at points (1), (2), (3) and (4) are to be understood as referring to the instantaneous power according to UNI EN 14511. The data stated at points (5) and (6) are determined in accordance with UNI EN 14825.

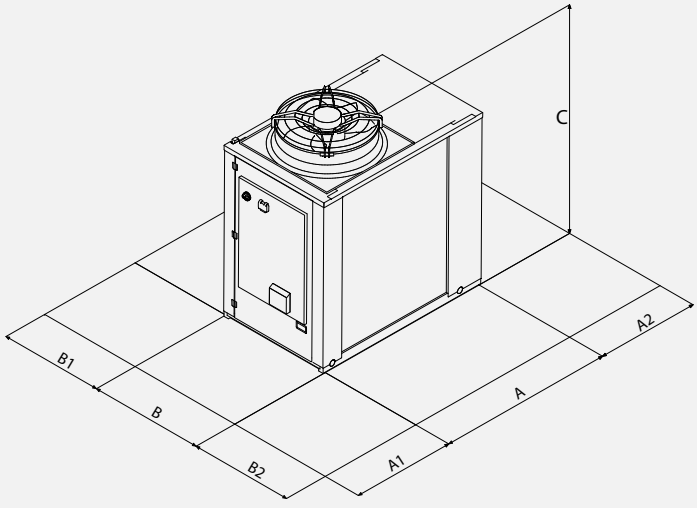
Dimensional Drawings

i-HPV5H 0140 / 0250 / 0260 / 0270



Version with tank kit





Clearances		A1	A2	B1	B2
0240	mm	1200	1000	1500	1500
0250	mm	1200	1000	1500	1500
0260	mm	1200	1000	1500	1500
0270	mm	1200	1000	1500	1500

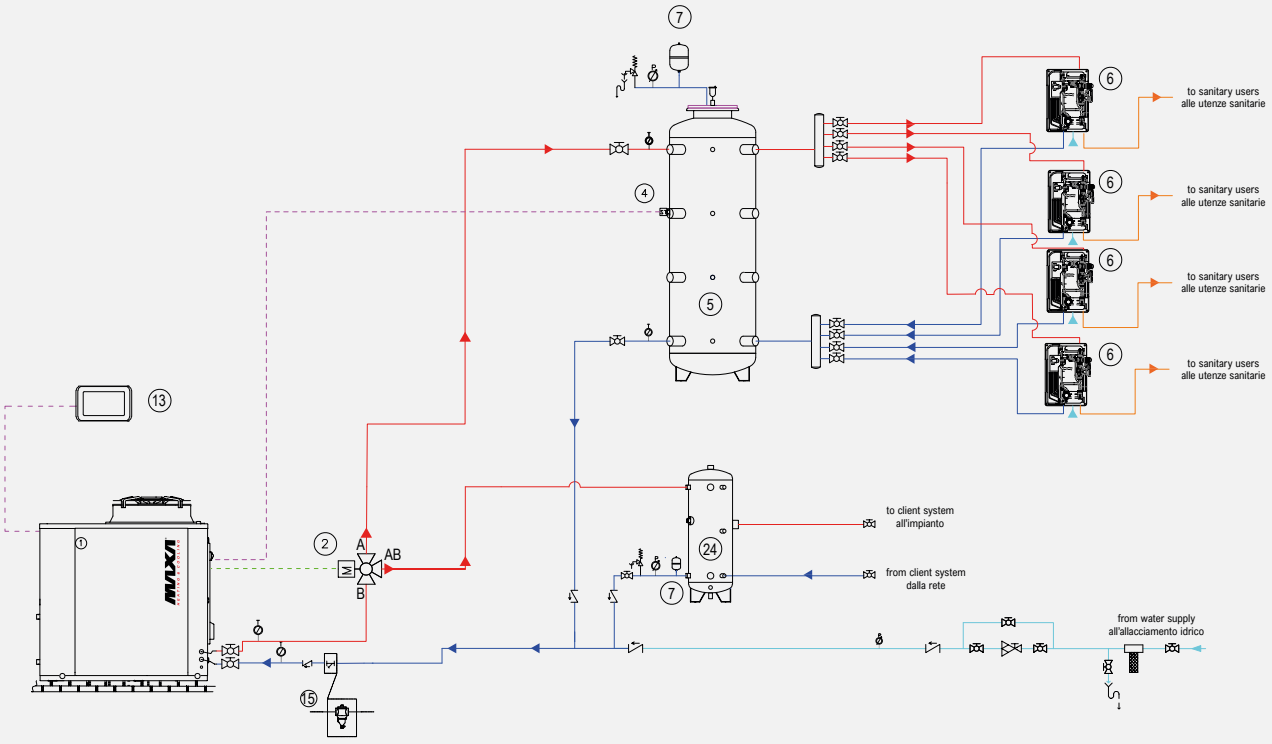
		0140	0250	0260	0270
L	mm	1850	1850	1850	1850
L (with tank)	mm	2460	2460	2460	2460
P	mm	1110	1110	1110	1110
H	mm	1920	1920	1920	1920
H (SSL)	mm	1980	1980	1980	1980
Shipping weight (Standard)	kg	415	505	525	575

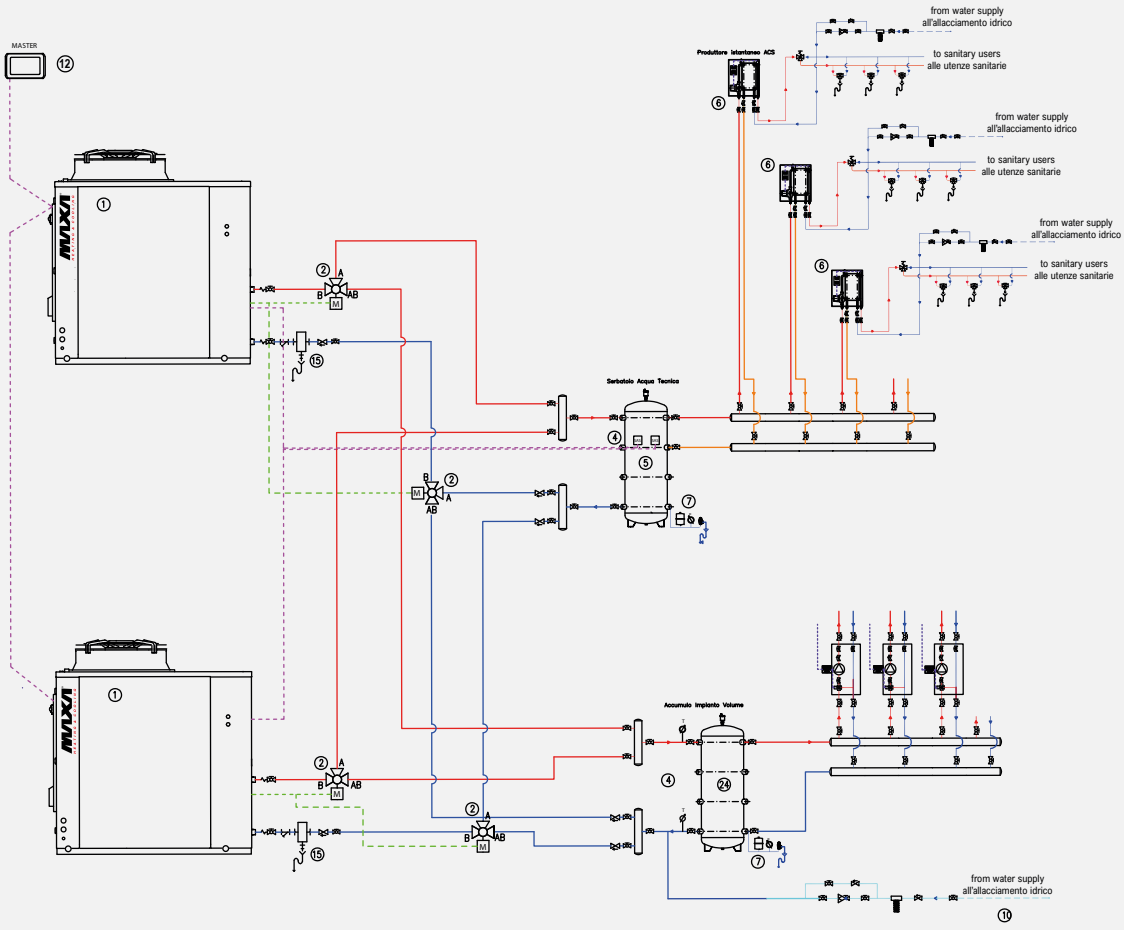
IN/OUT: 1" 1/2 Grooved
E: Power supply input
D IN/OUT: Hydraulic connections for desuperheater kit 1" G

Dimensions in mm

System Diagram - Standard Application

1	i-HPV5 heat pump	5	DHW tank (Puffroller)	10	Water connection	15	Y-strainer
2	3-way DHW/system valve (VDIS4)	6	Fast DHW heater	12	Hi-TV415 Control	24	Technical water tank (Puffroller)
4	DHW temperature sensor (SAS)	7	Expansion vessel	13	e-PRO control		





Purely indicative and non-binding diagram; for the construction of the system, it is necessary to refer to a design prepared by a qualified technician.

Puffroller & PuffrollerOut

Storage tank for hot and cold technical water

60÷1400 L

Designed to ensure maximum versatility and reliability: it can be integrated into any type of system and guarantees rapid storage with abundant, continuous delivery. Thanks to its high efficiency, it offers low operating costs while at the same time ensuring absolute hygiene and long service life with no risk of corrosion. Installation is simple, facilitated by an untreated interior and by specific mounting points for wall installation on the 60, 120 and 200 litre models, which can also be installed either horizontally or vertically. The 50 mm polyurethane foam insulation ensures excellent thermal performance, while the provision for the insertion of an auxiliary electric heating element further extends its functionality.

Accessories

Provided separately

- **RE1.5M3**: Single-phase electric heater 1.5 kW (L=340 mm) *
- **RE2.0M3**: Single-phase electric heater 2.0 kW (L=390 mm) *
- **RE3.0M3**: Single-phase electric heater 3.0 kW (L=390 mm) *
- **VE24AT**: 24 l expansion vessel for storage tanks with capacity up to 500 l
- **VEP35AT**: 35 l expansion vessel for storage tanks with a capacity from 800 to 1000 l

* Not for model 60-750-880-1400

Versions

- **Puffroller**: For indoor installation only. Suitable for indoor installation, it ensures excellent energy performance, provided it is not exposed to weather conditions.
- **Puffroller-Out**: For indoor and outdoor installation. Suitable for both indoor and outdoor installation, thanks to the additional coating that protects the tank even when exposed to atmospheric agents.

			60	120	200	280	400	480	750	880	1400
Puffroller PuffrollerOut	Total capacity	l	57	123	203	277	399	473	732	855	1420
	Insulation thickness	mm	50	50	50	50	50	50	100	100	100
	Total height with insulation	mm	935	1100	1395	1560	1540	1840	1725	1975	2090
	Diameter with Insulation	mm	380	510	550	600	700	700	850	850	1060
	Diameter with Insulation PuffrollerOut	mm	500	600	650	700	800	800	990	990	1200
	Curb weight	kg	25	35	45	55	95	100	170	190	240
	Maximum operating pressure in heating	bar	6	6	6	6	6	6	6	6	6
	Maximum operating temperature	°C	95	95	95	95	95	95	95	95	95
	Hydraulic connections		60	120	200	280	400	480	750	880	1400
	Ventilation outlet		1"	1"	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4
	Boiler flow		1" 1/4	1" 1/4	1" 1/2	2"	2" 1/2	2" 1/2	3"	3"	4"
	Heating supply		-	-	-	-	-	2" 1/2	3"	3"	4"
	Boiler heating return		1" 1/4	1" 1/4	1" 1/2	2"	2" 1/2	2" 1/2	3"	3"	4"
	Thermometer		1/2	1/2	1/2	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
	Probe		1/2	1/2	1/2	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
	Electric resistance		1" 1/2	1" 1/2	1" 1/2	1" 1/2	1" 1/2	1" 1/2	1" 1/2	1" 1/2	2"
	Drain		1/2	1/2	1/2	3/4"	3/4"	3/4"	1"	1"	1"

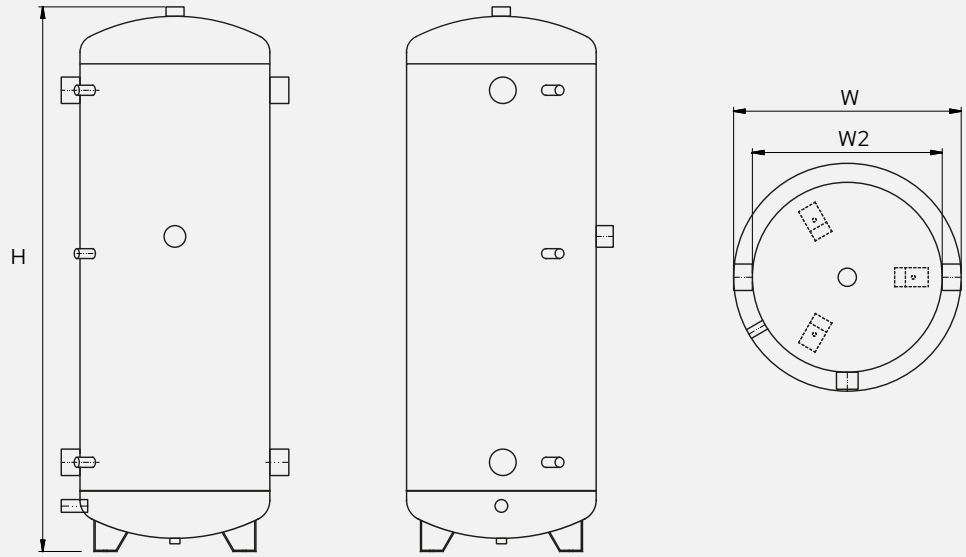
Price list

Puffroller			60	120	200	280	400	480	750	880	1400
Puffroller	Storage tank for hot and cold technical water	code	018160000101	018160000201	018160000301	018160000401	018160000501	018160000601	018160000701	018160000801	018160000901
		€	729	865	1.164	1.354	1.515	1.677	2.396	2.550	3.627
Puffroller Out	Storage tank for hot and cold technical water	code	018160007601	018160007101	018160007201	018160007301	018160007401	018160007501	018160007601	018160007701	018160007801
		€	873	1.040	1.396	1.625	1.819	2.014	2.873	3.061	4.352

ACCESSORIES		Code	€
RE1.5M3	Single-phase 1.5 kW electric heating element (length 340 mm) (WEEE €0.02)	018160003101	207*
RE2.0M3	Single-phase 2 kW electric heating element (length 390 mm) (WEEE €0.02)	018160003201	225*
RE3.0M3	Single-phase electric heater 3 kW (length 390 mm) (WEEE €0.02)	018160003301	250*
VE24AT	24 l expansion vessel for storage tanks with capacity up to 500 l	0119100033	117
VEP35AT	35 l expansion vessel for storage tanks with a capacity from 800 to 1000 l	0119100034	225

* Accessory not available for size 60. It is necessary to add an adapter collar, to be provided by the installer, for sizes 750, 880, 1400.

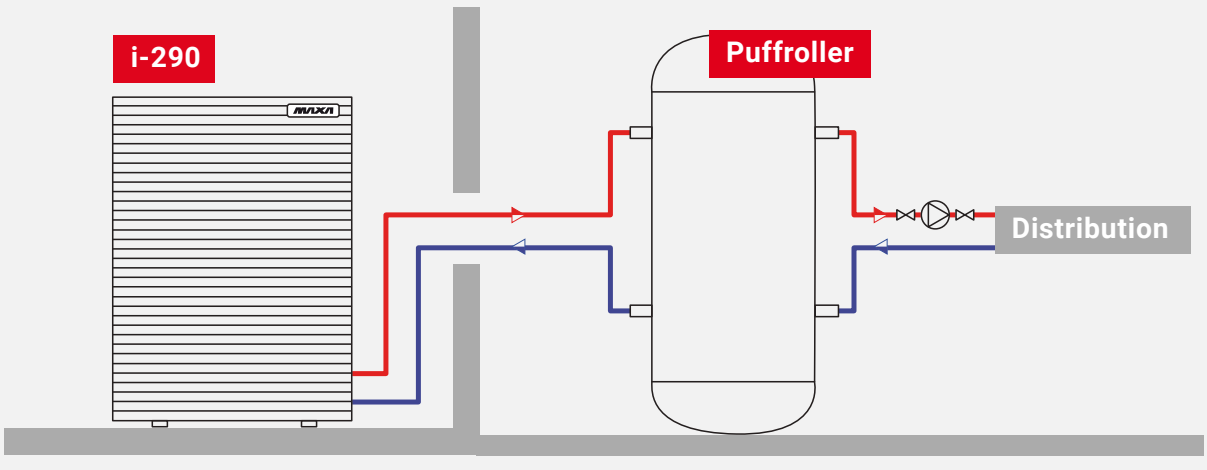
Dimensional Drawings



	60	120	200	280	400	480	750	880	1400
H	933	1.100	1.395	1.560	1.540	1.840	1.725	1.975	2.090
W	380	510	550	600	700	700	890	890	900
W2	300	400	450	500	600	600	790	790	1000

Dimensions in mm

Schematic Diagram



The booster circulation pump is not supplied by MAXA

B-Puffroller

Double buffer tank for technical water for domestic hot water production and system side

300/80-500/70 L

Integrated, compact solution designed to fit any type of system, ensuring rapid storage with abundant, continuous delivery. The high efficiency reduces operating costs while maintaining absolute hygiene and long service life with no risk of corrosion. Installation is straightforward thanks to the untreated internal structure and 50 mm polyurethane foam insulation, with the option to add an auxiliary electric heating element. In addition, the lower storage section allows the management of heating or chilled water, providing further versatility. For some versions, reinforced insulation in rigid polyurethane with a thickness of 70 mm is available, ensuring even higher thermal performance.

Accessories

Provided separately

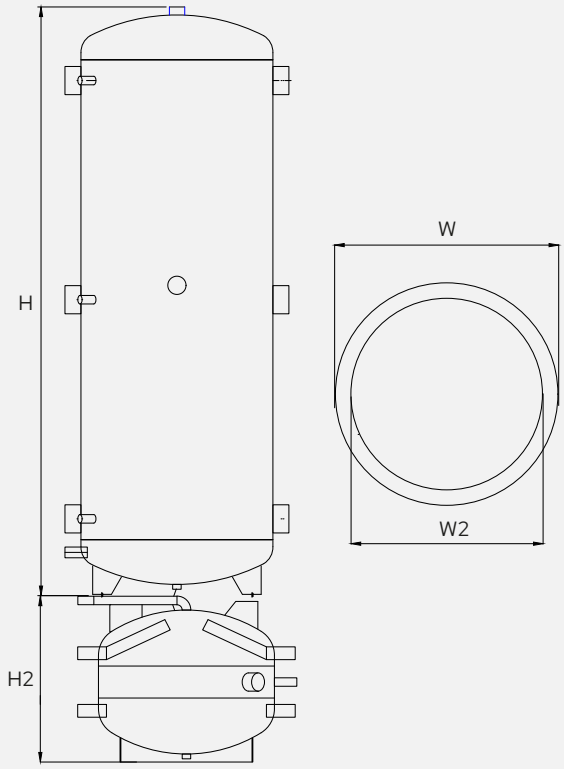
- **RE1.5M3**: Single-phase electric heater 1.5 kW (L=340 mm)
- **RE2.0M3**: Single-phase electric heater 2.0 kW (L=390 mm)
- **RE3.0M3**: Single-phase electric heater 3.0 kW (L=390 mm)
- **VE24AT**: 24 l expansion vessel for storage tanks with capacity up to 500 l
- **VEP35AT**: 35 l expansion vessel for storage tanks with a capacity from 800 to 1000 l

			300	500
B-Puffroller	Total capacity	l	363	553
	Insulation thickness	mm	50	50
	Total height with insulation	mm	1940	2050
	Diameter with Insulation	mm	600	700
	Curb weight	kg	55	100
	Maximum operating pressure in heating	bar	6	6
	Maximum operating temperature	°C	95	95
Lower tank	Buffer tank for heat pump	l	80	70
Upper tank	Connection type		300	500
	Ventilation outlet		1" 1/4	1" 1/4
	Boiler flow		2"	2" 1/2
	Heating supply		-	2" 1/2
	Boiler-heating return at 50°C		2"	2" 1/2
	Boiler-heating return at 30°C		1/2"	1/2"
	Thermometer		1/2"	1/2"
	Probe		1/2"	1/2"
	Electric resistance		1" 1/2	1" 1/2
	Drain		3/4"	3/4"

Price list

B-Puffroller			**300**	**500**
B-Puffroller	Storage tank for hot and cold technical water	code	018160004401	018160004601
		€	2.669	3.030
ACCESSORIES			**Code**	**€**
RE1.5M3	Single-phase 1.5 kW electric heating element (length 340 mm) (WEEE €0.02)		018160003101	207
RE2.0M3	Single-phase 2 kW electric heating element (length 390 mm) (WEEE €0.02)		018160003201	225
RE3.0M3	Single-phase electric heater 3 kW (length 390 mm) (WEEE €0.02)		018160003301	250
VE24AT	24 l expansion vessel for storage tanks with capacity up to 500 l		0119100033	117
VEP35AT	35 l expansion vessel for storage tanks with a capacity from 800 to 1000 l		0119100034	225

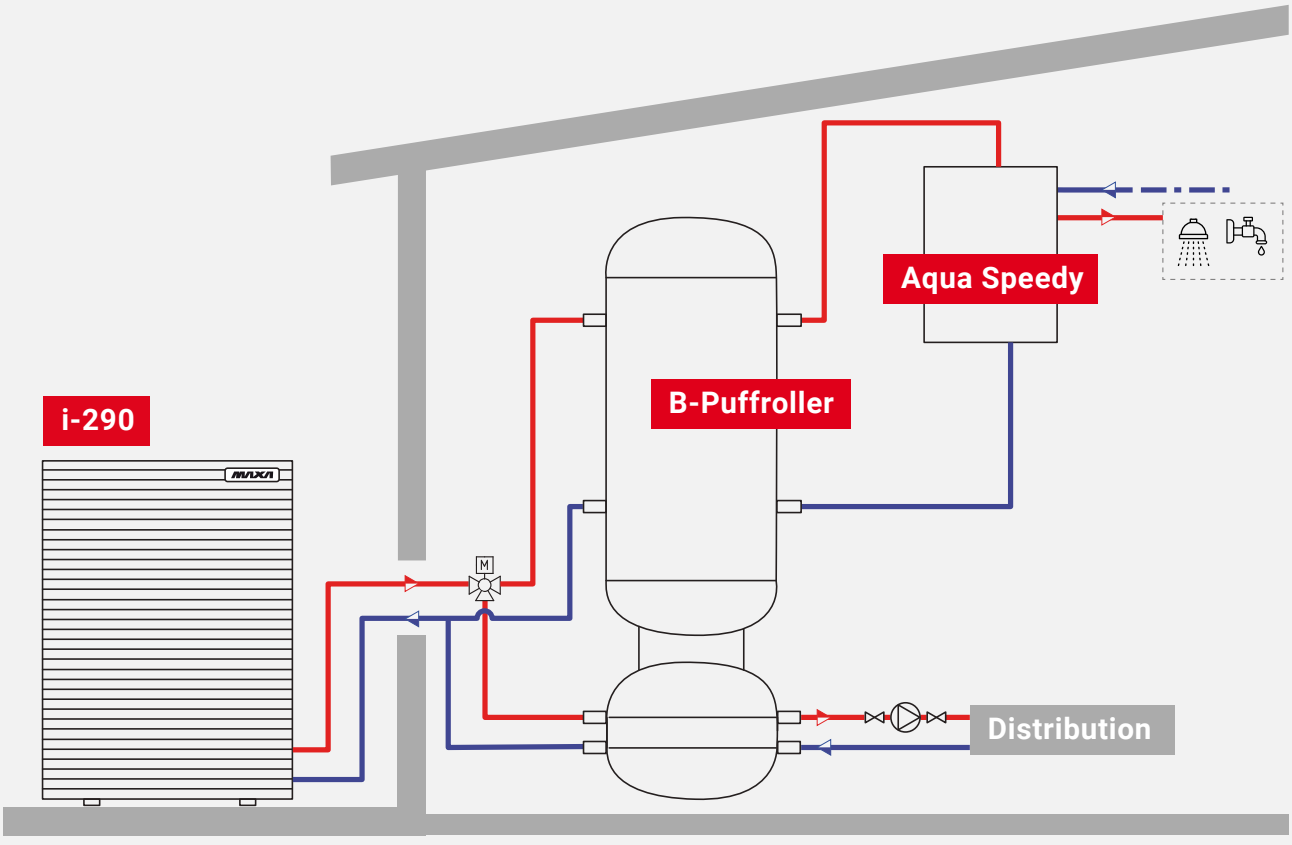
Dimensional Drawings



	300	500
H	1.560	1.840
H2	505	505
W	600	700
W2	500	600

Dimensions in mm

Schematic Diagram



The booster circulation pump is not supplied by MAXA

Caddy

Buffer tank for heating water with stratifier and removable domestic hot water heat exchanger

300÷800 L

Innovative storage system designed for use with alternative energy sources and for instantaneous domestic hot water production. Its structure incorporates a domestic hot water coil located in the upper section and a low-position diffuser, thus ensuring optimal performance with various plant configurations. The 100 mm soft polyurethane insulation provides high energy efficiency, while the possibility of integration with solar thermal systems, condensing boilers, heat pumps or wood-fired boilers makes the system extremely versatile. Instantaneous domestic hot water production, combined with stratification via hydraulic chimney and a 4 m² copper coil, guarantees maximum performance, absolute hygiene and long-lasting durability.

Accessories

Provided separately

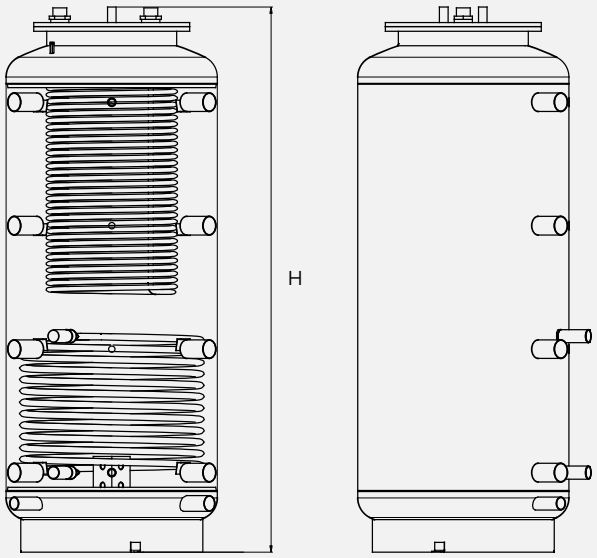
- **VE24AT**: 24 l expansion vessel for storage tanks with capacity up to 500 l
- **VEP35AT**: 35 l expansion vessel for storage tanks with a capacity from 800 to 1000 l

			300	500	800
Caddy	Total capacity	l	270	450	700
	Insulation thickness	mm	100	100	100
	Total height with insulation	mm	1625	1765	1780
	Diameter with Insulation	mm	700	850	990
	Lower heat exchanger	m²	1,9	2,5	2,5
	Lower serpentine water content	l	11,4	14,9	14,2
	Power input	kW	45	60	63
	Curb weight	kg	130	150	220
	Maximum operating pressure in heating	bar	3	3	3
	Maximum operating temperature	°C	95	95	95
Caddy Removable coil	Heat exchanger surface	m²	4,0		
	Water content of serpentine circuit	l	2,8		
	Power input	kW	80		
	Domestic hot water production	m³/h	2,0		
	Pressure drops	mbar	584		
	Coefficient (DIN 4708)	NL	20		

Price list

Caddy			**300**	**500**	**800**
Caddy	Buffer tank for heating water with stratifier and removable domestic hot water heat exchanger	code	018160001001	018160001101	018160001201
		€	3.246	3.867	4.990
ACCESSORIES				**Code**	**€**
VE24AT	24 l expansion vessel for storage tanks with capacity up to 500 l			0119100033	117
VEP35AT	35 l expansion vessel for storage tanks with a capacity from 800 to 1000 l			0119100034	225

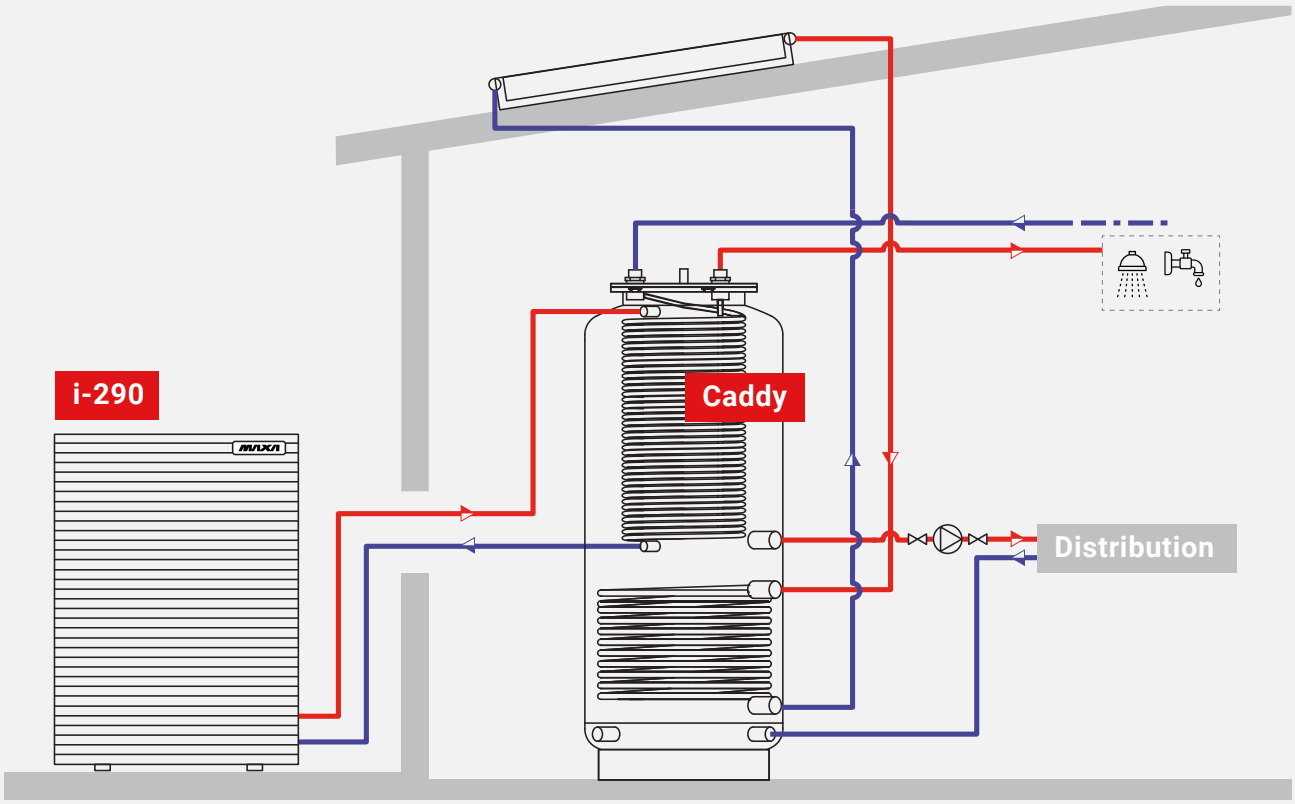
Dimensional Drawings



	300	500	800
H	1.580	1.678	1.778
W	700	850	990
W2	500	650	790

Dimensions in mm

Schematic Diagram



Barrel

DHW tank with internal treatment and coil for heat pump

300÷1000 L

Single-coil carbon steel storage tank, complete with anodic protection and internal treatment in accordance with DIN 4753 and UNI 10025 standards. Insulation: 50 mm rigid polyurethane (models 200–500), 100 mm soft polyurethane (models 800–1000). Designed to ensure rapid storage with abundant, continuous delivery, the system can be easily integrated into any type of plant, with low operating costs and long service life without risk of corrosion. The large heat exchange surface optimizes performance, while ease of installation and complete hygiene round out its advantages. The Barrel SE version is also available, equipped with a solar coil for greater integration with renewable energy sources.

Accessories

Provided separately

- **RE1.5M3**: Single-phase electric heater 1.5 kW (L=340 mm)
- **RE2.0M3**: Single-phase electric heater 2.0 kW (L=390 mm)
- **RE3.0M3**: Single-phase electric heater 3.0 kW (L=390 mm)
- **VAS**: Anti-scald valve
- **VE24AT**: 24 l expansion vessel for storage tanks with capacity up to 500 l
- **VEP35AT**: 35 l expansion vessel for storage tanks with a capacity from 800 to 1000 l

			200	300	500	800	1000
Barrel	Total capacity	l	190	263	470	702	900
	Insulation thickness	mm	50	50	50	100	100
	Total height with insulation	mm	1215	1615	1705	1810	2140
	Diameter with Insulation	mm	600	600	750	990	990
	Heat exchanger	m2	3,0	4,0	6,0	7,0	8,0
	Water content serpentine coil *	l	17,2	23,0	51,5	60,0	68,5
	Curb weight	kg	120	160	220	280	320
	Maximum pressure.	bar	10				
	Maximum heat exchanger pressure	bar	6				
	Maximum operating temperature	°C	95				
Barrel SE	Total capacity	l	-	260	455	702	900
	Upper heat exchanger	m2	-	3,7	5,2	5,2	6,0
	Water content serpentine coil *	l	-	18	31	31	35
	Curb weight	kg	-	140	245	250	280
	Lower heat exchanger	m2	-	1,2	1,8	2,4	3,7

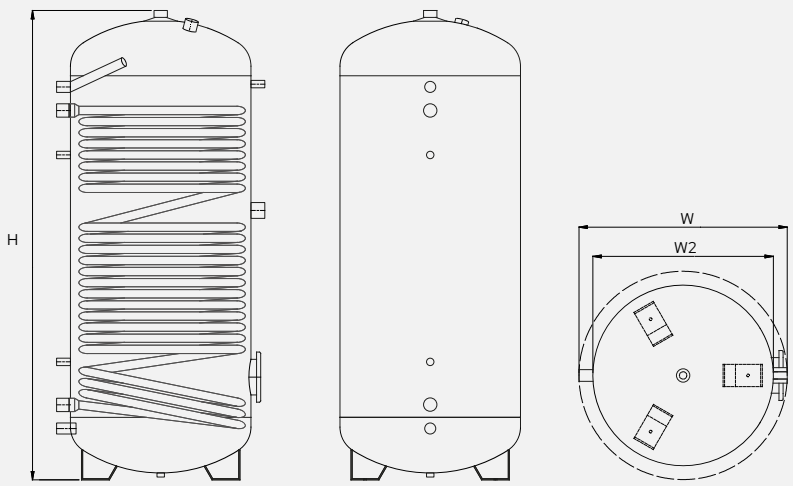
* Check that the water contained in the coil is greater than the minimum water content required by the heat pump

Price list

Barrel			**200**	**300**	**500**	**800**	**1000**
Barrel	DHW tank with internal treatment and coil for heat pump	code	018160001601	018160001701	018160001801	018160001901	018160002001
		€	1.942	2.219	2.878	3.504	4.778
Barrel SE	DHW cylinder with internal treatment and coil for heat pump and solar coil	code	-	018160005701	018160005801	018160005901	018160006001
		€	-	3.354	4.599	6.192	7.726

ACCESSORIES		**Code**	**€**
RE1.5M3	Single-phase 1.5 kW electric heating element (length 340 mm) (WEEE €0.02)	018160003101	207
RE2.0M3	Single-phase 2 kW electric heating element (length 390 mm) (WEEE €0.02)	018160003201	225
RE3.0M3	Single-phase electric heater 3 kW (length 390 mm) (WEEE €0.02)	018160003301	250
VAS	Anti-scald valve	0119100023	162
VE24AT	24 l expansion vessel for storage tanks with capacity up to 500 l	0119100033	117
VEP35AT	35 l expansion vessel for storage tanks with a capacity from 800 to 1000 l	0119100034	225

Dimensional Drawings

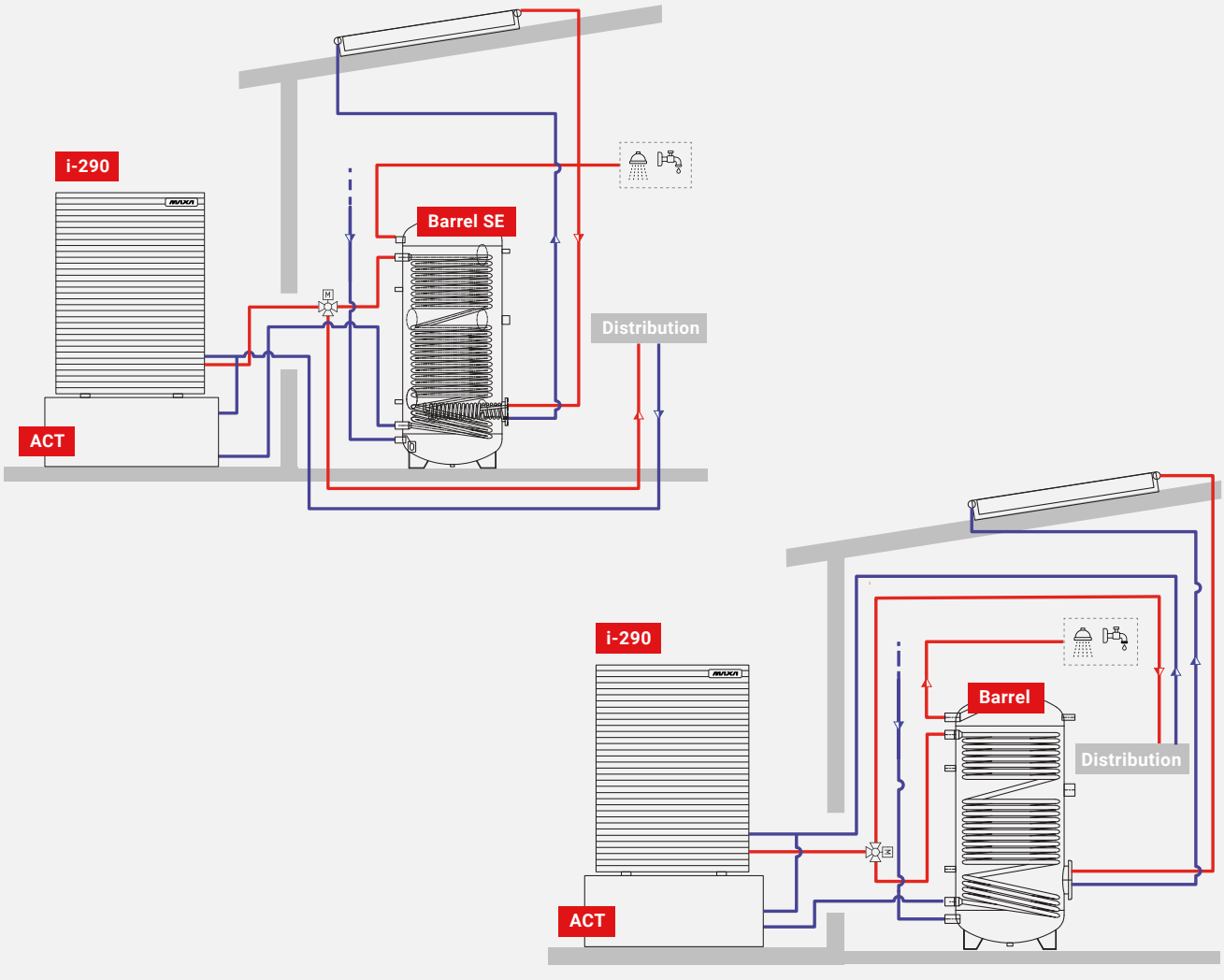


	200	300	300 SE	500	500 SE	800	1000	1000 SE
H	1.215	1.615	1.615	1.690	1.690	1.790	2.040	2.140
W	600	600	590	750	740	990	990	990
W2	500	500	500	650	650	790	790	790

Representation referring to models without a removable coil.

Dimensions in mm

Schematic Diagram



Hybridroller

Double DHW storage from heat pump and solar with thermal buffer for hot/chilled water

60÷500 L

This integrated, compact solution is designed to ensure maximum efficiency and practicality: it provides rapid storage capacity with abundant, continuous delivery and can be easily integrated into all types of systems. The large heat exchange surface optimizes performance, while the high efficiency keeps operating costs low. Designed to last over time with no risk of corrosion, it combines absolute hygiene, ease of installation, and a space-saving design that facilitates its use in any context.

Accessories

Provided separately

- **RE1.5M3**: Single-phase electric heater 1.5 kW (L=340 mm)
- **RE2.0M3**: Single-phase electric heater 2.0 kW (L=390 mm)
- **RE3.0M3**: Single-phase electric heater 3.0 kW (L=390 mm)
- **VAS**: Anti-scald valve
- **VE24AT**: 24 l expansion vessel for storage tanks with capacity up to 500 l
- **VEP35AT**: 35 l expansion vessel for storage tanks with a capacity from 800 to 1000 l

Versions

- **H2**: Upper cylinder with more than 1 carbon steel coil, complete with anodic protection, internal treatment according to DIN 4763-3 and UNI 10025 standards. Lower storage for heating or chilled water, internal surface untreated. Insulation: 70 mm thick rigid polyurethane.
- **H2SE**: Upper tank with more than 2 coils in carbon steel, complete with anodic protection, internal treatment according to DIN 4763-3 and UNI 10025 standards. Lower storage section for heating or chilled water, untreated interior. Insulation: 70 mm thick rigid polyurethane.

			H2		H2SE	
			300	**500**	**300**	**500**
Hybridroller	Diameter with insulation	mm	690	790	690	790
	Total Height	mm	1925	2040	1925	2040
	Unladen Weight	kg	150	200	150	200
	Effective Capacity	l	270	460	270	450
	Coil Operating Pressure	bar	10	10	10	10
	Tank Operating Pressure	bar	10	10	10	10
	Maximum Coil Temperature	°C	110	110	110	110
	Maximum Tank Temperature	°C	95	95	95	95
	Coil Surface	m2	3,3	6	2,8	4,4
	Water Content of Coil *	l	20,2	51,5	17	26,6
	Nominal flow rate (60/50°C)	m³/h	1,3	2,7	1,2	2
	Output Power (60/50°C)	kW	15	31	14	23
	Domestic Hot Water Production (10/45°C) Din 4708	m³/h	0,37	0,76	0,34	0,57
	Pressure Drop	mbar	11	31	13	22
	Buffer for Heat Pump		80	74	80	74
	Buffer Tank Operating Pressure	bar	6	6	6	6
	Maximum Buffer Tank Temperature	°C	95	95	95	95
Hybridroller Removable Coil	Coil Surface	m2	-	-	0,9	1,5
	Water Coil Content	l	-	-	5,3	9,4
	Heating Water (80/60°C)	m³/h	-	-	0,9	1,6
	Heating Water (60/50°C)	m³/h	-	-	1,7	2,8
	Output Power	kW	-	-	20	32
	Domestic Hot Water Production (10/45°C) Din 4708	m³/h	-	-	0,49	0,79
	Pressure Drop	mbar	-	-	26	42

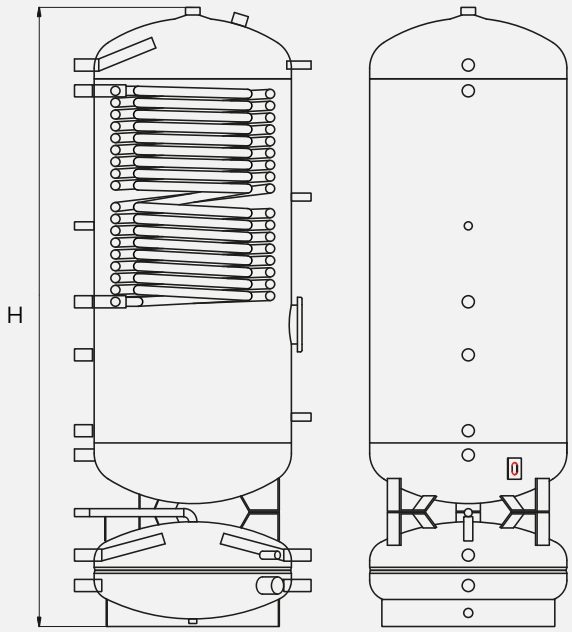
* Check that the water contained in the coil is higher than the minimum water content required by the heat pump

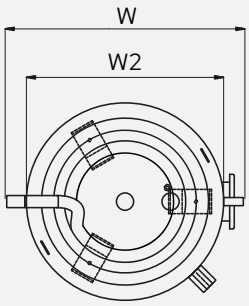
Price list

Hybridroller			300	500
H2	DHW tank with internal treatment	code	018160002301	018160002401
		€	4.410	5.680
H2SE	DHW tank with internal treatment and removable coil	code	018160002501	018160002601
		€	5.068	6.474

ACCESSORIES		Code	€
RE1.5M3	Single-phase 1.5 kW electric heating element (length 340 mm) (WEEE €0.02)	018160003101	207
RE2.0M3	Single-phase 2 kW electric heating element (length 390 mm) (WEEE €0.02)	018160003201	225
RE3.0M3	Single-phase electric heater 3 kW (length 390 mm) (WEEE €0.02)	018160003301	250
VAS	Anti-scald valve	0119100023	162
VE24AT	24 l expansion vessel for storage tanks with capacity up to 500 l	0119100033	117
VEP35AT	35 l expansion vessel for storage tanks with a capacity from 800 to 1000 l	0119100034	225

Dimensional Drawings



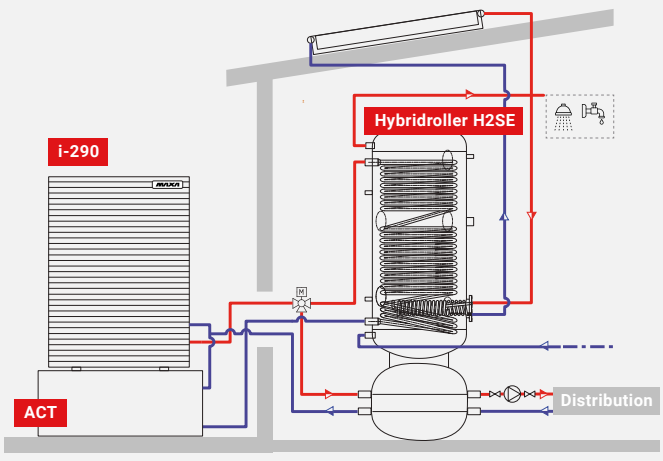


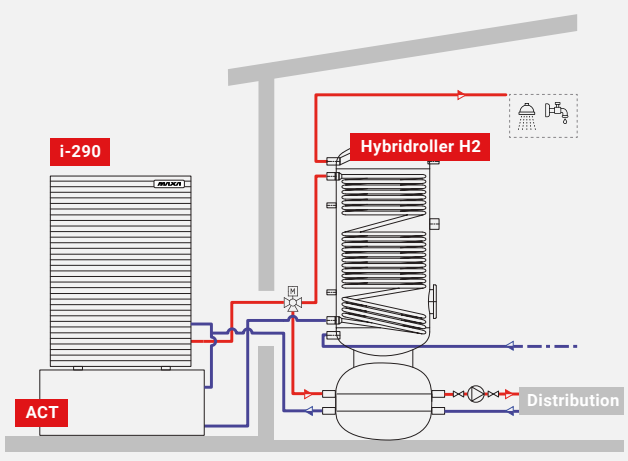
	H2		H2SE	
	300	500	300	500
H	1.925	2.040	1.925	2.040
W	690	790	690	790
W2	550	650	550	650

Representation referring to model H2.

Dimensions in mm

Schematic Diagram





The booster circulation pump is not supplied by MAXA

HWA2

Range of chillers and reversible heat pumps with scroll compressors and R290 refrigerant

- **A single solution for heating, cooling and domestic hot water production** with guaranteed performance all year round.

- Sustainability, technology and reliability make this range suitable for integration in both commercial and industrial applications, thanks to the use of fixed-speed scroll compressor technology.

- The HWA2 range is designed to achieve water temperatures suitable for a wide variety of applications, including the indirect production of domestic hot water.

78°C
hot water

- The range includes **8 sizes**, available in cooling-only or heat pump versions.

- **Double range: chillers and reversible heat pumps.**
HWA2-A represents the range of chillers suitable for both comfort and industrial applications, thanks to the BT version, which allows fluid operating temperatures down to -8°C.
HWA2-AH thanks to its wide operating range and high maximum water temperature, it can easily be used both for new systems and for the replacement of existing systems.

- **3 different frames to meet every need**
The 8 different HWA2 sizes require different configurations; for this reason, 3 new frames have been developed, capable of accommodating all the components necessary for their proper operation.

- **Extensive hydraulic configurability**
Each size in the HWA2 range can be configured with various circulation pump models, which can optionally be complemented, on request, by the corresponding storage tank.
In addition, the hydraulic connections to the distribution system can be easily oriented, optimizing the connection to it (04140-04155-04170).

HWA2

0270-0280-0290

- 2 scroll compressors
- single refrigeration circuit
- optional: single AC pump, double AC pump, single inverter pump
- optional: integrated tank
- EC fans as standard (version A)
- optional: EC fans (AH version)
- optional: SL or SSL version

HWA2

04110-04120

- 4 scroll compressors
- dual refrigeration circuit
- optional: single AC pump, double AC pump, single inverter pump
- optional: integrated tank
- EC fans as standard (version A)
- optional: EC fans (AH version)
- optional: SL or SSL version

HWA2

04140-04155-04170

- 4 scroll compressors
- dual refrigeration circuit
- optional: single AC pump, double AC pump, single inverter pump
- optional: integrated tank
- EC fans as standard (version A)
- optional: EC fans (AH version)
- optional: SL or SSL version

HWA2-A 0270÷04170

Air-cooled water chiller, with scroll compressors, axial fans and R290 GAS

70 kW÷170 kW

During certification

The HWA2 range uses the natural refrigerant R290, which drastically reduces environmental impact and offers top-level energy performance.
Designed for commercial and industrial applications and equipped with large-surface air-side heat exchangers, they ensure high efficiency, with SEER values among the highest in their category.
The use of high-efficiency, particularly robust scroll compressors, together with the oil recovery and distribution system adopted on tandem circuits, ensures high reliability and consistent performance.
Available in 8 sizes.

MADE IN ITALY | R290 REFRIGERANT 0.02 GWP | SCROLL COMPRESSORS | SUPER SILENCED VERSION | VERSION BT | MODBUS AVAILABLE AS STANDARD

Carpentry: all units in the series feature a structure suitable for outdoor installation, made of hot-dip galvanized steel sheet and coated with RAL 7035/RAL 7046 polyester powder paint (only for certain components) to ensure maximum resistance to atmospheric agents. All screws and inserts are in galvanized and stainless steel.

Compressors: scroll type, specifically designed to operate with R290, mounted on a double anti-vibration slide. The permanently installed crankcase heater is activated when the compressor is stopped and is disabled when it restarts.

Air-side heat exchangers: entirely made of aluminum using microchannel technology, which significantly reduces both air-side pressure drops and refrigerant charge, while at the same time ensuring higher heat transfer capacity for the same frontal surface area compared to traditional heat exchangers.

User side heat exchangers: of the brazed-plate type. Made of AISI stainless steel for both single-circuit and dual-circuit units, factory-insulated with closed-cell material. They can be equipped with an electric antifreeze heater (optional accessory KA). A differential pressure switch, installed on the water side, ensures the presence of water flow, preventing ice formation inside.

Fans: axial type with airfoil blades. They are statically and dynamically balanced and supplied complete with protective grille and inlet/outlet nozzles with double flared profile, specially shaped to increase efficiency and reduce noise. The motor has a degree of protection IP54 according to CEI EN 60529. The electric motor used is modulation-controlled with a directly coupled EC brushless motor and equipped with integrated thermal protection, which ensures condensation control down to an outdoor temperature of -20 °C.

Refrigeration circuit: built using components from leading international manufacturers and in accordance with UNI EN 13134. The refrigerant gas is R290. In its basic version, the refrigeration circuit includes: electronic expansion valve, service valves for maintenance and control, safety device compliant with current regulations (two high-pressure switches per circuit), pressure transducers to accurately measure evaporation and condensation pressures, filter drier, sight glass for monitoring the refrigerant charge, and solenoid valve.

Electrical panel: fully manufactured and wired in compliance with standard EN 60204, comprising a power section and a control section. The degree of protection of the electrical panel is IP54. The electrical panel is equipped with a terminal block with volt-free contacts for remote ON-OFF.

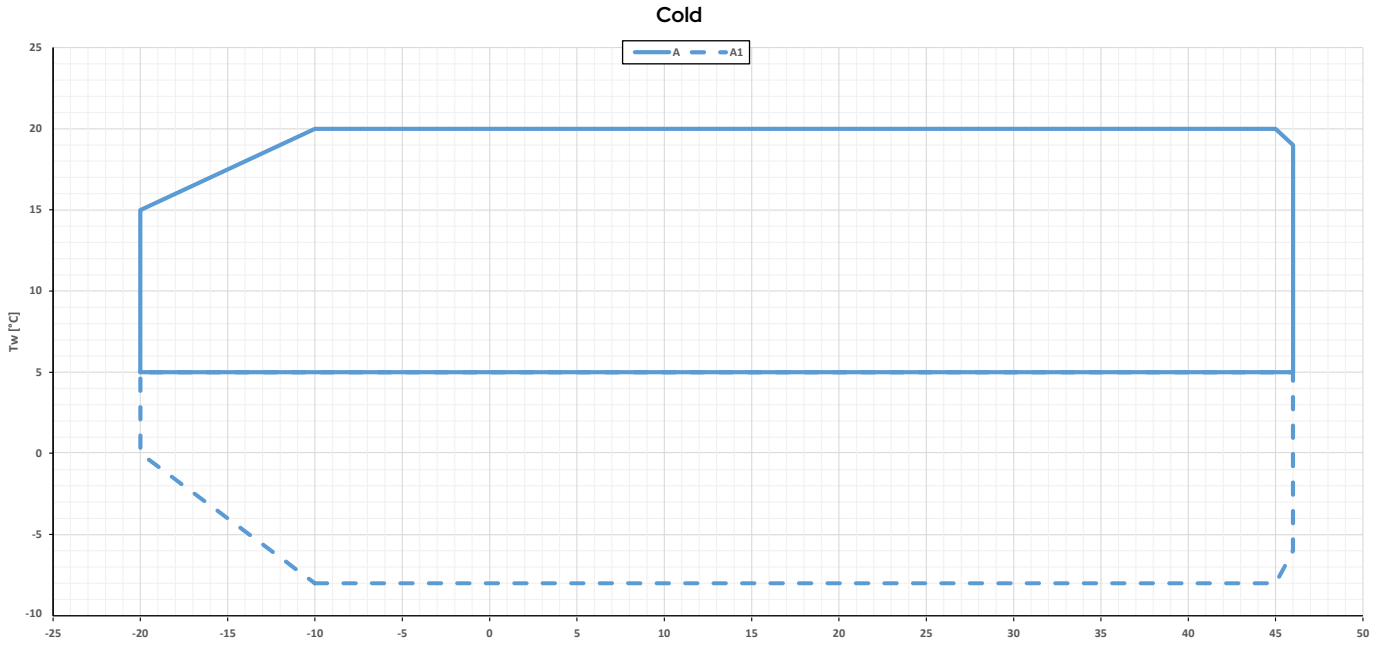
Control system: all units are equipped with a microprocessor control board with superheat control logic managed on the basis of the signals sent by the pressure transducers and temperature probes. The CPU also controls the following functions: regulation of the water temperature, antifreeze protection, compressor start-up and timing, management of fan and circulation pumps (if present), alarm reset, alarm signaling and operation LEDs.
ModBus RTU RS-485 interface available as standard on the terminal block.

Control and protection devices: all units are equipped with the following control and protection devices: phase monitor complete with minimum and maximum voltage relay, which stops the unit if the phase sequence is incorrect or if the voltage of at least one phase differs by more than 10% from the others. Leaving water temperature sensor (with antifreeze function for the water circuit), return water temperature sensor, low-pressure transducer, high-pressure transducer, discharge temperature sensor on the compressors, suction temperature sensor on the compressors, outdoor air temperature sensor.
Thermomagnetic circuit breakers for the protection of: transformer, compressors, pumps (if present) and fans, fan thermal protection, thermal protection on each compressor, differential pressure switch on the water side, two manually reset high-pressure switches installed on the compressor discharge line.

Hydraulic circuit: the HWA2 series can be supplied with a built-in, highly configurable hydronic kit which, in addition to the differential pressure switch, can include a single pump or a twin-pump set (one in standby as backup to the other), suitable for use with chilled water containing glycol up to 50%, and directly managed by the onboard unit controller. It is also possible to install an internal inertial buffer tank, externally insulated with closed-cell expanded material, with a capacity suitable for the unit size.

R290 gas safety: the HWA2 series is equipped with an automatic electronic system for detecting any R290 gas releases. Activation of the R290 gas safety system starts the ATEX fan in the compressor compartment, ensuring rapid dispersion and dilution of the gas. When the unit is fitted with a pump kit or twin pump, a second R290 detector is added, providing an additional level of monitoring and increasing the overall safety of the installation.

Operating Areas



Tw: water temperature - Ta: outdoor air temperature |n|A = HWA2-A + EC-CC
A1 = HWA2-A BT

Accessories

Factory-installed

- **KA1 *** – Antifreeze heater for heat exchanger and pump (if present) – electric heating element installed on the front face of the plate heat exchanger, which is activated when the water temperature inside the exchanger falls below +4°C, and electric heating element that protects the pump motor at low temperatures.
- **SL ** –** The silenced unit features an innovative acoustic insulation applied to the compressor compartment panels. This system significantly reduces noise during operation, improving the acoustic comfort of the surrounding environment.
- **SSL ** –** The super-silenced unit combines the acoustic insulation applied to the compressor compartment panels with a special diffuser mounted on the fan. This diffuser increases its efficiency, allowing the speed to be reduced, lowering the sound pressure level and optimizing energy consumption.
- **PS ***** – Reversible heat pump, heating-only version with standard head.
- **PSAP ***** – Reversible heat pump, high head pump-only version.
- **PSI***** - AC circulation pump controlled by an external inverter installed in the electrical panel.
- **PSIAP** -** High head AC circulation pump controlled by an external inverter installed in the electrical panel.
- **PD ***** – Reversible heat pump, dual-pump version with standard head.
- **PDAP ***** – Reversible heat pump, dual high-head pump version.
- **PS-SI ***** – Reversible heat pump, pump-only version with standard head + tank and expansion vessel.
- **PSAP-SI ***** – Reversible heat pump, high-head pump only version + tank and expansion vessel.
- **PSI-SI***** - AC circulation pump controlled via external inverter installed in the electrical panel + tank and expansion vessel.
- **PSIAP-SI*** -** High head AC circulation pump controlled via external inverter installed in the electrical panel + tank and expansion vessel.
- **PD-SI ***** – Reversible heat pump, dual-pump version with standard head + tank and expansion vessel.
- **PDAP-SI ***** – Reversible heat pump, high-head double pump version + tank and expansion vessel.
- **TR1** – Microchannel coil with Aero surface treatment. The treatment consists of spraying a special water-based coating, formulated with new resins offering extremely high chemical resistance. The product is flexible to withstand thermal contractions and expansions, UV-resistant, dirt-repellent, mechanically resistant, with very limited reduction in heat transfer and virtually no impact on air-side pressure drops. The treatment withstands 6,000 h according to ASTM B117.
- **TR1C4** - Anti-corrosion treatment on coil and sheet metal – includes a TR1-type treatment on the coil and, in addition, the hot-dip galvanized steel panels are painted so as to make them suitable for unit installation in C4H environments, according to UNI EN 12944. The external fastening hardware is made of AISI 304 material, class A2.
- **C4** - The hot-dip galvanized steel panels are painted to ensure compliance with installation in C4H-class environments, in accordance with UNI EN 12944. The external fastening hardware is made of AISI 304 stainless steel (A2 class), ensuring corrosion resistance and long-term durability.
- **BT** - The BT accessory allows the operating range of the water temperature to be extended down to -8°C. In this case, it is mandatory to use a water-glycol mixture suitable for the operating point and for the minimum temperature reached by the system.

** Accessories not usable simultaneously
*** Accessories not usable simultaneously

Accessories

- **EC-CC** - Modulating EC fan. Includes the CC function, condensation control down to -20°C. Mandatory accessory for cooling-only versions, comfort applications, EU market.
- **GR2** - Battery compartment anti-intrusion kit – wire mesh to prevent the entry of foreign objects into the coil and to protect the coil from accidental contact by people or objects.
- **GR4** - Anti-intrusion kit for hydraulic circuit compartment and anti-intrusion kit for coil compartment.
- **SS** - Soft starter – electronic static starter for inrush current management, installed inside the electrical panel; it allows a reduction of inrush current and of mechanical wear on the motor windings.
- **KS** - Lifting bracket kit – facilitates lifting and positioning of the unit.
- **MN** - External pressure gauges for quick monitoring of high and low pressure; four gauges in dual-circuit units.

Provided separately

- **AG** - Rubber anti-vibration kit – designed to prevent vibration transmission to the structure; they are to be installed beneath the unit, in the designated mounting holes.
- **AM -** Spring anti-vibration kit – designed to prevent transmission of vibrations to the structure; they must be installed underneath the unit, in the designated holes.
- **FY** - Y-strainer – contains a stainless steel mesh screen (500 µm filtration) that collects solid materials present in the water. Filtration prevents blockage and/or damage to the devices installed downstream of the strainer. Alternatively, it is possible to install a dirt separator that ensures a filtration level not greater than 1 mm (in this case, it is no longer necessary to install the Y-strainer).
- **SAS** - Remote system probe.
- **TQE** - Rainproof cover for electrical panel.
- **RV** - Grooved coupling joint kit with carbon steel pipe stubs, complete with grooved connection to the unit and flanged connection with gasket for direct connection to the system.
- **ISK**** - USB/RS485 serial converter – interface device capable of reading and writing control registers via the RS485 standard and converting them to a USB port that can be connected to any supervision system.
- **LNC**** - LAN-Wi-Fi router – device that allows the unit to be connected to a local network via Ethernet cable or Wi-Fi coverage for remote monitoring.
- **OVPN**** - 3G LAN-Wi-Fi router with VPN tunnel – device that allows the unit to be connected remotely with an industrial router using the secure OPENVPN service.
- **i-CR2**** - Wall-mounted remote control – Modbus remote controller with negative LCD and capacitive keys. The device is intended to be used as a remote unit keypad with local temperature sensing and replicates the functions of the on-board unit controller.
- **Hi-TV415**** - Color touch screen wired remote controller for the centralized management of a cascade of chillers/heat pumps, for up to 7 units.

** Accessories not usable simultaneously

i-CR2
Wall-mounted remote control
ACCESSORY

Hi-TV415
Touch screen remote controller for cascade management (max 7 units)
ACCESSORY

HWA2-A			0270	0280	0290	04110
Cooling	Cooling capacity (1)	kW	67,1	75,7	79,1	98,3
	Total absorbed power (1)	kW	19,7	21,7	24,4	31,7
	EER (1)	W/W	3,41	3,49	3,24	3,10
	Cooling capacity (2)	kW	89,9	98,5	103	138
	Total absorbed power (2)	kW	22,3	24,7	28	34,5
	EER (2)	W/W	4,03	3,99	3,68	4,00
	SEER (3)	W/W	4,70	5,09	4,69	4,29
	IPLV (9)		5,55	6,04	5,69	TBD
	Cooling capacity (8)	kW	41,2	46,5	48,8	TBD
	Total absorbed power (8)	kW	18,1	19,5	21,5	TBD
	EER (8)	W/W	2,28	2,38	2,27	TBD
	Water flow rate (1)	l/s	3,21	3,62	3,78	4,70
	Pressure drops in the heat exchanger on the user side (1)	kPa	18,00	22,40	24,20	16,30
Compressor	Compressor type		SCROLL			
	Refrigerant oil (type)		POE 160SZ			
	No. of compressors	No.	2	2	2	4
	Standard capacity steps	No.	2	3	2	5
	Oil loading	l	6,6	6,6	6,6	13,2
	Refrigerant circuits	No.	1	1	1	2
Refrigerant	Type		R290			
	Refrigerant charge (4) Circuit 1	kg	4,5	4,5	4,5	3,8
	Refrigerant charge (4) Circuit 2	kg	-	-	-	3,8
	Tons of CO_2 equivalent (4)	Ton	0,0001	0,0001	0,0001	0,0002
	Design pressure (high/low)	bar	33/1,7	33/1,7	33/1,7	33/1,7
Outdoor zone fans	Fan types		AXIAL - EC			
	No. of fans	No.	2	2	2	2
	Rated power (1)	kW	1,9	1,9	1,9	1,7
	Maximum power	kW	2,55	2,55	2,55	2
	Maximum absorbed current	A	4	4	4	3,1
	Standard air flow rate	m³/h	42000	42000	42000	42000
Internal heat exchanger	Internal heat exchanger type		PHE – PLATE TYPE			
	No. of indoor heat exchangers	No.	1	1	1	1
	Water content	l	5,30	5,30	5,30	8,30
Hydraulic circuit	Maximum water-side pressure	bar	6	6	6	6
	Maximum pressure of hydronic kit (safety valve setting)	bar	6	6	6	6
	Water connections		2"	2"	2"	2" 1/2
	Minimum system water content (5)	l	354	423	414	270
Sound data	Sound power (6)	dB (A)	85 std 83 SL 81 SSL	86 std 84 SL 82 SSL	86 std 84 SL 82 SSL	87 std 85 SL 83 SSL
	Sound pressure (7)	dB (A)	53 std 51 SL 49 SSL	54 std 52 SL 50 SSL	54 std 52 SL 50 SSL	55 std 53 SL 51 SSL
Electrical data	Power supply		400V/3P/50Hz			
	Maximum input power, version without accessories	kW	42,4	45,6	48,8	64,0
	Maximum current absorbed, version without accessories	A	64,2	71,0	77,8	102,4
	Maximum inrush current for version without accessories	A	327,0	366,0	405,0	241,8
Dimensions and weights	Standard length / with tank	mm	2570 / 3280	2570 / 3280	2570 / 3280	3960 / 4670
	Depth	mm	1135	1135	1135	1135
	Standard height / SSL	mm	2250 / 2300	2250 / 2300	2250 / 2300	2250 / 2300
	Net transport weight (standard version)	kg	1055	1060	1065	1270
	Operating weight (standard version)	kg	1065	1070	1075	1280

(1) Internal heat exchanger water temperature = 12/7°C, air entering the external heat exchanger 35°C.
(2) Internal heat exchanger water temperature = 23/18°C, air entering the external heat exchanger 35°C.
(3) Cooling: low temperature, variable output, constant flow rate.
(4) Data is indicative and subject to change. For the correct value, always refer to the technical label on the unit.
(5) The calculated value of minimum system water volume does not take into account the water volume contained in the internal heat exchanger (evaporator). For applications with low outdoor air temperature or low required average loads, the minimum system water volume is obtained by doubling the indicated value.
(6) Condition (1); value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-2, in compliance with the requirements of Eurovent certification.
(7) Value calculated from the sound power level using ISO 3744:2010, referenced to a distance of 10 m from the unit.
(8) Cooling BT version: outdoor air temperature 35°C, internal heat exchanger water temperature = -3/-8°C. Fluid treated with 35% ethylene glycol.
(9) Calculated according to AHRI 551/591 (SI) standard.
The performance data provided are indicative and may be subject to change. The capacities declared at points (1), (2), (8) refer to the instantaneous output in accordance with EN 14511:2022. The data declared at point (3) are determined in accordance with UNI EN 14825:2022.

Preliminary data

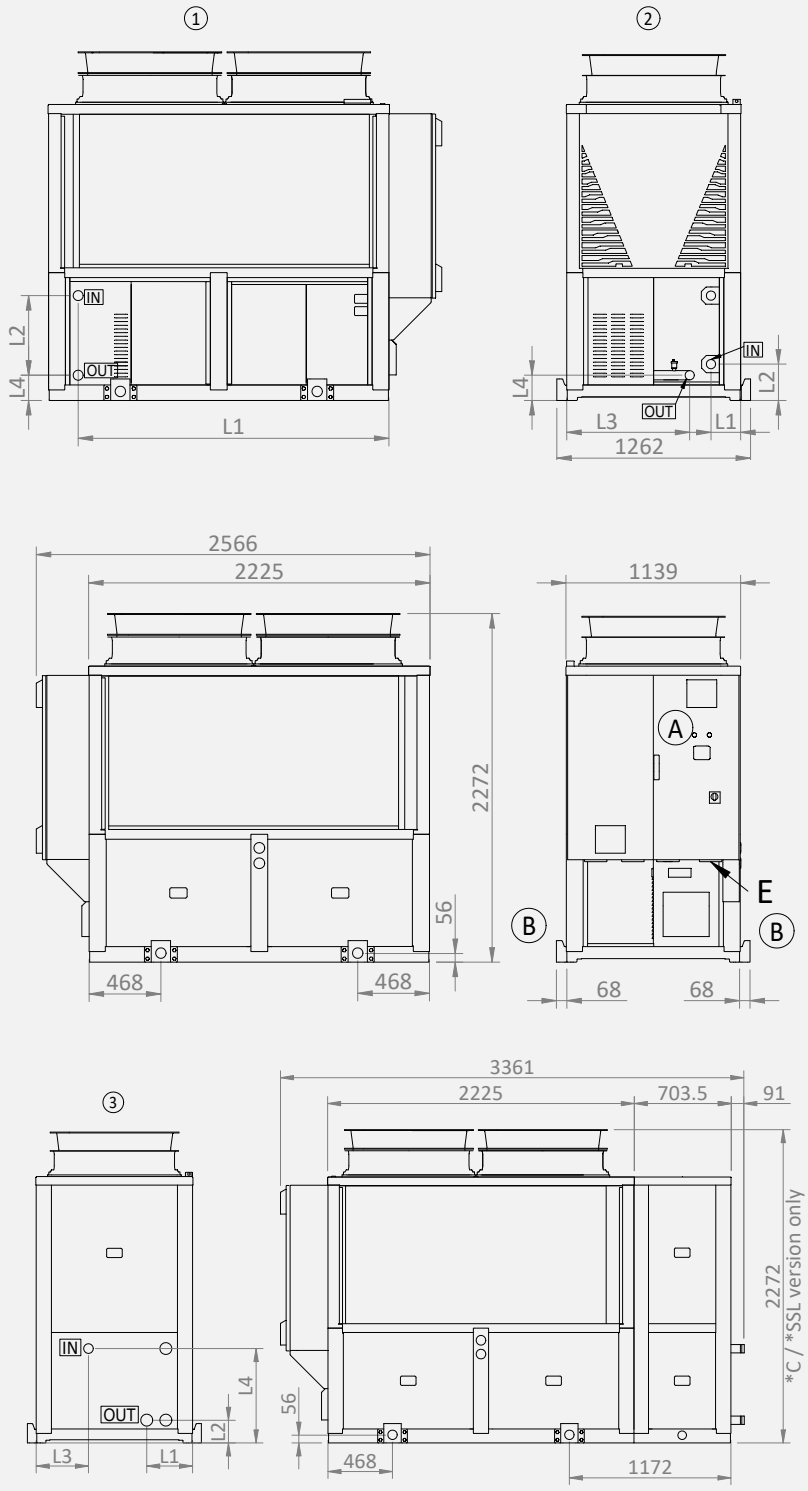
HWA2-A			04120	04140	04155	04170
Cooling	Cooling capacity (1)	kW	112,0	132,4	141,6	152,4
	Total absorbed power (1)	kW	35,2	42,3	47,0	50,8
	EER (1)	W/W	3,18	3,13	3,01	3,00
	Cooling capacity (2)	kW	155	169,6	180	192,4
	Total absorbed power (2)	kW	38,6	44,5	48,8	52,7
	EER (2)	W/W	4,02	3,81	3,69	3,65
	SEER (3)	W/W	4,45	≤ 4	≤ 4	≤ 4
	IPLV (9)		TBD	TBD	TBD	TBD
	Cooling capacity (8)	kW	TBD	TBD	TBD	TBD
	Total absorbed power (8)	kW	TBD	TBD	TBD	TBD
	EER (8)	W/W	TBD	TBD	TBD	TBD
	Water flow rate (1)	l/s	5,35	6,33	6,77	7,28
	Pressure drops in the heat exchanger on the user side (1)	kPa	20,70	21,86	21,36	21,52
Compressor	Compressor type		SCROLL			
	Refrigerant oil (type)		POE 160SZ			
	No. of compressors	No.	4	4	4	4
	Standard capacity steps	No.	4	4	6	4
	Oil loading	l	13,2	13,2	13,2	13,2
	Refrigerant circuits	No.	2	2	2	2
Refrigerant	Type		R290			
	Refrigerant charge (4) Circuit 1	kg	3,8	4,4	4,5	4,5
	Refrigerant charge (4) Circuit 2	kg	3,8	4,4	4,5	4,5
	Tons of CO_2 equivalent (4)	Ton	0,0002	0,0002	0,0002	0,0002
	Design pressure (high/low)	bar	33/1,7	33/1,7	33/1,7	33/1,7
Outdoor zone fans	Fan types		AXIAL - EC			
	No. of fans	No.	2	4	4	4
	Rated power (1)	kW	1,7	1,9	1,9	1,9
	Maximum power	kW	2	2,6	2,6	2,6
	Maximum absorbed current	A	3,1	4	4	4
	Standard air flow rate	m³/h	42000	84000	84000	84000
Internal heat exchanger	Internal heat exchanger type		PHE – PLATE TYPE			
	No. of indoor heat exchangers	No.	1	1	1	1
	Water content	l	8,30	12,60	13,90	15,10
Hydraulic circuit	Maximum water-side pressure	bar	6	6	6	6
	Maximum pressure of hydronic kit (safety valve setting)	bar	6	6	6	6
	Water connections		2" 1/2	2" 1/2	2" 1/2	2" 1/2
	Minimum system water content (5)	l	326	TBD	TBD	TBD
Sound data	Sound power (6)	dB (A)	88 std 86 SL 84 SSL	TBD	TBD	TBD
	Sound pressure (7)	dB (A)	56 std 54 SL 52 SSL	TBD	TBD	TBD
Electrical data	Power supply		400V/3P/50Hz			
	Maximum input power, version without accessories	kW	68,8	77,5	84,0	90,5
	Maximum current absorbed, version without accessories	A	109,8	123,4	137,0	150,6
	Maximum inrush current for version without accessories	A	256,8	TBD	TBD	TBD
Dimensions and weights	Standard length / with tank	mm	3960 / 4670	2810	2810	2810
	Depth	mm	1135	2320	2320	2320
	Standard height / SSL	mm	2250 / 2300	2362 / 2369	2362 / 2369	2362 / 2369
	Net transport weight (standard version)	kg	1280	1950	1960	1975
	Operating weight (standard version)	kg	1290	1955	1965	1980

(1) Internal heat exchanger water temperature = 12/7°C, air entering the external heat exchanger 35°C.
(2) Internal heat exchanger water temperature = 23/18°C, air entering the external heat exchanger 35°C.
(3) Cooling: low temperature, variable output, constant flow rate.
(4) Data is indicative and subject to change. For the correct value, always refer to the technical label on the unit.
(5) The calculated value of minimum system water volume does not take into account the water volume contained in the internal heat exchanger (evaporator). For applications with low outdoor air temperature or low required average loads, the minimum system water volume is obtained by doubling the indicated value.
(6) Condition (1); value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-2, in compliance with the requirements of Eurovent certification.
(7) Value calculated from the sound power level using ISO 3744:2010, referenced to a distance of 10 m from the unit.
(8) Cooling BT version: outdoor air temperature 35°C, internal heat exchanger water temperature = -3/-8°C. Fluid treated with 35% ethylene glycol.
(9) Calculated according to AHRI 551/591 (SI) standard.
The performance data provided are indicative and may be subject to change. The capacities declared at points (1), (2), (8) refer to the instantaneous output in accordance with EN 14511:2022. The data declared at point (3) are determined in accordance with UNI EN 14825:2022.

Preliminary data

Dimensional Drawings

HWA2-A 0270 / 0280 / 0290



Version	L1	L2	L3	L4	IN / OUT	Version height -SSL / -C
Standard	2026	519	-	165	2" Victaulic	2295
Single - Dual pump	194	236	802	685		2295
Single - Dual pump with tank	332	165	380	685		2295

A: Electrical panel
B: Lifting bracket
E: Power supply input

* Accessory
** Standard version height; for -SSL / -C: see table

Dimensions in mm

Price list

HWA2-A			270	280	290
HWA2-A	Cooling only	€	34.593	35.183	35.501
WEEE		€	6	6	6
FACTORY-MOUNTED ACCESSORY MANDATORY: Standard EC fan for ERP regulation to be added to the unit price					
EC-CC	EC fan (included in BT, SSL versions). DC control included	€	994	994	994
FACTORY-MOUNTED ACCESSORIES					
BT	Cooling only BT version (EC-CC accessory already included)	€	2.080	2.080	2.080
KA1	Adhesive heater for heat exchanger + pump heater (if present). Not available for units with tank	€	246	246	246
GR2	Anti-intrusion battery compartment kit	€	1.348	1.348	1.348
GR4	Anti-intrusion kit for hydraulic circuit compartment and anti-intrusion kit for batteries compartment	€	2.526	2.526	2.526
PS	Standard head pump	€	3.882	3.882	3.882
PSI	Standard head pump controlled by an inverter installed in the electrical panel	€	4.422	4.422	4.422
PSAP	High-head pump	€	4.327	4.327	4.327
PSIAP	High-head pump controlled by an inverter installed in the electrical panel	€	4.866	4.866	4.866
PD	Twin pump, standard head	€	7.048	7.048	7.048
PDAP	Dual high-head pump	€	7.873	7.873	7.873
PS-SI	Standard head pump + tank	€	9.005	9.005	9.005
PSI-SI	Standard head pump controlled by an inverter installed in the electrical panel + tank and expansion vessel	€	9.505	9.505	9.505
PSAP-SI	High head pump + tank	€	9.417	9.417	9.417
PSIAP-SI	High-head pump with inverter control installed in the electrical panel + tank and expansion vessel	€	9.918	9.918	9.918
PD-SI	Dual standard-head pump + tank	€	12.583	12.583	12.583
PDAP-SI	Double high-head pump + tank	€	13.408	13.408	13.408
KS	Lifting bracket kit	€	710	710	710
MN	External pressure gauges	€	272	272	272
SS	Soft starter	€	1.944	1.944	1.944
SL	Silenced version	€	787	787	787
SSL	Ultra-silent version (EC-CC accessory is already included for these versions)	€	3.962	3.962	3.962
TR1	Microchannel coil with Aero surface treatment	€		Contact our office	
TR1C4	Cu/Al coil and sheet metal with anti-corrosion treatment	€		Contact our office	
C4	Protective treatment	€		Contact our office	
ACCESSORIES SUPPLIED SEPARATELY					
AG	Rubber anti-vibration mounts	€	727	727	727
AM	Spring anti-vibration mounts	€	1.873	1.873	1.873
FY	Y-strainer	€	175	175	175
Hi-TV415	Touchscreen remote control	€	640	640	640
i-CR2	Wall-mounted remote control	€	319	319	319
RV	Starter kit consisting of 2 jaws and 2 plain stubs	€		Contact our office	
SAS	Remote sensor	€	47	47	47
TQE	Rain cover for electrical control panel	€	300	300	300

WEEE for Italian market only.

HWA2-AH 0270÷04170

Reversible air/water heat pump, with scroll compressors, axial fans and R290 REFRIGERANT GAS

70 kW÷170 kW

During certification

The HWA2 range uses natural refrigerant R290, which drastically reduces environmental impact and delivers top-level energy performance.
Designed for commercial and industrial applications and equipped with large-surface air-side heat exchangers, they ensure high efficiency, with SCOP and SEER values among the highest in their category.
The use of high-efficiency, particularly robust scroll compressors, together with the oil recovery and distribution system adopted on tandem circuits, ensures high reliability and consistent performance.
Available in 8 sizes.

MADE IN ITALY	R290 REFRIGERANT 0.02 GWP	78°C OUTLET WATER Supply Temperature	SCROLL COMPRESSORS	SUPER SILENCED VERSION	VERSION BT	MODBUS AVAILABLE AS STANDARD

Carpentry: all units in the series feature a structure suitable for outdoor installation, made of hot-dip galvanized steel sheet and coated with RAL 7035/RAL 7046 polyester powder paint (only for certain components) to ensure maximum resistance to atmospheric agents. All screws and inserts are in galvanized and stainless steel.

Compressors: scroll type, expressly designed to operate with R290, mounted on a double anti-vibration slide. The crankcase heater, which is always present, is activated when the compressor is stopped and is disabled when it restarts.

Air side heat exchangers: finned coil type, made with copper tubes and aluminum fins with corrugated surface, spaced appropriately to ensure maximum heat exchange efficiency.
At the base of the heat exchangers, there are drain pans for the collection and drainage of condensate water.

User side heat exchangers: of the brazed-plate type. Made of AISI stainless steel for both single-circuit and dual-circuit units, factory-insulated with closed-cell material. They can be equipped with an electric antifreeze heater (optional accessory KA). A differential pressure switch, installed on the water side, ensures the presence of water flow, preventing ice formation inside.

Fans: axial type with airfoil-profile blades. They are statically and dynamically balanced and supplied complete with protection grille and inlet and outlet air nozzles with double flared profile, specially shaped to increase efficiency and reduce noise. The motor has an IP54 protection rating according to CEI EN 60529. EC fans, with EC electric motor driven in modulation, are available as accessories on request.

Refrigeration circuit: is made using components from leading international manufacturers and in accordance with UNI EN 13134. The refrigerant gas is R290. In its basic version, the refrigeration circuit includes: electronic expansion valve, inspection valves for maintenance and control, a safety device compliant with current regulations (two high-pressure switches per circuit), pressure transducers to accurately measure evaporation and condensation pressures, high-capacity filter drier to prevent expansion valve clogging and remove any moisture present in the circuit, liquid sight glass for checking the refrigerant charge, solenoid valve, 4-way cycle-reversing valve, liquid separator, liquid receiver, and the outdoor air temperature sensor.

Electrical panel: fully manufactured and wired in compliance with standard EN 60204, comprising a power section and a control section. The degree of protection of the electrical panel is IP54. The electrical panel is equipped with a terminal block with volt-free contacts for remote ON-OFF.

Control system: all units are equipped with a control board featuring a microprocessor with superheat control logic managed based on the signals sent by pressure transducers and temperature probes. The CPU also controls the following functions: water temperature regulation, antifreeze protection, compressor start-up and timing, fan and circulation pump management (if present), alarm reset, alarm indication and operating status LEDs. On request, the microprocessor can be connected to remote BMS control systems. ModBus RTU RS-485 interface available as standard on the terminal block.

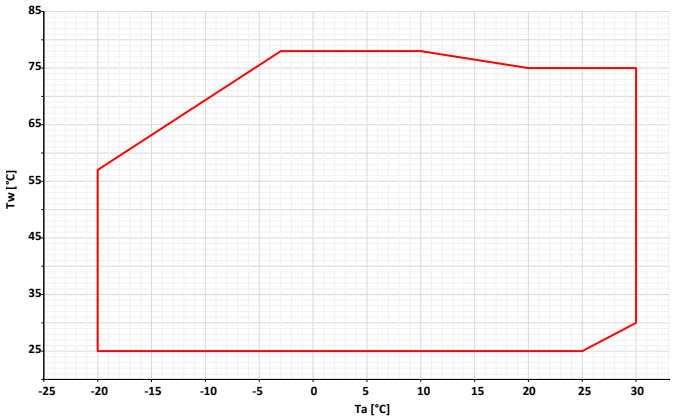
Control and protection devices: all units are equipped with the following control and protection devices: phase monitor complete with minimum and maximum voltage relay, which stops the unit if the phase sequence is incorrect or if the voltage of at least one phase differs by more than 10% from the others. Leaving water temperature sensor (with antifreeze function for the water circuit), return water temperature sensor, low-pressure transducer, high-pressure transducer, discharge temperature sensor on the compressors, suction temperature sensor on the compressors, outdoor air temperature sensor.
Thermomagnetic circuit breakers for the protection of: transformer, compressors, pumps (if present) and fans, fan thermal protection, thermal protection on each compressor, differential pressure switch on the water side, two manually reset high-pressure switches installed on the compressor discharge line.

Hydraulic circuit: the HWA2 series can be supplied with a built-in, highly configurable hydronic kit which, in addition to the differential pressure switch, can include a single pump or a twin-pump set (one in standby as backup to the other), suitable for use with chilled water containing glycol up to 50%, and directly managed by the onboard unit controller. It is also possible to install an internal inertial buffer tank, externally insulated with closed-cell expanded material, with a capacity suitable for the unit size.

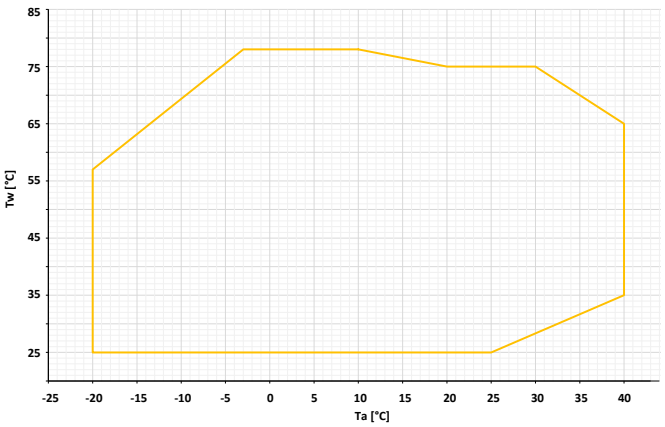
R290 gas safety: the HWA2 series is equipped with an automatic electronic system for detecting any R290 gas releases. Activation of the R290 gas safety system starts the ATEX fan in the compressor compartment, ensuring rapid dispersion and dilution of the gas. When the unit is fitted with a pump kit or twin pump, a second R290 detector is added, providing an additional level of monitoring and increasing the overall safety of the installation.

Operating Areas

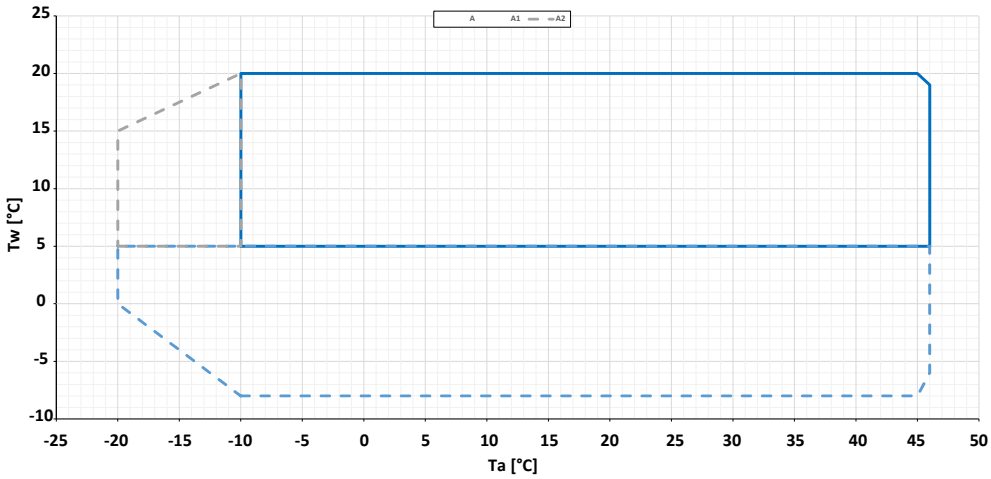
Hot



DHW



Cold



A = HWA2-AH cooling
A1 = HWA2-AH BT
A2 = HWA2-AH with EC-CC accessory (condensation control down to -20°C)

Accessories

Factory-installed

- **KA1 *** – Antifreeze heater for heat exchanger and pump (if present) – electric heating element installed on the front face of the plate heat exchanger, which is activated when the water temperature inside the exchanger falls below +4°C, and electric heating element that protects the pump motor at low temperatures.
- **KA4*** - Electric heater located on the front side of the plate heat exchanger, activated when the water temperature drops below +4°C, and heater that protects the pump motor at low temperatures. It also includes heaters in the drain pans that collect water from coil defrosting, preventing ice formation.
- **SL ** –** The silenced unit features an innovative acoustic insulation applied to the compressor compartment panels. This system significantly reduces noise during operation, improving the acoustic comfort of the surrounding environment.
- **SSL ** –** The super-silenced unit combines the acoustic insulation applied to the compressor compartment panels with a special diffuser mounted on the fan. This diffuser increases its efficiency, allowing the speed to be reduced, lowering the sound pressure level and optimizing energy consumption.
- **PS *** –** Reversible heat pump, heating-only version with standard head.
- **PSAP *** –** Reversible heat pump, high head pump-only version.
- **PSI*** -** AC circulation pump controlled by an external inverter installed in the electrical panel.
- **PSIAP*** -** High-head AC circulation pump controlled via an external inverter installed in the electrical panel.
- **PD *** –** Reversible heat pump, dual-pump version with standard head.
- **PDAP *** –** Reversible heat pump, dual high-head pump version.
- **PS-SI *** –** Reversible heat pump, pump-only version with standard head + tank and expansion vessel.
- **PSAP-SI *** –** Reversible heat pump, high-head pump only version + tank and expansion vessel.
- **PSI-SI*** -** AC circulation pump controlled via external inverter installed in the electrical panel + tank and expansion vessel.
- **PSIAP-SI*** -** High head AC circulation pump controlled via

** Accessories not usable simultaneously
*** Accessories not usable simultaneously

Accessories

external inverter installed in the electrical panel + tank and expansion vessel.

- **PD-SI ***** – Reversible heat pump, dual-pump version with standard head + tank and expansion vessel.
- **PDAP-SI ***** – Reversible heat pump, high-head double pump version + tank and expansion vessel.
- **TR2** - Cu/Al coil with Silver Line surface treatment. Finned coil heat exchangers with copper tubes and aluminium fins, subjected to treatment with a special polyurethane-based paint for corrosion protection. The protection provides the coil with flexibility to withstand thermal contraction and expansion, UV resistance, and makes it dirt-repellent. The treatment ensures coil protection under virtually all environmental conditions: from marine to rural environments, from industrial to urban areas. For specific instructions on cleaning coils treated in this way, refer to the relevant chapter in the user-installer manual. The treatment withstands 6000 h according to ASTM B117.
- **TR2C4** - Anti-corrosion treatment on coil and sheet metal – includes a TR2-type treatment on the coil and, in addition, the hot-dip galvanized steel panels are painted to make them suitable for installing the unit in C4H environments, in accordance with UNI EN 12944. The external fastening hardware is made of AISI 304 material, class A2.
- **C4** - The hot-dip galvanized steel panels are painted to ensure compliance with installation in C4H-class environments, in accordance with UNI EN 12944. The external fastening hardware is made of AISI 304 stainless steel (A2 class), ensuring corrosion resistance and long-term durability.
- **BT** - The BT accessory allows the operating range of the water temperature to be extended down to -8°C. In this case, it is mandatory to use a water-glycol mixture suitable for the operating point and for the minimum temperature reached by the system.
- **EC-CC** - Modulating EC fan. Includes CC function, condensing pressure control down to -20°C.
- **GR2** - Battery compartment anti-intrusion kit – wire mesh to prevent the entry of foreign objects into the coil and to protect the coil from accidental contact by people or objects.
- **GR4** - Anti-intrusion kit for hydraulic circuit compartment and anti-intrusion kit for coil compartment.
- **SS** - Soft starter – electronic static starter for inrush current management, installed inside the electrical panel; it allows a reduction of inrush current and of mechanical wear on the motor windings.
- **KS** - Lifting bracket kit – facilitates lifting and positioning of the unit.
- **MN** - External pressure gauges for quick monitoring of high and low pressure; four gauges in dual-circuit units.

Provided separately

- **AG** - Rubber anti-vibration kit – designed to prevent vibration transmission to the structure; they are to be installed beneath the unit, in the designated mounting holes.
- **AM -** Spring anti-vibration kit – designed to prevent transmission of vibrations to the structure; they must be installed underneath the unit, in the designated holes.
- **FY** - Y-strainer – contains a stainless steel mesh screen (500 µm filtration) that collects solid materials present in the water. Filtration prevents blockage and/or damage to the devices installed downstream of the strainer. Alternatively, it is possible to install a dirt separator that ensures a filtration level not greater than 1 mm (in this case, it is no longer necessary to install the Y-strainer).
- **SAS** - Remote system probe.
- **TQE** - Rainproof cover for electrical panel.
- **RV** - Grooved coupling joint kit with carbon steel pipe stubs, complete with grooved connection to the unit and flanged connection with gasket for direct connection to the system.
- **ISK**** - USB/RS485 serial converter – interface device capable of reading and writing control registers via the RS485 standard and converting them to a USB port that can be connected to any supervision system.
- **LNC**** - LAN-Wi-Fi router – device that allows the unit to be connected to a local network via Ethernet cable or Wi-Fi coverage for remote monitoring.
- **OVPN**** - 3G LAN-Wi-Fi router with VPN tunnel – device that allows the unit to be connected remotely with an industrial router using the secure OPENVPN service.
- **i-CR2**** - Wall-mounted remote control – Modbus remote controller with negative LCD and capacitive keys. The device is intended to be used as a remote unit keypad with local temperature sensing and replicates the functions of the on-board unit controller.
- **Hi-TV415**** - Color touch screen wired remote controller for the centralized management of a cascade of chillers/heat pumps, for up to 7 units.

** Accessories not usable simultaneously
*** Accessories not usable simultaneously

i-CR2
Wall-mounted remote control
ACCESSORY

Hi-TV415
Touch screen remote controller for cascade management (max 7 units)
ACCESSORY

HWA2-AH			0270	0280	0290	04110
Cooling	Cooling capacity (1)	kW	61,5	67,2	72,8	94,7
	Total absorbed power (1)	kW	19,7	21,5	23,5	33,4
	EER (1)	W/W	3,12	3,13	3,10	2,84
	Cooling capacity (2)	kW	73,9	81,2	86,3	116,0
	Total absorbed power (2)	kW	20,2	22,0	24,7	35,2
	EER (2)	W/W	3,66	3,69	3,49	3,30
	SEER (5)	W/W	4,40	4,60	4,29	4,31
	Water flow rate (1)	l/s	2,94	3,21	3,48	4,52
	Pressure drops in the heat exchanger on the user side (1)	kPa	19,7	22,7	25,9	16,7
Heating	Heating capacity (3)	kW	72,7	78,5	84,4	116,0
	Total absorbed power (3)	kW	16,8	18,6	20,4	29,1
	COP (3)	W/W	4,33	4,22	4,14	3,99
	Heating capacity (4)	kW	65,0	71,4	76,2	105,0
	Total absorbed power (4)	kW	23,2	24,8	27,5	36,3
	COP (4)	W/W	2,80	2,88	2,77	2,89
	Heating capacity (11)	kW	61,0	67,1	72,6	103,0
	Total absorbed power (11)	kW	26,7	28,5	31,5	44,4
	COP (11)	W/W	2,28	2,35	2,30	2,32
	SCOP (6)	W/W	4,00	4,16	3,87	3,70
	Water flow rate (3)	l/s	3,47	3,75	4,03	5,54
	Pressure drops in the user-side heat exchanger (3)	kPa	23,6	26,8	30,2	23,7
	Energy efficiency water 35°C/55°C	class	A++/A++	A++/A++	A++/A++	NA
Compressor	Compressor type		SCROLL			
	Refrigerant oil (type)		POE 160SZ			
	No. of compressors	No.	2	2	2	4
	Standard capacity steps	No.	2	3	2	5
	Oil loading	l	6,6	6,6	6,6	13,2
	Refrigerant circuits	No.	1	1	1	2
Refrigerant	Type		R290			
	Refrigerant charge (4) Circuit 1	kg	6,5	6,5	6,5	4,9
	Refrigerant charge (4) Circuit 2	kg	-	-	-	4,9
	Tons of CO_2 equivalent (4)	Ton	0,0001	0,0001	0,0001	0,0002
	Design pressure (high/low)	bar	33/0,7	33/0,7	33/0,7	33/0,7
Outdoor zone fans	Fan types		AXIAL - EC			
	No. of fans	No.	2	2	2	2
	Rated power (1)	kW	1,9	1,9	1,9	1,7
	Maximum power	kW	2,55	2,55	2,55	2,00
	Maximum absorbed current	A	4	4	4	3,1
	Standard air flow rate	m³/h	40000	40000	40000	40000
Internal heat exchanger	Internal heat exchanger type		PHE – PLATE TYPE			
	No. of indoor heat exchangers	No.	1	1	1	1
	Water content	l	5,30	5,30	5,30	8,30
Hydraulic circuit	Maximum water-side pressure	bar	6	6	6	6
	Maximum pressure of hydronic kit (safety valve setting)	bar	6	6	6	6
	Water connections		2"	2"	2"	2" 1/2
	Minimum system water content (8)	l	394	466	456	302
Sound data	Sound power (9)	dB (A)	85 std/ 83 SL/ 81 SSL	86 std/ 84 SL/ 82 SSL	86 std/ 84 SL/ 82 SSL	87 std/ 85 SL/ 83 SSL
	Sound pressure (10)	dB (A)	53 std/ 51 SL/ 49 SSL	54 std/ 52 SL/ 50 SSL	54 std/ 52 SL/ 50 SSL	55 std/ 53 SL/ 51 SSL
Electrical data	Power supply		400V/3P/50Hz			
	Maximum input power, version without accessories	kW	42,4	45,6	48,8	64,0
	Maximum current absorbed, version without accessories	A	64,2	71,0	77,8	102,4
	Maximum inrush current for version without accessories	A	327,0	366,0	405,0	241,8
Dimensions and weights	Standard length / with tank	mm	2570 / 3280	2570 / 3280	2570 / 3280	3960 / 4670
	Depth	mm	1135	1135	1135	1135
	Standard height / SSL	mm	2250 / 2300	2250 / 2300	2250 / 2300	2250 / 2300
	Net transport weight (standard version)	kg	1070	1075	1080	1270
	Operating weight (standard version)	kg	1080	1085	1090	1280

(1) Internal heat exchanger water temperature = 12/7°C, air entering the external heat exchanger 35°C.
(2) Internal heat exchanger water temperature = 23/18°C, air entering the external heat exchanger 35°C.
(3) Internal heat exchanger water temperature = 30/35°C, entering air temperature at the external heat exchanger = 7°C D.B./6°C W.B; EC fans
(4) Internal heat exchanger water temperature = 47/55°C, entering air temperature at the external heat exchanger = 7°C D.B./6°C W.B; EC fans
(11) Internal heat exchanger water temperature = 55/65°C, entering air temperature at the external heat exchanger = 7°C D.B./6°C W.B.; EC fans
(5) Cooling: low temperature, variable output, constant flow rate.
(6) Average climatic conditions; Tbiv = -4°C, internal heat exchanger water temperature = 30/35°C; EC fans
(7) Indicative data, subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) The calculated value of minimum system water volume does not take into account the water volume contained in the internal heat exchanger (evaporator). For applications with low outdoor air temperatures or low required average loads, the minimum system water volume is obtained by doubling the indicated value.
(9) Condition (3); value determined on the basis of measurements carried out in accordance with standard UNI EN ISO 9614-2, in compliance with the requirements of Eurovent certification.
(10) Value calculated from the sound power level using ISO 3744:2010, referred to a distance of 10 m from the unit.
The stated performance data are indicative and may be subject to variation. The capacities declared at points (1), (2), (3), (4) refer to the instantaneous output in accordance with EN 14511. The data declared at points (5), (6) are determined in accordance with UNI EN 14825.

Preliminary data

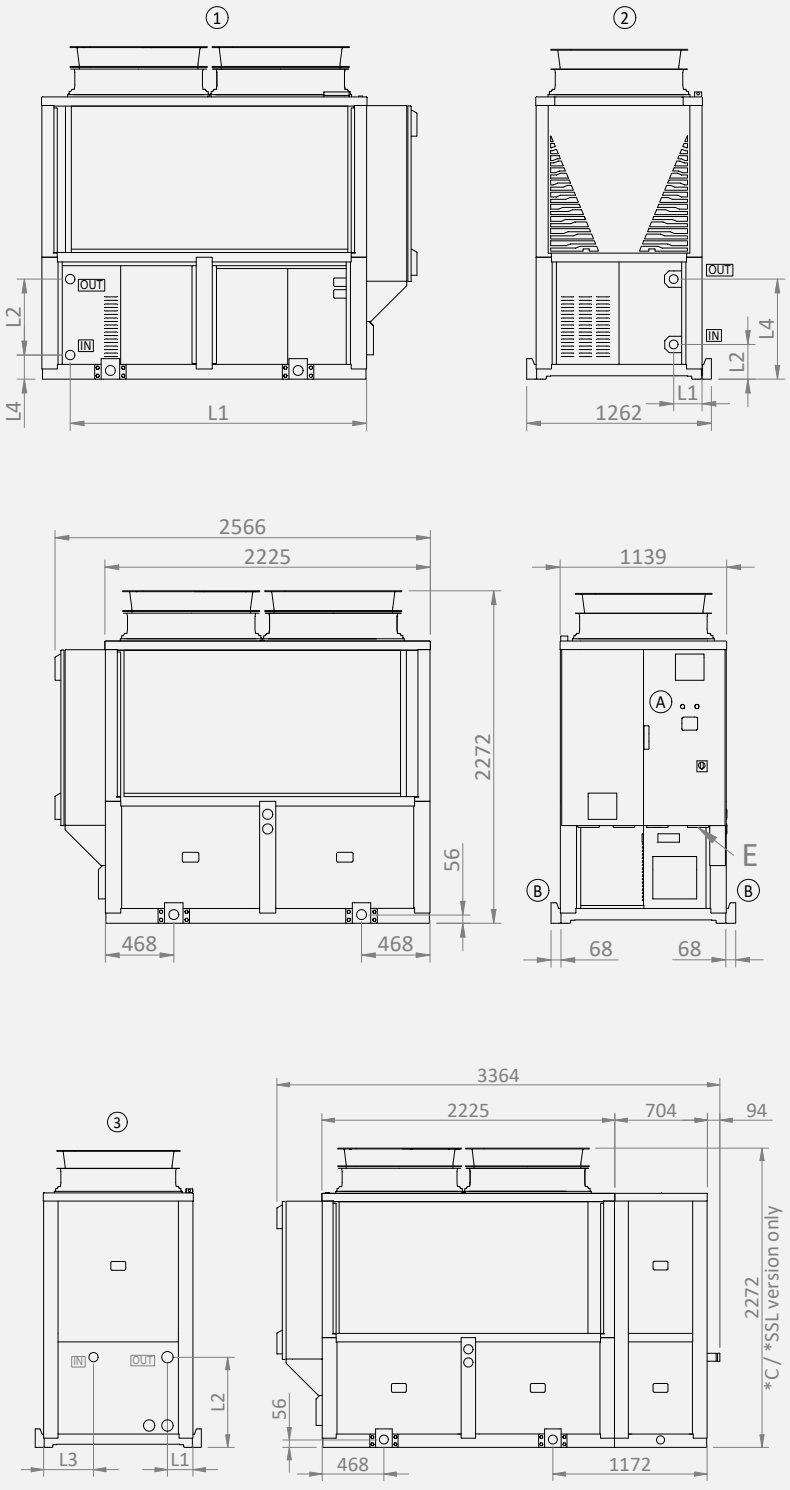
HWA2-AH			04120	04140	04155	04170
Cooling	Cooling capacity (1)	kW	107,0	111,6	123,2	134,0
	Total absorbed power (1)	kW	36,9	39,2	42,9	46,0
	EER (1)	W/W	2,90	2,85	2,87	2,91
	Cooling capacity (2)	kW	131,0	146,1	161,3	168,9
	Total absorbed power (2)	kW	39,1	42,0	45,7	51,5
	EER (2)	W/W	3,35	3,48	3,53	3,28
	SEER (5)	W/W	4,58	3,5 ÷ 4	3,5 ÷ 4	3,5 ÷ 4
	Water flow rate (1)	l/s	5,11	5,33	5,89	6,40
	Pressure drops in the heat exchanger on the user side (1)	kPa	15,30	15,9	16,5	17,2
Heating	Heating capacity (3)	kW	129,0	140,2	154,7	169,3
	Total absorbed power (3)	kW	31,0	35,4	38,0	40,7
	COP (3)	W/W	4,16	3,96	4,08	4,16
	Heating capacity (4)	kW	118,0	125,5	139,5	153,3
	Total absorbed power (4)	kW	39,4	46,7	50,2	53,8
	COP (4)	W/W	2,99	2,69	2,78	2,85
	Heating capacity (11)	kW	115,0	120,6	134,0	147,2
	Total absorbed power (11)	kW	47,9	53,9	58,0	62,2
	COP (11)	W/W	2,40	2,24	2,31	2,37
	SCOP (6)	W/W	3,90	3,5 ÷ 4	3,5 ÷ 4	3,5 ÷ 4
	Water flow rate (3)	l/s	6,16	6,70	7,39	8,09
	Pressure drops in the user-side heat exchanger (3)	kPa	21,0	24,3	25,3	26,4
	Energy efficiency water 35°C/55°C	class	NA	NA	NA	NA
Compressor	Compressor type		SCROLL			
	Refrigerant oil (type)		POE 160SZ			
	No. of compressors	No.	4	4	4	4
	Standard capacity steps	No.	4	4	6	4
	Oil loading	l	13,2	13,2	13,2	13,2
	Refrigerant circuits	No.	2	2	2	2
Refrigerant	Type		R290			
	Refrigerant charge (4) Circuit 1	kg	4,9	6,4	6,5	6,6
	Refrigerant charge (4) Circuit 2	kg	4,9	6,4	6,5	6,6
	Tons of CO_2 equivalent (4)	Ton	0,0002	0,0003	0,0003	0,0003
	Design pressure (high/low)	bar	33/0,7	33/0,7	33/0,7	33/0,7
Outdoor zone fans	Fan types		AXIAL - EC			
	No. of fans	No.	2	4	4	4
	Rated power (1)	kW	1,7	1,9	1,9	1,9
	Maximum power	kW	2,00	2,55	2,55	2,55
	Maximum absorbed current	A	3,1	4	4	4
	Standard air flow rate	m³/h	40000	80000	80000	80000
Internal heat exchanger	Internal heat exchanger type		PHE – PLATE TYPE			
	No. of indoor heat exchangers	No.	1	1	1	1
	Water content	l	8,30	12,60	13,90	15,10
Hydraulic circuit	Maximum water-side pressure	bar	6	6	6	6
	Maximum pressure of hydronic kit (safety valve setting)	bar	6	6	6	6
	Water connections		2" 1/2	2" 1/2	2" 1/2	2" 1/2
	Minimum system water content (8)	l	368	TBD	TBD	TBD
Sound data	Sound power (9)	dB (A)	88 std/ 86 SL/ 84 SSL	TBD	TBD	TBD
	Sound pressure (10)	dB (A)	56 std/ 54 SL/ 52 SSL	TBD	TBD	TBD
Electrical data	Power supply		400V/3P/50Hz			
	Maximum input power, version without accessories	kW	68,8	77,5	84,0	90,5
	Maximum current absorbed, version without accessories	A	109,8	123,4	137,0	150,6
	Maximum inrush current for version without accessories	A	256,8	TBD	TBD	TBD
Dimensions and weights	Standard length / with tank	mm	3960 / 4670	2810	2810	2810
	Depth	mm	1135	2320	2320	2320
	Standard height / SSL	mm	2250 / 2300	2362 / 2369	2362 / 2369	2362 / 2369
	Net transport weight (standard version)	kg	1280	2050	2065	2080
	Operating weight (standard version)	kg	1290	2055	2070	2085

(1) Internal heat exchanger water temperature = 12/7°C, air entering the external heat exchanger 35°C.
(2) Internal heat exchanger water temperature = 23/18°C, air entering the external heat exchanger 35°C.
(3) Internal heat exchanger water temperature = 30/35°C, entering air temperature at the external heat exchanger = 7°C D.B./6°C W.B; EC fans
(4) Internal heat exchanger water temperature = 47/55°C, entering air temperature at the external heat exchanger = 7°C D.B./6°C W.B; EC fans
(11) Internal heat exchanger water temperature = 55/65°C, entering air temperature at the external heat exchanger = 7°C D.B./6°C W.B.; EC fans
(5) Cooling: low temperature, variable output, constant flow rate.
(6) Average climatic conditions; Tbiv = -4°C, internal heat exchanger water temperature = 30/35°C; EC fans
(7) Indicative data, subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) The calculated value of minimum system water volume does not take into account the water volume contained in the internal heat exchanger (evaporator). For applications with low outdoor air temperatures or low required average loads, the minimum system water volume is obtained by doubling the indicated value.
(9) Condition (3); value determined on the basis of measurements carried out in accordance with standard UNI EN ISO 9614-2, in compliance with the requirements of Eurovent certification.
(10) Value calculated from the sound power level using ISO 3744:2010, referred to a distance of 10 m from the unit.
The stated performance data are indicative and may be subject to variation. The capacities declared at points (1), (2), (3), (4) refer to the instantaneous output in accordance with EN 14511. The data declared at points (5), (6) are determined in accordance with UNI EN 14825.

Preliminary data

Dimensional Drawings

HWA2-AH 0270 / 0280 / 0290



Version	L1	L2	L3	L4	IN / OUT	Version height -SSL / -C
Standard	2026	519	-	165	2" Victaulic	2295
Single - Dual pump	194	236	-	685		2295
Single - Dual pump with tank	194	685	380	-		2295

A: Electrical panel
B: Lifting bracket
E: Power supply input

* Accessory
** Standard version height; for -SSL / -C: see table

Dimensions in mm

Price list

HWA2-AH			270	280	290
HWA2-AH	Reversible heat pump	€	41.786	42.428	42.885
WEEE		€	6	6	6
FACTORY-MOUNTED ACCESSORY MANDATORY: Standard EC fan for ERP regulation to be added to the unit price					
EC-CC	EC fan (included in BT, SSL versions). DC control included	€	994	994	994
FACTORY-MOUNTED ACCESSORIES					
BT	Cooling only BT version (EC-CC accessory already included)	€	2.080	2.080	2.100
KA1	Adhesive heater for heat exchanger + pump heater (if present). Not available for units with tank	€	246	246	246
KA4	Exchanger heater + pump (if present) + tray	€	594	594	594
GR2	Anti-intrusion battery compartment kit	€	1.348	1.348	1.348
GR4	Anti-intrusion kit for hydraulic circuit compartment and anti-intrusion kit for batteries compartment	€	2.526	2.526	2.526
PS	Standard head pump	€	3.882	3.882	3.882
PSI	Standard head pump controlled by an inverter installed in the electrical panel	€	4.422	4.422	4.422
PSAP	High-head pump	€	4.327	4.327	4.327
PSIAP	High-head pump controlled by an inverter installed in the electrical panel	€	4.866	4.866	4.866
PD	Twin pump, standard head	€	7.048	7.048	7.048
PDAP	Dual high-head pump	€	7.873	7.873	7.873
PS-SI	Standard head pump + tank	€	9.005	9.005	9.005
PSI-SI	Standard head pump controlled by an inverter installed in the electrical panel + tank and expansion vessel	€	9.505	9.505	9.505
PSAP-SI	High head pump + tank	€	9.417	9.417	9.417
PSIAP-SI	High-head pump with inverter control installed in the electrical panel + tank and expansion vessel	€	9.918	9.918	9.918
PD-SI	Dual standard-head pump + tank	€	12.583	12.583	12.583
PDAP-SI	Double high-head pump + tank	€	13.408	13.408	13.408
KS	Lifting bracket kit	€	710	710	710
MN	External pressure gauges	€	229	229	636
SS	Soft starter	€	1.944	1.944	1.944
SL	Silenced version	€	787	787	787
SSL	Ultra-silent version (EC-CC accessory is already included for these versions)	€	3.962	3.962	3.962
TR2	Cu/Al coil with anti-corrosion treatment	€	3.374	3.374	3.374
TR2C4	Cu/Al coil and sheet metal with anti-corrosion treatment	€		Contact our office	
C4	Protective treatment	€		Contact our office	
ACCESSORIES SUPPLIED SEPARATELY					
AG	Rubber anti-vibration mounts	€	727	727	727
AM	Spring anti-vibration mounts	€	1.873	1.873	1.873
FY	Y-strainer	€	175	175	175
Hi-TV415	Touchscreen remote control	€	640	640	640
i-CR2	Wall-mounted remote control	€	319	319	319
RV	Starter kit consisting of 2 jaws and 2 plain stubs	€		Contact our office	
SAS	Remote sensor	€	47	47	47
TQE	Rain cover for electrical control panel	€	300	300	300

WEEE for Italian market only.

HWA1-A 0140÷0285
HWA1-A/H 0140÷0285 *

Water chiller and heat pump reversible air/water

40 kW÷85 kW

(*) Eurovent certified product range

The water chillers and air/water heat pumps have been designed for commercial and industrial applications; they are very compact yet equipped with large-surface air-side heat exchangers, ensuring high efficiency with EER and COP among the highest in their category.

The use of high-efficiency, particularly robust scroll compressors together with the oil recovery and distribution system used on tandem circuits ensures high reliability and consistent performance.

MADE IN ITALY | R410A REFRIGERANT 2088 GWP | PLATE HEAT EXCHANGER | SCROLL COMPRESSOR

Carpentry: all units in the series are manufactured from hot-dip galvanized sheet metal and painted with polyurethane powder coatings baked at 180°C to ensure maximum resistance to atmospheric agents.

Refrigerant circuit: made using components from leading international manufacturers and in compliance with UNI EN 13134. The refrigerant used is R410A. The refrigerant circuit in its basic version includes: electronic expansion valve, liquid separator, liquid receiver, service valves for maintenance and control, safety device compliant with the PED directive (high-pressure switch), safety valve for the refrigerant, pressure transducers to accurately measure evaporation and condensation pressures, high-capacity drier filter to prevent throttling valve blockages and eliminate any moisture present in the circuit, and liquid sight glass for checking the refrigerant charge. In heat pump versions, a 4-way cycle-reversing valve and an outdoor air temperature sensor are also provided.

Compressors: scroll type, specifically designed to operate with R410A, mounted on rubber anti-vibration mounts. The crankcase heater, where present, is activated when the compressor is stopped and is disabled when the compressor restarts.

Air-side heat exchangers: for chillers it is made entirely of aluminum using the new microchannel technology, which makes it possible to reduce
significantly both the air-side pressure drops and the refrigerant charge, while at the same time ensuring a higher heat exchange capacity for the same frontal surface compared with traditional heat exchangers. In the heat pump versions, the heat exchanger is a finned coil with fin spacing optimized for operation at low temperatures.

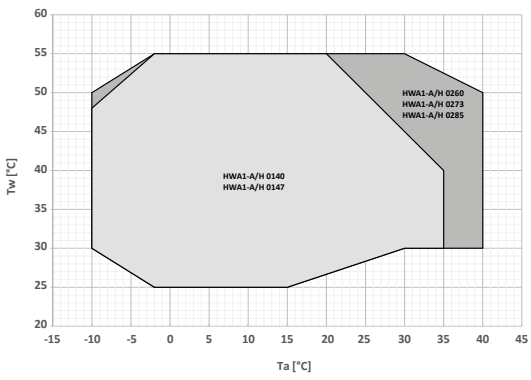
Fan: axial type with airfoil-profile blades. Supplied complete with protective grille and inlet/outlet nozzles with double flared profile, specially shaped to increase efficiency and reduce noise.

User-side heat exchangers: brazed-plate type, made of AISI 316 stainless steel and factory-insulated with closed-cell material; they can be equipped with an electric antifreeze heater. Each evaporator is protected by a temperature probe used as an antifreeze protection sensor that activates the circulator (if present), even when the unit is switched off, if the conditions set on the controller occur.

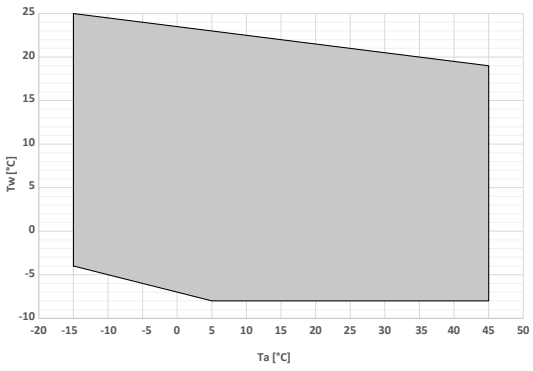
Control system: all units are equipped with a microprocessor-based control board with superheat control logic managed according to the signals sent by the pressure transducers and temperature probes. The CPU also controls the following functions: water temperature regulation, antifreeze protection, compressor timing and start-up, management of fan and circulation pumps (if present), alarm reset, alarm indication and operating status LEDs. On request, the microprocessor can be connected to remote BMS control systems. With the addition of the expansion module, it is possible to control an external 3-way valve, either modulating or 2-position, via the controller.

Operating Areas

Hot



Cold



Tw: water temperature - Ta: outdoor air temperature

Accessories

Factory-installed

- **KA** - Anti-freeze heater on: heat exchanger and base. Electric heater installed on the front side of the plate heat exchanger, which is activated when the water temperature inside the exchanger falls below +4°C. A heating cable is installed on the base to melt any ice that may form. (HWA1-A/H).
- **KA1** - Anti-freeze heater on heat exchanger. Electric heater installed on the front face of the plate heat exchanger, which is activated when the water temperature inside the exchanger falls below +4°C. (HWA1-A).
- **DSFR** - Three-phase relay for overvoltage and undervoltage monitoring + phase loss/sequence. Indicates the presence of all three phases in the correct sequence and whether all three line-to-line voltages are within the set limits. It is possible to set the overvoltage and undervoltage thresholds separately.
- **SL** ** - Silenced version. The silenced unit (equipped with the SL accessory) features an innovative thermo-acoustic jacket on the compressors. This insulation allows a noise reduction of up to 10% at certain compressor rotation frequencies. The special multi-layer structure provides thermal insulation that, at low temperatures, reduces losses by up to 2% compared to standard insulation.
- **SSL** ** - Super silenced version. The super silenced unit (equipped with the SSL accessory) includes, in addition to the thermo-acoustic jacket on the compressors, a special fan with diffuser. This component increases the fan efficiency, allowing its speed to be reduced, thereby lowering sound pressure and energy consumption. In this way it is possible to save significant amounts of electrical energy for each fan.
- **C** ** – Ductable version. With the ductable version, the diffuser is used to take advantage of the higher available pressure of the fan and, if required, to duct the air discharge.
- **C(S)** ** - Ductable version with jackets. In addition to the ductable version, thermo-acoustic jackets are installed on the compressors.
- **EC** - Modulating EC fan (standard for size 0285 cooling only, size 0273–0285 heat pump). Includes the CC function, condensation control down to -15°C. Mandatory accessory for cooling-only versions, comfort applications, EU market.
- **PS** - Fixed-speed AC circulation pump.
- **CM** - BMS connectivity setup – ModBus protocol included – accessory that enables the connection of the unit to external controllers via serial cable with RS-485 electrical standard and ModBus RTU protocol.
- **GI** - Hardware expansion module. Additional expansion board installed at the factory that increases the resources (I/O) available in the system.
- **TR1** - Microchannel coil with Aero surface treatment. The treatment consists of spraying a special water-based coating made of new resins with very high chemical resistance. The product is flexible to withstand thermal contractions and expansions, UV-resistant, dirt-repellent, mechanically resistant, with very limited heat transfer losses and practically no effect on air-side pressure drops. The treatment withstands 6000 h according to ASTM B117. (HWA1-A).
- **TR2** - Coil anti-corrosion treatment – thanks to this treatment, the coil becomes flexible to withstand thermal contractions and expansions, mechanically resistant, UV-protected and dirt-repellent. Heat transfer losses are very limited. The treatment ensures coil protection under virtually all environmental conditions: from coastal to rural areas, from industrial to urban zones. The treatment withstands 6,000 hours according to ASTM B117. (HWA1-A/H).
- **IM** - Circuit breakers on compressors and fans – overcurrent switches applied to compressors and fans, protecting the components from faults caused by possible current spikes.

Provided separately

- **SAS** - Remote system probe. The remote system probe controls the heat pump temperature only during the compressor start-up phase; shutdown is managed by the probe installed on the heat pump flow line.
- **AG** - Rubber anti-vibration kit – designed to prevent vibration transmission to the structure; they are to be installed beneath the unit, in the designated mounting holes.
- **FY** - Y-strainer – contains a stainless steel mesh screen (500 µm filtration) that collects solid materials present in the water. Filtration prevents blockage and/or damage to the devices installed downstream of the strainer. Alternatively, it is possible to install a dirt separator that ensures a filtration level not greater than 1 mm (in this case, it is no longer necessary to install the Y-strainer).
- **i-CR2**** - Wall-mounted remote control – Modbus remote controller with negative LCD and capacitive keys. The device is intended to be used as a remote unit keypad with local temperature sensing and replicates the functions of the on-board unit controller.
- **Hi-TV415**** - Color touch screen wired remote controller for the centralized management of a cascade of chillers/heat pumps, for up to 7 units.

i-CR2
Wall-mounted remote control
ACCESSORY

Hi-TV415
Touch screen remote controller for cascade management (max 7 units)
ACCESSORY

HWA1-A			0140	0147	0260	0273	0285
Cooling	Cooling capacity (1)	kW	39,7	46,8	60,8	73,3	86,5
	Power input (1)	kW	12,5	15,1	19,3	24,8	29,3
	EER (1)	W/W	3,16	3,11	3,16	2,95	2,96
	Cooling capacity (2)	kW	54,4	63,5	81,9	99,4	116,3
	Power input (2)	kW	14,3	17,0	21,9	28,0	33,3
	EER. (2)	W/W	3,80	3,74	3,75	3,55	3,50
	SEER (5)	W/W	3,80	3,80	4,05	3,98	4,14
	Cooling capacity (8)	kW	22,7	27,0	36,2	42,9	51,1
	Total absorbed power (8)	kW	11,4	13,5	16,9	22,1	25,7
	EER (8)	W/W	1,99	2,01	2,14	1,94	1,99
	Water flow rate (1)	l/s	1,90	2,24	2,91	3,51	4,14
	Pressure drops in the heat exchanger on the user side (1)	kPa	54,08	51,68	56,79	46,43	50,41
Compressor	Type		Scroll				
	Number		1	1	2	2	2
	Standard capacity steps		1	1	2	3	3
	Refrigerant circuits		1	1	1	1	1
	Oil (type, quantity)	dm³	BVC32 / 2,7		BVC32 / 5,4		
Refrigerant	Type		R410A				
	Refrigerant quantity (4)	kg	7,8	7,8	12,8	13,4	14,6
	Tons of CO_2 equivalent (4)	Ton	16,3	16,3	26,7	28	30,5
	Refrigerant quantity BT model (4)	kg	8,5	8,5	12,8	13,4	14,6
	Tons of CO2 equivalent BT version (4)	Ton	17,8	17,8	26,7	28	30,5
	Design pressure (high/low)	MPa	4,2/2,7				
Outdoor zone fans	Type		AXIAL				
	Number		1				
	Maximum power	kW	1,90	1,90	1,90	1,85	3,2
	Absorbed current (max)	A	3,9	3,9	3,9	3,8	4,65
	Nominal air flow rate	m3/s	4,04 / 5,32	3,88 / 5,23	4,15 / 5,44	4,86 / 6,01	7,4
	ΔP available for DUCTED VERSION	Pa	50	50	39	40	39
Internal heat exchanger	Internal heat exchanger type		PLATE-TYPE				
	No. of indoor heat exchangers		1	1	1	1	1
	Water content	l	2,03	2,46	3,21	4,64	5,25
Hydronic circuit	Maximum pressure of the hydronic kit	bar	6				
	Hydraulic connections	inch	2"				
	Minimum system water volume (5)	L	330	380	260	380	490
Sound data	Sound power (6)	dB(A)	81	81	82	83	84
	Sound pressure (7)	dB(A)	49,3	49,3	50,3	51,3	52,3
Electrical data (version without accessories)	Power supply		400V/3P+N+T/50Hz				
	Maximum absorbed power	kW	17,4	19,8	26,5	32,5	N.A.
	Maximum absorbed current	A	29,6	34,1	46,5	55,3	N.A.
	Maximum inrush current	A	156	183	155,3	204,3	N.A.
Electrical data with EC fan (version without accessories)	Power supply		400V/3P+N+T/50Hz				
	Maximum absorbed power	kW	17,45	19,85	26,55	33,4	39,5
	Maximum absorbed current	A	29	33,5	45,9	56,5	66,2
	Maximum inrush current	A	148,3	175,3	147,6	198,3	237,3

(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 23/18°C.
(3) Reference water temperature for internal heat exchanger = 12/7°C.
(4) Data is indicative and subject to change. For the correct value, always refer to the technical label on the unit.
(5) The calculated value of minimum system water volume does not take into account the water volume contained in the internal heat exchanger (evaporator). For applications with low outdoor air temperature or low required average loads, the minimum system water volume is obtained by doubling the indicated value.
(6) Condition (3); value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-2, in compliance with the requirements of Eurovent certification.
(7) Value calculated from the sound power level using ISO 3744:2010, referenced to a distance of 10 m from the unit.
(8) Cooling BT version: outdoor air temperature 35°C, internal heat exchanger water temperature = -3/-8°C. Fluid treated with 35% ethylene glycol.
The performance data shown are indicative and may be subject to change. The capacities declared at points (1), (2), (8) are to be understood as referring to the instantaneous output in accordance with EN 14511. The data declared at point (3) are determined in accordance with UNI EN 14825.

HWA1-A/H			0140	0147	0260	0273	0285
Cooling	Cooling capacity (1)	kW	38,6	45,6	58,6	71,2	80,2
	Power input (1)	kW	13,0	15,7	19,9	24,6	29,2
	EER (1)	W/W	2,97	2,91	2,94	2,90	2,75
	Cooling capacity (2)	kW	51,8	60,6	77,7	94,1	106,4
	Power input (2)	kW	14,7	17,6	22,6	28,0	33,3
	EER. (2)	W/W	3,53	3,43	3,43	3,37	3,20
	SEER (5)	W/W	3,82	3,8	3,94	3,98	4,07
	Water flow rate (1)	l/s	1,86	2,20	2,83	3,41	3,84
	Pressure drops in the heat exchanger on the user side (1)	kPa	55,8	56,6	61,5	63,7	66,6
Heating	Heating capacity (3)	kW	43,5	48,2	64,1	80,9	88,7
	Input power (3)	kW	10,7	12,3	15,6	20,0	22,7
	COP (3)	W/W	4,05	3,92	4,10	4,05	3,90
	Heating capacity (4)	kW	42,1	47,8	63,0	74,9	84,6
	Power input (4)	kW	12,8	14,8	18,8	23,3	28,5
	COP (4)	W/W	3,28	3,23	3,35	3,22	2,97
	SCOP (6)	W/W	3,49	3,34	3,85	3,84	3,70
	Water flow rate (4)	l/s	2,02	2,30	3,03	3,60	4,07
	Pressure drops in the heat exchanger on the user side (4)	kPa	84,4	81,6	84,1	81,5	84,1
	Energy efficiency water 35°C	class	A+	A +	A++	A++	A+
Compressor	Type		Scroll				
	Number		1	1	2	2	2
	Standard capacity steps		1	1	2	3	3
	Refrigerant circuits		1	1	1	1	1
	Oil (type, quantity)	dm³	BVC32 / 2,7		BVC32 / 5,4		
Refrigerant	Type		R410A				
	Refrigerant quantity (7)		9,98	9,98	14	15,25	15,6
	Tons of CO2 equivalent (7)		20,8	20,8	29,2	31,8	32,6
	Design pressure (high/low)		4,2/2,7				
Outdoor zone fans	Type		AXIAL				
	Number		1	1	1	1	1
	Rated power (1)	kW	1,36	1,66	1,76	1,89	2,12
	Maximum power	kW	1,95	1,95	1,95	3,20	3,20
	Maximum absorbed current	A	3,30	3,30	3,30	5,00	5,00
	Nominal air flow rate	m3/s	4,3	5,3	6,3	6,9	7,4
	ΔP available for DUCTED VERSION	Pa	41	44	35	33	35
Internal heat exchanger	Internal heat exchanger type		PLATE-TYPE				
	No. of indoor heat exchangers		1	1	1	1	1
	Water content	l	2,03	2,46	3,21	4,64	5,25
Hydraulic circuit	Maximum pressure of hydronic kit (safety valve setting)	bar	6				
	Hydraulic connections	inch	2"				
	Minimum system water volume (8)	L	330	380	260	380	490
Sound data	Sound power (9)	dB(A)	84	85	88	88	88
	Sound pressure (10)	dB(A)	52,3	53,3	56,3	56,3	56,3
Electrical data (version without accessories)	Power supply		400V/3P+N+T/50Hz				
	Maximum absorbed power	kW	17,4	19,8	26,5	N.A.	N.A.
	Maximum absorbed current	A	29,6	34,1	46,5	N.A.	N.A.
	Maximum inrush current	A	156	183	155,3	N.A.	N.A.
Electrical data with EC fan (version without accessories)	Power supply		400V/3P+N+T/50Hz				
	Maximum absorbed power	kW	17,45	19,85	26,55	33,4	39,5
	Maximum absorbed current	A	29	33,5	45,9	56,5	66,2
	Maximum inrush current	A	148,3	175,3	147,6	198,3	237,3

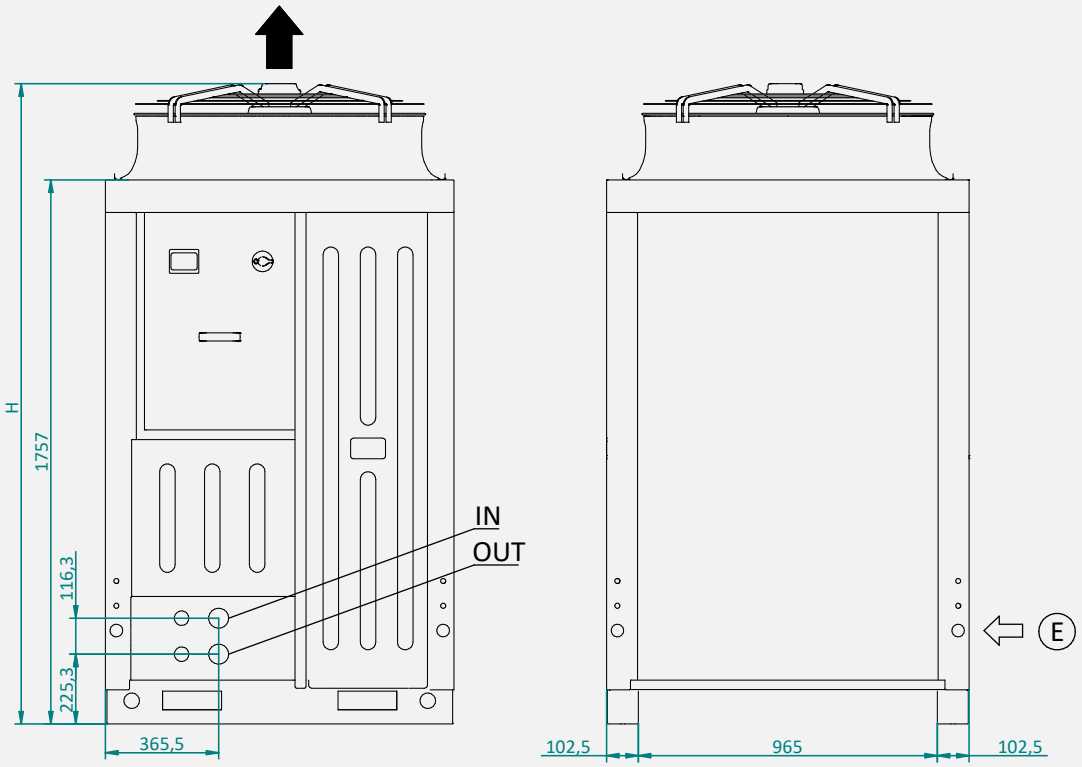
(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 23/18°C.
(3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 30/35°C.
(4) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 40/45°C.
(5) Cooling: water inlet/outlet temperature 12/7°C
(6) Heating: average climatic conditions; Tbiv = -7°C; water temp. in/out 30/35°C
(7) Indicative data, subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) The calculated value of minimum system water volume does not take into account the water volume contained in the internal heat exchanger (evaporator). For applications with low outdoor air temperatures or low required average loads, the minimum system water volume is obtained by doubling the indicated value.
(9) Condition (3); value determined on the basis of measurements carried out in accordance with standard UNI EN ISO 9614-2, in compliance with the requirements of Eurovent certification.
(10) Value calculated from the sound power level using ISO 3744:2010, referred to a distance of 10 m from the unit.

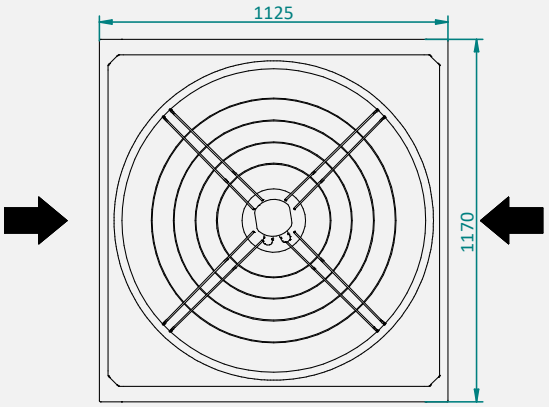
N.B. The stated performance data are indicative and may be subject to change. The capacities declared in points (1), (2), (3) and (4) are to be understood as referring to the instantaneous power according to EN 14511. The data declared in points (5) and (6) are determined in accordance with UNI EN 14825.

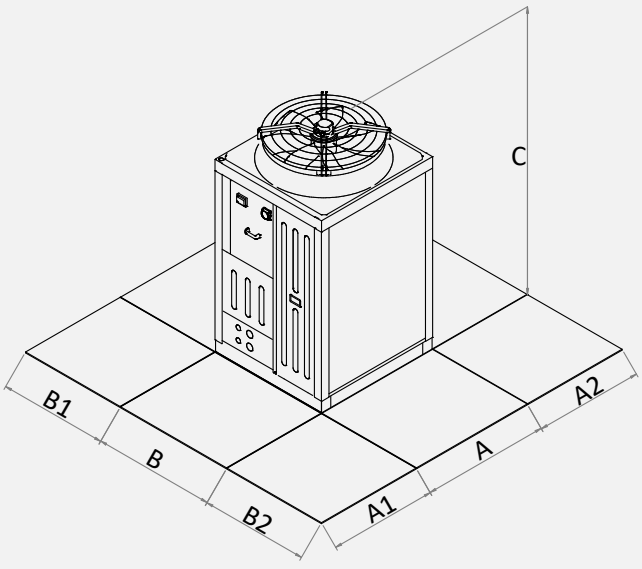
Range of Eurovent-certified products

Dimensional Drawings

HWA1-A & HWA1-A/H 0140 / 0147 / 0260 / 0273 / 0285







		0140	0147	0260	0273	0285
L	mm	1125	1125	1125	1125	1125
P	mm	1170	1170	1170	1170	1170
H	mm	2014	2014	2110	2110	2110
H (SSL)	mm	2200	2200	2220	2220	2220

Clearances		A1	A2	B1	B2
0140	mm	800	800	200	600
0147	mm	800	800	200	600
0260	mm	800	800	200	600
0273	mm	800	800	200	600
0285	mm	800	800	200	600

Dimensions in mm

Price list

HWA1-A			0140	0147	0260	0273	0285
HWA1-A	Cooling only	€	16.040	19.102	22.798	24.491	27.573
HWA1-A/BT	Cooling only for low-temperature chilled water production (including EC fan)	€	18.964	21.966	25.663	27.358	30.439
WEEE		€	6	6	6	6	6
FACTORY-MOUNTED ACCESSORY MANDATORY: Standard EC fan for ERP regulation to be added to the unit price							
EC	EC fan (included in versions C, C(S), BT, SSL – standard on 0285 CC with modulating control as standard). DC control included	€	1.772	1.772	1.772	2.080	Standard
FACTORY-MOUNTED ACCESSORIES							
C	Ductable version	€	2.427	2.427	2.427	3.075	3.075
C(S)	Ductable version + Soundproofing	€	2.919	2.919	3.120	3.768	3.768
CC	On-off pressure-based condensation control down to -15 °C	€	Available only with EC				Standard
CM	Serial communication module for Modbus	€	833	833	833	833	833
CT	On-off pressure-based condensation control down to 0 °C	€	Standard				--
DSF	Phase sequence and failure monitoring device	€	Standard				
DSFR	Sequence and phase-failure control device with undervoltage and overvoltage relay	€	385	385	385	385	385
FE	EMC electrical filter for auxiliary devices	€	Standard				
FL	Flow switch	€	Standard				
GI	System management module	€	482	482	482	482	482
HP LP	High and low pressure transducers with values shown on display	€	Standard				
IM	Magnetic circuit breakers on compressors and fans	€	758	758	758	758	758
KA1	Adhesive resistance exchanger	€	339	339	339	339	339
MPI	Integral protection module for each compressor	€	Standard				
PS	Single circulation pump	€	1.464	1.464	1.464	1.572	1.572
SL	Unit silencing	€	493	493	693	693	693
SSL	Super soundproofing with EC fan and DC condensation control down to -15 °C	€	2.388	2.388	2.695	3.620	2.465
TR1	Microchannel coil with Aero surface treatment	€	2.003	2.003	3.158	4.005	4.005
VEV	Electronic thermostat + bypass solenoid valve for low water and/or air temperatures	€	Standard				

HWA1-A/H			0140	0147	0260	0273	0285
HWA1-A/H	Chiller and reversible heat pump	€	18.712	22.028	26.495	28.960	32.349
WEEE		€	6	6	6	6	6
FACTORY-MOUNTED ACCESSORIES							
EC	EC fan (included in versions C, BT, SSL – standard on 0285 CC with factory-fitted modulation). Including CC control	€	1.772	1.772	1.772	Standard	
C	Ductable version	€	2.427	2.427	2.427	3.075	3.075
C(S)	Ductable version + Soundproofing	€	2.919	2.919	3.120	3.768	3.768
CC	On-off pressure-based condensation control down to -15 °C	€	Available only with EC			Standard	
CM	Serial communication module for Modbus	€	851	851	851	851	851
CT	On-off pressure-based condensation control down to 0 °C	€	2.356	3.639	4.614	--	--
DSF	Phase sequence and failure monitoring device	€	Standard				
DSFR	Sequence and phase-failure control device with undervoltage and overvoltage relay	€	385	385	385	385	385
FE	EMC electrical filter for auxiliary devices	€	Standard				
FL	Flow switch	€	Standard				
GI	System management module	€	482	482	482	482	482
HP LP	High and low pressure transducers with values shown on display	€	Standard				
IM	Magnetic circuit breakers on compressors and fans	€	758	758	758	758	758
KA	Heat exchanger resistance + base	€	339	339	339	339	339
MPI	Integral protection module for each compressor	€	Standard				
PS	Single circulation pump	€	1.464	1.464	1.464	1.572	1.572
SL	Unit silencing	€	493	493	693	693	693
SSL	Super soundproofing with EC fan and DC condensation control down to -15 °C	€	2.388	2.388	2.695	3.620	2.465
TR2	Cu/Al coil with Silver Line anti-corrosion treatment - Cu	€	2.003	2.003	3.158	4.005	4.005
VEV	Electronic thermostat + bypass solenoid valve for low water and/or air temperatures	€	Standard				

ACCESSORIES SUPPLIED SEPARATELY HWA1-A & HWA1-A/H		Code	€
AG	Anti-vibration mounts	015908010050	233
Hi-TV415	Hi-touch control (WEEE €0.02)	010312300001	640
i-CR2	Wall-mounted remote control (WEEE €0.02)		319
SAS	Remote sensor	0110321000001	47
FY	Y-strainer	015908010056	143

For accessories of the DAS monitoring system (ISK, LNC, OVPN), see the chapter "Connection devices for Maxa DAS supervision system."
WEEE for Italian market only.

HWA1-A 02106÷04349

Air-cooled water chiller with axial fans

106 kW÷349 kW

The water chillers have been designed for commercial and industrial applications; they are very compact yet equipped with large-surface air-side heat exchangers. They therefore ensure high efficiency, with EER values among the highest in their category.
The use of high-efficiency, particularly robust scroll compressors, together with the patented oil recovery and distribution system used on tandem circuits, guarantees high reliability and consistent performance.
Available in 12 sizes.

MADE IN ITALY

R410A
REFRIGERANT
2088 GWP

PLATE HEAT EXCHANGER

SCROLL COMPRESSOR

Casing: All units in the series feature a structure suitable for outdoor installation, made of hot-dip galvanized steel sheet coated with polyester powder paint in RAL 7035 / RAL 3020 (only for some components) to ensure optimal resistance to atmospheric agents. All screws and inserts are made of galvanized steel.

Compressors: of the scroll type, expressly designed to operate with R410A, mounted on rubber anti-vibration supports. The crankcase heater, which is always present, is activated when the compressor is stopped and is disabled when it restarts.

Air-side heat exchangers: entirely made of aluminum using microchannel technology, which significantly reduces both air-side pressure drops and refrigerant charge, while at the same time ensuring higher heat transfer capacity for the same frontal surface area compared to traditional heat exchangers.

User-side heat exchangers: of the brazed plate type and made of AISI 304 stainless steel for single-circuit units and AISI 316 for dual-circuit units, factory-insulated with closed-cell material, and can be equipped with an electric antifreeze heater (optional accessory KA). A differential pressure switch, installed on the water side, ensures the presence of water flow, preventing ice formation inside.

Fans: axial type with airfoil blades. They are statically and dynamically balanced and supplied complete with protective guard and inlet/outlet nozzles with double flared profile, specially shaped to increase efficiency and reduce noise. The motor has an IP54 protection rating according to CEI EN 60529. The electric motor used is modulation-controlled, with a directly coupled EC brushless motor and equipped with integrated thermal protection.

Refrigeration circuit : manufactured using components from leading international companies and in accordance with UNI EN 13134. The refrigerant gas is R410A. In its basic version, the refrigeration circuit includes: electronic expansion valve, service valves for maintenance and inspection, safety device compliant with current regulations (high- and low-pressure switch), refrigerant safety valve, pressure transducers for accurate measurement of evaporation and condensation pressures, cartridge-type dehydrator filter, liquid sight glass for checking the refrigerant charge, solenoid valve, and shut-off valves.

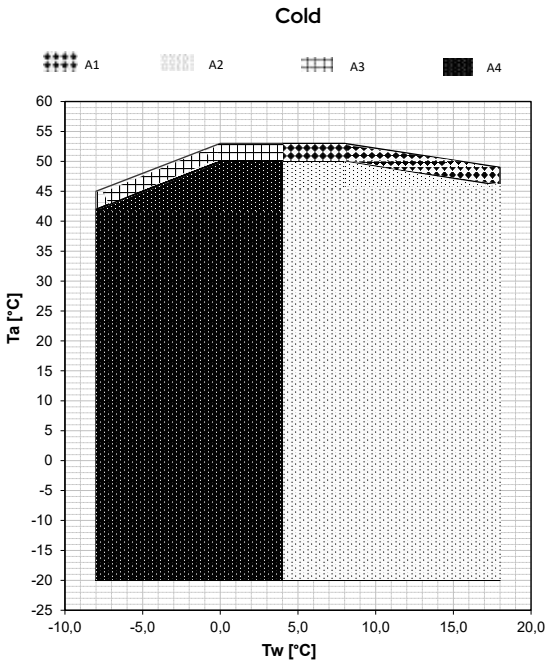
Electrical panel: fully manufactured and wired in compliance with standard EN 60204, comprising a power section and a control section. The degree of protection of the electrical panel is IP54. The electrical panel is equipped with a terminal block with volt-free contacts for remote ON-OFF.

Control system : all units are equipped with a microprocessor-based control board featuring a superheat control logic managed according to the signals sent by the pressure transducers and temperature probes. The CPU also controls the following functions: water temperature regulation, antifreeze protection, compressor start-up and timing, fan and circulation pump management (where present), alarm reset, alarm indication, and operation status LEDs.

Control and protection devices: all units are equipped with the following control and protection devices: phase monitor complete with minimum and maximum voltage relay, which stops the unit if the phase sequence is incorrect or the voltage of at least one phase differs by more than 15% from the others; flow water temperature sensor (with antifreeze function); return water temperature sensor (both installed inside the heat exchanger); low-pressure transducer; high-pressure transducer; discharge temperature sensor on the compressors; safety valve on both the low- and high-pressure sides; suction temperature sensor on the compressors; outdoor air temperature sensor; fan thermal protection; thermal protection on each compressor; water-side differential pressure switch protecting the evaporator; manual reset high-pressure switch installed on the compressor discharge line.

Hydraulic circuit : the chillers can be supplied with an integrated hydronic module which, in addition to differential pressure switches, includes a single or twin pump (one serving as backup for the other) with AC motor, suitable for chilled water operation and directly managed by the on-board unit control. It is also possible to install an internal buffer tank with external insulation made of closed-cell expanded material, with capacity sized to prevent excessive compressor start-stop cycles.

Operating Areas



Tw: water temperature - Ta: outdoor air temperature
A1 = HWA1-A partial load
A2 = HWA1-A
A3 = HWA1-A BT partial load
A4 = HWA1-A BT

Accessories

Factory-installed

- **KA1 *** – Antifreeze heater for heat exchanger and pump (if present) – electric heating element installed on the front face of the plate heat exchanger, which is activated when the water temperature inside the exchanger falls below +4°C, and electric heating element that protects the pump motor at low temperatures.
- **KA2** * - Antifreeze protection for heat exchanger, pump and tank (if present) – includes KA1 – in addition to accessory KA1, an immersion heater is added in the tank. The kit consists of: an armored electric heater in AISI 321, a programmable digital temperature controller and a contactor.
- **SL **** – Silenced version. The silenced unit (equipped with the SL accessory) features an innovative thermo-acoustic jacket on the compressors. This insulation allows a noise reduction of up to 10% at certain compressor rotational frequencies. The special multilayer structure provides thermal insulation that, at very low temperatures, reduces losses by up to 2% compared to standard insulation.
- **SSL **** – Super-silenced version. The super-silenced unit (equipped with the SSL accessory) includes, in addition to the thermo-acoustic enclosure on the compressors, a special diffuser mounted on the fan. This diffuser increases the fan's efficiency, allowing its speed to be reduced, thereby lowering sound pressure level and energy consumption. In this way, substantial electrical energy savings can be achieved for each fan.
- **C **** – Ductable version. With the ductable version, the diffuser is used to take advantage of the higher available pressure of the fan and, if required, to duct the air discharge.
- **C(S) **** – Ductable version with jackets. In addition to the ductable version, thermo-acoustic jackets are installed on the compressors.
- **PS ***** – Reversible heat pump, heating-only version with standard head.
- **PSAP ***** – Reversible heat pump, high head pump-only version.
- **PD ***** – Reversible heat pump, dual-pump version with standard head.
- **PDAP ***** – Reversible heat pump, dual high-head pump version.
- **PS-SI ***** – Reversible heat pump, standard head pump version + tank
- **PSAP-SI ***** – Reversible heat pump, high-head pump version with storage tank.
- **PD-SI ***** – Reversible heat pump, dual-pump version with standard head + storage tank.
- **PDAP-SI ***** – Reversible heat pump with dual high-head pump configuration and storage tank.
- **TE1** - Special mechanical seal for glycol content above 40% - for water-glycol mixtures with a glycol mass fraction greater than 40% and up to 50%, a different mechanical seal is used to ensure the correct operation of the electric pump.
- **TR1** – Microchannel coil with Aero surface treatment. The treatment consists of spraying a special water-based coating, formulated with new resins offering extremely high chemical resistance. The product is flexible to withstand thermal contractions and expansions, UV-resistant, dirt-repellent, mechanically resistant, with very limited reduction in heat transfer and virtually no impact on air-side pressure drops. The treatment withstands 6,000 h according to ASTM B117.
- **DS** - The desuperheater includes the addition of a brazed plate heat exchanger made of AISI 316 stainless steel, factory-insulated using closed-cell material.
- **BT** - The BT accessory allows the operating range of the water

** Accessories not usable simultaneously
*** Accessories not usable simultaneously
*** Accessories not usable simultaneously

Accessories

temperature to be extended down to -8°C. In this case, it is necessary to use a water-glycol mixture.

- **EC** - Modulating EC fan. Includes CC function, condensing pressure control down to -20°C. Mandatory accessory for cooling-only versions, comfort applications, EU market.
- **CC** – Condensation control down to -20°C. Includes the EC accessory.
- **CT** - Condensation control down to -10°C.
- **GR1** - Anti-intrusion kit for the refrigerant circuit compartment – fitted on the refrigerant circuit compartment to prevent foreign objects from entering the structure.
- **GR2** - Battery compartment anti-intrusion kit – wire mesh to prevent the entry of foreign objects into the coil and to protect the coil from accidental contact by people or objects.
- **GR3** - Anti-intrusion kit for the refrigeration circuit compartment and anti-intrusion kit for the battery compartment.
- **IM** - Circuit breakers on compressors and fans – overcurrent switches applied to compressors and fans, protecting the components from faults caused by possible current spikes.
- **SS** - Soft starter – electronic static starter for inrush current management, installed inside the electrical panel; it allows a reduction of inrush current and of mechanical wear on the motor windings.
- **LQ** – Internal switchboard lights – light for illuminating the interior of the electrical panel, facilitating maintenance for the operator.
- **SH** - Schuko socket (with MCB) - convenience socket located in the electrical panel (maximum 16 A), protected against overloads and short circuits by a miniature circuit breaker.
- **RFM** - Discharge and suction service valve on compressors – shut-off valve installed on the compressor suction and discharge lines, which simplifies maintenance by preventing the need to recover the refrigerant from the entire unit.
- **2SFV** - Changeover valve with double safety valve – the changeover valve allows alternating use of two safety valves, facilitating periodic inspection or replacement while ensuring system operation and maintaining the safety system.
- **KS** - Lifting bracket kit – facilitates lifting and positioning of the unit.
- **CM** - BMS connectivity setup – ModBus protocol included – accessory that enables the connection of the unit to external controllers via serial cable with RS-485 electrical standard and ModBus RTU protocol.

Provided separately

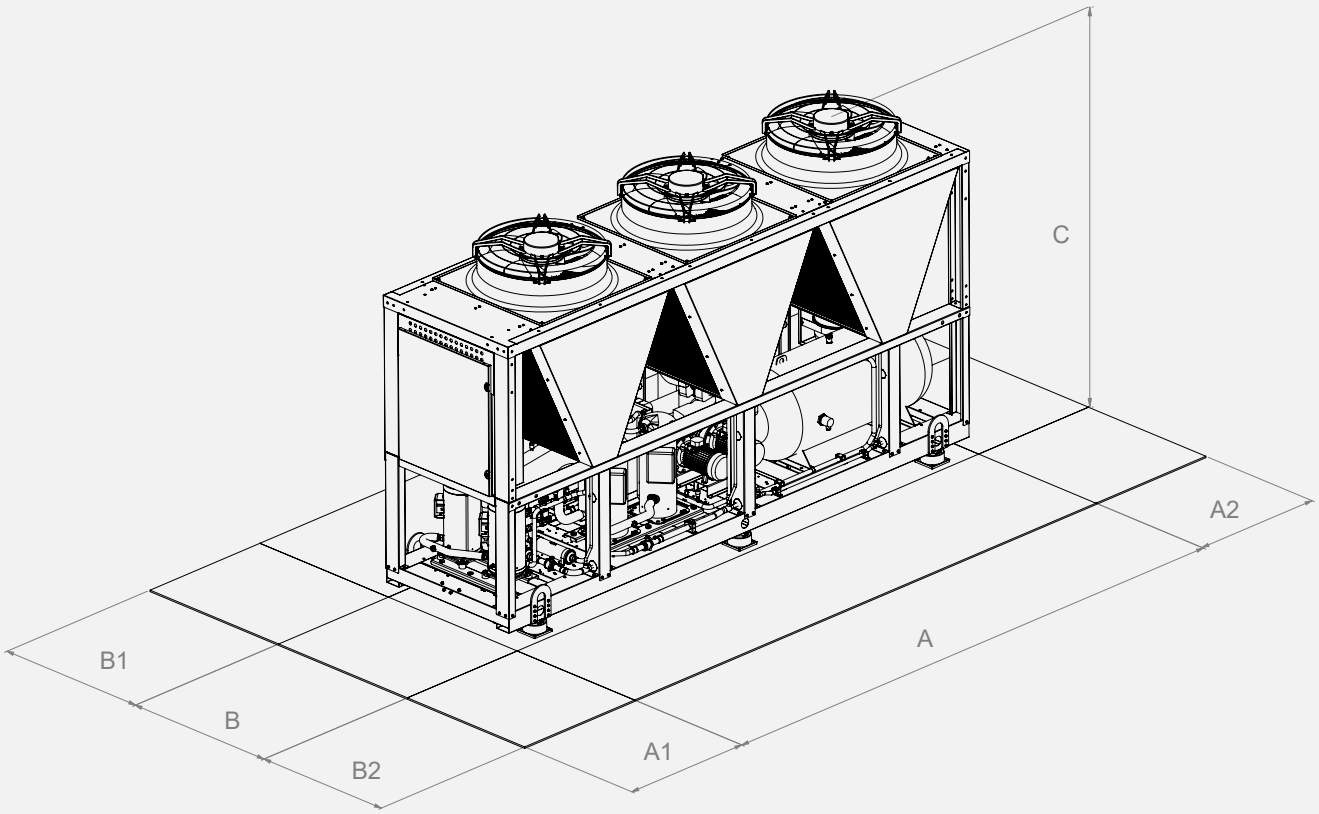
- **AG** - Rubber anti-vibration kit – designed to prevent vibration transmission to the structure; they are to be installed beneath the unit, in the designated mounting holes.
- **AM -** Spring anti-vibration kit – designed to prevent transmission of vibrations to the structure; they must be installed underneath the unit, in the designated holes.
- **FY** - Y-strainer – contains a stainless steel mesh screen (500 µm filtration) that collects solid materials present in the water. Filtration prevents blockage and/or damage to the devices installed downstream of the strainer. Alternatively, it is possible to install a dirt separator that ensures a filtration level not greater than 1 mm (in this case, it is no longer necessary to install the Y-strainer).
- **SAS** - Remote system probe.
- **RV** – Grooved connection joint. To facilitate installation, a carbon steel pipe nipple can be supplied, featuring on one end a grooved connection compatible with the one on the unit and complete with the appropriate coupling for the connection, and on the other end a G 1" 1/2 M threaded connection. The kit consists of 2 nipples and 2 grooved connections to connect the nipples to the unit.
- **ISK**** - USB/RS485 serial converter – interface device capable of reading and writing control registers via the RS485 standard and converting them to a USB port that can be connected to any supervision system.
- **LNC**** - LAN-Wi-Fi router – device that allows the unit to be connected to a local network via Ethernet cable or Wi-Fi coverage for remote monitoring.
- **OVPN**** - 3G LAN-Wi-Fi router with VPN tunnel – device that allows the unit to be connected remotely with an industrial router using the secure OPENVPN service.
- **i-CR2**** - Wall-mounted remote control – Modbus remote controller with negative LCD and capacitive keys. The device is intended to be used as a remote unit keypad with local temperature sensing and replicates the functions of the on-board unit controller.
- **Hi-TV415**** - Color touch screen wired remote controller for the centralized management of a cascade of chillers/heat pumps, for up to 7 units.

i-CR2
Wall-mounted remote control
ACCESSORY

Hi-TV415
Touch screen remote controller for cascade management (max 7 units)
ACCESSORY

Dimensional Drawings

HWA1-A 02106÷04349



Model	Dimensions			Clearances				User heat exchanger	
	A [mm]	B [mm]	C [mm]	A1[mm]	A2 [mm]	B1 [mm]	B2 [mm]	Type	Ø *
02106	2860	1100	2350	1000	800	1000	1000	Victaulic	DN65 (2" 1/2)
02120	2860	1100	2350	1000	800	1000	1000	Victaulic	DN65 (2" 1/2)
02128	2860	1100	2350	1000	800	1000	1000	Victaulic	DN65 (2" 1/2)
02140	4060	1100	2350	1000	800	1000	1000	Victaulic	DN65 (2" 1/2)
04155	4060	1100	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04177	4060	1100	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04184	4060	1100	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04209	2860	2200	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04239	2860	2200	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04258	2860	2200	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04305	4060	2200	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04349	4060	2200	2350	1000	800	1000	1000	Victaulic	DN80 (3")

* It depends on the hydronic version – refer to the technical bulletin

			02106	02120	02128	02140	04155	04177
Cooling	Cooling capacity (1)	kW	105	119	130	139	155	176
	Total absorbed power (1)	kW	33,5	38,3	44,2	44,3	49,9	56,7
	EER (1)	W/W	3,13	3,10	2,93	3,15	3,11	3,10
	Cooling capacity (2)	kW	139	155	164	185	204	230
	Total absorbed power (2)	kW	35,7	40,8	46,8	47,5	52,9	60,9
	EER (2)	W/W	3,88	3,79	3,50	3,89	3,87	3,77
	SEER (3)	W/W	4,13	4,12	4,11	4,27	4,11	4,11
	IPLV (9)		4,99	5,09	4,71	5,02	5,13	5,13
	Cooling capacity (8)	kW	61,9	70,6	77,8	82,0	91,5	103
	Total absorbed power (8)	kW	29,9	34,1	39,3	39,5	45,4	50,8
	EER (8)	W/W	2,07	2,07	1,98	2,08	2,02	2,04
	Water flow rate (1)	l/s	5,0	5,7	6,2	6,7	7,4	8,4
	Pressure drops in the heat exchanger, user side (1)	kPa	31,68	39,65	24,67	41,78	45,07	40,44
Compressor	Compressor type		SCROLL					
	Refrigerant oil (type)		Emkarate RL 32 3MAF					
	No. of compressors	No.	2	2	2	2	4	4
	Standard capacity steps	No.	2	3	2	3	4	4
	Oil charge (Circuit 1)	l	4,44 + 4,44	4,44 + 4,44	4,44 + 4,44	6,3 + 4,44	3,25 + 3,25	4,44 + 4,44
	Oil load (Circuit 2)	l	-	-	-	-	3,25 + 3,25	3,25 + 3,25
	Refrigerant circuits	No.	1	1	1	1	2	2
Refrigerant	Type		R410A					
	Refrigerant charge (Circuit 1) (4)	kg	10,5	10,5	10,5	15	13,0	13,0
	Refrigerant charge (Circuit 2) (4)	kg	-	-	-	-	10,5	10,5
	Tons of CO_2 equivalent (4)	Ton	21,9	21,9	21,9	31,3	49,1	49,1
	Design pressure (high/low)	bar	40,5/4	40,5/4	40,5/4	40,5/4	40,5/4	40,5/4
Outdoor zone fans	Fan types		AXIAL					
	No. of fans	No.	2	2	2	3	3	3
	Rated power (1)	kW	1,5	1,5	1,5	1,4	1,4	1,4
	Maximum power	kW	3,8	3,8	3,8	5,7	5,7	5,7
	Maximum absorbed current	A	3,9	3,9	3,9	3,9	3,9	3,9
	Standard air flow rate	l/s	10614	10714	11143	14649	14467	15868
Internal heat exchanger	Internal heat exchanger type		PHE – PLATE TYPE					
	No. of indoor heat exchangers	No.	1	1	1	1	1	1
	Water content	l	6,87	6,87	9,90	7,88	9,30	11,40
Hydraulic circuit	Max water-side pressure	bar	12	12	12	12	12	12
	Max pressure of hydronic kit (safety valve setting)	bar	6	6	6	6	6	6
	Water connections		2" 1/2	2" 1/2	2" 1/2	2" 1/2	3"	3"
	Minimum system water content (5)	l	427	535	535	699	409	533
Sound data	Sound power (6)	dB (A)	86 std 85 SL 83 SSL	86 std 85 SL 83 SSL	87 std 86 SL 84 SSL	87 std 86 SL 84 SSL	87 std 86 SL 84 SSL	88 std 87 SL 85 SSL
	Sound pressure (7)	dB (A)	54 std 53 SL 51 SSL	54 std 53 SL 51 SSL	55 std 54 SL 52 SSL	54,9 std 53,9 SL 51,9 SSL	54,9 std 53,9 SL 51,9 SSL	55,9 std 54,9 SL 52,9 SSL
Electrical data	Power supply		400V/3P/50Hz					
	Maximum power input version without accessories	kW	48,9	55,0	61,1	66,9	82,4	87,4
	Maximum absorbed current version without accessories	A	83,0	93,4	103,8	113,5	139,9	148,3
	Maximum inrush current version without accessories	A	285,6	332,3	342,7	358,1	279,9	350,9
Dimensions and weights	A - Length	mm	2860	2860	2860	4060	4060	4060
	B - Depth	mm	1100	1100	1100	1100	1100	1100
	C - Height	mm	2350	2350	2350	2350	2350	2350
	Net shipping weight	kg	1080	1080	1090	1510	1620	1620
	Operating weight	kg	1090	1090	1100	1520	1630	1630

(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 23/18°C.
(3) Cooling: inlet/outlet water temperature 7/12°C.
(4) Data is indicative and subject to change. For the correct value, always refer to the technical label on the unit.
(5) The indicated volume refers to the total required amount; the designer must meet this requirement by taking into account the quantity already contained within the unit, depending on the selected hydronic kit (please refer to the technical data sheet to check this value).
(6) Condition (1); value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1.
(7) Value calculated from the sound power level using ISO 3744:2010, referenced to a distance of 10 m from the unit.
(8) Cooling BT version: outdoor air temperature 35°C, internal heat exchanger water temperature = -3/-8°C. Fluid treated with 35% ethylene glycol.
(9) Calculated according to AHRI 551/591 (SI) standard.
The stated performance data are indicative and may be subject to change. Furthermore, the capacities declared at points (1), (2), (8) refer to the instantaneous power in accordance with UNI EN 14511. The value declared at point (3) is determined in accordance with UNI EN 14825.

			04184	04209	04239	04258	04305	04349
Cooling	Cooling capacity (1)	kW	182	208	238	257	305	348
	Total absorbed power (1)	kW	62,9	67,1	76,8	88,5	98,3	112
	EER (1)	W/W	2,90	3,10	3,10	2,90	3,10	3,10
	Cooling capacity (2)	kW	239	277	314	333	405	458
	Total absorbed power (2)	kW	67,8	71,6	81,9	94,6	105	121
	EER (2)	W/W	3,52	3,87	3,84	3,52	3,85	3,78
	SEER (3)	W/W	4,10	4,14	4,24	4,10	4,16	4,12
	IPLV (9)		4,95	4,99	4,94	4,37	4,92	5,05
	Cooling capacity (8)	kW	109	123	144	158	184	211
	Total absorbed power (8)	kW	55,8	59,7	68,8	79,4	88,5	101
	EER (8)	W/W	1,95	2,06	2,09	1,99	2,08	2,10
	Water flow rate (1)	l/s	8,7	9,9	11,4	12,3	14,6	16,6
	Pressure drops in the heat exchanger, user side (1)	kPa	43,31	55,47	42,98	49,56	40,76	52,52
Compressor	Compressor type		SCROLL					
	Refrigerant oil (type)		Emkarate RL 32 3MAF					
	No. of compressors	No.	4	4	4	4	4	4
	Standard capacity steps	No.	4	4	6	4	6	4
	Oil charge (Circuit 1)	l	4,44 + 4,44	4,44 + 4,44	4,44 + 4,44	4,44 + 4,44	4,44 + 6,3	6,3 + 6,3
	Oil load (Circuit 2)	l	4,44 + 4,44	4,44 + 4,44	4,44 + 4,44	4,44 + 4,44	4,44 + 6,3	6,3 + 6,3
	Refrigerant circuits	No.	2	2	2	2	2	2
Refrigerant	Type		R410A					
	Refrigerant charge (Circuit 1) (4)	kg	13,0	13,0	13,5	13,5	19,5	20,0
	Refrigerant charge (Circuit 2) (4)	kg	10,5	13,0	13,5	13,5	19,5	20,5
	Tons of CO_2 equivalent (4)	Ton	49,1	54,3	56,4	56,4	81,4	84,6
	Design pressure (high/low)	bar	40,5/4	40,5/4	40,5/4	40,5/4	40,5/4	40,5/4
Outdoor zone fans	Fan types		AXIAL					
	No. of fans	No.	3	4	4	4	6	6
	Rated power (1)	kW	1,5	1,4	1,5	1,5	1,4	1,5
	Maximum power	kW	5,7	7,6	7,6	7,6	11,4	11,4
	Maximum absorbed current	A	3,9	3,9	3,9	3,9	3,9	3,9
	Standard air flow rate	l/s	15892	20647	20471	22231	29279	33255
Internal heat exchanger	Internal heat exchanger type		PHE – PLATE TYPE					
	No. of indoor heat exchangers	No.	1	1	1	1	1	1
	Water content	l	11,40	11,40	15,50	22,10	22,10	22,10
Hydraulic circuit	Max water-side pressure	bar	12	12	12	12	12	12
	Max pressure of hydronic kit (safety valve setting)	bar	6	6	6	6	6	6
	Water connections		3"	3"	3"	3"	3"	3"
	Minimum system water content (5)	l	533	533	669	669	874	874
Sound data	Sound power (6)	dB (A)	88 std 87 SL 85 SSL	88 std 87 SL 85 SSL	88 std 87 SL 85 SSL	88 std 87 SL 85 SSL	88 std 87 SL 85 SSL	90 std 89 SL 87 SSL
	Sound pressure (7)	dB (A)	55,9 std 54,9 SL 52,9 SSL	55,9 std 54,9 SL 52,9 SSL	55,9 std 54,9 SL 52,9 SSL	55,9 std 54,9 SL 52,9 SSL	55,8 std 54,8 SL 52,8 SSL	57,8 std 56,8 SL 54,8 SSL
Electrical data	Power supply		400V/3P/50Hz					
	Maximum power input version without accessories	kW	90,9	97,8	110,0	122,3	146,0	165,8
	Maximum absorbed current version without accessories	A	154,3	166,0	186,8	207,6	247,8	281,4
	Maximum inrush current version without accessories	A	356,9	368,6	425,7	446,5	492,4	526,0
Dimensions and weights	A - Length	mm	4060	2860	2860	2860	4060	4060
	B - Depth	mm	1100	2200	2200	2200	2200	2200
	C - Height	mm	2350	2350	2350	2350	2350	2350
	Net shipping weight	kg	1620	1950	1960	1960	2670	2850
	Operating weight	kg	1630	1960	1970	1980	2690	2870

(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 23/18°C.
(3) Cooling: inlet/outlet water temperature 7/12°C.
(4) Data is indicative and subject to change. For the correct value, always refer to the technical label on the unit.
(5) The indicated volume refers to the total required amount; the designer must meet this requirement by taking into account the quantity already contained within the unit, depending on the selected hydronic kit (please refer to the technical data sheet to check this value).
(6) Condition (1); value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1.
(7) Value calculated from the sound power level using ISO 3744:2010, referenced to a distance of 10 m from the unit.
(8) Cooling BT version: outdoor air temperature 35°C, internal heat exchanger water temperature = -3/-8°C. Fluid treated with 35% ethylene glycol.
(9) Calculated according to AHRI 551/591 (SI) standard.
The stated performance data are indicative and may be subject to change. Furthermore, the capacities declared at points (1), (2), (8) refer to the instantaneous power in accordance with UNI EN 14511. The value declared at point (3) is determined in accordance with UNI EN 14825.

Price list

HWA1-A			02106	02120	02128	02140	04155	04177
HWA1-A	Cooling only	€	37.723	40.044	41.646	47.210	49.573	52.730
WEEE		€	10	10	10	10	10	10
FACTORY-MOUNTED ACCESSORY MANDATORY: Standard EC fan for ERP regulation to be added to the unit price								
EC	EC fan (included in C, BT, SSL versions). DC control included	€	2.076	2.076	2.076	2.855	2.336	2.076
FACTORY-MOUNTED ACCESSORIES								
2SFV	Double safety valve	€	415	415	415	415	831	831
BT	Cooling only BT version (EC accessory already included)	€	5.120	5.168	5.375	6.461	6.245	7.734
C	Ductable version (EC accessory is already included for these versions)	€	3.374	3.374	3.374	5.450	5.450	5.450
C(S)	Ductable version with compressor soundproofing	€	4.361	4.466	4.466	6.614	6.965	6.965
CC	Condensation control down to -20°C (Only with EC fans)	€	2.076	2.076	2.076	2.855	2.336	2.076
CM	Serial communication module for Modbus	€	825	825	825	825	825	825
CT	Condensation control down to -10°C	€	379	379	379	379	379	561
DS	Cooling only with partial heat recovery (desuperheater circuit)	€	3.974	4.355	4.529	7.031	7.380	6.347
GR1	Anti-intrusion kit for refrigeration circuit compartment	€	2.165	2.165	2.165	2.644	2.644	2.644
GR2	Anti-intrusion battery compartment kit	€	753	753	753	753	753	753
GR3	Anti-intrusion kit for battery compartment and circuit	€	2.918	2.918	2.918	3.396	3.396	3.396
IM	Magnetic circuit breakers on compressors and fans	€	844	844	844	1.479	1.713	1.713
KA1	Adhesive heater for heat exchanger + pump heater (if present). Not available for units with tank	€	246	246	246	246	246	246
KA2	Adhesive heater exchanger + pump heater (if present) + heater	€	909	909	909	909	909	909
KS	Lifting bracket kit	€	285	285	285	285	285	285
LQ	Internal electrical panel lights	€	454	454	454	454	454	454
PD	Twin pump, standard head	€	7.007	7.007	7.007	7.865	7.865	8.383
PD-SI	Dual standard-head pump + tank	€	10.245	11.614	10.245	11.809	11.679	11.679
PDAP	Dual high-head pump	€	8.046	8.046	8.046	9.343	9.603	9.603
PDAP-SI	Double high-head pump + tank	€	11.543	12.912	11.543	13.626	13.496	13.496
PS	Standard head pump	€	3.763	3.763	3.763	5.255	5.255	5.255
PS-SI	Standard head pump + tank	€	7.332	7.332	7.332	8.500	7.786	7.786
PSAP	High-head pump	€	4.802	4.802	4.802	6.034	6.034	6.034
PSAP-SI	High head pump + tank	€	8.371	8.371	8.371	9.538	8.824	8.824
RFM	Delivery and suction valves for compressors	€	410	410	410	818	818	818
SH	Schuko socket (with miniature circuit breaker)	€	272	272	272	272	272	272
SL	Silenced version	€	987	1.092	1.092	1.163	1.513	1.513
SS	Soft starter	€	3.715	4.015	4.015	4.955	5.872	5.872
SSL	Super-silent version (EC accessory is already included for these versions).	€	3.499	3.499	3.499	4.848	5.320	5.710
TE1	Special mechanical seal for glycol >40%	€	364	364	364	559	559	559
TR1	Microchannel coil with Aero surface treatment	€	3.828	3.828	3.828	5.450	8.046	8.046
ACCESSORIES SUPPLIED SEPARATELY								
AG	Rubber anti-vibration mounts	€	727	727	727	1.078	1.078	1.078
AM	Spring anti-vibration mounts	€	1.873	2.485	2.485	2.485	2.485	2.485
FY	Y-strainer	€	175	175	175	251	251	251
Hi-TV415	Touchscreen remote control	€	640	640	640	640	640	640
i-CR2	Wall-mounted remote control	€	319	319	319	319	319	319
RV	Starter kit consisting of 2 jaws and 2 plain stubs	€	125	125	125	125	125	125
SAS	Remote sensor	€	47	47	47	47	47	47

Price list

HWA1-A			04184	04209	04239	04258	04305	04349
HWA1-A	Cooling only	€	67.410	68.744	70.464	80.834	88.197	100.262
WEEE		€	10	10	10	10	10	10
FACTORY-MOUNTED ACCESSORY MANDATORY: Standard EC fan for ERP regulation to be added to the unit price								
EC	EC fan (included in C, BT, SSL versions). DC control included	€	2.076	2.855	2.855	2.855	5.191	5.191
FACTORY-MOUNTED ACCESSORIES								
2SFV	Double safety valve	€	831	831	831	831	831	831
BT	Cooling only BT version (EC accessory already included)	€	6.660	6.568	6.721	6.929	7.407	5.532
C	Ductable version (EC accessory is already included for these versions)	€	5.450	6.566	6.566	6.566	10.642	11.939
C(S)	Ductable version with compressor soundproofing	€	7.086	8.280	8.416	8.416	12.601	13.898
CC	Condensation control down to -20°C (Only with EC fans)	€	2.076	2.855	2.855	2.855	5.191	5.191
CM	Serial communication module for Modbus	€	825	825	825	825	825	825
CT	Condensation control down to -10°C	€	561	561	561	561	561	561
DS	Cooling only Partial Heat Recovery (Desuperheater Circuit)	€	5.654	7.139	5.713	7.871	8.019	6.858
GR1	Anti-intrusion kit for refrigeration circuit compartment	€	2.644	2.769	2.769	2.769	3.247	3.247
GR2	Anti-intrusion battery compartment kit	€	1.070	1.070	1.362	1.362	1.622	1.622
GR3	Anti-intrusion kit for battery compartment and circuit	€	3.714	3.839	4.132	4.132	4.870	4.870
IM	Magnetic circuit breakers on compressors and fans	€	1.713	1.713	1.713	1.713	2.531	2.984
KA1	Adhesive heater for heat exchanger + pump heater (if present). Not available for units with tank	€	246	246	246	246	246	246
KA2	Adhesive heater exchanger + pump heater (if present) + heater	€	909	909	909	909	909	909
KS	Lifting bracket kit	€	285	285	285	285	285	285
LQ	Internal electrical panel lights	€	454	454	454	454	454	454
PD	Twin pump, standard head	€	8.617	9.032	9.032	9.811	10.382	12.199
PD-SI	Dual standard-head pump + tank	€	14.923	15.832	16.352	16.352	17.389	18.686
PDAP	Dual high-head pump	€	9.603	9.863	9.863	10.512	11.939	12.977
PDAP-SI	Double high-head pump + tank	€	16.222	17.129	17.649	17.649	19.206	20.503
PS	Standard head pump	€	5.255	5.255	5.255	6.436	6.436	6.436
PS-SI	Standard head pump + tank	€	10.122	10.382	10.900	11.939	12.329	12.329
PSAP	High-head pump	€	6.034	6.294	6.294	7.267	7.527	7.786
PSAP-SI	High head pump + tank	€	11.160	11.420	11.939	12.977	13.366	13.366
RFM	Delivery and suction valves for compressors	€	818	818	818	818	1.151	1.151
SH	Schuko socket (with miniature circuit breaker)	€	272	272	272	272	272	272
SL	Silenced version	€	1.635	1.713	1.849	1.849	1.960	1.960
SS	Soft starter	€	7.425	7.425	7.630	8.026	9.900	11.224
SSL	Super-silent version (EC accessory is already included for these versions).	€	8.306	8.954	9.084	9.084	13.236	13.756
TE1	Special mechanical seal for glycol >40%	€	559	559	559	559	559	559
TR1	Microchannel coil with Aero surface treatment	€	8.046	7.656	7.656	7.656	10.770	10.770
ACCESSORIES SUPPLIED SEPARATELY								
AG	Rubber anti-vibration mounts	€	1.315	1.315	1.315	1.315	2.257	2.457
AM	Spring anti-vibration mounts	€	2.444	2.444	2.444	2.444	3.169	3.169
FY	Y-strainer	€	251	376	376	376	426	426
Hi-TV415	Touchscreen remote control	€	640	640	640	640	640	640
i-CR2	Wall-mounted remote control	€	319	319	319	319	319	319
RV	Starter kit consisting of 2 jaws and 2 plain stubs	€	125	125	125	175	175	175
SAS	Remote sensor	€	47	47	47	47	47	47
STANDARD								
	Remote probe enablement	€	standard					
	Second setpoint enable	€	standard					

For accessories of the DAS monitoring system (ISK, LNC, OVPN), see the chapter "Connection devices for Maxa DAS supervision system."
WEEE for Italian market only.

HWA1-A/H 02109÷04345

Air/water heat pumps with axial fans

109 kW÷345 kW

The air-to-water heat pumps have been designed for commercial and industrial applications; they are very compact yet equipped with large-surface air-side heat exchangers. As a result, they ensure high efficiency, with COP values among the highest in their category. The use of high-efficiency, particularly robust scroll compressors, together with the patented oil recovery and distribution system used on tandem circuits, guarantees high reliability and consistent performance. Available in 12 sizes.

MADE IN ITALY | R410A REFRIGERANT 2088 GWP | PLATE HEAT EXCHANGER | SCROLL COMPRESSOR

Casing: All units in the series feature a structure suitable for outdoor installation, made of hot-dip galvanized steel sheet coated with polyester powder paint in RAL 7035 / RAL 3020 (only for some components) to ensure optimal resistance to atmospheric agents. All screws and inserts are made of galvanized steel.

Compressors: scroll type, specifically designed to operate with R410A, mounted on rubber anti-vibration supports. The crankcase heater, which is always present, is activated when the compressor is stopped and is disabled when it restarts.

Air-side heat exchangers: finned-coil type, made with copper tubes and aluminum fins with corrugated surface, suitably spaced to ensure maximum heat exchange efficiency.

User-side heat exchangers: of the brazed plate type and made of AISI 304 stainless steel for single-circuit units and AISI 316 for dual-circuit units, factory-insulated with closed-cell material, and can be equipped with an electric antifreeze heater (optional accessory KA). A differential pressure switch, installed on the water side, ensures the presence of water flow, preventing ice formation inside.

Fans: axial type with airfoil profile blades. They are statically and dynamically balanced and supplied complete with protective grille and inlet and outlet nozzles with double flared profile, specially shaped to increase efficiency and reduce noise. The motor has an IP54 protection rating in accordance with CEI EN 60529. Regulation is performed by means of voltage variators, directly controlled by the onboard unit control; this solution is particularly suitable when operation with outdoor air temperatures below –10 °C is required and is available on request for all models. As an accessory, EC fans are available, allowing the operating range to be further extended.

Refrigerant circuit: it is built using components supplied by leading international manufacturers and in compliance with UNI EN 13134. The refrigerant gas is R410A. In its basic configuration, the refrigerant circuit includes: electronic expansion valve, service valves for maintenance and inspection, safety device compliant with current regulations (high- and low-pressure switch), safety valve for the refrigerant, pressure transducers to accurately measure evaporation and condensation pressures, high-capacity replaceable core filter drier to prevent expansion valve blockage and remove any moisture present in the circuit, liquid sight glass for refrigerant charge monitoring, solenoid valve and shut-off valves.

In heat pump versions, the following are also included: 4-way reversing valve, liquid separator, liquid receiver, and outdoor air temperature probe.

Electrical panel: fully manufactured and wired in compliance with standard EN 60204, comprising a power section and a control section. The degree of protection of the electrical panel is IP54. The electrical panel is equipped with a terminal block with volt-free contacts for remote ON-OFF.

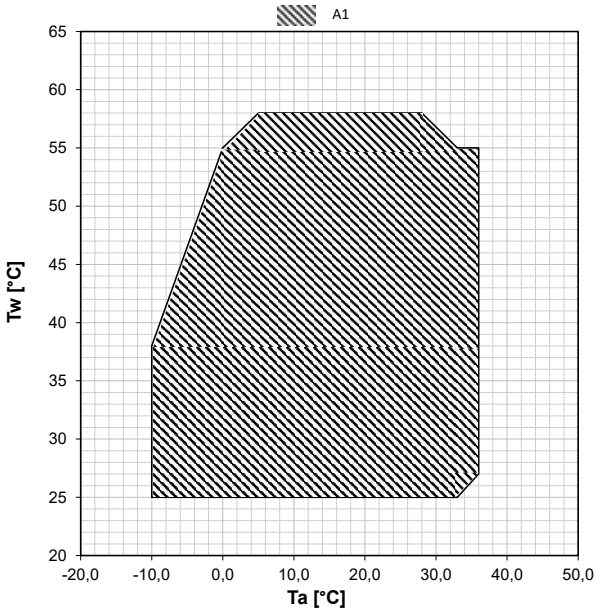
Control system: all units are equipped with a microprocessor-based control board with superheat control logic managed according to the signals sent by the pressure transducers and temperature probes. The CPU also controls the following functions: water temperature regulation, antifreeze protection, compressor start-up and timing, fan and circulation pump management (where present), alarm reset, alarm signalling and operation LEDs. On request, the microprocessor can be connected to remote BMS control systems.

Control and protection devices: all units are equipped with the following control and protection devices: phase monitor complete with minimum and maximum voltage relay, which stops the unit if the phase sequence is incorrect or the voltage of at least one phase differs by more than 15% from the others; flow water temperature sensor (with antifreeze function); return water temperature sensor (both installed inside the heat exchanger); low-pressure transducer; high-pressure transducer; discharge temperature sensor on the compressors; safety valve on both the low- and high-pressure sides; suction temperature sensor on the compressors; outdoor air temperature sensor; fan thermal protection; thermal protection on each compressor; water-side differential pressure switch protecting the evaporator; manual reset high-pressure switch installed on the compressor discharge line.

Hydraulic circuit: the heat pumps in the series can be supplied with an integrated hydraulic module, which includes, in addition to differential pressure switches, a single or twin pump (one serving as a backup for the other) with AC motor, suitable for chilled water operation and directly managed by the unit's onboard controller.
It is also possible to install an internal buffer storage tank, externally insulated with closed-cell foam material and sized with an adequate capacity to prevent excessive compressor start-stop cycles.

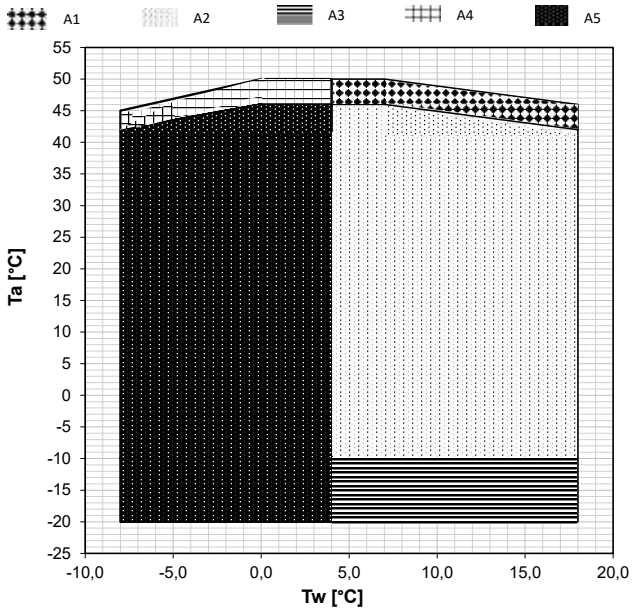
Operating Areas

Hot



Tw: water temperature - Ta: outdoor air temperature
A1 = HWA1-A/H heating

Cold



A1 = HWA1-A/H cooling partial load
A2 = HWA1-A/H cooling
A3 = HWA1-A/H cooling with CC accessory for condensation control down to -20°C
A4 = HWA1-A/H BT partial load
A5 = HWA1-A/H BT

Accessories

Factory-installed

- **KA1 *** – Antifreeze heater for heat exchanger and pump (if present) – electric heating element installed on the front face of the plate heat exchanger, which is activated when the water temperature inside the exchanger falls below +4°C, and electric heating element that protects the pump motor at low temperatures.
- **KA2** * - Antifreeze protection for heat exchanger, pump and tank (if present) – includes KA1 – in addition to accessory KA1, an immersion heater is added in the tank. The kit consists of: an armored electric heater in AISI 321, a programmable digital temperature controller and a contactor.
- **SL **** – Silenced version. The silenced unit (equipped with the SL accessory) features an innovative thermo-acoustic jacket on the compressors. This insulation allows a noise reduction of up to 10% at certain compressor rotational frequencies. The special multilayer structure provides thermal insulation that, at very low temperatures, reduces losses by up to 2% compared to standard insulation.
- **SSL **** – Super-silenced version. The super-silenced unit (equipped with the SSL accessory) includes, in addition to the thermo-acoustic enclosure on the compressors, a special diffuser mounted on the fan. This diffuser increases the fan's efficiency, allowing its speed to be reduced, thereby lowering sound pressure level and energy consumption. In this way, substantial electrical energy savings can be achieved for each fan.
- **C **** – Ductable version. With the ductable version, the diffuser is used to take advantage of the higher available pressure of the fan and, if required, to duct the air discharge.
- **C(S) **** – Ductable version with jackets. In addition to the ductable version, thermo-acoustic jackets are installed on the compressors.
- **PS ***** – Reversible heat pump, heating-only version with standard head.
- **PSAP ***** – Reversible heat pump, high-head pump only version.
- **PD ***** – Reversible heat pump, dual-pump version with standard head.
- **PDAP ***** – Reversible heat pump, dual high-head pump version.
- **PS-SI ***** – Reversible heat pump with standard head pump version + tank.
- **PSAP-SI ***** – Reversible heat pump, high-head pump version with storage tank.
- **PD-SI ***** – Reversible heat pump, dual-pump version with standard head + storage tank.
- **PDAP-SI ***** – Reversible-cycle heat pump, high-head twin pump version with buffer tank.
- **TE1** - Special mechanical seal for glycol content above 40%

** Accessories not usable simultaneously
*** Accessories not usable simultaneously
*** Accessories not usable simultaneously

Accessories

- for water-glycol mixtures with a glycol mass fraction greater than 40% and up to 50%, a different mechanical seal is used to ensure the correct operation of the electric pump.
- **TR2** - Coil anti-corrosion treatment – thanks to this treatment, the coil becomes flexible to withstand thermal contractions and expansions, mechanically resistant, UV-protected and dirt-repellent. Heat transfer losses are very limited. The treatment ensures coil protection under virtually all environmental conditions: from coastal to rural areas, from industrial to urban zones. The treatment withstands 6,000 hours according to ASTM B117. (HWA1-A/H).
- **DS** - The desuperheater includes the addition of a brazed plate heat exchanger made of AISI 316 stainless steel, factory-insulated using closed-cell material.
- **BT** - The BT accessory allows the operating range of the water temperature to be extended down to -8°C. In this case, it is necessary to use a water-glycol mixture.
- **EC** - Modulating EC fan. Includes CC function, condensing pressure control down to -20°C. Mandatory accessory for cooling-only versions, comfort applications, EU market.
- **CC** – Condensation control down to -20°C. Includes the EC accessory.
- **CT** - Condensation control down to -10°C.
- **GR1** - Anti-intrusion kit for refrigeration circuit compartment – installed on the refrigeration circuit compartment to prevent the ingress of foreign objects into the unit.
- **GR2** - Battery compartment anti-intrusion kit – wire mesh to prevent the entry of foreign objects into the coil and to protect the coil from accidental contact by people or objects.
- **GR3** - Anti-intrusion kit for the refrigeration circuit compartment and anti-intrusion kit for the battery compartment.
- **IM** - Circuit breakers on compressors and fans – overcurrent switches applied to compressors and fans, protecting the components from faults caused by possible current spikes.
- **SS** - Soft starter – electronic static starter for inrush current management, installed inside the electrical panel; it allows a reduction of inrush current and of mechanical wear on the motor windings.
- **LQ** – Internal switchboard lights – light for illuminating the interior of the electrical panel, facilitating maintenance for the operator.
- **SH** - Schuko socket (with MCB) - convenience socket located in the electrical panel (maximum 16 A), protected against overloads and short circuits by a miniature circuit breaker.
- **RFM** - Discharge and suction service valve on compressors – shut-off valve installed on the compressor suction and discharge lines, which simplifies maintenance by preventing the need to recover the refrigerant from the entire unit.
- **2SFV** - Changeover valve with double safety valve – the changeover valve allows alternating use of two safety valves, facilitating periodic inspection or replacement while ensuring system operation and maintaining the safety system.
- **KS** - Lifting bracket kit – facilitates lifting and positioning of the unit.
- **CM** - BMS connectivity setup – ModBus protocol included – accessory that enables the connection of the unit to external controllers via serial cable with RS-485 electrical standard and ModBus RTU protocol.
- **ACK6** - Summer/Winter status signaling - auxiliary contactors providing a volt-free contact, allowing remote indication of the operating mode (summer/winter).

Provided separately

- **AG** - Rubber anti-vibration kit – designed to prevent vibration transmission to the structure; they are to be installed beneath the unit, in the designated mounting holes.
- **AM -** Spring anti-vibration kit – designed to prevent transmission of vibrations to the structure; they must be installed underneath the unit, in the designated holes.
- **FY** - Y-strainer – contains a stainless steel mesh screen (500 µm filtration) that collects solid materials present in the water. Filtration prevents blockage and/or damage to the devices installed downstream of the strainer. Alternatively, it is possible to install a dirt separator that ensures a filtration level not greater than 1 mm (in this case, it is no longer necessary to install the Y-strainer).
- **SAS** - Remote system probe.
- **RV** – Grooved connection joint. To facilitate installation, a carbon steel pipe nipple can be supplied, featuring on one end a grooved connection compatible with the one on the unit and complete with the appropriate coupling for the connection, and on the other end a G 1" 1/2 M threaded connection. The kit consists of 2 nipples and 2 grooved connections to connect the nipples to the unit.
- **ISK**** - USB/RS485 serial converter – interface device capable of reading and writing control registers via the RS485 standard and converting them to a USB port that can be connected to any supervision system.
- **LNC**** - LAN-Wi-Fi router – device that allows the unit to be connected to a local network via Ethernet cable or Wi-Fi coverage for remote monitoring.
- **OVPN**** - 3G LAN-Wi-Fi router with VPN tunnel – device that allows the unit to be connected remotely with an industrial router using the secure OPENVPN service.
- **i-CR2**** - Wall-mounted remote control – Modbus remote controller with negative LCD and capacitive keys. The device is intended to be used as a remote unit keypad with local temperature sensing and replicates the functions of the on-board unit controller.
- **Hi-TV415**** - Color touch screen wired remote controller for the centralized management of a cascade of chillers/heat pumps, for up to 7 units.

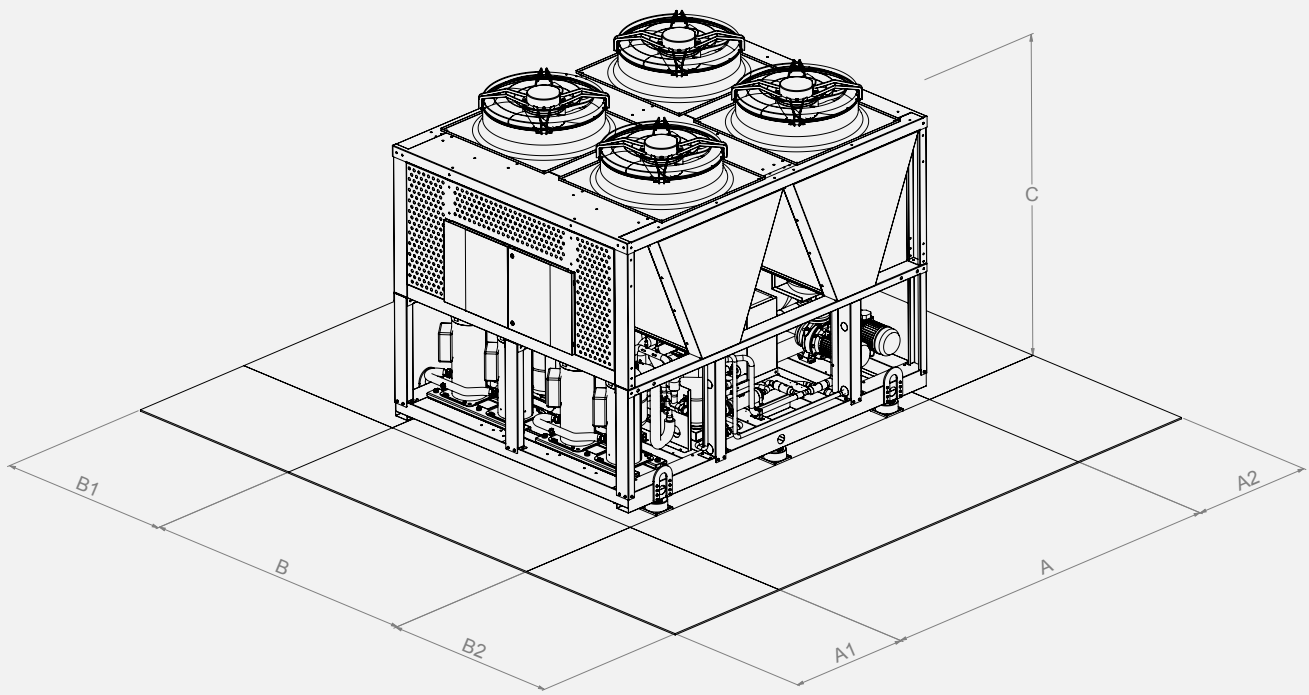
** Accessories not usable simultaneously

i-CR2
Wall-mounted remote control
ACCESSORY

Hi-TV415
Touch screen remote controller for cascade management (max 7 units)
ACCESSORY

Dimensional Drawings

HWA1-A/H 02109÷04345



Model	Dimensions			Clearances				User heat exchanger	
	A [mm]	B [mm]	C [mm]	A1[mm]	A2 [mm]	B1 [mm]	B2 [mm]	Type	Ø *
02109	2860	1100	2350	1000	800	1000	1000	Victaulic	DN65 (2" 1/2)
02121	2860	1100	2350	1000	800	1000	1000	Victaulic	DN65 (2" 1/2)
02142	4060	1100	2350	1000	800	1000	1000	Victaulic	DN65 (2" 1/2)
02148	4060	1100	2350	1000	800	1000	1000	Victaulic	DN65 (2" 1/2)
02160	4060	1100	2350	1000	800	1000	1000	Victaulic	DN65 (2" 1/2)
04176	2860	2200	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04199	2860	2200	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04215	2860	2200	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04237	2860	2200	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04273	4060	2200	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04304	4060	2200	2350	1000	800	1000	1000	Victaulic	DN80 (3")
04345	4060	2200	2350	1000	800	1000	1000	Victaulic	DN80 (3")

* It depends on the hydronic version – refer to the technical bulletin

			02109	02121	02142	02148	02160	04176
Cooling	Cooling capacity (1)	kW	103	113	132	138	148	165
	Total absorbed power (1)	kW	33,8	38,9	41,3	44,4	49,8	52,6
	EER (1)	W/W	3,05	2,90	3,19	3,11	2,97	3,14
	Cooling capacity (2)	kW	139	151	177	188	202	224
	Total absorbed power (2)	kW	36,5	42,7	44,1	47,7	53,0	55,7
	EER (2)	W/W	3,81	3,53	4,01	3,94	3,82	4,01
	SEER (5)	W/W	4,35	4,36	4,38	4,73	4,50	4,61
	Cooling capacity (11)	kW	63,0	68,4	78,9	82,4	90,6	97,4
	Total absorbed power (11)	kW	30,2	34,8	37,6	40,1	44,8	48,7
	EER (11)	W/W	2,09	1,97	2,10	2,05	2,02	2,00
	Water flow rate (1)	l/s	4,9	5,4	6,3	6,6	7,1	7,9
	Pressure drops in the heat exchanger, user side (1)	kPa	30,5	36,3	37,8	41,0	38,0	36,0
Heating	Heating capacity (3)	kW	113	125	148	154	166	188
	Total absorbed power (3)	kW	27,6	30,9	36,6	37,7	41,4	46,0
	COP (3)	W/W	4,09	4,05	4,04	4,08	4,01	4,08
	Heating capacity (4)	kW	108	120	142	148	160	179
	Total absorbed power (4)	kW	32,9	37,5	43,9	45,3	49,4	55,9
	COP (4)	W/W	3,30	3,20	3,22	3,26	3,23	3,21
	SCOP (6)	W/W	3,72	3,77	3,62	3,69	3,68	3,90
	Water flow rate (4)	l/s	5,2	5,7	6,8	7,1	7,6	8,6
	Pressure drops in the heat exchanger, user side (4)	kPa	33,5	40,5	43,0	46,6	43,6	41,8
	Energy efficiency water 35°C/55°C	class	A+/A+	A+/A+	A+/A+	A+/A+	A+/A+	A++/A+
Compressor	Compressor type		SCROLL					
	Refrigerant oil (type)		Emkarate RL 32 3MAF					
	No. of compressors	No.	2	2	2	2	2	2
	Standard capacity steps	No.	2	3	2	3	3	4
	Oil charge (Circuit 1)	l	4,44 + 4,44	4,44 + 4,44	4,44 + 4,44	6,3 + 4,44	6,3 + 4,44	3,25 + 3,25
	Oil load (Circuit 2)	l	-	-	-	-	-	3,25 + 3,25
	Refrigerant circuits	No.	1	1	1	1	1	2
Refrigerant	Type		R410A					
	Refrigerant charge (Circuit 1) (7)	kg	26,5	27,0	34,5	42,0	40,0	22,0
	Refrigerant charge (Circuit 2) (7)	kg	-	-	-	-	-	22,0
	Tons of CO2 equivalent (7)	Ton	55,3	56,4	72,0	87,7	83,5	91,9
	Design pressure (high/low)	bar	40,5/2,5	40,5/2,5	40,5/2,5	40,5/2,5	40,5/2,5	40,5/2,5
Outdoor zone fans	Fan types		AXIAL					
	No. of fans	No.	2	2	3	3	3	4
	Rated power (1)	kW	1,4	1,4	1,4	1,4	1,4	1,4
	Maximum power	kW	3,80	3,80	5,70	5,70	5,70	7,60
	Maximum absorbed current	A	3,9	3,9	3,9	3,9	3,9	3,9
	Standard air flow rate	l/s	10021	9984	15109	15088	15045	20954
Internal heat exchanger	Internal heat exchanger type		PHE – PLATE TYPE					
	No. of indoor heat exchangers	No.	1	1	1	1	1	1
	Water content	l	6,87	6,87	7,88	7,88	8,89	11,40
Hydraulic circuit	Max water-side pressure	bar	12	12	12	12	12	12
	Max. hydraulic unit pressure (safety valve setting)	bar	6	6	6	6	6	6
	Water connections		2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	3"
	Minimum system water content (8)	l	490	630	630	820	820	480
Sound data	Sound power (9)	dB (A)	88 std 87 SL 84 SSL	88 std 87 SL 84 SSL	88 std 87 SL 84 SSL	88 std 87 SL 84 SSL	88 std 87 SL 84 SSL	89 std 88 SL 85 SSL
	Sound pressure (10)	dB (A)	56 std 55 SL 52 SSL	56 std 55 SL 52 SSL	55,9 std 54,9 SL 51,9 SSL	55,9 std 54,9 SL 51,9 SSL	55,9 std 54,9 SL 51,9 SSL	56,9 std 55,9 SL 52,9 SSL
Electrical data	Power supply		400V/3P/50Hz					
	Max. power input without accessories	kW	48,9	55,0	63,1	66,9	73,0	87,9
	Max current absorbed without accessories	A	83,0	93,4	107,1	113,5	123,9	149,2
	Maximum inrush current without accessories	A	285,6	332,3	346,0	358,1	368,5	289,2
Dimensions and weights	A - Length	mm	2860	2860	4060	4060	4060	2860
	B - Depth	mm	1100	1100	1100	1100	1100	2200
	C - Height	mm	2350	2350	2350	2350	2350	2350
	Net shipping weight	kg	1180	1210	1470	1530	1530	2030
	Operating weight	kg	1190	1220	1480	1540	1540	2040

(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; entering/leaving water temperature 23/18°C.
(3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 30/35°C.
(4) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 40/45°C.
(5) Cooling: water inlet/outlet temperature 7/12°C.
(6) Heating: average climatic conditions; Tbiv = -7°C; inlet/outlet water temperature 30/35°C.
(7) Indicative data, subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) The indicated volume refers to the total required amount; the designer must meet this requirement by taking into account the quantity already present inside the unit, depending on the selected hydronic kit (please check this value in the technical data sheet).
(9) Condition (1); value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1
(10) Value calculated from the sound power level using ISO 3744:2010, referred to a distance of 10 m from the unit.
(11) Cooling BT version: outdoor air temperature 35°C, internal heat exchanger water temperature = -3/-8°C. Fluid treated with 35% ethylene glycol.

			04199	04215	04237	04273	04304	04345
Cooling	Cooling capacity (1)	kW	187	208	225	260	289	325
	Total absorbed power (1)	kW	59,4	67,2	77,5	80,6	92,9	112
	EER (1)	W/W	3,15	3,10	2,90	3,22	3,10	2,90
	Cooling capacity (2)	kW	252	282	301	351	388	434
	Total absorbed power (2)	kW	63,8	71,6	83,2	87,0	101	122
	EER (2)	W/W	3,95	3,94	3,62	4,04	3,86	3,56
	SEER (5)	W/W	4,64	4,71	4,53	4,65	4,73	4,42
	Cooling capacity (11)	kW	111	129	140	155	177	203
	Total absorbed power (11)	kW	54,3	60,0	69,4	72,3	84,2	99,9
	EER (11)	W/W	2,04	2,15	2,02	2,14	2,10	2,03
	Water flow rate (1)	l/s	8,9	10,0	10,7	12,4	13,8	15,5
	Pressure drops in the heat exchanger, user side (1)	kPa	45,4	55,7	38,5	50,7	36,8	46,0
Heating	Heating capacity (3)	kW	207	223	246	286	316	356
	Total absorbed power (3)	kW	50,7	54,8	61,1	69,2	78,3	88,5
	COP (3)	W/W	4,09	4,07	4,02	4,13	4,04	4,02
	Heating capacity (4)	kW	198	214	237	273	303	344
	Total absorbed power (4)	kW	61,5	66,0	74,0	83,8	94,7	108
	COP (4)	W/W	3,22	3,24	3,20	3,26	3,20	3,20
	SCOP (6)	W/W	3,84	3,96	4,00	3,92	3,95	4,01
	Water flow rate (4)	l/s	9,5	10,2	11,3	13,0	14,5	16,5
	Pressure drops in the heat exchanger, user side (4)	kPa	50,6	58,6	42,5	55,8	40,4	51,6
	Energy efficiency water 35°C/55°C	class	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+	A++/A+
Compressor	Compressor type		SCROLL					
	Refrigerant oil (type)		Emkarate RL 32 3MAF					
	No. of compressors	No.	4	4	4	4	4	4
	Standard capacity steps	No.	6	4	6	5	5	5
	Oil charge (Circuit 1)	l	4,44 + 3,25	4,44 + 4,44	4,44 + 4,44	6,3 + 4,44	6,3 + 6,3	6,3 + 6,3
	Oil load (Circuit 2)	l	4,44 + 3,25	4,44 + 4,44	4,44 + 4,44	4,44 + 4,44	4,44 + 4,44	4,44 + 4,44
	Refrigerant circuits	No.	2	2	2	2	2	2
Refrigerant	Type		R410A					
	Refrigerant charge (Circuit 1) (7)	kg	18,0	25,5	28,5	43,0	47,0	50,0
	Refrigerant charge (Circuit 2) (7)	kg	18,0	24,0	28,5	36,0	34,0	30,0
	Tons of CO2 equivalent (7)	Ton	75,2	103,4	119,0	165,0	169,1	167,0
	Design pressure (high/low)	bar	40,5/2,5	40,5/2,5	40,5/2,5	40,5/2,5	40,5/2,5	40,5/2,5
Outdoor zone fans	Fan types		AXIAL					
	No. of fans	No.	4	4	4	6	6	6
	Rated power (1)	kW	1,4	1,4	1,4	1,4	1,4	1,4
	Maximum power	kW	7,60	7,60	7,60	11,40	11,40	11,40
	Maximum absorbed current	A	3,9	3,9	3,9	3,9	3,9	3,9
	Standard air flow rate	l/s	20888	20815	20738	31370	31264	31109
Internal heat exchanger	Internal heat exchanger type		PHE – PLATE TYPE					
	No. of indoor heat exchangers	No.	1	1	1	1	1	1
	Water content	l	11,40	11,40	15,50	15,50	22,10	22,10
Hydraulic circuit	Max water-side pressure	bar	12	12	12	12	12	12
	Max. hydraulic unit pressure (safety valve setting)	bar	6	6	6	6	6	6
	Water connections		3"	3"	3"	3"	3"	3"
	Minimum system water content (8)	l	610	610	780	1020	1020	1290
Sound data	Sound power (9)	dB (A)	89 std 88 SL 85 SSL	89 std 88 SL 85 SSL	90 std 89 SL 86 SSL	90 std 89 SL 86 SSL	91 std 90 SL 87 SSL	92 std 91 SL 88 SSL
	Sound pressure (10)	dB (A)	56,9 std 55,9 SL 52,9 SSL	56,9 std 55,9 SL 52,9 SSL	57,9 std 56,9 SL 53,9 SSL	57,8 std 56,9 SL 53,9 SSL	58,8 std/ 57,8 SL/ 54,8 SSL	59,8 std/ 58,8 SL/ 55,8 SSL
Electrical data	Power supply		400V/3P/50Hz					
	Max. power input without accessories	kW	92,8	97,8	110,0	123,8	139,8	160,1
	Max current absorbed without accessories	A	157,6	166,0	186,8	210,2	237,4	271,8
	Maximum inrush current without accessories	A	360,2	368,6	425,7	454,8	482,0	597,2
Dimensions and weights	A - Length	mm	2860	2860	2860	4060	4060	4060
	B - Depth	mm	2200	2200	2200	2200	2200	2200
	C - Height	mm	2350	2350	2350	2350	2350	2350
	Net shipping weight	kg	2060	2100	2130	2680	2880	2900
	Operating weight	kg	2070	2110	2140	2700	2900	2930

(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; entering/leaving water temperature 23/18°C.
(3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 30/35°C.
(4) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 40/45°C.
(5) Cooling: water inlet/outlet temperature 7/12°C.
(6) Heating: average climatic conditions; Tbiv = -7°C; inlet/outlet water temperature 30/35°C.
(7) Indicative data, subject to change. For the correct data, always refer to the technical nameplate on the unit.
(8) The indicated volume refers to the total required amount; the designer must meet this requirement by taking into account the quantity already present inside the unit, depending on the selected hydronic kit (please check this value in the technical data sheet).
(9) Condition (1); value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1
(10) Value calculated from the sound power level using ISO 3744:2010, referred to a distance of 10 m from the unit.
(11) Cooling BT version: outdoor air temperature 35°C, internal heat exchanger water temperature = -3/-8°C. Fluid treated with 35% ethylene glycol.

Price list

HWA1-A/H			02109	02121	02142	02148	02160	04176
HWA1-A/H	Reversible heat pump	€	43.593	46.217	54.504	55.616	59.176	73.709
WEEE		€	10	10	10	10	10	10
FACTORY-MOUNTED ACCESSORIES								
2SFV	Double safety valve	€	415	415	415	415	831	831
ACK6	Summer-Winter Indication	€	207	207	207	207	207	207
BT	Reversible heat pump, BT version	€	4.280	4.280	5.408	6.761	7.872	4.240
C	Ductable version	€	3.374	3.374	5.450	5.450	5.450	5.450
CC	Condensation control down to -20°C (Only with EC fans)	€	2.076	2.076	2.855	2.855	2.855	3.633
C(S)	Ductable version with compressor soundproofing	€	4.361	4.466	6.614	6.614	6.963	7.086
CM	Serial communication module for Modbus	€	825	825	825	825	825	825
CT	Condensation control down to -10°C	€	379	379	379	379	561	561
DS	Partial heat recovery heat pump (desuperheater circuit)	€	3.155	3.485	4.943	5.766	4.979	7.914
EC	EC fan (included in C, BT, SSL versions). DC control included	€	2.076	2.076	2.855	2.855	2.855	3.633
GR1	Anti-intrusion kit for refrigeration circuit compartment	€	2.165	2.165	2.644	2.644	2.644	2.769
GR2	Anti-intrusion battery compartment kit	€	753	753	753	753	753	753
GR3	Anti-intrusion kit for battery compartment and circuit	€	2.918	2.918	3.396	3.396	3.396	3.521
IM	Magnetic circuit breakers on compressors and fans	€	844	844	844	844	1.480	1.713
KA1	Adhesive heater for heat exchanger + pump heater (if present). Not available for units with tank	€	246	246	246	246	246	246
KA2	Adhesive heater exchanger + pump heater (if present) + heater	€	909	909	909	909	909	909
KS	Lifting bracket kit	€	285	285	285	285	285	285
LQ	Internal electrical panel lights	€	454	454	454	454	454	454
PD	Twin pump, standard head	€	7.007	7.007	7.007	7.007	7.007	7.865
PD-SI	Dual standard-head pump + tank	€	10.245	10.245	11.614	11.614	11.614	11.809
PDAP	Dual high-head pump	€	8.046	8.046	8.046	9.343	9.603	9.603
PDAP-SI	Double high-head pump + tank	€	11.543	12.199	13.626	13.626	13.626	13.626
PS-SI	Standard head pump + tank	€	7.332	7.332	8.500	8.500	8.500	8.500
PS	Standard head pump	€	4.153	4.153	4.153	4.153	4.153	4.153
PSAP	High-head pump	€	4.802	4.802	4.802	6.034	6.034	6.034
PSAP-SI	High head pump + tank	€	8.371	8.371	9.538	9.538	9.538	9.538
RFM	Delivery and suction valves for compressors	€	410	410	818	818	818	818
SH	Schuko socket (with miniature circuit breaker)	€	272	272	272	272	272	272
SL	Silenced version	€	987	1.092	1.163	1.163	1.513	1.635
SS	Soft starter	€	3.715	4.955	4.955	4.955	5.353	5.353
SSL	Ultra-silent version	€	3.499	3.499	4.848	5.320	5.320	7.007
TE1	Special mechanical seal for glycol >40%	€	364	364	364	559	559	559
TR2	Cu/Al coil with Silver Line anti-corrosion treatment - Cu	€	3.374	3.763	4.412	4.931	4.931	5.190
ACCESSORIES SUPPLIED SEPARATELY								
AG	Rubber anti-vibration mounts	€	727	727	1.078	1.078	1.078	1.078
AM	Spring anti-vibration mounts	€	1.873	2.485	2.485	2.485	2.485	2.485
FY	Y-strainer	€	175	175	175	251	251	376
Hi-TV415	Touchscreen remote control	€	640	640	640	640	640	640
i-CR2	Wall-mounted remote control	€	319	319	319	319	319	319
RV	Starter kit consisting of 2 jaws and 2 plain stubs	€	150	150	150	150	150	150
SAS	Remote sensor	€	47	47	47	47	47	47

For accessories of the DAS monitoring system (ISK, LNC, OVPN), see chapter "Connection devices for Maxa DAS supervision system"
WEEE for Italian market only.

Price list

HWA1-A/H			04199	04215	04237	04273	04304	04345
HWA1-A/H	Reversible heat pump	€	82.509	85.810	88.282	100.896	112.036	116.584
WEEE		€	10	10	10	10	10	10
FACTORY-MOUNTED ACCESSORIES								
2SFV	Double safety valve	€	831	831	831	831	831	831
ACK6	Summer-Winter Indication	€	207	207	207	207	207	207
BT	Reversible heat pump, BT version	€	5.207	5.419	7.266	5.515	2.268	5.532
C	Ductable version	€	6.566	6.566	6.566	10.642	10.642	11.939
CC	Condensation control down to -20°C (Only with EC fans)	€	3.633	3.633	3.633	5.840	5.840	5.840
C(S)	Ductable version with compressor soundproofing	€	8.280	8.280	8.415	12.491	12.601	13.898
CM	Serial communication module for Modbus	€	825	825	825	825	825	825
CT	Condensation control down to -10°C	€	561	561	561	561	561	561
DS	Partial heat recovery heat pump (desuperheater circuit)	€	4.220	4.389	5.839	6.201	6.133	9.814
EC	EC fan (included in C, BT, SSL versions). DC control included	€	3.633	3.633	3.633	5.840	5.840	5.840
GR1	Anti-intrusion kit for refrigeration circuit compartment	€	2.769	2.769	2.769	3.247	3.247	3.247
GR2	Anti-intrusion battery compartment kit	€	1.070	1.070	1.362	1.362	1.622	1.622
GR3	Anti-intrusion kit for battery compartment and circuit	€	3.839	3.839	4.132	4.611	4.870	4.870
IM	Magnetic circuit breakers on compressors and fans	€	1.713	1.713	1.713	2.531	2.531	2.984
KA1	Adhesive heater for heat exchanger + pump heater (if present). Not available for units with tank	€	246	246	246	246	246	246
KA2	Adhesive resistance of heat exchanger + pump resistance (if present) + resistance	€	909	909	909	909	909	909
KS	Lifting bracket kit	€	285	285	285	285	285	285
LQ	Internal electrical panel lights	€	454	454	454	454	454	454
PD	Twin pump, standard head	€	7.865	8.383	8.383	9.811	10.252	11.160
PD-SI	Dual standard-head pump + tank	€	11.809	14.923	15.832	17.389	17.389	18.686
PDAP	Dual high-head pump	€	9.603	9.863	10.252	11.420	12.458	12.977
PDAP-SI	Double high-head pump + tank	€	11.160	11.420	11.939	12.977	13.366	13.366
PS	Standard head pump	€	4.153	4.153	4.153	5.710	6.436	6.436
PS-SI	Standard head pump + tank	€	10.382	10.382	10.900	11.939	12.329	12.329
PSAP	High-head pump	€	6.034	6.294	6.294	7.267	7.527	7.786
PSAP-SI	High head pump + tank	€	16.222	17.129	17.649	17.649	19.206	20.503
RFM	Delivery and suction valves for compressors	€	818	818	818	818	1.151	1.151
SH	Schuko socket (with miniature circuit breaker)	€	272	272	272	272	272	272
SL	Silenced version	€	1.713	1.713	1.849	1.849	1.960	1.960
SS	Soft starter	€	7.425	7.425	7.425	7.630	9.898	11.224
SSL	Ultra-silent version	€	8.306	8.954	9.084	13.236	13.756	13.756
TE1	Special mechanical seal for glycol >40%	€	559	559	559	559	559	559
TR2	Cu/Al coil with Silver Line anti-corrosion treatment - Cu	€	5.190	5.970	5.970	8.176	9.084	9.084
ACCESSORIES SUPPLIED SEPARATELY								
AG	Rubber anti-vibration mounts	€	1.315	1.315	1.315	1.315	2.257	2.457
AM	Spring anti-vibration mounts	€	2.444	2.444	2.444	2.444	3.169	3.169
FY	Y-strainer	€	376	426	426	426	477	477
Hi-TV415	Touchscreen remote control	€	640	640	640	640	640	640
i-CR2	Wall-mounted remote control	€	319	319	319	319	319	319
RV	Starter kit consisting of 2 jaws and 2 plain stubs	€	150	150	200	200	200	200
SAS	Remote sensor	€	47	47	47	47	47	47
STANDARD								
Remote probe enablement		€	standard					
Second setpoint enable		€	standard					

For accessories of the DAS monitoring system (ISK, LNC, OVPN), see chapter "Connection devices for Maxa DAS supervision system"
WEEE for Italian market only.

Available functions table

GI / GI3 hardware expansion modules

	GI module					
	i-32V5 	i-32V5 SL 	MIDI 	i-HPV5 	i-MAX 	HWA1 
	10 ÷ 16	12 ÷ 16				
Remote On/Off	□	□	□	□	□	□
Domestic hot water management	□	□	□	□	□	X
Domestic hot water heater integration	□	□	□	■	■	X
Integration of system resistance	□	□	□	■	■	■
Boiler enable integration	□	□	□	■	■	■
Digital contact, dual setpoint	□	□	□	□	■	■
Digital summer-winter contact	□	□	□	□	■	■
Operating mode indication	□	□	□	■	■	■
Defrost cycle in progress notification	□	□	□	■	■	■
Dual-zone management	■	■	■	■	■	■
Alarm/trip notification	□	□	□	■	■	■
Block notification	□	□	□	■	■	■
Remote water system probe	■	■	■	■	■	■
Secondary circulator	■	■	■	■	■	■
Mixing valve	■	■	■	■	■	X
Solar thermal integration	■	■	■	■	■	X
Weather compensation	□	□	□	□	□	□

Function available only with accessory GI ■
Function available as standard, no accessories required □
Function not available X

* The GI is not compatible with i-32V5 and i-32V5 SL sizes 06A, 08A, 10T A, 12T A, 14T A, 16T A, 18T A

Remote Controllers Compatibility Table

	i-32V5	i-32V5 SL	MIDI	i-HPV5	i-MAX	HWA1
e-Lite 	■	■	■	■	X	X
e-Pro 	■ **	■ **	■	■ *	X	X
i-CR 	■	■	■	■	■	■
Hi-TV415 *** 	■	■	■	■	■	■

** Energy measurements not available*
*** No backward compatibility with models 06, 08, "T"*
**** Necessary accessory for cascade management*

Compatible ■
Not compatible X

GI3 Module

i-32V5 *	i-32V5 SL *	i290 0106÷0118	i290 0121÷0127	i290 0240÷0250	
					
□	□	□	□	□	Remote On/Off
□	□	□	□	□	Domestic hot water management
□	□	□	□	■	Domestic hot water heater integration
□	□	□	□	■	Integration of system resistance
□	□	□	□	■	Boiler enable integration
□	□	□	□	■	Digital contact, dual setpoint
□	□	□	□	□	Digital summer-winter contact
□	□	□	□	■	Operating mode indication
□	□	□	□	■	Defrost cycle in progress notification
■	■	■	■	■	Dual-zone management
□	□	□	□	■	Alarm/trip notification
□	□	□	□	■	Block notification
□	□	□	□	■	Remote water system probe
■	■	■	■	■	Secondary circulator
■	■	■	■	■	Mixing valve
■	■	■	■	■	Solar thermal integration
□	□	□	□	□	Weather compensation

Function available only with accessory GI3 ■
Function available as standard, no accessories required □
Function not available X

* The GI3 is not compatible with i-32V5 and i-32V5 SL sizes 10, 12, 14, 16

i290 0106÷0118	i290 0121÷0127	i290 0240÷0250	HWA1	HWA2	
					
■	■	■	X	X	e-Lite 
■	■	■ *	X	X	e-Pro 
X	X	X	■	■	i-CR2 
■	■	■	■	■	Hi-TV415 *** 

My Maxa

Simplicity, comfort, and complete control at your fingertips with the My Maxa app.

The My Maxa app allows remote management of MAXA heat pumps connected via the e-Pro controller.

Through the My Maxa APP, one or more MAXA heat pump installations can be associated with your user profile, thereby granting you full remote control. The main operations that can be performed using the My Maxa APP are:

- switching the heat pump on and off
- the adjustment of the operating temperature of the heat pump in the different operating modes (heating, cooling, and domestic hot water)
- the transition from manual to programmed operation
- the display of the main operating data of the heat pump
- the weekly time scheduling of the main functions of the heat pump
- the visualization of energy data through time-based charts
- changing the desired room temperature (only with room thermostat function enabled)
- the display of the room temperature (only with the room thermostat function enabled).

Available on the App Store

ANDROID APP ON Google play

Multi-system management

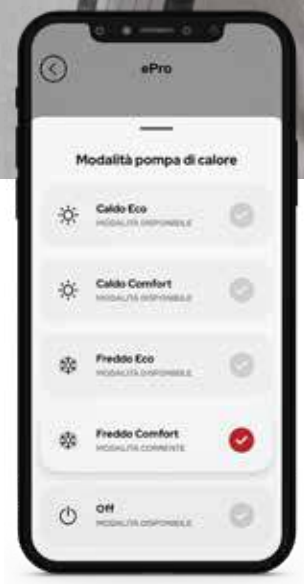
The app is designed to simplify the management of multiple heat pumps associated with the same user profile.
A single interface provides a comprehensive overview of all installed systems.

Room temperature control

In **room thermostat** mode, the app allows you to change the set temperature at any time, ensuring precise and immediate control. This function makes it possible to rapidly adapt the system to the users' varying needs.

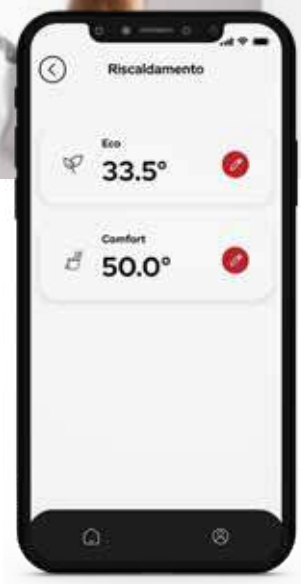
Immediate monitoring

The **control mode** displays the main operating parameters: the domestic hot water temperature, the current flow temperature, and the outdoor temperature.
A single glance provides an overview of the entire situation.



Change of operating mode

From the dedicated section, it is possible to change the heat pump's **operating mode**. This option simplifies seasonal changeover management and allows the heat pump to be adapted to the current needs of the system.



Preset setpoints

Each operating mode allows you to set two customized temperature values, "ECO" and "COMFORT." This function is particularly useful for programming different usage scenarios, helping to reduce energy consumption without sacrificing comfort.

Water temperature control

Water temperature management is made immediate thanks to a dedicated slider. The setting is intuitive and, at the same time, precise.

Chrono-programming

It is possible to schedule both the desired room temperature and the water temperature in the different operating modes.

Real-time energy data

The energy data of the heat pump are always available and presented in a clear and straightforward manner.

Historical analysis

Through dedicated charts, it is possible to view the history of energy data—an advanced tool for monitoring system efficiency and optimizing its performance.

e-Pro

Wired Remote control, Wi-Fi connected

e-Pro is the new smart remote controller by Maxa, designed to provide advanced and intuitive control of heat pumps in residential and commercial applications.
Thanks to 2.4 GHz Wi-Fi connectivity and integration with the My Maxa app, it is possible to manage heating, cooling and domestic hot water production functions simply and efficiently, even remotely, directly from a smartphone. Equipped with a 4" color graphic LCD display with touch-screen technology, e-Pro combines elegant design with a modern, intuitive interface designed for wall installation.
The user can quickly access all operating settings through dedicated pages, such as heat pump control or the room chronothermostat, ensuring a comprehensive and immediate user experience.
e-Pro also incorporates advanced energy efficiency functions, such as automatic room temperature control and dynamic adjustment of the supply temperature based on outdoor conditions.
The result is an intelligent management system that optimizes energy consumption, enhances comfort, and ensures maximum efficiency in every season.

e-Pro is compatible with Maxa heat pumps from the i-290 (0106–0127), i-32V5, i-32V5SL, Atria, and i-32V5 Midi ranges.

Main functions

- Temperature control for heating, cooling and domestic hot water production
- Real-time diagnostics and data visualization
- Setting and management of setpoints
- Daily and weekly scheduling for cooling, heating, domestic hot water production, and room temperature
- Selection of climatic curves for cooling and heating
- The main European languages are supported

Integrated Energy Efficiency

The advanced energy management system automatically reduces the screen brightness when not in use and adjusts the lighting to ambient conditions. e-Pro consumes less than 1 W in standby, complying with the strictest CE certifications.

Connectivity and Automation

Thanks to the built-in Wi-Fi module, the e-Pro can be connected to the local Wi-Fi network, ensuring automatic updates and advanced services.

Tailored Comfort

Equipped with an integrated thermostat and customizable modes, e-Pro maintains an ideal climate at all times thanks to daily, weekly, or holiday scheduling.

Intuitive Use

The touch screen interface simulates the presence of backlit keys, providing an intuitive user experience.
Dynamic icons offer immediate visual feedback on the status of the heat pump and on active functions, ensuring fast and easy navigation.

Guaranteed Reliability

Each e-Pro undergoes rigorous quality testing with advanced diagnostic functions that ensure maximum long-term reliability. Firmware self-recovery and intelligent alert management ensure that the device is always ready for use.

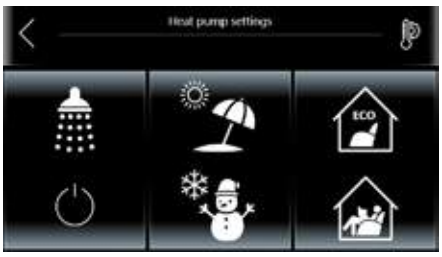
Price list

e-Pro	Wired Remote control, Wi-Fi connected	code	010022520010
		€	450

e-Lite

Multifunction touch screen wired control

e-LITE is a remote control with a touch-screen interface and capacitive color LCD display, designed for wall-mounted installation in indoor residential and commercial environments.
Compatible with MAXA heat pumps and water chillers, it uses Modbus communication to ensure simple and effective integration. In addition to serving as a remote control panel for the unit, it is equipped with a local sensor for temperature detection, thus ensuring precise and reliable comfort management.
e-LITE can be configured with a single machine and does not allow network management of multiple units, while still ensuring accurate, centralized control of system performance.



e-Lite is compatible with Maxa heat pumps from the i-290, i-32V5, i-32V5SL, Atria, i-32V5 Midi, and i-HPV5 ranges..

The e-Lite remote controller replicates all the functions available on board the MAXA unit, including:

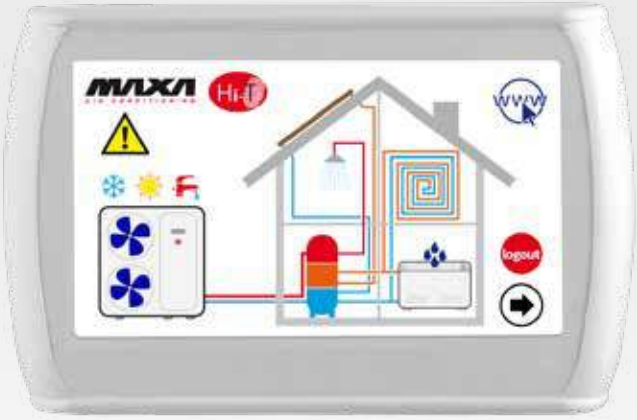
- Switching on and off
- Setting the operating mode
- Setpoint configuration (heating, cooling, domestic hot water production)
- Real-time diagnostics and data visualization
- DHW production enablement
- Enable dual setpoint.
- Dynamic setpoint enablement
- Room thermostat
- 12 Vdc power supply included
- Micro SD slot for firmware updates

Price list

e-Lite	Multifunction touch screen wired control	code	0110490101
		€	450

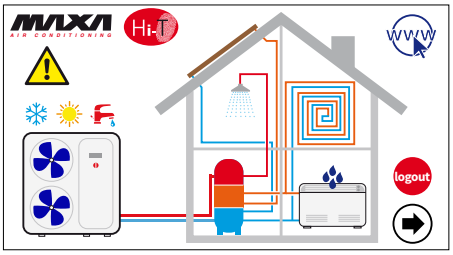
Hi-TV415

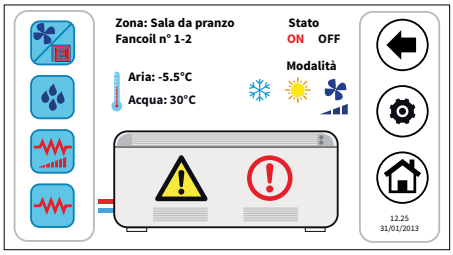
Multifunction touch screen wired control

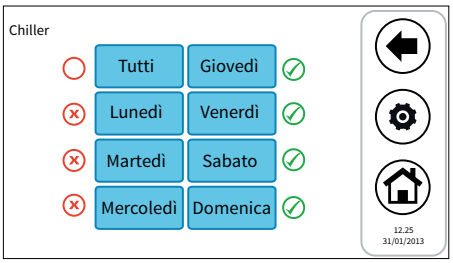


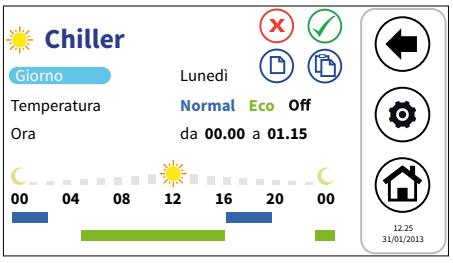
Hi-TV415 is a touchscreen remote control designed to ensure efficient management of both single systems and complex systems consisting of multiple units in cascade. Thanks to its integrated temperature and humidity sensor, the device not only enables thermo-hygrometric monitoring of the environment, but also provides thermostat functionality with dual setpoint control, ideal for underfloor radiant systems equipped with dehumidification units.
Equipped with an intuitive color graphical interface enhanced by easily understandable synoptic diagrams, Hi-TV415 simplifies the use and configuration of all functions. It can be used as a remote panel for a single chiller or heat pump, as a room thermostat for zone management, or as a centralized control system for a network of chillers, heat pumps, and RFC systems.

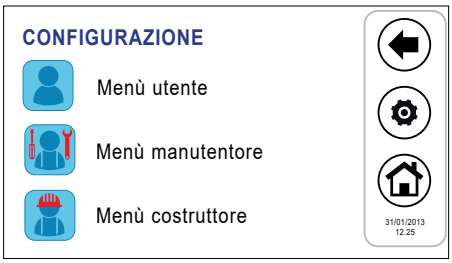
The controller monitors and periodically polls the network, with a cycle time that varies according to the size of the fan coil and/or heat pump system. In multicircuit systems, the parameters and resources relating to the first circuit are displayed. Hi-TV415 therefore represents a complete, versatile and intuitive solution for advanced plant control.











Price list

Hi-TV415	Multifunction touch screen wired control	code	0110490098
		€	640

i-CR2

Touch-screen wired control

Touchscreen remote control with negative LCD display and capacitive keys, designed for residential and commercial applications. Developed as a Modbus remote keypad, it allows management of a single unit by conveniently replicating all main on-board control functions, such as probe reading and parameter access, directly from the home or installation site.

Configurable exclusively with a single unit and not with machine networks, i-CR2 stands out for its ease of use, elegant design, and reliability, making it the ideal solution for the daily control of heat pumps or water chillers.

Other important functions are listed below:

- Dual setpoint.
- Weekly programmable room thermostat.
- Anti-legionella cycle.
- Alarm history.
- Room thermostat

ON/OFF BACKLIGHT
Function operating at thermostat level; switches the LED and backlight on and off. When in OFF mode, the keypad does not accept commands. This function has no effect on unit control, but enables/disables interaction with the thermostat. It allows exiting the menu. If pressed for 3 seconds, it activates standby mode and locks the keypad (the padlock icon appears). This function has no effect on unit control, but enables/disables user interaction with the thermostat keypad.

UP
Allows you to move to a higher-level menu or increase the value of a parameter

DOWN
Allows you to move to a lower-level menu or to decrease the value of a parameter.

CHRONOTHERMOSTAT
Allows you to set the operating ranges for thermostat control based on the room temperature measured by the sensor integrated in the i-CR2.

SEASON CHANGE BUTTON
A prolonged 3-second press is required to change the operating mode (season) or to switch the heat pump or chiller to OFF.

ENTER KEY
Allows entering the menus or confirming a parameter

Price list

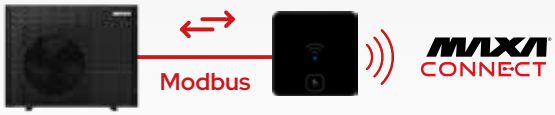
i-CR2	Touch-screen wired control	€	319

Connect Box

Gateway Wireless

Connect Box is the ModBus-to-Wi-Fi converter that enables direct interfacing between MAXA heat pumps and the local network, allowing full management via the Maxa Connect application. Once connected to the home router, the device immediately links the heat pump to the MAXA cloud, providing simple and instant access to all operating information.

Connect Box is compatible with Maxa heat pumps from the i-290, i-32V5, i-32V5SL, i-32V5 Midi and i-HPV5 ranges.



Through the **Maxa Connect** app, available both as a mobile application and as a Web App accessible from any browser, you can monitor key parameters in real time, such as system water temperatures, set operating modes, and check instantaneous power and the thermal energy produced. The intuitive interface ensures a comprehensive user experience that is accessible to everyone.

The ease of installation and seamless integration with the onboard electronics make Connect Box an ideal solution not only for residential applications, but also for commercial and tertiary settings, where it enables plant managers to directly and precisely control operating parameters.

Intuitive user interface

User-friendly interface that enables users to easily monitor and manage their systems and installations.

Diagnostics and monitoring

Advanced diagnostic tools enable real-time monitoring of system status, allowing rapid identification and remote resolution of issues. View and access a complete history of alarms/events.

Safety

Use of cutting-edge security technologies to protect data and ensure secure communication with service technicians.

Remote configuration

The platform allows remote adjustment of system and installation settings, minimizing the need for a technician to be physically present on site. 24/7 access to installations. Management of schedules and modification of installation parameters.

Start My Connect

Connect Box allows authorized service centers to interact with the heat pump through the dedicated professional app: Start My Connect.

The latter enables the pairing of the Connect Box with the user's heating system.

Price list

Connect Box	Gateway Wireless	code	0110490103
		€	309

Maxa Das

Supervision, monitoring and analysis system

The MAXA DAS software was developed to meet the need for a complete, high-performance program for carrying out parameter configurations and testing on the production line.
It makes it possible to collect all information related to the unit's production, and allows the test engineer to analyze process data intuitively through a programmable graph.
In addition, it is designed to be used by after-sales office staff, service centers and installers as an analysis and monitoring tool for MAXA units during commissioning, maintenance, and in the event of operating faults.

Compatible with i-290, i-32V5, i-32V5 MIDI, i-HPV5, i-MAX, HWA1-A, HWA1-A/H.

Maxa SCADA

It is the beating heart of the DAS system: a PC software application associated with a license—free of charge if linked to the purchase of a connection device—that acquires all data and parameter settings of the unit or system in real time and sends them to the graphical visualization system.

- Multi-connection system with local units or units integrated into a LAN/Wi-Fi network, also suitable for remote connections.
- Simple and intuitive tree-based selection of the model to be monitored.
- Forced unit status.
- Monitoring of system variables, with an alarm notification system via pop-up or email.
- Unit parameterization.
- Process logging.
- Event logging and data traffic debugging.
- Import of new models or updated revisions via quick library import.
- User access level management.
- Available in Italian and English
- Online help
- Multiple levels of user management.

Maxa TREND

Useful for heat pumps and cooling-only units, it displays all ongoing processes through configurable, multi-level customizable graphs.

- Graphical analysis of the acquired measurements with customizable traces.
- List of alarm activations and deactivations and timestamp.
- Cursor functionality for viewing and navigating the plotted data.
- Zoom for analysis on a temporal detail or a specific range of values.
- Real-time update of an ongoing process.

Connectivity

There are three ways to connect our heat pump to the DAS monitoring system, each with a different level of operability.

- **Serial converter - Accessory ISK**: Direct connection to the units via RS-485 serial cable and USB. For quick maintenance performed directly on the units.
- **LAN-WiFi Router - Accessory LNC**: Connection of the units to a local network via Ethernet cable or WiFi coverage. For local remote monitoring, ideal for residential and commercial applications.
- **4G LAN-WiFi Router with VPN Tunnel - OVPN** Accessory: Remote connection of units via industrial router using a secure, protected OPENVPN service. For unlimited long-distance monitoring worldwide.

Price list

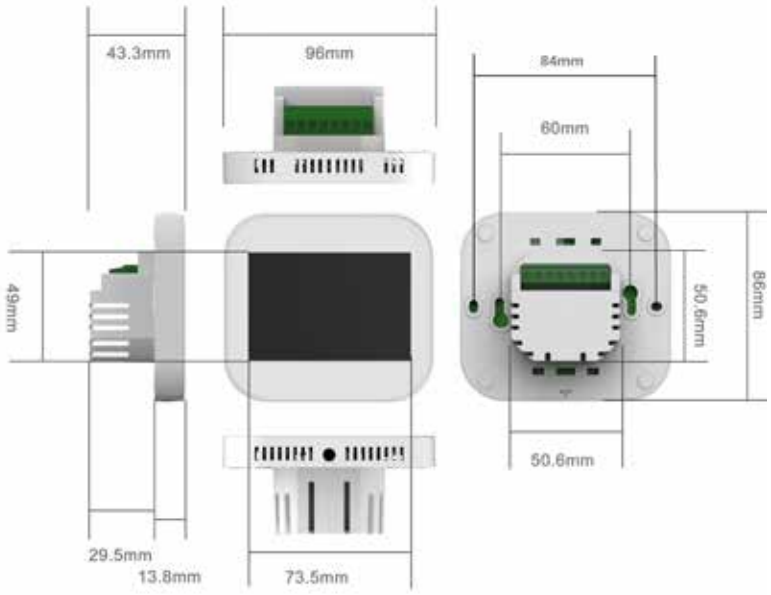
ISK	USB RS-485 serial converter, includes one Maxa DAS license	code	0110490065
		€	128
Low Noise Cabin	Local LAN/Wi-Fi gateway, includes one Maxa DAS license	code	0110490068
		€	319
OVPN	Remote OpenVPN converter LAN/Wi-Fi/4G, includes one Maxa DAS license	code	0110490069
		€	988
High-gain antenna	High-gain antenna, accessory for 0110490069	code	0110490070
		€	277
OpenVPN Client first year for Computer	Client subscription on computer, 1st year for 0110490069	code	0110490071
		€	137
OpenVPN Client first year per machine	Client subscription on machine 1st year for 0110490069	code	0110490072
		€	137
OpenVPN subsequent years	One-year extension for each client subscription (Computer / Machine) for 0110490069	code	0110490073
		€	69

Controls for hydronic terminals

Airmust 3V A1 / 010 A1

Wi-Fi touch screen control / chronothermostat for wall installation

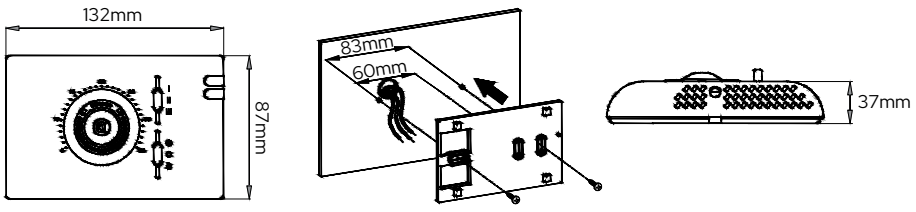
- 3.5" color LCD touch screen
- LCD resolution: 480x320 px
- Power supply 230V
- Maximum current (3V A1): 3A
- Thermostat function included
- Modbus
- 2.4G Wi-Fi connectivity
- APP available for Android and iOS: My House Pro
- 3-speed version (3V) or for 0–10 V motors (010)
- For 2-pipe and 4-pipe systems
- Window contact input
- Water probe inlet
- Automatic brightness
- Room temperature sensor
- Relative humidity sensor
- Operating mode management
- Mounting pitch with European standard
- Temperature and humidity measurement history
- Automatic changeover from cooling to heating mode
- Automatic management of daylight saving time / standard time changeover
- Multilingual
- Weekly schedule
- Weekly scheduling



Air-Cooled Chiller

Three-speed wall-mounted thermostat

- Wall-mounted thermostat 230V
- Relay contacts 5A/230V
- 3-speed fan selector
- Off-On-Manual Selector
- Management of 2-pipe system with or without 230V on-off valves



Airmust BMCP A1

Wi-Fi touch-screen controller for on-board installation on VSL fan coil units

- LCD display with five touch function keys
- Power supply 230V
- Maximum current: 5 A
- Thermostat function included
- Modbus
- 2.4G Wi-Fi connectivity
- App available on the stores for Android and iOS: SmartLife
- For 3-speed fan coil units
- For 2-pipe and 4-pipe systems
- Window contact input
- Water probe inlet
- Room temperature sensor
- Operating mode management
- Automatic changeover from cooling to heating mode
- Weekly scheduling (App only)

Airmust P

Wi-Fi touch-screen controller for wall-mounted installation

- LCD display with five touch function keys
- Power supply 230V
- Maximum current: 5 A
- Thermostat function included
- Modbus
- 2.4G Wi-Fi connectivity
- App available on the stores for **Android and iOS: SmartLife**
- For 3-speed fan coil units
- For 2-pipe and 4-pipe systems
- Window contact input
- Water probe inlet
- Room temperature sensor
- Operating mode management
- Automatic changeover from cooling to heating mode
- Weekly scheduling (App only)

* Images related to Airmust BMCP A1 and Airmust P models

Price list

	Code	€
AIRMUST 3V A1	011993780000	229
AIRMUST 010 A1	011993790000	237
AIRMUST BMCP A1	012508260000	237
AIRMUST P	012508170000	237
Air-Cooled Chiller	0119950036020	102
SND-A3*	011993800000	9

* Compatible only with Airmust 3V A1 and 010A1 models

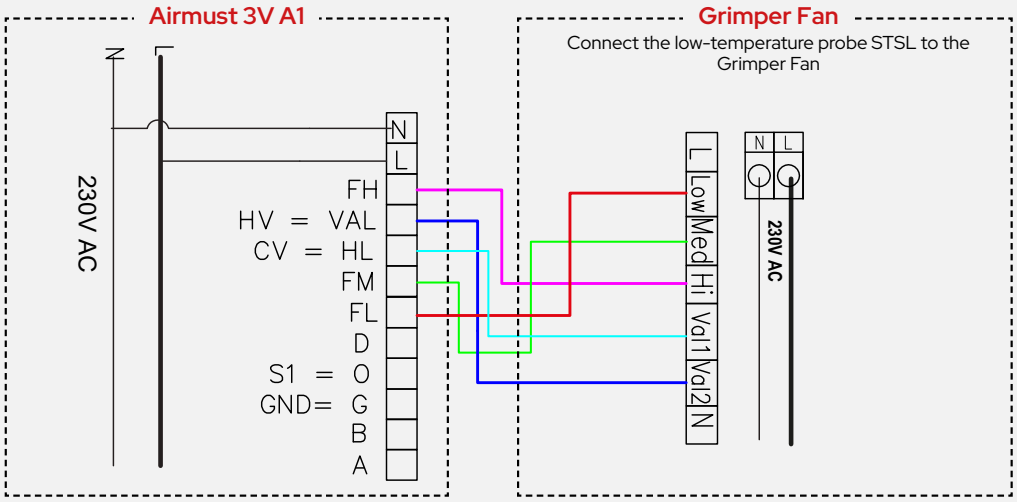
Compatibility table

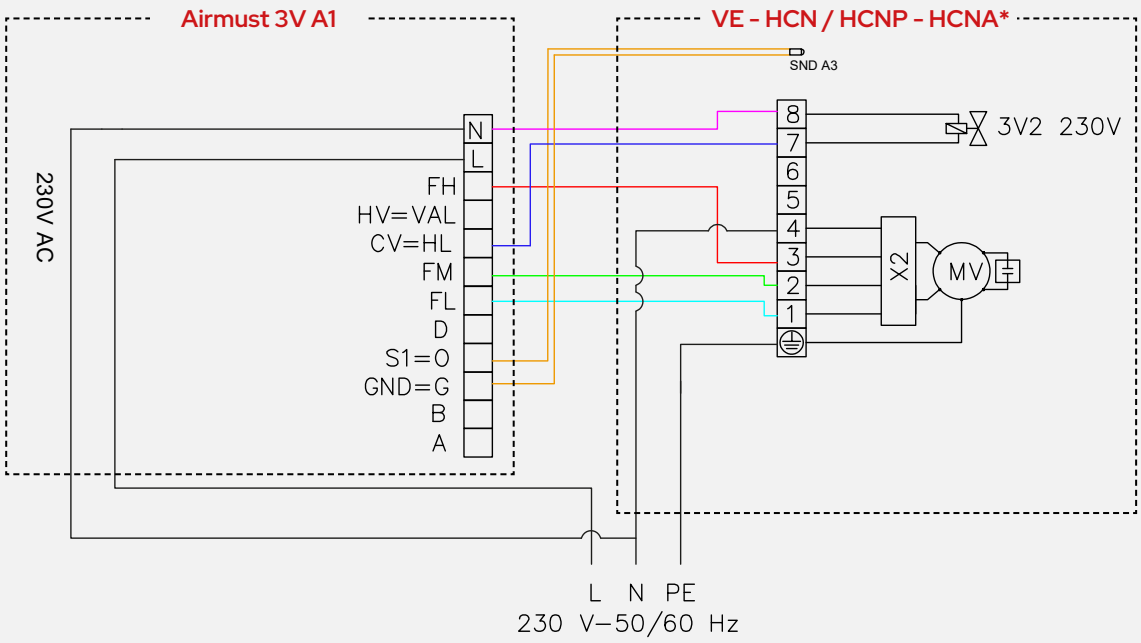
	 Air-Cooled Chiller	 AIRMUST BMCP A1	 AIRMUST P	 AIRMUST 3V A1	 AIRMUST 010 A1
GRIMPER MSL	X	X	■ (3)	X	X
GRIMPER VSL	X	■ (3)	■ (3)	X	X
GRIMPER BSL	X	X	■ (3)	X	X
VE: VMI, VMF, OMP, OMI	■	X	■ (1) (3)	■ (1)	X
VE: VII, VIF, OIP, OII	■	X	■ (1) (3)	■ (1)	X
VE: VMI, VMF, OMP, OMI Vers. MB	X	X	X	X	■ (1) (4)
VE: VII, VIF, OIP, OII Vers. MB	X	X	X	X	■ (1) (4)
HCN	■ (2)	X	■ (1) (3)	■ (1) (2)	X
HCN - Vers. MB	X	X	X	X	■ (1) (4)
HCNP	■ (2)	X	■ (1) (3)	■ (1) (2)	X
HCNP - Vers. MB	X	X	X	X	■ (1) (4)
HCNA	■ (2)	X	■ (1) (3)	■ (1) (2)	X
HCNA - Vers. MB	X	X	X	X	■ (1) (4)

(1) Not compatible with TMB – SND-A3 accessory required
(2) Check the power consumption; if necessary, add the SDI accessory.
(3) If necessary, add the STSL accessory for minimum winter temperature control.
(4) SDI accessory not required

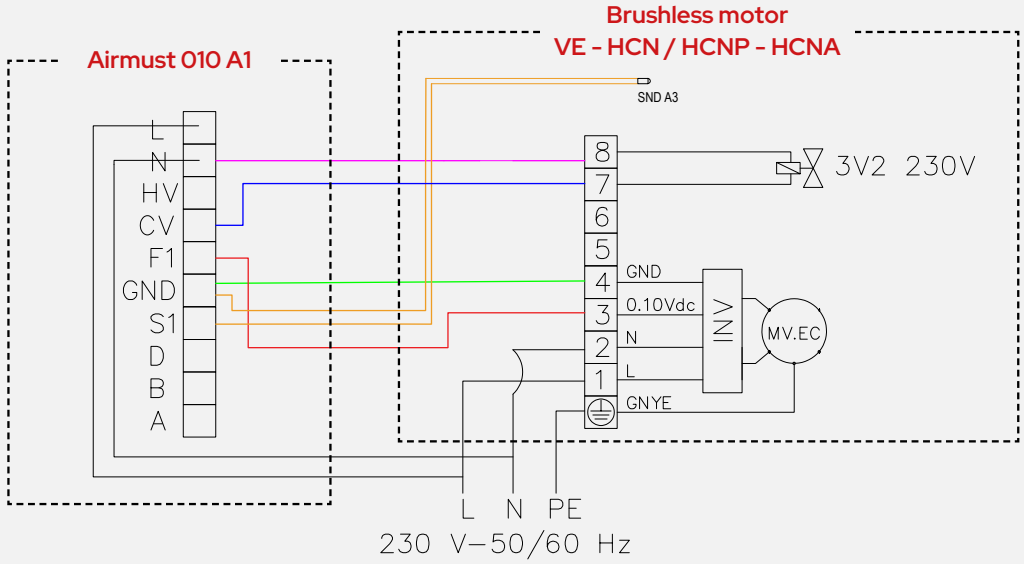
Compatible ■
Not compatible X

Wiring diagrams

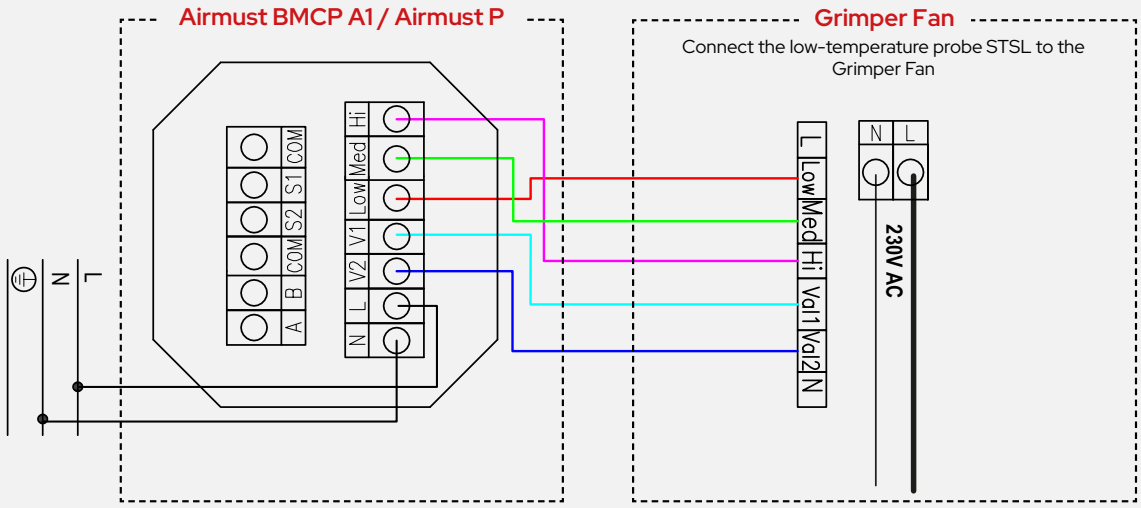




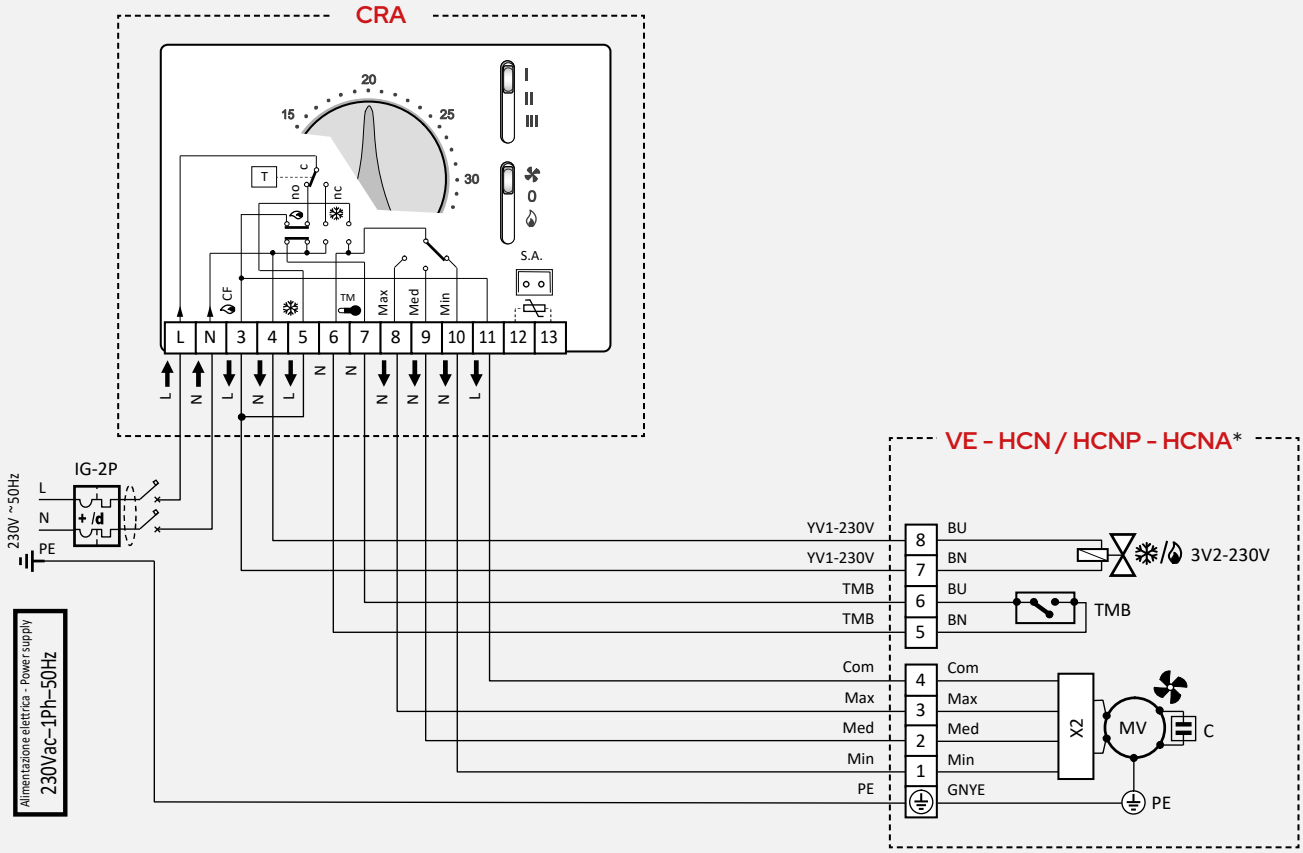
* Check the absorbed power; if necessary, add the SDI accessory.



Wiring diagrams



AIRMUST BMCP A1 / P: Parameter setting menu:
No. 1 = 1.
Leave all the others as default.
Warning: do not connect the supplied probe



* Check the absorbed power; if necessary, add the SDI accessory.

Grimper Fan

Ultra-slim fan coil unit

0.9 kW÷3.4 kW

The **12cm thick Grimper Fan range** is 10% thinner than its competitors in the slim segment.
Il **pannello hardened glass front** is interchangeable on both sides to allow piping to be connected on the left/right side without additional operation.

Una a feature that distinguishes the range is the **assenza front intake grilles**, thanks to the innovative ventilation system that improves battery performance when working at negative pressure.

Tutti the models are equipped with **ventilatori EC,** which improves quietness ensuring a noise level of less than **20 dB(A)**.

LOW ENERGY CONSUMPTION	ULTRA-THIN 12 CM	INFRARED REMOTE CONTROL including BSL / MSL	FAN EC	MINIMUM NOISE LEVEL 20 DB(A)	VSL: HYDRAULIC CONNECTIONS Right and Left	WI-FI OPTIONAL	APP AVAILABLE WITH AIRMUST	AIRMUST WIRED CONTROLLER accessory

The absence of front grilles allows for versatile Grimper Fan installation even in the tightest spaces.
The MSL and VSL models are compatible with 2- and 4-pipe installations, while the BSL model is compatible with 2-pipe installations.

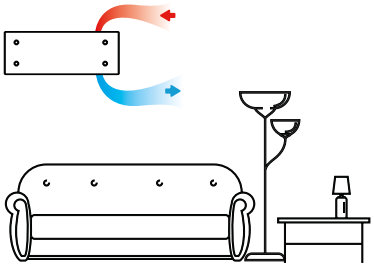
Completano the range i **filtri stainless steel pleated** with unlimited life, the **ventilatore aluminum tangential** and an included infrared **telecomando** (BSL, MSL models).

The entire Grimper Fan range offers simple and intuitive management thanks to the use of a touch screen control wire (accessory), and a convenient dedicated app. IT is possible to manage one or more connected units, both in residential and commercial settings.

La the range is made up of three models:

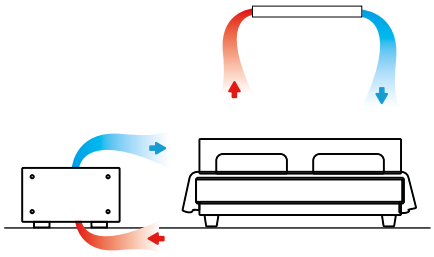
Grimper Fan MSL

High-wall installation



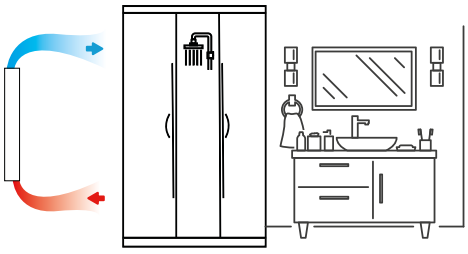
Grimper Fan VSL

Floor or ceiling installation



Grimper Fan BSL

Bathroom installation



Accessories

Supplied separately, common to the range

- **STSL**: Minimum water temperature sensor

Exclusive accessories for VSL model

- **2V2VSL**: 2-way straight valve kit with microswitch for VSL 09-27
- **2V2VSL34**: 2-way straight valve kit with microswitch for VSL 34
- **3V2VSL**: 3-way bypass valve kit with microswitch, 2-pipe, for VSL 09-27
- **3V2VSL34**: 3-way bypass valve kit with microswitch, 2-pipe, for VSL 34
- **3V4VSL**: 3-way bypass valve kit with micro switch, 4-pipe, for VSL
- **PEP09**: Rear aesthetic panel VSL 09
- **PEP18**: Rear aesthetic panel VSL 18
- **PEP27**: Rear aesthetic panel VSL 27
- **PEP34**: Rear aesthetic panel VSL 34
- **P-VSL**: Floor anchoring feet for VSL

- **VASL09**: Tray for horizontal installation VSL 09
- **VASL18**: Drip tray for horizontal installation VSL 18
- **VASL27**: Drip tray for horizontal installation VSL 27
- **VASL34**: Drip tray for horizontal installation VSL 34

Exclusive accessories for MSL model

- **2V2MSL**: 2-way straight valve kit with microswitch for MSL 12–17
- **2V2MSL25**: 2-way straight valve kit for MSL 25
- **3V2MSL**: 3-way bypass valve kit, 2-pipe, for MSL 12-17
- **3V2MSL25**: 3-way bypass valve kit, 2-pipe, for MSL 25

Exclusive accessories for BSL model

- **2V2BSL**: 2-way straight valve kit
- **3V2BSL**: 2-pipe 3-way bypass valve kit

			12	17	25
MSL	Total cooling capacity (max / med / min)	kW	1,20 / 0,81 / 0,70	1,70 / 1,20 / 0,90	2,45 / 1,60 / 1,18
	Heating capacity (max / med / min)	kW	1,68 / 1,14 / 0,96	2,45 / 1,90 / 1,53	3,30 / 2,20 / 1,70
	Air flow rate (min–max)	m³/h	155-315	240-450	310-540
	Minimum sound pressure level (SPL)	dB(A)	23,0	23,4	25,0
	Electric power (min–max)	W	4-11	5-14	8-17
	Power supply voltage	V-Hz	220-50	220-50	220-50
	Battery connections		1/2" GF	1/2" GF	1/2" GF
	Low-power DC motor		yes	yes	yes
	Aluminum tangential fan		yes	yes	yes
	Remote control		yes	yes	yes
	LCD display		yes	yes	yes
	Pleated stainless steel filter		yes	yes	yes
	Front panel in tempered glass crystal		yes	yes	yes
	Unit frame in powder-coated steel		yes	yes	yes

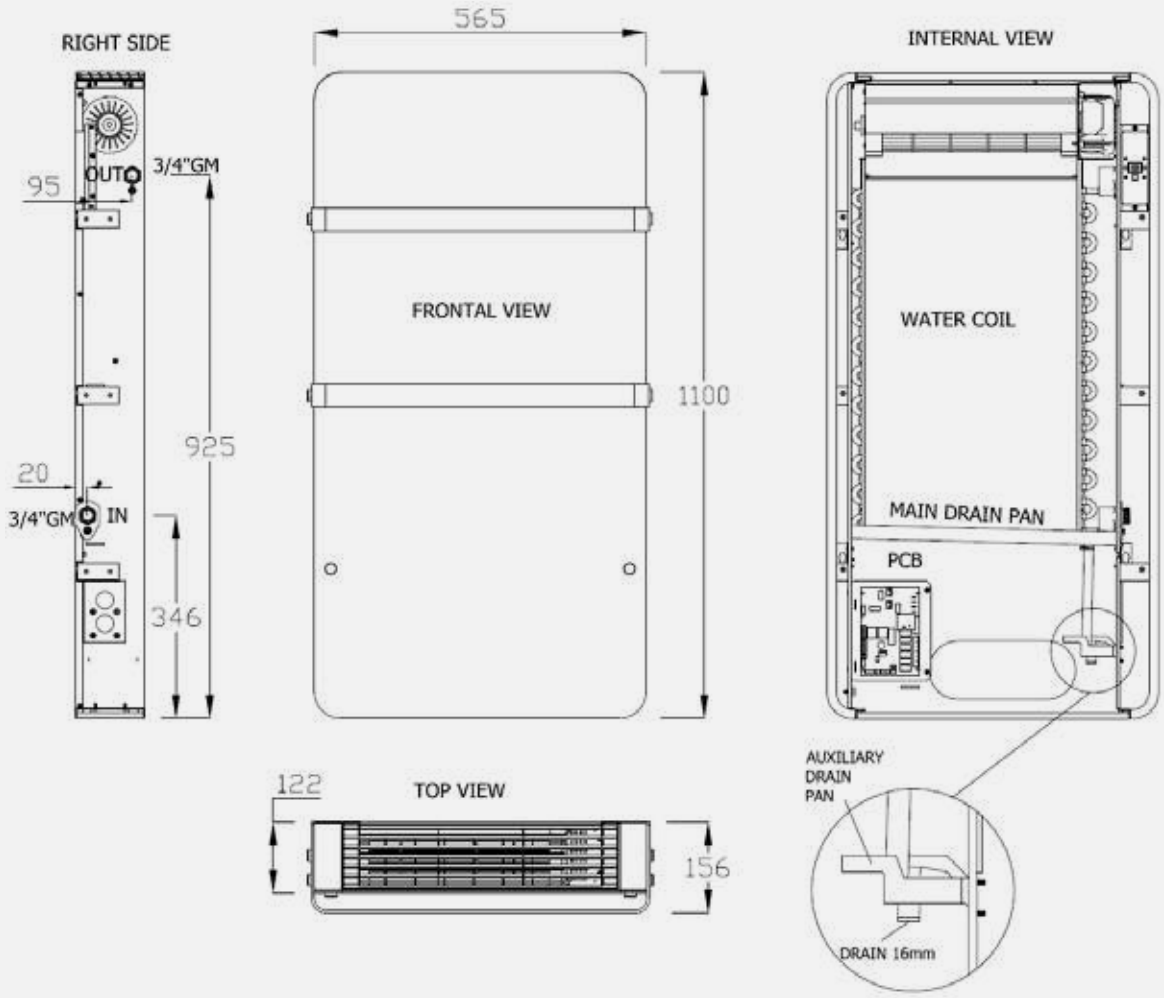
			09	18	27	34
VSL	Total cooling capacity (max / med / min)	kW	0,88 / 0,79 / 0,45	1,81 / 1,45 / 0,98	2,70 / 2,20 / 1,70	3,38 / 2,75 / 2,13
	Heating capacity (max / med / min)	kW	1,10 / 0,90 / 0,61	2,40 / 1,50 / 1,16	3,20 / 2,40 / 1,75	4,23 / 3,40 / 2,41
	Air flow rate (min–max)	m³/h	80-180	155-315	240-450	310-540
	Minimum sound pressure level (SPL)	dB(A)	20,5	21,6	23,5	21,7
	Electric power (min–max)	W	3-12	4-13	5-14	8-17
	Power supply voltage	V-Hz	220-50	220-50	220-50	220-50
	Battery connections		1/2" GF	1/2" GF	1/2" GF	3/4" GM
	Low-power DC motor		yes	yes	yes	yes
	Aluminum tangential fan		yes	yes	yes	yes
	Remote control		no	no	no	no
	LCD display		no	no	no	no
	Pleated stainless steel filter		yes	yes	yes	yes
	Front panel in tempered glass crystal		yes	yes	yes	yes
	Unit frame in powder-coated steel		yes	yes	yes	yes

			12
BSL	Total cooling capacity (max / med / min)	kW	1,20 / 0,90 / 0,60
	Thermal power (max / med / min)	kW	1,45 / 1,10 / 0,72
	Air flow rate (min–max)	m³/h	120-225
	Minimum sound pressure level (SPL)	dB(A)	19,1
	Electric power (min–max)	watt	4-11 (150*)
	Power supply voltage	V-Hz	220-50
	Battery connections		3/4" GM
	Low-power DC motor		yes
	Aluminum tangential fan		yes
	Remote control		yes
	LCD display		yes
	Pleated stainless steel filter		yes
	Front panel in tempered glass crystal		yes
	Unit frame in powder-coated steel		yes

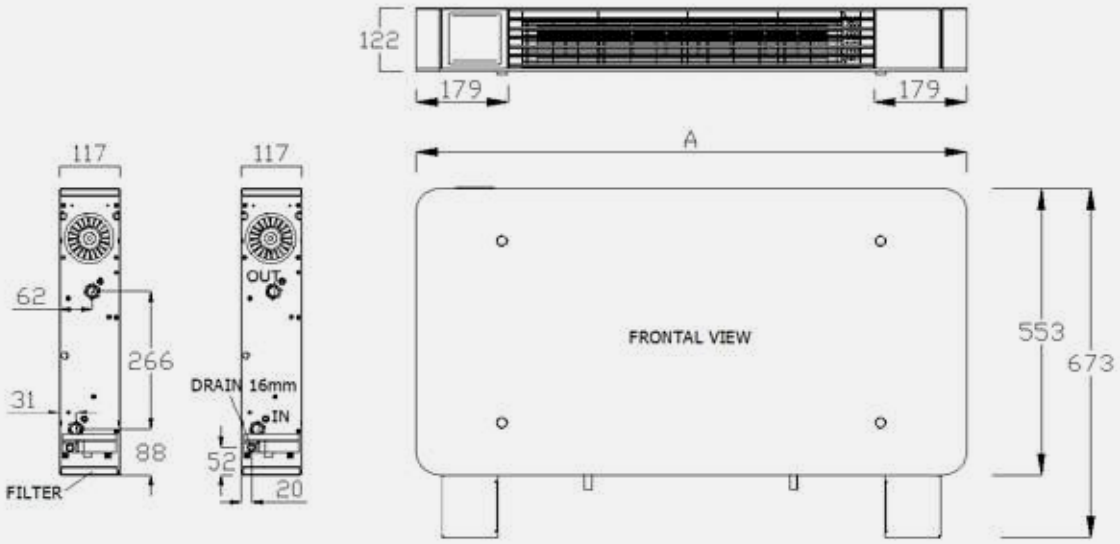
Cooling test conditions: Room temperature: 27 °C - 47% RH, Water temperature (in/out): 7/12 °C
Heating test conditions: ambient temperature: 20 °C, inlet water temperature: 50 °C, water flow rate as in cooling mode.

*Electric towel warmer heating element

Dimensional Drawings



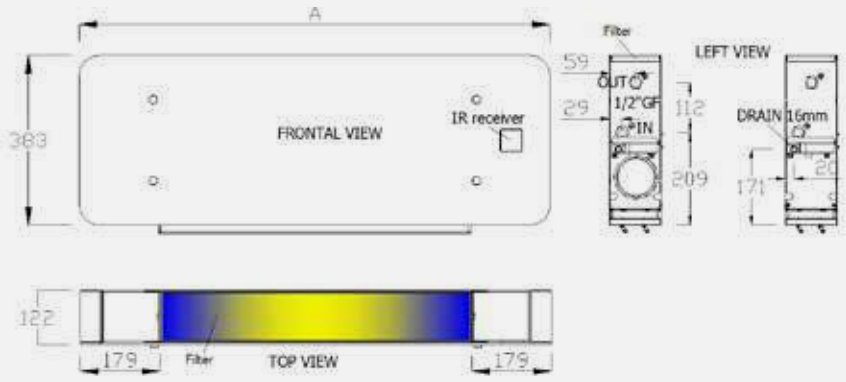
	12
Kg	18



	09	18	27	34
A	681	873	1.065	1.257
Kg	18	21	24	27

Dimensions in mm

Dimensional Drawings



	12	17	25
A	873	1.065	1.257
Kg	16	17	20

Dimensions in mm

Price list

Grimper Fan VSL			09	18	27	34
VSL	Fan coil unit for low-wall and horizontal ceiling installation	code	011518040009	011518040018	011518040027	011518040034
		€	640	703	830	985
WEEE		€	0,5	0,5	0,5	0,5

EXCLUSIVE ACCESSORIES FOR VSL MODEL				
		Compatibility	Code	€
2V2VSL	2-way valve kit	VSL 9÷27	012508090009	229
3V2VSL	3-way bypass valve kit, 2-pipe system		012508140009	216
3V4VSL	4-pipe bypass 3-way valve kit		012508080000	432
2V2VSL34	2-way valve kit with microswitch	VSL 34	012508090034	229
3V2VSL34	3-way bypass valve kit with microswitch, 2-pipe	VSL 34	012508140034	216
P-VSL	Floor-mounting feet	VSL 9–34	012508100000	83
PEP09	Rear aesthetic panel	VSL 09	012508130009	148
PEP18	Rear aesthetic panel	VSL 18	012508130018	148
PEP27	Rear aesthetic panel	VSL 27	012508130027	148
PEP34	Rear aesthetic panel	VSL 34	012508130034	148
VASL09	Drip tray for horizontal installation	VSL 09	012508120009	141
VASL18	Drip tray for horizontal installation	VSL 18	012508120018	141
VASL27	Drip tray for horizontal installation	VSL 27	012508120027	141
VASL34	Drip tray for horizontal installation	VSL 34	012508120034	141

Grimper Fan BSL			12
BSL	Hydronic fan coil unit for the bathroom	code	011518050012
		€	1.252
WEEE		€	0,5

EXCLUSIVE ACCESSORIES FOR BSL MODEL				
		Compatibility	Code	€
2V2BSL	2-way valve kit	BSL 12	012508090000	308
3V2BSL	3-way bypass valve kit, 2-pipe system	BSL 12	012508070012	291

Grimper Fan MSL			12	17	25
MSL	Hydronic fan coil unit for wall installation	code	011518030012	011518030017	011518030025
		€	941	1.023	1.151
WEEE		€	0,5	0,5	0,5

EXCLUSIVE ACCESSORIES FOR MSL MODEL				
		Compatibility	Code	€
2V2MSL	2-way valve kit	MSL 12÷17	012508090018	222
2V2MSL25	2-way valve kit	MSL 25	012508090027	222
3V2MSL	3-way bypass valve kit, 2-pipe system	MSL 12÷17	012508140018	240
3V2MSL25	3-way bypass valve kit, 2-pipe system	MSL 25	012508140027	240

ACCESSORIES SUPPLIED SEPARATELY COMMON TO THE RANGE		Code	€
STSL	Minimum water temperature probe	012508060000	34

For the wired controller price lists, refer to the pages at the beginning of the chapter.

VE: VMI, VMF, OMP, OMI

Fan coil unit with AC or brushless DC motor, complete with cabinet

1.4 kW÷9.49 kW

- Structure in galvanized sheet metal with pre-painted casing and ABS components, complete with thermal and acoustic insulation.
- Complete with regenerable filter.
- Standard gravity-drain condensate collection tray **(for horizontal units only).**
- Six-speed centrifugal fans, three of which are connected in the standard configuration **(no MB).**
- Three-row heat exchange coils with copper tubes and aluminum fins featuring a hydrophilic surface treatment for rapid condensate drainage.
- The installation of valve kits is recommended for every type of system.

S version

- Version with silenced motor, reduced condenser
- Thermal and acoustic insulation with reinforced anti-vibration system

MB version

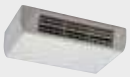
- Brushless motor
- Ventilation modulation 0–100%

Version 4

- Version with second hydronic coil
- For 4-pipe systems
- Additional coil for heating only

Configurations

VMI: Vertical unit with bottom return air



OMP: Horizontal rear return air

VMF: Vertical unit with front air return

OMI: Horizontal unit, bottom return air

Versions

Standard

- **VE VMI**: Vertical, bottom return air
- **VE VMF**: Vertical front return
- **VE OMP**: Horizontal unit with rear return air
- **VE OMI**: Horizontal bottom return

Muted

- **VE VMI S**: Vertical unit with bottom return, soundproofed
- **VE VMF S**: Vertical, front return, soundproofed
- **VE OMP S**: Horizontal with rear intake, soundproofed
- **VE OMI S**: Horizontal unit with bottom return, soundproofed

Standard with Brushless Motor

- **VE VMI MB**: Vertical, bottom return with MB
- **VE VMF MB**: Vertical front return with MB
- **VE OMP MB**: Horizontal rear return with MB
- **VE OMI MB**: Horizontal unit with bottom return and MB

Silenced with brushless motor

- **VE VMI S MB**: Vertical unit with bottom return, soundproofed, with MB
- **VE VMF S MB**: Vertical unit, bottom return, soundproofed with MB
- **VE OMP S MB**: Horizontal unit with rear intake, soundproofed, with MB
- **VE OMI S MB**: Horizontal unit with bottom return, soundproofed, with MB

Available in a 4-pipe version. Refer to the price list for the codes.
Standard VE with left-hand connection. When ordering, it is possible to request connections on the right-hand side.

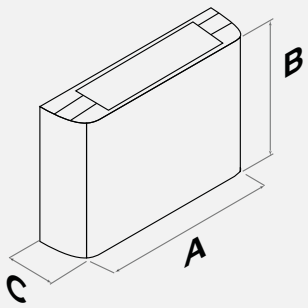
Accessories

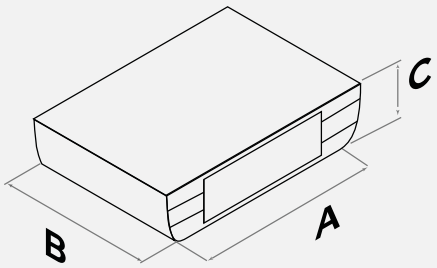
	**P**	Feet (supplied separately)		**PCPB**	Middle rear closing panel in pre-painted sheet metal
	**PCPF**	Lower rear closing panel in pre-painted sheet metal		**PCB**	Lower closure panel without grille in pre-painted sheet metal
	**PMP1**	Condensate pump (maximum water flow rate 8 l/h at 0 m.w.c., water flow rate 6.5 l/h at 1 m.w.c., water flow rate 4 l/h at 3 m.w.c., water flow rate 0 l/h at 6 m.w.c.) equipped with an alarm contact 8A@250V (suitable for all VERTICAL versions)		**PMP2**	Condensate pump (maximum water flow rate 8 l/h at 0 m.w.c., water flow rate 6.5 l/h at 1 m.w.c., water flow rate 4 l/h at 3 m.w.c., water flow rate 0 l/h at 6 m.w.c.) equipped with 8A@250V alarm contact (suitable for all HORIZONTAL versions).
	**VA**	Auxiliary drip tray for vertical versions (included with horizontal versions)		**CVC**	Onboard electronic control 230Vac with OFF/Summer/Winter + 3 fan speeds + thermostat with/without valves (including "Mammut" MOR terminal block)
	**CVA**	Unit-mounted 3-speed control (including "Mammut" MOR terminal block).		**CBB**	On-unit controller for brushless motor, 2/4-pipe management with/without valves ("Mammut" MOR terminal block included). Compatible with TMB.
	**CVB**	On-board 3-speed control with summer/ winter selector and room thermostat ("Mammut" MOR terminal block included). Compatible with TMB.		**CVD1**	On-board microprocessor control 230Vac + 2/4-pipe management with/ without valves (including "Mammut" MOR terminal block). Compatible with TMB.
	**TMB**	Low-limit bimetal thermostat: allows the automatic shutdown of ventilation if the temperature of the water entering the coil falls below 32°C in heating mode (winter). Compatible with CRA, CVC, CVA, CBB, CVB, CVD1.		**SND-W4**	Water temperature probe (NTC type, 4700 Ohm @ 25°C) with adjustable minimum setpoint, 1 m cable length. Alternative to TMB thermostat, compatible with CBB and CVD1.
	**SDI.4 X3A**	4-output relay board. Suitable for controlling up to 4 three-speed motors. For AC motors only. Maximum rating: 4 x 3 A 230 Vac.		**MOR**	"Mammut"-type terminal block included when purchasing the fan coil unit complete with on-board controller. Must be ordered separately for wall-mounted controllers.
	**2V2**	2-way valves for 2-pipe systems, with 230V actuator		**3V2**	3-way valves for 2-pipe system, with 230V actuator
	**2V4**	2-way valves for 4-pipe system, with 230V actuator		**3V4**	3-way valves for 4-pipe systems, with 230V actuator
	**TEL**	System for remote-control management. Main board + air probe + water probe + IR receiver + remote control (management of 2/4-pipe systems, with/without valves). Fan: 7A–230Vac. Valves: 2A–230Vac. ("Mammut" MOR terminal block included).			

	VE			13	23	33	43	53	63	73	83	93	103
3 ROWS **	Cooling capacity (1) *	max	W	1.500	2.000	2.530	3.020	3.570	4.250	5.520	6.420	7.530	9.020
		medium	W	1.317	1.755	2.264	2.702	3.521	3.991	5.211	6.062	7.107	8.515
		min	W	1.169	1.557	1.970	2.354	3.111	3.528	4.442	5.169	6.201	7.431
	Sensible cooling capacity		W	1.290	1.620	2.070	2.310	2.870	3.230	4.330	4.800	5.670	6.620
	Heating capacity (2) *	max	W	1.833	2.410	2.949	3.331	4.060	4.686	5.971	6.651	7.756	9.079
		medium	W	1.572	2.067	2.585	2.918	3.765	4.347	5.573	6.207	7.235	8.469
		min	W	1.369	1.799	2.198	2.481	3.252	3.757	4.614	5.136	6.151	7.199
	Heating capacity (3) *	max	W	3.678	4.837	5.916	6.682	8.144	9.401	11.978	13.339	15.556	18.209
		medium	W	3.154	4.146	5.185	5.852	7.551	8.718	11.176	12.447	14.508	16.983
		min	W	2.745	3.606	4.406	4.972	6.519	7.533	9.250	10.295	12.329	14.431
	Pressure drops in cooling *		kPa	14,5	18,1	20,5	23,0	25,1	26,8	27,2	30,0	31,9	32,4
	Pressure drops in heating (3) *		kPa	15,9	19,2	20,1	20,0	20,9	23,2	22,6	22,6	23,8	22,9
	Air flow rate *	max	m³/h	370	400	500	550	670	720	1.000	1.050	1.280	1.310
		medium	m³/h	285	308	400	440	590	634	890	935	1.139	1.166
		min	m³/h	226	244	305	336	462	497	650	683	870	891
	Water flow rate in cooling (*)		l/h	272	362	458	547	679	769	999	1.162	1.363	1.633
	Heating water flow rate (3) (*)		l/h	322	422	514	577	702	812	1.032	1.144	1.333	1.557
	Sound pressure (4)		dB(A)	24 31 38	25 31 38	30 38 44	31 38 45	26 33 37	27 34 37	34 41 43	35 41 45	39 46 48	40 46 49
	Power supply		V~/Ph/Hz	230/1/50									
	Hydraulic connections		"G	1/2"									
	Condensate drain Ø		mm	20									
	Electric motors		no.	1									
	Power input *		W	55		85		75		145		175	
	Fans		no.	1				2					
Thermal outputs in 4-pipe version	Cooling capacity (1) (*)		W	1.450	1.940	2.470	2.920	3.650	4.110	5.390	6.230	7.350	8.810
	Sensible capacity (1) (*)		W	1.240	1.570	2.020	2.220	2.780	3.110	4.210	4.640	5.520	6.440
	Thermal output (2) (*)		W	940	990	1.590	1.675	2.190	2.275	3.145	3.230	3.995	4.055
	Thermal output (3) (*)		W	1.880	1.980	3.180	3.350	4.380	4.550	6.290	6.460	7.990	8.110
	Pressure losses (3) (*)		kPa	7,3	8,0	11,7	12,9	21,3	22,9	41,1	43,3	37,7	38,8
BRUSHLESS **	Cooling capacity (1)	range	W	1.810-880	2.320-1.130	2.830-1.400	3.220-1.600	4.630-2.130	5.070-2.330	6.010-3.060	6.820-3.470	7.440-3.780	8.790-4.460
	Thermal power (2)	range	W	985-2.325	1.233-2.915	1.670-3.409	1.557-3.625	2.063-5.209	2.285-5.794	2.949-6.615	2.174-7.149	3.388-7.650	3.898-8.800
	Heating capacity (3)	range	W	4.680-1.970	5.860-2.470	6.840-2.940	7.250-3.120	10.510-4.130	11.650-4.580	13.280-5.900	14.300-6350	15.300-6.780	17.600-7.800
	Hot coil (2)		W	1.209-510	1.211-515	1.855-800	1.865-805	2.880-1.135	2.883-1.140	3.553-1.580	3.561-1.590	4.045-1.790	4.045-1.795
	Hot coil (3)		W	2.440-1.030	2.440-1.030	3.730-1.610	3.730-1.610	5.800-2.280	5.800-2.280	7.140-3.170	7.140-3.170	8.090-3.590	8.090-3.590
	Airflow		m³/h	537-127		625-153		1.021-215		1.184-306	1.184-306	1.255-323	
	Power input (5)		W	9		9		10		11	11	11	
	Sound pressure (5)		dB(A)	23		26		22		24	24	25	
	Power supply		V~/Ph/Hz	230/1/50									
	Signal		Vdc	0-10									
	Motors		no.	1									
	Fans		no.	1				2					
S Versions *	Sound pressure (4)		dB(A)	10 11 16	10 11 16	14 16 22	14 16 22	12 13 18	12 13 18	17 19 25	17 19 25	15 18 24	15 18 24
S MB Versions *	Sound pressure (4)		dB(A)	10 17 30	10 18 31	10 22 34	10 22 36	11 21 30	12 22 31	11 26 35	12 28 36	10 27 39	10 28 40

Water connections on the left side
Note: Output and air flow rates are given at a static pressure of 0 Pa. For different available static pressures, refer to the air flow variation diagrams.
* For the remaining technical data, refer to the product manual.
** Data referring only to the 2-pipe version. For other versions, please refer to the product manual.
(1) Inlet air temperature: 27°C d.b. / 19.5°C w.b.
Water inlet/outlet temperature: 7°C / 12°C
(2) Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 45°C / 40°C
(3) Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 70°C / 60°C
(4) At a distance of 2 m and with a reverberation time of 0.5 s.
(5) With 3 VDC input signal
(*) Maximum speed

Dimensional Drawings





Dimensions - With casing										
VE	**13**	**23**	**33**	**43**	**53**	**63**	**73**	**83**	**93**	**103**
A*	670	670	870	870	1.070	1.070	1.270	1.270	1.470	1.470
B	520	520	520	520	520	520	520	520	520	520
C	220	220	220	220	220	220	220	220	220	220
Kg	13,5	14	16,4	17,2	22,5	23,5	26	27,5	30	31,5

Dimensions in mm

VE: VII, VIF, OIP, OII

Ductable/built-in fan coil unit with AC or DC brushless motor

1.4 kW÷10.7 kW

- Galvanized sheet metal structure, complete with insulation.
- Complete with regenerable filter.
- Standard natural-drain condensate collection tray **(for horizontal units only)**.
- Six-speed centrifugal fans, three of which are connected in the standard configuration **(no MB).**
- Three-row heat exchange coils with copper tubes and aluminum fins featuring a hydrophilic surface treatment for rapid condensate drainage.
- The installation of valve kits is recommended for every type of system.

S version

- Version with silenced motor, reduced capacitor.
- Thermal and acoustic insulation with reinforced anti-vibration system

MB version

- Brushless motor
- Ventilation modulation 0–100%

Version 4

- Version with second hydronic coil
- For 4-pipe systems
- Additional coil for heating only

P version

- Single-phase AC squirrel-cage asynchronous electric motor
- Thermal protection TH (Klixon)
- Run capacitor always engaged
- 4 poles, IP42, Class B, double insulation, 230Vac–1Ph–50/60Hz

Configurations

VII: Vertical built-in unit with bottom air return

OIP: Horizontal recessed unit with rear return air intake

VIF: Vertical built-in unit with front return air intake

OII: Horizontal built-in unit with bottom return air intake

Versions

Standard

- **VE VII**: Vertical built-in unit with bottom air return
- **VE VIF**: Vertical built-in unit with front return air intake
- **VE OIP**: Horizontal concealed units with rear return air intake
- **VE OII**: Horizontal concealed units with bottom return air intake

Enhanced

- **VE VII P**: Enhanced recessed vertical unit with bottom return air
- **VE VIF P**: Enhanced vertical recessed unit with front return air
- **VE OIP P**: Horizontal recessed units with rear return, enhanced
- **VE OII P**: Horizontal ducted units, enhanced lower return

Enhanced with Brushless Motor

- **VE VII P MB**: Vertical built-in unit with enhanced bottom return and MB
- **VE VIF P MB**: Enhanced built-in vertical unit with front return, with MB
- **VE OIP P MB**: Recessed horizontal rear return, enhanced with MB
- **VE OII P MB**: Horizontal ducted units with bottom return, enhanced with MB

Standard with Brushless Motor

- **VE VII MB**: Recessed vertical unit with bottom return, with MB
- **VE VIF MB**: Vertical concealed front-return unit with MB
- **VE OIP MB**: Horizontal concealed units with rear return, with MB
- **VE OII MB**: Horizontal ductable units with bottom return air and MB

Muted

- **VE VII S**: Vertical built-in unit, bottom return, soundproofed
- **VE VIF S**: Vertical built-in front return, soundproofed
- **VE OIP S**: Horizontal recessed rear-return silenced units
- **VE OII S**: Horizontal ducted concealed units with bottom air return, soundproofed

Silenced with brushless motor

- **VE VII S MB**: Vertical built-in unit with lower return, soundproofed, with MB
- **VE VIF S MB**: Vertical built-in front-return silenced unit with MB
- **VE OIP S MB**: Horizontal built-in rear return silenced unit with MB
- **VE OII S MB**: Horizontal concealed unit, bottom return, soundproofed, with MB

Available in a 4-pipe version. Refer to the price list for the codes.
Standard VE with left-hand connection. When ordering, it is possible to request connections on the right-hand side.

Accessories

PA Suction plenum with circular connections

PM Supply plenum with circular connections

Size	13/23	33/43	53/63	73/83	93/103
No. of connections with concentric collars Ø 200/180/160 mm	1	2	2	3	4

P1 Aesthetic panel in pre-painted sheet metal complete with intake and supply grille.

P2 Aesthetic panel in pre-painted sheet metal complete with supply and return air grille, equipped with inspection doors for access to controls.

PMI 90° supply air plenum

FTI Preparation frame in galvanized sheet metal. Suitable for creating the installation recess.

PMP1 Condensate pump (maximum water flow rate 8 l/h at 0 m.w.c., water flow rate 6.5 l/h at 1 m.w.c., water flow rate 4 l/h at 3 m.w.c., water flow rate 0 l/h at 6 m.w.c.) equipped with an alarm contact 8A@250V (suitable for all VERTICAL versions)

PMP2 Condensate pump (maximum water flow rate 8 l/h at 0 m.w.c., water flow rate 6.5 l/h at 1 m.w.c., water flow rate 4 l/h at 3 m.w.c., water flow rate 0 l/h at 6 m.w.c.) equipped with 8A@250V alarm contact (suitable for all HORIZONTAL versions).

TMB Low-limit bimetal thermostat: allows the automatic shutdown of ventilation if the temperature of the water entering the coil falls below 32°C in heating mode (winter). Compatible with CRA, CVC, CVA, CBB, CVB, CVD1.

SND-W4 Water temperature probe (NTC type, 4700 Ohm @ 25°C) with adjustable minimum setpoint, 1 m cable length. Alternative to TMB thermostat, compatible with CBB and CVD1.

SDI.4 X3A 4-output relay board. Suitable for controlling up to 4 three-speed motors. For AC motors only. Maximum rating: 4 x 3 A 230 Vac.

MOR "Mammut"-type terminal block included when purchasing the fan coil unit complete with on-board controller. Must be ordered separately for wall-mounted controllers.

2V2 2-way valves for 2-pipe systems, with 230V actuator

3V2 3-way valves for 2-pipe system, with 230V actuator

2V4 2-way valves for 4-pipe system, with 230V actuator

3V4 3-way valves for 4-pipe systems, with 230V actuator

TEL System for remote-control management. Main board + air probe + water probe + IR receiver + remote control (management of 2/4-pipe systems, with/without valves). Fan: 7A–230Vac. Valves: 2A–230Vac. ("Mammut" MOR terminal block included).

For vertical VII/VIF and horizontal OIP/OII versions in sizes 13, 23, 33 and 43, the EC motor electronic board is mounted externally on the short side of the unit.

VE: VII, VIF, OIP, OII				13	23	33	43	53	63	73	83	93	103
Thermal outputs in 2-pipe version	Cooling capacity (1) *	max	W	1.579	2.105	2.663	3.179	3.947	4.474	5.811	6.758	7.926	9.495
		medium	W	1.317	1.755	2.264	2.702	3.521	3.991	5.211	6.062	7.107	8.515
		min	W	1.169	1.557	1.970	2.354	3.111	3.528	4.442	5.169	6.201	7.431
	Sensible cooling capacity		W	1.290	1.620	2.070	2.310	2.870	3.230	4.330	4.800	5.670	6.620
	Heating capacity (2) *	max	W	1.870	2.455	2.990	3.355	4.080	4.720	6.000	6.650	7.750	9.050
		medium	W	1.572	2.067	2.585	2.918	3.765	4.347	5.573	6.207	7.235	8.469
		min	W	1.369	1.799	2.198	2.481	3.252	3.757	4.614	5.136	6.151	7.199
	Heating capacity (3) *	max	W	3.740	4.910	5.980	6.710	8.160	9.440	12.000	13.300	15.500	18.100
		medium	W	3.154	4.146	5.185	5.852	7.551	8.718	11.176	12.447	14.508	16.983
		min	W	2.745	3.606	4.406	4.972	6.519	7.533	9.250	10.195	12.329	14.431
	Pressure drops in cooling *		kPa	14,5	18,1	20,5	23,0	25,1	26,8	27,2	30,0	31,9	32,4
	Pressure drops in heating (3) *		kPa	15,9	19,2	20,1	20,0	20,9	23,2	22,6	22,6	23,8	22,9
	Chilled water flow rate *		l/h	272	362	458	547	679	769	999	1.162	1.363	1.633
	Heating water flow rate (3) *		l/h	322	422	514	577	702	812	1.032	1.144	1.333	1.557
	Air flow rate *	max	m³/h	370	400	500	550	670	720	1.000	1.050	1.280	1.310
		medium	m³/h	285	308	400	440	590	634	890	935	1.139	1.166
		min	m³/h	226	244	305	336	462	497	650	683	870	891
	Sound pressure (4)	dB(A)		24 31 38	25 31 38	30 38 44	31 38 45	26 33 37	27 34 37	34 41 43	35 41 45	39 46 48	40 46 49
	Power supply	V~/Ph/Hz		230/1/50									
	Hydraulic connections		"G	1/2" F									
	Condensate drain Ø		mm	20									
	Electric motors		no.	1									
	Power input *		W	55		85		75		145		175	
	Fans		no.	1				2					
	Maximum available static pressure (7)		Pa	60									
Thermal outputs in 4-pipe version	Cooling capacity (1) *		W	1.450	1.940	2.470	2.920	3.650	4.110	5.390	6.230	7.350	8.810
	Sensible capacity (1) *		W	1.240	1.570	2.020	2.220	2.780	3.110	4.210	4.640	5.520	6.440
	Thermal output (2) *		W	940	990	1.590	1.675	2.190	2.275	3.145	3.230	3.995	4.055
	Thermal power (3) *		W	1.880	1.980	3.180	3.350	4.380	4.550	6.290	6.460	7.990	8.110
	Pressure drops (3) *		kPa	7,3	8,0	11,7	12,9	21,3	22,9	41,1	43,3	37,7	38,8
Thermal outputs in brushless version **	Cooling capacity (1)	range	W	1.810	2.320	2.830	3.220	4.630	5.070	6.010	6.820	7.440	8.790
	Thermal power (2)	range	W	985	1.233	1.670	1.557	2.063	2.285	2.949	2.174	3.388	3.898
	Heating capacity (3)	range	W	4.680	5.860	6.840	7.250	10.510	11.650	13.280	14.300	15.300	17.600
	Airflow	m³/h		537	536	625	627	1.018	1.022	1.180	1.187	1.255	1.255
	Power input (5)	W		9	9	9	9	10	10	11	11	11	11
	Sound pressure (5)	dB(A)		23	23	26	26	22	22	24	24	25	25
	Power supply	V~/Ph/Hz		230/1/50									
	Signal	Vdc		0-10									
	Motors	no.		1									
	Fans	no.		1				2					
	Maximum available static pressure (7)	Pa		70									
Thermal outputs in 4-pipe brushless version	Hot coil (2)	W		895	938	1.479	1.556	2.087	2.163	2.959	3.057	3.633	3.687
	Hot coil (3)(6)	W		1.800	1.880	2.960	3.120	4.180	4.330	5.920	6.120	7.270	7.370

Water connections on the left side
* For the remaining technical data, refer to the product manual.
** Data referring only to the 2-pipe version. For other versions, please refer to the product manual.
(1) Inlet air temperature: 27°C d.b. / 19.5°C w.b.
Water inlet/outlet temperature: 7°C / 12°C
(2) Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 45°C / 40°C
(3) Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 70°C / 60°C
(4) At a distance of 2 m and with a reverberation time of 0.5 s.
(5) Rated nameplate electrical power input
(6) Version 4
(7) For performance data, refer to the product technical manual.

Performances and airflows are specified at a pressure head of 0 Pa.
For different available pressure values, refer to the product technical brochure by scanning the QR Code.
(7) For performance data, refer to the product technical manual.

FAN COIL UNITS: VII, VIF, OIP, OII P version				13	23	33	43	53	63	73	83	93	103
Heating capacities in enhanced 2-pipe version	Cooling capacity (1) *	max	W	1.683	2.296	2.899	3.255	4.163	4.701	6.164	7.150	8.568	10.337
		medium	W	1.577	2.141	2.812	3.242	3.851	4.357	5.848	6.800	8.082	9.770
		min	W	1.387	1.879	2.650	3.062	3.345	3.807	5.075	5.910	7.060	8.499
	Sensible cooling capacity		W	1.380	1.790	2.270	2.450	3.050	3.420	4.630	5.120	6.200	7.300
	Heating capacity (2) *	max	W	2.000	2.692	3.260	3.553	4.317	4.976	6.389	7.061	8.415	9.895
		medium	W	1.852	2.477	3.157	3.410	3.936	4.545	6.000	6.651	7.849	9.253
		min	W	1.592	2.124	2.942	3.187	3.335	3.878	5.078	5.637	6.693	7.851
	Heating capacity (3) *	max	W	4.000	5.380	6.510	7.100	8.630	9.950	12.760	14.120	16.830	19.790
		medium	W	3.704	4.954	6.313	6.821	7.872	9.090	12.000	13.300	15.700	18.506
		min	W	3.184	4.249	5.885	6.374	6.671	7.757	10.156	11.276	13.388	15.704
	Pressure drops in cooling *		kPa	14.7	19.4	21.6	23.0	25.1	26.5	27.5	30.3	33.7	34.6
	Pressure drops in heating (3) *		kPa	18.1	23.0	23.8	22.3	23.4	25.8	25.6	25.6	28.0	27.4
	Chilled water flow rate *		l/h	273	375	471	547	679	767	1.006	1.168	1.400	1.689
	Heating water flow rate (3) *		l/h	344	463	560	611	742	856	1.098	1.214	1.447	1.702
	Air flow rate *	max	m³/h	410	460	570	600	730	780	1.100	1.150	1.450	1.500
		medium	m³/h	360	400	540	560	625	670	990	1.040	1.290	1.340
		min	m³/h	280	310	480	500	475	515	750	790	990	1.020
	Sound pressure (4)		dB(A)	29 36 39	30 38 42	41 44 45	42 45 47	25 32 37	27 34 39	37 43 47	38 44 48	43 44 51	44 49 52
	Power supply		V~/Ph/Hz	230/1/50									
	Hydraulic connections		"G	1/2" F									
	Condensate drain Ø		mm	20									
	Electric motors		no.	1									
	Power input *		W	55		125		115		195		230	
	Fans		no.	1				2					
	Maximum available static pressure (7)		Pa	87	87	105	105	100	100	103	103	115	115
Heating capacities in enhanced 4-pipe version	Cooling capacity (1) *		W	1.550	2.120	2.680	3.150	3.890	4.330	5.710	6.640	7.970	9.620
	Sensible capacity (1) *		W	1.330	1.740	2.220	2.430	2.990	3.300	4.500	4.990	6.050	7.130
	Thermal output (2) *		W	1.009	1.090	1.739	1.820	2.345	2.405	3.347	3.460	4.350	4.450
	Thermal power (3) *		W	2.010	2.180	3.470	3.640	4.690	4.810	6.690	6.910	8.700	8.900
	Pressure drops (3) *		kPa	8,3	9,7	13,9	15,3	24,4	25,6	46,5	49,6	44,7	46,8
Thermal outputs in enhanced brushless version **	Cooling capacity (1)	range	W	1.670	2.220	2.830	3.280	4.310	4.880	6.010	6.970	8.470	10.210
	Thermal power (2)	range	W	2.096	2.749	3.372	3.679	4.736	5.468	6.579	7.262	8.793	10.325
	Heating capacity (3)	range	W	4.190	5.490	6.740	7.330	9.470	10.930	13.150	14.520	17.580	20.640
	Airflow	m³/h		440	475	600	630	840	900	1.150	1.200	1.550	1.600
	Power input (5)	W		55	55	65	65	85	85	90	90	180	180
	Sound pressure (5)	dB(A)		13 29 40	13 30 43	16 33 47	16 35 48	16 29 42	16 31 44	17 36 48	17 37 49	20 43 52	20 44 53
	Power supply	V~/Ph/Hz		230/1/50									
	Signal	Vdc		0-10									
	Motors	no.		1									
	Fans	no.		1				2					
	Maximum available static pressure (7)		Pa	103	103	111	112	120	120	137	138	174	175
Heating capacities in enhanced 4-pipe brushless version	Hot coil (2)	W		1.052	1.107	1.822	1.861	2.573	2.635	3.440	3.542	4.552	4.689
	Hot coil (3)(6)	W		2.100	2.210	3.640	3.720	5.070	5.270	6.880	7.080	9.100	9.370

Water connections on the left side
* For the remaining technical data, refer to the product manual.
** Data refers only to the 2-pipe unit in the silenced version. For other versions, refer to the product manual.
(1) Inlet air temperature: 27°C d.b. / 19.5°C w.b.
Water inlet/outlet temperature: 7°C / 12°C
(2) Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 45°C / 40°C
(3) Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 70°C / 60°C
(4) At a distance of 2 m and with a reverberation time of 0.5 s.
(5) Rated nameplate electrical power input
(6) Version 4
(7) For performance data, refer to the product technical manual.

Performances and airflows are specified at a pressure head of 0 Pa.
For different available pressure values, refer to the product technical brochure by scanning the QR Code.
(7) For performance data, refer to the product technical manual.

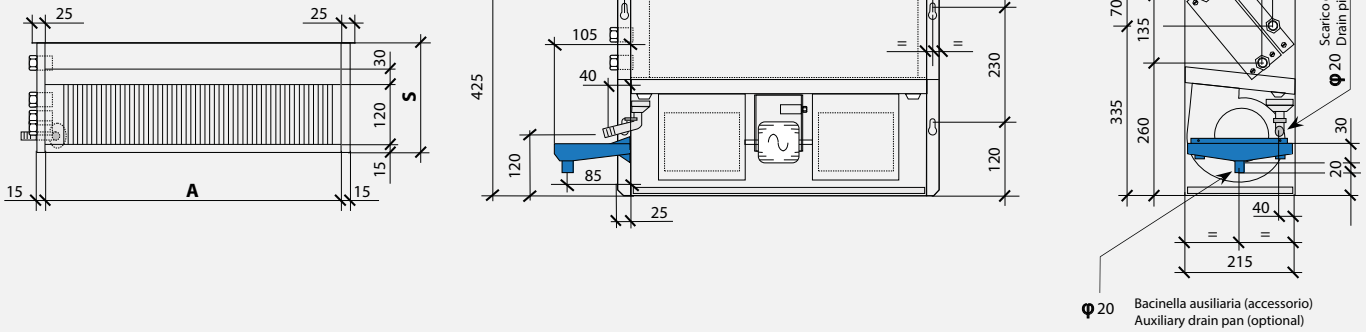
VE: VII, VIF, OIP, OII S version				13	23	33	43	53	63	73	83	93	103
Thermal outputs in 2-pipe silenced version	Cooling capacity (1) *	max	W	1.030	1.390	1.810	2.160	2.690	3.050	3.900	4.590	4.860	5.960
		medium	W	932	1.276	1.653	1.965	2.514	2.880	3.641	4.277	4.453	5.460
		min	W	831	1.154	1.532	1.834	2.386	2.747	3.427	4.042	4.156	5.118
	Sensible cooling capacity		W	840	1.060	1.410	1.570	1.950	2.200	2.900	3.260	3.420	4.100
	Heating capacity (2) *	max	W	1.247	1.656	2.088	2.348	2.856	3.309	4.143	4.649	4.858	5.818
		medium	W	1.050	1.419	1.770	1.977	2.490	2.917	3.597	4.029	4.129	4.942
		min	W	917	1.262	1.620	1.823	2.342	2.759	3.350	3.770	3.808	4.582
	Heating capacity (3) *	max	W	2.500	3.320	4.180	4.700	5.720	6.620	8.290	9.300	9.720	11.640
		medium	W	2.099	2.839	3.541	3.954	4.981	5.834	7.195	8.059	8.259	9.885
		min	W	1.834	2.524	3.240	3.647	4.685	5.519	6.701	7.542	7.617	9.164
	Pressure drops in cooling *		kPa	6,2	7,9	9,4	10,6	11,6	12,4	12,2	13,8	12,0	12,7
	Pressure drops in heating (3) *		kPa	7,1	8,7	9,8	9,8	10,3	11,4	10,8	11,1	9,4	9,5
	Chilled water flow rate *		l/h	177	239	311	372	463	525	671	789	836	1.025
	Heating water flow rate (3) *		l/h	215	286	359	404	492	569	713	800	836	1.001
	Air flow rate *	max	m³/h	200	220	290	320	390	420	570	610	630	670
		medium	m³/h	150	170	220	240	310	340	450	480	480	510
		min	m³/h	120	140	190	210	280	310	400	430	420	450
	Sound pressure (4)		dB(A)	10 11 16	10 11 16	14 16 22	14 16 22	12 13 18	12 13 18	17 19 25	17 19 25	15 18 24	15 18 24
	Power supply	V~/Ph/Hz		230/1/50									
	Hydraulic connections		"G	1/2" F									
	Condensate drain Ø		mm	20	20	20	20	20	20	20	20	20	20
	Electric motors		no.	1	1	1	1	1	1	1	1	1	1
	Power input *		W	55		80				145		180	
	Fans		no.	1				2					
	Maximum available static pressure (7)		Pa	60				63		75		78	
Heating/ cooling capacities in 4-pipe silenced version	Cooling capacity (1) *		W	1.000	1.350	1.760	2.080	2.600	2.960	3.820	4.450	4.760	5.790
	Sensible capacity (1) *		W	810	1.030	1.380	1.500	1.880	2.130	2.830	3.150	3.350	3.970
	Thermal output (2) *		W	628	670	1.115	1.166	1.526	1.604	2.179	2.256	2.517	2.595
	Thermal power (3) *		W	1.260	1.340	2.230	2.340	3.060	3.210	4.360	4.520	5.040	5.190
	Pressure drops (3) *		kPa	3,3	3,7	5,7	6,3	10,4	11,4	19,7	21,1	15,0	15,9
Heating capacities in silenced brushless version **	Cooling capacity (1)	range	W	1.430	1.910	2.380	2.820	3.600	4.070	5.230	6.070	6.860	8.240
	Thermal power (2)	range	W	1.769	2.332	2.798	3.109	3.897	4.501	5.659	6.269	7.014	8.210
	Heating capacity (3)	range	W	3.540	4.670	5.580	6.220	7.800	9.010	11.320	12.540	14.030	16.430
	Airflow	m³/h		340	370	450	490	625	670	915	960	1.100	1.130
	Input power (5)	W		55	55	65	65	85	85	90	90	90	90
	Sound pressure (5)	dB(A)		10 17 30	10 18 31	10 22 34	10 22 36	11 21 30	12 22 31	11 26 35	12 28 36	10 27 39	10 28 40
	Power supply	V~/Ph/Hz		230/1/50									
	Signal	Vdc		0-10									
	Motors	no.		1									
	Fans	no.		1				2					
	Maximum available static pressure (7)		Pa	72	72	79	80	85	85	86	86	73	83
Thermal capacities in soundproofed brushless 4-pipe version	Hot coil (2)	W		895	938	1.479	1.556	2.087	2.163	2.959	3.057	3.633	3.687
	Hot coil (3)(6)	W		1.800	1.880	2.960	3.120	4.180	4.330	5.920	6.120	7.270	7.370

Water connections on the left side
* For the remaining technical data, refer to the product manual.
** Data refers only to the 2-pipe unit in the silenced version. For other versions, refer to the product manual.
(1) Inlet air temperature: 27°C d.b. / 19.5°C w.b.
Water inlet/outlet temperature: 7°C / 12°C
(2) Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 45°C / 40°C
(3) Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 70°C / 60°C
(4) At a distance of 2 m and with a reverberation time of 0.5 s.
(5) Rated nameplate electrical power input
(6) Version 4
(7) For performance data, refer to the product technical manual.

Performances and airflows are specified at a pressure head of 0 Pa.
For different available pressure values, refer to the product technical brochure by scanning the QR Code.
(7) For performance data, refer to the product technical manual.

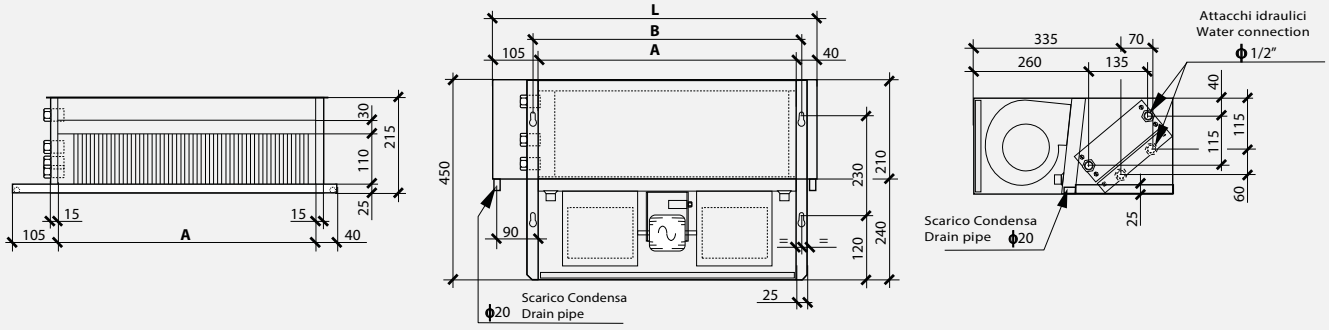
Dimensional Drawings

VII, VIF



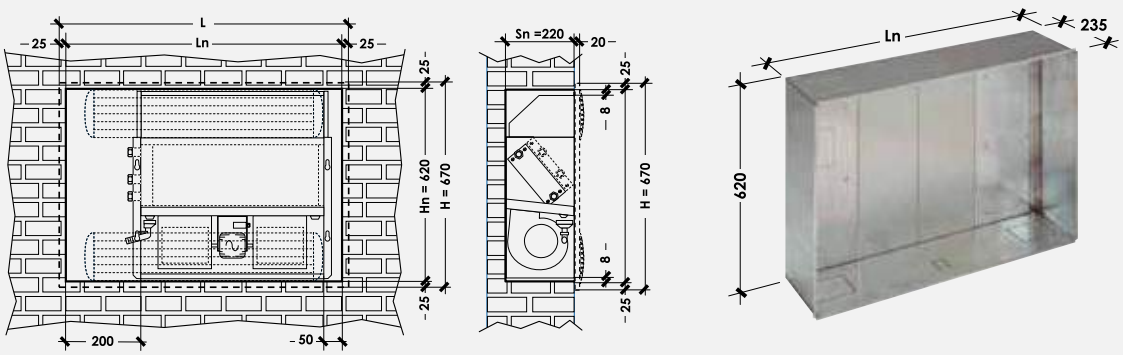
Dimensions of vertical versions											
VE		13	23	33	43	53	63	73	83	93	103
A	mm	400	400	600	600	800	800	1.000	1.000	1.200	1.200
B	mm	425	425	625	625	825	825	1.025	1.025	1.225	1.225
L	mm	450	450	650	650	850	850	1.050	1.050	1.250	1.250

OII, OIP



Dimensions of horizontal versions											
VE		13	23	33	43	53	63	73	83	93	103
A	mm	400	400	600	600	800	800	1.000	1.000	1.200	1.200
B	mm	425	425	625	625	825	825	1.025	1.025	1.225	1.225
L	mm	545	545	745	745	945	945	1.145	1.145	1.345	1.345

FTI



		13/23	33/43	53/63	73/83	93/103
Line	mm	650	850	1.050	1.250	1.450
L	mm	700	900	1.100	1.300	1.500

Price list

VMI: Vertical unit with cabinet and bottom return air intake

	VE VMI - Vertical with bottom return air		VE VMI S - Vertical unit with bottom return, soundproofed		VE VMI 4 - Vertical, bottom return, 4-pipe		VE VMI 4/S – Vertical, bottom silenced return, 4-pipe	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	0114130000130300	438	0114130020130300	522	0114132200130300	602	0114132220130300	645
23	0114130000230300	462	0114130020230300	549	0114132200230300	629	0114132220230300	672
33	0114130000330300	482	0114130020330300	579	0114132200330300	668	0114132220330300	720
43	0114130000430300	533	0114130020430300	636	0114132200430300	724	0114132220430300	776
53	0114130000530300	580	0114130020530300	696	0114132200530300	799	0114132220530300	860
63	0114130000630300	648	0114130020630300	771	0114132200630300	874	0114132220630300	934
73	0114130000730300	733	0114130020730300	874	0114132200730300	987	0114132220730300	1.057
83	0114130000830300	797	0114130020830300	944	0114132200830300	1.057	0114132220830300	1.127
93	0114130000930300	861	0114130020930300	1.020	0114132200930300	1.164	0114132220930300	1.243
103	0114130001030300	924	0114130021030300	1.087	0114132201030300	1.231	0114132221030300	1.310
WEEE	0,5							

	VE VMI MB - Vertical, bottom return, brushless		VE VMI MB S - Vertical, bottom return, silenced, brushless		VE VMI MB 4 - Vertical, bottom air return, 4-pipe brushless		VE VMI MB 4/S - Vertical low-noise bottom return 4-pipe brushless	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	0114131100130300	623	0114131120130300	704	0114133000130300	788	0114133020130300	828
23	0114131100230300	641	0114131120230300	732	0114133000230300	816	0114133020230300	854
33	0114131100330300	664	0114131120330300	760	0114133000330300	854	0114133020330300	901
43	0114131100430300	714	0114131120430300	816	0114133000430300	910	0114133020430300	956
53	0114131100530300	755	0114131120530300	878	0114133000530300	985	0114133020530300	1.041
63	0114131100630300	828	0114131120630300	953	0114133000630300	1.060	0114133020630300	1.116
73	0114131100730300	912	0114131120730300	1.054	0114133000730300	1.174	0114133020730300	1.238
83	0114131100830300	974	0114131120830300	1.124	0114133000830300	1.244	0114133020830300	1.308
93	0114131100930300	1.046	0114131120930300	1.203	0114133000930300	1.351	0114133020930300	1.424
103	0114131101030300	1.111	0114131121030300	1.269	0114133001030300	1.418	0114133021030300	1.492
WEEE	0,5							

* Available with right-hand connection

VMF: Vertical unit with cabinet, front return air

	VE VMF - Vertical front return air		VE VMF S - Vertical, front return, soundproofed		VE VMF 4 - Vertical unit with front return, 4-pipe system		VE VMF 4/S - Vertical front intake, soundproofed, 4-pipe system	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	0114130100130300	463	0114130120130300	551	0114132300130300	631	0114132320130300	674
23	0114130100230300	486	0114130120230300	576	0114132300230300	657	0114132320230300	700
33	0114130100330300	515	0114130120330300	616	0114132300330300	704	0114132320330300	757
43	0114130100430300	565	0114130120430300	671	0114132300430300	759	0114132320430300	811
53	0114130100530300	620	0114130120530300	739	0114132300530300	842	0114132320530300	902
63	0114130100630300	691	0114130120630300	814	0114132300630300	916	0114132320630300	977
73	0114130100730300	778	0114130120730300	923	0114132300730300	1.037	0114132320730300	1.107
83	0114130100830300	842	0114130120830300	993	0114132300830300	1.107	0114132320830300	1.177
93	0114130100930300	913	0114130120930300	1.078	0114132300930300	1.222	0114132320930300	1.300
103	0114130101030300	975	0114130121030300	1.145	0114132301030300	1.289	0114132321030300	1.367
WEEE	0,5							

	VE VMF MB - Vertical, front return, brushless		VE VMF MB S - Vertical, front air return, soundproofed, brushless		VE VMF MB 4 - Vertical, front return, 4-pipe, brushless		VE VMF MB 4/S - Vertical front intake, soundproofed, 4-pipe brushless	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	0114131200130300	641	0114131220130300	733	0114133100130300	817	0114133120130300	856
23	0114131200230300	666	0114131220230300	759	0114133100230300	843	0114133120230300	881
33	0114131200330300	696	0114131220330300	797	0114133100330300	891	0114133120330300	938
43	0114131200430300	750	0114131220430300	851	0114133100430300	945	0114133120430300	991
53	0114131200530300	801	0114131220530300	921	0114133100530300	1.028	0114133120530300	1.084
63	0114131200630300	877	0114131220630300	997	0114133100630300	1.104	0114133120630300	1.159
73	0114131200730300	950	0114131220730300	1.104	0114133100730300	1.223	0114133120730300	1.287
83	0114131200830300	1.015	0114131220830300	1.174	0114133100830300	1.293	0114133120830300	1.357
93	0114131200930300	1.095	0114131220930300	1.260	0114133100930300	1.409	0114133120930300	1.482
103	0114131201030300	1.160	0114131221030300	1.327	0114133101030300	1.475	0114133121030300	1.549
WEEE	0,5							

* Available with right-hand connection

OMP: Horizontal with rear return cabinet

	VE OMP - Horizontal rear return		VE OMP S - Horizontal rear intake, silenced		VE OMP 4 – Horizontal rear return, 4-pipe		VE OMP 4/S – Horizontal, rear return, silenced, 4-pipe	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	0114130200130300	466	0114130220130300	554	0114132400130300	634	0114132420130300	677
23	0114130200230300	490	0114130220230300	581	0114132400230300	661	0114132420230300	704
33	0114130200330300	513	0114130220330300	614	0114132400330300	703	0114132420330300	755
43	0114130200430300	562	0114130220430300	669	0114132400430300	757	0114132420430300	810
53	0114130200530300	611	0114130220530300	732	0114132400530300	834	0114132420530300	895
63	0114130200630300	681	0114130220630300	806	0114132400630300	909	0114132420630300	970
73	0114130200730300	767	0114130220730300	910	0114132400730300	1.023	0114132420730300	1.094
83	0114130200830300	831	0114130220830300	980	0114132400830300	1.094	0114132420830300	1.164
93	0114130200930300	897	0114130220930300	1.060	0114132400930300	1.205	0114132420930300	1.282
103	0114130201030300	958	0114130221030300	1.126	0114132401030300	1.269	0114132421030300	1.348
WEEE	0,5							

	VE OMP MB - Horizontal rear return brushless		VE OMP MB S – Horizontal rear intake silenced brushless		VE OMP MB 4 - Horizontal rear return, 4-pipe brushless		VE OMP MB 4/S - Horizontal rear return, soundproofed, 4-pipe brushless	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#1300130300	639	011413#1320130300	736	011413#3200130300	820	011413#3220130300	860
23	011413#1300230300	662	011413#1320230300	764	011413#3200230300	848	011413#3220230300	886
33	011413#1300330300	685	011413#1320330300	796	011413#3200330300	889	011413#3220330300	936
43	011413#1300430300	735	011413#1320430300	849	011413#3200430300	944	011413#3220430300	990
53	011413#1300530300	784	011413#1320530300	913	011413#3200530300	1.020	011413#3220530300	1.076
63	011413#1300630300	860	011413#1320630300	988	011413#3200630300	1.095	011413#3220630300	1.151
73	011413#1300730300	942	011413#1320730300	1.090	011413#3200730300	1.211	011413#3220730300	1.275
83	011413#1300830300	1.007	011413#1320830300	1.161	011413#3200830300	1.281	011413#3220830300	1.345
93	011413#1300930300	1.080	011413#1320930300	1.243	011413#3200930300	1.391	011413#3220930300	1.464
103	011413#1301030300	1.144	011413#1321030300	1.308	011413#3201030300	1.456	011413#3221030300	1.530
WEEE	0,5							

* Available with right-hand connection

OMI: Horizontal unit with bottom return cabinet

	VE OMI - Horizontal, bottom return		VE OMI S - Horizontal bottom silenced return		VE OMI 4 - Horizontal bottom return, 4 pipes		VE OMI 4/S - Horizontal, bottom return, soundproofed, 4-pipe	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#0300130300	490	011413#0320130300	581	011413#2500130300	661	011413#2520130300	704
23	011413#0300230300	516	011413#0320230300	608	011413#2500230300	689	011413#2520230300	732
33	011413#0300330300	545	011413#0320330300	650	011413#2500330300	738	011413#2520330300	791
43	011413#0300430300	594	011413#0320430300	703	011413#2500430300	791	011413#2520430300	843
53	011413#0300530300	651	011413#0320530300	774	011413#2500530300	877	011413#2520530300	938
63	011413#0300630300	721	011413#0320630300	849	011413#2500630300	952	011413#2520630300	1.012
73	011413#0300730300	811	011413#0320730300	959	011413#2500730300	1.073	011413#2520730300	1.144
83	011413#0300830300	877	011413#0320830300	1.032	011413#2500830300	1.145	011413#2520830300	1.215
93	011413#0300930300	948	011413#0320930300	1.116	011413#2500930300	1.260	011413#2520930300	1.338
103	011413#0301030300	1.011	011413#0321030300	1.185	011413#2501030300	1.328	011413#2521030300	1.406
WEEE	0,5							

	VE OMI MB - Horizontal bottom return brushless		VE OMI MB S - Horizontal, bottom return, silenced, brushless		VE OMI MB 4 - Horizontal, bottom return, 4-pipe brushless		VE OMI MB 4/S – Horizontal, bottom return, silenced, 4-pipe brushless	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#1400130300	663	011413#1420130300	764	011413#3300130300	848	011413#3320130300	886
23	011413#1400230300	689	011413#1420230300	791	011413#3300230300	875	011413#3320230300	913
33	011413#1400330300	724	011413#1420330300	831	011413#3300330300	924	011413#3320330300	971
43	011413#1400430300	776	011413#1420430300	883	011413#3300430300	977	011413#3320430300	1.023
53	011413#1400530300	829	011413#1420530300	956	011413#3300530300	1.063	011413#3320530300	1.119
63	011413#1400630300	908	011413#1420630300	1.032	011413#3300630300	1.139	011413#3320630300	1.194
73	011413#1400730300	984	011413#1420730300	1.140	011413#3300730300	1.260	011413#3320730300	1.324
83	011413#1400830300	1.049	011413#1420830300	1.212	011413#3300830300	1.332	011413#3320830300	1.396
93	011413#1400930300	1.127	011413#1420930300	1.298	011413#3300930300	1.447	011413#3320930300	1.520
103	011413#1401030300	1.293	011413#1421030300	1.367	011413#3301030300	1.516	011413#3321030300	1.589
WEEE	0,5							

* Available with right-hand connection

VII: Vertical built-in unit with bottom air return

	VE VII - Vertical built-in unit with bottom return air intake		VE VII S - Vertical built-in, bottom return, soundproofed		VE VII 4 - Vertical built-in unit with bottom return, 4-pipe system		VE VII 4/S - Built-in vertical, bottom return, silenced, 4-pipe system	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#0400130300	346	011413#0420130300	422	011413#2600130300	501	011413#2620130300	544
23	011413#0400230300	369	011413#0420230300	448	011413#2600230300	527	011413#2620230300	570
33	011413#0400330300	372	011413#0420330300	460	011413#2600330300	547	011413#2620330300	600
43	011413#0400430300	423	011413#0420430300	514	011413#2600430300	602	011413#2620430300	655
53	011413#0400530300	457	011413#0420530300	561	011413#2600530300	663	011413#2620530300	724
63	011413#0400630300	537	011413#0420630300	634	011413#2600630300	736	011413#2620630300	797
73	011413#0400730300	603	011413#0420730300	718	011413#2600730300	832	011413#2620730300	902
83	011413#0400830300	683	011413#0420830300	788	011413#2600830300	902	011413#2620830300	973
93	011413#0400930300	735	011413#0420930300	851	011413#2600930300	994	011413#2620930300	1.073
103	011413#0401030300	795	011413#0421030300	918	011413#2601030300	1.062	011413#2621030300	1.140
WEEE	0,5							

	VE VII MB - Vertical built-in unit with bottom return, brushless		VE VII MB S – Recessed vertical unit with bottom return, brushless, soundproof		VE VII MB 4 – Built-in vertical unit with bottom return, 4-pipe brushless, low-noise		VE VII MB 4 S - Vertical ducted vertical concealed unit with lower return, enhanced brushless	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#1500130300	531	011413#1520130300	604	011413#3400130300	689	011413#3420130300	727
23	011413#1500230300	549	011413#1520230300	629	011413#3400230300	714	011413#3420230300	752
33	011413#1500330300	557	011413#1520330300	640	011413#3400330300	735	011413#3420330300	781
43	011413#1500430300	609	011413#1520430300	695	011413#3400430300	788	011413#3420430300	835
53	011413#1500530300	641	011413#1520530300	742	011413#3400530300	849	011413#3420530300	906
63	011413#1500630300	724	011413#1520630300	816	011413#3400630300	923	011413#3420630300	979
73	011413#1500730300	791	011413#1520730300	899	011413#3400730300	1.019	011413#3420730300	1.083
83	011413#1500830300	870	011413#1520830300	970	011413#3400830300	1.089	011413#3420830300	1.153
93	011413#1500930300	921	011413#1520930300	1.034	011413#3400930300	1.182	011413#3420930300	1.255
103	011413#1501030300	981	011413#1521030300	1.101	011413#3401030300	1.249	011413#3421030300	1.322
WEEE	0,5							

	VE VII P - Recessed vertical unit with enhanced bottom return		VE VII 4/P – Vertical built-in unit with bottom return, 4-pipe, high-capacity		VE VII MB P - Built-in vertical, enhanced brushless, bottom return		VE VII MB 4/P - Vertical built-in unit, bottom return, brushless, boosted 4-pipe system	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#0410130300	416	011413#2610130300	538	011413#1510130300	585	011413#3410130300	707
23	011413#0410230300	440	011413#2610230300	564	011413#1510230300	610	011413#3410230300	733
33	011413#0410330300	476	011413#2610330300	616	011413#1510330300	613	011413#3410330300	753
43	011413#0410430300	530	011413#2610430300	671	011413#1510430300	668	011413#3410430300	808
53	011413#0410530300	568	011413#2610530300	732	011413#1510530300	706	011413#3410530300	869
63	011413#0410630300	642	011413#2610630300	805	011413#1510630300	779	011413#3410630300	942
73	011413#0410730300	717	011413#2610730300	901	011413#1510730300	854	011413#3410730300	1.038
83	011413#0410830300	787	011413#2610830300	971	011413#1510830300	924	011413#3410830300	1.108
93	011413#0410930300	935	011413#2610930300	1.162	011413#1510930300	1.278	011413#3410930300	1.499
103	011413#0411030300	1.000	011413#2611030300	1.229	011413#1511030300	1.345	011413#3411030300	1.566
WEEE	0,5							

* Available with right-hand connection

VIF: Vertical built-in unit with front return air intake

	VE VIF - Vertical built-in unit with front air return		VE VIF S - Vertical built-in front intake silenced unit		VE VIF 4 - Vertical recessed unit with front return, 4-pipe system		VE VIF 4/S - Vertical built-in, front return, silenced, 4-pipe system	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#0500130300	350	011413#0520130300	426	011413#2700130300	506	011413#2720130300	549
23	011413#0500230300	375	011413#0520230300	454	011413#2700230300	533	011413#2720230300	576
33	011413#0500330300	385	011413#0520330300	465	011413#2700330300	553	011413#2720330300	605
43	011413#0500430300	427	011413#0520430300	521	011413#2700430300	608	011413#2720430300	661
53	011413#0500530300	461	011413#0520530300	565	011413#2700530300	668	011413#2720530300	728
63	011413#0500630300	538	011413#0520630300	640	011413#2700630300	742	011413#2720630300	803
73	011413#0500730300	604	011413#0520730300	725	011413#2700730300	838	011413#2720730300	909
83	011413#0500830300	680	011413#0520830300	797	011413#2700830300	910	011413#2720830300	980
93	011413#0500930300	735	011413#0520930300	856	011413#2700930300	1.000	011413#2720930300	1.078
103	011413#0501030300	802	011413#0521030300	923	011413#2701030300	1.067	011413#2721030300	1.145
WEEE	0,5							

	VE VIF MB - Vertical built-in unit with front return, brushless motor		VE VIF MB S – Vertical recessed, front return, brushless, soundproofed		VE VIF MB 4 - Vertical recessed front return 4-pipe silent brushless unit		VE VIF MB 4 S - Built-in vertical, front return, enhanced brushless	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#1600130300	534	011413#1620130300	608	011413#3500130300	693	011413#3520130300	732
23	011413#1600230300	557	011413#1620230300	636	011413#3500230300	720	011413#3520230300	759
33	011413#1600330300	571	011413#1620330300	645	011413#3500330300	739	011413#3520330300	785
43	011413#1600430300	613	011413#1620430300	701	011413#3500430300	796	011413#3520430300	842
53	011413#1600530300	646	011413#1620530300	747	011413#3500530300	854	011413#3520530300	910
63	011413#1600630300	726	011413#1620630300	822	011413#3500630300	930	011413#3520630300	985
73	011413#1600730300	792	011413#1620730300	906	011413#3500730300	1.025	011413#3520730300	1.089
83	011413#1600830300	868	011413#1620830300	977	011413#3500830300	1.097	011413#3520830300	1.161
93	011413#1600930300	921	011413#1620930300	1.038	011413#3500930300	1.186	011413#3520930300	1.260
103	011413#1601030300	988	011413#1621030300	1.105	011413#3501030300	1.254	011413#3521030300	1.327
WEEE	0,5							

	VE VIF P - Enhanced vertical recessed unit with front return air		VE VIF 4/P - Vertical built-in front return, enhanced 4-pipe system		VE VIF MB P – Vertical concealed unit with frontal return, enhanced brushless		VE VIF MB 4/P - Vertical recessed front-return brushless enhanced 4-pipe unit	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#0510130300	420	011413#2710130300	543	011413#1610130300	590	011413#3510130300	712
23	011413#0510230300	448	011413#2710230300	570	011413#1610230300	616	011413#3510230300	739
33	011413#0510330300	480	011413#2710330300	622	011413#1610330300	618	011413#3510330300	759
43	011413#0510430300	536	011413#2710430300	677	011413#1610430300	674	011413#3510430300	814
53	011413#0510530300	573	011413#2710530300	736	011413#1610530300	710	011413#3510530300	874
63	011413#0510630300	648	011413#2710630300	811	011413#1610630300	785	011413#3510630300	948
73	011413#0510730300	724	011413#2710730300	907	011413#1610730300	861	011413#3510730300	1.044
83	011413#0510830300	796	011413#2710830300	979	011413#1610830300	933	011413#3510830300	1.116
93	011413#0510930300	952	011413#2710930300	1.167	011413#1610930300	1.282	011413#3510930300	1.217
103	011413#0511030300	1.016	011413#2711030300	1.234	011413#1611030300	1.350	011413#3511030300	1.284
WEEE	0,5							

* Available with right-hand connection

OIP: Horizontal recessed unit with rear return air

	VE OIP - Horizontal recessed unit with rear return air		VE OIP S - Horizontal built-in rear intake, soundproofed		VE OIP 4 - Horizontal recessed unit with rear return, 4-pipe system		VE OIP 4/S - Horizontal concealed rear return silenced 4-pipe unit	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#0600130300	352	011413#0620130300	426	011413#2800130300	506	011413#2820130300	549
23	011413#0600230300	376	011413#0620230300	454	011413#2800230300	533	011413#2820230300	576
33	011413#0600330300	384	011413#0620330300	465	011413#2800330300	553	011413#2820330300	605
43	011413#0600430300	429	011413#0620430300	521	011413#2800430300	608	011413#2820430300	661
53	011413#0600530300	463	011413#0620530300	565	011413#2800530300	668	011413#2820530300	728
63	011413#0600630300	538	011413#0620630300	640	011413#2800630300	742	011413#2820630300	803
73	011413#0600730300	607	011413#0620730300	725	011413#2800730300	838	011413#2820730300	909
83	011413#0600830300	686	011413#0620830300	797	011413#2800830300	910	011413#2820830300	980
93	011413#0600930300	735	011413#0620930300	856	011413#2800930300	1.000	011413#2820930300	1.078
103	011413#0601030300	798	011413#0621030300	923	011413#2801030300	1.067	011413#2821030300	1.145
WEEE	0,5							

	VE OIP MB – Horizontal recessed unit with rear return, brushless		VE OIP MB S - Horizontal built-in unit with rear return, brushless, soundproofed		VE OIP MB 4 - Horizontal recessed unit with rear return, 4-pipe brushless, soundproofed		VE OIP MB 4 S - Horizontal built-in unit with rear return, enhanced brushless	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#1700130300	534	011413#1720130300	608	011413#3600130300	693	011413#3620130300	732
23	011413#1700230300	558	011413#1720230300	636	011413#3600230300	720	011413#3620230300	759
33	011413#1700330300	570	011413#1720330300	645	011413#3600330300	739	011413#3620330300	785
43	011413#1700430300	609	011413#1720430300	701	011413#3600430300	796	011413#3620430300	842
53	011413#1700530300	650	011413#1720530300	747	011413#3600530300	854	011413#3620530300	910
63	011413#1700630300	726	011413#1720630300	822	011413#3600630300	930	011413#3620630300	985
73	011413#1700730300	795	011413#1720730300	906	011413#3600730300	1.025	011413#3620730300	1.089
83	011413#1700830300	873	011413#1720830300	977	011413#3600830300	1.097	011413#3620830300	1.161
93	011413#1700930300	921	011413#1720930300	1.038	011413#3600930300	1.186	011413#3620930300	1.260
103	011413#1701030300	985	011413#1721030300	1.105	011413#3601030300	1.254	011413#3621030300	1.327
WEEE	0,5							

	VE OIP P - Horizontal built-in rear return enhanced		VE OIP 4/P - Horizontal recessed unit with rear return, 4-pipe enhanced		VE OIP MB P - Horizontal ducted unit with rear return, enhanced brushless		VE OIP MB 4/P - Horizontal concealed unit with rear return, brushless, enhanced 4-pipe system	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#0610130300	420	011413#2810130300	543	011413#1710130300	590	011413#3610130300	712
23	011413#0610230300	448	011413#2810230300	570	011413#1710230300	616	011413#3610230300	739
33	011413#0610330300	480	011413#2810330300	622	011413#1710330300	618	011413#3610330300	759
43	011413#0610430300	536	011413#2810430300	677	011413#1710430300	674	011413#3610430300	814
53	011413#0610530300	573	011413#2810530300	736	011413#1710530300	710	011413#3610530300	874
63	011413#0610630300	648	011413#2810630300	811	011413#1710630300	785	011413#3610630300	948
73	011413#0610730300	724	011413#2810730300	907	011413#1710730300	861	011413#3610730300	1.044
83	011413#0610830300	796	011413#2810830300	979	011413#1710830300	933	011413#3610830300	1.116
93	011413#0610930300	940	011413#2810930300	1.167	011413#1710930300	1.282	011413#3610930300	1.504
103	011413#0611030300	1.005	011413#2811030300	1.234	011413#1711030300	1.350	011413#3611030300	1.571
WEEE	0,5							

* Available with right-hand connection

OII: Horizontal concealed unit with bottom return air intake

	VE OII - Horizontal concealed unit with bottom return air intake		VE OII S - Horizontal recessed unit with bottom return, soundproofed		VE OII 4 – Horizontal recessed unit bottom return, 4-pipe system		VE OII 4/S - Horizontal recessed, bottom return, silenced, 4-pipe	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#0700130300	356	011413#0720130300	433	011413#2900130300	512	011413#2920130300	556
23	011413#0700230300	378	011413#0720230300	458	011413#2900230300	538	011413#2920230300	581
33	011413#0700330300	384	011413#0720330300	472	011413#2900330300	561	011413#2920330300	613
43	011413#0700430300	432	011413#0720430300	526	011413#2900430300	613	011413#2920430300	666
53	011413#0700530300	473	011413#0720530300	570	011413#2900530300	672	011413#2920530300	733
63	011413#0700630300	547	011413#0720630300	645	011413#2900630300	747	011413#2920630300	808
73	011413#0700730300	622	011413#0720730300	732	011413#2900730300	845	011413#2920730300	915
83	011413#0700830300	686	011413#0720830300	802	011413#2900830300	915	011413#2920830300	985
93	011413#0700930300	742	011413#0720930300	864	011413#2900930300	1.008	011413#2920930300	1.086
103	011413#0701030300	802	011413#0721030300	930	011413#2901030300	1.073	011413#2921030300	1.151
WEEE	0,5							

	VE OII MB - Horizontal built-in unit with bottom return, brushless		VE OII MB S - Horizontal ducted concealed unit with bottom return, brushless, soundproofed		VE OII MB 4 – Horizontal built-in unit with bottom return, 4-pipe, brushless, soundproofed		VE OII MB 4 S - Horizontal ducted built-in unit, bottom return, enhanced brushless	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#1800130300	543	011413#1820130300	614	011413#3700130300	700	011413#3720130300	738
23	011413#1800230300	567	011413#1820230300	640	011413#3700230300	725	011413#3720230300	764
33	011413#1800330300	572	011413#1820330300	654	011413#3700330300	747	011413#3720330300	794
43	011413#1800430300	622	011413#1820430300	706	011413#3700430300	800	011413#3720430300	846
53	011413#1800530300	659	011413#1820530300	752	011413#3700530300	860	011413#3720530300	915
63	011413#1800630300	734	011413#1820630300	828	011413#3700630300	934	011413#3720630300	990
73	011413#1800730300	807	011413#1820730300	912	011413#3700730300	1.032	011413#3720730300	1.095
83	011413#1800830300	873	011413#1820830300	982	011413#3700830300	1.102	011413#3720830300	1.165
93	011413#1800930300	930	011413#1820930300	1.046	011413#3700930300	1.194	011413#3720930300	1.268
103	011413#1801030300	988	011413#1821030300	1.112	011413#3701030300	1.260	011413#3721030300	1.333
WEEE	0,5							

	VE OII P - Horizontal built-in unit with enhanced bottom return air		VE OII 4/P - Horizontal built-in unit with bottom return, enhanced 4-pipe system		VE OII MB P - Horizontal recessed unit with bottom return, enhanced brushless		VE OII MB 4/P - Horizontal built-in unit, bottom return, brushless, enhanced 4-pipe system	
Size	**Code**	**€**	**Code**	**€**	**Code**	**€**	**Code**	**€**
13	011413#0710130300	426	011413#2910130300	549	011413#1810130300	596	011413#3710130300	718
23	011413#0710230300	452	011413#2910230300	575	011413#1810230300	622	011413#3710230300	744
33	011413#0710330300	489	011413#2910330300	629	011413#1810330300	626	011413#3710330300	767
43	011413#0710430300	541	011413#2910430300	682	011413#1810430300	678	011413#3710430300	819
53	011413#0710530300	578	011413#2910530300	741	011413#1810530300	715	011413#3710530300	878
63	011413#0710630300	654	011413#2910630300	816	011413#1810630300	791	011413#3710630300	953
73	011413#0710730300	730	011413#2910730300	913	011413#1810730300	867	011413#3710730300	1.051
83	011413#0710830300	800	011413#2910830300	984	011413#1810830300	938	011413#3710830300	1.121
93	011413#0710930300	957	011413#2910930300	1.176	011413#1810930300	1.290	011413#3710930300	1.225
103	011413#0711030300	1.022	011413#2911030300	1.241	011413#1811030300	1.356	011413#3711030300	1.290
WEEE	0,5							

* Available with right-hand connection

ACCESSORIES				
		Compatibility	Code	€
2V2	2-way valves for 2-pipe system with 230V actuator	13÷103	011993380000	147
2V4	2-way valves for 4-pipe system with 230V actuator		011993400000	318
3V2	3-way valves for 2-pipe systems with 230V actuator		011993370000	147
3V4	3-way valves for 4-pipe systems with 230V actuator		011993390000	364
CBB	On-unit controller for brushless motor, 2/4-pipe system management with/without valves (WEEE €0.02)		011993570000	280
CRA	Electronic thermostat for fan coil units (WEEE €0.02)		011993600000	102
CVA	On-unit 3-speed control (WEEE €0.02)		011993540000	42
CVB	On-unit 3-speed control + summer/winter selector switch + room thermostat (WEEE contribution €0.02)		011993550000	101
CVC	On-board electronic unit control 230Vac with OFF/Cooling/Heating + 3 speeds + thermostat (WEEE €0.02)		011993580000	115
CVD1	Microprocessor machine-mounted control 230Vac + 2/4-pipe management with/without valves (WEEE €0.02)		011993590000	215
MOR	"Mamut"-type terminal block		011993630000	11
P	Feet		011993500000	40
SDI.4X3A	Board with 4 outputs (4 motors, 3 speeds) rated 3 A (WEEE €0.02)		0119950076020	266
TEL	System for remote control management (WEEE €0.02)			311
TMB	Minimum thermostat		011993620000	41
VA	Auxiliary drain pan for vertical versions		011993530000	29
3V2-25-1NO	3-way valve for 2-pipe systems with end-of-stroke microswitch (4-wire)	13÷103	011993840000	238
FTI	Galvanized recessed subframe for VIP versions	13÷23	011993641323	81
		33÷43	011993643343	104
		53÷63	011993645363	123
		73÷83	011993647383	145
		93÷103	011993649303	165
P1	Panel for VIP/ONP version	13÷23	011993411323	101
		33÷43	011993413343	123
		53÷63	011993415363	149
		73÷83	011993417383	180
		93÷103	011993419303	201
P2	Panel for VIP2 version with control door	13÷23	011993421323	108
		33÷43	011993423343	138
		53÷63	011993425363	158
		73÷83	011993427383	187
		93÷103	011993429303	211
PA	Plenum with circular suction connections	13÷23	011993471323	118
		33÷43	011993473343	147
		53÷63	011993475363	170
		73÷83	011993477383	198
		93÷103	011993479303	224
PCB	Lower closing panel without grille in pre-painted sheet metal	13÷23	011993451323	34
		33÷43	011993453343	42
		53÷63	011993455363	51
		73÷83	011993457383	61
		93÷103	011993459303	65

MI A3

Hydronic wall panels

2.7 kW÷4.4 kW

Designed to fully meet efficiency, low-noise, and aesthetic requirements. The microprocessor control ensures precise comfort in the room. Three-way valve installed on board the unit. ABS casing with high mechanical strength and excellent ageing resistance; DC brushless fan motor; water coil with large heat exchange surface equipped with air vent valve and condensate drain; horizontal fins and independent vertically adjustable deflectors; complete function management via LCD remote control; cooling and heating operation with three fan speeds plus Auto mode. Manual restart function and Timer function.

As standard:
Three-way 230 V diverter valve with compact-type electric actuator, normally closed and equipped with protective cover, air bleed valve, LCD remote control, volt-free contact for remote ON-OFF, ModBus input, condensate collection tray and drain.

Limit Switch Micro Switch
The unit is equipped with a limit micro switch installed on the three-way diverter valve. This micro switch is wired to a dedicated terminal block from which the signal can be used for various purposes. In particular, this volt-free contact is useful for implementing system automation functions.

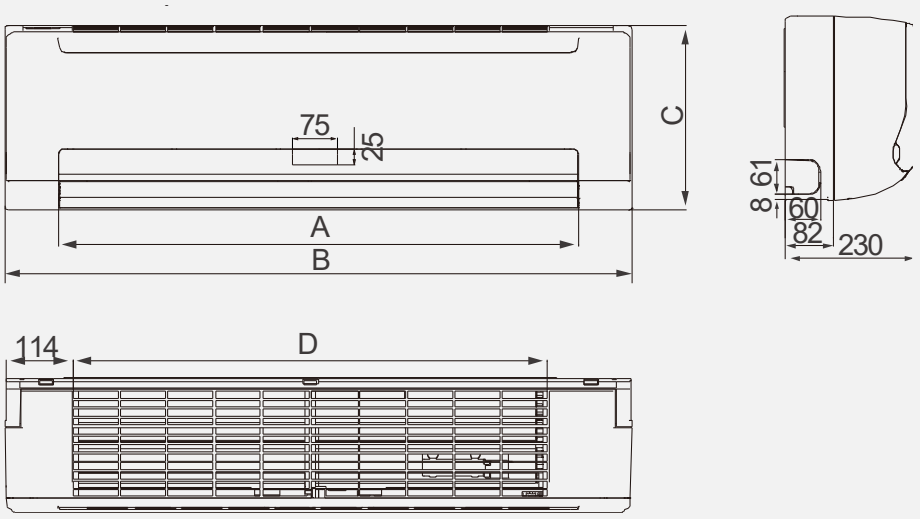
Accessories

- **WGC8**: LAN gateway centralizer for remote management via App
- **WRC11**: Compact multifunction wired controller
- **WRC16**: Allows control of up to 16 indoor units using a single wired controller via the XYE ports.

			26A3	35A3	42A3
Cooling	(1) Cooling capacity	kW	2,7/2,59/2,39	3,81/3,3/2,88	4,47/3,98/3,48
		kBTU/h	9,2/8,8/8,1	12/11,2/9,8	15,2/13,5/11,8
	Power input	W	13/11/10	34/22/15	26/18/13
	Water flow rate	m³/h	0,48/0,46/0,42	0,67/0,57/0,51	0,77/0,68/0,61
	Water pressure losses	kPa	31,61/28,63/25,36	56,75/41,23/33,02	41,17/33,54/27,05
Heating	(2) Heating capacity	kW	2,94/2,8/2,58	4,3/3,65/3,09	4,84/4,23/3,62
		kBTU/h	10/9,5/8,8	14,6/12,4/10,5	16,5/14,4/12,3
	Power input	W	11/11/9	31/20/14	22/16/12
	Water flow rate	m³/h	0,51/0,49/0,46	0,73/0,64/0.56	0,84/0,73/0,64
	Water pressure losses	kPa	32,66/34,89/30,24	51,86/47,53/35,69	36,82/33,83/26,26
Sound data	(3) Maximum–medium–minimum sound pressure	dB(A)	32/30/27	45/39/35	38/34/30
	Hydraulic connections	Ø	3/4"	3/4"	3/4"
	Airflow	m³/h	492/454/400	825/689/590	862/741/634
Power supply	Power supply	V~/Ph/Hz	230/1/50		
	Absorbed current	A	0,2	0,4	0,3
Heat exchange coil	Rows		2	2	2
	Max. pressure	MPa	1.6		
	Diameter	mm	Φ7		
	Condensate drain	mm	OD Φ20		
	Heat exchanger coil length	mm	635x26.74		785x26.74
	Fin type		Hydrophilic aluminum		
	No. of circuits		5	5	7

Not equipped with a condensate drain pump.
(1) Cooling capacity: Inlet air temperature: 27°C d.b. / 19°C w.b.
Water inlet/outlet temperature: 7°C / 12°C
(2) Heating capacity: Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 45°C / 40°C
(3) Noise level tested in a semi-anechoic chamber.

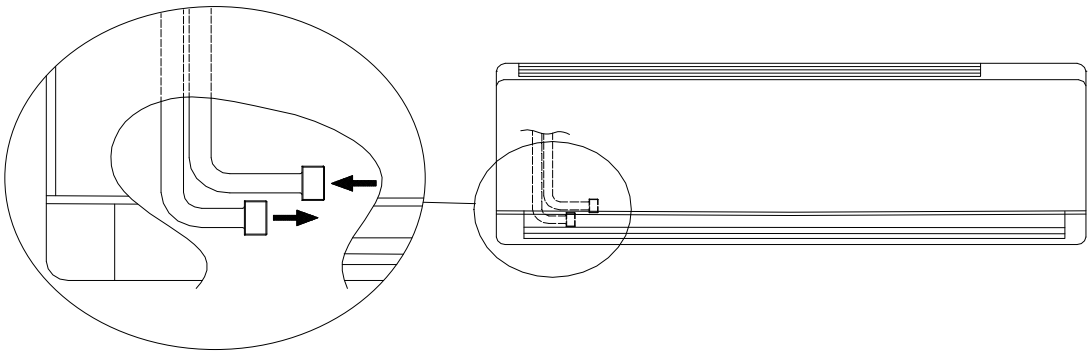
Dimensional Drawings



	26A3	35A3	42A3
A	732	732	892
B	915	915	1.072
C	290	290	315
D	663	663	813
Kg	12,7	12,7	15,1

Dimensions in mm

Left-hand side hydraulic connections



Price list

MI A3			26A3	35A3	42A3
Hydronic wall-mounted unit		code	011422020026	011422020035	011422020042
		€	801	885	1.108
WEEE		€	0,5	0,5	0,5
ACCESSORIES				**Code**	**€**
WGC8	LAN gateway central controller for remote management via App. Up to 64 units connectable.			012109010099	1.226
WRC11	Compact multifunction wired controller			012108010034	166
WRC16	Allows control of up to 16 indoor units by means of a single wired remote controller via the XYE terminals.			012108010095	205

HCA1 - HCA1/4

Hydronic DC brushless cassettes

2.0 kW÷6.1 kW

MAXA hydronic cassettes with DC brushless motor are designed to fully meet the efficiency, low-noise and aesthetic requirements demanded by the market. The microprocessor control ensures precise comfort in the room. The ModBus input allows quick integration with external BMS systems.
The compact dimensions meet installation needs in false ceilings thanks to the reduced sizes of 57 x 57 cm or 84 x 84 cm in the higher-capacity versions.
Provision for local adjacent air supply (size 60 only) and for fresh air intake (all sizes).

Unit composition:

- High-efficiency finned coils with low pressure drops.
- Internal closed-cell insulation to minimize thermal loss and acoustic emission.
- Automatic flap movement.
- Condensate lift pump up to a maximum height of 500 mm, supplied as standard
- Modbus input

Valve kit *

- 3V2C: 3-way 2-pipe valve kit (HCA 22-29-35-42)
- 3V2CG: 3-way valve kit for 2-pipe systems (HCA 60)
- 3V4C: 3-way valve kit, 4-pipe system (HCA 22-35-50)
- 3V4CG: 4-pipe 3-way valve kit (HCA 60)

Valve kit for systems with modulating pump

- 2V2C: 2-way valve kit for 2-pipe system (HCA 22-29-35-42)
- 2V2CG: 2-way valve kit, 2-pipe (HCA 60)
- 2V4C: 2-way 4-pipe valve kit (HCA 35–50)
- 2V4CG: 2-way valve kit, 4-pipe system (HCA 60)

3-way / 2-way valve kit *

The kit consists of:

- No. 2 nipples / No. 1 nipple
- no. 4 O-rings / no. 2 O-rings
- No. 2 copper connection pipes / No. 1 copper connection pipe
- No. 1 three-way valve body – 4 ports / No. 1 two-way valve body – 2 ports
- No. 1 ON/OFF actuator / No. 1 ON/OFF actuator

* For optimal operation it is always necessary to connect the water shut-off valve(s). In the absence of this device, room temperature control may not be guaranteed.

Accessories

- **WGC8**: LAN gateway centralizer for remote management via App
- **WRC11**: Compact multifunction wired controller
- **WRC16**: Allows control of up to 16 indoor units using a single wired controller via the XYE ports.

Versions

- **HCA1**: Cassette unit for 2-pipe system with electronic control and remote control
- **HCA1/4** : Cassette unit for 4-pipe system with electronic control and remote control

2V4C/2V4CG

3V4C

3V2C/3V2CG

3V4CG

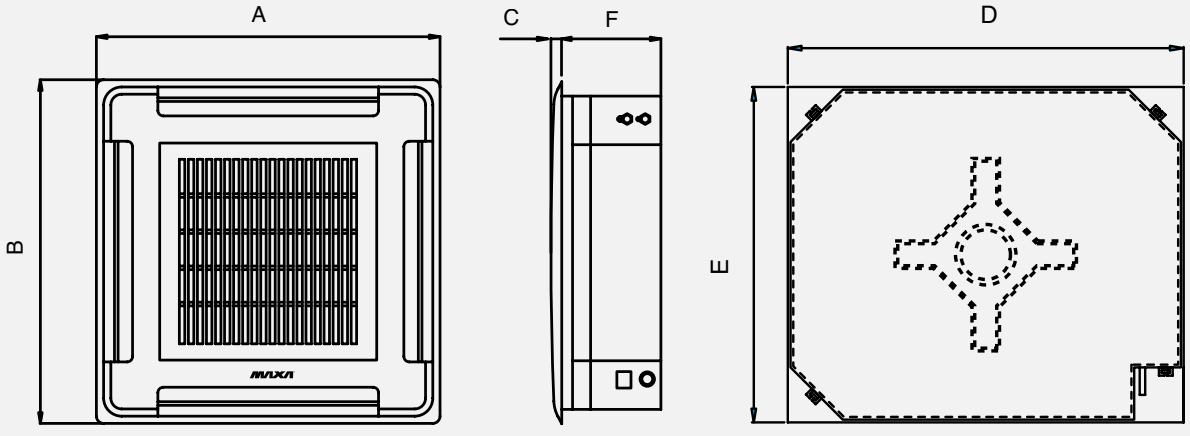
			22	29	35	42	60
HCA1	(1) Cooling capacity	W	2.000	2.980	3.960	4.200	6.120
		BTU/h	6.826	10.171	13.515	14.335	20.888
	Water flow rate	m³/h	0,35	0,53	0,7	0,75	1,1
	(1) Power input	W	5	15	28	43	75
	(2) Heating capacity	W	2.240	2.610	4.630	4.950	6. 270
		BTU/h	7.645	8.908	15.802	16.894	21.400
	Water flow rate	m³/h	0,35	0,53	0,7	0,75	1,1
	(2) Power input	W	5	15	28	33	76
	Maximum - medium - minimum sound pressure (3)	dB(A)	39/33/27	39/33/27	42/36/30	43/38/32	44/40/34
	Maximum - medium - minimum sound power (3)	dB(A)	51/45/39	51/45/39	54/48/42	55/50/44	-
	Airflow rate	m³/h	322	535	719	781	1229
	Fan type		Centrifugal				
	No. of rows		2				
	Electric motor		DC				

			35	50	60
HCA1/4	(1) Cooling capacity	W	3.080	3.050	5.620
		BTU/h	10.512	10.410	19.181
	Water flow rate	m³/h	0,56	0,54	1,04
	(1) Power input	W	37	32	60
	(2) Heating capacity	W	5.520	5.970	7.660
		BTU/h	18.840	20.376	26.144
	Water flow rate	m³/h	0,42	0,46	0,73
	(2) Power input	W	28	32	61
	Maximum - medium - minimum sound pressure (3)	dB(A)	42/35/30	44/39/31	44/39/33
	Airflow rate	m³/h	723	731	1389
	Fan type		Centrifugal		
	No. of rows (cooling / heating)		4/3	4/3	9/3
	Electric motor		DC		

(1) Inlet air temperature: 27°C d.b./19.5°C w.b. at maximum speed
Entering/leaving water temperature: 7°C / 12°C at maximum speed
(2) Inlet air temperature: 20°C d.b. at maximum speed
Inlet water temperature: 50°C at maximum speed

(3) At a distance of 1 m and a reverberation time of 0.5 s, maximum velocity

Dimensional Drawings



	HCA1 22	HCA1 29	HCA1 35 HCA1/4 35	HCA1 42 HCA1/4 50	HCA1 60 HCA1/4 60
A	647	647	647	647	950
B	647	647	647	647	950
C	50	50	50	50	45
D	575	575	575	575	840
E	575	575	575	575	840
F	261	261	261	261	300
Kg	19	19	19	19	33,5

Dimensions in mm

Price list

HCA1			22	29	35	42	60
Cassette unit for 2-pipe system with electronic control and remote control		**Body Code**	0111318010022	0111318010029	0111318010035	0111318010042	0111318010060
		Panel Code	010132518010	010132518010	010132518010	010132518010	010132518030
		Drip Tray Code	010132519010	010132519010	010132519010	010132519010	010132519030
		€	959	1.004	1.041	1.125	1.468
WEEE		€	0,5	0,5	0,5	0,5	0,5
HCA1 ACCESSORIES							
2V2C*	2-way valve kit	code	0119100015	0119100015	0119100015	0119100015	-
		€	71	71	71	71	-
2V2CG*	2-way valve kit	code	-	-	-	-	0119100020
		€	-	-	-	-	71
3V2C*	3-way valve kit	code	0119100013	0119100013	0119100013	0119100013	-
		€	105	105	105	105	-
3V2CG*	3-way valve kit (mandatory accessory)	code	-	-	-	-	0119100019
		€	-	-	-	-	82
WGC8	LAN gateway central controller for remote management via App. Up to 64 units connectable.	code	012109010099				
		€	1.226				
WRC11	Compact multifunction wired controller	code	012108010034				
		€	166				
WRC16	Allows control of up to 16 indoor units by means of a single wired remote controller via the XYE terminals.	code	012108010095				
		€	205				

* To be assembled on site

HCA1/4			35	50	60
Cassette unit for 4-pipe system with electronic control and remote control		**Body Code**	0111318030035	0111318030050	0111318030060
		Panel Code	010132518010	010132518010	010132518030
		Drip Tray Code	010132519010	010132519010	010132519030
		€	1.308	1.412	1.860
WEEE		€	0,5	0,5	0,5
ACCESSORIES					
2V4C*	2-way, 4-pipe valve kit	code	0119100016	0119100016	-
		€	135	135	-
2V4CG*	2-way 4-pipe valve kit (mandatory accessory)	code	-	-	0119100022
		€	-	-	117
3V4C*	4-pipe 3-way valve kit	code	0119100014	0119100014	-
		€	191	191	-
3V4CG*	4-pipe 3-way valve kit (mandatory accessory)	code	-	-	0119100021
		€	-	-	153
WGC8	LAN gateway central controller for remote management via App. Up to 64 units connectable.	code	012109010099		
		€	1.226		
WRC11	Compact multifunction wired controller	code	012108010034		
		€	166		
WRC16	Allows control of up to 16 indoor units by means of a single wired remote controller via the XYE terminals.	code	012108010095		
		€	205		

* To be assembled on site

HCN

Low-profile ductable units with asynchronous AC or brushless DC motor

6 kW÷20 kW

- Self-supporting structure in galvanized sheet metal with thermal and acoustic insulation (S version) or double 20 mm sandwich panel with pre-painted external sheet metal in white RAL 9002 (D version); equipped with ceiling/wall mounting holes, compact dimensions and optimized overall footprint.
- Double-slope condensate collection tray.
- High-efficiency heat exchange coil with copper tubes and aluminum fins, standard connections on the right-hand side.
- Double inlet centrifugal fans with plastic impellers featuring forward-curved, airfoil blades of large diameter, mounted on elastic supports and vibration dampers.
- The unit is equipped with an IP20 "Mammut"-type terminal block mounted outside the unit.
- The ductable units of the HCN series are supplied without an air filter. A wide range of filters is available in the accessories section.

Configurations

S-OIP Single recessed horizontal panel with rear return air intake

S-OII Single recessed horizontal panel with bottom return

D-OIP Double panel, horizontal recessed units with rear return air

D-OII Double panel, horizontal recessed units with bottom return

Versions

- **S-OIP**: Single concealed horizontal unit, rear return panel
- **D-OIP**: Double panel, horizontal recessed units with rear return air intake
- **S-OII**: Single recessed horizontal panel with bottom return
- **D-OII**: Double panel, horizontal recessed units with bottom return air

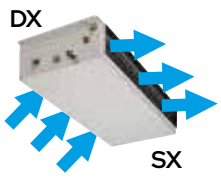
Standard with connection on the left. When ordering, it is possible to request connections on the right side.

Nomenclature

When ordering, always specify the full model as shown in the example below.

HCN	–	S	–	OIP	–	130	–	DX
Series		Load-bearing casing		Version		Size		Connections
HCN		S; D		OIP-OII		60.....200		DX; SX

HCN-S-OIP 130-DX



For accessories, see the "HCN - HCNP Accessories" page.

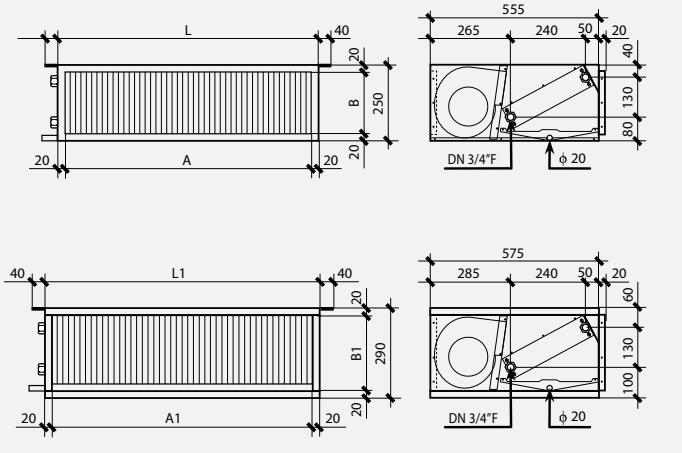
HCN			60	75	86	103	130	136	150	170	200
Cooling capacity (1) (*)		W	6.010	7.480	8.590	10.300	12.900	13.600	15.000	17.200	20.200
Sensible capacity (1) (*)		W	4.570	5.560	6.160	8.100	9.950	10.800	11.100	13.300	14.900
Thermal output (2) (*)		W	6.550	7.900	8.300	11.700	14.400	15.650	15.200	19.400	20.400
Thermal output (3) (*)		W	13.100	15.800	16.600	23.400	28.800	31.300	30.400	38.800	40.800
Air flow rate (4)		m³/h	1.100	1.200	1.150	2.100	2.300	2.800	2.200	3.100	2.950
Sound pressure Min-Med-Max (5)		dB(A)	37-44-49	38-45-50	38-45-50	45-50-52	46-51-53	41-48-51	46-51-53	42-49-52	42-49-52
Nominal electrical power input		W	200	200	200	340	340	340	320	320	320
Rated current		A	0,9	0,9	0,9	1,65	1,65	1,65	1,50	1,50	1,50
No. of motors / no. of fans			1 / 1	1 / 1	1 / 1	1 / 2	1 / 2	1 / 2	1 / 3	1 / 3	1 / 3
Maximum available static pressure		Pa	148	152	152	138	142	142	132	136	136
Combined heating/ cooling coil hot/cold	no. of rows	no.	3	3	4	3	3	4	3	3	4
	hydraulic connection	Ø	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F	3/4" F
	water content	L	1,95	1,96	2,60	2,86	2,87	3,82	3,75	3,76	4,99

Heat outputs in 4-pipe version (HCN + BC)

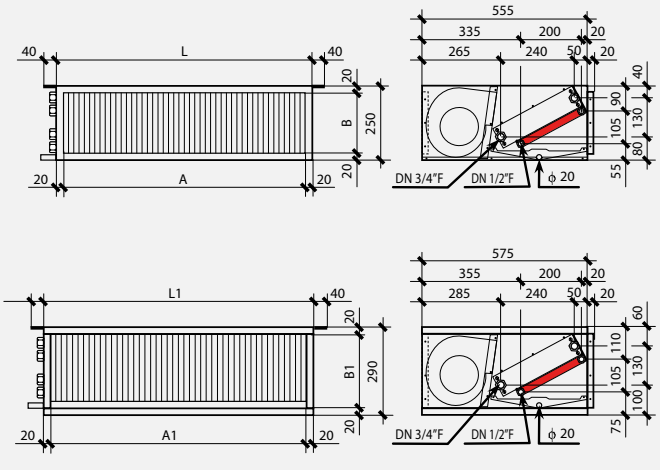
HCN		60	75	86	103	130	136	150	170	200
Cooling capacity (1) (*)	W	5.830	7.220	-	9.960	12.400	-	13.200	16.600	-
Sensible capacity (1) (*)	W	4.220	5.350	-	7.830	9.530	-	10.400	12.800	-
Heating capacity (3)	W	6.610	6.970	-	11.600	12.200	-	15.500	16.400	-
Air flow rate (4)	m³/h	1.050	1.140	-	2.000	2.170	-	2.670	2.930	-
Maximum available static pressure	Pa	148	152	-	138	142	-	134	138	-

Note: Capacities and air flow rates refer to the version with AC motor, under conditions of 0 Pa available static pressure. For different available pressures, refer to the air flow variation diagrams.
(1) Inlet air temperature: 27°C d.b. / 19.5°C w.b.
Water inlet/outlet temperature: 7°C / 12°C
(2) Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 45°C / 40°C
(3) Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 70°C / 60°C
(4) Rated values measured with plenum chamber in accordance with AMCA 210-74 and duct plus orifice plate in accordance with CNR-UNI 10023 standards.
(5) In free field, distance 3 m. Values calculated from sound power measured in a reverberation room in accordance with standards ISO 3740 - ISO 3742.
(1)(2)(3)(4)(5) Nominal technical data referring to air flow rate (4) at maximum speed and unit with free discharge
(*) Maximum speed
DN = Nominal diameter; F = Female gas connections

Dimensional Drawings



Auxiliary heating coil (for 4-pipe system)



HCN "S" Version									
	60	75	86	103	130	150	136	170	200
L	800	800	800	1.200	1.200	1.200	1.600	1.600	1.600
A	760	760	760	1.160	1.160	1.160	1.560	1.560	1.560
B	210	210	210	210	210	210	210	210	210
Kg	34	35	37	48	50	53	63	65	68

HCN Version "D"									
	60	75	86	103	130	150	136	170	200
L1	840	840	840	1.240	1.240	1.240	1.640	1.640	1.640
A1	800	800	800	1.200	1.200	1.200	1.600	1.600	1.600
B1	250	250	250	250	250	250	250	250	250
Kg	48	49	51	66	68	71	85	87	90

HCN "S" Version – Hot Coil						
	60	75	103	130	136	170
L	800	800	1.200	1.200	1.600	1.600
A	760	760	1.160	1.160	1.560	1.560
B	210	210	210	210	210	210
Kg	36	37	51	53	67	69

HCN "D" Version – Hot Coil						
	60	75	103	130	136	170
L1	840	840	1.240	1.240	1.640	1.640
A1	800	800	1.200	1.200	1.600	1.600
B1	250	250	250	250	250	250
Kg	50	51	69	71	89	91

Dimensions in mm

HCNP

Enhanced low-profile/flat ductable units with asynchronous AC or brushless DC motor

6.8 kW÷12 kW

- Self-supporting structure in galvanized sheet metal with thermal and acoustic insulation (S version) or double 20 mm sandwich panel with pre-painted external sheet metal in white RAL 9002 (D version); equipped with ceiling/wall mounting holes, compact dimensions and optimized overall footprint.
- Double-slope condensate collection tray.
- High-efficiency heat exchange coil with copper tubes and aluminum fins, standard connections on the right-hand side.
- In the HCNP series, the double-inlet centrifugal fans with large-diameter plastic impellers featuring forward-curved, airfoil blades, mounted on elastic supports and vibration dampers, are equipped with higher-power motors to ensure higher available static pressures.
- The unit is equipped with an IP20 "Mammut"-type terminal block mounted outside the unit.
- The ductable units of the HCNP series are supplied without an air filter. A wide range of filters is available in the accessories section.

Configurations

S-OIP Single recessed horizontal panel with rear return air intake

S-OII Single recessed horizontal panel with bottom return

D-OIP Double panel, horizontal recessed units with rear return air

D-OII Double panel, horizontal recessed units with bottom return

Versions

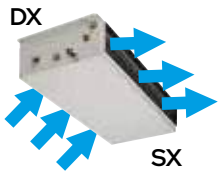
- **S-OIP**: Single concealed horizontal unit, rear return panel
- **D-OIP**: Double panel, horizontal recessed units with rear return air intake
- **S-OII**: Single recessed horizontal panel with bottom return
- **D-OII**: Double panel, horizontal recessed units with bottom return air

Standard with connection on the left. When ordering, it is possible to request connections on the right side.

Nomenclature

When ordering, always specify the full model as shown in the example below.

HCNP	–	S	–	OIP	–	120	–	DX
Series		Load-bearing casing		Version		Size		Connections
HCNP		S; D		OIP-OII		60.....120		DX; SX



HCNP-S-OIP 120-DX

HCN, HCNP accessories

Factory-installed

TEL

System for remote control management. Main board + Air sensor + Water sensor + IR receiver + Remote control (management of 2/4-pipe systems, with/without valves). Fan: 7A-230Vac. Valves: 2A-230Vac.

BC

Auxiliary heating coil (for 4-pipe system)

MOR
TMB

"Mammut"-type terminal block + minimum hot water temperature thermostat. Tset 32°C. All HCN units are supplied complete with a standard "Mammut"-type terminal block, without thermostat.

SFA-S
SFA-D

Removable flat air filter (non-ductable) EU3 (S = single galvanized sheet metal, D = double pre-painted panel)

SND
W4

Water temperature probe (NTC type 4700 Ohm@25°C) with adjustable minimum setpoint, 1 m cable length. Alternative to TMB thermostat.

SFC-S
SFC-D

EU3 ductable air filter section + flat air filter (S = single galvanized sheet metal, D = double pre-painted panel)

MB

Brushless motor with continuous 0–100% air flow modulation (0–10 Vdc control signal).

3VC-2,5
3VC-4
3VC-6

No. 1 three-way valve for heating coil (4-pipe system) with 230 V actuator

3V-2.5
3V-4
3V-6

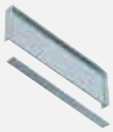
No. 1 three-way valve for 2-pipe system with 230 V actuator

2VC-2,5
2VC-4
2VC-6

No. 1 two-way valve for heating coil (4-pipe system) with 230V actuator

2V–2.5
2V-4
2V-6

No. 1 two-way valve for 2-pipe system with 230 V actuator



SFD-S
SFD-D

Ductable EU5 air filter section + corrugated HIGH-EFFICIENCY air filter H=100 mm (S=single galvanized sheet metal, D=double pre-painted panel)

Air pressure drop (clean/dirty filter)

HCN	60	75	86	103	130	150	136	170	200
SFA (Pa)	15/35	17/42	16/38	23/55	27/66	25/60	22/54	28/66	25/60
SFC (Pa)	15/35	17/42	16/38	23/55	27/66	25/60	22/54	28/66	25/60
SFD (Pa)	20/37	24/44	22/41	32/59	38/70	35/64	31/58	39/71	35/64

Note: each individual kit includes only one valve with actuator. In the case of a 4-pipe system, 2 valves are required. Example: with a 4-pipe ducted unit, in the case of 3-way valves, 230 V power supply: 3V + 3VC.

Features of 3-way / 2-way valves - RECOMMENDED COMBINATIONS									
HCN	60	75	86	103	130	150	136	170	200
Characteristic valve	Kvs 2,5			Kvs 4			Kvs 6		
User-side connections	DN 3/4" M								
Nominal pressure	PN 16 bar								

HCN, HCNP accessories

Provided separately

PMP

Condensate pump equipped with 8A (250V) alarm contact

MS

"230 Vac on/off" servomotor for air damper

SDI.4X3A

Board with 4 outputs at 3A (suitable for controlling up to 4 three-speed motors at 3A; e.g. 4 small fan coils).

SDI.2X10A

Board with 2 x 10A outputs (suitable for controlling up to 2 three-speed 10A motors; e.g. 1 large unit with 2 motors).

S2S-S
S2S-D

Closed section + 2 balancing/adjustment dampers (1 lower + 1 rear) – dampers without actuators, prepared for manual control or motorization (S = single galvanized steel sheet, D = double pre-painted panel)

SSL-S
SSL-D

Labyrinth silencer section (for air intake and/or supply)
(S=single galvanized sheet metal, D=double pre-painted panel)

Scm-S
Scm-D

Sheet metal section with circular connections, variable "Ø", made of plastic material
(S=single galvanized sheet metal, D=double pre-painted panel)

No. and Ø of circular connections									
HCN	60	75	86	103	130	150	136	170	200
SCM no. x Ø	3xØ200/180/160			5xØ200/180/160			6xØ200/180/160		

SSM-S
SSM-D

Outdoor air (0–33%) / return air (100–67%) mixing section, or vice versa (interlocked dampers with manual controls, prepared for motorization)
(S=single galvanized sheet metal, D=double pre-painted panel)

Air pressure drops									
HCN	60	75	86	103	130	150	136	170	200
SSM (Pa)	13	15	14	20	24	22	20	24	22
S2S (Pa)	15	17	16	23	27	25	22	28	25

SBC-O

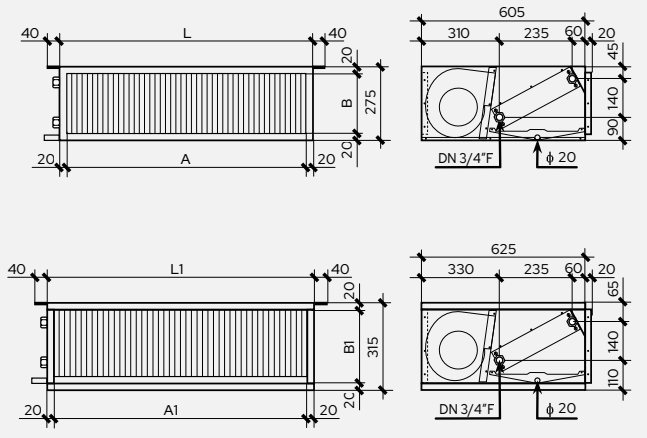
Auxiliary galvanized steel condensate collection tray with thermal insulation

			68	86	101	120
	Cooling capacity (1) (*)	W	6.820	8.650	10.100	12.000
	Sensible capacity (1) (*)	W	5.300	6.580	7.380	9.780
	Thermal output (2) (*)	W	7.600	9.450	10.000	14.200
	Thermal output (3) (*)	W	15.200	18.900	20.000	28.400
	Air flow rate (4)	m³/h	1.350	1.500	1.450	2.750
	Sound pressure Min-Mid-Max (7)	dB(A)	34-43-49	35-44-50	35-44-50	37-48-51
	Nominal electrical power input	W	270	270	270	570
	Rated current	A	1,25	1,25	1,25	2,70
	No. of motors / no. of fans		1/1	1/1	1/1	1/2
HCNP	Maximum available static pressure	Pa	184	194	194	182
	Combined heating/cooling coil					
	No. of rows	no.	3	3	4	3
	Hydraulic connection	Ø	3/4" F	3/4" F	3/4" F	3/4" F
	Water content	L	1,95	1,95	2,60	2,86
	Heating and cooling outputs in 4-pipe configuration (HCNP + BC)					
	Cooling capacity (1) (*)	W	6.570	8.280	11.500	14.600
	Sensible capacity (1) (*)	W	5.070	6.250	9.330	11.500
	Heating capacity (3)	W	12.100	12.900	22.300	23.600
	Air flow rate (4)	m³/h	1.270	1.400	2.570	2.800
	Maximum available static pressure	Pa	186	196	184	192

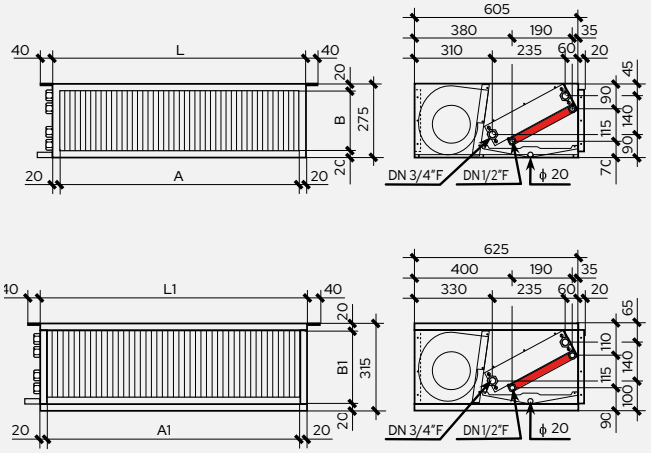
Note: Capacities and air flow rates refer to the version with AC motor, under conditions of 0 Pa available static pressure. For different available pressures, refer to the air flow variation diagrams.
(1) Inlet air temperature: 27°C d.b. / 19.5°C w.b.
Water inlet/outlet temperature: 7°C / 12°C
(2) Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 45°C / 40°C
(3) Inlet air temperature: 20°C d.b.
Water inlet/outlet temperature: 70°C / 60°C

(4) Rated values measured with plenum chamber in accordance with AMCA 210-74 and duct plus orifice plate in accordance with CNR-UNI 10023 standards.
(7) In free field, distance 3 m. Values calculated from sound power measured in a reverberation chamber in accordance with ISO 3740 - ISO 3742.
(1)(2)(3)(4)(5)(6) Nominal technical data referring to air flow rate (4) at maximum speed and unit with free discharge
(*) Maximum speed
DN = Nominal diameter; F = Female gas connections

Dimensional Drawings



Auxiliary heating coil (for 4-pipe system)



HCNP "S" Version				
	68	86	101	120
L	800	800	800	1.200
A	760	760	760	1.160
B	235	235	235	235

HCNP "D" Version				
	68	86	101	120
L1	840	840	840	1.240
A1	800	800	800	1.200
B1	275	275	275	275

HCNP "S" Version - Hot Coil				
	68	86	101	120
L	800	800	800	1.200
A	760	760	760	1.160
B	235	235	235	235

HCNP "D" Version – Hot Coil				
	68	86	101	120
L1	840	840	840	1.240
A1	800	800	800	1.200
B1	275	275	275	275

Dimensions in mm

HCNA

Medium ductable units with AC asynchronous or DC brushless motor

7 kW÷68 kW

HCNA units are compact, freely configurable air handling units. You can choose from: 2 motor options (6-pole or brushless), 2 types of load-bearing casings (S or D), the 2-pipe/4-pipe version, and a wide range of compatible accessories.
The high flexibility, together with the wide output range, makes HCNA the winning solution that always allows you to find the right configuration for your specific needs.

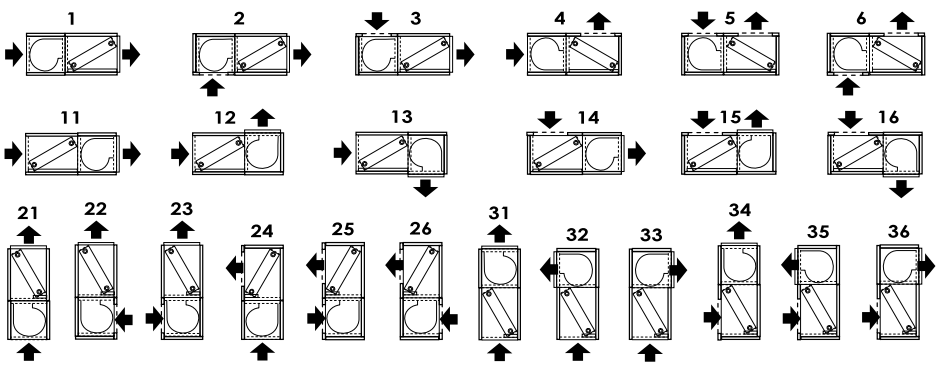
Construction Features

- Load-bearing structure in heavy-gauge galvanized sheet metal, resistant to rust, corrosion, chemicals, solvents, aliphatics, and alcohols.
- Self-supporting, removable panels; assembled with self-tapping screws for quick and easy inspection/maintenance. Load-bearing casings are available in "S" version (single panel) and "D" version (20 mm double sandwich panel with pre-painted outer sheet, white RAL 9002).
- The units are equipped with high-efficiency heat exchange coils (without air vent valves) made of copper tubes and aluminum fins.
- Standard connections on the right; on request and at an additional cost, connections on the left.
- The sections with cooling coil are equipped with a galvanized steel condensate drain pan with external thermal insulation (on request, at extra cost, in AISI 304 stainless steel) with single slope to ensure optimal condensate drainage, complete with Ø30 mm drain connection.
- The standard electrical equipment includes: "Mammut"-type IP20 terminal blocks, with the terminal block mounted outside the unit on the same side as the hydraulic connections. For units with 2 motors, the installation of 3 relays or of the interface board is recommended.
- All standard versions are supplied with free intake and discharge openings, without any grille/guard and without an air filter.
- No. 2 motor drives: 6-pole or brushless

Versions

- **S**: Recessed version - Single panel
- **D**: Exposed version - Double panel

Standard with connection on the left. When ordering, it is possible to request connections on the right side.



Accessories

Provided separately

MOR-TMB

"Mammut"-type terminal block + minimum hot water temperature thermostat. Tset 32°C. All HCN units are supplied complete with a standard "Mammut"-type terminal block, without thermostat.

PMP

Condensate pump with integrated 0.5 L tank, equipped with 4A (250V) alarm contact

SDI.4X3A

Board with 4 outputs at 3A (suitable for controlling up to 4 three-speed motors at 3A; e.g. 4 small fan coils).

SDI.2X10A

Board with 2 x 10A outputs (suitable for controlling up to 2 three-speed 10A motors; e.g. 1 large unit with 2 motors).

PFT-S
PFT-D

Ductable air filter section + EU7 pocket air filter, H = 400 mm. VERY HIGH EFFICIENCY (S = single galvanized sheet metal, D = double pre-painted panel)

P2S-S
P2S-D

Closed section + 2 balancing/ adjustment dampers (1 lower and 1 rear). Dampers without actuators, prepared for manual control or motorization. (S = single galvanized sheet metal, D = double pre-painted panel)

PMA-S
PMA-D

Outdoor air (0–33%) / return air (100–67%) mixing section (S=single galvanized sheet metal, D=double pre-painted panel)

MS

"230 Vac on/off" servomotor for air damper

P90-S
P90-D

90° Section (S = single galvanized sheet metal, D = double pre-painted panel)

PCR-S
PCR-D

Sheet metal section with circular "Ø" connections, internally insulated (S = single galvanized sheet metal, D = double pre-painted panel)

PSL-S
PSL-D

Labyrinth silencer section, suitable for both intake and supply air openings (S = single galvanized sheet metal, D = double pre-painted panel).

Coil characteristics

	HCNA	71	117	143	165	216	290	240	293	330	565	685
Coil hot/cold	Kvs characteristic	2,33	3,78	4,58	5,65	6,65	9,00	8,22	9,91	11,04	16,36	19,73
	User-side connections DN	3/4"M	1"M	1"M	1"M	1"-1/4M	1"-1/2M	1"-1/4M	1"-1/2M	1"-1/2M	1"-1/2M (4R)	1"-1/2M (4R)
Hot coil	Kvs characteristic	1,66	2,56	3,23	3,94	4,64	6,46	5,73	7,14	7,98	9,67	11,53
	User-side connections DN	3/4"M	1"M	1"M	1"M	1"-1/4M	1"-1/4M	1"-1/4M	1"-1/4M	1"-1/4M	1"-1/4M	1"-1/4M

Valve features

3-way valve	(1) Each individual kit includes only one control valve.			
3V / 3VM	DN 3/4" Kvs 2,8	DN 1" Kvs 5,2	DN 1 1/4" Kvs 13,0	DN 1 1/2" Kvs 16,0
2-way valve	(1) Each individual kit includes only one control valve.			
2V / 2VM	DN 3/4" Kvs 2,8	DN 1" Kvs 5,2	DN 1 1/4" Kvs 13,0	DN 1 1/2" Kvs 16,0

(1) Each individual valve kit is compatible with any size of HCNA unit.
For on-off valves, it is recommended to use valves with a high Kvs value – for modulating valves, it is recommended to use valves with a Kvs value comparable to the Kvs of the coil.

The heating coil of the HCNA units (4-pipe system) uses the same type of valves.
Therefore, in a 4-pipe system, 2 valves (2 codes) must be provided.

Accessories

Factory-installed

BC

Auxiliary hot coil, 2 rows

TEL

System for remote control management. Main board + Air sensor + Water sensor + IR receiver + Remote control (management of 2/4-pipe systems, with/without valves). Fan: 7A-230Vac. Valves: 2A-230Vac.

3V-2.8
3V-5.2
3V-13
3V-16

No. 1 three-way valve with 230V actuator

MB

Brushless motor with continuous 0–100% air flow modulation (0–10 Vdc control signal).

PFA-S
PFA-D

Ductable air filter section + EU3 flat air filter (S = single galvanized sheet metal, D = double pre-painted panel)

PFO-S
PFO-D

Ductable air filter section + corrugated EU5 air filter, H = 100 mm, HIGH EFFICIENCY (S = single galvanized sheet metal, D = double pre-painted panel)

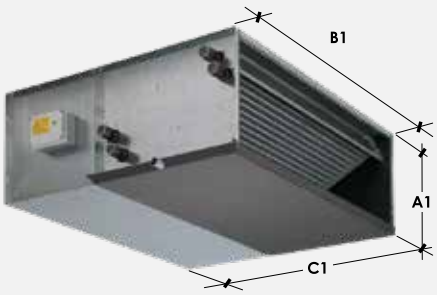
2V-2.8
2V-5.2
2V-13
2V-16

No. 1 two-way valve with 230V actuator

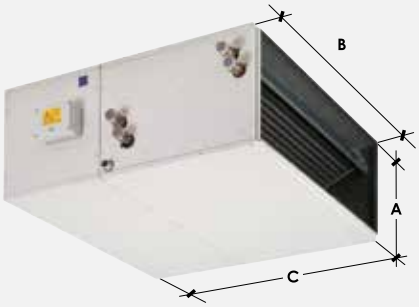
	HCNA		71	117	143	165	216 (7)	290(7)	240(7)	293(7)	330(7)	565(7)	685(7)
HCNA	Cooling capacity (1)	kW	7,3	11,7	14,6	17,0	22,2	29,8	24,1	30,1	34,0	58,1	70,1
	Sensible output (1)	kW	5,9	9,8	12,0	14,0	18,3	24,3	20,2	24,6	28,1	44,5	55,4
	Thermal power (2)	kW	17,2	28,3	34,9	40,7	52,9	69,9	58,8	71,2	80,9	125,7	157,2
	Heating capacity (3)	W	8.350	14.100	17.000	19.700	25.650	34.100	29.300	34.600	39.150	60.950	76.650
	Airflow rate (3)	m³/h	1500	2500	3000	3500	5000	6000	5000	6000	7000	10000	12000
	Water flow rate (4)												
	Cooling	l/h	1256	2012	2511	2924	3818	5126	4145	5177	5848	9993	12057
	Heating	l/h	1479	2434	3001	3500	4549	6011	5057	6123	6957	10810	13519
	Water pressure drops (4)												
	Cooling	kPa	27,7	27,3	29,7	27,5	28,1	32,8	25,7	27,4	29,0	32,4	35,0
	Heating	kPa	30,0	31,1	33,1	30,7	31,0	35,2	30,1	30,0	32,0	29,6	34,3
	Sound pressure (5)												
	Min-Med-Max	dB(A)	35-41-46	42-48-54	40-45-54	43-47-53	48-52-58	47-51-57	45-51-57	43-48-57	46-50-56	51-55-61	50-54-60
	Motors/Fans	n°/n°	1/1	1/1	1/1	1/1	1/1	1/1	2/2	2/2	2/2	2/2	2/2
	Absorbed current	A	1x2,4	1x5,0	1x5,0	1x7,0	1x7,2	1x9	2x5	2x5	2x7	2x7,2	2x9
	Power supply		230Vac - 1 Ph - 50Hz										
	Poles	no.	4										
	Coil/Rows	no.	3R	3R	3R	3R	3R	3R	3R	3R	3R	4R	4R
	Hydraulic connections	Ø	3/4"M	1"M	1"M	1"M	1"1/4 M	1"1/4 M	1"1/4 M	1"1/4 M	1"1/4 M	1"1/4 M	1"1/4 M
	Condensate drain	Ø mm	30	30	30	30	30	30	30	30	30	30	30
	HCNA		**71**	**117**	**143**	**165**	**216 (7)**	**290(7)**	**240(7)**	**293(7)**	**330(7)**	**565(7)**	**685(7)**
HCNA Hot Coil	Thermal power (2)	W	13,3	21,7	27,3	31,7	40,4	54,5	44,8	55,3	62,4	85,2	103,1
	Water flow rate (5)												
	Heating	l/h	1144	1866	2348	2726	3474	4687	3853	4756	5366	7327	8867
	Water pressure drops (5)												
	Heating	kPa	35,1	36,3	37,7	38,6	40,4	37,3	37,7	34,7	37,1	37	40,2
	Coil/Rows	no.	2R	2R	2R	2R	2R	2R	2R	2R	2R	2R	2R
	Hydraulic connections	Ø	3/4"M	1"M	1"M	1"M	1"1/4 M	1"1/4 M	1"1/4 M	1"1/4 M	1"1/4 M	1"1/4 M	1"1/4 M

(1) Entering air temperature: 27°C d.b. / 19°C w.b. – Entering/leaving water temperature: 7°C / 12°C Maximum speed
(2) Inlet air temp.: 20°C d.b. - Inlet/outlet water temp.: 70°C / 60°C Max speed
(3) Entering air temp.: 20°C d.b. – Entering/leaving water temp.: 45°C / 40°C Max speed
(4) Rated values measured with plenum chamber in accordance with AMCA 210-74 and duct plus orifice plate in accordance with CNR-UNI 10023 standards.
(6) In free field, at a distance of 3 m. Values calculated from sound power measured in a reverberation room in accordance with ISO 3740 - ISO 3742.
(7) With AIRMUST 3VA1 and CRA accessories. For units equipped with a motor with electrical absorption greater than 3A, or with 2 motors, add 1 SDI.2x10A interface board.
(1)(2)(3)(4)(5) Nominal technical data referring to air flow rate (4) at maximum speed and unit with free discharge
(*) DN = Nominal diameter; F = Female gas connections

Dimensional Drawings



S: Recessed version – Single panel



D: Exposed version – Double panel

HCNA "S" Version											
	71	117	143	165	216	290	240	293	330	565	685
A1	360	425	425	480	550	550	425	425	480	580	580
B1	560	660	760	760	1.160	1.360	1.160	1.360	1.360	1.660	1.660
C1	840	995	1.105	1.160	1.140	1.240	995	1.105	1.160	1.450	1.450
Kg	35,8	46,6	55,7	60,6	93,7	107,8	78,5	94,8	103,5	179,1	181,1

HCNA "D" Version											
	71	117	143	165	216	290	240	293	330	565	685
A	380	440	440	480	570	570	440	440	480	600	600
B	520	620	720	720	1.120	1.320	1.120	1.320	1.320	1.620	1.620
C	870	1.020	1.120	1.160	1.150	1.250	1.020	1.120	1.160	1.470	1.470
Kg	45,1	59,5	71,3	77,3	118,9	138,7	99,7	121,4	131,4	224,4	226,4

HCNA "S" Version - with hot coil											
	71	117	143	165	216	290	240	293	330	565	685
A1	360	425	425	480	550	550	425	425	480	580	580
B1	560	660	760	760	1.160	1.360	1.160	1.360	1.360	1.660	1.660
C1	840	995	1.105	1.160	1.140	1.240	995	1.105	1.160	1.450	1.450
Kg	40,2	52,1	62,3	67,2	104,7	123,8	89,5	110,8	119,5	203,1	205,1

HCNA Version "D" - with hot coil											
	71	117	143	165	216	290	240	293	330	565	685
A	380	440	440	480	570	570	440	440	480	600	600
B	520	620	720	720	1.120	1.320	1.120	1.320	1.320	1.620	1.620
C	870	1.020	1.120	1.160	1.150	1.250	1.020	1.120	1.160	1.470	1.470
Kg	49,5	65,0	77,9	83,9	129,9	154,7	110,7	137,4	197,4	248,4	250,4

Dimensions in mm

*WARNING: Check that the electrical current draw of the unit motors is compatible with the contact rating of the remote controls. If the electrical current draw is higher, or if the unit is equipped with two motors, it is recommended to use the SDI interface board.
(1) All HCNA units are supplied complete with standard "Mammut"-type terminal block, without thermostat.
(2) Each control panel can control only one unit (see "SDI" accessory).