MAXA HEATING & COOLING

V5

R32 GAS

V5 Heat Pump Range

i-32V5 6kW-18kW
i-32V5C Midi 21kW-32kW
i-32V5H Midi 21kW-32kW
i-HPV5H 40kW-70kW

maxaheatpumps.co.uk

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

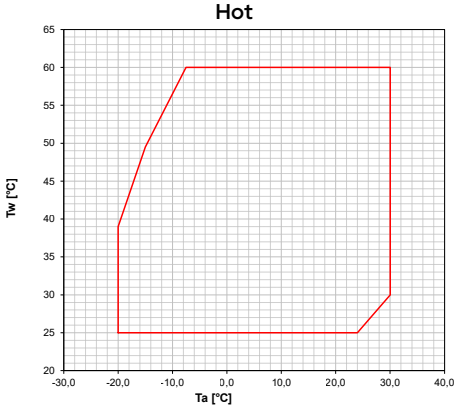
- Proprietary control system with microcontroller-based regulation, superheat control logic via electronic expansion valve.
- Compressors: Twin Rotary DC inverter
- Fans: axial type with brushless DC motor
- Source heat exchanger: optimized with a circuit and a finned coil with copper tubes and aluminum 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:

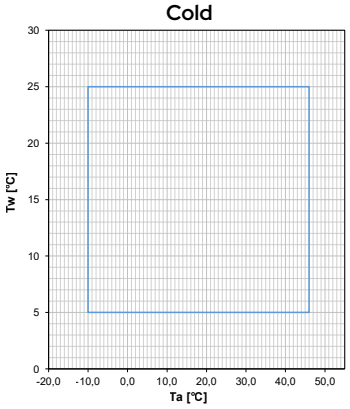
- All units can operate in three different modes: heating, cooling, and domestic hot water, with specific programs that maximize performance in all conditions, including optional control via climatic compensation curve.
- The units of the V5 series are capable of managing mixing valves, diverting valves, 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

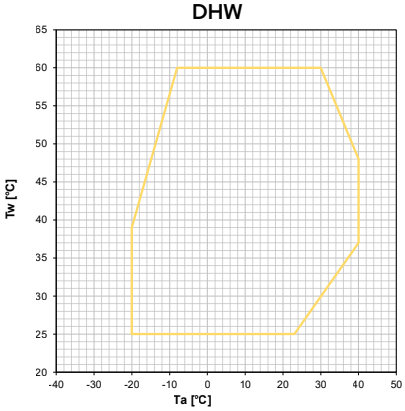
Hot



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

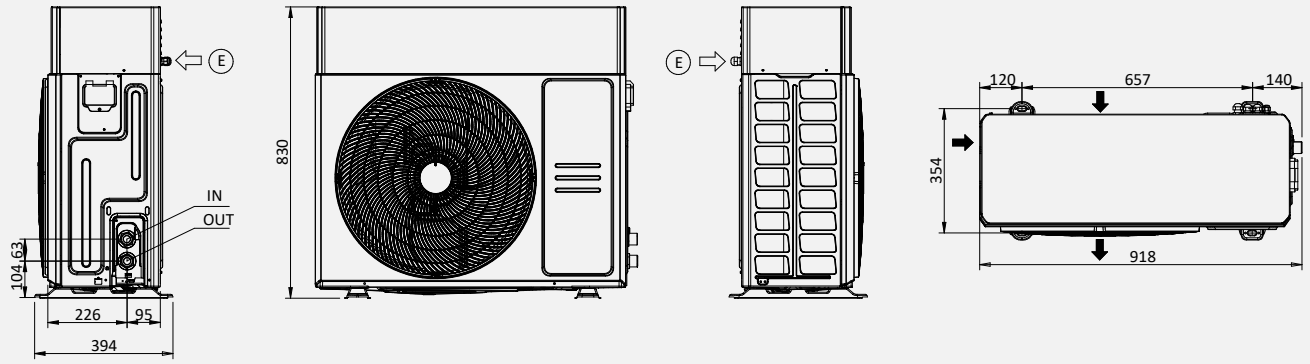
(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 23/18°C.
(3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 30/35°C
(4) Heating: outdoor air temperature 7°C d.b. 6°C 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

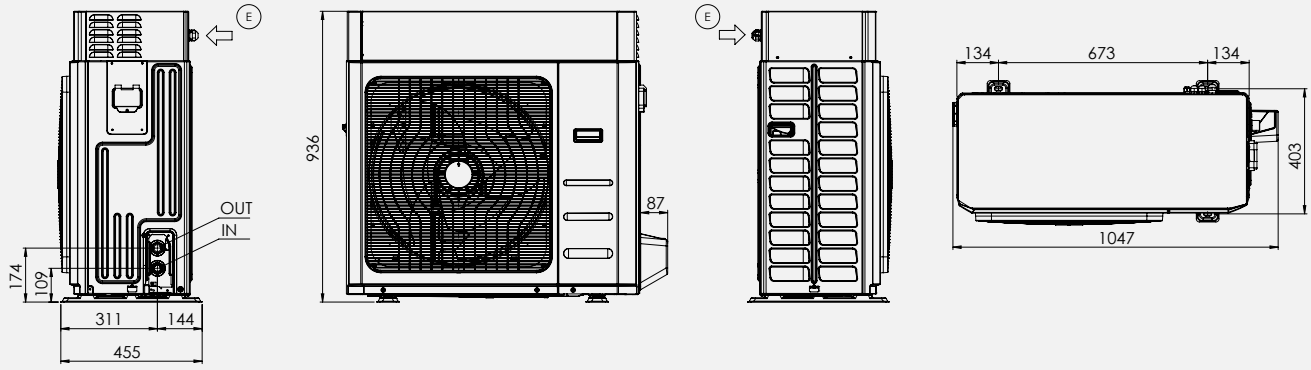
(1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
(2) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 23/18°C.
(3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water inlet/outlet temp. 30/35°C.
(4) Heating: outdoor air temperature 7°C d.b. 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

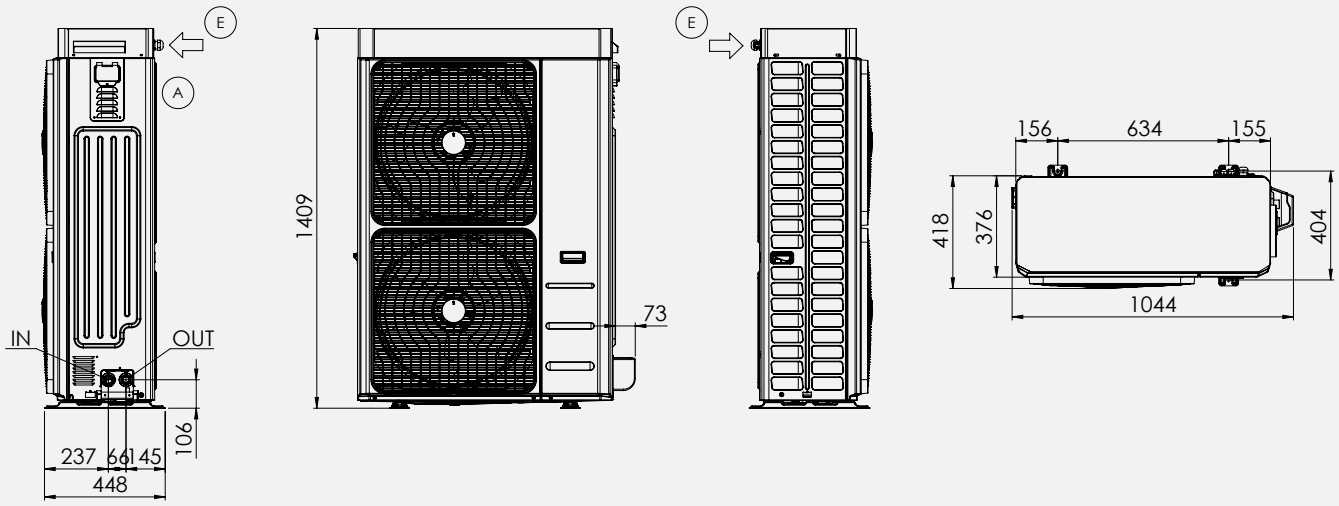
i-32V5 06A / 08A / SL08A



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



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



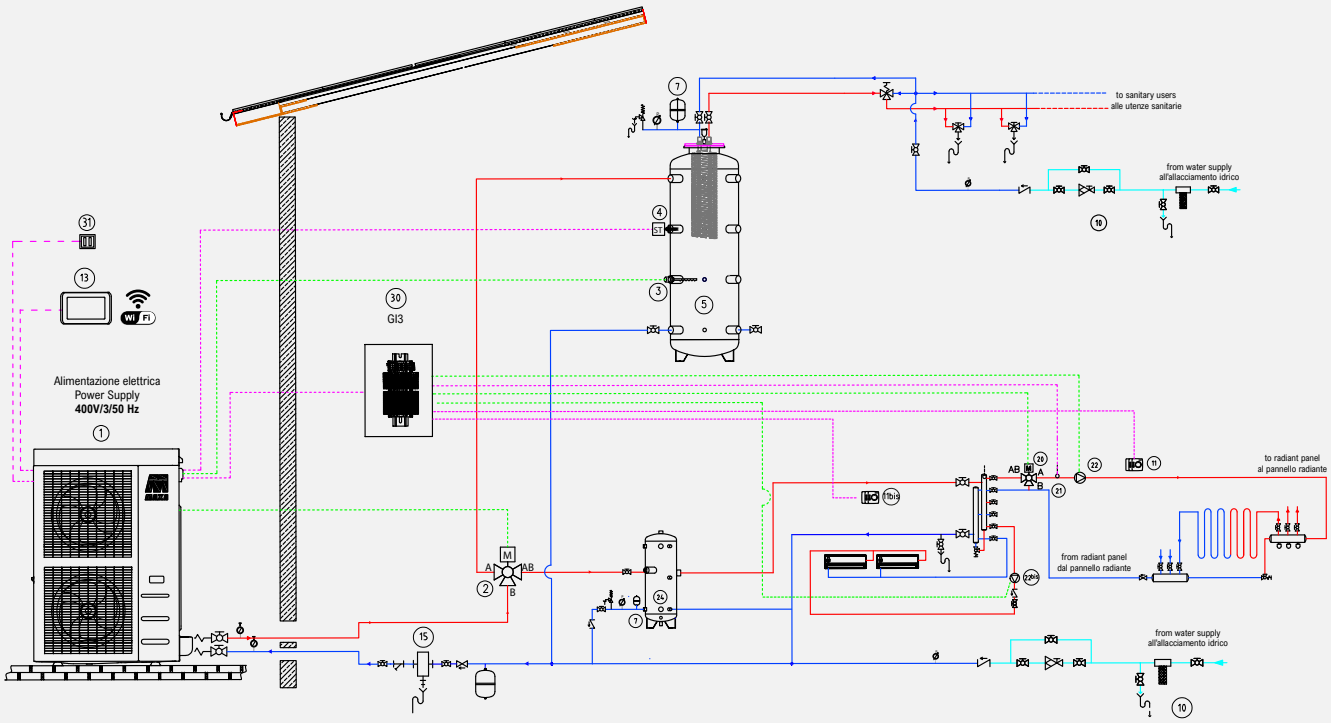
		06A 08A / SL08A		10 / 10T A 12 / SL12 / 12T A / SL12T A				14	14T A	16 SL16	16T A SL16T A	18T A
L	mm	918	918	1.047	1.047	1.047	1.047	1.044	1.044	1.044	1.044	1.044
P	mm	394	394	455	455	455	455	455	455	455	455	455
H	mm	830	830	936	936	936	936	1.409	1.409	1.409	1.409	1.409
Shipping weight	kg	77	77	110	110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

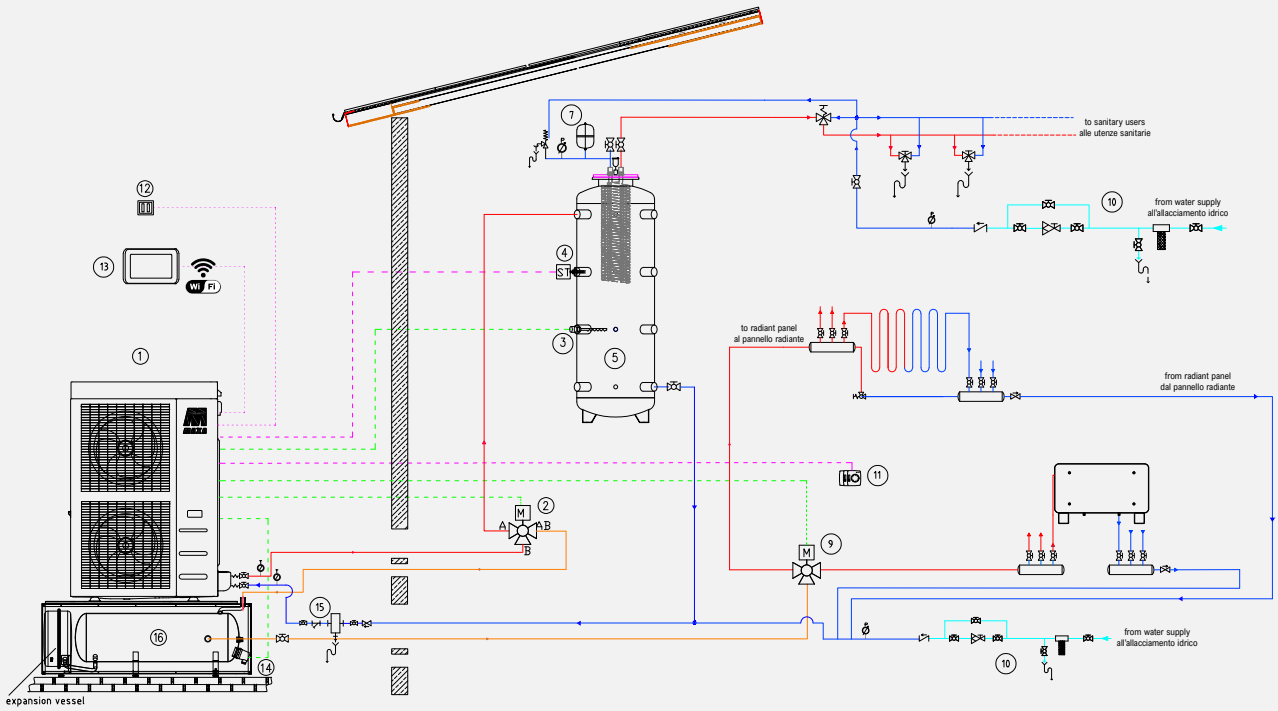
IN/OUT: 1"M G
E: Power supply input

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.

Price list

		i-32V5	i-32V5/KA	i-32V5 SL	i-32V5SL/KA
06A	code	0110419203300001	0110419203310001	-	-
	£	4.504	4.804	-	-
08A	code	0110419203400001	0110419203410001	0110419603400001	0110419603410001
	£	4.821	5.121	6.460	6.847
10	code	0110419201800001	0110419201810001	-	-
	£	5.837	6.137	-	-
10T A	code	0110419211800001	0110419211810001	-	-
	£	6.491	6.791	-	-
12	code	0110419201900001	0110419201910001	0110419601900001	0110419601910001
	£	6.090	6.391	8.008	8.394
12T A	code	0110419214500001	0110419214510001	0110419611900001	0110419611910001
	£	6.745	7.045	8.806	9.192
14	code	0110419202000001	0110419202010001	-	-
	£	7.287	7.587	-	-
14T A	code	0110419214600001	0110419214610001	-	-
	£	7.562	7.862	-	-
16	code	0110419202100001	0110419202110001	0110419602100001	0110419602110001
	£	7.739	8.039	10.546	10.934
16T A	code	0110419214700001	0110419214710001	0110419614700001	0110419614710001
	£	7.806	8.106	10.443	10.831
18T A	code	0110419214800001	0110419214810001	-	-
	£	8.335	8.635	-	-

FACTORY-MOUNTED ACCESSORIES			
		Compatibility	£
GI *	System management module		388
TR2	Cu/Al coil with Silver Line Cu anti-corrosion treatment for models	06A, 08A, SL08A	1.094
TR2	Cu/Al coil with Silver Line Cu anti-corrosion treatment for models	10, 10T A, 12, SL12, 12T A, SL12T A	1.885
TR2	Cu/Al coil with Silver Line Cu anti-corrosion treatment for models	14, 14T A, 16, SL16, 16T A, SL16T A, 18T A	2.043

ACCESSORIES SUPPLIED SEPARATELY				
		Compatibility	Code	£
e-PRO ***	Wired Remote control, Wi-Fi connected		010022520010	450
e-LITE ***	Multifunction touch screen wired control		0110490101	450
Hi-TV415 ***	Centralized multifunction touch screen remote control		010312300001	640
i-CR2 ***	Wall-mounted remote control			319
Connect Box **	Heat pump communication gateway and MAXA CONNECT		0110490103	309
GI3 **	Hardware expansion module		01821000001	860
AG	Anti-vibration support		015908010045	170
FD	Defangling filter for models	06A, 08A, 10, 10T A, 12, 12T A	0119100075	115
FD	Defangling filter for models	14, 14T A, 16, 16T A, 18T A	0119100076	272
FY	Y-strainer		0171212401	87
SAS	Remote system probe - Domestic hot water storage probe		0110321000001	47
SPS	Solar panel sensor		CH-CC-EN-ST-0015	101
VDIS2	Three-way diverting valve for domestic hot water production in a thermal storage tank		0110490077	399
VSA	Anti-freeze thermal discharge valve		010112532500010	390
VRC	Condensate Drain Pan		01028245020010	265
	Condensate Drain Pan with rubber anti-vibration mounts		01028245000010	372

For accessories of the DAS monitoring system (ISK, LNC, OVPN), see chapter "Connection devices for Maxa DAS supervision system"
* Accessory available for sizes 10-12-14-16, not compatible with version A
** Accessory available for sizes 06A, 08A, 10, 10T A, 12, 12T A, 14T A, 16T A, 18T A – not available for sizes 14, 16
*** Accessories not usable simultaneously

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:

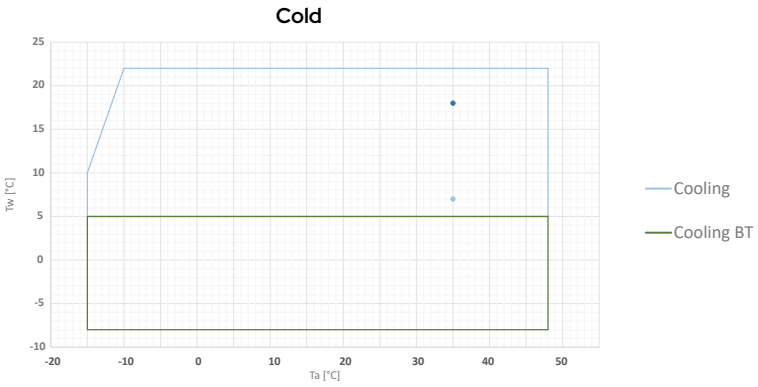
- Filter drier;
- Shut-off valve on the liquid line;
- Liquid flow and moisture indicator;
- Electronic expansion valve
- Charge connections;
- High-pressure safety pressure switches
- High and low pressure transducers

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



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

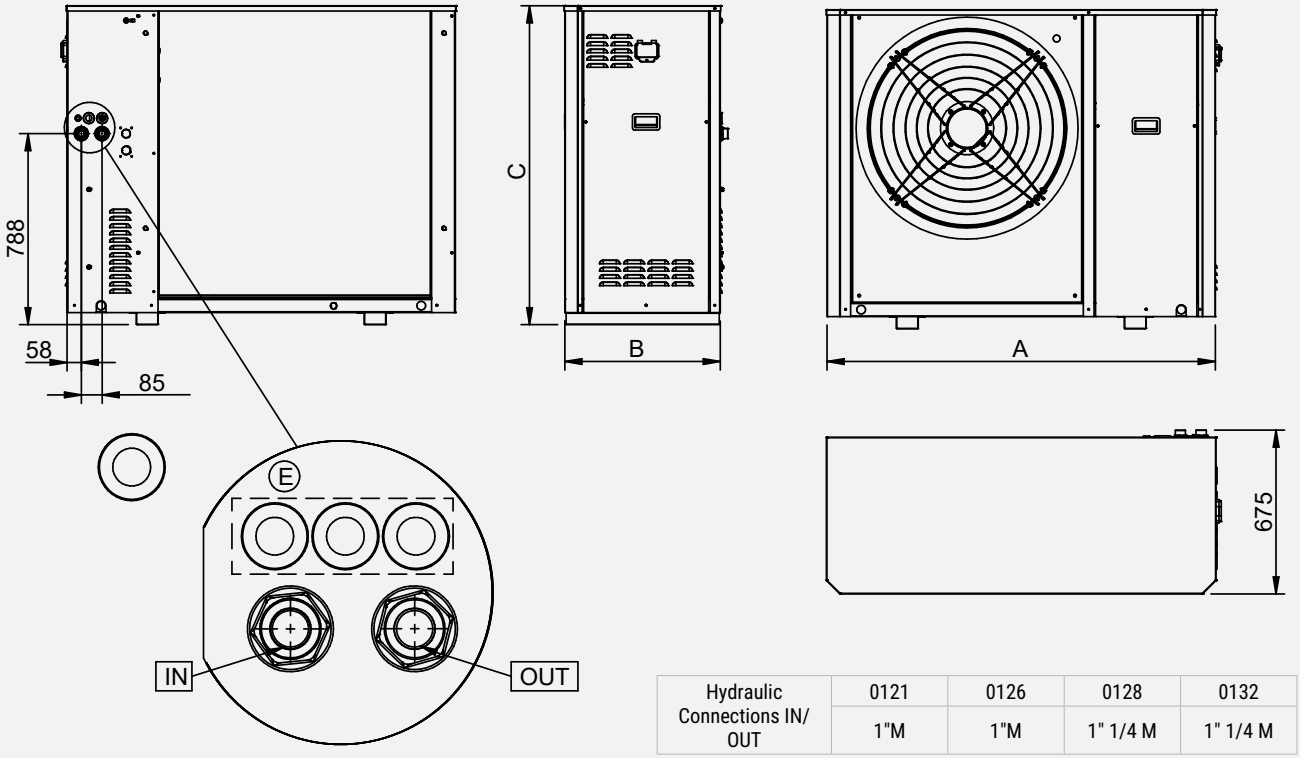
			0121	0126	0128	0132
Cooling	Cooling capacity (1)	kW	20,7	25,8	28,1	31,8
	Power input (1)	kW	5,92	8,03	8,29	10,2
	E.E.R. (1)	W/W	3,50	3,21	3,39	3,13
	Cooling capacity (2)	kW	21,6	25,5	28,4	32,8
	Power input (2)	kW	4,30	5,28	5,77	7,09
	E.E.R. (2)	W/W	5,02	4,83	4,92	4,63
	SEER (3)	W/W	5,19	5,07	5,43	5,06
	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.

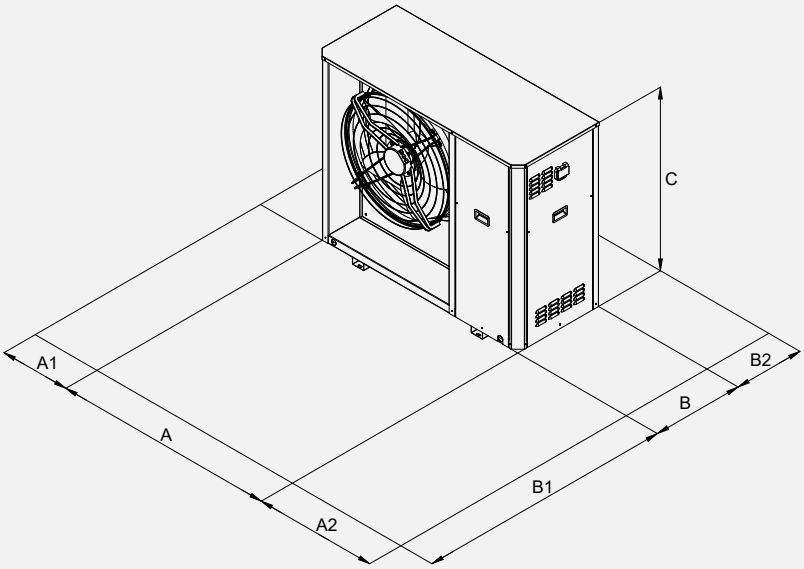
(7) Sound power: condition (3); value determined on the basis of measurements carried out in accordance with UNI EN ISO 9614-1, in compliance with the requirements of Eurovent certification.
(8) Cooling BT version: outdoor air temperature 35°C; inlet/outlet water temperature -3/-8°C. Fluid treated with 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
D	mm	680	680	680	680
H	mm	1315	1315	1315	1315
Shipping weight	kg	215	215	225	225

Dimensions in mm

Price list

i-32V5C Midi			0121	0126	0128	0132
i-32V5C Midi	Monobloc inverter chillers	£	13.106	13.948	14.910	15.391
i-32V5C Midi/BT	Monobloc inverter chillers for low-temperature operation	£	13.695	14.535	15.497	15.979
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	Magnetothermal circuit breakers	£	281			
KA1	Adhesive resistance exchanger	£	192			
RP	Battery protection nets	£	496			
SL	Silenced version	£	692			
TR1	Microchannel coil with Aero surface treatment	£	1.738		1.986	
TR1C4	Cu/Al coil and sheet metal with anti-corrosion treatment	£	3.942	4.354	4.602	
ACCESSORIES SUPPLIED SEPARATELY						
e-LITE*	Multifunction touch screen wired control	code	0110490101			
		£	450			
Hi-TV415*	Centralized multifunction touch screen remote control	code	010312300001			
		£	640			
Connect Box*	Heat pump communication gateway and MAXA CONNECT	code	0110490103			
		£	309			
i-CR2*	Wall-mounted remote control	£	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 probe – DHW storage probe	code	0110321000001			
		£	47			
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

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.

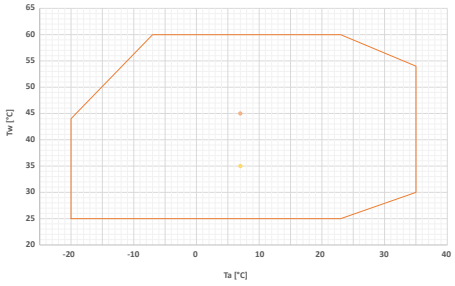
The motor has an IP 54 protection rating according to CEI EN 60529.

Standard Components

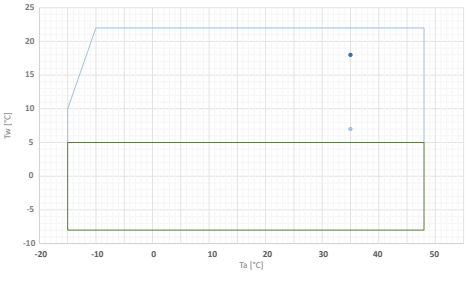
- Electronic circulator
- EEV - electronic thermostatic valve
- Liquid indicator
- Water-side safety valve
- Drain valve
- Flow switch (flow presence signaling)
- Clean remote on/off contact
- Dynamic setpoint
- Three-phase relay for phase sequence/failure monitoring
- Fan speed controller (ECM fans)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

Operating Areas

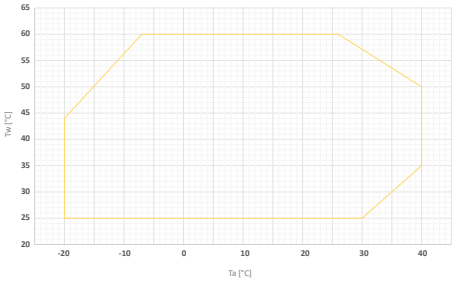
Hot



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)

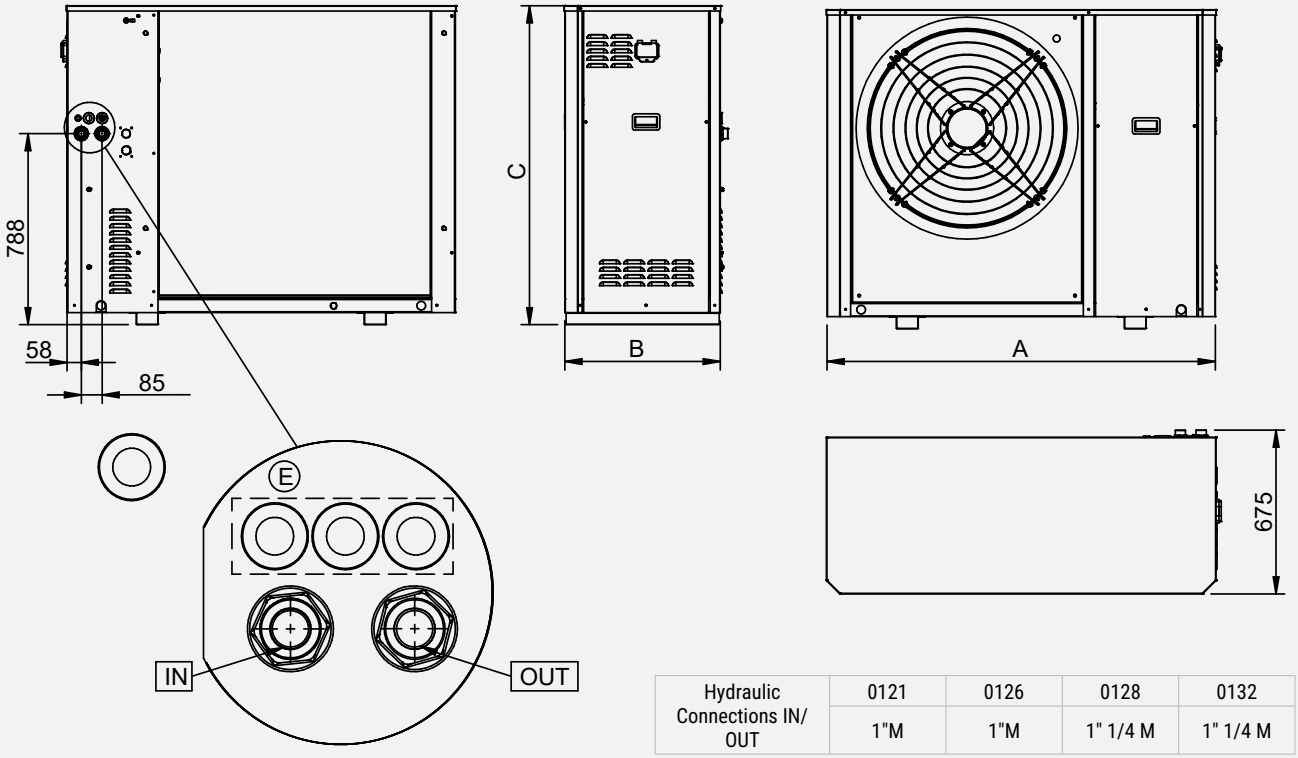
			0121	0126	0128	0132
Cooling	Cooling capacity (1)	kW	17,7	18,7	24,2	26,0
	Power input (1)	kW	5,87	6,19	7,98	8,65
	E.E.R. (1)	W/W	3,02	3,02	3,03	3,01
	Cooling capacity (2)	kW	22,0	25,8	29,0	31,4
	Power input (2)	kW	4,44	5,50	6,36	7,08
	E.E.R. (2)	W/W	4,95	4,68	4,56	4,44
	SEER (5)	W/W	4,44	4,55	4,76	4,81
	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.

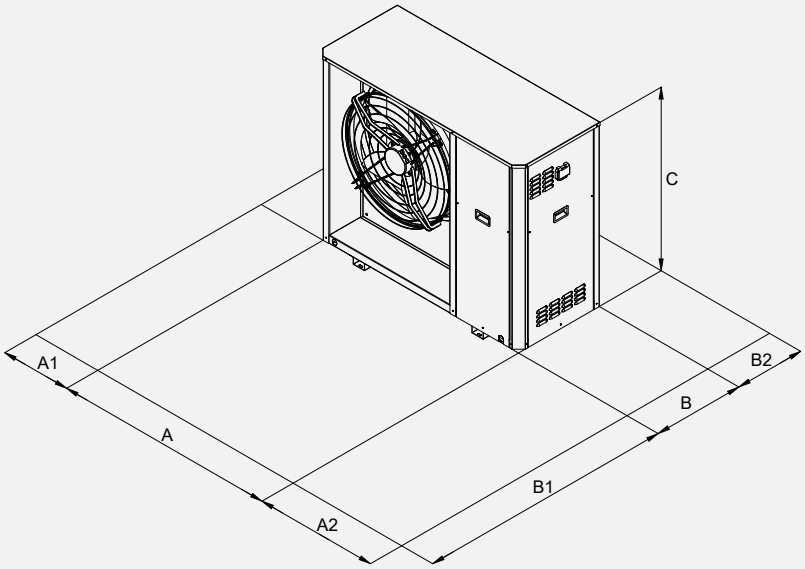
(9) Sound power: heating mode condition (3) according to EN 12102-1:2013; value determined on the basis of measurements carried out in accordance with standard UNI EN ISO 9614-1.
(10) Cooling BT version: outdoor air temperature 35°C; inlet/outlet water temperature -3/-8°C. Fluid treated with 35% ethylene 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



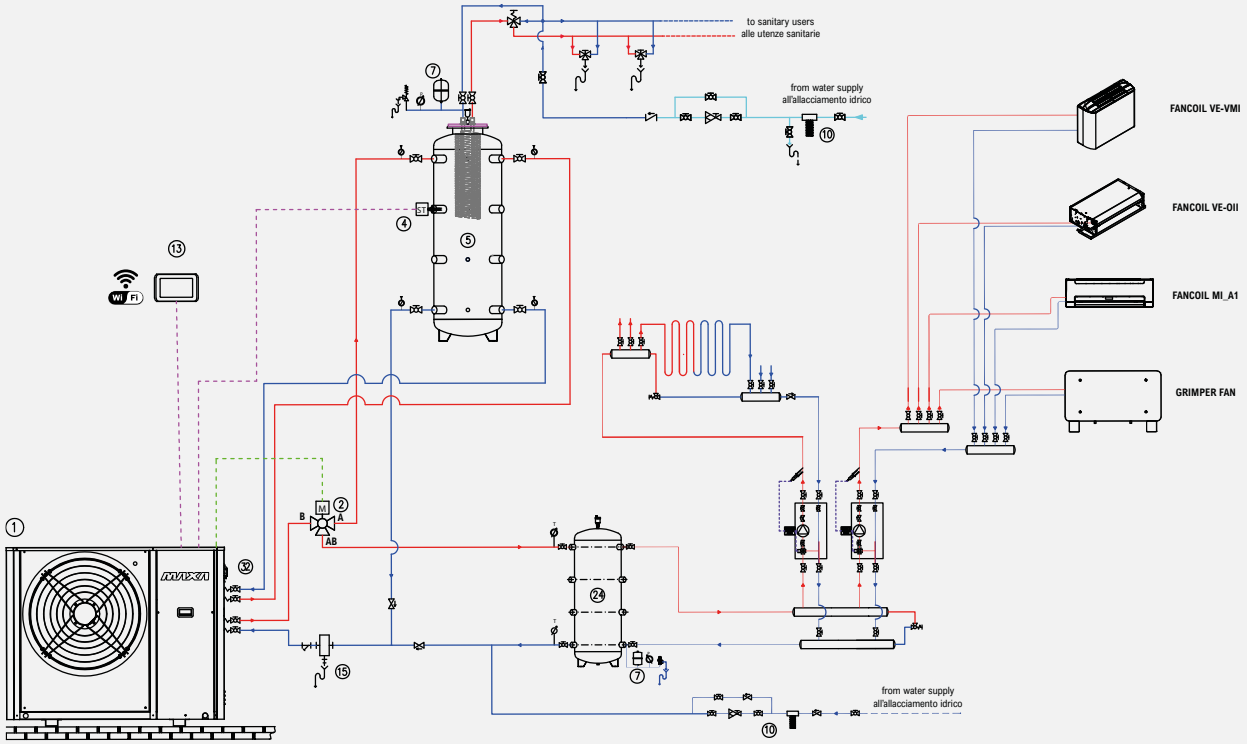
Clearances		A1	A2	B1	B2
0121	mm	400	500	1500	400
0126	mm	400	500	1500	400
0128	mm	400	500	1500	400
0132	mm	400	500	1500	400

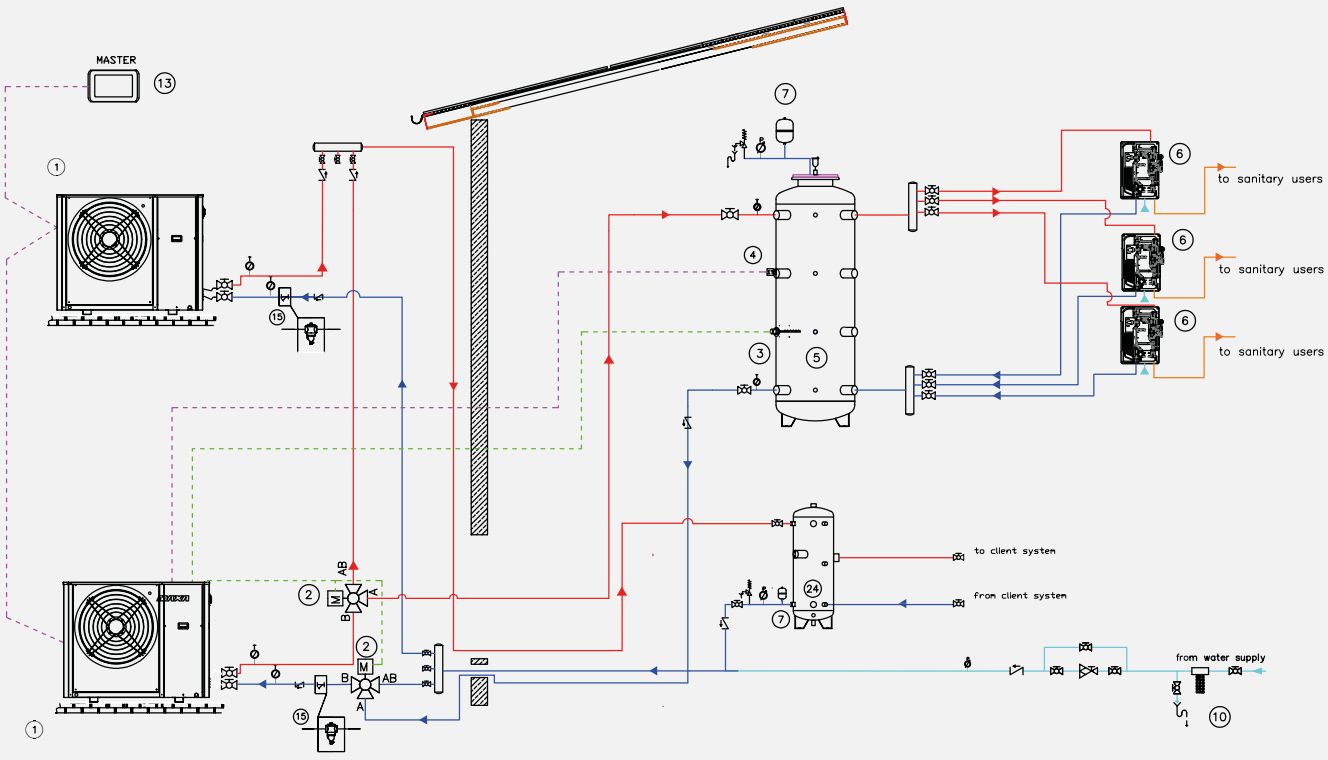
		0121	0126	0128	0132
L	mm	1600	1600	1600	1600
D	mm	680	680	680	680
H	mm	1315	1315	1315	1315
Shipping weight	kg	250	250	265	265

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
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	code	010312300001			
		£	640			
Connect Box *	Heat pump communication gateway and MAXA CONNECT	code	0110490103			
		£	309			
i-CR2*	Wall-mounted remote control	£	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

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

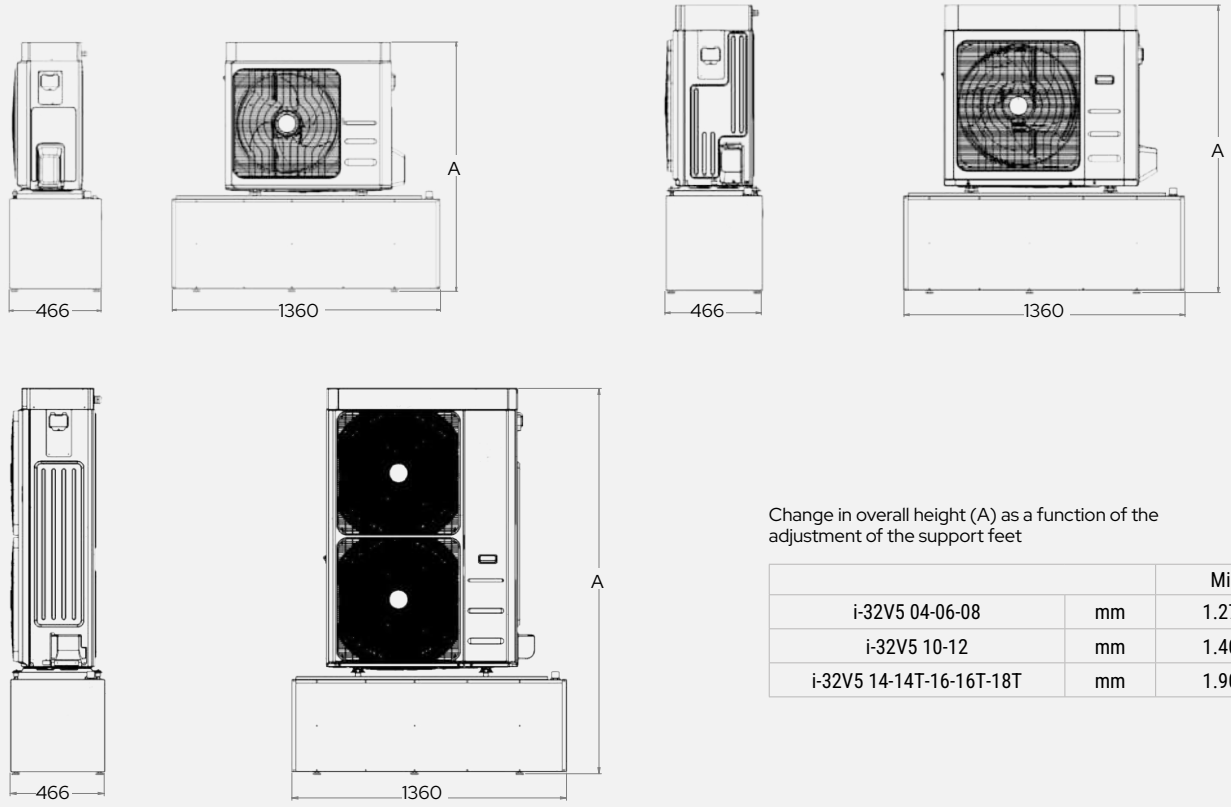
Factory-installed

- **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

Price list

ACT			50 l	75 l	95 l
Buffer tank		£	1.245	1.308	1.403
FACTORY-MOUNTED ACCESSORIES					
RE1.2M	Single-phase electric heater 1.2 kW	£	267	267	267
RE2.0M	Single-phase 2 kW electric heater	£	432	432	432
RE3.0M	Single-phase 3 kW electric heater	£	464	464	464
RE4.0M	Single-phase electric heater 4.5 kW	£	496	496	496
RE2.0T	Three-phase electric heater 2 kW	£	464	464	464
RE3.0T	Three-phase electric heater 3 kW	£	496	496	496
RE4.0T	Three-phase electric heater 4.5 kW	£	528	528	528
VE18AT	Expansion vessel 18 l	£	208	208	208

ACT 120/220

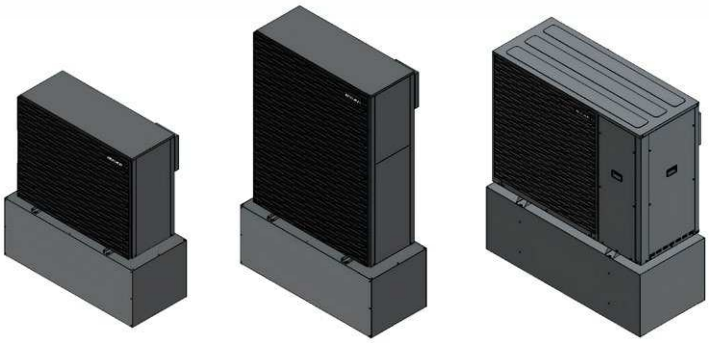
Buffer tank for hot water and chilled water

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)

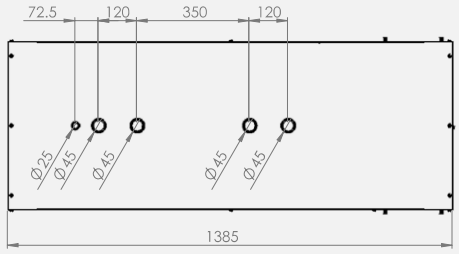
Electric heaters cannot be installed when combined with i-290 range heat pumps.

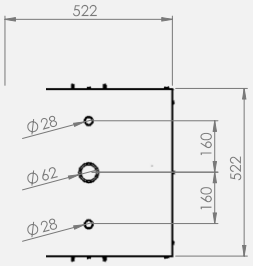
			120	220
ACT	Useful capacity	Lt	120	220
	Coeff. Thermal Conductivity	W/mK	0,023	0,023
	Insulation thickness	mm	55	55
	Tmax operating	°C	95	95
	Pmax operating	Bar	3	3
	Pmax test	Bar	6	6
	Curb weight	kg	20	30
	Operating weight	kg	140	250
	Dimensions (WxDxH)	Mm	1385x522x522	1732x745x622
	Expansion vessel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

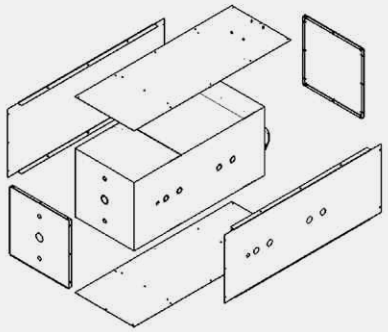
Preliminary data

Dimensional Drawings

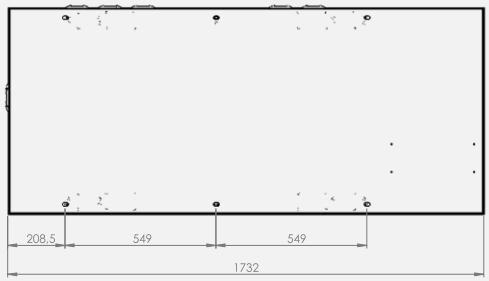
ACT 120 L

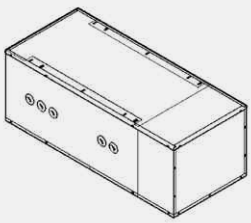


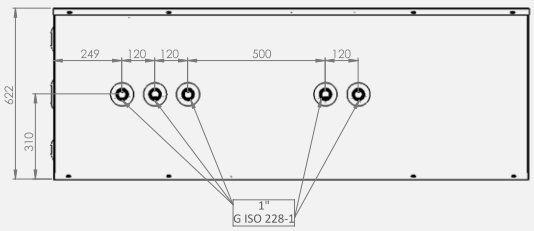


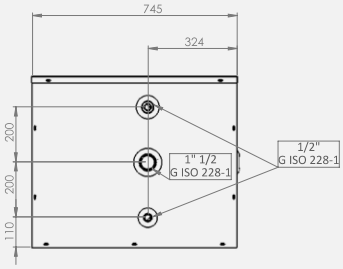


ACT 220 L









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.

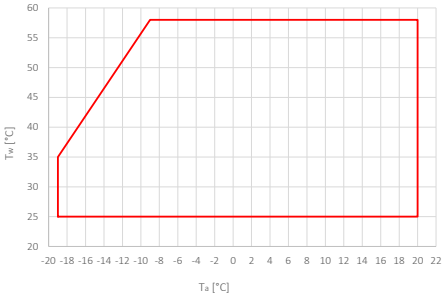
Refrigerant Circuit: is made of copper piping, brazed and factory-assembled in accordance with EN 13134.
Includes: drier filter; shut-off valve on the liquid line; liquid and humidity sight glass; electronic expansion valve; charging ports; high-pressure safety pressure switch; high and low pressure 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:

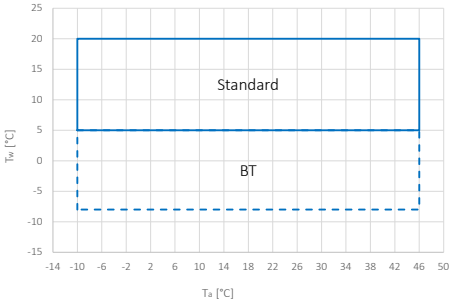
- Main isolator with door interlock;
- Isolation transformer for control power supply
- Thermal protection fuses for compressor drivers, EC fan, and pump inverter (where present);
- Automatic circuit breaker for compressor protection (optional);
- Driver for modulating compressor control;
- Phase sequence 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

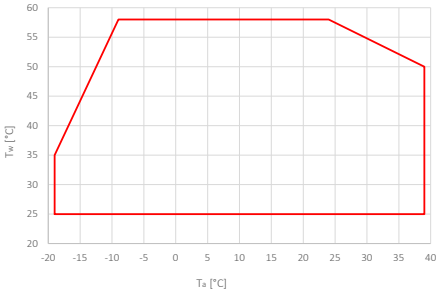
Hot



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

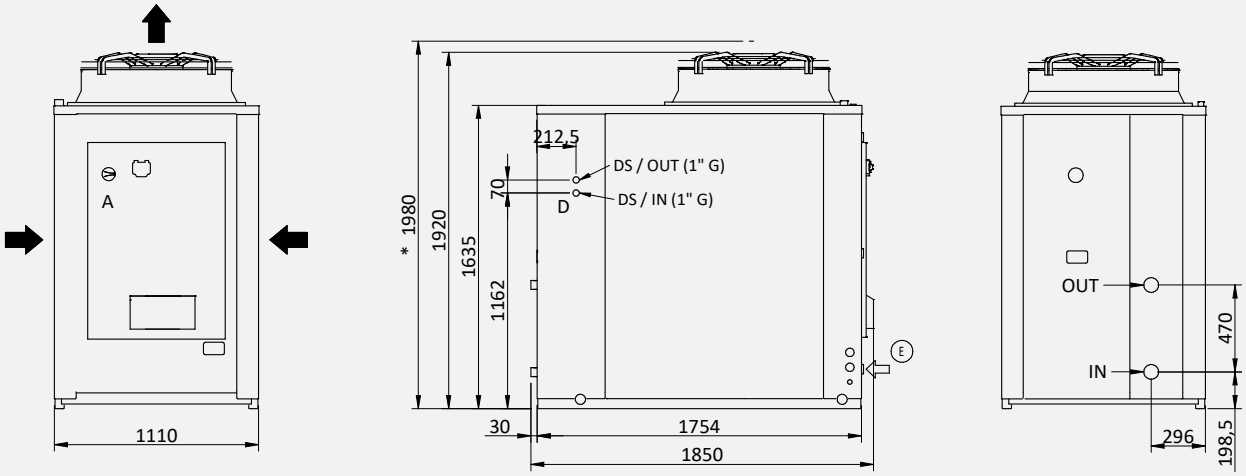
* Energy measurements not available

			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

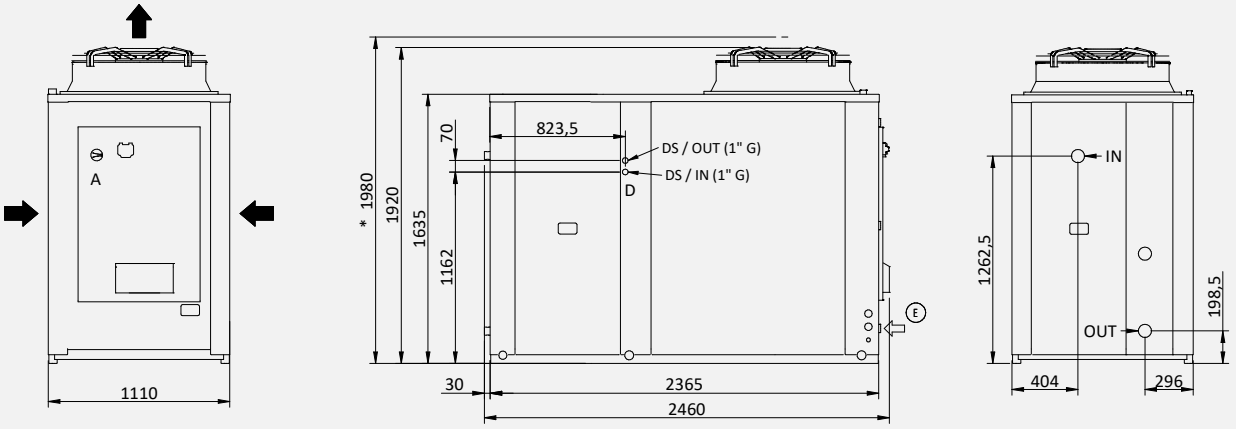
(1) Cooling: outdoor air temperature 35 °C; inlet/outlet water temperature 12/7 °C.
(2) Cooling: outdoor air temperature 35 °C; inlet/outlet water temperature 23/18 °C.
(3) Heating: outdoor air temperature 7 °C d.b. 6 °C w.b.; inlet/outlet water temperature 30/35 °C.
(4) Heating: outdoor air temperature 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.

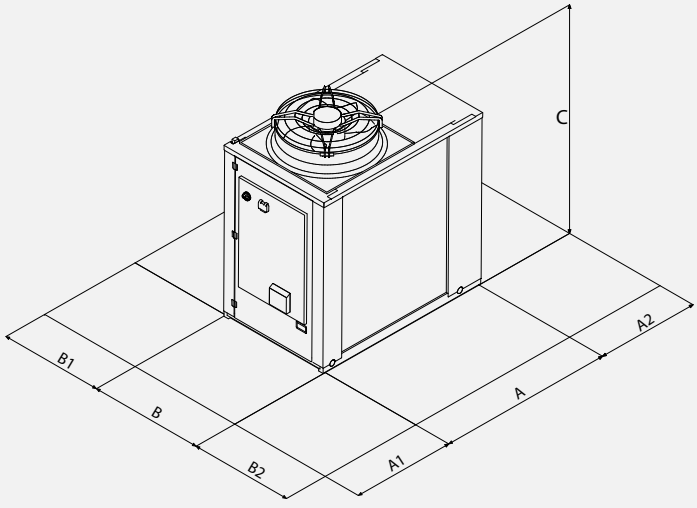
Dimensional Drawings

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

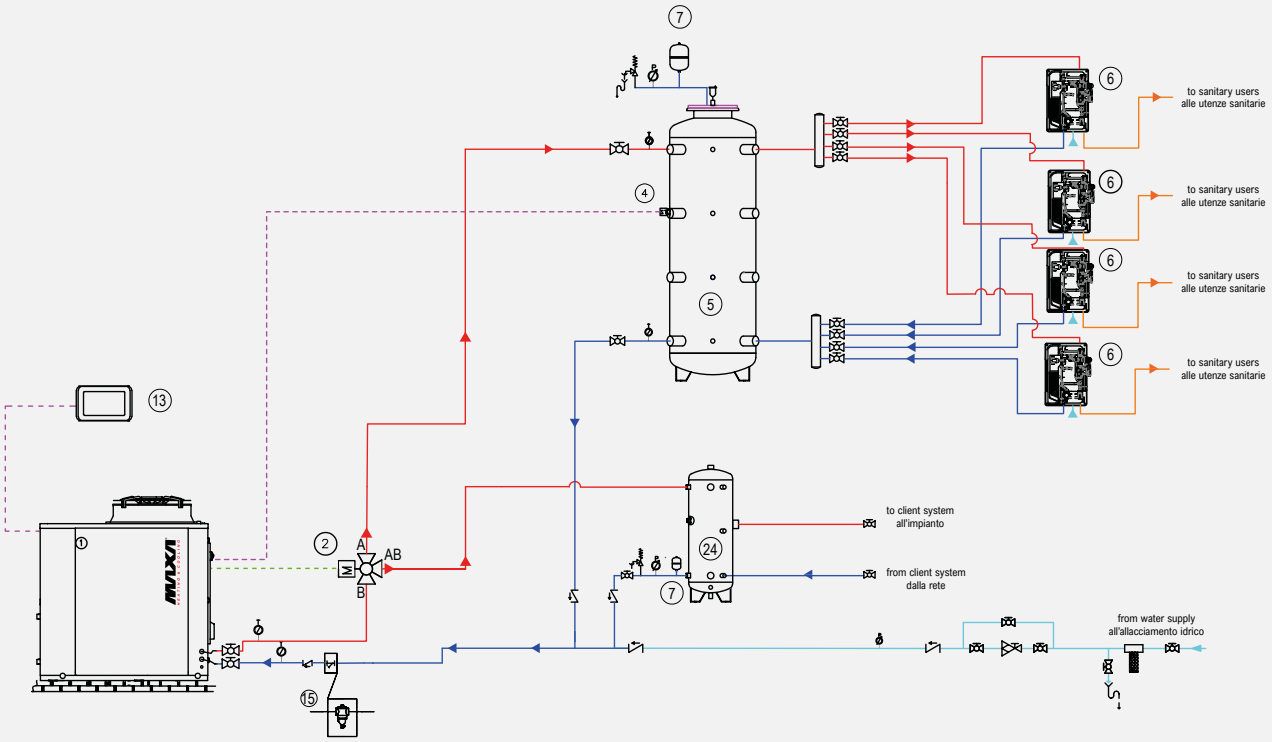
		0140	0250	0260	0270
L	mm	1850	1850	1850	1850
L (with tank)	mm	2460	2460	2460	2460
P	mm	1110	1110	1110	1110
H	mm	1920	1920	1920	1920
H (SSL)	mm	1980	1980	1980	1980
Shipping weight (Standard)	kg	415	505	525	575

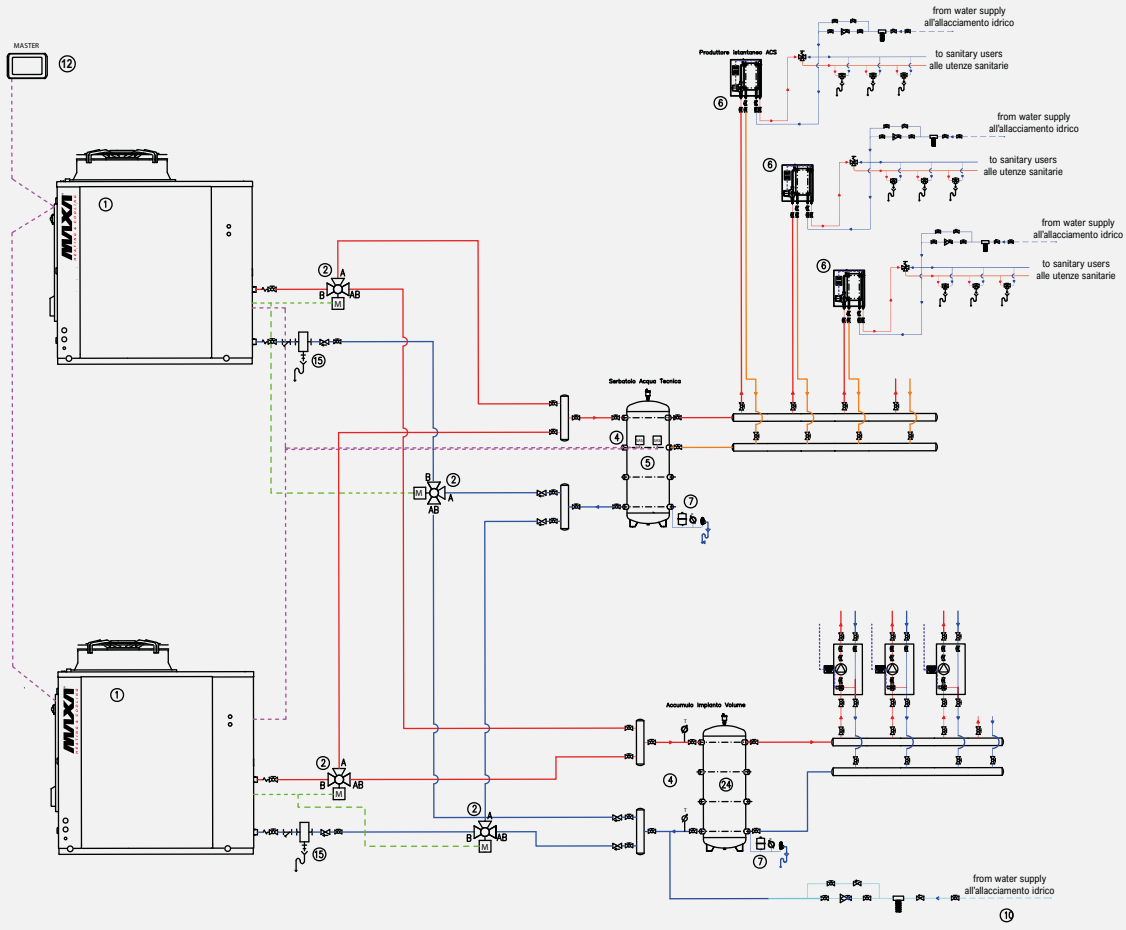
IN/OUT: 1" 1/2 Grooved
E: Power supply input
D IN/OUT: Hydraulic connections for desuperheater kit 1" G

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.

Price list

i-HPV5H			0140	0250	0260	0270
i-HPV5H	Reversible inverter heat pump	£	23.251	28.257	30.229	34.306
FACTORY-MOUNTED ACCESSORIES						
BT	Low water temperature version	£	888			
C	Ducted version (not compatible with SL and SSL)	£	1.165			
C(S)	Ductable version with compressor soundproofing	£	1.328	1.531	1.531	1.531
CM	Serial communication module for Modbus	£	853			
DS	Partial recovery (with GI module only) - desuperheater	£	2.104	2.706	2.881	3.132
DSFR	Phase sequence and phase loss monitoring device + undervoltage and overvoltage relay	£	Standard			
GI	System management module	£	632			
GL	Crate packaging in wooden cage	£	422			
	Crate packaging in wooden frame (with YES accessory)	£	584			
IM	Magnetothermal circuit breakers	£	351	752	752	752
KA1	Adhesive resistance heat exchanger + pump resistance (if present)	£	402			
KA2	Adhesive resistance of heat exchanger, pump resistance and tank resistance	£	1.504			
PD	Double AC pump (includes accessory GI)	£	3.507	3.507	3.758	3.758
PS	Single AC pump	£	1.616	1.980	1.980	1.980
PSI	Single variable-speed AC pump with inverter control	£	2.826			
PSEC	Single EC pump	£	4.761			
PD-SI	Twin AC pump and buffer tank (includes GI accessory)	£	8.268			
PS-SI	Single AC pump and buffer tank	£	5.762			
PSI-SI	Single inverter-driven modulating AC pump and buffer tank	£	6.990			
PSEC-SI	Single EC pump and buffer tank	£	8.392			
RFM	Discharge and suction valves for compressors	£	420			
RP	Battery protection nets	£	451	902	902	902
SL	Silencing	£	266	388	388	388
SSL	Super soundproofing (includes SL)	£	1.328	1.531	1.531	1.531
TE2	Special mechanical seal for electric pump with glycol content higher than 25% and lower than 50% – Not available for single EC pump (1)	£	372			
TR2	Cu-Al coil with anti-corrosion treatment	£	2.898	3.331	3.331	3.331
TR2C4	Cu/Al coil and sheet metal with anti-corrosion treatment	£	5.515	6.452	6.452	6.452
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*	Touchscreen remote control	code	010312300001			
		£	640			
Connect Box*	Heat pump communication gateway and MAXA CONNECT	code	0110490103			
		£	309			
i-CR2*	Wall-mounted remote control	£	319			
FD-DA	Defanging Filter / Deaerator Kit	code	0102724250010			
		£	1.851			
RP	Battery protection nets	code	019212801	019213001	019213101	019213201
		£	451	902	902	902
AG	Anti-vibration support	code	019221NN01			
		£	505			
FY	Y-strainer	code	017221NN01			
		£	143			
RV	Grooved Connection Joint	code	018221NN01			
		£	143			
SAS	DHW storage probe - Remote probe	code	0110321000001			
		£	47			
VDIS4	Three-way diverting valve for domestic hot water production in a thermal storage tank	code	0110490094			
		£	620			

(1) On BT version mandatory with PS - PSI - PD
(2) Installing this accessory precludes the installation of the other control accessories
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

April 2026

MAXA®
HEATING & COOLING

www.maxa.it