



General Catalogue  
Industrial, Commercial, Residential

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Rev.	Date	Changes
1	20/01/2025	<p><b>First issue:</b></p> <p>Phase Out Airmust BMCP, Airmust BM - Added Airmust BMCP A1, Airmust P</p> <p>Added e-Pro control - Added VARCO accessory for i-32V5, i-32V5-SL range - Updated i-32V5 T range with T A VE range, surface-mounted version separate from flush-mounted version - VE range, added S, P, 4 versions</p> <p>HCNP version added - PuffrollerOut version and size 1400 added</p> <p>Added OTA1-V, OTAE1-V vertical heat recovery range</p> <p>Total-One update - Added multi Lys R3 version - Replaced UECS 71, 130 - Added DUCT R2 range</p>





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# About us

## Technology and innovation for over 30 years

**“We design, build and market heat pumps and air conditioning systems that will help the world”.**

Maxa was founded with this statement of intent, a clear mission that, even today, more than 30 years after its founding, continues to guide the spirit of the entire company.

In 1992, Luciano Tredicesimo Ferroli, who had already led several successful entrepreneurial projects, founded what is now one of the top five heat pump manufacturing companies in Italy, and one of the top 15 in the domestic air conditioning sector.

A path that has led Maxa to become one of the key players in the world of

residential, commercial, and industrial air conditioning.

Led by the three children: Paolo, David, and Simone, Maxa continues the path set by its Founder.

Environmental comfort, sustainable growth and environmental protection are the result of the commitment and expertise that the entire Maxa team spends every day to design and produce heating and air conditioning systems.

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### Mission

Our ‘Mission’ is to ensure environmental comfort and human well-being by implementing state-of-the-art heating and air conditioning solutions; installing our products wherever there is a need for quality air conditioning, from cold climates to tropical temperatures.

### Vision

Being a reliable and trusted partner for the air conditioning market thanks to our Made in Italy production is our ‘Vision’.

Customer satisfaction is our primary goal.



# Maxa Milestones

Our story

1992

## The Beginnings

In 1992, the MAXA project began in the residential air-conditioning sector, which was in its initial phase at the time. The first warehouse and laboratory is opened in Villanova in San Bonifacio. Growth continues thanks to the economic development of the air conditioning market and in 2004 we become an SpA.

2005

## The Expansion

In 2005, it was decided to expand the sales activities also abroad, thus beginning a process of growth that led Maxa to become a well-known brand in international markets.

2010

## Our Production

In 2010, the first production line for inverter heat pumps from 5 to 15 kW was opened, riding on the first signs of renewal in the heating market with alternative products to the use of boilers, and supported by the possibility of exploiting new ecology-oriented technologies. Since 2011 Maxa has been equipped with an M1 climatic chamber to test units up to 100kW cooling capacity on chiller units and heat pumps.



**2016**

### **The Extension**

Thus began a process of growth and expansion of Maxa's production division, which led us in 2016, after the construction of the fifth line, to develop the production of heat pumps up to 115 kW.

This required an expansion of the company and the construction of a new factory of 7,100 m<sup>2</sup>, in addition to the existing 7,800 m<sup>2</sup>.

**2019**

In 2019 we will inaugurate as many as 8 production lines.

In 2023, 3 new heat pump lines with R290 gas are introduced and the new climatic chamber is inaugurated for extensive performance tests with a temperature range of -25 to +50°C and for power ratings up to 800 kW.

**2024**

### **The innovation**

In 2024, the historical Pay Off: '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.



# Our Production

Production lines, climatic chambers and certifications

## Made in Italy

We can proudly claim to be the company that designs, develops and manufactures heating and air conditioning products Made in Italy.

## The Headquarters

Our headquarters in Arcole covers an area of 42,000 square metres. In addition to the offices, it houses 7000 square metres of storage space for finished products and spare parts and 7800 square metres of area for our production. Area destined to grow with the expansion of a further 6,600 m<sup>2</sup> by 2025.

## Production line

The 8 production lines allow us to meet the ever-increasing demand for inverter heat pumps, both for the residential and industrial markets, thanks to the combination of high-quality components and the innovation that has always distinguished us.



## The climatic chambers

Maxa is equipped with two climatic chambers, M1 and M2, capable of precisely testing units with a maximum cooling capacity of 800kW. The climatic chambers, located at the Maxa facility, are a clear strength of the Research and Development department and ensure a high level of accuracy in the declared performance.

## Lean

The company also adopts the LEAN methodology in the production process, resulting in improvements in the component transportation system through Milk-run and the Kanban management system for optimizing the management of component consumption.

## Certifications

Over the years, we have obtained various certifications, a testament to the guarantee of performance and quality of our products.



# i-290

## New Heat Pumps Range with R290 gas

The widest in the market!

 A unique solution for heating, cooling and hot water production with assured performance all year round.



 Sustainability, technology and reliability combined with an incomparable **Made in Italy** style.

 MAXA's i-290 heat pumps are designed to generate **extremely high water temperatures** even in the harshest conditions.



 The range is distinguished by a **unique design** that integrates advanced technical solutions and modern aesthetics. With elegant lines and **state-of-the-art functionality**, it combines energy efficiency with distinctive style, representing excellence in heating and cooling.



# MAXX<sup>®</sup>

HEATING & COOLING

DESIGNED, REALIZED, GUARANTEED IN ITALY

 The **i-290 range** is available in **11 sizes**, with power outputs between **6 kW** and **50 kW** in heating mode.

### Finally, the right heat pump solution for every system.

The i-290 range can be **perfectly and quickly integrated** both in new buildings and in combination with existing systems.

This makes it possible to satisfy with great efficiency both radiant floor systems, as well as traditional systems that exploit high-temperature water.

### Environmental Sustainability

Thanks to the R290 technology, your system operates without the use of any fuel gas, ensuring efficient and sustainable operation **without any CO2 emissions** into the environment.

### Unique and suitable for every need

Numerous accessories and fittings allow the individual heat pump to be customised.

LIVE  
BETTER

 **A+++**  
energy class

 **GWP = 0,02**



# i-290

## R290 Inverter heat pump monoblock

6 kW ÷ 18 kW

The latest evolution of MAXA full inverter heat pump technology uses the environmentally friendly refrigerant gas R290. This new evolutionary step further simplifies the construction of fully heat pump systems.

In fact, thanks to the 78° maximum water temperature achievable by the i-290 range, application on systems requiring high flow temperatures is also very simple.

Finally, the direct replacement of existing systems, which previously operated with combustion appliances, is very manageable.



### Technical Features

- Proprietary control system with microcontroller control, overheating control logic via electronic expansion valve.
- Compressors. Twin Rotary DC inverter.
- Fans. Axial type with brushless DC motor.
- Source heat exchanger. Optimised with a finned coil circuit, copper tubes and aluminium fins with hydrophilic treatment (0106/0118).
- AISI 304 stainless steel brazed plate heat exchanger with low pressure drop on the water side.
- Refrigeration circuit made of copper piping, includes: condensation control, electronic thermostatic valve, reversing valve, high pressure switch, liquid separator, pressure tap, bidirectional metal mesh filters, high and low pressure transducers.
- Integrated hydraulic circuit with high-efficiency brushless circulator with variable speed, flowmeter, deaerator with air vent valve (loose accessories), overpressure valve 3 bar, system filling and draining tap.

### Logic and Controls:

- All units can operate in 3 different modes: heating, cooling and DHW, with specific programming to optimise performance in all conditions, with possible management of the climatic curve.
- All units of the i-290 series are equipped with a wired control for complete control of the heat pump, model e-Lite.
- The i-290 series units are able to manage mixing valves, diverter valves and secondary-side circulator; they are also able to control the solar thermal system, possible integration with external heat sources, and integration with external Home/ Building automation or Home Automation systems. ModBus available as standard.
- The i-290 series is equipped with an innovative remote control that, once connected to the heat pump, allows a complete control, both in the premises and remotely when connected to the Wi-Fi network.

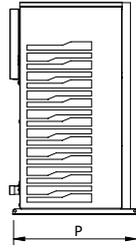
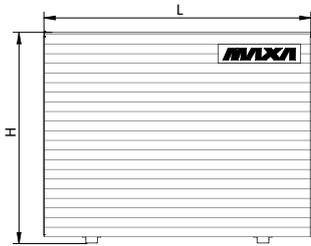
### Accessories

<b>TR2</b>	Cu/Al battery with anti-corrosion treatment	<b>KA</b>	Heat exchanger resistance + base
<b>TR2C4</b>	Cu/Al battery with anti-corrosion and metal panels treatment	<b>KA3</b>	Base resistance
		<b>RP</b>	Battery protection grilles

### Loose accessories

<b>e-Pro</b>	Wi-Fi wall remote control	<b>SPS</b>	Solar panel probe for GI3
<b>Hi-TV415</b>	Remote Touch Screen Display	<b>VDIS2</b>	Three-wires diverting valve
<b>CONNECT BOX**</b>	Gateway Heat Pump Communication and Maxa Connect	<b>FD</b>	Dirt separator filter
<b>EXOGEL</b>	Frost protection	<b>FY</b>	Y-filter
<b>GI3**</b>	External hardware extension module	<b>ACT</b>	Outdoor water buffer (view page.28)
<b>AG</b>	Anti-vibration kit		
<b>SAS</b>	Remote plant probe - Sanitary storage probe		

\*\* Accessories that cannot be used simultaneously



Dimensions		0106	0109	0112	0115	0118
L	mm	1105	1105	1105	1105	1105
P	mm	490	490	490	490	490
H	mm	870	870	1440	1440	1440

i-290		0106	0109	0112	0115	0118
<b>Cooling</b>						
Cooling capacity (1)	kW	5,8* / 5,4	9,2* / 8,6	11,2* / 10,7	13,5* / 12,4	14,3* / 13,8
Power input (1)	kW	2,0	2,8	3,8	3,7	4,3
EER (1)	W/W	2,8	3,1	2,6	3,4	3,2
Cooling capacity (2)	kW	6,2* / 5,62	9,9* / 9,15	13,3* / 12,57	14,4* / 12,90	14,8* / 13,94
Power input (2)	kW	1,25	1,93	2,83	2,40	2,69
EER (2)	W/W	4,49	4,74	4,44	5,37	5,18
SEER (5)	W/W	4,8	5,4	4,7	5,0	5,0
Water flow rate (1)	L/s	0,3	0,4	0,5	0,6	0,7
Useful head (1)	kPa	64	52	80	77	67
<b>Heating</b>						
Heating capacity (3)	kW	6,9* / 6,24	10,4* / 9,69	13,7* / 12,60	17,7* / 16,33	19,84* / 18,72
Power input (3)	kW	1,31	2,05	2,61	3,30	4,05
COP (3)	W/W	4,76	4,72	4,83	4,94	4,62
Heating capacity (4)	kW	6,4* 6,0	9,75* 9,1	12,77* 11,6	17,69* 15,2	18,7* 17,4
Power input (4)	kW	1,9	2,9	3,6	4,5	5,3
COP (4)	W/W	3,1	3,2	3,2	3,4	3,3
Heating capacity (11)	kW	6,41* / 5,9	9,81* / 9,1	13,08* / 12,0	16,64* / 14,7	17,7* / 16,7
Power input (11)	kW	2,3	3,4	4,6	5,2	6,0
COP (11)	W/W	2,6	2,7	2,6	2,8	2,8
SCOP (6)	W/W	4,7	5,2	4,7	4,9	4,8
Water flow rate (3)	L/s	0,3	0,4	0,6	0,8	0,9
Useful head (3)	kPa	58	46	76	63	40
Energy efficiency (Water 35°C / 65°C)		A+++ / A++	A+++ / A+++	A+++ / A++	A+++ / A++	A+++ / A++
<b>Compressor</b>						
Type		Twin Rotary DC Inverter				
Compressors	n°	1	1	1	1	1
Refrigerant circuits	n°	1	1	1	1	1
R290 refrigerant quantity (7)	kg	0,43	0,75	1,00	1,27	1,27
<b>Hydraulic circuit</b>						
Plumbing fittings	inch	1" M				
Minimum water volume (8)	L	65	95	125	155	155
<b>Noise level</b>						
Sound power (9)	dB(A)	57	58	59	62	62
Sound pressure at 1m distance (10)	dB(A)	42	43	44	47	47
<b>Electrical data</b>						
Power supply		230V/1/50Hz			400V/3P+N+T/50Hz	
Maximum power input	kW	3	4	5	8	8
Maximum input current	A	14	21	26	16	16
<b>Weight</b>						
Shipping weight	kg	117	119	170	188	188

\* Performance referring to the following conditions:

- (1) Cooling: outdoor air temperature 35°C; in/out water temperature 12/7°C.
- (2) Cooling: outdoor air temperature 35°C; in/out water temperature 23/18°C.
- (3) Heating: outdoor air temperature 7°C db 6°C db; in/out water temperature 30/35°C.
- (4) Heating: outdoor air temperature 7°C db 6°C db; in/out water temperature 47/55°C.
- (5) Cooling: low temperature, variable output, fixed flow rate.
- (6) Heating: average climatic conditions; T<sub>biv</sub>=-7°C; low temperature, variable output, fixed flow rate.
- (7) Indicative data subject to changes. For the correct value, always refer to the technical label on the unit.

(8) Calculated for a decrease in system water temperature of 10°C with a defrost cycle lasting 6 minutes.

(9) Sound power: heating mode according to EN 12102:2022; value determined on the basis of measurements made in accordance with UNI EN ISO 9614-1, in compliance with Eurovent certification requirements.

(10) Sound pressure: value calculated from the sound power level using the standard ISO 3744:2010 at a distance of 1 m.

(11) Heating: outdoor air temperature 7°C db 6°C db; in/out water temperature 55/65°C.

(\*) by activating the maximum Hz function

# i-290

## R290 Inverter heat pump monoblock

21 kW ÷ 27 kW

Range of heat pumps from 21 to 27 kW, equipped with ecological refrigerant gas R290, which represents the most advanced evolution of full inverter technology.

The range of 21 to 27 kW 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 the replacement of combustion plants, it guarantees a simple installation and an optimal energy efficiency, with a reduced environmental impact.



### Technical Features

- Proprietary control system with microcontroller regulation, overheating control logic through an electronic expansion valve.
- Compressors: DC inverter scroll.
- Fans: Axial type with brushless DC motor.
- Source heat exchanger: Optimized with a circuit and finned battery, copper tubes, and aluminum fins.
- User heat exchanger: Brazed plate heat exchanger made of AISI 304 stainless steel with low water-side pressure drop.
- Refrigeration circuit made of copper tubing, includes: condensation control, electronic thermostatic valve, reversing valve, high-pressure switch, liquid separator, liquid receiver, pressure port, bi-directional mesh metal filters, high and low pressure transducers.
- Integrated hydraulic circuit with high-efficiency brushless circulator with variable speed, flow meter, air venting device with air release valve, 6 bar overpressure valve, system filling and draining valves.

### Logic and Controls:

- All units can operate in 3 different modes: heating, cooling, and domestic hot water, with specific programs that enhance performance under all conditions, with optional management of the climate curve.
- All units in the i-290 series are equipped with a wired remote control for complete heat pump management, model e-Lite.
- The i-290 units can manage mixing valves, diverting valves, and secondary side circulators; they can also control the solar thermal system, integrate with external heat sources, and interface with external Home/Building automation or Domotics systems. ModBus available as an accessory "CM."
- The i-290 series features an innovative remote control that, once connected to the heat pump, allows complete control, both locally and remotely.

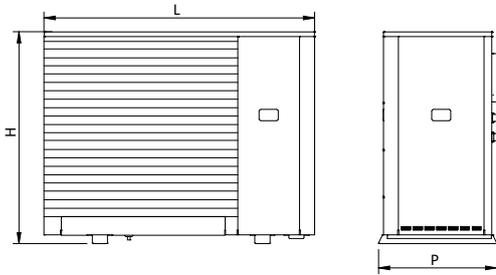
### Accessories

<b>CM</b>	Provision of Modbus connectivity	<b>KA</b>	metal panels treatment
<b>TR2</b>	Cu/Al battery with anti-corrosion treatment	<b>KA3</b>	Heat exchanger resistance + base
<b>TR2C4</b>	Cu/Al battery with anti-corrosion and	<b>RP</b>	Base resistance
			Battery protection grilles

### Loose accessories

<b>e-Pro</b>	Wi-Fi wall remote control	<b>SPS</b>	Solar panel probe for GI3
<b>Hi-TV415</b>	Remote Touch Screen Display	<b>VDIS3</b>	Three-wires diverting valve
<b>CONNECT BOX**</b>	Gateway Heat Pump Communication and Maxa Connect	<b>FD</b>	Dirt separator filter
<b>EXOGEL</b>	Frost protection	<b>FY</b>	Y-filter
<b>GI3**</b>	External hardware extension module	<b>ACT</b>	Outdoor water buffer ( <i>view page.28</i> )
<b>AG</b>	Anti-vibration kit		
<b>SAS</b>	Remote plant probe - Sanitary storage probe		

\*\* Accessories that cannot be used simultaneously



Dimensions		0121	0123	0125	0127
L	mm	1610	1610	1610	1610
P	mm	710	710	710	710
H	mm	1270	1270	1270	1270

i-290		0121	0123	0125	0127
<b>Cooling</b>					
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
Useful head (1)	kPa	128	121	128	117
<b>Heating</b>					
Heating capacity (3)	kW	21,0	22,8	24,8	27,0
Power input (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 (11)	kW	19,7	21,2	24,1	25,8
Power input (11)	kW	7,38	7,97	9,56	10,3
COP (11)	W/W	2,67	2,66	2,52	2,50
SCOP (6)	W/W	4,75	4,72	4,49	4,46
Water flow rate (3)	L/s	0,59	0,65	0,69	0,79
Useful head (3)	kPa	105	92	97	85
Energy efficiency (Water 35°C / 65°C)		A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
<b>Compressor</b>					
Type		Scroll DC Inverter			
Compressors	n°	1	1	1	1
Refrigerant circuits	n°	1	1	1	1
R290 refrigerant quantity (7)	kg	1,7	1,7	2,1	2,1
<b>Hydraulic circuit</b>					
Plumbing fittings	inch	1" 1/4 M			
Minimum water volume (8)	L	175	175	220	225
<b>Noise level</b>					
Sound power (9)	dB(A)	64	64	65	65
Sound pressure at 1m distance (10)	dB(A)	48	48	49	49
<b>Electrical data</b>					
Power supply		400V/3P+N+T/50Hz			
Maximum power input	kW	11	11	13	13
Maximum input current	A	19	19	21	21
<b>Weight</b>					
Shipping weight	kg	276	276	285	285

\* Performance referring to the following conditions:

- (1) Cooling: outdoor air temperature 35°C; in/out water temperature 12/7°C.
- (2) Cooling: outdoor air temperature 35°C; in/out water temperature 23/18°C.
- (3) Heating: outdoor air temperature 7°C db 6°C db; in/out water temperature 30/35°C.
- (4) Heating: outdoor air temperature 7°C db 6°C db; in/out water temperature 47/55°C.
- (5) Cooling: low temperature, variable output, fixed flow rate.
- (6) Heating: average climatic conditions; T<sub>biv</sub>=7°C; low temperature, variable output, fixed flow rate.
- (7) Indicative data subject to changes. For the correct value, always refer to the technical label on the unit.

(8) Calculated for a decrease in system water temperature of 10°C with a defrost cycle lasting 6 minutes.

(9) Sound power: heating mode according to EN 12102:2022; value determined on the basis of measurements made in accordance with UNI EN ISO 9614-1, in compliance with Eurovent certification requirements.

(10) Sound pressure: value calculated from the sound power level using the standard ISO 3744:2010 at a distance of 1 m.

(11) Heating: outdoor air temperature 7°C db 6°C db; in/out water temperature 55/65°C.

(\*) by activating the maximum Hz function

# i-290

## Tandem scroll inverter heat pumps air/water with EC axial fan

40 kW÷50 kW

The i-290 0240 and 0250 sizes represent the latest evolution in MAXA full inverter heat pump technology. In fact, using the environmentally friendly refrigerant gas R290, it is possible to take the latest evolutionary step that further simplifies the construction of fully heat pump systems.

In fact, thanks to reaching a maximum temperature of 78°, direct application on systems requiring high flow temperatures is also very easy.



### Technical Features

- Proprietary control system with microcontroller control, overheating control logic via electronic expansion valve.
- Compressors. Scroll DC inverter with tandem operation.
- Fans. Axial type with brushless DC motor.
- Heat exchanger source. Optimised with a finned coil circuit, copper tubes and aluminium fins with hydrophilic treatment. AISI 304 stainless steel brazed plate user exchanger with reduced water-side pressure drop.
- Refrigeration circuit made of copper tube, includes: 4-way cycle reversing valve, electronic expansion valve, liquid separator, liquid receiver, safety device (high pressure switch), pressure transducers, filter dehydrator, liquid flow and moisture indicator.
- The suction pipe is thermally insulated with flexible, closed-cell elastomeric foam.
- Hydraulic circuit including: plate heat exchanger, protection flow switch, safety valve (6 bar) to be connected to a collection system and manual air vent valve.
- On request (optional) further components such as a tank and circulation pump can be installed on the machine.

### Logic and Controls

- All units can operate in 3 different modes: heating, cooling and DHW, with specific programming that exalts performance in all conditions, with possible management of the climatic curve.
- The i-290 series units are able to manage mixing valves, diverter valves and secondary-side circulator; they are also able to control the solar thermal system, possible integration with external heat sources, and integration with external Home/Building automation or Home Automation systems.
- The i-290 0240-0250 series is fully controllable via the on-board display..
- The range is compatible with various MAXA remote control models, in particular: e-Lite suitable for the local control of a single heat pump; Hi-TV415 suitable for the local control of a cascade of heat pumps; e-Pro which allows both local and remote control of a single heat pump, or CONNECTBOX which functions as a gateway between the heat pump and the local wi-fi network.

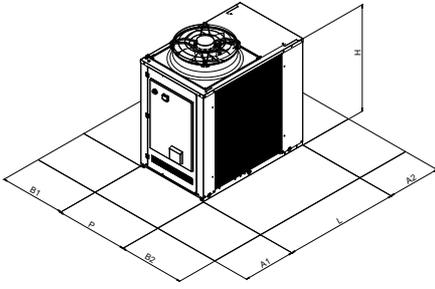
### Accessories

<b>GL</b>	Wooden cage packing	<b>PSEC</b>	Single pump EC (high prevalence)
<b>GL</b>	Wooden cage packing (with SI acc.)	<b>PS-SI</b>	Single pump AC and inertial tank
<b>IM</b>	Protection switches	<b>PSI-SI</b>	Inverter modulated single pump AC and inertial tank
<b>RP</b>	Protection module	<b>PSEC-SI</b>	Single pump EC (high prevalence) and inertial tank
<b>TR2</b>	Cu/Al battery with anti-corrosion	<b>SL</b>	Silencing
<b>CM</b>	Modbus communication module	<b>SSL</b>	Super silencing (SI included)
<b>KA1</b>	Heat exchanger + pump (if on board) electrical heaters	<b>TR2C4</b>	Cu/Al battery with anti-corrosion and metal panels treatment
<b>PS</b>	Single pump AC		
<b>PSI</b>	Inverter modulated single pump AC		

### Loose accessories

<b>e-Pro</b>	Wi-Fi wall remote control		probe
<b>e-Lite</b>	Multifunctional remote control system	<b>SPS</b>	Solar panel probe for GI3
<b>Hi-TV415</b>	Remote Touch Screen Display	<b>RV</b>	Grooved Joint Connection
<b>CONNECT BOX**</b>	Gateway Heat Pump Communication and Maxa Connect	<b>VDIS4</b>	Three-wires diverting valve
<b>GI3**</b>	External hardware extension module	<b>FY</b>	Y-filter
<b>AG</b>	Anti-vibration kit	<b>VSA</b>	Antifreeze drain valve for hydraulic circuit
<b>RP</b>	Battery protection grilles		Deaerator Kit
<b>SAS</b>	Remote plant probe - Sanitary storage	<b>DISA</b>	

\*\* Accessories that cannot be used simultaneously



Dimensions		0240	0250	Spaces of respect		0240-0250
L	mm	1850	1850	A1	mm	1200
L (with tank)	mm	2460	2460	A2	mm	1000
P	mm	1110	1110	B1	mm	1500
H	mm	1920	1920	B2	mm	1500
H (SSL)	mm	1980	1980			

i-290		0240	0250
<b>Cooling</b>			
Cooling capacity (1)	kW	28,9	34,1
Power input (1)	kW	9,20	11,0
EER (1)	W/W	3,14	3,10
Cooling capacity (2)	kW	34,5	37,0
Power input (2)	kW	8,10	8,53
EER (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
<b>Heating</b>			
Heating capacity (3)	kW	40,1	50,0
Power input (3)	kW	9,8	11,9
COP (3)	W/W	4,10	4,20
Heating capacity (4)	kW	38,0	47,9
Power input (4)	kW	13,1	16,5
COP (4)	W/W	2,90	2,90
Heating capacity (11)	kW	38,4	45,8
Power input (11)	kW	16,0	18,8
COP (11)	W/W	2,40	2,44
SCOP (6)	W/W	4,09	4,20
Water flow rate (3)	L/s	1,14	1,43
Energy efficiency (Water 35°C / 65°C)		A++ / A++	A++ / A++
<b>Compressor</b>			
Type		Scroll DC Inverter	
Compressors	n°	2	2
Refrigerant circuits	n°	1	1
R290 Refrigerant quantity (7)	kg	3,15	3,50
<b>Hydraulic circuit</b>			
Plumbing fittings (grooved)	inch	1" 1/2 (DN 40)	
Minimum water volume (8)	L	365	415
<b>Noise level</b>			
Sound power (9)	dB(A)	74	75
Sound pressure at 1m distance (10)	dB(A)	57	58
<b>Electrical data</b>			
Power supply		400V/3P+N+T/50Hz	
Maximum power input	kW	23	27
Maximum input current	A	37	44
<b>Weight</b>			
Shipping weight	kg	510	525

\* Performance referring to the following conditions:

- (1) Cooling: outdoor air temperature 35°C; in/out water temperature 12/7°C.
- (2) Cooling: outdoor air temperature 35°C; in/out water temperature 23/18°C.
- (3) Heating: outdoor air temperature 7°C db 6°C db; in/out water temperature 30/35°C.
- (4) Heating: outdoor air temperature 7°C db 6°C db; in/out water temperature 47/55°C.
- (5) Cooling: low temperature, variable output, fixed flow rate.
- (6) Heating: average climatic conditions; T<sub>biv</sub>=-7°C; low temperature, variable output, fixed flow rate.
- (7) Indicative data subject to changes. For the correct value, always refer to the technical label on the unit.

(8) Calculated for a decrease in system water temperature of 10°C with a defrost cycle lasting 6 minutes.

(9) Sound power: heating mode according to EN 12102:2022; value determined on the basis of measurements made in accordance with UNI EN ISO 9614-1, in compliance with Eurovent certification requirements.

(10) Sound pressure: value calculated from the sound power level using the standard ISO 3744:2010 at a distance of 1 m.

(11) Heating: outdoor air temperature 7°C db 6°C db; in/out water temperature 55/65°C.

# i-32V5

## Inverter monoblock heat pump

6 kW÷18 kW

### 11 models: the most compact and the best performing of the market!

The inverter technology employment together with DC brushless motors ensures higher global energetic efficiency of equipment also thanks to high and effective modulating power. The employment extension to all components gives the COP and EER improvement and a substantial increase of partial loads efficiency.



### Technical Features

- Customized control system with microcontroller regulation, overheating control logic with electronic expansion valve.
- DC inverter compressors: twin-rotary Dc Inverter.
- Ventilation: DC inverter with axial fan
- Source exchanger: optimized circuit with finned coil, copper pipes and hydrophilic aluminum fins.
- Users exchanger: a brazed plate type in stainless steel AISI 304 with reduced pressure drop on the water side.
- Refrigerant circuit is made with copper pipes and includes: condensing control, electronic expansion valve, reversing valve 4 ways, high pressure switch, separator and liquid receiver, valves for maintenance and control, high and low pressure transducers.
- Integral hydraulic system: pump with high efficiency brushless circulator, flow switch, air valve, pressure relief valve (6 bar), pressure gauge, water valve for system charge/discharge.

### Logic and Controls

- All units can work in three different modes: heating, cooling and DHW, with specific programs that enhance the performance in all conditions, with possible management of the temperature curve.
- The V5 series units are able to handle mixing valves, diverter and circulatory secondary side; They are also able to control the solar thermal system, the eventual integration with external heat sources, and integration with external systems Home Building automation or Domotic. All i-32V5 series is controllable remotely (accessory HI-TV415).
- Modbus RS485 protocol as standard

The i-32V5 KA models with integrated defrosting kit "KA" has the same performance and technical data, in order to they have the same Eurovent HP Keymark certification.

### Accessories

<b>GI *</b>	Internal hardware extension module	<b>TR2</b>	Anti-corrosion treatment
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### Loose accessories

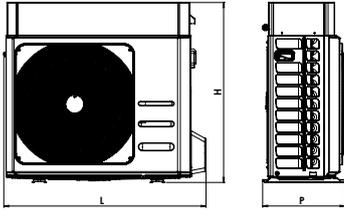
<b>e-Pro</b>	Wi-Fi wall remote control	<b>AG</b>	Vibration damper kit
<b>e-Lite</b>	Multifunctional remote control system	<b>SAS</b>	DHW probe / Sanitary water probe
<b>Hi-TV415</b>	Multifunctioning touch screen remote control	<b>SPS</b>	Solar panel probe
<b>CONNECT BOX**</b>	Gateway Heat Pump Communication and Maxa Connect	<b>VDIS2</b>	Three-wires diverting valve
<b>i-CR</b>	Remote wall controller	<b>FD</b>	Dirt separator filter
<b>EXOGEL</b>	Frost protection	<b>FY</b>	Y-filter
<b>GI3**</b>	External hardware extension module	<b>ACT</b>	Outdoor water buffer ( <i>view page.26</i> )
		<b>VARCO</b>	Condensate collection tray

\* Factory mounted accessory available only for sizes 10-12-14-16

\*\* Accessories that cannot be used simultaneously

### Versions

<b>i-32V5</b>	Reversible heat pump	<b>i-32V5/KA</b>	Reversible heat pump with integrated defrosting kit
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Dimensions		06A	08A	10	10T A	12	12T A	14	14T A	16	16T 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

i-32V5		06A	08A	10	10T A	12	12T A	14	14T A	16	16T A	18T A
<b>Cooling</b>												
Cooling capacity (1)	kW	5,7* / 5,2	6,7* / 6,1	8,3* / 7,5	8,3* / 7,5	9,4* / 8,5	9,4* / 8,5	12,1* / 11,5	12,1* / 11,5	14,5* / 13,8	14,5* / 13,8	15,8* / 15,04
Power input (1)	kW	1,6	2,0	2,4	2,4	2,8	2,8	3,5	3,5	4,4	4,4	4,9
EER (1)	W/W	3,2	3,1	3,2	3,2	3,1	3,1	3,3	3,3	3,2	3,2	3,1
Cooling capacity (2)	kW	6,7* / 6,4	8,7* / 8,0	10,4* / 9,5	10,4* / 9,5	12,8* / 11,6	12,8* / 11,6	14,7* / 14,0	14,7* / 14,0	16,6* / 15,8	16,6* / 15,8	18,0* / 17,1
Power input (2)	kW	1,3	1,8	2,2	2,2	2,8	2,8	2,6	2,6	3,2	3,2	3,6
EER (2)	W/W	4,9	4,5	4,4	4,4	4,2	4,2	5,4	5,4	5,0	5,0	4,8
SEER (5)	W/W	4,4	4,5	4,3	4,3	4,4	4,4	4,8	4,8	4,9	4,9	5,1
Water flow (1)	L/s	0,3	0,3	0,4	0,4	0,4	0,4	0,6	0,6	0,7	0,7	0,7
Available pressure (1)	kPa	75	71	69	69	63	63	75	75	62	62	56
<b>Heating</b>												
Heating capacity (3)	kW	7,5* / 6,1	9,4* / 7,8	11,6* / 10,1	11,6* / 10,1	13,6* / 11,8	13,6* / 11,8	15,2* / 14,1	15,2* / 14,1	17,6* / 16,3	17,6* / 16,3	19,3* / 17,9
Power input (3)	kW	1,3	1,7	2,3	2,3	2,7	2,7	2,9	2,9	3,5	3,5	4,1
COP (3)	W/W	4,9	4,6	4,4	4,4	4,3	4,3	4,9	4,9	4,7	4,7	4,4
Heating capacity (4)	kW	7,0* / 6,0	9,0* / 7,7	11,2* / 9,76	11,2* / 9,8	13,2* / 11,5	13,2* / 11,5	14,6* / 13,6	14,6* / 13,6	17,0* / 15,8	17,0* / 15,8	18,7* / 17,3
Power input (4)	kW	1,6	2,1	2,8	2,8	3,3	3,3	3,6	3,6	4,2	4,2	4,9
COP (4)	W/W	3,8	3,7	3,5	3,5	3,4	3,4	3,8	3,8	3,7	3,7	3,5
SCOP (6)		4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5	4,5
Water flow (3)	L/s	0,3	0,4	0,5	0,5	0,6	0,6	0,7	0,7	0,8	0,8	0,8
Available pressure (3)	kPa	71	65	53	53	41	41	61	61	46	46	33
Energy efficiency (Water 35°C / 55°C)		A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
<b>Compressor</b>												
Type		Twin Rotary DC Inverter										
Compressors	n°	1	1	1	1	1	1	1	1	1	1	1
Refrigerant circuits	n°	1	1	1	1	1	1	1	1	1	1	1
Refrigerant charge (7)	kg	0,97	0,97	2,5	2,5	2,5	2,5	3,2	3,2	3,5	3,5	3,5
<b>Hydraulic circuit</b>												
Water connections	inch	1"M	1"M	1"M	1"M	1"M	1"M	1"M	1"M	1"M	1"M	1"M
Min. water volume (8)	L	40	40	50	50	60	60	60	60	70	70	70
<b>Sound level</b>												
Sound power Lw (9)	dB(A)	62	62	63	63	63	63	66	66	66	66	66
Sound pressure at 1 m distance Lp1 (10)	dB(A)	47	47	48	48	48	48	51	51	51	51	51
<b>Electrical data</b>												
Power supply		230V/1/50Hz			400V 3/50Hz	230V 1/50Hz	400V/3P +N+T/50Hz	230V/1/50Hz	400V/3P +N+T/50Hz	230V 1/50Hz	400V/3P +N+T/50Hz	
Max. power input	kW	3,4	4,1	4,6	4,6	5,1	5,1	6,6	6,6	7,0	7,0	8,3
Max. current input	A	15,5	18,7	20,2	6,6	22,1	7,3	28,6	9,5	30,4	10,1	12,0
<b>Weight</b>												
Gross weight	kg	77	77	110	110	110	110	134	148	140	154	154
Operation weight	kg	66	66	96	96	96	96	121	136	126	141	141

## Operating conditions:

- (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 DB 6°C WB; inlet/outlet water temperature 30/35°C.  
 (4) Heating: Outdoor air temperature 7°C DB 6°C WB; inlet/outlet temperature 40/45°C.  
 (5) Cooling: Water temperature inlet/outlet 12/7°C.  
 (6) Heating: in average climate condition; T<sub>biv</sub>=-7°C; water temperature inlet/outlet 30/35°C.  
 (7) The data are only indicative and subject to change. For the correct data, refer to the technical label sticker on the unit.

(8) Calculated for a decrease of the water temperature of the plant with 10°C with a defrosting cycle of 6 minutes.

(9) Sound power: heating mode according to EN 12102:2022; value determined on the basis of measurements made in accordance with UNI EN ISO 9614-1, in compliance with Eurovent certification requirements.

(10) Sound pressure level obtained with internal measurements made in accordance with ISO 3744, at 1 m distance..

(\*) by activating the maximum Hz function

# i-32V5 SL

## Silenced Inverter monoblock heat pump

8 kW÷16 kW

### 5 models: low noise guaranteed with only 53 dB(A)

#### Extreme Silence

The introduction of rules concerning not only the energy efficiency of heating equipment but also the noise level of the same requires a constant evolution of the products. The new SL series of the i-32V5 range represents the ideal combination of high efficiency, extreme quietness and the usual reliability. Thanks to a complete software and hardware reorganization of the well tested i-32V5 has allowed to reach the best levels of silence and makes this i-32V5SL series perfectly compliant with the most stringent national and international standards.



#### Technical Features

- Customized control system with microcontroller regulation, overheating control logic with electronic expansion valve.
- DC inverter compressors: twin-rotary Dc Inverter.
- Ventilation: DC inverter with axial fan
- Source exchanger: optimized circuit with finned coil, copper pipes and hydrophilic aluminum fins.
- Users exchanger: a brazed plate type in stainless steel AISI 304 with reduced pressure drop on the water side.
- Refrigerant circuit: is made with copper pipes and includes: condensing control, electronic expansion valve, reversing valve 4 ways, high/low pressure switch, separator and liquid receiver, valves for maintenance and control, double-inlet pressure, high and low pressure transducers.
- Integral hydraulic system: pump with high efficiency brushless circulator, expansion tank, flow switch, air valve, pressure relief

valve (6 bar), pressure gauge, water valve for system charge/discharge.

#### Logic and Controls

- All units can work in three different modes: heating, cooling and DHW, with specific programs that enhance the performance in all conditions, with possible management of the temperature curve.
- The V5 series units are able to handle mixing valves, diverter and circulatory secondary side; They are also able to control the solar thermal system, the eventual integration with external heat sources, and integration with external systems Home Building automation or Domotic. All i-32V5 series is controllable remotely (accessory HI-TV415).
- Modbus RS485 protocol as standard

#### Accessories

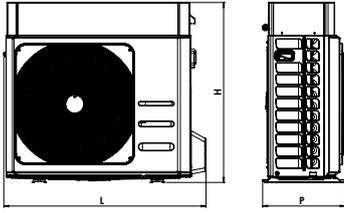
<b>GI *</b>	Internal hardware extension module	<b>TR2</b>	Anti-corrosion treatment
<b>Loose accessories</b>			
<b>e-Pro</b>	Wi-Fi wall remote control	<b>AG</b>	Vibration damper kit
<b>e-Lite</b>	Multifunctional remote control system	<b>SAS</b>	DHW probe / Sanitary water probe
<b>Hi-TV415</b>	Multifunctioning touch screen remote control	<b>SPS</b>	Solar panel probe
<b>CONNECT BOX**</b>	Gateway Heat Pump Communication and Maxa Connect	<b>VDIS2</b>	Three-wires diverting valve
<b>i-CR</b>	Remote wall controller	<b>FD</b>	Dirt separator filter
<b>EXOGEL</b>	Frost protection	<b>FY</b>	Y-filter
<b>G13**</b>	Hardware expansion module	<b>ACT</b>	Outdoor water buffer ( <i>view page.26</i> )
		<b>VARCO</b>	Condensate collection tray

\* Factory mounted accessory available only for sizes 10-12-14-16

\*\* Accessories that cannot be used simultaneously

#### Versions

<b>i-32V5SL</b>	Silenced reversible heat pump	<b>i-32V5SL/KA</b>	Silenced reversible heat pump with integrated defrosting kit
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Dimensions		08A	12	12T A	16	16T A
L	mm	918	1047	1047	1044	1044
P	mm	394	466	466	448	448
H	mm	830	936	936	1409	1409

i-32V5SL		08A	12	12T A	16	16T A
<b>Cooling</b>						
Cooling capacity (1)	kW	6,7* / 6,1	9,4* / 8,5	9,4* / 8,5	14,5* / 13,8	14,5* / 13,8
Power input (1)	kW	2,0	2,8	2,8	4,4	4,4
EER (1)	W/W	3,1	3,1	3,1	3,2	3,2
Cooling capacity (2)	kW	8,8* / 8,0	12,8* / 11,6	12,8* / 11,6	16,6* / 15,8	16,6* / 15,8
Power input (2)	kW	1,8	2,8	2,8	3,2	3,2
EER (2)	W/W	4,5	4,2	4,2	5,0	5,0
SEER (5)	W/W	4,5	4,4	4,4	4,9	4,9
Water flow (1)	L/s	0,3	0,4	0,4	0,7	0,7
Available pressure (1)	kPa	71	63	63	62	62
<b>Heating</b>						
Heating capacity (3)	kW	9,4* / 4,8	13,6* / 7,4	13,6* / 7,4	17,6* / 8,7	17,6* / 8,7
Power input (3)	kW	1,0	1,5	1,5	1,7	1,7
COP (3)	W/W	5,0	4,8	4,8	5,2	5,2
Heating capacity (4)	kW	9,0* / 4,7	13,2* / 7,14	13,2* / 7,1	17,0* / 8,4	17,0* / 8,4
Power input (4)	kW	1,2	1,9	1,9	2,0	2,0
COP (4)	W/W	3,9	3,9	3,9	4,1	4,1
SCOP (6)		4,6	4,5	4,5	4,5	4,5
Water flow (3)	L/s	0,2	0,3	0,3	0,4	0,4
Available pressure (3)	kPa	77	70	70	87	87
Energy efficiency (Water 35°C / 55°C)		A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++
<b>Compressor</b>						
Type		Twin Rotary				
Compressors	n°	1	1	1	1	1
Refrigerant circuits	n°	1	1	1	1	1
Refrigerant charge (7)	kg	0,97	2,5	2,5	3,5	3,5
<b>Hydraulic circuit</b>						
Water connections	inch	1" M	1" M	1" M	1" M	1" M
Min. water volume (8)	L	40	60	60	70	70
<b>Sound level</b>						
Sound power Lw (9)	dB(A)	53	53	53	53	53
Sound pressure at 1 m distance Lp1 (10)	dB(A)	39	38	38	38	38
<b>Electrical data</b>						
Power supply		230V/1/50Hz	230V/1/50Hz	400V/3P+N+T/50Hz	230V/1/50Hz	400V/3P+N+T/50Hz
Max. power input	kW	4,1	5,1	5,1	7,0	7,0
Max. current input	A	18,7	22,1	7,3	30,4	10,1
<b>Weight</b>						
Gross weight	kg	77	110	110	140	154
Operation weight	kg	66	96	96	126	141

**Operating conditions:**

- (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 DB 6°C WB; inlet/outlet water temperature 30/35°C.
- (4) Heating: Outdoor air temperature 7°C DB 6°C WB; inlet/outlet temperature 40/45°C.
- (5) Cooling: Water temperature inlet/outlet 12/7°C.
- (6) Heating: in average climate condition; T<sub>biv</sub>=-7°C; water temperature inlet/outlet 30/35°C.
- (7) The data are only indicative and subject to change. For the correct data, refer to the technical label stuck on the unit.

- (8) Calculated for a decrease of the water temperature of the plant with 10°C with a defrosting cycle of 6 minutes.
- (9) Sound power: heating mode according to EN 12102:2022; value determined on the basis of measurements made in accordance with UNI EN ISO 9614-1, in compliance with Eurovent certification requirements.
- (10) Sound pressure level obtained with internal measurements made in accordance with ISO 3744, at 1 m distance.
- (\*) by activating the maximum Hz function

# i-32V5C Midi

## Inverter monoblock chiller

21 kW ÷ 32 kW



### Compressor

DC inverter compressor are of the hermetic rotary type, expressly designed for operation with R32, equipped with thermal protection and mounted on rubber vibration dampers.

### User-Side Heat Exchanger

Grade AISI 304 stainless steel brazed plate heat exchanger coated with black closed-cell flexible elastomeric foam.



### Structure

Structure consisting of profiles and panels in hot-dip galvanized steel sheet and polyester powder coated, color RAL 7035 peeled weather resistant.

### Source-Side Heat Exchanger

The air exchangers are made entirely of aluminium with the microchannel technology.

### Fan

DC inverter axial-type fans are mounted, featuring aerofoil blades. They are statically and dynamically balanced.

### Refrigerant Circuit

- Dehydrator filter;
- Shut-off valve on the liquid line;
- Liquid flow and humidity indicator;
- Electronic expansion valve;
- Service couplers;

- High pressure safety pressure switches;
- High-and low-pressure transducers;

### Standard Components

- Electronic circulator
- EEV - electronic expansion valve
- Liquid indicator
- Water side safety valve
- Drain cock
- Flow switch (flow presence signal)
- Remote on / off dry contact
- Dynamic set point
- Three-phase relay for sequence / lack monitoring
- Fan speed regulator (ECM fans)
- 2nd set point

### Electrical Panel And Control

Entirely made and wired in conformity to the IEC 60335-2-40.

### Accessories

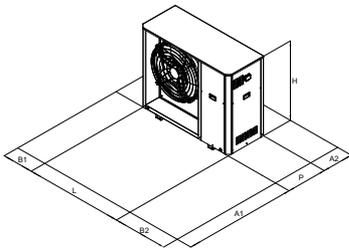
<b>CM</b>	Modbus communication module	<b>KA1</b>	Heat exchanger adhesive resistance
<b>DS</b>	Desuperheater partial heat recovery unit	<b>RP</b>	Metallic guards for condenser
<b>DSFR</b>	Sequence control device, phase failure + Minimum and Maximum voltage relay	<b>TR1</b>	Micro-channel coil with Aero surface treatment
<b>GI</b>	Internal hardware extension module	<b>SL</b>	Silenced version
<b>IM</b>	Protection switches		

### Loose accessories

<b>e-Pro</b>	Wi-Fi wall remote control		probe
<b>e-Lite</b>	Multifunctional remote control system	<b>VDIS3</b>	Three-wires diverting valve
<b>Hi-TV415</b>	Remote Touch Screen Display	<b>FD</b>	Dirt separator filter
<b>CONNECT BOX</b>	Gateway Heat Pump Communication and Maxa Connect	<b>FY</b>	Y-strainer
<b>i-CR</b>	Remote wall controller	<b>ACT</b>	Outdoor water buffer (view page.28)
<b>AG</b>	Anti-vibration kit	<b>TR2C4</b>	Cu/Al battery with anti-corrosion and metal panels treatment
<b>SAS</b>	Remote plant probe - Sanitary storage		

### Versions

<b>i-32V5C Midi</b>	Standard version chiller	<b>i-32V5C-BT Midi</b>	BT version chiller (for low water temperatures)
<b>i-32V5C-DS Midi</b>	Chiller with desuperheater		



Spaces of respect	0121-0126	0128-0132
A1	mm 1500	1500
A2	mm 400	400
B1	mm 400	400
B2	mm 700	700

Dimensions		0121	0126	0128	0132
L	mm	1600	1600	1600	1600
P	mm	680	680	680	680
H	mm	1315	1315	1315	1315

i-32V5C Midi		0121	0126	0128	0132
<b>Cooling</b>					
Cooling capacity (1)	kW	24,7* / 20,7	27,1* / 25,8	30,8* / 28,1	32,8* / 31,8
Power input (1)	kW	5,9	8,0	8,2	10,2
EER (1)	W/W	3,5	3,2	3,4	3,1
Cooling capacity (2)	kW	24,7* / 21,6	27,4* / 25,5	31,9* / 28,4	34,3* / 32,8
Power input (2)	kW	4,3	5,3	5,8	7,1
EER (2)	W/W	5,0	4,8	4,9	4,6
SEER (3)	W/W	5,2	5,1	5,4	5,1
Water flow (1)	L/s	1,0	1,2	1,3	1,5
Hydronic circuit side load losses (1)	kPa	37,5	53,1	39,2	47,8
<b>Compressor</b>					
Type	Twin Rotary DC Inverter				
Compressors	n°	1	1	1	1
Refrigerant circuits	n°	1	1	1	1
Refrigerant (R32)	kg	1,8	1,8	2,2	2,2
Cooling quantity in tonnes of CO2 equivalent	ton	1,22	1,22	1,49	1,49
<b>Fan</b>					
Type	DC Brushless				
Number	N°	1	1	1	1
Nominal air flow (1)	m³/h	8091	8407	12873	12836
<b>Hydronic heat exchanger</b>					
Type	Plate				
Number	N°	1	1	1	1
<b>Hydraulic circuit</b>					
Water connections	inch	1"	1"	1"1/4	1"1/4
Water quantity	L	2,4	2,4	3,4	3,4
Minimum water volume	L	110	110	110	110
<b>Sound level</b>					
Sound power (4)	dB(A)	73	74	75	76
<b>Electrical data</b>					
Power supply	400V/3P+N+T/50Hz				
Max. power input	kW	9,88	10,3	11,1	11,7
Max. current input	A	19,0	19,7	20,9	21,9
<b>Weight</b>					
Gross weight	kg	215	215	225	225
Net weight	kg	205	205	215	215

Performance referred to the following conditions:

- (1) Cooling: outdoor air temperature 35 ° C; water temperature in / out 12/7 ° C.
  - (2) Cooling: outdoor air temperature 35 ° C; water temperature in / out 23/18 ° C
  - (3) Cooling: inlet / outlet water temperature 12/7 ° C.
  - (4) Sound power: heating mode according to EN 12102:2022; value determined on the basis of measurements made in accordance with UNI EN ISO 9614-1, in compliance with Eurovent certification requirements.
- (\*) by activating the maximum Hz function

# i-32V5H Midi

## Inverter monoblock heat pump

21 kW ÷ 32 kW

### Compressor

DC inverter compressor are of the hermetic rotary type, expressly designed for operation with R32, equipped with thermal protection and mounted on rubber vibration dampers.

### User-Side Heat Exchanger

Grade AISI 304 stainless steel brazed plate heat exchanger coated with black closed-cell flexible elastomeric foam.

### Structure

Structure suitable for outdoor installation consisting of high-thickness profiles made of hop-dip galvanised steel sheets coated with polyester powder, coated with RAL 7035 bush-hammered finish resistant to weathering.



### Source-Side Heat Exchanger

The air-cooled heat exchangers are made with copper pipes and aluminium fins.

### Electrical Panel And Control

Entirely made and wired in conformity to the IEC 60335-2-40.

### Fan

Axial-type fans are mounted, featuring aerofoil blades. They are statically and dynamically balanced and supplied with a protection grille and air inlet and outlet nozzle with double-flared profile, specially shaped to boost efficiency and reduce noise. The electric motor is modulated with EC brushless motor, directly coupled, and equipped with an integrated thermal protection device. The motor has an IP 54 protection rating in accordance with the CEI

EN 60529 standard.

### Standard Components

- Electronic circulator
- EEV - electronic expansion valve
- Liquid indicator
- Water side safety valve
- Drain cock
- Flow switch (flow presence signal)
- Remote on / off dry contact
- Dynamic set point
- Three-phase relay for sequence / lack monitoring
- Fan speed regulator (ECM fans)
- 2nd set point

### Accessories

<b>CM</b>	Modbus communication module	<b>KA</b>	Plate heat exchanger + basement electrical heaters
<b>DS</b>	Desuperheater partial heat recovery unit	<b>RP</b>	Metallic guards for condenser
<b>DSFR</b>	Sequence control device, phase failure + Minimum and Maximum voltage relay	<b>TR2</b>	Cu / Al coil with Silver Line anti-corrosion treatment
<b>GI</b>	Internal hardware extension module	<b>SL</b>	Silenced version
<b>IM</b>	Protection switches		

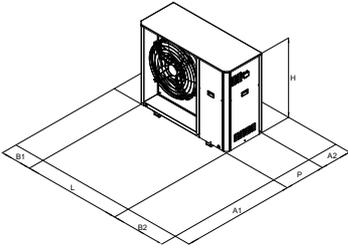
### Loose accessories

<b>e-Pro</b>	Wi-Fi wall remote control	<b>VDIS3</b>	probe
<b>e-Lite</b>	Multifunctional remote control system	<b>FD</b>	Three-wires diverting valve
<b>Hi-TV415</b>	Remote Touch Screen Display	<b>FY</b>	Dirt separator filter
<b>CONNECT BOX</b>	Gateway Heat Pump Communication and Maxa Connect	<b>ACT</b>	Y-strainer
<b>i-CR</b>	Remote wall controller	<b>TR2C4</b>	Outdoor water buffer (view page.28)
<b>AG</b>	Anti-vibration kit		Cu/Al battery with anti-corrosion and metal panels treatment
<b>SAS</b>	Remote plant probe - Sanitary storage		

### Versions

<b>i-32V5H Midi</b>	Standard version reversible heat pump	<b>i-32V5H-BT Midi</b>	BT version reversible heat pump (for low water temperatures)
<b>i-32V5H-DS Midi</b>	Reversible heat pump with desuperheater		





Spaces of respect	0121-0126	0128-0132
A1	mm 1500	1500
A2	mm 400	400
B1	mm 400	400
B2	mm 700	700

Dimensions		0121	0126	0128	0132
L	mm	1600	1600	1600	1600
P	mm	640	640	640	640
H	mm	1315	1315	1315	1315

i-32V5H Midi		0121	0126	0128	0132
<b>Cooling</b>					
Cooling capacity (1)	kW	18,0* / 17,7	22,7* / 18,7	25,0* / 24,2	27,5* / 26,0
Power input (1)	kW	5,9	6,2	8,0	8,7
EER (1)	W/W	3,0	3,0	3,0	3,0
Cooling capacity (2)	kW	25,1* / 22,0	27,7* / 25,8	30,8* / 29,0	32,7* / 31,4
Power input (2)	kW	4,4	5,5	6,4	7,1
EER (2)	W/W	5,0	4,7	4,6	4,4
SEER (3)	W/W	4,4	4,6	4,8	4,8
Water flow (1)	L/s	0,8	0,9	1,2	1,2
Hydronic circuit side load losses (1)	kPa	32,5	34,5	31,2	34,2
<b>Heating</b>					
Heating capacity (3)	kW	25,2* / 21,3	27,3* / 26,0	31,4* / 28,0	33,9* / 32,1
Power input (3)	kW	4,9	6,4	6,4	7,9
COP (3)	W/W	4,3	4,0	4,4	4,1
Heating capacity (4)	kW	25,2* / 21,2	27,6* / 25,8	30,7* / 28,3	34,5* / 32,7
Power input (4)	kW	6,4	7,9	8,2	9,9
COP (4)	W/W	3,3	3,3	3,5	3,3
SCOP (6)	W/W	4,2	4,0	4,3	4,0
Water flow (1)	L/s	1,0	1,2	1,4	1,6
Use side heat exchanger load losses (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+
<b>Compressor</b>					
Type	Twin Rotary DC Inverter				
Compressors	n°	1	1	1	1
Refrigerant circuits	n°	1	1	1	1
Refrigerant (R32)	kg	4,3	4,3	5,1	5,1
Cooling quantity in tonnes of CO2 equivalent	ton	2,90	2,90	3,44	3,44
<b>Fan</b>					
Type	DC Brushless				
Number	N°	1	1	1	1
Nominal air flow (1)	m³/h	10769	10847	12209	13202
<b>Hydronic heat exchanger</b>					
Type	Plate				
Number	N°	1	1	1	1
<b>Hydraulic circuit</b>					
Water connections	inch	1"	1"	1 1/4"	1 1/4"
Water quantity	L	2,4	2,4	3,4	3,4
Minimum water volume	L	110	110	110	110
<b>Sound level</b>					
Sound power (7)	dB(A)	65	65	67	67
<b>Electrical data</b>					
Power supply	400V/3P+N+T/50Hz				
Max. power input	kW	12,3	12,3	14,7	14,7
Max. current input	A	22,9	22,9	26,8	26,8
<b>Weight</b>					
Gross weight	kg	250	250	265	265
Net weight (*)	kg	240	240	255	255

Performance referred to the following conditions:

- (1) Cooling: outdoor air temperature 35 °C; water temperature in / out 12/7 °C.  
 (2) Cooling: outdoor air temperature 35 °C; water temperature in / out 23/18 °C  
 (3) Heating: external air temperature 7 °C d.b. 6 °C b.u. ; in / out water temp. 30/35 °C.

(4) Heating: external air temperature 7 °C d.b. 6 °C b.u. ; in / out water temp. 40/45 °C

(5) Cooling: inlet / outlet water temperature 12/7 °C.

(6) Heating: average climatic conditions; T<sub>biv</sub> = -7 °C; in / out water temp. 30/35 °C.

(7) Sound power: heating mode according to EN 12102:2022; value determined on the basis of measurements made in accordance with UNI EN ISO 9614-1, in compliance with Eurotest certification requirements.

(\*) by activating the maximum Hz function

# ACT

## Outdoor water buffer for hot water and chilled water

50-75-95 L

The technical accumulation called ACT consists of a cylindrical tank in a horizontal position, 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 positioned in order to promote a homogeneous flow inside the entire tank. The ACT accumulation is closed with a supporting frame and with powder-coated metal sheet panels of the same colour as the i-32V5 series units. The supply includes both the fastening screws between the heat pump and the ACT chassis and the adjustable feet for levelling the assembly. Some accessories are available such as: different sizes of electrical resistors equipped with its own electrical panel, the expansion tank and the EXOGEL valve.



### Building Features

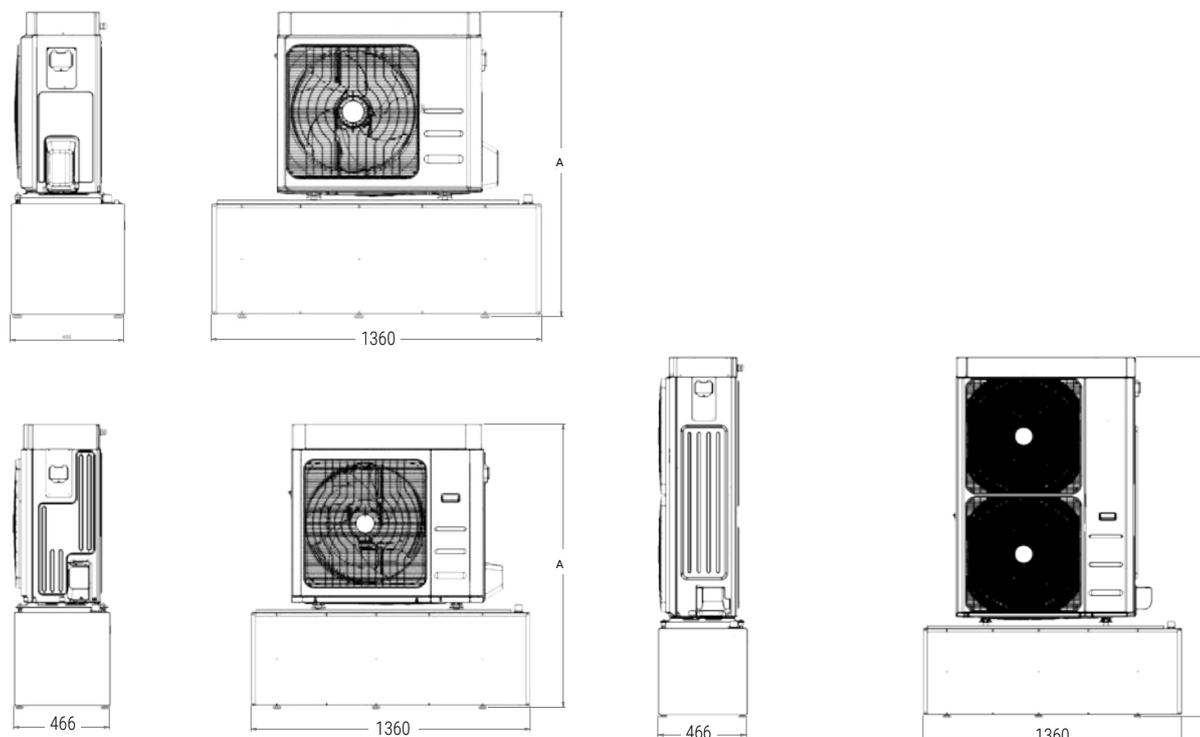
- Free standing horizontal inertial puffer with 50, 75 and 95 liters capacity.
  - One encumbrance dimensions for all sizes.
  - Solid hardware to support i-32V5 units
  - Dampers between inertial puffer and heat pump as standard
  - Insulation panel in polyester fiber of thickness 50 mm
  - Finishing with Polyolefin-foam adhesive of 3 mm thick
  - Possibility of installing and expansion tank 18 l (optional)
  - Discharge valve included as standard
  - N. 1 flexible for the connection of the inertial puffer to the heat pump as standard.
  - Tank anti-corrosion painting .
- EDILFIBER insulation; new concept of thermal insulation, made of polyester fiber with the characteristic of being mainly produced from differentiated urban recycle waste (PET bottles collection) and therefore strongly respecting the environment.
  - Metal sheets polyurethane powder painting
  - Possibility of installing electric heaters from 1.2 (single phase) 2, 3 to 4.5 kW single and three-phase (optional).
  - 18l expansion vessel (optional, factory installed).
  - 2, 3, 4.5kW electrical heaters, available in single and three phases, managed as integration and/or replacement with double security level with automatic and manual reset thermostat to protect user and plant (optional, factory installed).
  - Kit Exogel, mechanical valve saves machinery from freezing.



Electrical resistance  
(optional)



Insulating panel



Variation of the total height (A)  
as a function of the supporters regulation

Dimensions (A)		Min
<b>i-32V5 04-06-08</b>	mm	1270
<b>i-32V5 10-12</b>	mm	1.400
<b>i-32V5 14-14T-16-16T-18T</b>	mm	1.900

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

### Exogel Kit - Frost protection

It protects the appliance and the plant from damage caused by an unexpected cooling of the working temperature of the technical water near the freezing point by evacuating the system.



### Loose accessories

**RE1.2M** 1.2 kW single phase electrical resistance  
**RE2.0M** 2 kW single phase electrical resistance  
**RE3.0M** 3 kW single phase electrical resistance  
**RE4.5M** 4.5 kW single phase electrical resistance  
**RE2.0T** 2 kW three-phase electrical resistance

**RE3.0T** 3 kW three-phase electrical resistance  
**RE4.0T** 4.0 kW three-phase electrical resistance  
**KIT EXOGEL** Frost protection  
**VE18AT** Expansion vessel 18 l

# ACT

## Outdoor water buffer for hot water and chilled water

50-75-95 L

The technical storage tank called ACT consists of a cylindrical tank in a horizontal position, available in four different capacities.

The tank is thermally insulated with polyurethane foam, so that it can operate with both hot and cold water. ACT is equipped with hydraulic connections positioned in such a way as to favour a homogeneous flow within the tank, allowing it to be used both as inertial in series and as hydraulic separation. The ACT storage tank constitutes a load-bearing system and is completed with RAL 7043 coloured panelling.

ACT includes both fastening hardware between the heat pump and the frame, and adjustable feet for levelling the assembly.

ACT is suitable for supporting various heat pump models: i-290 series from 0106 to 0127, i-32V5, i-32V5 Midi.

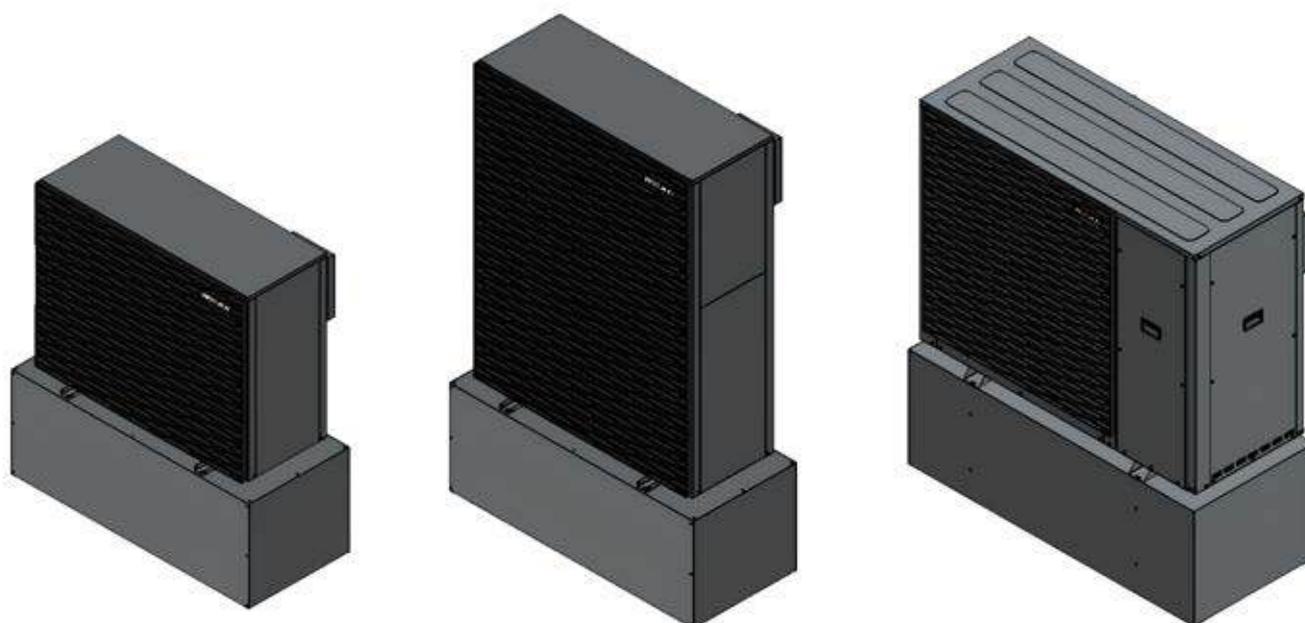
A number of accessories are available, such as: different sizes of electric heaters with their own electrical panel, expansion vessels and the EXOGEL valve.

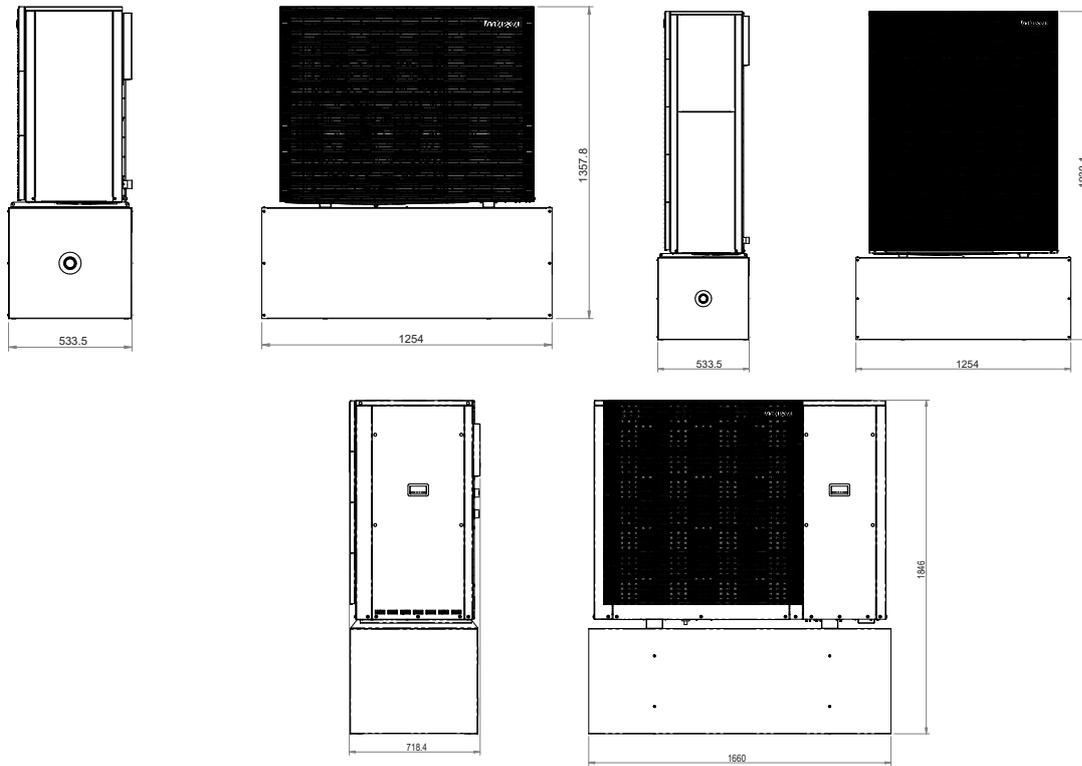


### Construction Features

- Inertial technical storage with capacities of 90, 120, 170, 220 litres.
- Compact dimensions with two different structures and sizes.
- Robust frame suitable for supporting different heat pump models: i-290 series from 0106 to 0127, i-32V5, i-32V5 Midi.
- Vibration dampers between ACT and heat pump (standard)
- Connecting fittings between ACT and heat pump (standard)
- Height adjustment feet (standard)
- Corrosion-proof finish of the storage tank
- Polyurethane foam insulation
- Water fill/drain tap.
- Several models of expansion vessels (optional, supplied separately).
- 5 models of additional single-phase and three-phase electric heaters (optional, supplied separately).
- Exogel kit, anti-freeze thermal drain valve, suitable for protecting systems without glycol inside the pipes (optional, supplied separately).

AVAILABLE FROM JUNE 2025





ACT		90	120	170	220
Useful capacity	L	90	120	170	220
Insulation thickness	mm	40	40	40	40
Thermal conductivity coefficient	W/mK	0,023	0,023	0,023	0,023
Max operating temperature	°C	95	95	95	95
Max working pressure	bar	3	3	3	3
Maximum test pressure	bar	6	6	6	6
Empty weight	kg	45	55	90	120
Operating weight	kg	135	175	260	340
Dimensions (LxHxP)	mm	1260x530x530	1260x530x530	1350x585x585	1660x585x702
Expansion vessel volume (optional)	L	7	7	12	15
Suggested matching		i-290 0106 i-32V5 06A ~ 18T A	i-290 0109 - 0112 i-32V5 Midi 0121 ~ 0132	i-290 0115 ~ 0123	i-290 0125 - 0127

### Exogel Kit - Frost protection

It protects the appliance and the plant from damage caused by an unexpected cooling of the working temperature of the technical water near the freezing point by evacuating the system.



### Loose accessories

<b>RE1.0M</b>	1.0 kW single phase electrical resistance
<b>RE2.0M</b>	2 kW single phase electrical resistance
<b>RE3.0M</b>	3 kW single phase electrical resistance
<b>RE4.0M</b>	4.0 kW single phase electrical resistance
<b>RE3.0T</b>	3 kW three-phase electrical resistance
<b>RE5.0T</b>	5.0 kW three-phase electrical resistance
<b>KIT EXOGEL</b>	Frost protection

<b>VE7AT</b>	Expansion vessel 7 l (ACT 90, 120)
<b>VE12AT</b>	Expansion vessel 12 l (ACT 170)
<b>VE15AT</b>	Expansion vessel 15 l (ACT 220)
<b>KF1</b>	Fixing Kit i-32V5 (06A ~ 18T A)
<b>KF2</b>	Fixing Kit i-290 (0106 ~ 0118)
<b>KF3</b>	Fixing Kit i-32V5 Midi (0121 ~ 0132), i-290 (0121 ~ 0127)

# i-HPV5H

## Air/water inverter heat pumps with axial fan

40 kW ÷ 70 kW



### Compressors

DC inverter compressor are of the hermetic scroll type expressly designed for operation with gas R32.

### Structure

Structure suitable for outdoor installation consisting of high-thickness profiles made of hot-dip galvanised steel sheets coated with polyester powder, coated with RAL 7035 bush-hammered finish.

### User-Side Heat Exchanger

Grade AISI 304 stainless steel brazed plate heat exchanger coated with black closed-cell flexible elastomeric foam.



### Source-Side Heat Exchanger

The air exchangers are made of copper pipes and aluminum fins. The tubes are mechanically expanded into the aluminum fins to increase the heat exchange factor.

### Fan Section

The fan is axial type with wing profile blades. The electric motor used and controlled in modulation with brushless EC motor.

### Refrigerant Circuit

It includes:

- Dehydrator filter;
- Shut-off valve on the liquid line;
- Liquid flow and humidity indicator;
- Electronic expansion valve;
- Service couplers;
- High pressure safety pressure switches;
- High- and low-pressure transducers;
- 4-way valve
- Receiver and liquid separator
- Non-return valves

### Electric Panel And Control

Entirely made and wired in conformity to the IEC 60335-2-40

The power section includes:

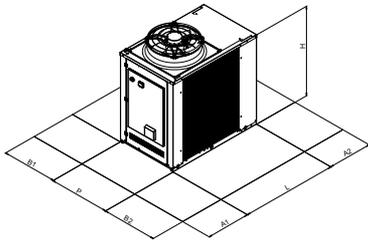
- Isolation transformer for powering the control devices;
- Thermal protection fuses for compressor drivers, EC fan and pump Driver;
- Automatic switch for protecting the compressors (optional);
- Drivers for modulating compressor control;
- Phase sequence control relay;
- Phase sequence control relay with minimum/maximum voltage inversion calibration (optional);
- Thermostatic ventilation inside electrical cabinet;
- Plant management module ( optional or for the versions that require it)
- Interface terminal with alphanumeric display;
- Visualisation function for the set values, analogue inputs, fault codes, alarm log and parameter index;
- On/off and alarm reset buttons;
- Button combinations for forcing defrosting and for forcing pump to maximum power;
- Unit switch-on management from local or remote source;
- Configuration for Modbus connectivity (CM accessory).

### Main accessories

<b>e-Pro</b>	Wi-Fi wall remote control	<b>PSI-SI</b>	Inverter modulated single pump AC and inertial tank
<b>e-Lite</b>	Multifunctional remote control system	<b>PD-SI</b>	Double pump AC and inertial tank (includes the GI accessory)
<b>DS</b>	Desuperheater partial heat recovery unit	<b>PSEC-SI</b>	Single pump EC and inertial tank
<b>BT</b>	Unit for low water temperatures (BT)	<b>SL</b>	Silenced unit
<b>C</b>	Ductable unit	<b>SSL</b>	Super-silenced unit
<b>C (S)</b>	Ductable unit with compressors insonorization	<b>VDIS4</b>	Three-wires diverting valve
<b>PS</b>	Single pump AC	<b>GI</b>	Internal hardware expansion module
<b>PSI</b>	Inverter modulated single pump AC	<b>TR2C4</b>	Cu/Al battery with anti-corrosion and metal panels treatment
<b>PD</b>	Double pump AC (includes the GI accessory)	<b>i-CR</b>	Remote wall controller
<b>PSEC</b>	Single pump EC		
<b>PS-SI</b>	Single pump AC and inertial tank		

### Versions

<b>i-HPV5H</b>	Standard version reversible heat pump	<b>i-HPV5H-BT</b>	BT version reversible heat pump (for low water temperatures)
<b>i-HPV5H-DS</b>	Reversible heat pump with desuperheater		



Dimensions		0140	0250	0260	0270	Spaces of respect		0140	0250	0260	0270
L	mm	1850	1850	1850	1850	A1	mm	1200	1200	1200	1200
L (with tank)	mm	2460	2460	2460	2460	A2	mm	1000	1000	1000	1000
P	mm	1110	1110	1110	1110	B1	mm	1000	1500	1500	1500
H	mm	1920	1920	1920	1920	B2	mm	1500	1500	1500	1500
H (SSL)	mm	1980	1980	1980	1980						

i-HPV5H -PS/PSI/PD		0140	0250	0260	0270
<b>Cooling</b>					
Cooling capacity (1)	kW	33,1* / 29,6	41,2* / 36,3	53,1* / 48	58,2* / 53,2
Power input (1)	kW	9,54	11,7	15,5	17,7
EER (1)	W/W	3,1	3,1	3,1	3,0
Cooling capacity (2)	kW	42,4* / 37,3	62,3* / 55,3	71,8* / 65,3	73,8* / 66
Power input (2)	kW	8,9	13	15,5	16,6
EER (2)	W/W	4,2	4,3	4,2	4,0
SEER (5)	W/W	4,8	4,7	4,9	4,8
Water flow (1)	L/s	1,4	1,7	2,3	2,6
Available head (1)	kPa	146	138	155	151
<b>Heating</b>					
Heating capacity (3)	kW	44,3* / 40	56,3* / 50,2	66* / 61,4	74,6* / 66,8
Power input (3)	kW	9,8	12,2	15	16,3
COP (3)	W/W	4,1	4,1	4,1	4,1
Heating capacity (4)	kW	43,6* / 40,6	55,9* / 49,7	64,2* / 59,5	75,5* / 66,6
Power input (4)	kW	12,5	15,4	18,3	20,4
COP (4)	W/W	3,3	3,23	3,3	3,3
SCOP (6)	W/W	4,3	4,16	3,9	3,9
Energy Efficiency (water 35°C / 55°C)	Classe	A++ / A++	A++ / A+	A++ / A+	A++ / A+
Water flow (1)	L/s	1,9	2,4	2,9	3,2
Available head (4)	kPa	125	109	130	122
<b>Compressor</b>					
Type		Scroll DC Inverter	Scroll DC Inverter	Scroll DC Inverter	Scroll DC Inverter
Compressors	n°	1	2	2	2
Refrigerant circuits	n°	1	1	1	1
Refrigerant		R32	R32	R32	R32
Refrigerant charge R32	kg	6,5	8,5	11,7	12,00
Cooling quantity in tonnes of CO2 equivalent	ton	4,4	5,7	7,9	8,1
<b>Fan</b>					
Nominal air flow	L/s	4368	5431	6417	5547
<b>Hydraulic circuit</b>					
Water flow (1)	L/s	1,42	1,74	2,30	2,55
Water connections	inch	1" 1/2 (DN 40)			
Max pressure hydronic side	bar	6	6	6	6
Minimum water volume	L	286	389	490	522
<b>Noise level</b>					
Sound power (7)	dB(A)	74	75	80	81
<b>Electrical data</b>					
Power supply		400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz
Max. power input	kW	24	33	39	43
Max. current input	A	38	52	62	68
<b>Weight</b>					
Net weight (**)	kg	440	540	560	600
<b>Hydronic kit (Optional)</b>					
Tank volume	L	400	400	400	400
Expansion vessel volume	L	24	24	24	24

Data referred to the following condition:

- (1) Cooling: outdoor air temperature 35°C; in/out water temperature 12/7°C.
- (2) Cooling: outdoor air temperature 35°C; in/out water temperature. 23/18°C.
- (3) Heating: outdoor air temperature 7°C b.s. 6°C b.u.; in/out water temperature 30/35°C.
- (4) Heating: outdoor air temperature 7°C b.s. 6°C b.u.; in/out water temperature 40/45°C.
- (5) Cooling: in/out water temperature 7/12°C.
- (6) Heating: Average climatic conditions; T<sub>biv</sub>=-7°C; low temperature.

(7) Sound power: heating mode according to EN 12102:2022; value determined on the basis of measurements made in accordance with UNI EN ISO 9614-1, in compliance with Eurovent certification requirements.

N.B. Performance data are indicative and are subject to change. Furthermore the performance declared in points (1), (2), (3), and (4) is intended to refer to instantaneous power according to UNI EN 14511. The value declared in point (5) and (6) is determined according to UNI EN 14825.

(\*) by activating the maximum Hz function

(\*\*) For data relating to other versions, refer to the technical manual

# i-MAX

## Air/water inverter heat pumps with axial fan

66 kW ≈ 115 kW

### Carpentry

Made up of hot-galvanized sheet painted metal.

### Compressors

The compressors are a scroll type, mounted on a rubber material acting as a shock absorber. Each one of the two circuits is equipped with a DC inverter compressor. In this way, the capacity of each circuit can be modulated continuously between the minimum capacity of a single inverter compressor and the sum of the maximum capacities of the whole compressors of the same circuit.



### User Side Heat Exchanger

The employed user side heat exchanger is made up of AISI 304 stainless steel braze-welded plates type integrating a dual cooling circuit.

### Air Side Heat Exchanger

The air side heat exchanger is made up of copper pipes and aluminum fins.

### Fan Section

The type of the fan is axial-flow with aluminum aerofoil blades of fibre. The electric fan motor used in this series is modulated by inverter.

### Refrigerant Circuit

The refrigerant circuit has been manufactured by means of international primary brands components and according to the UNI EN 13134 Rule concerning welding procedures. The refrigerant gas is R410A. Each refrigerant circuit includes 4 way reverse cycle valve, electronic expansion valve, liquid separator, liquid receivers, auxiliary circuit to reduce the defrosting time, oil recovery circuit, non-return

valves, valves of inspection for maintenance and control, safety device (high pressure switch) according to PED regulation, pressure transducers, precision sensors, high capacity filter dryer, mechanical filters.

### Electric Panel

The electric panel is manufactured according to the actual European Union rules and it contains all the electromechanical and electronic components of regulation and control. The terminal board in the electric panel is supplied with voltage free contacts for: remote ON-OFF, winter/summer commutation, domestic hot water temperature sensor, and for the remote control panel. The addition of the GI optional module allows further management of the plant.

### Hydraulic Circuit

Includes: dual refrigerant circuit plate heat exchanger and a single hydraulic circuit, a pressure gauge at the inlet and a fitting on the heat exchanger outlet for evaluating the load losses, service valve and flow switch for protection, automatic air release valve and safety valve (6 bar).

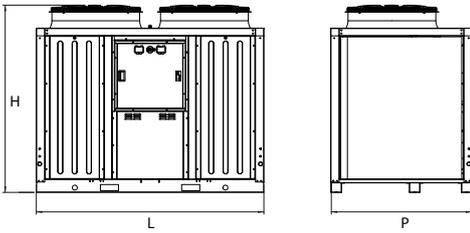
### Main accessories

<b>AG</b>	Rubber shock absorbers	<b>i-CR</b>	Remote wall controller
<b>CI6</b>	AC inverter pump (GI module included)	<b>IM</b>	Protection module
<b>CI7</b>	AC integrated pump	<b>KA</b>	Antifreeze kit
<b>CM</b>	Modbus interface RS485 activation	<b>SL</b>	Silencing
<b>DSFR</b>	Sequence control device, phase failure + Minimum and Maximum voltage relay	<b>SSL</b>	Super Silencing
<b>GI</b>	Internal hardware extension module	<b>TR2</b>	Anti-corrosion treatment
<b>HiT2</b>	Multifunction touch screen remote controller		

### Versions

i-MAX

Reversible heat pump



Dimensions		0466	0475	0485	0695	06105	06115
L	mm	2.250	2.250	2.250	2.250	2.250	2.250
P	mm	1.170	1.170	1.170	1.170	1.450	1.450
H	mm	1.985	1.985	1.985	1.985	2.010	2.010

i-MAX		0466	0475	0485	0695	06105	06115
<b>Cooling</b>							
Cooling capacity (1)	kW	65,6	74,6	83,9	94,7	105,6	114,3
Power input (1)	kW	22,6	25,7	28,8	32,7	36,2	39,4
EER (1)	W/W	2,9	2,9	2,91	2,9	2,9	2,9
Cooling capacity (2)	kW	79,6	90,2	102,8	113,3	127,3	139,3
Power input (2)	kW	21,8	24,6	28,2	31,0	34,9	38,2
EER (2)	W/W	3,7	3,7	3,7	3,7	3,7	3,7
SEER (5)	W/W	3,8	3,9	3,8	3,8	3,8	3,8
Water flow (1)	L/s	3,1	3,6	4,0	4,5	5,1	5,5
Pressure drop (1)	kPa	32	36	37	34	33	38
<b>Heating</b>							
Heating capacity (3)	kW	68,4	74,7	85,6	93,3	102,5	111,5
Power input (3)	kW	16,9	18,4	21,1	23,9	25,3	28,6
COP (3)	W/W	4,1	4,1	4,1	3,9	4,1	3,9
Heating capacity (4)	kW	65,9	71,0	82,1	88,6	97,1	108,3
Power input (4)	kW	20,5	22,2	25,7	27,7	30,4	36,1
COP (4)	W/W	3,2	3,2	3,2	3,2	3,2	3,0
SCOP (6)	W/W	3,6	3,6	3,5	3,6	3,6	3,5
Water flow (4)	L/s	3,2	3,4	3,9	4,2	4,7	5,2
Use side heat exchanger load losses (4)	kPa	30	31	31	32	27	27
Energy efficiency (Water 35°C/55°C)	Class	A+/A+	A+/A+	A+/A+	A+/A+	A+/A+	A++/A+
<b>Compressor</b>							
Type		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Compressors	n°	4	4	4	6	6	6
Refrigerant circuits	n°	2	2	2	2	2	2
Refrigerant charge R410A (7)	kg	13,4	14,2	14,3	13,4	14,2	14,3
<b>Fan</b>							
Nominal air flow	m³/s	6,5x2	7x2	7,5x2	8x2	8,5x2	9x2
<b>Hydraulic circuit</b>							
Max pressure hydronic kit	bar	6	6	6	6	6	6
Water connections	inch	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2	2" 1/2
Min. water volume (8)	L	200	200	200	260	260	260
<b>Sound level</b>							
Sound power (9)	dB(A)	84 / SL 82,0 / SSL 81,2	84 / SL 82,5 / SSL 81,7	85 / SL 83,0 / SSL 82,2	85 / SL 83,2 / SSL 82,7	85 / SL 83,2 / SSL 82,7	86 / SL 83,7 / SSL 83,2
Sound pressure (10)	dB(A)	52,2	52,2	53,2	53,2	53,2	54,2
<b>Electrical data</b>							
Power supply		400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz
Max. power input	kW	39,9	42,3	46,7	52,3	55,8	63,0
Max. current input	A	60,1	63,5	70,3	78,7	83,9	94,7
<b>Weight</b>							
Gross weight	kg	943	955	1011	1026	1128	1142
Operation weight	kg	923	946	996	1011	1105	1120

## Operating conditions:

- (1) Cooling: Outdoor air temperature 35°C; inlet/outlet temperature 12/7°C.
- (2) Cooling: Outdoor air temperature 35°C; inlet/outlet temperature 23/18°C.
- (3) Heating: Outdoor air temperature 7°C DB 6°C WB; inlet/outlet temperature 30/35°C.
- (4) Heating: Outdoor air temperature 7°C DB 6°C WB; inlet/outlet temperature 40/45°C.
- (5) Cooling: water temperature inlet/outlet 12/7°C.
- (6) Heating: normal climatic condition; T<sub>biv</sub>=-7°C; eater temperature inlet/outlet 30/35°C.
- (7) Indicative data and subject to change. For the correct data, always refer to the technical label on the unit.

(8) Calculated in the case of the plant water temperature decreased by 10°C for 6 minutes of defrosting.

(9) Condition (3); the value is determined on the basis of measurements taken in accordance with the UNI EN ISO 9614-2, in compliance with the requirements of Eurovent certification.

(10) Sound pressure level measured at 10 m from the unit, in free field, according to ISO 3744:2010.

N.B. The performance data are indicative and could be subject to change. In addition, the performances declared in apex (1), (2), (3) and (4) refer to the instantaneous power according to EN 14511. The declared data stated in the apex (5) and (6) is determined according to the UNI EN 14825.

# Atria

## Hybrid system with heat pump and boiler

21 kW ÷ 29 kW

Atria's range is the ideal for domestic/residential installation, especially in situations where it is necessary the substitution on an existing system.

Respects the environment decreasing the carbon dioxide emissions. Is suitable for all types of domestic heating: radiant system, radiators, fancoil. Now a days the incentives provided for energy improvement are several.



### The technological integration that guarantees:

- Versatility
- Energy consumption reduction
- Respect for the environment thanks with R32 gas
- Guaranteed savings, thanks to the 110% super bonus & thermal account
- Possibility of choice between the indoor boiler (I) and the outdoor boiler (E)

An hybrid system is made of a heat pump and a condensation boiler, expressly realized and designed from the manufacturer in order to make them work together.

Maxa new proposal allows to have an hybrid system according to current regulations which offers an high performance level without renunciation of an eco-friendly choice, that allows the carbon dioxide emission decrease in favour of environmental sustainability.

### Accessories available separately

<b>AG</b>	Vibration dumper	<b>SPS</b>	Solar panel probe for GI
<b>FD</b>	Dirt separator filter	<b>TPV</b>	Starting coaxial stub 60/100 mm
<b>GI*</b>	Internal hardware extension module	<b>TAPS KIT</b>	Taps kit (condensing boiler)
<b>GI3</b>	External hardware extension module	<b>Dima</b>	Template for Atria hybrid module
<b>Hi-TV415</b>	Multifunctioning touch screen remote control	<b>e-Lite</b>	Multifunctional remote control system
<b>KIT EXOGEL</b>	Frost protection	<b>e-Pro</b>	Wi-Fi wall remote control
<b>SAS</b>	DHW probe / Sanitary water probe	<b>ACT</b>	Outdoor water buffer (view page.26)

\* Factory mounted accessory excluding sizes i-32V5 6A and i-32V5 8A

### Loose accessories specific to ATRIA-I

<b>CDP</b>	Double starting curve 90 ° diam. 60 / 100mm	<b>TPV</b>	Starting coaxial stub diam. 60 / 100mm
<b>SDO</b>	Splitter D.80F-F		

### Loose accessories specific to ATRIA-E

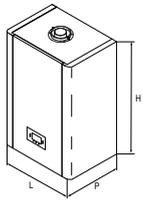
<b>DP</b>	Starting diffuser for ATRIA E diam. 80mm (recommended accessory)	<b>Wirecontroller</b>	Standard for Atria E outdoor
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### Versions

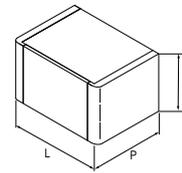
**ATRIA-I** Indoor condensing boiler

**ATRIA-E**

Outdoor condensing boiler



		25-I	30-I	35-I	25-E	30-E
L	mm	400	400	400	400	400
P	mm	250	250	250	250	250
H	mm	700	700	700	700	700
	kg	31	31	32	31	31



Hydraulic separator		
L	mm	400
P	mm	250
H	mm	360

Element	Symbol	Unit	25-I	30-I	35-I	25-E	30-E
Load profile			XL	XL	XL	XL	XL
Seasonal energy efficiency of room heating			A	A	A	A	A
Seasonal energy efficiency of water heating			A	A	A	A	A
Nominal heating capacity	$P_{\text{nominale}}$	kW	21,0	25,0	29,0	21,0	25,0
Useful heat input at nominal heating capacity at high temperature (P4)		kW	20,4	24,3	28,3	20,4	24,3
Annual fuel consumption	$A_{\text{FC}}$	GJ	17,3	17,4	17,6	17,3	17,4
Seasonal energy efficiency of room heating (GCV)	$\eta_s$	%	91,7	92	93,2	91,7	92
Energy efficiency of water heating (GVC)	$\eta_{\text{wh}}$	%	85,1	84,86	83,6	85,1	84,86
Sound power level	$L_{\text{WA}}$	dB	50,5	52	52	50,5	52

#### Indoor Unit

Type	C13 - C33 - C53 - C63 - C83					
Nox class	mg/kWh	6 (24,40)	6 (36,06)	6 (24,71)	6 (24,40)	6 (36,06)
Nominal heating capacity	kW	21	25,0	29	21	25,0
Nominal domestic hot water flow rate	kW	25,5	31,0	34,9	25,5	31,0
Minimum heat input	kW	3,7	4,0	4,0	3,7	4,0
Max. useful power heating	kW	20,4	24,2	28,3	20,4	24,2
Thermal power (80/60°C)	kW	3,5	3,7	3,7	3,5	3,7
Thermal power (50/30°C)	kW	3,9	4,2	4,1	3,9	4,2
Performance at 100% Pn (80/60°C)	%	97	97,1	97,5	97	97,1
Performance at 100% Pn (50/30°C)	%	105,1	105,5	105,5	105,1	105,5
Performance at 30% Pn (50/30°C)	%	107,7	107,8	107,8	107,1	107,8

#### Outdoor unit

Heating		i-32V5 06A	i-32V5 08A	i-32V5 10	i-32V5 12	i-32V5 14
Heating capacity (3)	kW	6,1	7,8	10,1	11,8	14,1
Power input (3)	kW	1,3	1,7	2,3	2,7	2,9
C.O.P. (3)	W/W	4,9	4,6	4,4	4,3	4,9
Heating capacity (4)	kW	6,0	7,7	9,8	11,5	13,6
Power input (4)	kW	1,6	2,1	2,8	3,3	3,6
C.O.P. (4)	W/W	3,8	3,7	3,5	3,4	3,8
SCOP (6)	W/W	4,5	4,5	4,5	4,5	4,5
Water flow (4)	L/s	0,3	0,4	0,5	0,6	0,7
Ext. pressure (4)	kPa	73,0	65,5	55,2	43,4	63,6
Energy efficiency (Water 35°C-55°C)		A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++

#### Cooling

Cooling capacity (1)	kW	5,2	6,1	7,5	8,51	11,5
Power input (1)	kW	1,6	2,0	2,4	2,8	3,5
E.E.R. (1)	W/W	3,2	3,1	3,2	3,1	3,3
Cooling capacity (2)	kW	6,4	8,0	9,5	11,6	14,0
Power input (2)	kW	1,3	1,8	2,2	2,79	2,6
E.E.R. (2)	W/W	4,9	4,5	4,4	4,16	5,4
SEER (5)	W/W	4,4	4,5	4,2	4,25	4,6
Water supply (1)	L/s	0,3	0,3	0,4	0,4	0,6
Ext. pressure (1)	kPa	3,2	5,3	68,9	63,4	75,0

#### Hydraulic circuit

Hydraulic connections	inch	1"M	1"M	1"M	1"M	1"M
Minimum water volume (8)	L	40	40	50	60	60

#### Electrical data

Power supply		230V/1/50Hz	230V/1/50Hz	230V/1/50Hz (400V/3/50Hz)(11)		
Maximum absorbed power	kW	3,5	3,9	4,6	5,1	6,6

(1) Cooling: outdoor air temperature 35 °C; water temperature in / out 12/7 °C.

(2) Cooling: outside air temperature 35 °C; water temperature in / out 23/18 °C.

(3) Heating: external air temperature 7 °C d.b. 6 °C b.u.; in / out water temp. 30/35 °C.

(4) Heating: external air temperature 7 °C d.b. 6 °C b.u.; in / out water temp. 40/45 °C.

(5) Cooling: in / out water temperature 12/7 °C.

(6) Heating: average climatic conditions; T<sub>biv</sub> = -7 °C; in / out water temp. 30/35 °C.

(7) Data indicative and subject to change. For the correct data, always refer to the technical label on the unit.

(8) Calculated for a decrease in the system water temperature of 10 °C with a defrost cycle lasting 6 minutes.

(9) Sound power: heating mode condition (3); value determined on the basis of measurements carried out in accordance with the UNI EN ISO 9614-2 standard, in compliance with the requirements of Eurovent certification.

(10) Sound pressure: value calculated from the sound power level using ISO 3744: 2010 at a distance of 1 m.

(11) Valid only with 10T / 12T outdoor unit

(12) Valid only for single-phase single models

(\*) by activating the maximum Hz function

# Table of available functions

## 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
DHW integration resistance	□	□	□	■	■	X
System resistance integration	□	□	□	■	■	■
Boiler enable integration	□	□	□	■	■	■
Double set point digital contact	□	□	□	□	■	■
Summer-winter digital contact	□	□	□	□	■	■
Signalling mode of operation	□	□	□	■	■	■
Signaling functioning mode	□	□	□	■	■	■
Two zones management	■	■	■	■	■	■
Alarm-block signaling	□	□	□	■	■	■
Block report	□	□	□	■	■	■
Remote plant water probe	■	■	■	■	■	■
Secondary circulator	■	■	■	■	■	■
Mixing valve	■	■	■	■	■	X
Solar thermal integration	■	■	■	■	■	X
Climate compensation	□	□	□	□	□	□

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

\* If GI is not compatible with i-32V5 e i-32V5 SL size 06A, 08A, 10T A, 12T A, 14T A, 16T A, 18T A

## Remote controllers compatibility table

	GI Module					
	i-32V5	i-32V5 SL	MIDI	i-HPV5	i-MAX	HWA1
						
<b>e-Lite</b> 	■	■	■	■	X	X
<b>e-Pro</b> 	■	■	■	■	X	X
<b>i-CR</b> 	■	■	■	■	■	■
<b>Hi-TV415*</b> 	■	■	■	■	■	■

\* Accessory necessary for cascade management

Compatible ■  
 Not compatible X

## G13 Module

**i-32V5 \***

**i-32V5 SL \***

**i290 0106÷0118**

**i290 0121÷0127**

**i290 0240÷0250**



i-32V5 *	i-32V5 SL *	i290 0106÷0118	i290 0121÷0127	i290 0240÷0250	Function
<input type="checkbox"/>	Remote On/Off				
<input type="checkbox"/>	Domestic hot water management				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DHW integration resistance
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	System resistance integration
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Boiler enable integration
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Double set point digital contact
<input type="checkbox"/>	Summer-winter digital contact				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Signalling mode of operation
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Signaling functioning mode
<input checked="" type="checkbox"/>	Two zones management				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Alarm-block signaling
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Block report
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Remote plant water probe
<input checked="" type="checkbox"/>	Secondary circulator				
<input checked="" type="checkbox"/>	Mixing valve				
<input checked="" type="checkbox"/>	Solar thermal integration				
<input type="checkbox"/>	Climate compensation				

Function available only with G13 accessory ■  
 Function available as standard, no accessories needed □  
 Function not available X

\* G13 is not compatible with i-32V5 e i-32V5 SL size 10, 12, 14, 16

**i290 0106÷0118**

**i290 0121÷0127**

**i290 0240÷0250**

**HWA1**



i290 0106÷0118	i290 0121÷0127	i290 0240÷0250	HWA1	Control Panel
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	e-Lite
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	e-Pro
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	i-CR
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Hi-TV415*



## e-Pro

The intelligent control  
for MAXA heat pumps

### Main functions

- Temperature control for heating, cooling and domestic hot water production
- Real-time diagnostics and data display
- Setpoint setting and management
- Daily and weekly chronoprogramming

### Embedded Energy Efficiency

The advanced power management system automatically reduces screen brightness when not in use and adapts lighting to environmental conditions. e-Pro consumes less than 1W in standby, meeting the strictest CE certifications.

### Connectivity and Automation

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

### Customized Comfort

Equipped with an integrated thermostat and customisable modes, e-Pro works for an ideal climate at all times by programming daily, weekly or in holiday mode.

### Intuitive Use

The touchscreen interface simulates backlit keys, providing an intuitive experience. Dynamic icons provide immediate visual feedback on the status of the heat pump and active functions, ensuring quick and easy navigation.

### Guaranteed Reliability

Every e-Pro passes rigorous quality tests with advanced diagnostic features that ensure maximum reliability over time. Self-resetting firmware and intelligent alert management ensure that the device is always ready for use.

**e-Pro** offers an intuitive interface and thanks to its Wi-Fi 2.4G connectivity and compatibility with the **"My Maxa"** app, it allows all heat pump functions to be easily managed directly from a smartphone.

With an elegant 4' capacitive LCD display and a design conceived for wall installation, it is suitable for both residential and commercial environments.



**e-Pro** is compatible with Maxa's heat pumps ranges **i-290**, **i-32V5**, **i-32V5SL**, **Atria**, **i-32V5 Midi** and **i-HPV5**.



**MyMaxa**

The MyMaxa app allows you to manage both local and remotely the MAXA heat pumps managed with the e-Pro remote control.

Using the MyMaxa APP it is possible to associate one or more MAXA heat pump installations with your user profile, and thus obtain complete remote control. The main operations that can be performed using the MyMaxa APP are:

- switching the heat pump on and off
- adjusting the working temperature of the heat pump in the different operating modes (*hot, cold and domestic hot*)
- switching from manual to programmed operation
- displaying the heat pump's main operating data
- adjusting the chrono-programming of the room thermostat function (*if enabled*)
- the modification of the desired room temperature (*only with room thermostat function enabled*)
- displaying the room temperature (*only with room thermostat function enabled*)

Easy, comfortable and in total control at your fingertips with the **MyMaxa** app



# e-Lite

## Multifunctional remote control system

Touch screen LCD capacitive remote control for wall-mounted installations in residential and commercial indoor environments for managing MAXA heat pumps and water chillers.

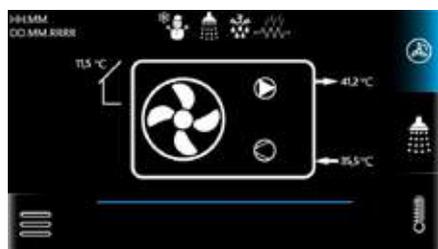


The e-Lite remote replicates all functions on board the MAXA unit, including:

- Turning on and off
- Setting operating modes
- Setpoint setting (heating, cooling, DHW production)
- Diagnostics and real-time data display
- Enabling DHW production
- Enabling double set-point

- Enabling dynamic setpoint
- Room thermostat
- Included 12 Vdc power supply
- Micro SD slot for firmware updates

Compatible with the following ranges: i-290, i-32V5, Atria, i-32V5 Midi, i-HPV5.



# Hi-TV415

## Multifunctional remote control system

Hi-TV415 is a touch screen remote control suitable for the management of both individual systems and systems consisting of several units in cascade.

Hi-TV415 integrates the temperature sensor to also allow the management of the room thermostat function.

Hi-TV415 is presented with a very intuitive color interface that simplifies the use of control; all functions are easily adjustable thanks to the use of synoptics of immediate understanding.



**IMPOSTAZIONE STATO**

System

Chiller

Zone 1

Zone 2

Zone 3

31/01/2013 12:25

**MAXXA Hi-TV**

logout

31/01/2013 12:25

Zona: Sala da pranzo Fancoil n° 1-2

Stato ON OFF

Modalità

Aria: -5.5°C

Acqua: 30°C

12:25 31/01/2013

**CONFIGURAZIONE**

Menù utente

Menù manutentore

Menù costruttore

31/01/2013 12:25

Chiller

<input type="radio"/>	Tutti	Giovedì	✓
<input checked="" type="radio"/>	Lunedì	Venerdì	✓
<input checked="" type="radio"/>	Martedì	Sabato	✓
<input checked="" type="radio"/>	Mercoledì	Domenica	✓

12:25 31/01/2013

**Chiller**

Giorno

Lunedì

Temperatura Normal Eco Off

Ora da 00.00 a 01.15

00 04 08 12 16 20 00

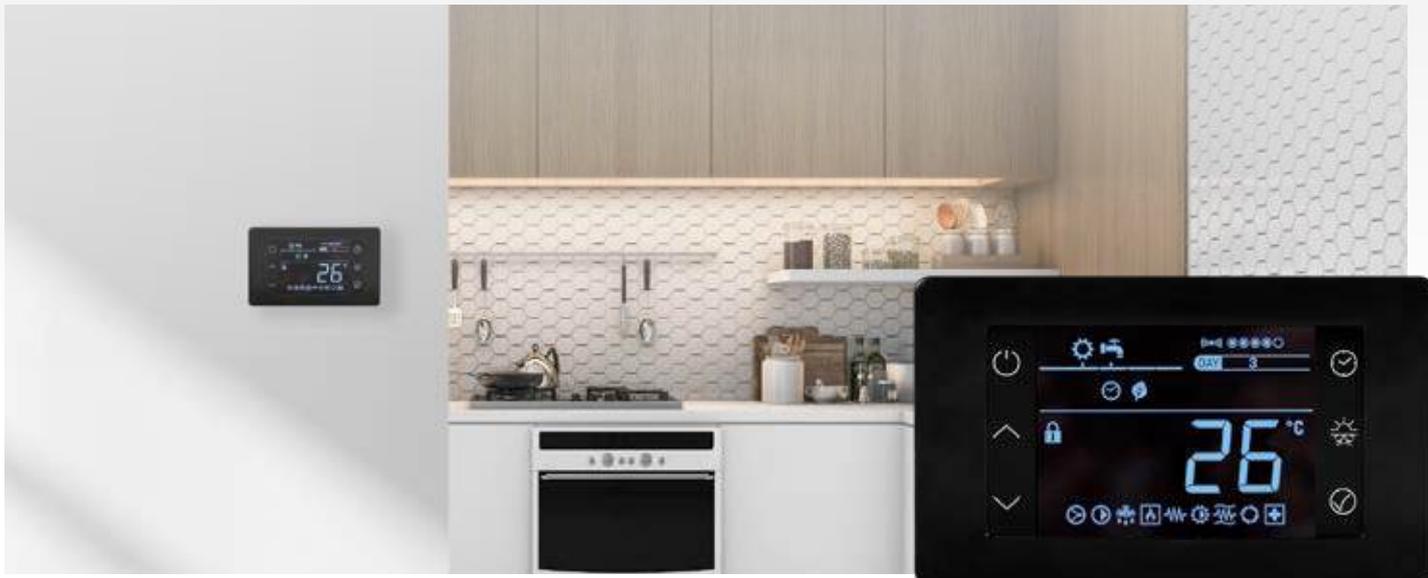
12:25 31/01/2013

# i-CR

## Touch screen remote controller

LCD touch screen remote controller with negative LCD and capacitive keys for residential use for the control and management of the single unit. With i-CR you will be able to

comfortably replicate all the functions from your home available on the control on the machine (reading probes, access parameters).



**Other important functions are listed below:**

- Double set-point.
- Weekly programmable thermostat.
- Anti-Legionella cycle.
- Alarm history.
- Room thermostat



**ON/OFF BACKLIGHT**

Function that acts at the thermostat level, used to turn off/on the LEDs and the backlight. In OFF mode, the keyboard does not accept any command. This function has not no effect on the setting of the machine, but it enables/disables the interaction with the Thermostat. Allows you to exit the menu. If this buttons is pressed for 3 seconds, the keyboard will lockout and the padlock icon appears on the display. This function has not no effect on the setting of the machine, it is just used to enable/disable the interaction of the user with the thermostat keyboard.



**UP**

This button allows you to move up to higher menus or to increase the value of a given parameter



**DOWN**

This button allows you to move down on lower menus or to decrease the value of a given parameter



**CHRONOTHERMOSTAT**

This allows you to set the operational time slot to regulate room temperature read by the probe on the i-CR



**CHANGE SEASON BUTTON**

Push this button at least for 3 seconds to change the season mode or to turn the heat pump/chiller unit OFF



**ENTER BUTTON**

Use this button to enter the menus or to confirm a parameter.

# Maxa Das

## Supervision, monitoring and analysis system

### Maxa SCADA

It is the beating heart of the DAS system: it is a software for PC associated with a license, free buying a connection device, that acquires all data and parameterizations of the heat pump or system in real time, and send them to the visualization system.

- Multi-connection system with local units or inserted on one
- LAN / WIFI network or for remote connections.
- Simple and intuitive tree selection of the model from to monitor.
- Forcing the machine status.
- Monitoring of system variables, with notification system alarm via popup or by sending mail.
- Parameterization of the unit.
- Process registration.
- Event log and data traffic debugging.
- Import new models or updated revisions, through quick library import.
- Management of user levels.
- Available in Italian and English
- Online help
- Multiple levels of user management.

### Maxa TREND

Useful for heat pumps and only cooling, displays all the processes in progress through configurable and customizable charts on multiple levels

- Graphic analysis of the acquired measurements with personalization of the tracks.
- List of activation and deactivation of alarms and time stamp.
- Cursor functionality to view and browse graphed data.
- Zoom for analysis on a temporal detail or relating to a range of values.
- Real-time updating of a process in progress.

### Connectivity

There are three ways to connect our heat pump to the system DAS monitoring and everyone has a different level of operation.

#### 1- Serial converter - Accessory ISK

Direct connection to the units via RS-485 serial cable and USB. For quick maintenance directly on the machines.

#### 2- Lan-Wifi Router - Accessory LNC

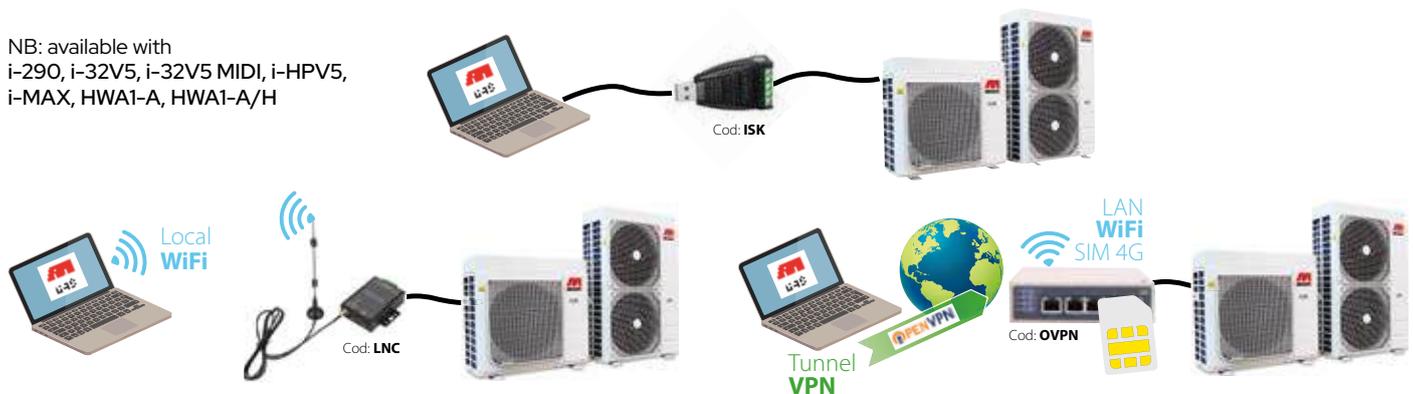
Connecting the units on a local network using an Ethernet cable or WIFI coverage. For a local remote display, ideal for residential and commercial applications.

#### 3- Lan-Wifi 4G Router with VPN Tunnel - Accessory OVPN

Remote connection of the units via an industrial router uses a secure and protected OPENVPN service. For monitoring at unlimited distance all over the world.



NB: available with  
i-290, i-32V5, i-32V5 MIDI, i-HPV5,  
i-MAX, HWA1-A, HWA1-A/H



# Connect Box

Gateway wireless

ModBus to Wi-Fi converter for interfacing heat pumps with the local network.

Enables management of heat pumps with the 'Maxa Connect' App.



Connect Box is the wireless gateway that enables efficient communication with Maxa heat pumps of the **i-290, i-32V5, i-32V5SL, i-32V5 Midi** and **i-HPV5** ranges.



## Maxa Connect

Connect Box makes it possible to interact with your air conditioning system via the new App **Maxa Connect**.

Available both as a single App and as a Web App, therefore fully navigable using your desktop or mobile browser, Maxa Connect offers a simple and complete user experience.

Maxa Connect allows you to record **all operating data of the Maxa heat pump in real time**, such as water temperatures in your system, manage its operating modes, and generally obtain a wide range of useful information.

Also remotely, it is possible to know both the power and the amount of thermal energy produced by your heat pump.

Connect Box is quickly associated with the home router and immediately projects the heat pump into the MAXA cloud.

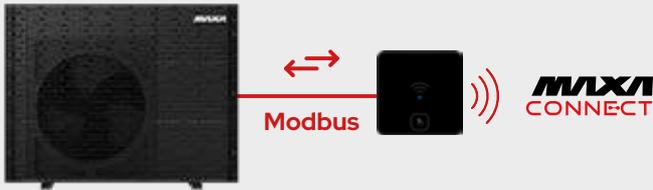
Thanks to its simple operation and deep integration with on-board electronics, the Connect Box is a useful tool for commercial and tertiary applications, allowing thermal system operators direct control of operating parameters.



### Start My Connect

Connect Box enables authorised service centres to interact with the heat pump via the dedicated APP for the professional world: **Start My Connect**.

The latter enables the Connect Box to be associated with your heating system.



Easy to install, it uses the on-board ModBus connection, allowing you to reach your heat pump remotely and safely.



#### Intuitive User Interface

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



#### Security

Utilizing state-of-the-art security technologies to protect your data and ensure secure communication with service technicians.



#### Diagnostics and monitoring

Advanced diagnostic tools allow for real-time monitoring of system status, enabling quick identification and remote problem-solving. View and access a complete history of alarms/events.



#### Remote Configuration

The platform enables remote adjustment of system and installation settings, minimizing the need for a physical presence of a technician on-site. Access to installations 24/7. Management of schedules and editing installation parameters.



# Calido 110

## Wall mounted heat pump for domestic hot water

110 L

Calido 110 is a water heater in air/water heat pump for wall installation. Thanks to the volume of 110 liters of water, Calido 110 guarantees high compactness and aesthetic care.

The Calido 110 is perfect for the replacement of electric water heaters on existing systems, thanks to the functions of hot water temperature set, timer setting and function antilegionella.

Installation is very simple and practical.



The kettle is made of steel with vitrification treatment, insulated with rigid polyurethane foam (PU).

The condenser is wrapped in a steel tank, which is not immersed in water while the rotary compressor guarantees maximum efficiency and silence, and finally the centrifugal fan allows the air ducting necessary for the correct operation of the heat pump.

Access to the battery is facilitated by the special compartment.

The machine has excellent yields even with external temperatures ranging from  $-5^{\circ}\text{C}$  to  $+43^{\circ}\text{C}$  thanks to the electronic expansion valve that improves its performance.

### Technical Features

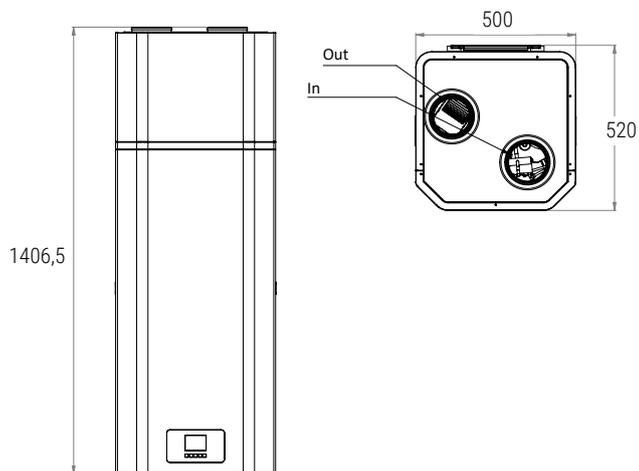
- Water boiler with 100 litres capacity, made of S235 JR steel with internal enamel coating, thermic insulation in hard thick expanded polyurethane (PU) without CFC and HCFC.
- External coating in metal sheet varnished with epossidic powders (white).
- Mounting brackets for wall installation.
- Magnesium anode for corrosion prevention.
- Hydraulic links located on the bottom part.
- Non submerged capacitor wrapped around the steel boiler.
- Integrated electric resistance 1,5 kW 230V~ activable through switches located inside control panel for heating of ranging from  $60^{\circ}\text{C}$  (max temp with heating pump only) to  $70^{\circ}\text{C}$ .
- Rotary compressor for maximum efficiency and reducing noise.
- Centrifugal fan for canalization of the necessary air for the proper functioning of the heating pump.
- Winged pack evaporator.
- R134a refrigerant cooling fluid.
- Safety thermostat set at  $+85^{\circ}\text{C}$
- Dry contact to start the unit from external switch
- Complete electronic control with control panel equipped with LCD touch display, water temp gauge, bright functioning heating pump and electric resistance gauge, commands with relative gauges for the activation of the various functioning modes, warnings for eventual alarm malfunction, such as:
  - Antilegionella function,
  - Setting / display of date and hour,
  - Hot water temp setting.

### Accessori

Bracket for wall mounted  
Screws and dowels for mounting  
Spacers for wall mounted  
Dielectric couplings

### Loose Accessories

Antivibration dampers for floor installation



		Calido 110
Energy class (1)		A+
Declared load profile		M
COP <sub>DHW</sub> (ERP) (1)		3.01
Heating time	h: min	6: 53
Heating energy consumption	kWh	1.58
Annual electricity consumption (average climatic condition)	kWh/year	462
Duct air flow (nom.)	m <sup>3</sup> /h	300
Available static pressure	Pa	60
Rated power input	W	236 <sup>(3)</sup> [+1500 <sup>(2)</sup> ]
Electrical Heating rated input	W	1500
Current (rated)	A	1.14 <sup>(3)</sup> [+6.5 <sup>(2)</sup> ]
Maximum current	A	1.81 <sup>(3)</sup> [+6.5 <sup>(2)</sup> ]
Power supply	V/Ph/Hz	220-240~/1/50
Max outlet water temperature (without using E-heater)	°C	60
GWP - Refrigerant / Charge / GWP	.../g / ...	R134a/650/1430
CO <sub>2</sub> equivalent tonnes	t	0,93
Refrigerant pressure suction (max.) - discharge (max.)	Bar	0.2/25
Set point relief valve	Bar	8
Diameter of hydraulic connections	-	G 1/2" M
Storage tank nominal volume	L	110
Internal water tank material	-	Vetrificato
Sound power level	dB (A)	48.5
Net weight	kg	62
Gross weight (when tank filled)	kg	172
Net size (WxHxD)	mm	500x1406x520
Package Size (WxHxD)	mm	550x1460x550
Duct diameter	mm	125
Protection rating	-	IPX1
Operating temperature range	°C	-5~43

(1) Tank at room temperature 20° C, air in ducted entry 7° C DB, 6° C WB, inlet water temperature 10° C and tank set at 55° C.

(2) Electrical resistance data

(3) Room temperature 20°C, water temperature from 15° C to 55° C

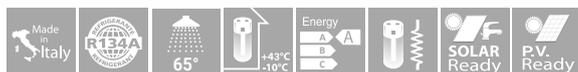
# Calido

## Heat pump for domestic hot water

200÷300 L

Heat 200 and 300. The Calido range for floor installation is a system that takes advantage of the high efficiency of the air/water heat pump and ensures reduced operating costs, with a significant saving compared to traditional gas kettles or electric heaters only.

Calido 200 and 300 can be installed in a technical room or in secondary rooms of the house such as garages or laundries, Thanks to the particularly accurate aesthetics, Calido 200 and 300 can be perfectly integrated into domestic environments. The Calido-S and Calido-D versions allow integration with systems with solar thermal panels and/or auxiliary sources such as boilers or hydronic heaters. Thanks to a clean contact input it is possible to manage the system remotely or activate it according to any automation coming from the photovoltaic system of the house.



### Technical Features

- Steel tank with double layer vitrification.
- Anti-corrosion magnesium stick for assuring the durability of the tank.
- Condenser wrapped externally to the boiler, free from fouling and gas-water contamination.
- High thickness polyurethane foam (PU) thermal insulation.
- Outer shell made of grey colour plastic material.
- Acoustically isolated top part plastic cover.
- Highly efficient compressor with the R134a refrigerant.
- High and low gas pressure protections.
- Electrical heater available in the unit as a back-up (with integrated thermo cut out with protection set at 90°C), assuring constant hot water even in extreme cold winters.
- ON-OFF contact for starting the unit from an external switch.
- Weekly disinfection cycle.
- Possibility of manage hot sanitary water re-circulation or solar water integration (presence of a dedicated temperature probe, flow switch input and command for an external pump).
- Electronic expansion valve for precise control

### Advantages

- The actual set of the heat pump is controlled by a climate curve for preventing that the hot air taken from outside (over 25°C with water at 65°C, over 35°C with water at 55°C) may cause high pressure alarms.

- The electrical heater integrates automatically the temperature of the tank to the desired setting when the actual setting is controlled by the weather curve.
- Predisposition for integration with photovoltaic system. After enabling the photovoltaic inverter, the set temperature will increase to the maximum value (according to the climate)

### Flexibility and Benefits

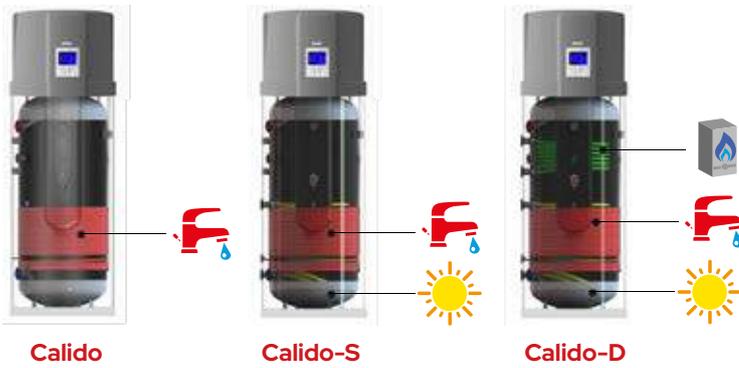
- Waste heat recovery: the unit can be installed near the kitchen, in the boiler-room or the garage, basically in every room which has a large number of waste-heat so that it has the higher energy efficiency even with very low outside temperatures during the winter.
- Hot water, cooling and dehumidification: the unit can be placed in the laundry room, in clothing room, gym or garage. When it produces hot water it lowers the temperature and dehumidifies the room as well.
- Compatible with solar energy: the unit can work with a second heat source as solar panels, boilers or other different energy sources (remark: the extra heat source is not provided with).
- The function for which the unit has been designed is only that of heat pump for DHW production. Any other side effect (ambient cooling, dehumidification, waste heat recovery) should be considered as a perk. The performance data are therefore provided only with respect to the function of water heating.

### Accessories

<b>ONE-SAS</b>	T6 Solar/DHW temperature sensor	<b>ONE-FL</b>	Nylon flow switch 1" F 9 l/min
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### Versions

<b>CALIDO</b>	Standard version, heat pump and the electric heater	<b>CALIDO-D</b>	With double auxiliary coil in order to have at the same time three energy sources.
<b>CALIDO-S</b>	With auxiliary coil for use combination with solar panels		



Calido		200	200-S	200-D	300	300-S	300-D
Energy class (1)		A	A	A	A	A	A
Declared load profile		L	L	L	XL	XL	XL
COP <sub>DHW</sub> (ERP) (1)		2.64	2.64	2.64	2.85	2.85	2.85
Heating time	h: min	07:48	07:48	07:48	09:53	09:53	09:53
Annual electricity consumption (average climatic condition)	kWh/year	1012	1012	1012	1426	1426	1426
Duct air flow (nom.)	m <sup>3</sup> /h			350			
Available static pressure	Pa			60			
Rated power input	W			2060 <sup>(3)</sup>			
Electrical Heating rated input	W			1200 <sup>(2)</sup>			
Current (rated)	A			2,21 <sup>(3)</sup> (+ 5.2) <sup>(2)</sup>			
Maximum current	A			3,2 <sup>(3)</sup> (+ 5.2) <sup>(2)</sup>			
Power supply	V/Ph/Hz			220-240/1Ph+N+PE/50			
Max outlet water temperature (without using E-heater)	°C			65			
GWP - Refrigerant / Charge / GWP	.../g /...			R134a/920/1430			
CO <sub>2</sub> equivalent tonnes	t			1,32			
Refrigerant pressure suction (max.) - discharge (max.)	Bar			0,2 / 25			
Diameter of hydraulic connections	-			G 1" F			
Storage tank nominal volume	L	228	220	217	286	278	273
Internal water tank material	-			Vitrification with double layer			
Solar exchange coil surface	m <sup>2</sup>	/	1,2	1,2	/	1,2	1,2
Auxiliary exchange coil surface	m <sup>2</sup>	/	/	0,5	/	/	0,8
Sound power level	dB (A)			58,2			
Net weight	kg	98.0	106.5	113.0	121.5	121.0	129.5
Gross weight (when tank filled)	kg	326.0	392.5	333.0	399.5	338.0	402.5
Net size (ØxH)	mm	Ø 654x1638	Ø 654x1638	Ø 654x1638	Ø 654x1888	Ø 654x1888	Ø 654x1888
Package Size (WxDxH)	mm	700x700x1760	700x700x1760	700x700x1760	700x700x2010	700x700x2010	700x700x2010
Duct diameter	mm			Ø160			
Protection rating	-			IPX1			
Operating temperature range	°C			-10 / + 43°C			

(1) Tank at room temperature 20 ° C, air in ducted entry 7 ° C DB, 6 ° C WB, inlet water temperature 10 ° C and tank set at 55 ° C.

(2) Electrical resistance data

(3) Room temperature 20°C, water temperature from 15 ° C to 55 ° C

Outdoor air intake up to -10°C



Electronic expansion valve for accurate adjustment of the overheating

Flared connections between cooling part and the tank for easy maintenance

Made in Italy Tank

# Aqua Speedy

## Instantaneous hot water heater

18 ÷ 25 L

Aqua Speedy is an instant producer of hot water for sanitation purposes with a water-to-water heat exchanger made of stainless steel plates welded together. The temperature of the hot water for sanitation is regulated by a thermostatic mixer installed at the factory.

An external energy source from which the energy needed to produce the hot water for sanitation is always necessary. This energy source is usually represented by a technical storage tank kept at temperature by the heat pump. A circulator inside AquaSpeedy is responsible for regulating the amount of energy needed based on the type of hot water for sanitation withdrawal. AquaSpeedy allows for the production of hot water for sanitation in complete safety.

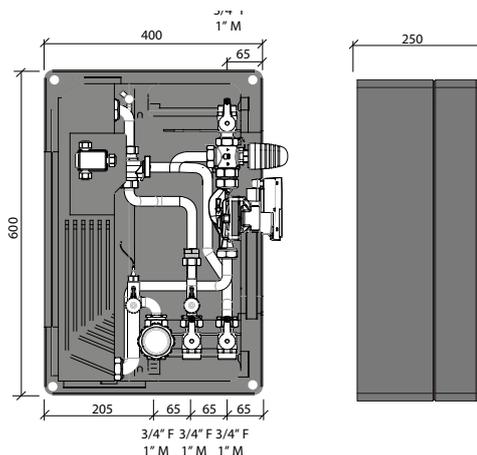


### Advantages

- Instant production of hot water for sanitation
- Nominal delivery of hot water for sanitation 18 or 25 l/min
- High efficiency thanks to the oversized steel plate heat exchanger
- Wall or tank installation
- Quick installation
- Very easy maintenance
- Complete with black EPP thermal insulation 40 g/l.

### Use

In both residential and commercial or tertiary heat pump systems, Aqua Speedy is a suitable solution to provide the domestic hot water production service of instant type.



Aqua Speedy		18	25
Maximum secondary output flow rate (DHW)	l/m	30	40
Minimum DHW ON/OFF flow rate	l/m	2,5 - 0,3	2,5 - 0,3
DHW pressure drop (30 l/min)	bar	0,5	0,9
DHW temperature setting	°C	40÷55	40÷55
Maximum pressure	bar	10	10
Heat exchanger surface	m <sup>2</sup>	0,882	1,76
Maximum primary flow rate	l/h	1480	1700
Max temperature	°C	90	90
Circulator		Wilo PARA SC 15/1-6	Wilo PARA SC 15/1-6
Maximum absorbed power	W	45	45
Connections		3/4"F-1"M	3/4"F-1"M
Maximum dimensions (packaging)	mm	620x490x30	620x490x30
ULTRA CFMUS ULTRASONIC M-BUS Qn 1,5 m <sup>3</sup> /h - 110 x 3/4"	mm	1,5 m <sup>3</sup> /h - CL2 - 110 mm x 3/4"	1,5 m <sup>3</sup> /h - CL2 - 110 mm x 3/4"
ULTRA CFMUS ULTRASONIC M-BUS Qn 1,5 m <sup>3</sup> /h - 110 x 3/4"	mm	1,5 m <sup>3</sup> /h - CL2 - 110 mm x 3/4"	1,5 m <sup>3</sup> /h - CL2 - 110 mm x 3/4"
Dimensions LxPxH	mm	400x250x600	400x250x600

### Versions

**18** 18 liters per minute with input 10°C, output 48°C, and buffer 55°C.

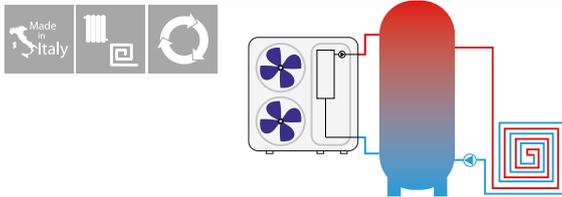
**25** 25 liters per minute with input 10°C, output 48°C, and buffer 55°C.

# Puffroller & PuffrollerOut

Optimal for the storage  
of chilled and hot water

60÷880 L

- To be integrated on all kind of plants.
- Storage rapidly, abundant and continuous erogation.
- High efficiency for low exercise costs
- Absolute hygiene
- Long durability without corrosion
- Simplicity of installation
- Inside untreated.
- Fixture point for wall installation for models 60/120 and 200 l.
- The models 60/120 and 200l can be installed in horizontal or vertical position.
- Polyurethane foam insulation 50 mm.
- Prepared for inserting auxiliary electric resistance.
- Coating suitable for outdoor installation (PuffrollerOut only)



Puffroller / PuffrollerOut		60	120	200	280	400	480	750	880	1400
Total storage	l	57	123	203	277	399	473	732	855	1420
Isolation thickness	mm	50	50	50	50	50	50	100	100	100
Total height insulation included	mm	935	1100	1395	1560	1540	1840	1725	1975	2090
Diameter isolation included	mm	380	510	550	600	700	700	850	850	1060
Diameter isolation included <b>PuffrollerOut</b>	mm	500	600	650	700	800	800	990	990	1200
Unloaded weight	kg	25	35	45	55	95	100	170	190	240
Heating max working pressure	bar	6	6	6	6	6	6	6	6	6
Boiler max working temp	°C	95	95	95	95	95	95	95	95	95
Hydraulic connections		60	120	200	280	400	480	750	880	1400
Air evacuation		1"	1"	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4	1" 1/4
Boiler inlet		1" 1/4	1" 1/4	1" 1/2	2"	2" 1/2	2" 1/2	3"	3"	4"
Heating inlet		-	-	-	-	-	2" 1/2	3"	3"	4"
Boiler - heating outlet		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"
Feeler		1/2	1/2	1/2	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Electric heater		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"

## Accessories

- RE1.5M3** Electrical resistance single phase 1,5 kW (L=340 mm) \*
- RE2.0M3** Electrical resistance single phase 2,0 kW (L=390 mm) \*
- RE3.0M3** Electrical resistance single phase 3,0 kW (L=390 mm) \*

- VAS**  
**VE24AT**  
**VEP35AT**

Anti-scalding valve  
Expansion vessel 24 l for tanks with capacity up to 500 l  
Expansion vessel 35 l for tanks with capacity up to 1000 l

\* Not for model 60-750-880-1400

## Versions

### Standard

Only for indoor installation

### Out

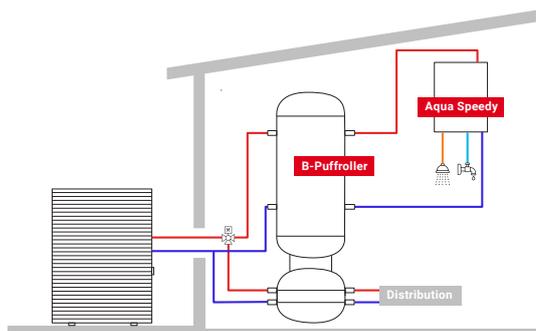
For indoor and outdoor installation

# B-Puffroller

Technical water double puffer  
for DHW production and plant side

300/80-500/70 L

- Integrated and compact solution
- To be integrated on all kind of plants.
- Storage rapidly, abundant and continuous erogation.
- High efficiency for low exercise costs
- Absolute hygiene
- Long durability without corrosion
- Simplicity of installation
- Inside untreated.
- Polyurethane foam insulation 50 mm.
- Prepared for inserting auxiliary electric resistance
- Lower Puffer for heat or cold water,
- No inside handling. Insulation: PU-hard polyurethane 70 mm



B-Puffroller		300	500
Total storage	l	363	553
Isolation thickness	mm	50	50
Total height insulation included	mm	1940	2050
Diameter isolation included	mm	600	700
Unloaded weight	kg	55	100
Heating max working pressure	bar	6	6
Boiler max working temp	°C	95	95

\* For the accessories see the Puffroller's page

Lower tank			
Thermal wheel for Heat Pump	l	80	70
Upper tank			
Connector Type		300	500
Air evacuation		1" 1/4	1" 1/4
Boiler outlet		2"	2" 1/2
Heating circuit outlet		-	2" 1/2
Boiler - heating circuit return at 50°C		2"	2" 1/2
Boiler - heating circuit return at 30°C		1/2"	1/2"
Thermometer		1/2"	1/2"
Feeler		1/2"	1/2"
Electric heater		1" 1/2	1" 1/2
Drain coil		3/4"	3/4"

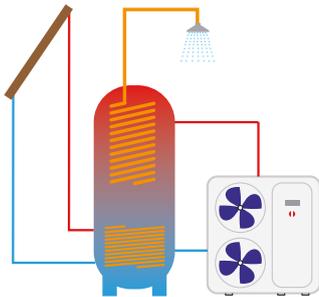
# Caddy

Tank for heating water with innovative thermic chimney and incorporated sanitary exchanger

300÷800 L

Innovative tank for alternative source and instant sanitary water production. Caddy is the synthesis of integration tanks to its sanitary water exchanger for the best performance with different energetic sources.

- Insulation made of soft polyurethane 100 mm.
- Solar intergration for HDW and heating technical water.
- Gas boiler integration.
- Wood boiler integration.
- Instantaneous HDW
- Stratification with hydraulic chimney.
- 4 m<sup>2</sup> copper coil exchanger.
- Sanitary water exchanger to choose.
- Absolute hygiene.
- Long durability.



Caddy		300	500	800
Total storage	l	270	450	700
Isolation thickness	mm	100	100	100
Total height insulation included	mm	1625	1765	1780
Diameter isolation included	mm	700	850	990
Lower collector pipe coil	m <sup>2</sup>	1,9	2,5	2,5
Water capacity of pipe coil	l	11,4	14,9	14,2
Power input	kW	45	60	63
Unladen weight	kg	130	150	220
Heating max working pressure	bar	3	3	3
Boiler max working temp	°C	95	95	95

Extractable heat-exchanger kit, complete with bored flange, upper cap for flange and nuts and bolts, already included

		4
Heat exchanger surface	m <sup>2</sup>	4,0
Pipe coil water capacity	l	2,8
Power input	kW	80
Domestic hot water production	m <sup>3</sup> /h	2,0
Pressure loss	mbar	584
Power code (DIN 4708)	NL	20



\* For the accessories see the Puffroller's page

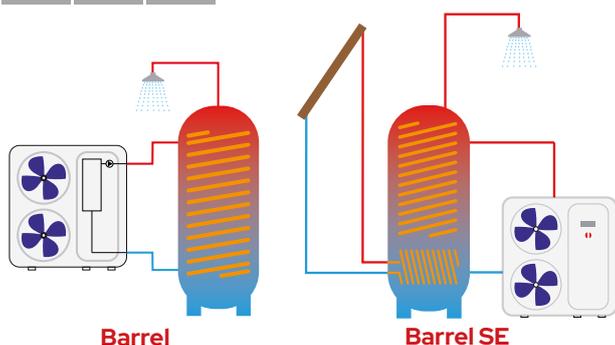
## Barrel

### DHW boiler with internal treatment and pipe coil for heat pump

300÷1000 L

Water-heater made of high quality steel with 1 fixed pipe-coil, complete with anodic protection, inside treatment according to norm DIN 4753 and UNI 10025. Insulation: Foamed hard polyurethane layer 50 mm (mod.200÷500), soft polyurethane 100 mm (mod. 800÷1000).

- To be integrated on all kind of plants.
- Storage rapidity, abundant and continuous erogation.
- High efficiency for low exercise costs.
- Absolute hygiene.
- Long durability without corrosion.
- Simplicity of installation.
- Efficient heat-exchange surface.
- Barrel SE version with solar heat exchanger.



Barrel		200	300	500	800	1000
Total storage	l	190	263	470	702	900
Isolation thickness	mm	50	50	50	100	100
Total height insulation included	mm	1215	1615	1705	1810	2140
Diameter isolation included	mm	600	600	750	990	990
Coil heat exchanger	m <sup>2</sup>	3,0	4,0	6,0	7,0	8,0
Water capacity of pipe coil *	l	17,2	23,0	51,5	60,0	68,5
Unladen weight	kg	120	160	220	280	320
Max. working-pressure	bar	10				
Max. working-pressure heat exchanger	bar	6				
Boiler max working temp.	°C	95				
Barrel SE		200	300	500	800	1000
Total storage	l	-	260	455	702	900
Upper collector pipe coil	m <sup>2</sup>	-	3,7	5,2	5,2	6,0
Water capacity of pipe coil *	l	-	18	31	31	35
Unladen weight	kg	-	140	245	250	280
Lower collector pipe coil	m <sup>2</sup>	-	1,2	1,8	2,4	3,7

For the accessories see the Puffroller's page

\* Check that the water contained in the coil is above the minimum water content required by the heat pump

# Hybridroller

Double tank for DHW production from heat pump and solar with thermal wheel for hot/cold water

60÷500 L

- To be integrated on all kind of plants.
- Storage rapidly, abundant and continuous erogation.
- High efficiency for low exercise costs.
- Absolute hygiene.
- Long durability without corrosion.
- Simplicity of installation.
- Efficient heat-exchange surface.
- Integrated and compact solution.
- Space saving.



## H2

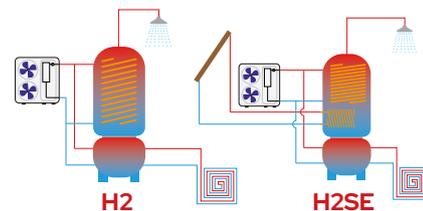
Upper Tank with 1 fixed pipe-coil, made of high quality steel, complete with anodic protection, inside treatment according to Norm DIN 4753-3 and UNI 10025. Lower Puffer for heat or cold water, no inside handling. Insulation: PU-hard polyurethane 70mm

Hybridroller		H2		H2SE	
		300	500	300	500
Diameter with insulation	mm	690	790	690	790
Tot. Height	mm	1925	2040	1925	2040
Weight Empty	kg	150	200	150	200
Effective Capacity	l	270	460	270	450
Pressure Of Operation Serpentine	bar	10	10	10	10
Pressure Of Operation Tank	bar	10	10	10	10
Maximum Temperature Serpentine	°C	110	110	110	110
Maximum Temperature Tank	°C	95	95	95	95
Coil Surface Area	m <sup>2</sup>	2,8	4,4	3,7	6,0
Contenuto Acqua Serpentino *	l	17	26,6	20,2	51,5
Rated capacity (60/50°C)	m <sup>3</sup> /h	1,2	2	1,3	2,7
Output power (60/50°C)	kW	14	23	15	31
Produzione Sanitaria (10/45°C) Din 4708	m <sup>3</sup> /h	0,34	0,57	0,37	0,76
Perdita Di Carico	mbar	13	22	11	31
Thermal Wheel For Heat Pump		80	74	80	74
Pressure Of Operation Puffer	bar	6	6	6	6
Maximum Puffer temperature	°C	95	95	95	95

## H2SE

Upper Tank with 2 fixed pipe-coils, made of high quality steel, complete with anodic protection, inside treatment according to Norm DIN 4753-3 and UNI 10025. Lower Puffer for heat or cold water, no inside handling. Insulation: PU-hard polyurethane 70mm.

Hybridroller		H2SE	
		300	500
Lower Pipe Coil			
Coil Surface Area	m <sup>2</sup>	0,9	1,5
Water Capacity Of The Pipe Coil	l	5,3	9,4
Heating Water (80/60°C)	m <sup>3</sup> /h	0,9	1,6
Heat Delivered	kW	22	37
Output Sanitary Water (10/45°C) Din 4708	m <sup>3</sup> /h	0,54	0,91
Pressure Loss	mbar	7	13
Coils In Series			
Total Surface Area	m <sup>2</sup>	3,7	5,9
Total Content	l	22,3	36
Heating Water (60/50°C)	m <sup>3</sup> /h	1,7	2,8
Heat Delivered	kW	20	32
Output Sanitary Water (10/45°C) Din 4708	m <sup>3</sup> /h	0,49	0,79
Pressure Loss	mbar	26	42



\* Check that the water contained in the coil is above the minimum water content required by the heat pump

### Accessories

<b>RE1.5M3</b>	Electrical resistance single phase 1,5 kW (L=340 mm) *
<b>RE2.0M3</b>	Electrical resistance single phase 2,0 kW (L=390 mm) *
<b>RE3.0M3</b>	Electrical resistance single phase 3,0 kW (L=390 mm) *

<b>VAS</b>	Anti-scalding valve
<b>VE24AT</b>	Expansion vessel 24 l for tanks with capacity up to 500 l
<b>VEP35AT</b>	Expansion vessel 35 l for tanks with capacity up to 1000 l

# HydroFull

The HydroFull range concentrates all the main system components within a single container, simplifying the installation of heat pump systems.

- **WIDE RANGE**

Different models are available with different types of DHW storage and various sizes of inertial storage for system service.

- **FULL ELECTRIC SOLUTION**

The HydroFull range can be operated with i-32V5 and i-290 series monobloc pumps with a service guarantee using electricity only.

- **DOMESTIC HOT WATER**

Perfect combination of the high reliability of the tank made of AISI 316 L stainless steel and two different capacities for different needs.

- **INSTALLATION FLEXIBILITY**

Various models of storage box allow them to be installed either recessed within the masonry or visible.

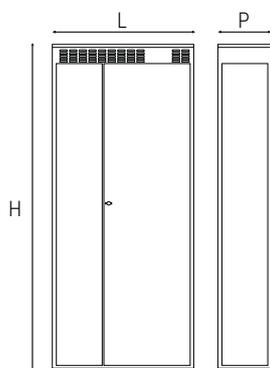
- **INERTIAL STORAGE**

Various standard or optional equipment allows to guarantee an adequate volume of technical water.



**Maximum flexibility 5 Versions**





Dimensions	C	R	L	X	Y	
L	mm	700	950	1000	1000	1000
P	mm	350	350	425	425	425
H	mm	2200	2200	2250	2250	2250

		HydroFull-C	HydroFull-R	HydroFull-L	HydroFull-X	HydroFull-Y
Insulation type domestic hot water tank		polyurethane	polyurethane	polyurethane	polyurethane	polyurethane
Exchange surface	m <sup>2</sup>	1.65	1.2	2	2	2
Inertial tank capacity	L	20	20	-	40	40
Net weight	kg	100	149	185	210	210
Nominal capacity of domestic hot water tank	L	150	150	200	200	200
Useful hydraulic pump head	kPa	68	68	68	68	68
Volume of the expansion vessel	L	6	6	12	12	12
Heat loss	W	75	75	75	75	75
Net box dimensions (LxHxP)	mm	700 x 2200 x 350	950 x 2200 x 350	1000 x 2250 x 425	1000 x 2250 x 425	1000 x 2250 x 425

#### HydroFull is only compatible with:

Range	Models
<b>i-32V5</b>	<b>06A, 08A, 10, 10T, 12, 12T</b>
<b>i-290</b>	<b>0106, 0109, 0112</b>

#### HydroFull-C accessories

<b>CARTER</b>	Wall box side closure Carter kit for covering hydraulic connections in visible installations	<b>RE1.5M-R</b>	1.5 kW electric heater, complete with safety thermostat, managed by the PDC electronics
<b>VE10C</b>	System expansion tank kit 10 lt		

#### HydroFull-R accessories

<b>BOX-R</b>	Wall box for built-in or visible installation. Supplied disassembled.	<b>RE1.5M-R</b>	1.5 kW electric heater, complete with safety thermostat, managed by the PDC electronics
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#### HydroFull-L accessories

<b>BOX-L-Z</b>	Galvanised built-in installation wall box. Supplied disassembled.	<b>RE1.25M-L</b>	1.25 kW electric heater, complete with safety thermostat, managed by the PDC electronics
<b>BOX-L-V</b>	Wall box for exposed installation painted RAL 9016. Supplied disassembled		

#### HydroFull-X accessories

<b>BOX-L-Z</b>	Galvanised built-in installation wall box. Supplied disassembled.		safety thermostat, managed by the PDC electronics
<b>BOX-L-V</b>	Wall box for exposed installation painted RAL 9016. Supplied disassembled	<b>VE10AT</b>	Expansion tanks 10 l for technical water storage
<b>RE1.25M-L</b>	1.25 kW electric heater, complete with		

#### HydroFull-Y accessories

<b>BOX-L-Z</b>	Galvanised built-in installation wall box. Supplied disassembled.	<b>VE10AT</b>	Expansion tanks 10 l for technical water storage
<b>BOX-L-V</b>	Wall box for exposed installation painted RAL 9016. Supplied disassembled	<b>KR-L</b>	Direct booster set with standard circulator 6 m head
<b>RE1.25M-L</b>	1.25 kW electric heater, complete with safety thermostat, managed by the PDC electronics	<b>K-MIX-L</b>	Mixed booster set (230V) with standard circulator 6 m head

**HydroFull-C****BOX**

White painted box for built-in or exposed installation (only 70 cm width, 35 cm depth and 2.2 m height), with practical front opening for easy inspection and maintenance.

**BOILER**

Vertical stainless steel boiler with a capacity of 150 litres, high stratification with increased coil with high exchange surface. An electric heating element can be fitted as optional.

**INERTIAL STORAGE 20 LITRES****RELAUNCH KIT**

Direct zone relaunch kit downstream of the hydraulic compensator

**HYDRAULIC AND ELECTRIC KIT**

Hydraulic and electrical kit for connection with heat pumps of the i-32V5 and i-290 series including:

- 3-way valve with priority on the DHW side
- 6-litre expansion vessel on DHW side
- thermostatic mixing valve
- system loading unit
- relaunch circulator with 7 m head
- hydraulic compensator.

**HydroFull-R****BOX**

White painted box for built-in or exposed installation with practical front opening for easy inspection and maintenance (accessory).

**BOILER**

Highly stratified vertical 316L stainless steel boiler with a capacity of 150 litres, single elliptical coil with concentric double helix for 1.2 m<sup>2</sup> of surface area. HYDRAULIC AND

**ELECTRIC KIT**

Hydraulic and electrical kit including:

- 3-way valve sanitary priority
- 20-litre inertial storage to optimise the modulation accuracy of the heat pump
- thermostatic mixing diverter valve
- 6-litre domestic expansion tank
- Taps kit

\*All components are supplied in special mounting kits

**HydroFull-L****BOX**

Box supplied disassembled, made of galvanised sheet metal for built-in installation, with vasistas opening doors or self-supporting box supplied pre-assembled, made of sheet metal painted RAL 9016, with vasistas opening doors.

**SANITARY CIRCUIT**

Sanitary circuit, with AISI316L stainless steel boiler, 200 L capacity in with heat pump exchanger with nominal power up to 12 kW.

**HYDRAULIC CIRCUIT**

Hydraulic circuit for connection to the heat pump system.

**SUPPLIED MATERIALS**

- sanitary diverter valve
- connection pipes to the boiler
- sanitary circuit connection pipes safety devices
- thermostatic valve
- sanitary circuit connection pipes safety devices.

\*All components are supplied in special mounting kits

**HydroFull-X****BOX**

Box supplied disassembled, made of galvanised sheet metal for built-in installation, with vasistas opening doors or self-supporting box supplied pre-assembled, made of sheet metal painted RAL 9016, with vasistas opening doors.

**SANITARY CIRCUIT**

Sanitary circuit, with AISI316L stainless steel boiler, 200 L capacity in with heat pump exchanger with nominal power up to 12 kW.

**HYDRAULIC CIRCUIT**

Hydraulic circuit for connection to the heat pump system.

**SUPPLIED MATERIALS**

- sanitary diverter valve
- connection pipes to the boiler
- sanitary circuit connection pipes safety devices
- thermostatic valve
- sanitary expansion tank
- direct discharge to the system.

**ACCUMULATION**

40 litre technical water tank

\*All components are supplied in special mounting kits

**HydroFull-Y****BOX**

Box supplied disassembled, made of galvanised sheet metal for built-in installation, with vasistas opening doors or self-supporting box supplied pre-assembled, made of sheet metal painted RAL 9016, with vasistas opening doors.

**SANITARY CIRCUIT**

Sanitary circuit, with AISI316L stainless steel boiler, 200 L capacity in with heat pump exchanger with nominal power up to 12 kW.

**HYDRAULIC CIRCUIT**

Hydraulic circuit for connection to the heat pump system.

**SUPPLIED MATERIALS**

- sanitary diverter valve
- connection pipes to the boiler
- sanitary circuit connection pipes safety devices
- thermostatic valve
- sanitary expansion tank
- predisposition for two relaunches.

**ACCUMULATION**

40 litre technical water tank

\*All components are supplied in special mounting kits

# HWA1-A 0140÷0285

## HWA1-A/H 0140÷0285\*

Air cooled liquid chiller and reversible heat pump for outdoor installation

40 kW÷85 kW

Air cooled liquid chillers and reversible heat pumps, with scroll compressors, axial fans with inverter control (except cooling only version), high performances plate heat exchanger, circulating pump, connectable with Hi-Touch remote controller.

Models widely used for replacing old units or to be installed on new systems.



(\*) Eurovent certified product range



### Technical Features

- Hot-galvanised thick sheet metal frame.
- Scroll hermetic 3-phase compressor complete with integral protection module.
- Axial fan type AC, which allows condensation control up to 0°C.
- Microchannel aluminium condensation coil (cooling only) and Louve with splitted circuits (heat pump version).
- Evaporator.
- Frontal electrical panel.
- Microprocessor with overheating control logic program.
- Refrigerant circuit manufactured according to the UNI EN 13134 directive.
- High and low pressure transducers, with values that can be shown on the display.
- Water circuit in copper tubing.
- Standard equipped with control and protection devices.

### Fitted accessories

<b>C</b>	Ducted version	<b>KA1</b>	Anti-frost heater on plate exchanger
<b>CM</b>	Modbus interface RS485 activation	<b>PS</b>	Single circulating pump with high pump head
<b>DSFR</b>	Sequence control device, phase failure + Minimum and Maximum voltage relay	<b>SL</b>	Standard silencing
<b>EC</b>	EC inverter fan, modulating up to -15°C air (standard on 0285 cooling only and 0273, 0285 heat pump)	<b>SSL</b>	Super silencing with EC fan and condensing control down to -15 °C
<b>GI</b>	Internal hardware extension module	<b>TR1</b>	Micro-channel coil with Aero surface treatment (for cooling only version HWA1-A)
<b>IM</b>	Magnethermic switch for compressors and fans	<b>TR2</b>	Cu / Al coil with Silver Line anti-corrosion treatment
<b>KA</b>	Plate heat exchanger + basement electrical heaters (for HWA1-A/H heat pump versions)		

### Loose accessories

<b>AG</b>	Rubber shock absorbers	<b>i-CR</b>	Remote wall controller
<b>Hi-TV415</b>	Hi-touch controller	<b>FY</b>	Y-strainer

### Versions

<b>HWA1-A</b>	Cooling only	<b>HWA1-A/BT</b>	Cooling only for low temperature water production
<b>HWA1-A/H</b>	Air cooled water chiller and reversible heat pump	<b>HWA1-A/C</b>	Ductable version

**Structure**

With support frame, hot galvanized sheet, painted with polyurethane powder enamels at 180 ° C to ensure the best weather resistance.

**Compressors**

Three-phase hermetic compressors installed on rubber anti-vibrations, complete with integral protection modules with PT100 drowned in engine windings.

**Fan**

Special profile axial, directly connected to the external rotor motor with IP54 degree of protection, complete with overtemperature protection of the motor and grill.

**Outdoor Heat Exchanger**

For cooling only units, microcanal aluminum heat exchanger that guarantees:

- No galvanic corrosion (100% aluminum)
- Reduction of refrigerant charge (up to 70%)
- Long life even in very aggressive environments
- $\Delta P$  lower air side (up to 30%)
- Good refrigerant distribution thanks to the special 3-step design.

For the heat pump version: Aluminum finned pack changers with pitch type louver wedges and copper plated tubes with split circuits for maximum evaporative efficiency and undercooling circuit to increase refrigeration capacity.

**Plant side Heat Exchanger**

Plate type, stainless steel plates AISI 304, braided type.

**Electric panel**

Includes: General disconnecter with door lock, fuses, fan and pump compressor remote sensors, electronic board for the management of all Analogic Input and Output, Digital Input and Output.

**Control System (Microprocessor)**

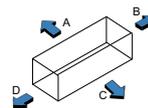
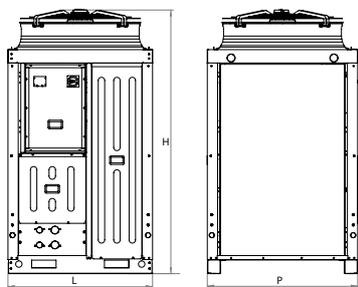
The units are equipped with a microprocessor that adopts a logic program and regulates the overheating through an electronic thermostatic valve monitored by the pressure transducer signals and temperature sensors. The CPU also manages the following functions: water temperature control, antifreeze protection, high and low pressure protection, compressor timing adjustment, alarm management and alarm, operating LEDs. On request, the microprocessor can be connected to a BMS remote control system.

**Refrigerant circuit**

The refrigerant circuit was built according to the UNI EN 13134 standard for welding procedures. The refrigerant used is R410A. The basic refrigerant circuit includes: electronic expansion valve, liquid separator, liquid receiver, maintenance and control valves, pressure regulator according to PED regulation, pressure transducers for precise setting of evaporation and condensing pressures, High capacity drier filter. In addition to the heat pump versions: the 4-way switch valve, the VEE capacity extension solenoid valve and 4 switching valves to allow installation of any heat recuperators.

**Hydraulic circuit**

The copper pipe circuit includes: service valve and flow switch, antifreeze sensor installed on the water supply pipe to the plant, safety valve, drain cock, air vent valve and pressure gauge.



Dimensions		0140	0147	0260	0273	0285
L	mm	1125	1125	1125	1125	1125
P	mm	1170	1170	1170	1170	1170
H	mm	2040	2040	2070	2070	2070

Minimum clearances		0140	0147	0260	0273	0285
A Frontal Panel	mm	800	800	800	800	800
D	mm	800	800	800	800	800
B	mm	200	200	800	800	800
C	mm	600	600	600	600	600

HWA1-A		0140	0147	0260	0273	0285
<b>Cooling</b>						
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 (3)	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
Power input (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 (1)	L/s	1,90	2,24	2,92	3,51	4,14
Pressure drop (1)	kPa	54,08	51,68	56,79	46,43	50,41
<b>Compressor</b>						
Type		Scroll	Scroll	Scroll	Scroll	Scroll
Compressors	n°	1	1	2	2	2
Refrigerant circuits	n°	1	1	1	1	1
Refrigerant charge (4)	kg	7,8	7,8	12,8	13,4	14,6
<b>Fan</b>						
Nominal air flow Y/Δ	m³/s	4,04/5,32	3,88/5,23	4,15/5,44	4,86/6,01	7,4
<b>Hydraulic circuit</b>						
Max pressure hydronic kit	bar	6	6	6	6	6
Water connections	inch	2"	2"	2"	2"	2"
Min. water volume (5)	L	330	380	260	380	490
<b>Sound level</b>						
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
<b>Electrical data</b>						
Power supply		400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz
Max. power input	kW	17,0	21,5	28,0	35,0	43,0
Max. current input	A	28,0	38,0	45,0	56,0	71,0
<b>Weight</b>						
Gross weight	kg	365	375	470	495	510
Operation weight	kg	350	360	455	480	495

**Operating conditions:**

- (1) Internal exchanger water temp.=12/7 ° C, air entering the external heat exchanger 35° C.
- (2) Internal exchanger water temp.=23/18 ° C, air entering the external heat exchanger 35° C.
- (3) Internal exchanger water reference temperature = 12/7 ° C.
- (4) Indicative data and subject to change. For the correct data, always refer to the technical label on the unit.
- (5) The calculated value of minimum volume of water at the plant does not consider the volume of water contained in the internal exchanger (evaporator). With low external air temperature applications or low average loads required, the minimum volume of water to the system is obtained by doubling the indicated value.

- (6) Condition (3); value determined on the basis of measurements carried out in accordance with the UNI EN ISO 9614-2 standard, in compliance with the requirements of the Eurovent certification.
  - (7) Value calculated from the sound power level using ISO 3744: 2010, referred to 10 m distance from the unit.
  - (8) Cooling version BT: outdoor air temperature 35 ° C, internal exchanger water temperature = -3 / -8 ° C. Fluid treated with 35% ethylene glycol.
- N.B. The performance data are indicative and could be subject to change. In addition, the performances declared in apex (1), (2), and (8) refer to the instantaneous power according to EN 14511. The declared data stated in the apex (6) is determined according to the UNI EN 14825.

HWA1-A/H		0140	0147	0260	0273	0285
<b>Cooling</b>						
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 (1)	L/s	1,86	2,20	2,83	3,41	3,84
Pressure drop (1)	kPa	55,8	56,6	61,5	63,7	66,6
<b>Heating</b>						
Heating capacity (3)	kW	43,5	48,2	64,1	80,9	88,7
Power input (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 (4)	l/s	2,02	2,30	3,03	3,60	4,07
Use side heat exchanger load losses (4)	kPa	84,4	81,6	84,1	81,5	84,1
Energy efficiency (Water 35°C)		A+	A+	A++	A++	A+
<b>Compressor</b>						
Type		Scroll	Scroll	Scroll	Scroll	Scroll
Compressors	n°	1	1	2	2	2
Refrigerant circuits	n°	1	1	1	1	1
Refrigerant charge (7)	kg	9,98	9,98	14	15,25	15,6
<b>Fan</b>						
Nominal air flow	m <sup>3</sup> /s	4,3	5,3	6,3	6,9	7,4
<b>Hydraulic circuit</b>						
Max pressure hydronic kit	bar	6	6	6	6	6
Water connections	inch	2"	2"	2"	2"	2"
Min. water volume (8)	L	330	380	260	380	490
<b>Sound level</b>						
Sound power (9)	dB(A)	84	85	89	88	88
Sound pressure (10)	dB(A)	52,3	53,3	56,3	56,3	56,3
<b>Electrical data</b>						
Power supply		400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz	400V/3P+N+T/50Hz
Max. power input	kW	17,0	21,5	28,0	35,0	43,0
Max. current input	A	28,0	38,0	45,0	56,0	71,0
<b>Weight</b>						
Gross weight	kg	400	420	520	545	555
Operation weight	kg	390	410	505	530	540

Data referred to the following condition:

(1) Cooling: outdoor air temperature 35°C; water temperature inlet/outlet 12/7°C.

(2) Cooling: outdoor air temperature 35°C; water temperature inlet/outlet 23/18°C.

(3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water temperature inlet/outlet 30/35°C.

(4) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water temperature inlet/outlet 40/45°C.

(5) Internal exchanger water reference temperature = 12/7 ° C.

(6) Heating: average climatic conditions; T<sub>biv</sub> = -7 ° C; Water Temp in/out 30/35 ° C.

(7) Indicative data and subject to change. For the correct data, always refer to the technical label on the unit.

(8) The calculated value of minimum volume of water at the plant does not consider the volume of water contained in the internal exchanger (evaporator). With low external air temperature applications or low average loads required, the minimum volume of water to the system is obtained by doubling the indicated value.

(9) Condition (3); value determined on the basis of measurements carried out in accordance with the UNI EN ISO 9614-2 standard, in compliance with the requirements of the Eurovent certification.

(10) Value calculated from the sound power level using ISO 3744: 2010, referred to 10 m distance from the unit.

N.B. The performance data are indicative and could be subject to change. In addition, the performances declared in apex (1), (2), and (8) refer to the instantaneous power according to EN 14511. The declared data stated in the apex (6) is determined according to the UNI EN 14825.

# HWA1-A 02106÷04349

## Air-Cooled liquid chiller for outdoor installation

106 kW÷349 kW

The high efficiency air-cooled chillers and heat pumps of the HWA1-A and HWA1-A / H series are designed for outdoor installation, available in 24 sizes, 12 chillers and 12 heat pumps, so as to satisfy all system requirements in commercial, residential and industrial buildings.

These are units made for cooling and heating water, very versatile and characterized by the possibility of complete and simple maintenance management.



### Fitted accessories

<b>2SFV</b>	Double security valve with changeover valve	<b>PDAP</b>	High pressure double pump
<b>BT</b>	BT version for low water temperatures	<b>PDAP/SI</b>	Double high pressure pump+tank
<b>C</b>	Ducted version	<b>PS</b>	Standard pressure pump
<b>CC</b>	Condensation control up to -20°C	<b>PS/SI</b>	Standard pressure pump+tank
<b>CM</b>	Modbus communication module	<b>PSAP</b>	High pressure pump
<b>CT</b>	Condensation control up to -10°C	<b>PSAP/SI</b>	High pressure pump+tank
<b>DS</b>	Chiller with desuperheater	<b>RFM</b>	Suction and discharge ball valve for compressors
<b>EC</b>	EC fan (included in versions C, BT, SSL)	<b>SAS</b>	Remote probe
<b>GR1</b>	Cooling circuit anti-intrusion grid	<b>SH</b>	Schuko plug (with magnetothermal switch)
<b>GR2</b>	Condenser anti-intrusion grid	<b>SL</b>	Silenced version
<b>GR3</b>	Condenser and circuit anti-intrusion grid	<b>SS</b>	Soft starter
<b>IM</b>	Magnethermic switch for compressors and fans	<b>SSL</b>	Super silenced version
<b>KS</b>	Hoist ring kit	<b>TE1</b>	Special pump gasket seal for glycol concentration over 40%
<b>LQ</b>	Electrical board lighting	<b>TRI</b>	Micro-channel coil with Aero surface treatment
<b>PD</b>	Standard double pump		
<b>PD/SI</b>	Double standard pump+tank		

### Loose accessories

<b>AG</b>	Anti-vibration rubber mounts	<b>e-Lite</b>	Multifunctional remote control system
<b>AM</b>	Anti-vibration spring mounts	<b>ISK</b>	Serial converter USB/RS485 (ISK)
<b>FY</b>	Y-strainer	<b>RV</b>	Starting kit made by 2 grooved couplers and 2 straight starting pipes
<b>Hi-TV415</b>	Hi-touch controller	<b>SAS</b>	Remote probe
<b>i-CR</b>	Remote wall controller		

### Standard

Remote probe enabling

Enable 2nd set point

### Versions

**HWA1-A** Standard version chiller

You can choose an acoustic configuration from the following:

<b>/SL</b>	Silenced version
<b>/SSL</b>	Super silenced version
<b>/C</b>	Ductable version

There are different types of hydronic kits to be combined with the chiller: with single/double pump standard/high pressure, with or without tank:

<b>/PS</b>	Standard pressure pump
<b>/PSAP</b>	High pressure pump
<b>PD</b>	Double standard pressure pump
<b>PDAP</b>	High pressure double pump
<b>PS/SI</b>	Standard pressure pump + tank
<b>PSAP/SI</b>	High pressure pump + tank
<b>PD/SI</b>	Double standard pressure pump + tank
<b>PDAP/SI</b>	Double high pressure pump + tank

### Carpentry

Suitable for outdoor installation, consisting of thick profiles in hot galvanized steel sheet or painted with RAL 7035 polyester powder resistant to atmospheric agents.

### Source (side) heat exchanger air

Full-aluminium coil microchannel type. Coil structure made with an open-angle V-geometry layout.

### Compressor

Hermetic scroll complete with internal thermal protection. The compressor is isolated from the structure by interposition of special rubber mountings. The mobile spiral is driven by an electric motor 2-pole (2900 rpm) cooled by the inlet refrigerant, the starter is directed. All compressors have full charge of oil polyester, suitable for use with refrigerant R410A. An electrical heater, located on the crankcase, is automatically activated when the unit is switch off in order to prevent the mixing of oil in the refrigerant. The control of cooling power is achieved through steps of parzialization in number equal to the number of compressors installed. When connecting in tandem there is an oil equalizing line with a level indicator.

### User (side) heat exchanger

AISI 304 steel braze-welded plate exchanger, insulated with Black closed-cell flexible elastomeric foam (FEF) coupled with a 3 mm layer of reticulated foam in PE and an exterior embossed finishing PE film in aluminium in colour; total thickness 6+3 mm, thermal conductivity ( $\lambda$ )  $\leq 0,034$  W/m·K.

A differential pressure switch, mounted on the water side, safeguard the flow rate and prevent ice from forming inside the evaporator. Maximum operating pressure exchanger: 15 bar on the water side and 45 bar on the refrigerant side

### Fan section

Ventilation system composed by 800mm axial electric fans, protected to IP54, with external rotor and plastic-coated aluminium blades. Housed in aerodynamic hoods complete with safety grille. Brushless electronically commutated electrical motor and incorporated thermal protection. Continuous adjustment of fan rotation speed.

### Refrigerant circuit

One or two independent refrigeration circuits made of copper, brazed and factory-assembled, complete with:

- Anti-acid dehydrator filter with solid cartridge, 100% molecular sieve solid core from 3Å, particularly suitable for HFC and POE, PAG oil;
- Liquid flow and moisture indicator;
- Low and high pressure transducer;
- Electronic expansion valve;
- Low and high pressure safety pressure switch;
- Low and high pressure safety valve;
- Shut-off valve on liquid line;
- Service valves

### Electrical panel

It is completely manufactured and wired in accordance with EN 60204.

The power supply section includes:

- General door lock switch, with bars for main power supply (400Vac/3ph+PE/50Hz);
- Isolating transformer for the auxiliary power supply circuit (400Vac/230Vac-12Vac);
- Compressor and fan protection fuses;
- Power supply contactor with thermal protection for compressor control;
- Phase control relay with minimum / maximum voltage intervention calibration
- Thermostated ventilation inside the electrical panel

### The control section includes:

- Interface terminal with alphanumeric display;
- Displaying function of setting values, of analog inputs, error codes, alarm history and parameter index;
- Forced circulation function in case of frost risk;
- Keys for on/off switching and reset of alarms;
- Keys combination to constrain the defrosting process and constraining the pump at maximum rpm (if present);
- Remote/Local power on/off management of the unit;
- Digital input for the machine power ON/OFF;
- Analog input for enabling remote plant temperature sensor;
- Digital input for double set point enablement;
- Digital input for Summer/Winter mode activation (heat pump only);
- BMS connectivity predisposition (Modbus / Bacnet / Knx / Lonworks)
- Thermoregulation and timing of the compressors;
- Fan motors speed regulation in evaporation/condensation;
- Dynamic set point management.

HWA1-A		02106	02120	02128	02140	04155	04177	04184	04209	04239	04258	04305	04349
<b>Cooling</b>													
Cooling capacity (1)	kW	105	119	130	139	155	176	182	208	238	257	305	348
Power input (1)	kW	33,5	38,3	44,2	44,3	49,9	56,7	62,9	67,1	76,8	88,5	98,3	112
EER (1)	W/W	3,13	3,10	2,93	3,15	3,11	3,10	2,90	3,10	3,10	2,90	3,10	3,10
Cooling capacity (2)	kW	139	155	164	185	204	230	239	277	314	333	405	458
Power input (2)	kW	35,7	40,8	46,8	47,5	52,9	60,9	67,8	71,6	81,9	94,6	105	121
EER (2)	W/W	3,88	3,79	3,50	3,89	3,87	3,77	3,52	3,87	3,84	3,52	3,85	3,78
SEER (3)	W/W	4,13	4,12	4,11	4,27	4,11	4,11	4,10	4,14	4,24	4,10	4,16	4,12
Cooling capacity (8)	kW	61,9	70,6	77,8	82,0	91,5	103	109	123	144	158	184	211
Power input (8)	kW	29,9	34,1	39,3	39,5	45,4	50,8	55,8	59,7	68,8	79,4	88,5	101
EER (8)	W/W	2,07	2,07	1,98	2,08	2,02	2,04	1,95	2,06	2,09	1,99	2,08	2,10
Water flow (1)	L/s	5,0	5,7	6,2	6,5	7,2	8,4	8,7	9,9	11,4	12,3	14,7	16,6
Pressure drop (1)	kPa	36,9	44,7	28,0	47,7	43,7	40,3	46,4	24,9	43,7	32,7	44,2	53,1

<b>Compressor</b>													
Type		Scroll											
Compressors	n°	2	2	2	2	4	4	4	4	4	4	4	4
Refrigerant circuits	n°	1	1	1	1	2	2	2	2	2	2	2	2
Refrigerant charge-Circuit 1 (4)	kg	10,5	10,5	10,5	15,0	13,0	13,0	13,0	13,0	13,5	13,5	19,5	20,0
Refrigerant charge-Circuit 2 (4)	kg	-	-	-	-	10,5	10,5	10,5	13,0	13,5	13,5	19,5	20,5

<b>Fans</b>													
Nominal air flow	l/s	10614	10714	11143	14649	14467	15868	15892	20647	20471	22231	29279	33255
Fan numbers	n°	2	2	2	3	3	3	3	4	4	4	6	6

<b>Hydraulic circuit</b>													
Max pressure hydronic kit	bar	6	6	6	6	6	6	6	6	6	6	6	6
Min. water volume (5)	L	427	535	535	699	409	533	533	533	669	669	874	874
Tank volume	L	390	390	390	705	420	420	420	520	520	520	705	705

<b>Sound level</b>													
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	90 std/ 89 SL/ 87 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	55,8 std/ 54,8 SL/ 52,8 SSL	57,8 std/ 56,8 SL/ 54,8 SSL				

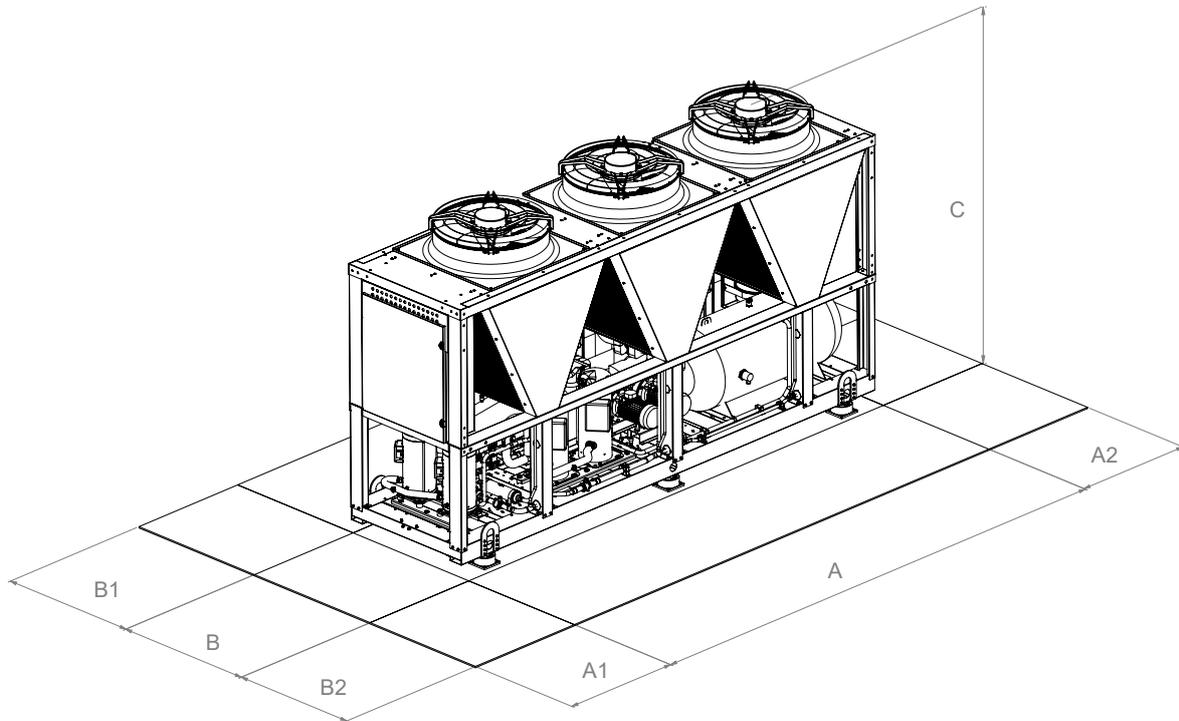
<b>Electrical data</b>													
Power supply		400Vac/3P+PE/50Hz											
Max. power input	kW	48,9	55,0	61,1	66,9	82,4	87,4	90,9	97,8	110,0	122,3	146,0	165,8
Max. current input	A	83,0	93,4	103,8	113,5	139,9	148,3	154,3	166,0	186,8	207,6	247,8	281,4

<b>Weight</b>													
Gross weight (9)	kg	1.080	1.080	1.090	1.510	1.620	1.620	1.620	1.950	1.960	1.960	2.670	2.850
Operation weight (9)	kg	1.090	1.090	1.100	1.520	1.630	1.630	1.630	1.960	1.970	1.980	2.690	2.870

Data referred to the following condition:

- (1) Cooling: outdoor air temperature 35°C; water temperature inlet/outlet 12/7°C.
- (2) Cooling: outdoor air temperature 35°C; water temperature inlet/outlet 23/18°C.
- (3) Internal exchanger water reference temperature = 12/7 ° C.
- (4) Indicative data and subject to change. For the correct data, always refer to the technical label on the unit.
- (5) The calculated value of minimum volume of water at the plant does not consider the volume of water contained in the internal exchanger (evaporator). With low external air temperature applications or low average loads required, the minimum volume of water to the system is obtained by doubling the indicated value.
- (6) Condition (1); value determined on the basis of measurements carried out in accordance with the UNI EN ISO 9614-2 standard, in compliance with the requirements of the Eurovent certification.

- (7) Value calculated from the sound power level using ISO 3744: 2010, referred to 10 m distance from the unit.
- (8) Cooling version BT: outdoor air temperature 35 ° C, internal exchanger water temperature = -3 / -8 ° C. Fluid treated with 35% ethylene glycol.
- (9) Weight referred to the standard version without hydronic kit and possible accessories. N.B. The performance data are indicative and could be subject to change. In addition, the performances declared in apex (1), (2), and (8) refer to the instantaneous power according to EN 14511. The declared data stated in the apex (6) is determined according to the UNI EN 14825.



Model	Size			Clearance recommended access				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")

\* Depends on the hydronic version - check the technical bulletin

# HWA1-A/H 02109÷04345

## Air-Cooled reversible heat pump for outdoor installation

109 kW÷345 kW

The high efficiency air-cooled chillers and heat pumps of the HWA1-A and HWA1-A / H series are designed for outdoor installation, available in 24 sizes, 12 chillers and 12 heat pumps, so as to satisfy all system requirements in commercial, residential and industrial buildings.



### Fitted accessories

<b>2SFV</b>	Double security valve with changeover valve	<b>PD</b>	Standard double pump
<b>BT</b>	BT version for low water temperatures	<b>PD/SI</b>	Double standard pump+tank
<b>ACK6</b>	Segnalazione Summer/Winter	<b>PDAP</b>	High pressure double pump
<b>C</b>	Ducted version	<b>PDAP/SI</b>	Double high pressure pump+tank
<b>CC</b>	Condensation control up to -20°C	<b>PS</b>	Standard pressure pump
<b>CM</b>	Modbus communication module	<b>PS/SI</b>	Standard pressure pump+tank
<b>CT</b>	Condensation control up to -10°C	<b>PSAP</b>	High pressure pump
<b>DS</b>	Chiller with desuperheater	<b>PSAP/SI</b>	High pressure pump+tank
<b>EC</b>	EC fan (included in versions C, BT, SSL)	<b>RFM</b>	Suction and discharge ball valve for compressors
<b>GR1</b>	Cooling circuit anti-intrusion grid	<b>SAS</b>	Remote probe
<b>GR2</b>	Condenser anti-intrusion grid	<b>SH</b>	Schuko plug (with magnetothermal switch)
<b>GR3</b>	Condenser and circuit anti-intrusion grid	<b>SL</b>	Silenced version
<b>IM</b>	Magnethermic switch for compressors and fans	<b>SS</b>	Soft starter
<b>KA1</b>	Heat exchanger + pump (if on board) electrical heaters	<b>SSL</b>	Super silenced version
<b>KA2</b>	Heat exchanger + pump (if on board) + inertial tank electrical heaters	<b>TE1</b>	Special pump gasket seal for glycol concentration over 40%
<b>KS</b>	Hoist ring kit	<b>TR2</b>	Al/Cu battery with anti-corrosion Silver Line treatment
<b>LQ</b>	Electrical board lighting		

### Loose accessories

<b>AG</b>	Anti-vibration rubber mounts	<b>e-Lite</b>	Multifunctional remote control system
<b>AM</b>	Anti-vibration spring mounts	<b>ISK</b>	Serial converter USB/RS485 (ISK)
<b>FY</b>	Y-strainer	<b>RV</b>	Starting kit made by 2 grooved couplers and 2 straight starting pipes
<b>Hi-TV415</b>	Hi-touch controller	<b>SAS</b>	Remote probe
<b>i-CR</b>	Remote wall controller		

### Standard

Remote probe enabling

Enable 2nd set point

### Versioni

**HWA1-A/H** Standard version chiller

You can choose an acoustic configuration from the following:

<b>/SL</b>	Silenced version
<b>/SSL</b>	Super silenced version
<b>/C</b>	Ductable version

There are different types of hydronic kits to be combined with the reversible heat pump: with single/double pump standard/high pressure, with or without tank:

<b>/PS</b>	Standard pressure pump
<b>/PSAP</b>	High pressure pump
<b>/PD</b>	Double standard pressure pump
<b>/PDAP</b>	High pressure double pump
<b>/PS/SI</b>	Standard pressure pump + tank
<b>/PSAP/SI</b>	High pressure pump + tank
<b>/PD/SI</b>	Double standard pressure pump + tank
<b>/PDAP/SI</b>	Double high pressure pump + tank

### Compressor

Hermetic scroll complete with internal thermal protection. The compressor is isolated from the structure by interposition of special rubber mountings. The mobile spiral is driven by an electric motor 2-pole (2900 rpm) cooled by the inlet refrigerant, the starter is directed. All compressors have full charge of oil polyester, suitable for use with refrigerant R410A. An electrical heater, located on the crankcase, is automatically activated when the unit is switch off in order to prevent the mixing of oil in the refrigerant. The control of cooling power is achieved through steps of parzialization in number equal to the number of compressors installed. When connecting in tandem there is an oil equalizing line with a level indicator.

### User (side) heat exchanger

AISI 304 steel braze-welded plate exchanger, insulated with Black closed-cell flexible elastomeric foam (FEF) coupled with a 3 mm layer of reticulated foam in PE and an exterior embossed finishing PE film in aluminium in colour; total thickness 6+3 mm, thermal conductivity ( $\lambda$ )  $\leq 0,034$  W/m·K.

A differential pressure switch, mounted on the water side, safeguard the flow rate and prevent ice from forming inside the evaporator.

Maximum operating pressure exchanger: 15 bar on the water side and 45 bar on the refrigerant side.

### Carpentry

Suitable for outdoor installation, consisting of thick profiles in hot galvanized steel sheet or painted with RAL 7035 polyester powder resistant to atmospheric agents.

### Source (side) heat exchanger air

Finned exchanger, made from copper pipes arranged in staggered rows and mechanically expanded for better adherence to the collar of the fins. The fins are made of aluminium with a special corrugated surface, set a suitable distance apart to ensure maximum heat exchange efficiency. A proper liquid supply of the expansion valve is ensured by the subcooling circuit. Each finned heat exchanger is directly cooled by the air flow of its specific fans.

### Fan section

Ventilation system composed of axial fans with 800mm diameter, with IP54 protection degree, with external rotor, with high aerodynamic efficiency aluminum blades with winglet profile (possibly covered with plastic material), housed in aerodynamic profile mouthpieces, complete with safety protection net. Brushless electric motor with electronic switching and built-in thermal protection. Continuous regulation of the fan rotation speed.

### Refrigerant circuit

One or two independent refrigeration circuits made of copper, brazed and factory-assembled, complete with:

- Anti-acid dehydrator filter with solid cartridge;
- Liquid flow and moisture indicator;
- Low and high pressure transducer;
- Electronic expansion valve;
- Check valves;
- 4-Way reversing valve;
- Liquid receiver;
- Suction separator;
- Low and high pressure safety pressure switch;
- Low and high pressure safety valve;
- Shut-off valve on liquid line;
- Service valves

### Electrical panel

- It is completely manufactured and wired in accordance with EN 60204.
- The power supply section includes:
- General door lock switch, with bars for main power supply (400Vac/3ph+PE/50Hz);
- Isolating transformer for the auxiliary power supply circuit (400Vac/230Vac-12Vac);
- Compressor and fan protection fuses;
- Power supply contactor with thermal protection for compressor control;
- Phase control relay with minimum / maximum voltage intervention calibration
- Thermostated ventilation inside the electrical panel

The control section includes:

- Interface terminal with alphanumeric display;
- Displaying function of setting values, of analog inputs, error codes, alarm history and parameter index;
- Water side protection of antifreeze pump (if present and on heat pump models);
- Keys for on/off switching and reset of alarms;
- Keys combination to constrain the defrosting process and constraining the pump at maximum rpm (if present);
- Remote/Local power on/off management of the unit;
- Digital input for the machine power ON/OFF;
- Analog input for enabling remote plant temperature sensor;
- Digital input for double set point enablement;
- Digital input for Summer/Winter mode activation (heat pump only);
- BMS connectivity predisposition (Modbus / Bacnet / Knx / Lonworks)
- Thermoregulation and timing of the compressors;
- Fan motors speed regulation in evaporation/condensation;
- Dynamic set point management.

HWA1-A/H		02109	02121	02142	02148	02160	04176	04199	04215	04237	04273	04304	04345
<b>Cooling</b>													
Cooling capacity (1)	kW	103	113	132	138	148	165	187	208	225	260	289	325
Power input (1)	kW	33,8	38,9	41,3	44,4	49,8	52,6	59,4	67,2	77,5	80,6	92,9	112
EER (1)	W/W	3,05	2,90	3,19	3,11	2,97	3,14	3,15	3,10	2,90	3,22	3,10	2,90
Cooling capacity (2)	kW	139	151	177	188	202	224	252	282	301	351	388	434
Power input (2)	kW	36,5	42,7	44,1	47,7	53,0	55,7	63,8	71,6	83,2	87,0	101	122
EER (2)	W/W	3,81	3,53	4,01	3,94	3,82	4,01	3,95	3,94	3,62	4,04	3,86	3,56
SEER (5)	W/W	4,35	4,36	4,38	4,73	4,50	4,61	4,64	4,71	4,53	4,65	4,73	4,42
Water flow (1)	L/s	4,9	5,4	6,3	6,6	7,1	7,9	8,9	10,0	10,8	12,4	13,8	15,5
Pressure drop (1)	kPa	21,7	20,1	26,5	24,3	20,2	21,7	26,5	24,7	27,2	18,8	24,9	17,9
<b>Heating</b>													
Heating capacity (3)	kW	113	125	148	154	166	188	207	223	246	286	316	356
Power input (3)	kW	27,6	30,9	36,6	37,7	41,4	46,0	50,7	54,8	61,1	69,2	78,3	88,5
COP (3)	W/W	4,09	4,05	4,04	4,08	4,01	4,08	4,09	4,07	4,02	4,13	4,04	4,02
Heating capacity (4)	kW	108	120	142	148	160	179	198	214	237	273	303	344
Power input (4)	kW	32,9	37,5	43,9	45,3	49,4	55,9	61,5	66,0	74,0	83,8	94,7	108
COP (4)	W/W	3,30	3,20	3,22	3,26	3,23	3,21	3,22	3,24	3,20	3,26	3,20	3,20
SCOP (6)	W/W	3,72	3,77	3,62	3,69	3,68	3,90	3,84	3,96	4,00	3,92	3,95	4,01
Water flow (4)	l/s	5,2	5,8	6,8	7,0	7,7	8,6	9,5	10,3	11,4	13,1	14,6	16,6
Use side heat exchanger load losses (4)	kPa	24,2	22,9	30,6	28,4	24,0	26,6	31,9	27,6	30,5	22,9	29,1	22,3
Energy efficiency (Water 35°C-55°C)		A+/A+	A+/A+	A+/A+	A+/A+	A+/A+	A++/A+						
<b>Compressor</b>													
Type		Scroll											
Compressors	n°	2	2	2	2	2	4	4	4	4	4	4	4
Refrigerant circuits	n°	1	1	1	1	1	2	2	2	2	2	2	2
Refrigerant charge-Circuit 1 (7)	kg	26,5	27,0	34,5	42,0	40,0	22,0	18,0	25,5	28,5	43,0	47,0	50,0
Refrigerant charge-Circuit 2 (7)	kg	-	-	-	-	-	22,0	18,0	24,0	28,5	36,0	34,0	30,0
<b>Fans</b>													
Nominal air flow	l/s	10021	9984	15109	15088	15045	20954	20888	20815	20738	31370	31264	31109
Fan numbers	n°	2	2	3	3	3	4	4	4	4	6	6	6
<b>Hydraulic circuit</b>													
Max pressure hydronic kit	bar	6	6	6	6	6	6	6	6	6	6	6	6
Min. water volume (8)	L	490	630	630	820	820	480	610	610	780	1.020	1.020	1.290
Tank volume	L	390	390	705	705	705	520	520	520	520	705	705	705
<b>Sound level</b>													
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	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 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	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
<b>Electrical data</b>													
Power supply		400Vac/3P+PE/50Hz											
Max. power input	kW	48,9	55,0	63,1	66,9	73,0	87,9	92,8	97,8	110,0	123,8	139,8	160,1
Max. current input	A	83,0	93,4	107,1	113,5	123,9	149,2	157,6	166,0	186,8	210,2	237,4	271,8
<b>Weight</b>													
Gross weight (11)	kg	1.180	1.210	1.470	1.530	1.530	2.030	2.060	2.100	2.130	2.680	2.880	2.900
Operation weight (11)	kg	1.190	1.220	1.480	1.540	1.540	2.040	2.070	2.110	2.140	2.700	2.900	2.930

Data referred to the following condition:

(1) Cooling: outdoor air temperature 35°C; water temperature inlet/outlet 12/7°C.

(2) Cooling: outdoor air temperature 35°C; water temperature inlet/outlet 23/18°C.

(3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water temperature inlet/outlet 30/35°C.

(4) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; water temperature inlet/outlet 40/45°C.

(5) Internal exchanger water reference temperature = 12/7 ° C.

(6) Indicative data and subject to change. For the correct data, always refer to the technical label on the unit.

(7) The calculated value of minimum volume of water at the plant does not consider the volume of water contained in the internal exchanger (evaporator). With low external air temperature applications or low average loads required, the minimum volume of water to the system is obtained by doubling the indicated value.

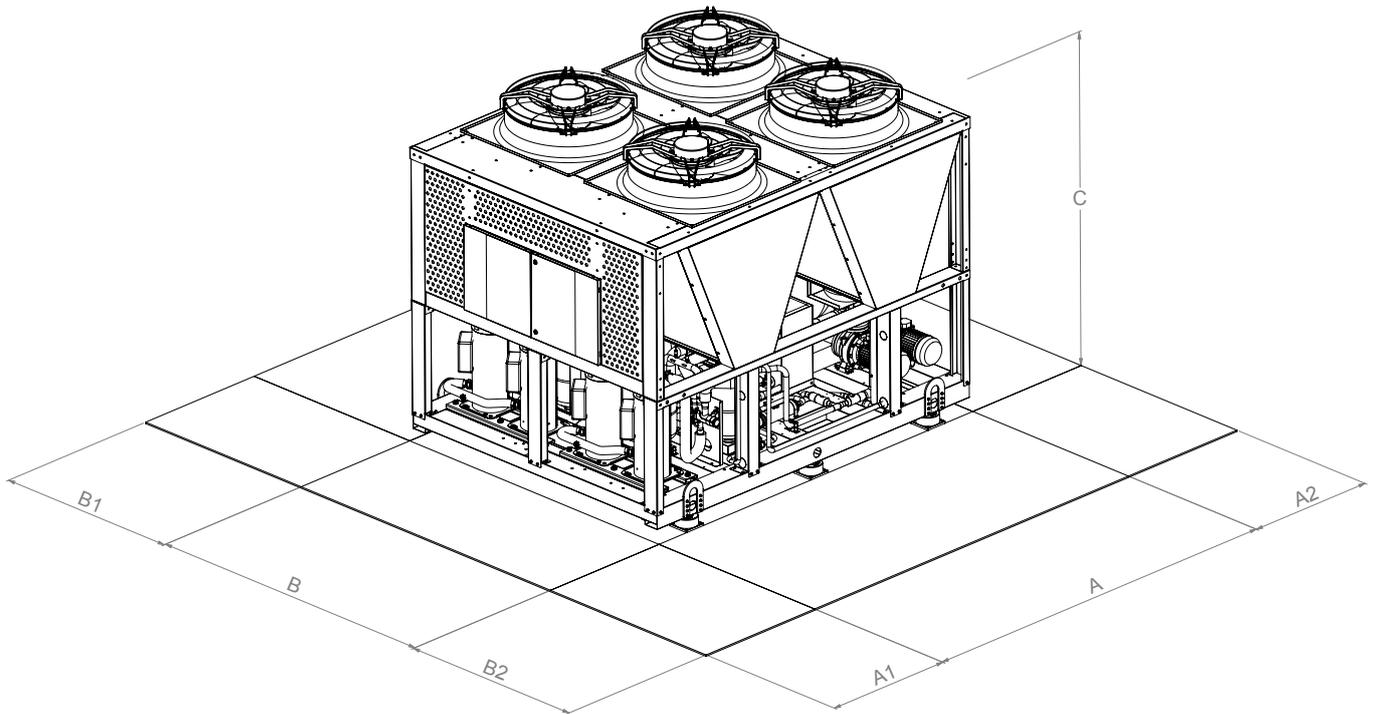
(8) Condition (1); value determined on the basis of measurements carried out in accordance with the UNI EN ISO 9614-2 standard, in compliance with the requirements of the Eurovent certification.

(9) Value calculated from the sound power level using ISO 3744: 2010, referred to 10 m distance from the unit.

(10) Cooling version BT: outdoor air temperature 35 ° C, internal exchanger water temperature = -3 / -8 ° C. Fluid treated with 35% ethylene glycol.

(11) Weight referred to the standard version without hydronic kit and possible accessories.

N.B. The performance data are indicative and could be subject to change. In addition, the performances declared in apex (1), (2), and (8) refer to the instantaneous power according to EN 14511. The declared data stated in the apex (6) is determined according to the UNI EN 14825.



Model	Size			Clearance recommended access				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")

\* Depends on the hydronic version - check the technical bulletin

# Wire controls & thermostats for hydronic terminals

## Airmust 3V A1 / 010 A1

Touch screen control for wall installation



- Color touch screen 3.5" TFT
- Power supply 230V
- European standard mounting
- ModBus
- Wi-Fi connectivity 2.4G
- APP available for Android and iOS: My House Pro
- 3-speed version (3V) or for 0-10V version (010)
- 2 pipes and 4 pipes systems
- Dry input for window contact
- Water probe inlet
- Automatic brightness
- Room temperature probe
- Relative humidity probe
- Management of the mode of operation
- Temperature and humidity history display
- Automatic change from summer to winter
- Automatic management of the time change (legal/solar)
- Multilanguage
- Weekly calendar
- Weekly time schedule



## Airmust BMCP A1

Touch screen thermostat for on-board installation of the VSL model fan coil machine



- LCD display with five touch function keys
- Power supply 230V
- Wall mounting
- ModBus
- Wi-Fi connectivity 2.4G
- App available on the stores for Android and iOS: Tuya
- For 3-speed fan coils
- For 2-tube and 4-tube systems
- Entry contact window
- Water probe inlet
- Ambient temperature sensor
- Management of the mode of operation
- Automatic change from summer to winter
- Weekly calendar
- Weekly time schedule



## Airmust P

Touch screen thermostat for wall installation



- Only for on-board installation, model VSL
- LCD display with five touch function keys
- Power supply 230V
- Wall mounting
- ModBus
- Wi-Fi connectivity 2.4G
- APP available on the Android and iOS stores: Tuya
- For 3-speed fan coils
- For 2-tube and 4-tube systems
- Entry contact window
- Water probe inlet
- Ambient temperature sensor
- Management of the mode of operation
- Automatic change from summer to winter
- Weekly calendar
- Weekly time schedule



**CBP**

## Electronic thermostat for wall installation



- Configurable digital fan coil thermostat diamond new line like TFF01M, but suitable for driving of 0-10V actuators.
- Driving of fan motor via 3 relays or proportional via 0..10V signal
- Possibility to supply the fan motor with 230V~, thermostat and actuators with 24V~.
- Temperature indication in °C or °F.
- Clean contact input for bimetallic minimum temperature (TMB)
- Analog input for water temperature probe (SND-W4)
- Wide configurability for 2-4 pipe systems, with or without neutral zone

**CRA**

## Thermostat for wall installation



- Wall mounted thermostat 230V
- Contacts relays 5A/230V
- Selector fan 3 speeds
- Off-on manual switch
- Management of the 2-tube system with or without on-off valves 230V

**Compatibility table**

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

(1) Not compatible with TMB - SND-A3 accessory required

(2) Check power consumption, add SDI accessory if necessary

(3) If necessary add STSL accessory for winter minimum temperature management

(4) SDI Accessory not required

Compatible ■  
Not compatible X

# Grimper Fan

Super thin thickness

0,9 kW ÷ 3,4 kW

The Grimper range in all its models holds the record of being the thinnest design fan coil on the market, with its 12 cm is 10% thinner than its competitors in the slim segment.

One feature that distinguishes the range is the absence of front intake grilles, thanks to the innovative ventilation system that improves battery performance working at negative pressure. The absence of front grilles also allows you to install Grimper Fan in a versatile way even in the most confined spaces.

The DC technology within the fan motor improves also the comfort.



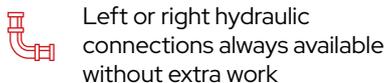
Heating



Cooling



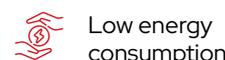
Dehumidification



Left or right hydraulic connections always available without extra work



Wi-fi controls for easy management by smartphone



Low energy consumption

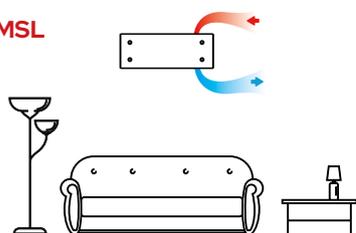
## Accessories

<b>2V2BSL</b>	2-way valve kit with micro for BSL	<b>3V2VSL34</b>	3-way by-pass valve kit with micro 2 pipes for VSL 34
<b>2V2MSL</b>	2-way valve kit with micro for MSL 12-17		Modbus.
<b>2V2MSL</b>	2-way valve kit with micro for MSL 25	<b>PEP09</b>	Rear aesthetic panel VSL 09
<b>2V2VSL</b>	2-way valve kit with micro for VSL 09-27	<b>PEP18</b>	Rear aesthetic panel VSL 18
<b>2V2VSL34</b>	2-way valve kit with micro for VSL 34	<b>PEP27</b>	Rear aesthetic panel VSL 27
<b>3V2BSL</b>	3-way by-pass valve kit with micro 2 pipes for BSL	<b>PEP34</b>	Rear aesthetic panel VSL 34
<b>3V2MSL</b>	3-way by-pass valve kit with micro 2 pipes for MSL 12-17	<b>P-VSL</b>	VSL ground fixing feet
<b>3V2MSL</b>	3-way by-pass valve kit 2 pipes with micro for MSL 25	<b>STSL</b>	Minimum water temperature probe
<b>3V2VSL</b>	3-way by-pass valve kit 2 pipes with micro for VSL 09-27	<b>VASL09</b>	Tray for horizontal installation VSL 09
<b>3V4VSL</b>	3-way by-pass valve kit 4 pipes with micro for VSL	<b>VASL18</b>	Tray for horizontal installation VSL 18
		<b>VASL27</b>	Tray for horizontal installation VSL 27
		<b>VASL34</b>	Tray for horizontal installation VSL 34

## Versions

<b>MSL</b>	Hydronic fan coil for high wall installation	<b>BSL</b>	Hydronic fan coil for bathrooms and behind the doors
<b>VSL</b>	Hydronic fan coil for floor standing or ceiling installation		

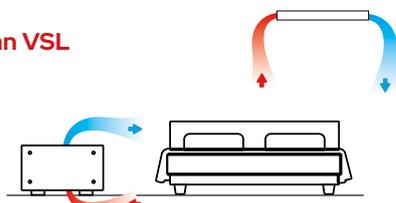
### Grimper Fan MSL



- **High wall installation**
- Super thin thickness, only 12 cm
- Minimum noise level below the threshold of the audible, 20 dB(A)
- Three speed, DC motor fan
- Low power consumption, only 4 Watts
- Modern design
- Front panel in tempered glass crystal
- Pleated stainless steel filters of unlimited duration
- Tangential aluminum fan for greater efficiency
- Standard remote control or wired remote control
- Digital indicator of the room temperature

MSL		12	17	25
Total cooling capacity	kW	1,20	1,70	2,45
Total heating capacity main exchanger	kW	1,68	2,45	3,30
Air flow rate (min-max)	m³/h	155-315	240-450	310-540
Electric power absorption (min-max)	W	4-11	5-14	8-17
Minimum sound pressure (SPL)	dB(A)	23,0	23,4	25,0
Width	mm	873	1065	1257
Height	mm	383	383	383
Depth	mm	122	122	122
Weight	kg	16	17	20
Low consumption DC motor		si	si	si
Tangential aluminum fan		si	si	si
Remote control		si	si	si
LCD display		si	si	si
Pleated stainless steel filter		si	si	si
Front panel in tempered glass		si	si	si
Machine frame in powder-coated steel		si	si	si
Supply voltage	V-Hz	220-50	220-50	220-50

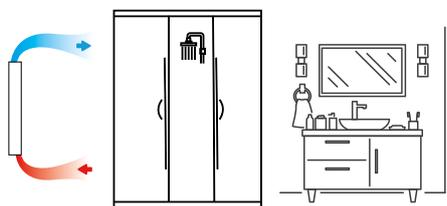
### Grimper Fan VSL



- **Floor standing or ceiling installation**
- Super thin thickness, only 12 cm
- Minimum noise level below the threshold of the audible, 20 dB (A)
- Three speed, DC motor fan
- Low power consumption, only 4 Watts
- Modern design
- Front panel in tempered glass crystal
- Double facade, front and rear, on request
- Pleated stainless steel filters of unlimited duration
- Tangential aluminum fan for greater efficiency
- Control built-in or with remote wall panel
- Left or right hydraulic connections always available without extra work

VSL		09	18	27	34
Total cooling capacity	kW	0,88	1,81	2,7	3,38
Total heating capacity main exchanger	kW	1,10	2,40	3,20	4,23
Air flow rate (min-max)	m³/h	80-180	155-315	240-450	310-540
Electric power absorption (min-max)	W	3-12	4-13	5-14	8-17
Minimum sound pressure (SPL)	dB(A)	20,5	21,6	23,5	21,7
Width	mm	681	873	1065	1257
Height*	mm	553	553	553	553
Depth	mm	122	122	122	122
Weight	kg	18	21	24	27
Low consumption DC motor		si	si	si	si
Tangential aluminum fan		si	si	si	si
Remote control		no	no	no	no
LCD display		no	no	no	no
Pleated stainless steel filter		si	si	si	si
Front panel in tempered glass		si	si	si	si
Machine frame in powder-coated steel		si	si	si	si
Supply voltage	V-Hz	220-50	220-50	220-50	220-50

### Grimper Fan BSL



- **Floor standing installation with or without feet**
- Super thin thickness, only 12 cm
- Minimum noise level below the threshold of the audible, 20 dB (A)
- Three speed, DC motor fan
- Low power consumption, only 4 Watts
- Modern design
- Front panel in tempered glass crystal
- Radiant panel of 200Watt as standard
- Pleated stainless steel filters of unlimited duration
- Tangential aluminum fan for greater efficiency
- Infrared remote controller

BSL		12
Total cooling capacity	kW	1,20
Total heating capacity main exchanger	kW	1,45
Air flow rate (min-max)	m³/h	120-225
Electric power absorption (min-max)	watt	4-11
Minimum sound pressure (SPL)	dB(A)	19,1
Width	mm	565
Height	mm	1100
Depth	mm	122
Weight	kg	18
Low consumption DC motor		si
Tangential aluminum fan		si
Remote control		si
LCD display		si
Pleated stainless steel filter		si
Front panel in tempered glass		si
Unit frame in powder-coated steel		si
Supply voltage	V-Hz	220-50

Cooling test conditions: Room:27° C - 47% R.H. Water temp. (in/out):7/12° C - Heating test conditions: Room:20° C. Water temp. in:50. same water flow conditioning  
\*Height without aesthetic feet

# VE: VMI, VMF, OMP, OMI

Range of fan coils,  
equipped with AC or DC Brushless motor

1,4 kW ÷ 9,49 kW



## Technical features

- Structure in galvanized sheet metal with cover coat in prepainted material and ABS details, complete of thermal acoustic insulation.
- Complete with regenerating filter
- Standard natural-discharge condensate collecting tank **(horizontal units only)**.
- Centrifugal fans with 6 speeds, of which 3 are connected in the standard configuration **(no MB)**
- Three-tier copper heat exchange batteries with hydrophilic surface treatment for rapid condensate drainage.
- It is recommended to install the valve kits on each type of system.

## Version MB

- Brushless motor
- Modulation ventilation 0-100%

## Version S

- Version with silent motor, reduced condenser
- Acoustic insulation with reinforced anti-vibration

## Version 4

- Version with second hydronic battery
- For 4-tube systems
- Additional battery for heating only

## Configurations



**VMI** Vertical cabinet with bottom inlet



**OMP** Horizontal cabinet with rear inlet



**VMF** Vertical cabinet with front inlet



**OMI** Horizontal cabinet with bottom inlet

## Versions

### Standard

**VE VMI** Vertical with bottom inlet  
**VE VMF** Vertical with front inlet  
**VE OMP** Horizontal with rear inlet  
**VE OMI** Horizontal with bottom inlet

### Standard with Brushless Motor

**VE VMI MB** Brushless motor, vertical with bottom inlet  
**VE VMF MB** Brushless motor, vertical with front inlet  
**VE OMP MB** Brushless motor, horizontal with rear inlet  
**VE OMI MB** Brushless motor, horizontal with bottom inlet

### Low noise

**VE VMI S** Vertical with bottom inlet  
low noise  
**VE VMF S** Vertical with front inlet  
low noise  
**VE OMP S** Horizontal with rear inlet  
low noise  
**VE OMI S** Horizontal with bottom inlet  
low noise

### Low noise with Brushless Motor

**VE VMI S MB** Brushless motor, vertical with  
bottom inlet low noise  
**VE VMF S MB** Brushless motor, vertical with  
front inlet low noise  
**VE OMP S MB** Brushless motor, horizontal with  
rear inlet low noise  
**VE OMI S MB** Brushless motor, horizontal with  
bottom inlet low noise

Available in 4-pipes version. Check the codes on the price-list.

3 ROWS **												
VE			13	23	33	43	53	63	73	83	93	103
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
	med	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
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
	med	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
	med	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 drop Cooling (*)		kPa	14,5	18,1	20,5	23,0	25,1	26,8	27,2	30,0	31,9	32,4
Pressure drop 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 (*)	max	m³/h	370	400	500	550	670	720	1.000	1.050	1.280	1.310
	med	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 Cooling (*)		l/h	272	362	458	547	679	769	999	1.162	1.363	1.633
Water flow rate Heating (3) (*)		l/h	322	422	514	577	702	812	1.032	1.144	1.333	1.557
Sound pressure (4)	dB(A)		24	25	30	31	26	27	34	35	39	40
			31	31	38	38	33	34	41	41	46	46
			38	38	44	45	37	37	43	45	48	49
Power supply	V~/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Water connections	"G	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Condensing drain ø	mm	20	20	20	20	20	20	20	20	20	20	20
Electric motors	n°	1	1	1	1	1	1	1	1	1	1	1
Power input (*)	W	55	55	85	85	75	75	145	145	175	175	175
Fans	n°	1	1	1	1	2	2	2	2	2	2	2
Energy performance in 4-pipes 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	
Heating capacity (2) (*)	W	940	990	1.590	1.675	2.190	2.275	3.145	3.230	3.995	4.055	
Heating capacity (3) (*)	W	1.880	1.980	3.180	3.350	4.380	4.550	6.290	6.460	7.990	8.110	
Pressure drop (3) (*)	kPa	7,3	8,0	11,7	12,9	21,3	22,9	41,1	43,3	37,7	38,8	
BRUSHLESS **												
Cooling cap. (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
Heating capacity (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	14.300-6.350	15.300-6.780	17.600-7.800
Hot water exchanger (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 water exchanger (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
Air flow	m³/h		537-127		625-153		1.021-215		1.184-306		1.184-306	
Power input (5)	W		9		9		10		11		11	
Sound pressure (5)	dB(A)		23		26		22		24		25	
Power supply	V~/Ph/Hz		230/1/50									
Signal	Vdc		0-10									
Motors	n°		1									
Fans	n°		1	1	1	1	2	2	2	2	2	2
Version S ***												
Sound pressure (4)	dB(A)		10	10	14	14	12	12	17	17	15	15
			11	11	16	16	13	13	19	19	18	18
			16	16	22	22	18	18	25	25	24	24
Version S MB ***												
Sound pressure (4)	dB(A)		10	10	10	10	11	12	11	12	10	10
			17	18	22	22	21	22	26	28	27	28
			30	31	34	36	30	31	35	36	39	40

**Water connections left side**

Note: Air yields and flow rates reported under conditions of a prevalence of 0 Pa. For different useful widths refer to the air flow variation diagrams.

\*\* Data for 2-tube version only. Refer to the product manual for different versions.

\*\*\* Technical data refer to the product manual.

(1) Inlet air temperature: 27°C b.s./19.5°C b.u.

Water inlet/outlet temperature: 7°C / 12°C

(2) Inlet air temperature: 20°C b.s.

Water inlet/outlet temperature: 45°C / 40°C

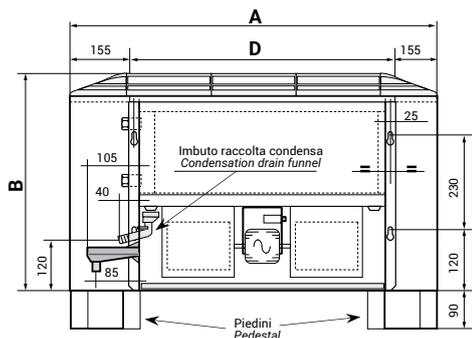
(3) Inlet air temperature: 20°C b.s.

Water inlet/outlet temperature: 70°C / 60°C

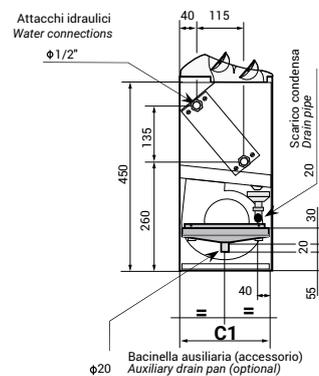
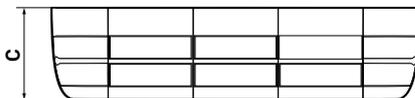
(4) At a distance of 2 m and a reverb time of 0.5 s.

(5) With 3Vdc input signal

(\*) Maximum speed



Left side water sockets



Versioni con mobile  
Versions with cabinet  
B = 520 mm  
C = 220 mm

Versioni senza mobile  
Versions without cabinet  
B1 = 450 mm  
C1 = 215 mm

**Dimensions - With cabinet**

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

\* In horizontal versions the width A is larger than 120 mm

**Dimensions - Naked Version**

VE		13	23	33	43	53	63	73	83	93	103
D*	mm	425	425	625	625	825	825	1.025	1.025	1.225	1.225
C1	mm	215	215	215	215	215	215	215	215	215	215
Weight	kg	11	11,6	14	15	20	21	23,5	25	27,5	29

\* In horizontal versions the width A is larger than 120 mm

**Accessories**



**P** Pedestal (Supplied separately)



**PCPB** Central closing back panel



**PCPF** Central closing back panel



**PCB** Bottom closing panel without grill



**PMP1** Condensate pump (max water flow rate 8 l/h with 0 m.c.a., water flow rate 6,5 l/h with 1 m.c.a., water flow rate 4 l/h with 3 m.c.a., water flow rate 0 l/h with 6 m.c.a.) fitted with alarm contact 8A@250V (suitable for all VERTICAL versions)



**PMP2** Condensate pump (max water flow rate 8 l/h with 0 m.c.a., water flow rate 6,5 l/h with 1 m.c.a., water flow rate 4 l/h with 3 m.c.a., water flow rate 0 l/h with 6 m.c.a.) fitted with alarm contact 8A@250V (suitable for all HORIZONTAL versions)

## Accessories

	<b>VA</b>	Auxiliary drain pan for vertical versions (included in horizontal versions)		<b>CVC</b>	On board mounted electronic control 230Vac with off/summer/winter+3speeds+thermostat with-without valves (Mammoth terminal board already included)
	<b>CVA</b>	OFF/3-speed switch (Mammoth terminal board already included)		<b>CBB</b>	On board brushless control 2/4pipes unit with-without valves (Mammoth terminal board already included). Compatible with TMB or SND-W4.
	<b>CVB</b>	OFF/3-speed switch Winter-Summer switch+Bulb room thermostat (Mammoth terminal board already included) Compatible with TMB.		<b>CVD1</b>	On board control 230 Vac for control 2/4 pipes unit with/without valves (Mammoth terminal board already included). Compatible with TMB or SND-W4.
	<b>TMB</b>	Water low temperature thermostat automatically shuts down the ventilation when the inlet water temperature to the coil is below 32°C in heating mode (Winter mode).		<b>SND-W4</b>	Water temperature probe (type NTC 4700 Ohm @ 25°C) with minimum temperature settable. Cable length 1 meter. Alternative to TMB thermostat.
	<b>SDI.4 X3A</b>	4-output relay board. Suitable for controlling up to 4 3-speed motors. Only for AC motors. Maximum capacity: 4x3 A 230Vac		<b>MOR</b>	"Mammoth" type terminal box included in the case of purchase of the fan coil unit complete with on-board control. To be ordered separately for wall-mounted controls.
	<b>2V2</b>	2-way valve with actuator 230V for 2 pipes units		<b>3V2</b>	3-way valve with actuator 230V for 2 pipes units
	<b>2V4</b>	2-way valve with actuator 230V for 4 pipes units		<b>3V4</b>	3-way valve with actuator 230V heating coil for 4 pipes units
	<b>TEL</b>	Remote control management system. Motherboard + Air sensor + Water sensor - I.R. receiver + I.R. Remote control (control 2-4 pipe units, with/without valves). Fan 7A-230Vac. Valves: 2A-230Vac.		<b>RA</b>	Electrical heater 230V (0,7 kW - 2 kW). Power relay and safety thermostat included. Not available separately.
	<b>RB</b>	Electrical heater 230V (1 kW - 3 kW). Power relay and safety thermostat included. Not available separately.			

## VE: VII, VIF, OIP, OII

Range of built-in fan coils,  
equipped with AC or DC Brushless motor

1,4 kW ÷ 10,7 kW

### Technical features

- Galvanised sheet metal construction, complete with insulation. Complete with regenerable filter
- Standard natural drain condensate tray (**only for horizontal units**).
- Centrifugal type fans with 6 speeds, 3 of which are connected in the standard configuration (**no MB**).
- Three-row heat exchanger coils in copper tubes and aluminium fins with hydrophilic surface treatment for rapid condensate drainage.
- it is recommended to install the valve kits on any type of system.

### MB version

- Brushless motor
- Fan modulation 0-100%.

### S version

- Version with silenced motor, reduced capacitor.
- Thermal-acoustic insulation with reinforced vibration damper

### 4 version

- Version with second hydronic coil



For 4-pipe systems  
Additional coil for heating only

### P version

- Electric AC motor, asynchronous single-phase squirrel cage motor
- TH thermal protection (Klixon)
- Run capacitor always on
- 4 poles, IP42, Class B, double insulation, 230Vac-1Ph-50/60Hz

### Configurations



**VII** Fitted vertical units, bottom inlet



**OIP** Fitted horizontal units, rear inlet



**VIF** Fitted vertical units, front inlet



**OII** Fitted horizontal units, bottom inlet

### Versions

#### Powered

<b>VE VII P</b>	Fitted vertical units, bottom inlet powered
<b>VE VIF P</b>	Fitted vertical units, front inlet powered
<b>VE OIP P</b>	Fitted horizontal units, rear inlet powered
<b>VE OII P</b>	Fitted horizontal units, bottom inlet powered

#### Powered with Brushless Motor

<b>VE VII P MB</b>	Fitted vertical units, bottom inlet powered with brushless motor
<b>VE VIF P MB</b>	Fitted vertical units, front inlet powered with brushless motor
<b>VE OIP P MB</b>	Fitted horizontal units, rear inlet powered with brushless motor
<b>VE OII P MB</b>	Fitted horizontal units, bottom inlet powered with brushless motor

#### Silenced

<b>VE VII S</b>	Fitted vertical units, bottom inlet silenced
<b>VE VIF S</b>	Fitted vertical units, front inlet silenced
<b>VE OIP S</b>	Fitted horizontal units, rear inlet silenced
<b>VE OII S</b>	Fitted horizontal units, bottom inlet silenced

#### Silenced with Brushless Motor

<b>VE VII S MB</b>	Fitted vertical units, bottom inlet silenced with brushless motor
<b>VE VIF S MB</b>	Fitted vertical units, front inlet silenced with brushless motor
<b>VE OIP S MB</b>	Fitted horizontal units, rear inlet silenced with brushless motor
<b>VE OII S MB</b>	Fitted horizontal units, bottom inlet silenced with brushless motor

Available in 4-pipes version. Check the codes on the price-list.

VE: VII, VIF, OIP, OII												
Energy performance in 2-pipe version												
VE			13	23	33	43	53	63	73	83	93	103
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
	med	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
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
	med	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
	med	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 drop Cooling (*)		kPa	14,5	18,1	20,5	23,0	25,1	26,8	27,2	30,0	31,9	32,4
Pressure drop Heating (3) (*)		kPa	15,9	19,2	20,1	20,0	20,9	23,2	22,6	22,6	23,8	22,9
Water flow rate Cooling (*)		l/h	272	362	458	547	679	769	999	1.162	1.363	1.633
Water flow rate Heating (3) (*)		l/h	322	422	514	577	702	812	1.032	1.144	1.333	1.557
Air flow (*)	max	m <sup>3</sup> /h	370	400	500	550	670	720	1.000	1.050	1.280	1.310
	med	m <sup>3</sup> /h	285	308	400	440	590	634	890	935	1.139	1.166
	min	m <sup>3</sup> /h	226	244	305	336	462	497	650	683	870	891
Sound pressure (4)		dB(A)	24	25	30	31	26	27	34	35	39	40
			31	31	38	38	33	34	41	41	46	46
			38	38	44	45	37	37	43	45	48	49
Power supply	V~/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Water connections	"G	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F	1/2" F
Condensing drain ø	mm	20	20	20	20	20	20	20	20	20	20	20
Electric motors	n°	1	1	1	1	1	1	1	1	1	1	1
Power input (*)	W	55	55	85	85	75	75	145	145	175	175	175
Fans	n°	1	1	1	1	2	2	2	2	2	2	2
Maximum useful static pressure (7)	Pa	60	60	60	60	60	60	60	60	60	60	60
Energy performance in 4-pipes 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	
Heating capacity (2) (*)	W	940	990	1.590	1.675	2.190	2.275	3.145	3.230	3.995	4.055	
Heating capacity (3) (*)	W	1.880	1.980	3.180	3.350	4.380	4.550	6.290	6.460	7.990	8.110	
Pressure drop (3) (*)	kPa	7,3	8,0	11,7	12,9	21,3	22,9	41,1	43,3	37,7	38,8	
Energy performance in BRUSHLESS version **												
Cooling cap. (1)	range	W	1.810	2.320	2.830	3.220	4.630	5.070	6.010	6.820	7.440	8.790
Heating capacity (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
Air flow	m <sup>3</sup> /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	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Signal	Vdc	0-10										
Motors	n°	1										
Fans	n°	1	1	1	1	2	2	2	2	2	2	2
Maximum useful static pressure (7)	Pa	70	70	70	70	70	70	70	70	70	70	70
Energy performance in BRUSHLESS 4-pipe version												
Hot water exchanger (2)	W	895	938	1.479	1.556	2.087	2.163	2.959	3.057	3.633	3.687	
Hot water exchanger (3)	W	1.800	1.880	2.960	3.120	4.180	4.330	5.920	6.120	7.270	7.370	

**Left-hand side water connections**

Note: Yields and air flow rates refer to 0 Pa head conditions. For different useful heads refer to air flow rate variation diagrams.

\*\* Data referring to the 2-pipe silenced version only. For different versions refer to the product manual.

(1) Inlet air temperature: 27°C b.s./19.5°C b.u.

Inlet/outlet water temperature: 7°C / 12°C

(2) Inlet air temperature: 20°C b.s.

Inlet / outlet water temperature: 45°C / 40°C

(3) Inlet air temperature: 20°C b.s.

Inlet / outlet water temperature: 70°C / 60°C

(4) At a distance of 2 m and reverberation time 0.5 s.

(5) Rated power consumption

(6) Version 4

(7) Refer to product manual for yields.

(\*) Maximum speed

## VE: VII, VIF, OIP, OII version P

## Energy performance in 2-pipe powered version

VE			13	23	33	43	53	63	73	83	93	103
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
	med	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
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
	med	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
	med	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 drop Cooling (*)		kPa	14.7	19.4	21.6	23.0	25.1	26.5	27.5	30.3	33.7	34.6
Pressure drop Heating (3) (*)		kPa	18.1	23.0	23.8	22.3	23.4	25.8	25.6	25.6	28.0	27.4
Water flow rate Cooling (*)		l/h	273	375	471	547	679	767	1.006	1.168	1.400	1.689
Water flow rate Heating (3) (*)		l/h	344	463	560	611	742	856	1.098	1.214	1.447	1.702
Air flow (*)	max	m <sup>3</sup> /h	410	460	570	600	730	780	1.100	1.150	1.450	1.500
	med	m <sup>3</sup> /h	360	400	540	560	625	670	990	1.040	1.290	1.340
	min	m <sup>3</sup> /h	280	310	480	500	475	515	750	790	990	1.020
Sound pressure (4)		dB(A)	29	30	41	42	25	27	37	38	43	44
			36	38	44	45	32	34	43	44	44	49
			39	42	45	47	37	39	47	48	51	52
Power supply	V~/Ph/Hz		230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Water connections		"G	1/2" F									
Condensing drain ø		mm	20	20	20	20	20	20	20	20	20	20
Electric motors		n°	1	1	1	1	1	1	1	1	1	1
Power input (*)		W	55	55	125	125	115	115	195	195	230	230
Fans		n°	1	1	1	1	2	2	2	2	2	2
Maximum useful static pressure (7)		Pa	87	87	105	105	100	100	103	103	115	115

## Energy performance in 4-pipes powered 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
Heating capacity (2) (*)	W	1.009	1.090	1.739	1.820	2.345	2.405	3.347	3.460	4.350	4.450
Heating capacity (3) (*)	W	2.010	2.180	3.470	3.640	4.690	4.810	6.690	6.910	8.700	8.900
Pressure drop (3) (*)	kPa	8,3	9,7	13,9	15,3	24,4	25,6	46,5	49,6	44,7	46,8

## Energy performance in BRUSHLESS powered version \*\*

Cooling cap. (1)	range	W	1.670	2.220	2.830	3.280	4.310	4.880	6.010	6.970	8.470	10.210
Heating capacity (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
Air flow		m <sup>3</sup> /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	13	16	16	16	16	17	17	20	20
			29	30	33	35	29	31	36	37	43	44
			40	43	47	48	42	44	48	49	52	53
Power supply	V~/Ph/Hz		230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Signal		Vdc	0-10									
Motors		n°	1	1	1	1	1	1	1	1	1	1
Fans		n°	1	1	1	1	2	2	2	2	2	2
Maximum useful static pressure (7)		Pa	103	103	111	112	120	120	137	138	174	175

## Energy performance in BRUSHLESS 4-pipes powered version

Hot water exchanger (2)	W	1.052	1.107	1.822	1.861	2.573	2.635	3.440	3.542	4.552	4.689
Hot water exchanger (3)	W	2.100	2.210	3.640	3.720	5.070	5.270	6.880	7.080	9.100	9.370

## Left-hand side water connections

Note: Yields and air flow rates refer to 0 Pa head conditions. For different useful heads refer to air flow rate variation diagrams.

\*\* Data referring to the 2-pipe silenced version only. For different versions refer to the product manual.

(1) Inlet air temperature: 27°C b.s./19.5°C b.u.

Inlet/outlet water temperature: 7°C / 12°C

(2) Inlet air temperature: 20°C b.s.

Inlet / outlet water temperature: 45°C / 40°C

(3) Inlet air temperature: 20°C b.s.

Inlet / outlet water temperature: 70°C / 60°C

(4) At a distance of 2 m and reverberation time 0.5 s.

(5) Rated power consumption

(6) Version 4

(7) Refer to product manual for yields.

(\*) Maximum speed

VE: VII, VIF, OIP, OII version S												
Energy performance in 2-pipe silenced version												
VE			13	23	33	43	53	63	73	83	93	103
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
	med	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
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
	med	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
	med	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 drop Cooling (*)		kPa	6,2	7,9	9,4	10,6	11,6	12,4	12,2	13,8	12,0	12,7
Pressure drop Heating (3) (*)		kPa	7,1	8,7	9,8	9,8	10,3	11,4	10,8	11,1	9,4	9,5
Water flow rate Cooling (*)		l/h	177	239	311	372	463	525	671	789	836	1.025
Water flow rate Heating (3) (*)		l/h	215	286	359	404	492	569	713	800	836	1.001
Air flow (*)	max	m <sup>3</sup> /h	200	220	290	320	390	420	570	610	630	670
	med	m <sup>3</sup> /h	150	170	220	240	310	340	450	480	480	510
	min	m <sup>3</sup> /h	120	140	190	210	280	310	400	430	420	450
Sound pressure (4)		dB(A)	10	10	14	14	12	12	17	17	15	15
			11	11	16	16	13	13	19	19	18	18
			16	16	22	22	18	18	25	25	24	24
Power supply	V~/Ph/Hz		230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Water connections	"G		1/2" F									
Condensing drain ø	mm		20	20	20	20	20	20	20	20	20	20
Electric motors	n°		1	1	1	1	1	1	1	1	1	1
Power input (*)	W		55	55	80	80	80	80	145	145	180	180
Fans	n°		1	1	1	1	2	2	2	2	2	2
Maximum useful static pressure (7)	Pa		60	60	60	60	63	63	75	75	78	78
Energy performance in 4-pipes 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
Heating capacity (2) (*)	W		628	670	1.115	1.166	1.526	1.604	2.179	2.256	2.517	2.595
Heating capacity (3) (*)	W		1.260	1.340	2.230	2.340	3.060	3.210	4.360	4.520	5.040	5.190
Pressure drop (3) (*)	kPa		3,3	3,7	5,7	6,3	10,4	11,4	19,7	21,1	15,0	15,9
Energy performance in BRUSHLESS silenced version **												
Cooling cap. (1)	range	W	1.430	1.910	2.380	2.820	3.600	4.070	5.230	6.070	6.860	8.240
Heating capacity (2)	range	W	1.769	2.332	2.79189	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
Air flow	m <sup>3</sup> /h		340	370	450	490	625	670	915	960	1.100	1.130
Power input (5)	W		55	55	65	65	85	85	90	90	90	90
Sound pressure (5)	dB(A)		10	10	10	10	11	12	11	12	10	10
			17	18	22	22	21	22	26	28	27	28
			30	31	34	36	30	31	35	36	39	40
Power supply	V~/Ph/Hz		230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50
Signal	Vdc							0-10				
Motors	n°							1				
Fans	n°		1	1	1	1	2	2	2	2	2	2
Maximum useful static pressure (7)	Pa		72	72	79	80	85	85	86	86	73	83
Energy performance in BRUSHLESS 4-pipes silenced version												
Hot water exchanger (2)	W		895	938	1.479	1.556	2.087	2.163	2.959	3.057	3.633	3.687
Hot water exchanger (3)	W		1.800	1.880	2.960	3.120	4.180	4.330	5.920	6.120	7.270	7.370

**Left-hand side water connections**

Note: Yields and air flow rates refer to 0 Pa head conditions. For different useful heads refer to air flow rate variation diagrams.

\*\* Data referring to the 2-pipe silenced version only. For different versions refer to the product manual.

(1) Inlet air temperature: 27°C b.s./19.5°C b.u.

Inlet/outlet water temperature: 7°C / 12°C

(2) Inlet air temperature: 20°C b.s.

Inlet / outlet water temperature: 45°C / 40°C

(3) Inlet air temperature: 20°C b.s.

Inlet / outlet water temperature: 70°C / 60°C

(4) At a distance of 2 m and reverberation time 0.5 s.

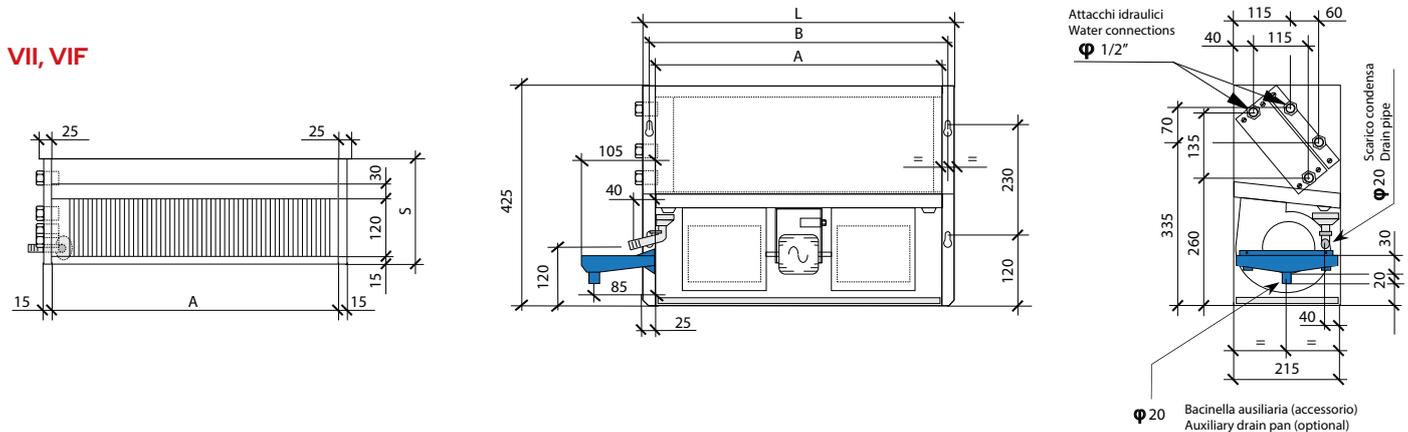
(5) Rated power consumption

(6) Version 4

(7) Refer to product manual for yields.

(\*) Maximum speed

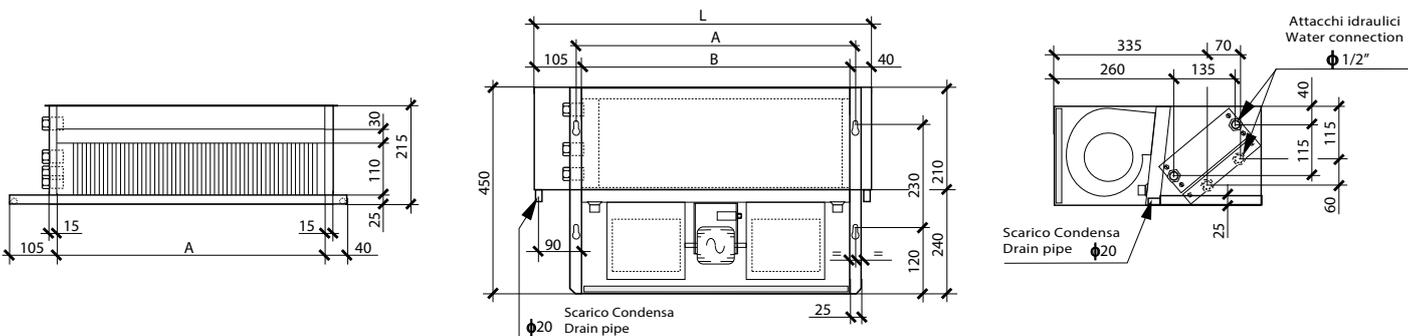
VII, VIF



Dimensions 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

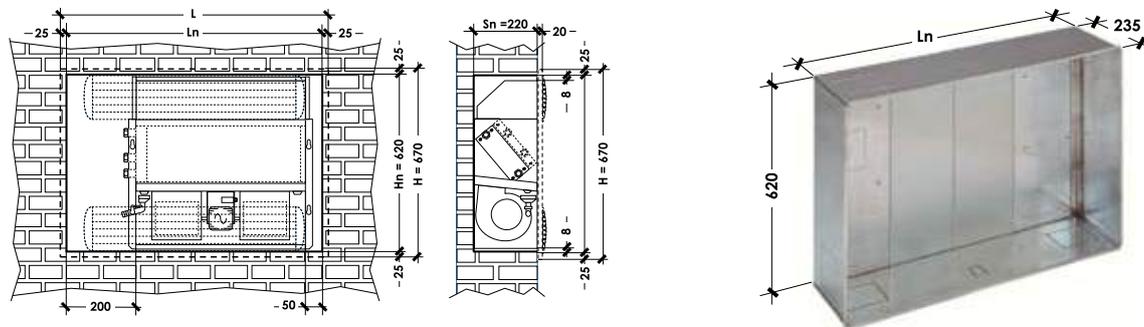
OII, OIP



Dimensions horizontal versions

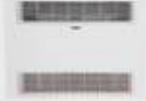
VE		13	23	33	43	53	63	73	83	93	103
A	mm	400	400	600	600	800	800	1.000	1.000	1.200	1.200
B	mm	425	425	625	625	825	825	1.025	1.025	1.225	1.225
L	mm	545	545	745	745	945	945	1.145	1.145	1.345	1.345

FTI



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

**Accessories**

	<b>PA</b>	Suction plenum with circular connections							
				Size	13/23	33/43	53/63	73/83	93/103
				No. of couplings fitted with concentric collars Ø 200/180/160 mm	1	2	2	3	4
	<b>PM</b>	Outlet plenum with circular connections							
	<b>P1</b>	Aesthetic panel in pre-painted sheet metal complete with suction and delivery grille.		<b>P2</b>	Aesthetic panel in pre-painted sheet metal complete with suction and delivery grille. Equipped with control access flaps				
	<b>PMI</b>	Plenum 90° outlet		<b>FTI</b>	Galvanised sheet metal installation frame. Suitable for installation niche				
	<b>PMP1</b>	Condensate lifting pump. Max. water flow rate 8 l/h with 0 m.c.a., water flow rate 6.5 l/h with 1 m.c.a., water flow rate 4 l/h with 3 m.c.a., water flow rate 0 l/h with 6 m.c.a.. Equipped with 8A@250V alarm contact (suitable for all VERTICAL versions)		<b>PMP2</b>	Condensate lifting pump. Max. water flow rate 8 l/h with 0 m.c.a., water flow rate 6.5 l/h with 1 m.c.a., water flow rate 4 l/h with 3 m.c.a., water flow rate 0 l/h with 6 m.c.a.. Equipped with 8A@250V alarm contact (suitable for all HORIZONTAL versions)				
	<b>TMB</b>	Bimetal minimum thermostat: automatically stops ventilation if the temperature of the water entering the coil drops below 32°C in heating mode (winter).		<b>SND-W4</b>	Water temperature probe (type NTC 4700 Ohm@25°C) with adjustable minimum, cable length 1 m. Alternative to TMB thermostat.				
	<b>SDI.4 X3A</b>	4-output relay board. Suitable for controlling up to 4 3-speed motors. Only for AC motors. Maximum capacity: 4x3 A 230Vac		<b>MOR</b>	"Mammoth" type terminal box included in the case of purchase of the fan coil unit complete with on-board control. To be ordered separately for wall-mounted controls.				
	<b>2V2</b>	2-way valves for 2-pipe system, with servo control 230V		<b>3V2</b>	3-way valves for 2-pipe system, with 230V servo control				
	<b>2V4</b>	2-way valves for 4-pipe system, with 230V servo control		<b>3V4</b>	3-way valves for 4-pipe system, with 230V servo control				
	<b>TEL</b>	System for management with remote control. Motherboard+Air probe+Water probe+R.i.receiver+Remote control (2/4 pipe management, with/without valves). Fan 7A-230Vac. Valves: 2A-230Vac.		<b>RA</b>	230 V electric heater (0.7 kW - 2 kW). Power relay and safety thermostat included. Cannot be ordered separately.				

# MI A3

## Hydronic Highwall

2,7 kW ÷ 4,4 kW

The MAXA hydronic high wall is designed to meet the demanding requirements for efficiency, quiet operation and good looks. The microprocessor assures accurate environmental control. 3-way valve on board.

Unit in A.b.s. with high mechanical characteristics and resistance to ageing; DC Brushless fan motor, the water coil has a large heat transfer surface is equipped with purge air valve and purge water valve; equipped with boot deflector blades and independent directional vanes, supply air can automatically be distributed and customized to direct the air; all function controlled by the LCD remote control handset unit; cool, heat, three fan speeds and auto mode; manual-restart, timer function

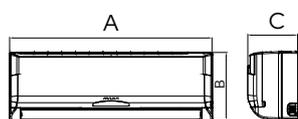


### As A Standard

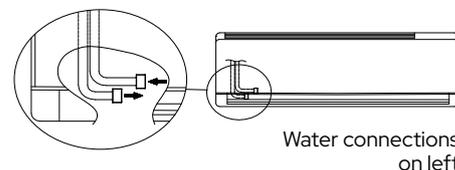
- Three-way diverter valve 230 V, with compact electric actuator, normally closed and equipped with protection, air purge valve, LCD remote control, clean contact for remote ON-OFF, modbus input, collection basin and condensate drain.

### Micro Limit Switch

- The unit is equipped with a "micro limit switch" located on the three-way diverting valve. This microswitch is connected to a special terminal board from which the signal can be used for various purposes. In particular, this free contact is useful for creating plant automation systems.



Dimensions		26A3	35A3	42A3
A	mm	915	915	1072
B	mm	290	290	315
C	mm	230	230	230



Water connections on left

MI A3		26A3	35A3	42A3
(1) Cooling capacity	kW	2,7/2,59/2,39	3,81/3,3/2,88	4,47/3,98/3,48
(1) Cooling capacity	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	m³/h	0,48/0,46/0,42	0,67/0,57/0,51	0,77/0,68/0,61
Pressure drop water	kPa	31,61/28,63/25,36	56,75/41,23/33,02	41,17/33,54/27,05
(2) Heating capacity	kW	2,94/2,8/2,58	4,3/3,65/3,09	4,84/4,23/3,62
(2) Heating capacity	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	m³/h	0,51/0,49/0,46	0,73/0,64/0,56	0,84/0,73/0,64
Pressure drop water	kPa	32,66/34,89/30,24	51,86/47,53/35,69	36,82/33,83/26,26
Absorbed current	A	0,2	0,4	0,3
(3) Press. sonora / Sound pressure				
MAX - MED - MIN	dB(A)	32/30/27	45/39/35	38/34/30
Water connections	Ø	3/4"	3/4"	3/4"
Weight	kg	12,7	12,7	15,1
Power supply	V~/Ph/Hz		230/1/50	
Air flow	m³/h	492/454/400	825/689/590	862/741/634
Coil				
Rows		2	2	2
Max. working-pressure	MPa		1.6	
Diameter	mm		Ø7	
Condensing drain	mm		ODØ20	

It not fitted with condensate pump.

(1) Cooling capacity: Entering air temperature: 27°C d.b. / 19°C w.b. Max speed  
In/Out water temperature: 7°C / 12°C Max speed

(2) Heating capacity: Entering air temperature: 20°C d.b. Max speed

In/Out water temperature: 45°C / 40°C Max speed

(3) Noise is tested in semi-anechoic test room.

# HCA1 HCA1/4

## DC brushless hydronic cassettes

2,0 kW÷6,1 kW

MAXA hydronic cassettes with brushless DC motor are designed to fully meet efficiency requirements, silence and aesthetics required by the market.

The microprocessor control ensures an accurate comfort in the environment. The modbus input allows a quick match to external BMS systems.

The small dimensions meet the installation requirements in the suspended ceilings thanks to the reduced measures of 57 x 57 cm or 84 x 84 cm in the more powerful versions.



### Unit composition

- Finned batteries for heat exchange with high efficiency and low pressure drop.
- Internal insulation with closed cells expanded enough to limit heat dispersion and noise emissions to a minimum.
- Automatic fins adjustment.
- Build-in Drain water pump for lifting the condensing up to a maximum of 500 mm.

### KIT VALVOLE

- 3V2C** 2 pipes 3 way valve kit (HCA 22-29-35-42)
- 3V2CG** 2 pipes 3 way valve kit (Necessary for HCA 60)
- 3V4C** 4 pipes 3 way valve kit (HCA 22-35-50)
- 3V4CG** 4 pipes 3 way valve kit (Necessary for HCA 60)

### Kit valves for systems with modulating pump

- 2V2C** 2 pipes 2 way valve kit (HCA 22-29-35-42)
- 2V2CG** 2 pipes 2 way valve kit (HCA 60)
- 2V4C** 4 pipes 2 way valve kit (HCA 35-50)
- 2V4CG** 4 pipes 2 way valve kit (HCA 60)

KIT for 3-way / 2-WAY valve

The kit, necessary for size 60, is composed by:

- a) n° 2 nipples / n° 1 nipples
- b) n° 4 o-ring / n° 2 o-ring
- c) n° 2 copper joints / n° 1 copper joints
- d) n° 13 way valve - 4 connections / n° 12 way valve - 2 connections
- e) n° 1 ON / OFF actuators / n° 1 ON / OFF actuators



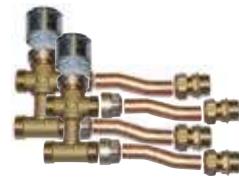
2V4C/2V4CG



3V4C



3V2C/3V2CG



3V4CG

### Accessories

#### WRC11

Multi functions accessory compact wired controller

#### WRC16

It can connect up to 16 indoor units with a single wire controller through XYE ports

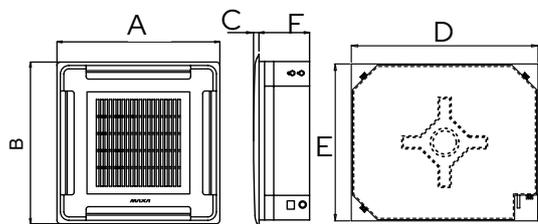
### Versions

#### HCA1

Cassette for 2-pipe systems with electronic control and wireless controller

#### HCA1/4

Cassette for 4-pipe systems with electronic control and wireless controller



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

HCA1		22	29	35	42	60
(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
	W	2.240	2.610	4.630	4.950	6.270
(2) Heating capacity	BTU/h	7.645	8.908	15.802	16.894	21.400
	m³/h	0,35	0,53	0,7	0,75	1,1
(2) Power input	W	5	15	28	33	76
Sound pressure max - med - min (3)	dB(A)	39/33/27	39/33/27	42/36/30	43/38/32	44/40/34
Sound power max - med - min (3)	dB(A)	51/45/39	51/45/39	54/48/42	55/50/44	-
Air flow	m³/h	322	535	719	781	1229
Fan type	centrifugal blade forward					
No. of rows	2					
Electric motor	DC					

HCA1/4		35	50	60
(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
	W	5.520	5.970	7.660
(2) Heating capacity	BTU/h	18.840	20.376	26.144
	m³/h	0,42	0,46	0,73
(2) Power input	W	28	32	61
Sound pressure max - med - min (3)	dB(A)	42/35/30	44/39/31	44/39/33
Air flow	m³/h	723	731	1389
Fan type	centrifugal blade forward			
No. of rows (cold/hot)	4/3		4/3	9/3
Electric motor	DC			

- (1) Entering air temperature: 27°C d.b./19,5°C w.b. maximum speed  
In/Out water temperature: 7°C / 12°C maximum speed
- (2) Entering air temperature: 20°C d.b. maximum speed  
In water temperature: 50°C maximum speed
- (3) At a distance of 1 m and with reverberation time of 0.5 s. maximum speed

# HCN

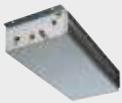
## Terminal units slim/reduced with Brushless DC and AC Asynchronous motor

6 kW÷20 kW



- Self-supporting structure in galvanised sheet metal with thermal-acoustic insulation (S version) or 20 mm double sandwich panel with pre-painted white RAL 9002 external sheet metal (D version); with ceiling/wall fixing holes, small size and optimised overall dimensions.
- Double-sloped condensate drip tray.
- High-efficiency heat exchange coil in copper tube and aluminium fins, standard connections on the right side.
- Double-intake centrifugal fans with plastic fans with forward curved blades, wing profile, large diameter, mounted on elastic supports and shock absorbers.
- The unit is equipped with an IP20 "Mammoth" type terminal box mounted on the outside of the unit.
- The HCN series ductable units are supplied without an air filter. A wide range of filters is available in the accessories section.

### Versions



**S-OIP** Single panel, horizontal naked terminal, rear air intake



**S-OII** Single panel, horizontal naked terminal, bottom air intake



**D-OIP** Double panel, horizontal naked terminal, rear air intake



**D-OII** Double panel, horizontal naked terminal, bottom air intake

### Versions

**S-OIP** Single panel, horizontal naked terminal, rear air intake

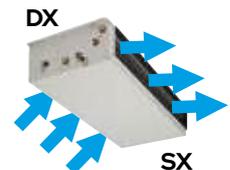
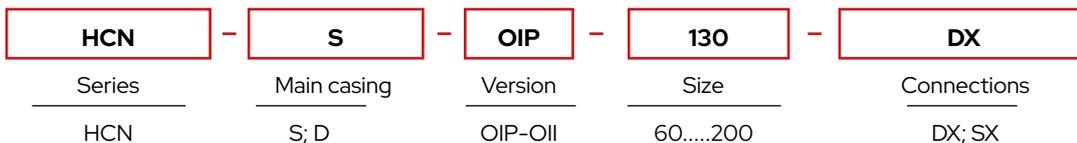
**D-OIP** Double panel, horizontal naked terminal, rear air intake

**S-OII** Single panel, horizontal naked terminal, bottom air intake

**D-OII** Double panel, horizontal naked terminal, bottom air intake

### Nomenclature

When ordering, always specify complete model like the example.



**HCN-S-OIP 130-DX**

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
Heating capacity (2) (*)	W		6.550	7.900	8.300	11.700	14.400	15.650	15.200	19.400	20.400
Heating capacity (3) (*)	W		13.100	15.800	16.600	23.400	28.800	31.300	30.400	38.800	40.800
Portata d'aria (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 power consumption	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
N° motors / n° fans			1 / 1	1 / 1	1 / 1	1 / 2	1 / 2	1 / 2	1 / 3	1 / 3	1 / 3
Maximum useful static pressure	Pa		148	152	152	138	142	142	132	136	136
n° of rows	n°		3	3	4	3	3	4	3	3	4
Mixed battery hot/cold	hydraulic connection	ø	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 (4)	m³/h		1.050	1.140	-	2.000	2.170	-	2.670	2.930	-
Maximum useful static pressure	Pa		148	152	-	138	142	-	134	138	-

Note: Yields and air flow rates refer to the AC motor version, at 0 Pa head conditions. For different useful heads refer to air flow rate variation diagrams.

(1) Inlet air temperature: 27°C b.s./19.5°C b.u.

Inlet/outlet water temperature: 7°C / 12°C

(2) Inlet air temperature: 20°C b.s.

Inlet / outlet water temperature: 45°C / 40°C

(3) Inlet air temperature: 20°C b.s.

Inlet / outlet water temperature: 70°C / 60°C

(4) Nominal values measured with box ref. standards AMCA210-74 and duct + diaphragm ref. standards CNR-UNI10023

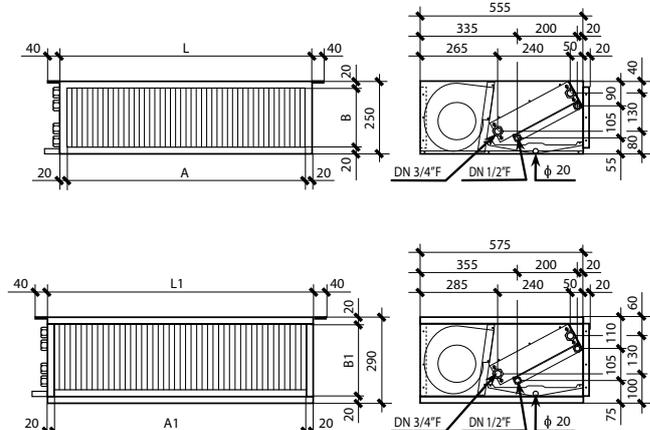
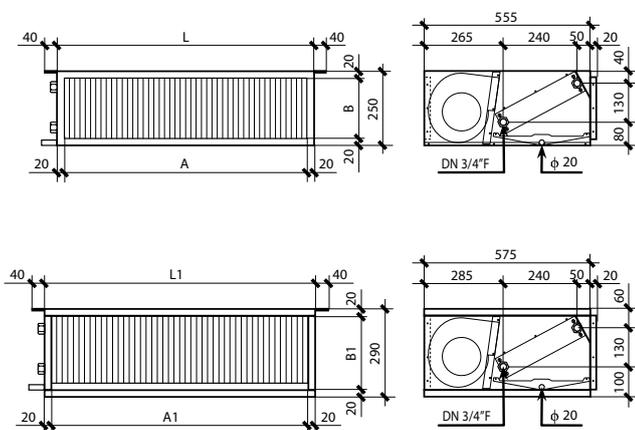
(5) In free field, distance 3 m. Values calculated from sound power measured in reverberation chamber ref. standards ISO3740 - ISO3742

(1)(2)(3)(4)(5) Nominal technical data ref. air flow rate (4) at max. speed and free field unit

(\*) Maximum speed

DN=Nominal diameter; F=Female gas connections

**Hot water exchanger**



**Version "S"**

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

**Version "D"**

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

**Version "S" - Hot water exchanger**

HCN		60	75	103	130	136	170
L	mm	800	800	1.200	1.200	1.600	1.600
A	mm	760	760	1.160	1.160	1.560	1.560
B	mm	210	210	210	210	210	210
Weight	kg	36	37	51	53	67	69

**Version "D" - Hot water exchanger**

HCN		60	75	103	130	136	170
L1	mm	840	840	1.240	1.240	1.640	1.640
A1	mm	800	800	1.200	1.200	1.600	1.600
B1	mm	250	250	250	250	250	250
Weight	kg	50	51	69	71	89	91

# HCNP

## Terminal units slim/reduced with Brushless DC and AC Asynchronous motor, powered

6,8 kW÷12 kW



- Self-supporting structure in galvanised sheet metal with thermal-acoustic insulation (S version) or 20 mm double sandwich panel with pre-painted white RAL 9002 external sheet metal (D version); with ceiling/wall fixing holes, small size and optimised overall dimensions.
- Double-sloped condensate drip tray.
- High-efficiency heat exchange coil in copper tube and aluminium fins, standard connections on the right side.
- In the HCN P series, double-intake centrifugal fans with plastic fans with forward curved blades, wing profile, large diameter, mounted on elastic supports and shock absorbers, are equipped with higher power motors to ensure higher useful static pressures.
- The unit is equipped with an IP20 'Mammoth' type terminal box mounted on the outside of the unit.
- The HCN P series ductable units are supplied without an air filter. A wide range of filters is available in the accessories section.

### Versions



**S-OIP**

Single panel, horizontal naked terminal, rear air intake



**S-OII**

Single panel, horizontal naked terminal, bottom air intake



**D-OIP**

Double panel, horizontal naked terminal, rear air intake



**D-OII**

Double panel, horizontal naked terminal, bottom air intake

### Versioni

**S-OIP**

Singolo pannello, orizzontali da incasso ripresa posteriore

**S-OII**

Singolo pannello, orizzontali da incasso ripresa inferiore

**D-OIP**

Doppio pannello, orizzontali da incasso ripresa posteriore

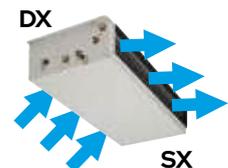
**D-OII**

Doppio pannello, orizzontali da incasso ripresa inferiore

### Nomenclature

When ordering, always specify complete model like the example.

<b>HCNP</b>	-	<b>S</b>	-	<b>OIP</b>	-	<b>120</b>	-	<b>DX</b>
Series		Main casing		Version		Size		Connections
HCNP		S; D		OIP-OII		68...120		DX; SX



**HCNP-S-OIP 120-DX**

HCNP			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
Heating capacity (2) (*)		W	7.600	9.450	10.000	14.200
Heating capacity (3) (*)		W	15.200	18.900	20.000	28.400
Air flow (4)		m³/h	1.350	1.500	1.450	2.750
Sound pressure Min-Med-Max (7)		dB(A)	34-43-49	35-44-50	35-44-50	37-48-51
Nominal power consumption		W	270	270	270	570
Rated current		A	1,25	1,25	1,25	2,70
N° motors / n° fans			1/1	1/1	1/1	1/2
Maximum useful static pressure		Pa	184	194	194	182
Mixed battery hot/cold	n° of rows	n°	3	3	4	3
	hydraulic connection	∅	3/4" F	3/4" F	3/4" F	3/4" F
	water content	L	1,95	1,95	2,60	2,86

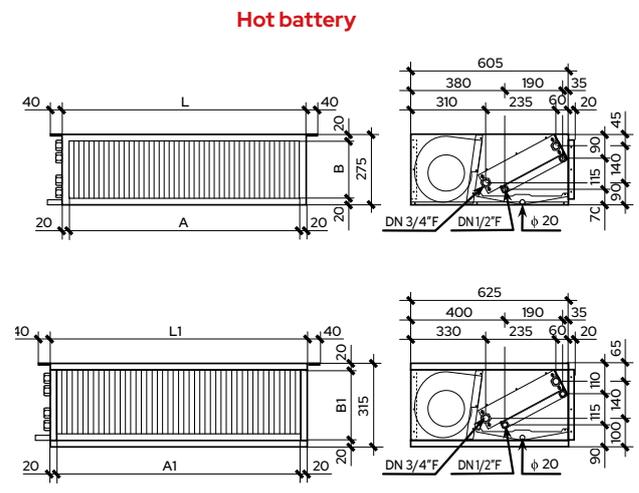
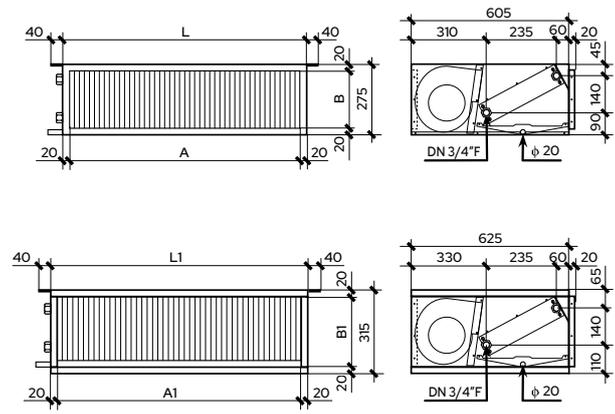
**Heat outputs in 4-pipe version (HCNP + BC)**

HCNP			68	86	101	120
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 (4)		m³/h	1.270	1.400	2.570	2.800
Maximum useful static pressure		Pa	186	196	184	192

Note: Yields and air flow rates refer to the AC motor version, at 0 Pa head conditions. For different useful heads refer to air flow rate variation diagrams.

- (1) Inlet air temperature: 27°C b.s./19.5°C b.u.  
Inlet/outlet water temperature: 7°C / 12°C
- (2) Inlet air temperature: 20°C b.s.  
Inlet / outlet water temperature: 45°C / 40°C
- (3) Inlet air temperature: 20°C b.s.  
Inlet / outlet water temperature: 70°C / 60°C
- (4) Nominal values measured with box ref. standards AMCA210-74 and duct + diaphragm ref. standards CNR-UNI10023

- (7) In free field, distance 3 m. Values calculated from sound power measured in reverberation chamber ref. standards ISO3740 - ISO3742
- (1)(2)(3)(4)(5)(6) Nominal technical data ref. air flow rate (4) at max. speed and free field unit
- (\*) Maximum speed  
DN=Nominal diameter; F=Gas connections female



**"S" version**

HCNP		68	86	101	120
L	mm	800	800	800	1.200
A	mm	760	760	760	1.160
B	mm	235	235	235	235

**"D" version**

HCNP		68	86	101	120
L1	mm	840	840	840	1.240
A1	mm	800	800	800	1.200
B1	mm	275	275	275	275

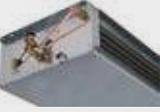
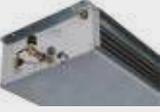
**Version "S" - Hot battery**

HCNP		68	86	101	120
L	mm	800	800	800	1.200
A	mm	760	760	760	1.160
B	mm	235	235	235	235

**Version "D" - Hot battery**

HCNP		68	86	101	120
L1	mm	840	840	840	1.240
A1	mm	800	800	800	1.200
B1	mm	275	275	275	275

**HCN, HCNP: Fitted accessories**

	<b>BC</b>	Auxiliary heating coil, 2 rows		<b>RE</b>	Electrical heater integrated inside the units + "TS" safety thermostat (without power relay) 230V/50Hz/1Ph
	<b>MOR TMB</b>	Mammoth type terminal board + water low temperature thermostat. Tset 32°C. All HCN units are supplied with standard Mammoth type terminal board, without thermostat.		<b>TEL</b>	Remote control management system .Motherboard + Air sensor + Water sensor - I.R. receiver + I.R. Remote control (control 2-4 pipe units, with/without valves). Fan 7A-230Vac. Valves: 2A-230Vac.
	<b>SND W4</b>	Water temperature probe (type NTC 4700 Ohm @ 25°C) with minimum temperature settable. Cable length 1 meter. Alternative to TMB thermostat.		<b>SFA-S SFA-D</b>	Flat air filter (not ductable), EU3 filtering level. (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)
	<b>MB</b>	Brushless motor with continuous variation 0-100% of the air flow (signal 0..10 Vdc) Digital wall thermostat is an essential accessory for the operation of a unit with Brushless motor. Should not be combined with accessory TEL		<b>SFC-S SFC-D</b>	Ductable air filter section + flat air filter, EU3 filtering level (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)
	<b>3V-2,5 3V-4 3V-6</b>	3-way valve with actuator 230V for 2 pipes units		<b>3VM-2,5 3VM-4 3VM-6</b>	3-way valve with actuator 24Vac for 2 pipes units, Modulating signal 0-10V
	<b>2V-2,5 2V-4 2V-6</b>	2-way valve with actuator 230V for 2 pipes units		<b>2VM-2,5 2VM-4 2VM-6</b>	2-way valve with actuator 24Vac for 2 pipes units, Modulating signal 0-10V
	<b>3VC-2,5 3VC-4 3VC-6</b>	3-way valve for heating coil (4-pipe unit) with actuator 230V		<b>3VCM-2,5 3VCM-4 3VCM-6</b>	3-way valve for heating coil (4-pipe unit) with actuator 24Vac, Modulating signal 0-10V

Quadro elettrico per sezione elettrica 230Vac  
(BOX+magnetotermico+relè)

	<b>QR1</b>	Modello	Potenza	Compatibilità HCN	Compatibilità QR1
		RE0.7-24	0,7 kW / 3,1 A	Tutte le taglie	QR1-0,7
		RE1.0-24	1,0 kW / 4,4 A	Tutte le taglie	QR1-1,4
		RE1.5-24	1,5 kW / 6,6 A	Tutte le taglie	QR1-2,3
		RE2.0-24	2,0 kW / 8,7 A	Tutte le taglie	QR1-2,3
		RE3.0-24	3,0 kW / 13,1 A	HCN 103-130-150-136-170-200	QR1-3,7

## HCN, HCNP: Fitted accessories

Ductable air filter section + HIGH EFFICIENCY ondulated air filter H=100mm, EU5 filtering level (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)



**SFD-S**  
**SFD-D**

Air press. 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

Power electric board for heaters 230Vac (BOX+magnetothermic+relè)



**QR1**

Model	Power	HCN Compatibility	QR1 Compatibility
RE0.7-24	0,7 kW / 3,1 A	All size	QR1-0,7
RE1.0-24	1,0 kW / 4,4 A	All size	QR1-1,4
RE1.5-24	1,5 kW / 6,6 A	All size	QR1-2,3
RE2.0-24	2,0 kW / 8,7 A	All size	QR1-2,3
RE3.0-24	3,0 kW / 13,1 A	HCN 103-130-150-136-170-200	QR1-3,7



**2VC-2,5** 2-way valve for heating coil  
**2VC-4** (4-pipe unit) with actuator  
**2VC-6** 230V

**2VCM-2,5**  
**2VCM-4**  
**2VCM-6**

2-way valve for heating coil (4-pipe unit) with actuator 24Vac, Modulating signal 0-10V

Note: Every single kit includes one valve and one actuator. In case of 4-pipe system must be provided n° 2 valves. For example, with ducted 4-pipe, in the case of 3-way valves, power supply 230 V: 3V + 3VC

### 3/2 way valve characteristics - RECOMMENDED MATCHINGS

HCN	60	75	86	103	130	150	136	170	200
Valve characteristics	Kvs 2,5		Kvs 4			Kvs 6			
User side connection					DN 3/4" M				
Nominal pressure					PN 16 bar				

**HCN, HCNP: Loose accessories**



**PMP**

Condensate pump provided with 8A (250V)



**MS**

Motor "230Vac on-off" suitable for air damper



**SDI.4X3A**

Card with 4 by 3A output (suitable to control up to max No. 4 3-Speed 3A motors ; ex. No. 4 small fan-coils)  
Contatti-Contacts: 4x 3(0,3)A 230Vac



**SDI.2X10A**

Card with 2 by 10A output (suitable to control up to max No. 2 3-Speed motors of 10A ; ex. No. 1 large unit with 2 motors)  
Contatti-Contacts: 2x 10A-230Vac



**S2S-S  
S2S-D**

Closed section + 2 Regulation/adjustment louvers (1 louver below + 1 louver on the rear side) - Louvers without controls - can be either manual or motorized control (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)



**SSL-S  
SSL-D**

Labyrinth noise level attenuator section, suitable for both air intake/supply outlets (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)



**Scm-S  
Scm-D**

Steel section with spigots "Ø" with variable diameter made of plastic material, external insulation (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)

N° and Ø spigots

HCN	60	75	86	103	130	150	136	170	200
SCM n° x Ø	3xØ200/180/160			5xØ200/180/160			6xØ200/180/160		



**SSM-S  
SSM-D**

External/Internal mixing section "external air 0-33% - internal air 100-67% or vice versa (coupled louvers with manual controls - can be motorized) (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)

Air pressure drop

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 drain pan made of galvanized steel- thermal insulation

(1) Each control panel can control only one unit. To controll more units see SDI accessory

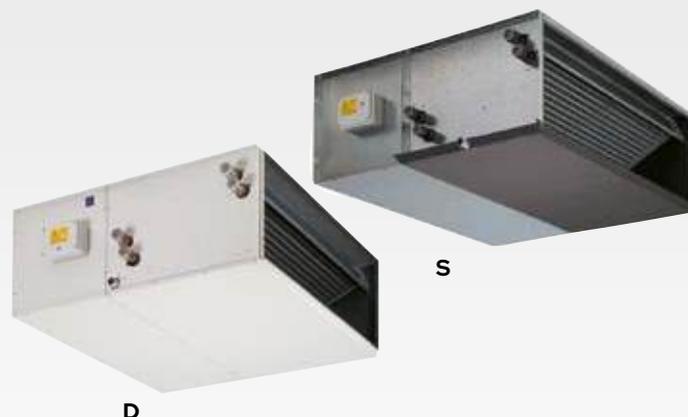
# HCNA

## Medium ductable terminal units with Brushless DC and AC Asynchronous motor

7 kW ÷ 68 kW

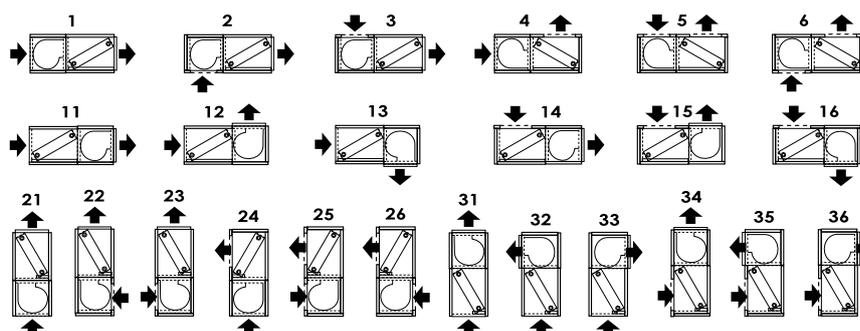
The HCNA are small air handling units, which can be freely configured. It is possible to select between 2 motors (6 Poles or Brushless), 2 types of housing cases (S or D), the version of 2/4 pipes and a wide range of coupled accessories.

The wide flexibility combined with the full range of capacity rating is the HCNA winning idea that allows to find the best solution for suiting your needs.



### Technical Features

- It has a self-supporting structure made of thick galvanized sheet making it resistant to rust, corrosion, chemical agents, solvents, aliphatic and alcohols.
- Self-supporting panels and removable; assembling with self-tapping screws for quick and easy inspection/maintenance. They are available in housing cases "S"-version (Simple panel) and "D"-version (Sandwich double panels 20mm thick with outer painted sheet with white RAL 9002).
- The units provide heat exchange coils (without air vent valves) with high-efficiency made of copper tubes and aluminium fins.
- Standard connections located on the right; on request for left connections at additional charges.
- The sections with cooling coil are equipped with a drain pan in galvanized sheet + external thermal insulation (optional, with additional charges, made of stainless steel AISI 304) with a single slope in order to ensure the optimal condensate draining, with drain hole of Ø30mm.
- The standard electrical equipment includes: "Mammoth" type terminal board IP20 installed outside the unit on the same side of the water connections. For units with 2 motors, it is recommended the installation of 3 relays or the interface card.
- All the standard versions are supplied with free air inlet and air outlet openings, without any grill/protection and without air filter.
- N° 2 motor types: 6 Poles or Brushless



### Versions

S

Concealed version - Single panel

D

With cabinet version - Double panel

HCNA		71	117	143	165	216 <sup>(7)</sup>	290 <sup>(7)</sup>	240 <sup>(7)</sup>	293 <sup>(7)</sup>	330 <sup>(7)</sup>	565 <sup>(7)</sup>	685 <sup>(7)</sup>
Cooling cap. (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 capacity (1)	kW	5,9	9,8	12,0	14,0	18,3	24,3	20,2	24,6	28,1	44,5	55,4
Heating cap. (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 cap (3)	W	8.350	14.100	17.000	19.700	25.650	34.100	29.300	34.600	39.150	60.950	76.650
Air flow (3)	m³/h	1500	2500	3000	3500	5000	6000	5000	6000	7000	10000	12000
Water flow (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
Pressure drop water (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		4										
Coil/Rows	n°	3R	3R	3R	3R	3R	3R	3R	3R	3R	4R	4R
Water connections	∅	3/4"M	1"M	1"M	1"M	1"1/4M						
Drain pipe	∅ (mm)	30	30	30	30	30	30	30	30	30	30	30

## Heating coil

HCNA		71	117	143	165	216 <sup>(7)</sup>	290 <sup>(7)</sup>	240 <sup>(7)</sup>	293 <sup>(7)</sup>	330 <sup>(7)</sup>	565 <sup>(7)</sup>	685 <sup>(7)</sup>
Heating cap. (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 (5)												
Heating	l/h	1144	1866	2348	2726	3474	4687	3853	4756	5366	7327	8867
Pressure drop water (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	n°	2R	2R	2R	2R	2R	2R	2R	2R	2R	2R	2R
Water connections	∅	3/4"M	1"M	1"M	1"M	1"1/4M						

(1) Entering air temp.: 27°C d.b./19°C w.b. - In/Out water temp.: 7°C / 12°C Max speed

(2) Entering air temp.: 20°C d.b. - In/Out water temperature: 70°C / 60°C Max speed

(3) Entering air temp.: 20°C d.b. In/Out water temperature: 45°C / 40°C Max speed

(4) Nominal data measured with casing ref. AMCA210-74 standards and plenum + diaphragm ref. CNR-UNI10023 standards.

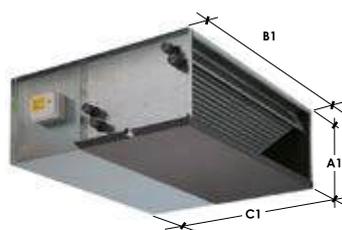
(6) Free field sound pressure, 3 m distance. Data calculated based on sound power measured in riverberation room ref. ISO 3741 - ISO 3742 standards.

(7) With CBP-CRA accessories. For units equipped with a motor with electrical absorption greater than 3A, or with 2

motors, add 1 SDI.2x10A interface card.

(1)(2)(3)(4)(5) Nominal technical data, refer air flow (3) to the max speed and unit with free air flow

(\*) DN: Nominal diameter; F=Female gas water coil connections



S

Concealed version - Single panel



D

With cabinet version - Double panel

## Version "S"

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

## Version "S" - con batteria calda / hot water exchanger

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

## Version "D"

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

## Version "D" - con batteria calda / hot water exchanger

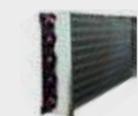
HCNA	71	117	143	165	216	290	240	293	330	565	685
A mm	380	440	440	480	570	570	440	440	480	600	600
B mm	520	620	720	720	1.120	1.320	1.120	1.320	1.320	1.620	1.620
C mm	870	1.020	1.120	1.160	1.150	1.250	1.020	1.120	1.160	1.470	1.470
Weight kg	49,5	65,0	77,9	83,9	129,9	154,7	110,7	137,4	197,4	248,4	250,4

\*WARNING: verify if the electrical absorption of the units motors are compatible with the remote control contact rating. If the electrical absorption is higher, or the unit is provided with 2 motors, it's recommended to use SDI chart.

(1) All HCNA units are supplied with standard Mammoth type terminal board, without thermostat.

(2) Each control panel can control only one unit (see accessory "SDI").

**Fitted accessories**



**BC** Auxiliary heating coil, 2 rows



**PFA-S**  
**PFA-D**

Ductable air filter section + flat air filter, EU3 filtering level (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)



**TEL**

Remote control management system. Motherboard + Air sensor + Water sensor - I.R. receiver + I.R. Remote control (control 2-4 pipe units, with/without valves). Fan 7A-230Vac. Valves: 2A-230Vac.



**PFO-S**  
**PFO-D**

Ductable air filter section + HIGH EFFICIENCY undulated air filter H=100mm, EU5 filtering level (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)



**3V-2,8**  
**3V-5,2**  
**3V-13**  
**3V-16**

3-way valve with actuator 230V



**2V-2,8**  
**2V-5,2**  
**2V-13**  
**2V-16**

2-way valve with actuator 230V



**3VM-2,8**  
**3VM-5,2**  
**3VM-13**  
**3VM-16**

3-way valve with actuator 24Vac, modulating signal 0-10V



**2VM-2,8**  
**2VM-5,2**  
**2VM-13**  
**2VM-16**

2-way valve with actuator 24Vac, modulating signal 0-10V



**MB**

Brushless motor with continuous variation 0-100% of the air flow (signal 0..10 Vdc) Digital wall thermostat is an essential accessory for the operation of a unit with Brushless motor. Should not be combined with accessory TEL

**Loose accessories**



**CRA (1)**

230V wall thermostat. 3 speeds fan selector + Off/On selector + 2 pipes plant management with or without 230V on-off valves



**CBP (1)**

Digital wall thermostat 230V/24V. On-off or brushless fan, 2 or 4 pipes plant management with or without on-off valve or 0..10V with 230V or 24V alimentation.



**AIRMUST**  
**3V**

Wall-mounted thermostat function control for 3-speed fancoil with Wi-Fi and Modbus, with or without valves



**AIRMUST**  
**010**

Wall-mounted thermostat function control for Brushless motor 0-10V fancoil, with Wi-Fi and Modbus, with or without valves

(1) Each control panel can control only one unit. To control more units see SDI accessory

## Loose accessories

**MOR-TMB**

Mammoth type terminal board + water low temperature thermostat. Tset 32°C. All HCN units are supplied with standard Mammoth type terminal board, without thermostat.

**SND-W4**

Water temperature probe (type NTC 4700 Ohm @ 25°C) with minimum temperature settable. Cable length 1 meter. Alternative to TMB thermostat.

**SDI.4X3A**

Card with 4 by 3A output (suitable to control up to max No. 4 3-Speed 3A motors ; ex. No. 4 small fan-coils)  
Contatti-Contacts: 4x 3(0,3)A 230Vac

**SDI.2X10A**

Card with 2 by 10A output (suitable to control up to max No. 2 3-Speed motors of 10A ; ex. No. 1 large unit with 2 motors)  
Contatti-Contacts: 2x 10A-230Vac

**PFT-S  
PFT-D**

Ductable air filter section + VERY HIGH EFFICIENCY POCKET BAGS air filter h=400mm with EU7 filtering level (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)

**P2S-S  
P2S-D**

Closed section +2 regulation/adjustment louvers (1 louver below + 1 louver on the rear side). Louvers without controls, can be either manual or motorized control. (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)

**PMA-S  
PMA-D**

External/internal mixing section "external air 0-33% - internal air 100-67%" (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)

**MS**

Motor "230Vac on-off" suitable for air damper

**P90-S  
P90-D**

90° section (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)

**PCR-S  
PCR-D**

Steel section with spigots "Ø", internal insulation. (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)

**PSL-S  
PSL-D**

Labyrinth noise level attenuator section, suitable for both air intake/supply outlets (S=single skin panel made of galvanized steel, D=double skin panel pre-painted)

**PMP**

Condensate pump including 0,5 litres condensate tank, provided with 4A (250V)

## COIL characteristics

	HCNA	71	117	143	165	216	290	240	293	330	565	685
Heat/cool coil	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 connection 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)
Heat coil	Kvs characteristics	1,66	2,56	3,23	3,94	4,64	6,46	5,73	7,14	7,98	9,67	11,53
	User side connection 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 characteristics

3-way valve		(1) Every single kit includes 1 intercept valve only			
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) Every single kit includes 1 intercept valve only			
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 valve kit is suitable for any HCNA unit size.  
with on-off valve it is recommended to use valves with high Kvs - with modulating valves it is recommended to use valves with Kvs - comparable with the one of the coil

The heat coil of HCNA units (4-pipes system) require the same type valves. So the 4-pipes system need n°2 valves (n° 2 codes)

# OTA1 40÷500

## Heat recovery unit with aluminium counterflow exchanger

400 m<sup>3</sup>/h ÷ 4700 m<sup>3</sup>/h

- Constant air flow fans available on OTA1 100 - 500.
- Built in by-pass facility.
- Case made by sandwich panels 23 mm thickness, galvanized inner skin and prepainted outer skin; 45 kg/m<sup>3</sup> density foamed polyurethane as heat and sound insulation.
- Full-range controlled direct driven double inlet centrifugal fans; low consumption EC technology motors on OTAE1.
- Filtering sections composed by cell filters with polypropylene media, extractable from side removable panels, ISO 16890 ePM1 55% efficiency for the fresh air flow, and ePM10 55% efficiency for the exhaust air flow.
- Integrated pressure switch for dirty filter signal.
- Condensate drain pan made of galvanized steel plate with water drain connection downwards, that ensure a total drainage.
- With PCUS control is possible the remote control by App for mobile phone in wi-fi network.



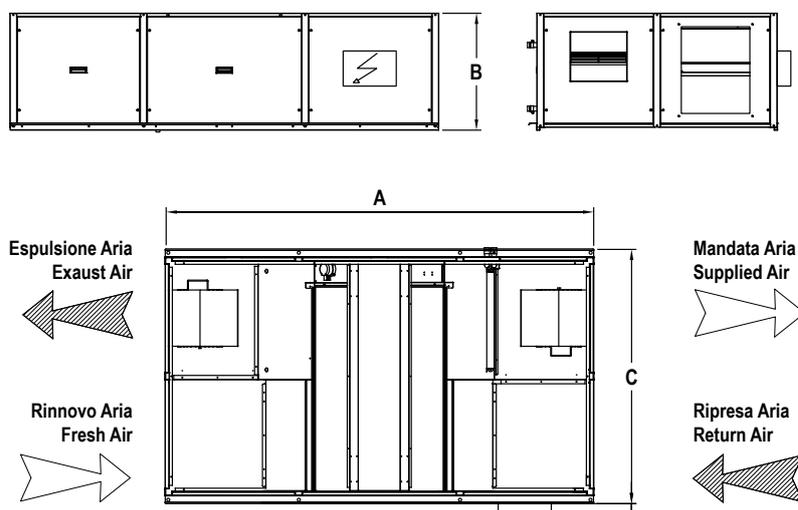
### Accessories

<b>ATG</b>	Anti-freeze thermostat	<b>SIGB</b>	Integrated management system on board
<b>BCR</b>	Post-heating internal water coil	<b>SM/SMR230</b>	Damper actuators
<b>BER</b>	Internal electric post-heating coil	<b>SPC</b>	N. 4 connections for circular ducts kit
<b>BIOX</b>	Purifying system Bioxygen®	<b>SR</b>	Regulation damper
<b>CPA</b>	Kit weather hood for external installation	<b>SSC</b>	Duct silencers
<b>EXT</b>	Kit for external installation	<b>TUP</b>	Wall mounted remote control panel (only with SIGB)
<b>F7CF</b>	High efficiency filters on exhaust air	<b>USD/USW</b>	Humidity sensor
<b>KB</b>	Kit bypass management	<b>V20</b>	Kit 2-Way valve with on-off actuator
<b>PCUS</b>	Unit control panel	<b>V30</b>	Kit 3-Way valve with on-off actuator
<b>PCUSM</b>	Unit control panel with modbus	<b>V3M</b>	Kit 3-Way valve with modulating actuator
<b>PF</b>	Additional pressure switch	<b>VSD</b>	Constant air flow fans control
<b>QSC/QSA</b>	CO2 sensor	<b>SI-SD</b>	Fresh air - exhaust air temperature probes
<b>RMS</b>	3 dampers defrosting section		
<b>SBFR</b>	Water cooling or heating coil section		
<b>SCMB</b>	Modbus PCB for SIGB / Q		

### Versions

**OTA1** Horizontal units with AC fans

**OTAE1** Horizontal units with EC fans



Mod.		40	75	100	150	200	320	400	500
A	mm	1480	1940	1940	2200	2200	2500	2500	2500
B	mm	380	480	480	550	550	680	680	680
C	mm	800	990	990	1000	1400	1400	1400	1700
Weight	kg	90	140	140	170	200	230	260	300

OTA1		40	75	100	150	200	320
Air flow	m <sup>3</sup> /h	400	750	1000	1500	2050	3200
External static pressure	Pa	160	120	180	160	120	180
Maximum external static pressure	Pa	160	120	180	160	120	180
Power supply	V/ph/Hz	230/1/50					
Maximum input current	A	1,5	2,9	6,0	6,0	6,0	14
<b>Fans</b>							
Motor type		AC					
(1) Speed	n°	3	3	3	3	3	3
(2) Sound pressure	dB (A)	50	53	53	56	56	60
<b>Heat exchanger</b>							
(3) Winter efficiency	%	83,6	82,9	81,6	83,3	83,7	86,8
(4) Summer efficiency	%	75,5	75,9	74,5	75,1	75,6	78
(5) Dry efficiency	%	75,9	76,4	75,0	75,6	76,0	76,3

OTAE1		40	75	100	150	200	320	400	500
Air flow	m <sup>3</sup> /h	400	750	1000	1500	2050	3200	3800	4700
External static pressure	Pa	160	120	180	160	120	180	200	200
Maximum external static pressure	Pa	340	160	520	500	540	375	330	200
Power supply	V/ph/Hz	230/1/50							
Maximum input current	A	2,4	2,4	9,0	9,0	9,0	10,0	8,8	8,8
<b>Fans</b>									
Motor Type		EC							
(1) Speed	n°	Multiple							
(2) Sound pressure	dB (A)	49	52	51	53	51	56	58	60
<b>Heat exchanger</b>									
(3) Winter efficiency	%	83,6	82,9	81,6	83,3	83,7	86,8	84,1	84
(4) Summer efficiency	%	75,5	75,9	74,5	75,1	75,6	78,0	75,0	75,1
(5) Dry efficiency	%	75,9	76,4	75,0	75,6	76,0	76,3	75,5	75,6

(1) Multiple = Multispeed &gt; 3

Man = Manual by selector switch or control panel; 0-10V = By potentiometer or control panel; VSD = Constant flow control or modulation by air quality or air humidity sensor  
 (2) Sound pressure level calculated at 1 m far from the service side of the casing, with ducted supply, exhaust, return and fresh air vents, at nominal conditions

(3) Outside air at -5° 80% RH; room air at 20°C 50% RH

(4) Outside air at 32° 50% RH; room air at 26°C 50% RH

(5) Refer to EU 1253/2014 regulation: at nominal pressure; air conditions refer to EN 308 standard

## OTA1-V 40÷500

### Vertical heat recovery unit with aluminium counterflow exchanger

400 m<sup>3</sup>/h÷4700 m<sup>3</sup>/h

- Constant air flow fans available on OTA1-V 100 - 500.
- Built in by-pass facility.
- Case made by sandwich panels 23 mm thickness, galvanized inner skin and prepainted outer skin; 45 kg/m<sup>3</sup> density foamed polyurethane as heat and sound insulation.
- Full-range controlled direct driven double inlet centrifugal fans; low consumption EC technology motors on OTAE1-V.
- Filtering sections composed by cell filters with polypropylene media, extractable from side removable panels, ISO 16890 ePM1 55% efficiency for the fresh air flow, and ePM10 55% efficiency for the exhaust air flow.
- Integrated pressure switch for dirty filter signal.
- Condensate drain pan made of galvanized steel plate with water drain connection downwards, that ensure a total drainage.
- With PCUS control is possible the remote control by App for mobile phone in wi-fi network.



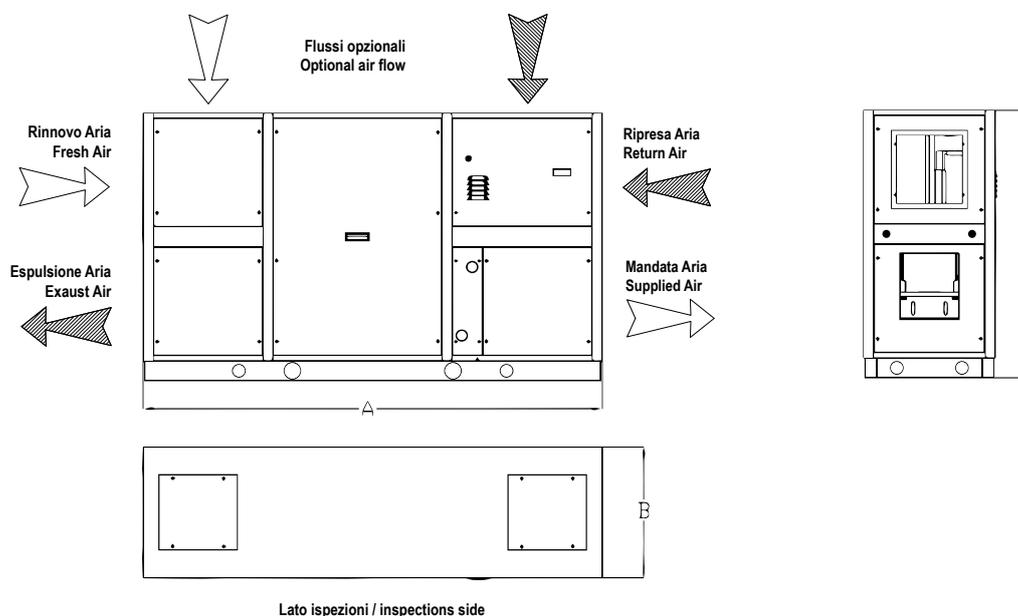
#### Accessories

<b>ATG</b>	Anti-freeze thermostat	<b>SIGB</b>	Integrated management system on board
<b>BCR</b>	Post-heating internal water coil	<b>SM/SMR230</b>	Damper actuators
<b>BER</b>	Internal electric post-heating coil	<b>SPC</b>	N. 4 connections for circular ducts kit
<b>BIOX</b>	Purifying system Bioxygen®	<b>SR</b>	Regulation damper
<b>CPA</b>	Kit weather hood for external installation	<b>SSC</b>	Duct silencers
<b>EXT</b>	Kit for external installation	<b>TUP</b>	Wall mounted remote control panel (only with SIGB)
<b>F7CF</b>	High efficiency filters on exhaust air	<b>USD/USW</b>	Humidity sensor
<b>KB</b>	Kit bypass management	<b>V20</b>	Kit 2-Way valve with on-off actuator
<b>PCUS</b>	Unit control panel	<b>V30</b>	Kit 3-Way valve with on-off actuator
<b>PCUSM</b>	Unit control panel with modbus	<b>V3M</b>	Kit 3-Way valve with modulating actuator
<b>PF</b>	Additional pressure switch	<b>VSD</b>	Constant air flow fans control
<b>QSC/QSA</b>	CO2 sensor	<b>SI-SD</b>	Fresh air - exhaust air temperature probes
<b>RMS</b>	3 dampers defrosting section		
<b>SBFR</b>	Water cooling or heating coil section		
<b>SCMB</b>	Modbus PCB for SIGB / Q		

#### Versions

**OTA1** Horizontal units with AC fans

**OTAE1** Horizontal units with EC fans



Mod.		40	75	100	150	200	320	400	500
A	mm	1480	1940	1940	2200	2200	2500	2500	2500
B	mm	420	520	520	520	720	720	720	720
C	mm	830	1070	1070	1080	1480	1480	1480	1780
Peso	kg	90	150	160	180	220	250	280	330

OTA1-V			40	75	100	150	200	320
Air flow		m <sup>3</sup> /h	400	750	1000	1500	2050	3200
External static pressure		Pa	160	120	180	160	120	180
Maximum external static pressure		Pa	160	120	180	160	120	180
Power supply		V/ph/Hz	230/1/50					
Maximum input current		A	1,5	2,9	6,0	6,0	6,0	14
<b>Fans</b>								
Motor type			AC					
(1) Speed		n°	3	3	3	3	3	3
(2) Sound pressure		dB (A)	50	53	53	56	56	60
<b>Heat exchanger</b>								
(3) Winter efficiency		%	83,6	82,9	81,6	83,3	83,7	86,8
(4) Summer efficiency		%	75,5	75,9	74,5	75,1	75,6	78
(5) Dry efficiency		%	75,9	76,4	75,0	75,6	76,0	76,3

OTAE1-V			40	75	100	150	200	320	400	500
Air flow		m <sup>3</sup> /h	400	750	1000	1500	2050	3200	3800	4700
External static pressure		Pa	160	120	180	160	120	180	200	200
Maximum external static pressure		Pa	340	160	520	500	540	375	330	200
Power supply		V/ph/Hz	230/1/50							
Maximum input current		A	2,4	2,4	9,0	9,0	9,0	10,0	8,8	8,8
<b>Fans</b>										
Motor Type			EC							
(1) Speed		n°	Multiple							
(2) Sound pressure		dB (A)	49	52	51	53	51	56	58	60
<b>Heat exchanger</b>										
(3) Winter efficiency		%	83,6	82,9	81,6	83,3	83,7	86,8	84,1	84
(4) Summer efficiency		%	75,5	75,9	74,5	75,1	75,6	78,0	75,0	75,1
(5) Dry efficiency		%	75,9	76,4	75,0	75,6	76,0	76,3	75,5	75,6

(1) Multiple = Multispeed &gt; 3

Man = Manual by selector switch or control panel; 0-10V = By potentiometer or control panel; VSD = Constant flow control or modulation by air quality or air humidity sensor

(2) Sound pressure level calculated at 1 m far from the service side of the casing, with ducted supply, exhaust, return and fresh air vents, at nominal conditions

(3) Outside air at -5° 80% RH; room air at 20°C 50% RH

(4) Outside air at 32° 50% RH; room air at 26°C 50% RH

(5) Refer to EU 1253/2014 regulation: at nominal pressure; air conditions refer to EN 308 standard

# OTA1-P 40÷320

## Energy recovery ventilation units

400 m<sup>3</sup>/h ÷ 3100 m<sup>3</sup>/h



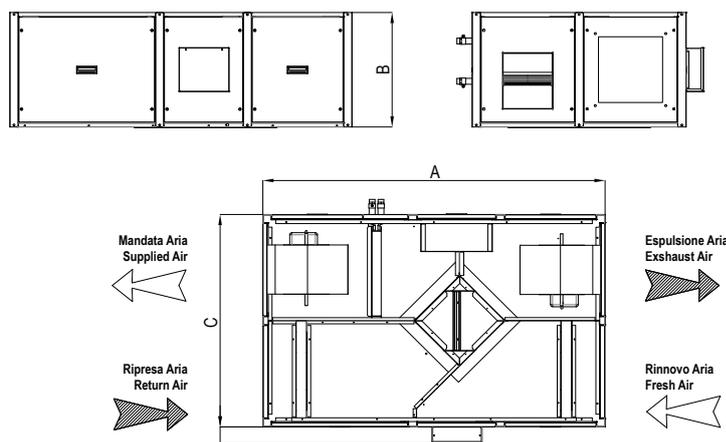
- Constant air flow fans available on OTA1-PE 100-320.
- Ceiling horizontal installation, the heat exchanger is extractable from below for all models.
- Case made by sandwich panels 23 mm thickness, galvanized inner skin and prepainted outer skin; 45 kg/m<sup>3</sup> density foamed polyurethane as heat and sound insulation.
- Full-range controlled direct driven double inlet centrifugal fans;
- OTA1-PE version with low consumption EC technology motors available.
- Filtering sections composed by cell filters with polypropylene media, extractable from side removable panels, ISO 16890 ePM1 55% efficiency for the fresh air flow, and ePM10 55% efficiency for the exhaust air flow.
- Integrated pressure switch for dirty filter signal.
- With PCUS control is possible to activate remote control by App in wi-fi network.

### Accessories

<b>ATG</b>	Anti-freeze thermostat	<b>SIGB</b>	Integrated management system on board
<b>BCR</b>	Post-heating internal water coil	<b>SM/SMR230</b>	Damper actuators
<b>BER</b>	Internal electric post-heating coil	<b>SPC</b>	N. 4 connections for circular ducts kit
<b>BIOX</b>	Purifying system Bioxigen®	<b>SR</b>	Regulation damper
<b>CPA</b>	Kit weather hood for external installation	<b>SSC</b>	Duct silencers
<b>EXT</b>	Kit for external installation	<b>TUP</b>	Wall mounted remote control panel (only with SIGB)
<b>F7CF</b>	High efficiency filters on exhaust air	<b>USD/USW</b>	Humidity sensor
<b>KB</b>	Kit bypass management	<b>V20</b>	Kit 2-Way valve with on-off actuator
<b>PCUS</b>	Unit control panel	<b>V30</b>	Kit 3-Way valve with on-off actuator
<b>PCUSM</b>	Unit control panel with modbus	<b>V3M</b>	Kit 3-Way valve with modulating actuator
<b>PF</b>	Additional pressure switch	<b>VSD</b>	Constant air flow fans control
<b>QSC/QSA</b>	CO2 sensor	<b>SI-SD</b>	Fresh air - exhaust air temperature probes
<b>RMS</b>	3 dampers defrosting section		
<b>SBFR</b>	Water cooling or heating coil section		
<b>SCMB</b>	Modbus PCB for SIGB / Q		

### Versions

<b>OTA1-P</b>	Horizontal units with AC fans	<b>OTA1-PE</b>	Horizontal units with EC fans
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Mod.		40	75	100	150	200	320
A	mm	1480	1450	1600	2000	2000	2100
B	mm	380	480	550	680	680	680
C	mm	800	990	1000	1290	1290	1400
Weight	kg	80	120	150	190	200	220

OTA1-P		40	75	100	150	200	320
Air flow	m <sup>3</sup> /h	400	660	1000	1500	2300	3100
Nominal external static pressure	Pa	170	120	160	190	240	190
Maximum external static pressure	Pa	170	120	160	190	240	190
Electrical power supply	V/ph/Hz	230/1/50					
Total full load amperage	A	1,50	2,90	6,00	6,00	14,00	14,00
<b>Fans</b>							
Motor type		AC					
(1) Speeds	n°	4	3	3	3	3	3
Absorbed Fan Power	kW	0,16	0,28	0,55	0,96	1,55	1,67
(2) Sound pressure	dB (A)	50	50	53	56	60	61
<b>Heat exchanger</b>							
(3) Winter thermal effic.	%	75,00	73,70	74,00	73,00	73,02	71,40
(4) Winter enthalpy effic.	%	60,00	58,20	58,80	62,50	62,70	55,50
(5) Summer thermal effic.	%	64,10	59,70	60,20	60,10	60,20	57,04
(4) Summer enthalpy effic.	%	56,70	55,10	55,70	58,30	58,50	52,50
(5) Dry thermal efficiency	%	75,10	73,70	74,20	73,10	73,20	73,00
OTA1-PE		40	75	100	150	200	320
Air flow	m <sup>3</sup> /h	400	660	1000	1500	2300	3100
Nominal external static pressure	Pa	170	120	160	190	240	190
Maximum external static pressure	Pa	375	250	535	550	447	400
Electrical power supply	V/ph/Hz	230/1/50					
Total full load amperage	A	2,40	2,40	9,00	9,00	9,00	10,00
<b>Fans</b>							
Motor type		EC					
(1) Speeds	n°	Multiple					
Absorbed Fan Power	kW	0,15	0,26	0,48	0,62	1,31	1,50
(2) Sound pressure	dB (A)	49	49	52	53	59	58
<b>Heat exchanger</b>							
(3) Winter thermal effic.	%	75,00	73,70	74,00	73,00	73,20	71,40
(4) Winter enthalpy effic.	%	60,00	58,20	58,80	62,50	62,70	55,50
(5) Summer thermal effic.	%	64,10	59,70	60,20	60,10	60,20	57,04
(4) Summer enthalpy effic.	%	56,70	55,10	55,70	58,30	58,50	52,50
(5) Dry thermal efficiency	%	75,10	73,70	74,20	73,10	73,20	73,00

(1) Multiple = Multispeed &gt; 3

Man = Manual by selector switch or control panel; 0-10V = By potentiometer or control panel; VSD = Constant flow control or modulation by air quality or air humidity sensor  
 (2) Sound pressure level calculated at 1 m far from the service side of the casing, with ducted supply, exhaust, return and fresh air vents, at nominal conditions

(3) Outside air at -5° 80% RH; room air at 20°C 50% RH

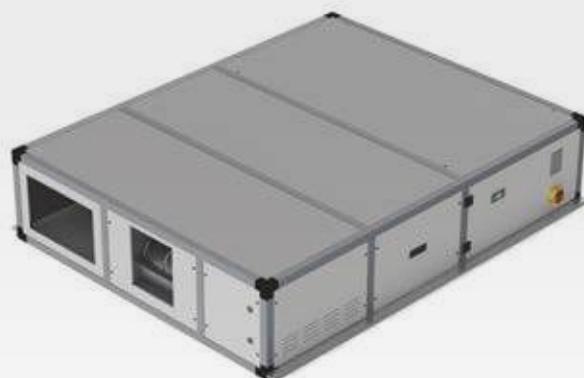
(4) Outside air at 32° 50% RH; room air at 26°C 50% RH

(5) Refer to EU 1253/2014 regulation: at nominal pressure; air conditions refer to EN 308 standard

## OTAE1-RHP 35÷450

### Heat recovery units combined to heat pump system

350 m<sup>3</sup>/h ÷ 4500 m<sup>3</sup>/h



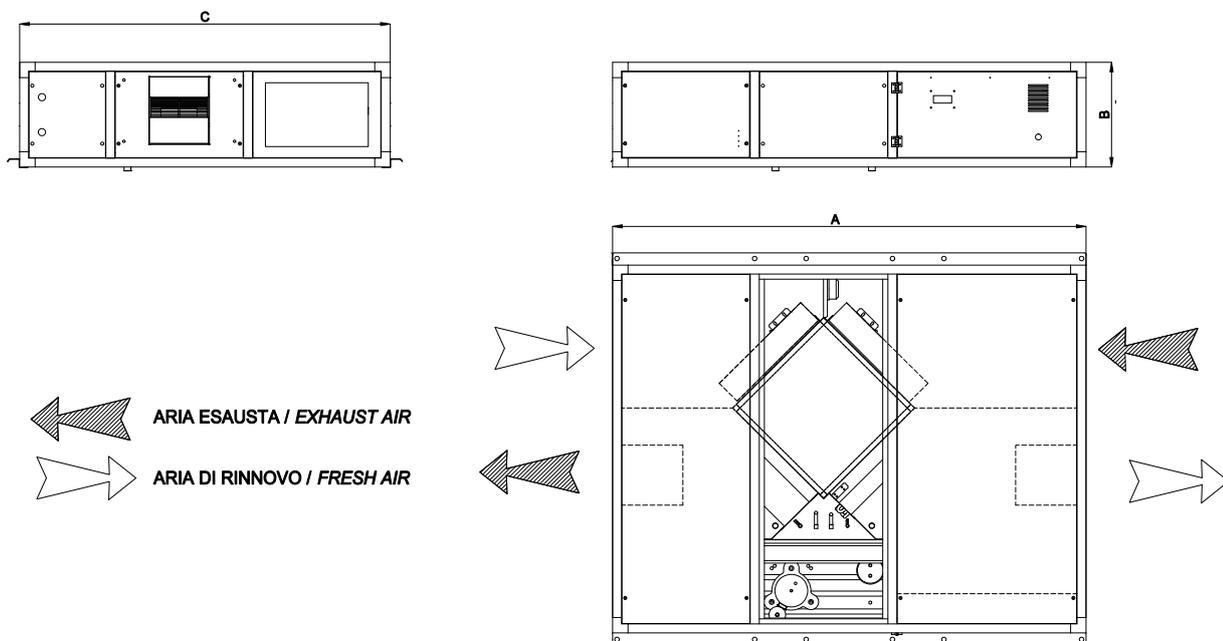
- Global COP >8
- HP mode with very low external temperature without pre-heating

#### Technical Features

- Series of 7 models for ceiling installation, composed of:
- Frame made from extruded aluminium alloy bars, connected by 3- way reinforced nylon joints.
- Sandwich panels, 23 mm thickness, galvanized steel inner skin and precoated outer skin; 45 kg/m<sup>3</sup> foamed polyurethane heat and sound insulation.
- Wide surface ISO 16890 COARSE 55% efficiency synthetic filters on both air intakes; as an option, ePM1 70%.
- Air-to-air crossflow aluminium heat recovery.
- Air-to-air heat pump system (R410A) composed of electric driven on-off compressor, evaporating and condensing reversible copperaluminium finned coils, electronic expansion valve.
- Full-range controlled direct driven double inlet centrifugal fans.
- Low consumption EC technology motors and constant flow regulation mode for 100-450 models.
- Built-in electric box complete with electronics and control panel.
- Possible water or electric integration

#### Accessories

<b>BER</b>	Additional electric heater post air treatment	<b>SCMB</b>	Modbus serial card
<b>BIOX</b>	Purifying system	<b>SPC1</b>	Round air duct adaptor
<b>CPA</b>	Fresh air/exhaust air casing	<b>SR230</b>	ON-OFF external dampers with actuators
<b>F7CF</b>	High efficiency filters F7 class	<b>SSC</b>	Duct silencer
<b>PF</b>	Air filter pressure switch	<b>TUP</b>	Wall mounted remote control panel
<b>RMS</b>	3 dampers section for low air fresh temperature up to -20°C, with modulating actuators	<b>TTP</b>	Weather canopy
<b>SBFR</b>	Additional water coil section	<b>V2O</b>	2-way water valve kit with on/off actuator
		<b>V3M</b>	3-way water valve kit with modulating actuator



OTAE1-RHP		35	60	100	150	230	320	450
A	mm	1540	1540	1840	1840	2040	2040	2240
B	mm	370	370	410	500	550	650	710
C	mm	1240	1240	1440	1440	1690	1690	1890
Weight	kg	122	125	185	228	267	281	329

Outside air / Return air / Supply air / Exhaust air

OTAE1-RHP		35	60	100	150	230	320	450
Air flow	m <sup>3</sup> /h	350	600	1000	1500	2300	3200	4500
Supply ext. pressure	Pa	270	285	295	290	365	265	270
Return ext. pressure	Pa	245	215	240	230	305	195	205
(1) Sound pressure	dB (A)	59	64	62	67	65	68	70
Power supply	V/ph/Hz	230/1/50			400/3/50			
Absorbed current	A	5,3	9,0	13,2	20,2	10,0	15,4	16,8
<b>(3) Heating capacities</b>								
Static recovery efficiency	%	62	51	50	50	50	50	50
Heat pump capacity	W	1740	2960	5010	7690	11090	16300	17300
Total heating capacity	W	3580	5790	9410	14390	21190	30260	36010
(4) Unit COP	W/W	10,90	9,60	9,20	8,60	8,90	9,90	12,60
<b>(5) Cooling capacities</b>								
Static recovery efficiency	%	56	50	50	50	50	50	49
Total cooling capacity	W	1810	2860	4890	7270	10580	15310	16990
Total cooling capacity	W	2210	3450	5840	8720	12830	18390	21440
(4) Unit EER	W/W	4,2	3,9	4,2	3,9	3,9	4,1	5,0

(1) Livello di pressione sonora valutata a 1 m da: presa premente canalizzata / presa aspirante / vano compressore.

(2) Riferite alla portata nominale

(3) Aria esterna -5°C 80% UR; aria ambiente 20°C 50% UR

(4) Esclusa la potenza assorbita per la ventilazione

(5) Aria esterna 32°C 50% UR; aria ambiente 26°C 50% UR

# OTA1 micro E 25÷130

## Energy recovery ventilation unit

250 m<sup>3</sup>/h÷1300 m<sup>3</sup>/h



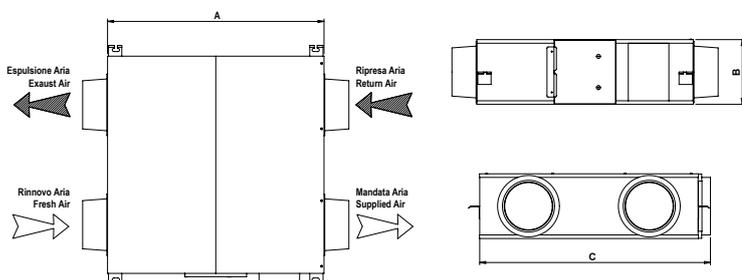
### Technical features

- Galvanized steel self-supporting panels, internally and externally insulated; accessibility from side door.
- ISO 16890 ePM2.5 95% efficiency class filter with synthetic cleanable media and COARSE 50% pre-filter on fresh air, COARSE 50% filter on return air intake.
- Integrated pressure switch for dirty filter signal.
- Motorised heat recovery by-pass device, automatically controlled by unit control to use fresh air free-cooling when convenient.
- Low consumption high efficiency & low noise direct driven fans with 10-speed EC motors.
- Duct connections by circular plastic collars.
- Built-in electric box equipped with PCB to control fan and by-pass function.
- With wi-fi accessory is possible the remote control the unit by app and mobile phone.

### Accessories

<b>PTS</b>	Touch screen controller
<b>QSW</b>	CO2 wall mount sensor
<b>USW</b>	Humidity wall mount sensor
<b>SLC</b>	Duct circular sound attenuator

<b>BIOX</b>	Purifying system BIOXIGEN®
<b>SBE1</b>	Electric pre-heater module
<b>SBE2</b>	Electric post-heater module
<b>WFM</b>	WiFi module for remote control via app



Mod.	25	35	50	65	80	100	130
A	mm	815	815	895	1185	1185	1200
B	mm	270	270	270	390	390	390
C	mm	650	855	955	945	1200	1290
Weight	kg	30	37	43	65	71	83

OTA1 micro E		25	35	50	65	80	100	130
Air flow	m <sup>3</sup> /h	250	350	500	650	800	1000	1300
Nominal external static pressure	Pa	90	140	110	100	140	140	135
Power supply	V/ph/Hz	230 / 1 / 50						
Absorbed current	A	0,5	0,6	0,6	1,2	1,4	2,1	2,7
<b>Fans</b>								
Motor typology		EC						
Number of speeds		10						
Fan control (1)	W	Man / VSD						
Power input	W	80	130	150	230	320	390	490
Sound pressure (2)	dB(A)	34	37	39	40	42	43	44
<b>Heat exchanger</b>								
Winter efficiency (3)	%	73	74	76	74	76	76	74,2
Winter enthalpy eff. (3)	%	65	65	67	65	65	62	59
Summer thermal eff. (4)	%	73	74	76	74	76	76	74
Summer enthalpy eff. (4)	%	62	62	63	60	63	60	58
Dry thermal efficiency (5)	%	73	74	76	74	76	76	74

(1) Man = Manual by selector switch or control panel; VSD = Modulation by air quality or air humidity sensor

(2) Sound pressure level calculated at 1m far from the service side of the casing, at nominal conditions

(3) Outside air at -5° 80% RH; room air at 20°C 50% RH

(4) Outside air at 32° 50% RH; room air at 26°C 50% RH

(5) Refer to EU 1253/2014 regulation: at nominal pressure; air conditions refer to EN 308 standard

# Accessories and regulation systems compatibility

The table below shows the compatibility between the various optional accessories and the regulation and control systems.

Versions and optional accessories		Control and regulation system Unit control system with wall mount display															
		PCUS															
ID. Configuration		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Version with standard fans	<b>AC fans</b>	●	●	●	●	●	●	●	●								
High efficiency EC fans version	<b>EC fans</b>									●	●	●	●	●	●	●	●
Internal electric pre-heating coil	<b>BER-PRR</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Internal electric post-heating coil	<b>BER-POST</b>		●				●				●				●		
Post-heating internal water coil	<b>BCR</b>			●				●				●				●	
Water cooling or heating coil section	<b>SBFR</b>				●				●			●					●
3 dampers defrosting section	<b>RMS</b>																
Damper actuators	<b>SM/SMR</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Kit bypass management	<b>KBP</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Additional pressure switch for return filters	<b>PF</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Anti-freeze thermostat	<b>ATG</b>			●	●			●	●			●	●			●	●
Kit 2-Way valve with on-off actuator	<b>V20</b>			●	●			●	●			●	●			●	●
Kit 3-Way valve with modulating actuator	<b>V3M</b>			●	●			●	●			●	●			●	●
Purifying system Bioxigen®	<b>BIOX</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Modbus PCB for SIGB / Q	<b>SCMB</b>																
Modbus PCB for RTU	<b>Modbus RTU*</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Wall mount remote control panel	<b>TUP</b>																
CO2 sensor	<b>QSC/QSA</b>									●	●	●	●				
Humidity sensor	<b>USD/USW</b>													●	●	●	●
Kit for external installation	<b>EXT</b>																

\*Modbus PCB for RTU Only valid for PCUSM control

Versions and optional accessories	Control and regulation system																															
	Integrated management system on board																Integrated management system wall mount box															
	SIGB																SIGQ															
ID. Configuration	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Version with standard fans	<b>AC fans</b>	●	●	●	●	●	●	●	●								●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
High efficiency EC fans version	<b>EC fans</b>								●	●	●	●	●	●	●	●									●	●	●	●	●	●	●	●
Internal electric pre-heating coil	<b>BER - PRR</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Internal electric post-heating coil	<b>BER - POST</b>	●				●				●				●			●					●				●				●		
Post-heating internal water coil	<b>BCR</b>		●				●				●				●			●					●				●				●	
Water cooling or heating coil section	<b>SBFR</b>			●				●				●				●			●					●				●				●
3 dampers defrosting section	<b>RMS</b>								●	●	●	●	●	●	●	●									●	●	●	●	●	●	●	●
Damper actuators	<b>SM/SMR</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Kit bypass management	<b>KBP</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Additional pressure switch for return filters	<b>PF</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Anti-freeze thermostat	<b>ATG</b>		●	●			●	●			●	●			●	●		●	●				●	●			●	●			●	●
Kit 2-Way valve with on-off actuator	<b>V20</b>		●	●			●	●			●	●			●	●		●	●				●	●			●	●			●	●
Kit 3-Way valve with modulating actuator	<b>V3M</b>		●	●			●	●			●	●			●	●		●	●				●	●			●	●			●	●
Purifying system Bioxigen®	<b>BIOX</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Modbus PCB for SIGB / Q	<b>SCMB</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Modbus PCB for RTU	<b>Modbus RTU*</b>																															
Wall mount remote control panel	<b>TUP</b>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
CO2 sensor	<b>QSC/QSA</b>	●	●	●	●				●	●	●	●				●	●	●	●	●				●	●	●	●				●	
Humidity sensor	<b>USD/USW</b>				●	●	●	●					●	●	●	●						●	●	●	●				●	●	●	
Kit for external installation	<b>EXT</b>																●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	

\* Modbus PCB for RTU Only valid for PCUSM control



**Commercial, Residential**

# Tredis

Monosplit wall-mounted  
DC inverter Wi-Fi

2,6 kW÷6,3 kW



## MONOSPLIT



Wi-Fi  
as standard



SEER  
7.0



Automatic  
restart



Filters  
Silver Ion



Function  
Super Ioniser



3 speeds  
DC motor



Timer  
Function



Sleep  
Mode



Variable  
Speed



Dehumidification  
mode



Cooling  
mode



Heating  
mode



### Energy Performance

With a SEER value of 7.0, the Tredis range qualifies at the top of its category for energy savings and operating efficiency.

### Design Aesthetics

The essential and minimalist design, characterised by a perfect total-white colour scheme, combined with soft lines and the absence of continuity solutions, allow the integration of Tredis into any environment.

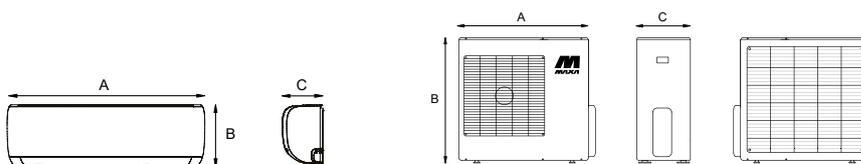


### Super Ioniser Function

Tredis systems are equipped with the Super Ioniser function. This technology emits a high concentration of positive and negative ions, purifying the indoor air of odours, dust and pollen, giving freshness to the room.

### Silver Ion Filters

Tredis systems are equipped with Silver Ion and Catechin filters to neutralise viruses and bacteria, fungus and spores. Silver Ion and Catechin help prevent the spread of viral diseases.



		TFL26R1 + UNIS26R	TFL35R1 + UNIS35R	TFL53R1 + UNIS53R	TFL70R1 + UNIS70R
Cooling capacity	kW	2,64	3,52	5,28	6,27
	BTU/h	9.000	12.000	18.000	24.000
Power input	kW	0,74	1,08	1,55	1,94
Absorbed current	A	4,95	5,10	6,7	10,9
S.E.E.R.		6,9 - A++	7,0 - A++	7,0 - A++	6,5 - A++
Heating capacity	kW	2,93	3,81	5,42	6,71
	BTU/h	10.000	13.000	18.500	22.900
Power input	kW	0,78	1,02	1,46	1,80
Absorbed current	A	3,5	3,66	6,5	9,3
S.C.O.P. (2)		4,0 - A+ / A+++	4,1 - A+ / A+++	4,0 - A+ / A+++	4,0 - A+ / A+++
INDOOR UNIT		TFL26R1	TFL35R1	TFL53R1	TFL70R1
Power supply	V~,Ph,Hz	230, 1, 50			
Air flow	m³/h	416/309/230	584/477/395	730/500/420	1020/830/640
Sound pressure	dB(A)	39/32/26	39,5/33/25	43/33,5/28	47/41,5/30,5
Dimensions AxBxC	mm	722x290x187	802x297x189	965x319x215	1.080x335x226
Kg	kg	7,3	8,6	10,9	13,7
OUTDOOR UNIT		UNIS26R	UNIS35R	UNIS53R	UNIS70R
Compressor		Rotary Inverter			
Power supply	V~, Ph, Hz	230, 1, 50			
Air flow	m³/h	1750	1800	2100	3500
Sound power	dB(A)	64	65	65	67
Outdoor temp. *	°C (coo)	-15 / +50	-15 / +50	-15 / +50	-15 / +50
	°C (hea)	-15 / +24	-15 / +24	-15 / +24	-15 / +24
Piping lenght	m	≤ 25	≤ 25	≤ 30	≤ 30
Diff. in level	m	≤ 10	≤ 10	≤ 20	≤ 20
Refrigerant q.ty	R32/g	550	550	1100	1450
Gas pipe (1)	mm / inch	Φ9.53(3/8")	Φ9.53(3/8")	Φ12.7(1/2")	Φ15.9(5/8")
Liquid pipe	mm / inch	Φ6.35(1/4")	Φ6.35(1/4")	Φ6.35(1/4")	Φ9.53(3/8")
Dimensions AxBxC **	mm	720x495x270	720x495x270	805x554x330	890x673x324
Kg	kg	23,2	23,2	33,5	43,9

\* Operating limits

(1) Please refer to the table of indoor units for the piping section

(2) Average climatic conditions / warm climatic conditions

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

For the consumption of the system refer to the label of the outdoor

\*\* The width measurement does not include attachments.

# Lys R3

Monosplit wall-mounted  
DC inverter Wi-Fi

2,6 kW÷5,9 kW

NEW



## MONOSPLIT



Wi-Fi  
as standard



Sleep Mode  
21,5 db(A)



Automatic  
restart



Size 26  
Compact dimensions



Variable  
Speed



Timer  
Function



3 speeds  
DC motor



Dehumidification  
mode



Cooling  
mode



Heating  
mode



### Limitless Cooling

Lys R3 systems guarantee full cooling performance even at very high outside temperatures. In fact, the cooling mode is optimal even at 50°C outside temperature.

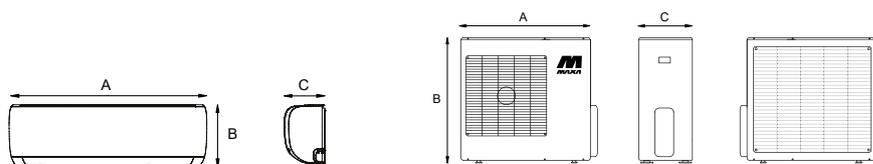
### Unlimited Heating

Lys R3 systems guarantee full heating power even at very low outside temperatures. In fact, the heating mode is optimal even at -20°C outside temperature.



### Maximum Silence

Thanks to the fan equipped with a DC type electric motor, Lys R3 systems guarantee the best energy efficiency together with excellent quietness. Finally, Sleep mode allows Lys R3 systems to further improve quietness by reaching a minimum of 21.5 db(A).



		LDL26R3 + LDL26R3	LDL35R3 + LDL35R3	LDL53R3 + LDL53R3	LDL70R3 + LDL70R3
Cooling capacity	kW	2,64	3,22	5,27	5,86
	BTU/h	9.000	12.000	18.000	24.000
Power input	kW	0,80	0,99	1,55	1,80
Absorbed current	A	3,48	4,3	6,7	7,86
S.E.E.R.		7,0 - A++	7,1 - A++	7,4 - A++	6,1 - A++
Heating capacity	kW	2,49	3,30	4,97	6,00
	BTU/h	8.500	13.000	19.000	25.000
Power input	kW	0,67	0,88	1,29	1,60
Absorbed current	A	2,9	3,8	5,64	6,99
S.C.O.P. (2)		4,1 - A+ / A+++	4,1 - A+ / A+++	4,0 - A+ / A+++	4,0 - A+ / A+++
INDOOR UNIT		LDL26R3	LDL35R3	LDL53R3	LDL70R3
Power supply	V~,Ph,Hz	230, 1, 50			
Air flow	m³/h	435/333/259	530/430/310	840/680/540	980/817/662
Sound pressure	dB(A)	37/32/25	39,5/35,5/25	43,5/36/26	45/40,5/36
Dimensions AxBxC	mm	715x285x194	805x285x194	957x302x213	1.040x327x220
Kg	kg	6,7	7,3	10	12,3
OUTDOOR UNIT		LDL26R3	LDL35R3	LDL53R3	LDL70R3
Compressor		Rotary Inverter			
Power supply	V~, Ph, Hz	230, 1, 50			
Air flow	m³/h	1.750	1.750	2.100	3.500
Sound power	dB(A)	59	63	63	67
Outdoor temp. *	°C (coo)	-15 / +50	-15 / +50	-15 / +50	-15 / +50
	°C (hea)	-20 / +30	-20 / +30	-20 / +30	-20 / +30
Piping length	m	≤ 25	≤ 25	≤ 30	≤ 50
Diff. in level	m	≤ 10	≤ 10	≤ 20	≤ 25
Refrigerant q.ty	R32/g	470	520	1080	1420
Gas pipe (1)	mm / inch	Φ9.53(3/8")	Φ9.53(3/8")	Φ12.7(1/2")	Φ15.9(5/8")
Liquid pipe	mm / inch	Φ6.35(1/4")	Φ6.35(1/4")	Φ6.35(1/4")	Φ9.53(3/8")
Dimensions AxBxC **	mm	720x495x270	720x495x270	805x554x330	890x673x324
Kg	kg	21	21	32,7	42,9

\* Operating limits

(1) Please refer to the table of indoor units for the piping section

(2) Average climatic conditions / warm climatic conditions

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

For the consumption of the system refer to the label of the outdoor

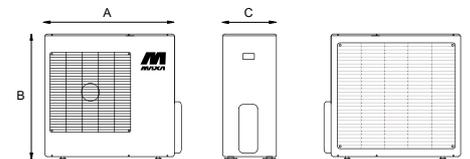
\*\* The width measurement does not include attachments.

# Outdoor Unit

## Multisplit DC inverter from 2 to 5 internal units

4,1 kW ÷ 12,3 kW

### MULTISPLIT



		EXT2M42R	EXT2M53R	EXT3M53R	EXT3M62R	EXT3M80R1	EXT4M82R	EXT4M105R	EXT5M120R
Cooling capacity	kW	4,10	5,27	5,27	6,29	7,91	8,18	10,54	12,30
	BTU/h	14.000	18.000	18.000	21.000	27.000	28.000	36.000	42.000
Power input	kW	1,27	1,63	1,40	1,95	2,45	2,55	3,81	3,81
Absorbed current	A	5,52	7,10	6,20	9,00	13,70	11,00	15,00	16,00
S.E.E.R.		5,6 - A+	6,1 - A++	6,2 - A++	6,1 - A++				
Heating capacity	kW	4,39	5,56	5,27	6,44	8,20	8,79	10,84	12,30
	BTU/h	15.000	19.000	18.000	22.000	28.000	30.000	37.000	42.000
Power input	kW	1,18	1,39	1,30	1,78	2,10	2,05	2,76	3,30
Absorbed current	A	5,15	6,1	5,9	8,5	12,5	9,0	12,1	14,6
S.C.O.P. Average		3,8 - A	3,8 - A+	4,0 - A+	4,0 - A+	4,0 - A+	3,8 - A	3,8 - A	3,5 - A
S.C.O.P. Warmer		4,6 - A++	5,1 - A+++	5,1 - A+++	4,8 - A++	5,1 - A+++	4,6 - A++	5,2 - A+++	5,1 - A+++
Max indoor units		2	2	3	3	3	4	4	5
Compressor		Rotary Inverter							
Power supply	V~, Ph, Hz	230, 1, 50							
Air flow	m³/h	2200	2100	2100	3000	3000	3800	4000	3850
Sound power	dB(A)	64	65	65	65	67	67	67	69
Outdoor temp. *	°C (coo)	-15 / +50	-15 / +50	-15 / +50	-15 / +50	-15 / +50	-15 / +50	-15 / +50	-15 / +50
	°C (hea)	-15 / +24	-15 / +24	-15 / +24	-15 / +24	-15 / +24	-15 / +24	-15 / +24	-15 / +24
Refrigerant q.ty	R32/g	1100	1250	1500	1500	1720	2100	2100	2900
Additional charge	g/m	12	12	12	12	12	12	12	12
Max. length with standard load	m	15	15	15	22,5	22,5	30	30	37,5
Max length for all indoor units	m	40	40	60	60	60	80	80	80
Max length for each unit	m	25	25	30	30	30	35	35	35
Max difference between inside and outside	m	15	15	15	15	15	15	15	15
Diff. in level between indoor units	m	10	10	10	10	10	10	10	10
Gas pipe (1)	mm / inch	Φ9,53(3/8")	Φ9,53(3/8")	Φ9,53(3/8")	Φ9,53(3/8")	Φ9,53(3/8")	Φ3x9,53+1x12,7 3x3/8"+1x1/2"	Φ3x9,53+1x12,7 3x3/8"+1x1/2"	Φ4x9,53+1x12,7 3x3/8"+1x1/2"
Liquid pipe	mm / inch	Φ6,35(1/4")	Φ6,35(1/4")	Φ6,35(1/4")	Φ6,35(1/4")	Φ6,35(1/4")	4x Φ6,35 4x1/4"	4x Φ6,35 4x1/4"	4x Φ6,35 5x1/4"
Dimensions AxBxC	mm	800x554x333	800x554x333	805x554x333	845x702x363	845x702x363	946x810x410	946x810x410	946x810x410
Kg	kg	31,8	35,5	36,2	46,8	51,1	62,1	68,8	74,1

\* Operating limits

(1) Please refer to the table of indoor units for the piping section

For the consumption of the system refer to the label of the outdoor

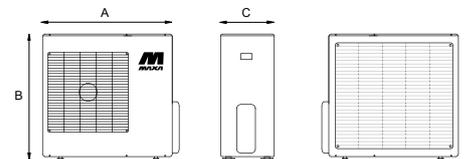
Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

# Outdoor Unit

Multisplit DC inverter  
with heat recovery

5,2 kW ÷ 7,9 kW

## MULTISPLIT WITH HEAT RECOVERY



NEW

		EXT3M53HR*	EXT4M80HR
Cooling capacity	kW	5,2	7,9
	BTU/h	18.000	27.000
Power input	kW	1,40	2,45
Absorbed current	A	6,20	11
S.E.E.R.		6,1	6,3
Heating capacity	kW	5,2	8,2
	BTU/h	18.000	28.000
Power input	kW	1,30	2,2
Absorbed current	A	5,9	10,5
S.C.O.P. Average		4,0	4,1
Max indoor units		2 + 1	3 + 1
Compressor		Rotary Inverter	Rotary Inverter
Power supply	V~, Ph, Hz	230, 1, 50	230, 1, 50
Air flow	m³/h	2100	4000
Sound power	dB(A)	65	69
Outdoor temp *	°C (raff)	-15~50	-15~50
	°C (risc)	-15~24	-15~24
Refrigerant q.ty	R32/g	1570	1,8
Additional charge	g/m	12	12
Max. length with standard load	m	15	15
Max length for all indoor units	m	60	80 (20m per ACS)
Max length for each unit	m	30	35 (20m per ACS)
Max diff. between inside and outside	m	15	15
Diff. in level between indoor units	m	10	10
Liquid pipe / gas	inch	3x1/4" / 3x3/8"	3x1/4" / 2x3/8"+1x1/2"
Dimensions AxBxC	mm	805x554x333	946x410x810
Kg	kg	36,2	64,3

Preliminary Data

Total-One allows you to manage the conditioning, heating and hot water production using a single external unit.

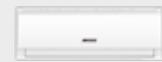
In addition, the exclusive technology used allows to activate the special energy recovery function during summer operation. The fields of application of Total-One range from residential plants to facilities for accommodation, up to commercial plants.

### Matching Internal Units Range



#### TREDIS

TFL26R1, TFL35R1, TFL53R1



#### LYS

LDL26R3, LDL35R3, LDL53R3



#### CASSETTE

CCST26R1, CCST35R1, CCST53R1



#### DUCT

DUCT26R2, DUCT35R2, DUCT53R2



#### CONSOLE

CONS35R



#### FLOOR CEILING

SPV53R

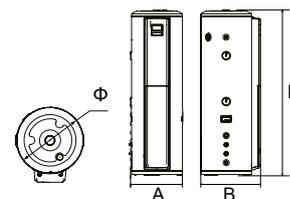
\* AVAILABLE FROM JUNE 2025

# DHW Tank

Internal unit R32  
for domestic hot water production

100, 190 l

**MULTISPLIT**



	TNK100HR	TNK190HR
Operating range	Da -15°C a + 43°C	Da -15°C a + 43°C
Refrigerant connections (mm/")	6,35 + 9,52	6,35 + 9,52 / 1/4" + 3/8"
DHW set point temperature (with heating element enabled) (°C)	38 ~ 55 (70)	38 ~ 55 (70)
Tank corrosion protection	Magnesium anode	Magnesium anode
Material of construction	Enamelled steel	Enamelled steel
Net internal volume Litres	100	190
Power supply (Ph-V-Hz)	1ph/220~240V/50Hz	1ph/220~240V/50Hz
<b>DHW performance according to EN 16147:2017</b>		
Load profile	M	L
Nominal power <sup>dhw</sup> (kW)	2,6	3,9
COP dhw	3,4	3,4
DHW test set point (°C)	52	52
Maximum drawdown with DHW = 40 °C	120 L	240 L
Energy class	A+	A+
Standby consumption (W)	50	50
Maximum tank pressure (bar)	10	10
Protection system	Sacrificial magnesium anode	Sacrificial magnesium anode
Type of material	Vitrified steel	Vitrified steel
Integration mode	2kW electric heater	2kW electric heater
<b>Data in ACS production only</b>		
Power heating water *	3,0	4,0
COP *	3,9	3,9
<b>Dimensions</b>		
Dimensions (mm)	1.060*500*556	1660*504*574
Net weight (kg)	45	70
<b>Electrical data</b>		
Electrical wiring	2 + Ground	2 + Ground
Recommended minimum power supply cross-section (mm <sup>2</sup> )	1,5	1,5
Electrical resistance power (kW)	2	2
Electrical resistance current (A)	9,1	9,1
Wiring section to outdoor unit (mm <sup>2</sup> )	1.0 x 3 + Ground	1.0 x 3 + Ground

\*15°C air inlet, 12°C air outlet, 15°C water inlet, 45°C water outlet

*Preliminary Data*

\* AVAILABLE FROM JUNE 2025

# Tredis

Wall-mounted internal unit  
with DC fan, Wi-Fi

2,6 kW÷6,3 kW



## MULTISPLIT



Wi-Fi  
as standard



SEER 7.0



Automatic  
restart



Filters  
Silver Ion



Super Ioniser  
function



3 speeds  
DC motor



Timer  
Function



Sleep  
Mode



Variable speed



Dehumidification  
mode



Cooling  
mode



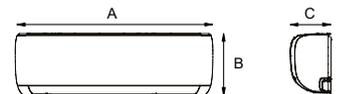
Heating  
mode

### Energy Performance

With a SEER value of 7.0, the Tredis range qualifies at the top of its category for energy savings and operating efficiency.

### Design Aesthetics

The essential and minimalist aesthetics characterised chromatically by a perfect total-white, combined with soft lines, allow Tredis to be integrated into any environment.



		TFL26R1	TFL35R1	TFL53R1	TFL70R1
Cooling capacity	kW	2,64	3,52	5,28	6,27
	BTU/h	9.000	12.000	18.000	24.000
Power input	kW	0,74	1,08	1,55	1,94
Absorbed current	A	4,95	5,10	6,7	10,9
Heating capacity	kW	2,93	3,81	5,42	6,71
	BTU/h	10.000	13.000	18.500	22.900
Power input	kW	0,78	1,02	1,46	1,80
Absorbed current	A	3,5	3,66	6,5	9,3
Power supply	V~,Ph,Hz	230, 1, 50			
Air flow	m³/h	416/309/230	584/477/395	730/500/420	1020/830/640
Sound pressure	dB(A)	39/32/26	39,5/33/25	43/33,5/28	47/41,5/30,5
Gas pipe (1)	mm / inch	Φ9.53(3/8")	Φ9.53(3/8")	Φ12.7(1/2")	Φ15,9(5/8")
Liquid pipe	mm / inch	Φ6.35(1/4")	Φ6.35(1/4")	Φ6.35(1/4")	Φ9.53(3/8")
Dimensions AxBxC	mm	722x290x187	802x297x189	965x319x215	1.080x335x226
Kg	kg	7,3	8,6	10,9	13,7

\* Operating limits

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

# Lys R3

Wall-mounted internal unit  
with DC fan, Wi-Fi

2,6 kW÷5,8 kW

NEW



## MULTISPLIT



Wi-Fi  
as standard



Sleep Mode  
21,5 db(A)



Automatic  
restart



Size 26  
Compact dimensions



Variable  
Speed



Timer  
Function



3 speeds  
DC motor



Dehumidification  
mode



Cooling  
mode



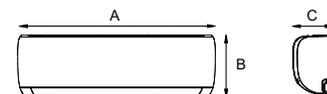
Heating  
mode

### Unlimited Heating

Lys R3 systems guarantee full heating power even at very low outside temperatures. In fact, the heating mode is optimal even at -20°C outside temperature.

### Limitless Cooling

Lys R3 systems guarantee full cooling performance even at very high outside temperatures. In fact, the cooling mode is optimal even at 50°C outside temperature.



		LDL26R3	LDL35R3	LDL53R3	LDL70R3
Cooling capacity	kW	2,64	3,22	5,27	5,86
	BTU/h	9.000	12.000	18.000	24.000
Power input	kW	0,80	0,99	1,55	1,80
Absorbed current	A	3,48	4,3	6,7	7,86
Heating capacity	kW	2,49	3,30	4,97	6,00
	BTU/h	8.500	13.000	19.000	25.000
Power input	kW	0,67	0,88	1,29	1,60
Absorbed current	A	2,9	3,8	5,64	6,99
Power supply	V~,Ph,Hz	230, 1, 50			
Air flow	m³/h	435/333/259	530/430/310	840/680/540	980/817/662
Sound pressure	dB(A)	37/32/25	39,5/35,5/25	43,5/36/26	45/40,5/36
Gas pipe (1)	mm / inch	Φ9.53(3/8")	Φ9.53(3/8")	Φ12.7(1/2")	Φ15,9(5/8")
Liquid pipe	mm / inch	Φ6.35(1/4")	Φ6.35(1/4")	Φ6.35(1/4")	Φ9.53(3/8")
Dimensions AxBxC	mm	715x285x194	805x285x194	957x302x213	1.040x327x220
Kg	kg	6,7	7,3	10	12,3

\* Operating limits

(1) Please refer to the table of indoor units for the piping section

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

For the consumption of the system refer to the label of the outdoor

# Cassette

## Cassette-type internal unit with DC fan

2,6 kW÷5,3 kW



### MULTISPLIT



Predisposition  
WiFi



Fan Motor DC



Auto Mode - Automatic  
season change



Condensate drain pump  
h max. 75 cm



Alarm signalling contact



Predisposition  
fresh air intake



Side air  
predisposition



Activation contact for  
renewal air



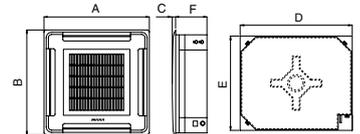
Remote on/off input

### Renewed Aesthetics

The R1 series cassettes are equipped with the new grid panel, which provides increased levels of comfort and aesthetics in line with the other cassette units in the Maxa line.

### 360° Ventilation

The R1 series cassettes are characterised by the round 360° air supply, which increases temperature uniformity in the room.



		CCST26R1	CCST35R1	CCST53R1
Cooling capacity	kW	2,64	3,51	5,27
	BTU/h	9.000	12.000	18.000
Absorbed current *	A	0,50	4,45	7,2
Heating capacity	kW	2,93	3,80	5,57
	BTU/h	10.000	13.000	17.870
Absorbed current *	A	0,50	4,73	6,8
Power supply	V~, Ph, Hz	230, 1, 50		
Air flow	m³/h	580/500/300	620x510x420	720x620x500
Sound pressure	dB(A)	37/35,5/33	42/38,5/31,5	44/41/31,5
Gas pipe	mm / inch	Φ9,53(3/8")	Φ9,53(3/8")	Φ12,7(1/2")
Liquid pipe	mm / inch	Φ6,35(1/4")	Φ6,35(1/4")	Φ6,35(1/4")
Frame dimensions DxExF	mm	570x570x245	647x647x50	647x647x50
Panel dimensions AxBxC	mm	647x647x50	570x570x260	570x570x260
Kg	kg	14,5	16,3	16,3

\* Specific only for the indoor unit

For the consumption of the system refer to the label of the outdoor

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

# Duct

## Ductable internal unit with DC fan, Wi-Fi

2,6 kW ÷ 5,3 kW



### MULTISPLIT



Airset-C wired remote control with WiFi as standard



ESP Settings



Auto Mode - Automatic season change



Condensate drain pump h max. 75 cm



Alarm signalling contact



Predisposition renewal air intake



Activation contact for renewal air



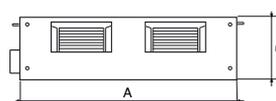
Remote on/off input

### Perfect Adaptability

Thanks to the DC technology applied to the fan motors, it is possible to adapt the useful static pressure required for each system using different control curves.

### Global Control

The ductable series units are equipped as standard with the AIRSET-C wired remote control, which allows global control over every function of the ductable unit and enables it to be connected via a WiFi network.



		DUCT26R1	DUCT35R1	DUCT53R1
Cooling capacity	kW	2,63	3,51	5,27
	BTU/h	9.000	12.000	18.000
Absorbed current *	A	1,10	4,75	7,1
Heating capacity	kW	2,93	3,81	5,57
	BTU/h	10.000	13.000	19.000
Absorbed current *	A	1,10	4,52	6,8
Power supply	V~, Ph, Hz	230, 1, 50	230, 1, 50	230, 1, 50
Air flow	m³/h	500/340/230	600/480/300	911/706.3/515.2
Ext. Static pressure	Pa	0 - 40	0 - 60	0 - 100
Sound pressure	dB(A)	34,5/32/30	42/39/35	49/46/41
Gas pipe	mm / inch	Φ9.53(3/8")	Φ9.53(3/8")	Φ12,7(1/2")
Liquid pipe	mm / inch	Φ6.35(1/4")	Φ6.35(1/4")	Φ6.35(1/4")
Dimensions AxBxC	mm	700x200x450	700x200x506	880x210x674
Kg	kg	18	17,8	24,4

(\*) Value referred to the sum of the absorptions external unit + internal unit (separate supplies)

For the consumption of the system refer to the label of the outdoor

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

# Duct

## Ductable internal unit with DC fan, Wi-Fi - Total-One

2,1 kW ÷ 5,3 kW



### MULTISPLIT



Airset-C wired remote control with WiFi as standard



ESP Settings



Free installation both vertical and horizontal



Condensate drain pump h max. 75 cm



Alarm signalling contact



Predisposition renewal air intake



Activation contact for renewal air



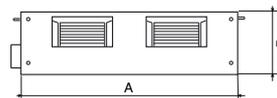
Remote on/off input

### Perfect Adaptability

Thanks to the DC technology applied to the fan motors, it is possible to adapt the useful static pressure required for each system using different control curves.

### Global Control

The ductable series units are equipped as standard with the AIRSET-C wired remote control, which allows global control over every function of the ductable unit and enables it to be connected via a WiFi network.



		DUCT20R2	DUCT26R2	DUCT35R2	DUCT53R2
Cooling capacity	kW	2,05	2,63	3,51	5,27
	BTU/h	7.000	9.000	12.000	18.000
Absorbed current *	A	1	1	1	0,66
Heating capacity	kW	2,34	2,93	3,81	6,00
	BTU/h	8.000	10.000	13.000	20.500
Absorbed current *	V~, Ph, Hz	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50
Power supply	m³/h	620/540/450	620/540/450	660/570/470	900/780/650
Air flow	Pa	25	25	25	25
Ext. Static pressure	Pa	0 - 80	0 - 80	0 - 100	0 - 160
Sound pressure	dB(A)	54	54	52	53
Gas pipe	mm / inch	Φ9.53(3/8")	Φ9.53(3/8")	Φ9.53(3/8")	Φ12.7(1/2")
Liquid pipe	mm / inch	Φ6.35(1/4")	Φ6.35(1/4")	Φ6.35(1/4")	Φ6.35(1/4")
Dimensions AxBxC	mm	700x200x506	700x200x506	700x200x506	700x245x750
Kg	kg	16,6	16,6	16,6	24,4

(\* Value referred to the sum of the absorptions external unit + internal unit (separate supplies)

For the consumption of the system refer to the label of the outdoor

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

## Console

### Console-type internal unit with DC fan

3,5 kW



#### MULTISPLIT



Predisposition  
WiFi



Display  
on board machine



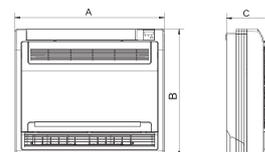
Double outlet Air

#### Guaranteed Efficiency

The console series units are equipped with automatic double opening so that heated or cooled air can be introduced from both the top and bottom, improving comfort.

#### Aesthetics and Design

The renewed intake grid and soft lines that characterise the console series units ensure perfect integration in any environment.



		CONS35R
Cooling capacity	kW	3,52
	BTU/h	12.000
Absorbed current	A	4,52
	kW	3,81
Heating capacity	BTU/h	13.000
	A	4,43
Power supply	V~, Ph, Hz	230, 1, 50
Air flow	m <sup>3</sup> /h	650/580/490
Sound pressure	dB(A)	37/34/27
Gas pipe	mm / inch	Φ9,53(3/8")
Liquid pipe	mm / inch	Φ6,35(1/4")
Dimensions AxBxC	mm	794x621x206
Kg	kg	14,9

For the consumption of the system refer to the label of the outdoor

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

# Floor Ceiling

Ceiling/floor-type internal unit  
with DC fan

5,2 kW

MULTISPLIT



Predisposition WiFi



Flexibility of Installation



Auto Mode  
Automatic season change



Alarm signalling contact



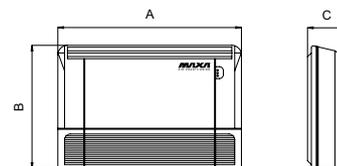
Remote on/off input

## Ideal for Large Spaces

The ceiling-floor series units are characterised by generous air flow rates and a large throw distance, these features make them ideal for large spaces.

## Flexibility of Installation

The main feature of these units is the possibility of installing them both vertically and horizontally, always ensuring maximum output.



		SPV53R
Cooling capacity	kW	5,27
	BTU/h	18.000
Absorbed current	A	6,0
Heating capacity	kW	5,57
	BTU/h	19.000
Absorbed current	A	6,6
Power supply	V~, Ph, Hz	230, 1, 50
Air flow	m <sup>3</sup> /h	958/839/723
Sound pressure	dB(A)	44/41/37
Gas pipe	mm / inch	Φ12,7(1/2")
Liquid pipe	mm / inch	Φ6,35(1/4")
Dimensions AxBxC	mm	1.068x675x235
Kg	kg	28

For the consumption of the system refer to the label of the outdoor

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

# Outdoor Unit

## Commercial Monosplit DC inverter

2,6 kW÷5,3 kW

COMMERCIAL



NEW

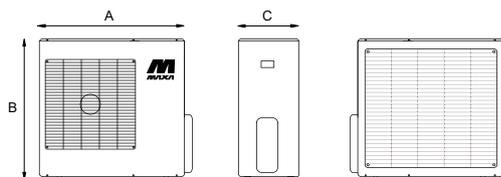
NEW

		UECS35R	UECS53R	UECS71R2	UECS105R-1	UECS105R	UECS130R2	UECS176R
Cooling capacity	kW	3,51	5,27	7,09	10,55	10,54	14,07	16,11
	BTU/h	12.000	18.000	24.200	36.000	36.000	48.000	55.000
Heating capacity	kW	3,80	5,56	8,0	11,72	11,72	16,12	18,17
	BTU/h	13.000	19.000	27.200	40.000	40.000	55.000	62.000
Compressor		Rotary Inverter						
Power supply	V~, Ph, Hz	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50	380, 3, 50	380, 3, 50	380, 3, 50
Air flow	m³/h	2.200	2.100	3.500	4.000	4.000	5.600	7.500
Sound power	dB(A)	53,6	59	60	63	63	63,5	64
(1) Outdoor temp.	°C (coo)	-15 / +50	-15 / +50	-15 / +50	-15 / +50	-15 / +50	-15 / +50	-15 / +50
	°C (hea)	-15 / +24	-15 / +24	-20 / +24	-15 / +24	-15 / +24	-20 / +24	-15 / +24
Piping lenght	m	25	30	50	75	75	75	75
Diff. in level	m	10	20	25	30	30	30	30
Refrigerant q.ty	R32/g	710	1150	1400	2400	2400	2900	3000
Gas pipe *	mm / inch	Φ9.53(3/8")	Φ12.7(1/2")	Φ15.9(5/8")	Φ15.9(5/8")	Φ15.9(5/8")	Φ15.9(5/8")	Φ15.9(5/8")
Liquid pipe	mm / inch	Φ6.35(1/4")	Φ6.35(1/4")	Φ9.53(3/8")	Φ9.53(3/8")	Φ9.53(3/8")	Φ9.53(3/8")	Φ9.53(3/8")
Dimensions AxBxC	mm	765x555x303	805x554x330	890x673x342	946x810x410	946x810x410	980x975x415	952x1.333x415
Kg	kg	26,6	32,5	41,9	80,5	66,9	90	107

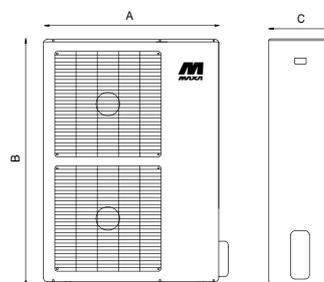
\* Please refer to the table of indoor units for the piping section

(1) Operating limits

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.



UECS35R, UECS53R, UECS71R2, UECS105R-1, UECS105R, UECS130R2



UECS176R

# Cassette

## Column-type internal unit with DC fan

2,1 kW ÷ 5,3 kW



### COMMERCIAL



Predisposition WiFi



Fan Motor DC



Auto Mode - Automatic season change



Condensate drain pump h max. 75 cm



Alarm signalling contact



Predisposition renewal air intake



Side Air predisposition



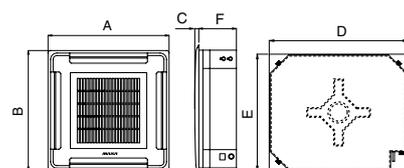
Activation contact for renewal air



Remote on/off input



Compatible TWIN configuration



		CCST35R1	CCST53R1	CCST71R	CCST105R <sup>(1)</sup>	CCST105R	CCST130R	CCST176R
Nominal cooling capacity	kW	3,51	5,27	7,03	10,55	10,01	14,07	15,24
	BTU/h	12.000	18.000	21.000	33.950	34.160	44.110	53.000
Power input *	kW	1,01	1,63	2,32	3,95	3,04	4,65	5,00
Absorbed current *	A	4,45	7,2	10,2	17,5	6,5	8,1	8,6
S.E.E.R.		6,6 - A++	6,3 - A++	6,2 - A++	6,7 - A++	6,7 - A++	6,1 - A++	6,3 - A++
Heating capacity	kW	3,80	5,57	7,62	11,14	11,14	16,12	18,17
	BTU/h	13.000	17.870	26.000	38.000	38.000	52.670	62.000
Power input *	kW	1,01	1,54	1,90	3,00	3,00	4,58	5,55
Absorbed current *	A	4,73	6,8	8,50	13,50	5,0	8,00	9,60
S.C.O.P. Average		4,1 - A+	4,0 - A+	4,0 - A+	4,0 - A+	4,0 - A+	4,0 - A+	4,0 - A+
S.C.O.P. Warmer		5,1 - A+++	4,8 - A++	5,1 - A+++	5,1 - A+++	5,1 - A+++	5,0 - A++	5,1 - A+++
Indoor unit power supply	V~, Ph, Hz	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50
Air flow	m³/h	620x510x420	720x620x500	1300/1140/1000	1700/1550/1380	1700/1550/1380	1970/1780/1580	2000/1850/1650
Sound pressure	dB(A)	42/37,5/34,5	45,4/44/39	50/47,5/42	51/49/46	51/49/46	52,5/50,5/48	54,5/52/49,5
Piping lenght	m	≤ 25	≤ 30	≤ 50	≤ 75	≤ 75	≤ 75	≤ 75
Diff. in level	m	≤ 10	≤ 20	≤ 25	≤ 30	≤ 30	≤ 30	≤ 30
Gas pipe	mm / inch	Φ9,53(3/8")	Φ12,7(1/2")	Φ15,9(5/8")	Φ15,9(5/8")	Φ15,9(5/8")	Φ15,9(5/8")	Φ15,9(5/8")
Liquid pipe	mm / inch	Φ6,35(1/4")	Φ6,35(1/4")	Φ9,53(3/8")	Φ9,53(3/8")	Φ9,53(3/8")	Φ9,53(3/8")	Φ9,53(3/8")
Dimensions AxBxCxDxExF	mm	647x647x50x570x570x260	647x647x50x570x570x260	950x950x55x830x830x205	950x950x55x830x830x245	950x950x55x830x830x245	950x950x55x830x830x287	950x950x55x830x830x287
Kg	kg	16,3	16,3	21,6	27,2	27,2	29,3	29,3

(\*) Value referred to the sum of the absorptions external unit + internal unit (separate supplies)

(1) Combined with single-phase outdoor unit

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

# Console

## Console-type internal unit with DC fan

3,5 kW


**COMMERCIAL**

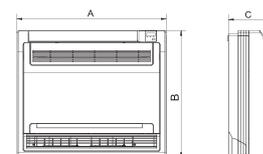

Predisposition  
WiFi



Display  
on board machine



Double air outlet



		CONS35R
Cooling capacity	kW	3,52
	BTU/h	12.000
Power input *	kW	1,0
Absorbed current	A	4,52
S.E.E.R.		7.3 - A+
Heating capacity	kW	3,78
	BTU/h	13.000
Power input *	kW	0,98
Absorbed current	A	4,43
Indoor unit power supply	V~, Ph, Hz	230, 1, 50
S.C.O.P. Average		4.0 - A+
S.C.O.P. Warmer		5.5 - A+++
Air flow	m <sup>3</sup> /h	650/580/490
Sound pressure	dB(A)	37/34/27
Gas pipe	mm / inch	Φ9,53(3/8")
Liquid pipe	mm / inch	Φ6,35(1/4")
Dimensions AxBxC	mm	794x621x206
Kg	kg	14,9

(\*) Value referred to the sum of the absorptions external unit + internal unit (separate supplies)

For the consumption of the system refer to the label of the outdoor

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

# Floor Ceiling

## Ceiling/floor-type internal unit with DC fan

5,3 kW ÷ 15,3 kW



COMMERCIAL



Predisposition  
WiFi



Flexibility of Installation



Auto Mode - Automatic season change



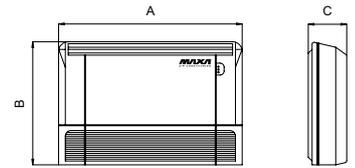
Alarm signalling  
contact



Remote on/off input



Compatible  
TWIN configuration



		SPV53R	SPV71R	SPV105R <sup>(1)</sup>	SPV105R	SPV130R	SPV176R
Nominal cooling capacity	kW	5,27	7,03	10,55	10,55	14,07	15,83
	BTU/h	18.000	24.000	36.000	36.000	48.000	54.000
Power input *	kW	1,45	2,30	3,90	4,00	5,00	5,65
Absorbed current *	A	6,0	10,54	17,0	6,30	8,8	9,7
S.E.E.R.		6,2 - A++	6,1 - A++	6,2 - A++	6,4 - A++	6,1 - A++	6,1 - A++
Heating capacity	kW	5,57	7,62	11,72	11,72	16,12	18,17
	BTU/h	19.000	26.000	40.000	40.000	55.000	62.000
Power input *	kW	1,50	2,05	3,35	4,0	5,5	6,2
Absorbed current *	A	6,6	9,50	15,00	5,40	8,90	10,50
S.C.O.P. Average		4,0 - A+	4,0 - A+	4,0 - A+	4,1 - A+	4,0 - A+	4,0 - A+
S.C.O.P. Warmer		5,1 - A+++	5,1 - A+++	5,1 - A+++	5,1 - A+++	5,1 - A+++	5,1 - A+++
Indoor unit power supply	V~, Ph, Hz	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50
Air flow	m³/h	958/839/723	1192/1023/853	1955/1728/1504	1955/1728/1504	2100/1850/1600	2200/1950/1650
Sound pressure	dB(A)	44/41/37	51/47/43	51,5/48/45	51,5/48/45	53/50/46	55/52/48
Piping lenght	m	≤ 30	≤ 50	≤ 75	≤ 75	≤ 75	≤ 75
Diff. in level	m	≤ 20	≤ 25	≤ 30	≤ 30	≤ 30	≤ 30
Gas pipe	mm / inch	Φ12,7(1/2")	Φ15,9(5/8")	Φ15,9(5/8")	Φ15,9(5/8")	Φ15,9(5/8")	Φ15,9(5/8")
Liquid pipe	mm / inch	Φ6,35(1/4")	Φ9,53(3/8")	Φ9,53(3/8")	Φ9,53(3/8")	Φ9,53(3/8")	Φ9,53(3/8")
Dimensions AxBxC	mm	1.068x675x235	1.068x675x235	1.650x675x235	1.650x675x235	1.650x675x235	1.650x675x235
Kg	kg	28	28	41,5	41,5	41,7	42,3

(\* Value referred to the sum of the absorptions external unit + internal unit (separate supplies)

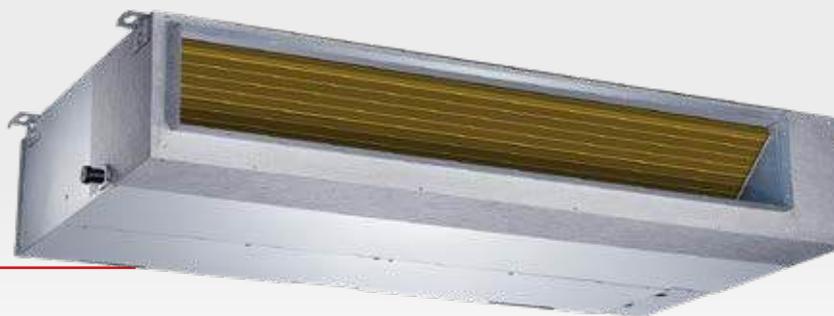
(1) Combined with single-phase outdoor unit

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

# Duct

## Ductable internal unit with DC fan, Wi-Fi

2,6 kW±5,3 kW



### COMMERCIAL



Airset-C wired remote control with WiFi as standard



ESP Settings



Auto Mode - Automatic season change



Condensate drain pump h max. 75 cm



Alarm signalling contact



Predisposition renewal air intake



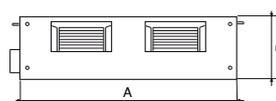
Activation contact for renewal air



Remote on/off input



Compatible TWIN configuration



		DUCT35R1	DUCT53R1	DUCT71R2	DUCT105R1 <sup>(1)</sup>	DUCT105R1	DUCT130R1	DUCT176R1
Nominal cooling capacity	kW	3,51	5,27	7,03	10,55	10,55	14,07	15,24
	BTU/h	12,000	18.000	24.000	36.000	36.000	48.000	52.000
Power input *	kW	1,05	1,53	2,19	3,95	4,0	4,8	5,2
Absorbed current *	A	4,75	7,1	10,20	17,50	6,50	8,40	9,60
S.E.E.R.		6,3 - A++	6,5 - A++	6,2 - A++	6,2 - A++	6,1 - A++	6,1 - A++	6,1 - A++
Heating capacity	kW	3,81	5,57	7,62	11,72	11,72	16,12	18,17
	BTU/h	13,000	19.000	26.000	40.000	38.360	51.280	57.430
Power input *	kW	1,03	1,51	1,90	3,25	3,25	4,50	5,15
Absorbed current *	A	4,52	6,8	9,2	14,5	5,3	8,0	9,5
S.C.O.P. Average		4,0 - A+	4,0 - A+	4,0 - A+	4,0 - A+	4,0 - A+	4,0 - A+	4,0 - A+
S.C.O.P. Warmer		5,1 - A+++	5,1 - A+++	5,1 - A+++	5,1 - A+++	5,1 - A+++	5,0 - A++	5,1 - A+++
Indoor unit power supply	V~, Ph, Hz	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50	230, 1, 50
Air flow	m³/h	600/480/300	911/706.3/515.2	1229/1035/825.1	2100/1800/1500	2100/1800/1500	2400/2040/1680	2600/2210/1820
(1) Ext. Static pressure	Pa	0 - 60	0 - 100	0-160	0-160	0-160	0-160	0-160
Sound pressure	dB(A)	34,5/32/30	42/39/35	49/46/41	50/49/47	50/49/47	51,5/49/47	52,5/49/47
Piping lenght	m	≤ 25	≤ 30	≤ 50	≤ 75	≤ 75	≤ 75	≤ 75
Diff. in level	m	≤ 10	≤ 20	≤ 25	≤ 30	≤ 30	≤ 30	≤ 30
Gas pipe	mm / inch	Φ9.53(3/8")	Φ12,7(1/2")	Φ15,9(5/8")	Φ15,9(5/8")	Φ15,9(5/8")	Φ15,9(5/8")	Φ15,9(5/8")
Liquid pipe	mm / inch	Φ6.35(1/4")	Φ6.35(1/4")	Φ9.53(3/8")	Φ9.53(3/8")	Φ9.53(3/8")	Φ9.53(3/8")	Φ9.53(3/8")
Dimensions AxBxC	mm	700x200x506	880x210x674	1.100x249x774	1.360x249x774	1.360x249x774	1.200x300x874	1.200x300x874
Kg	kg	17,8	24,4	32,3	40,5	40,5	47,6	47,4

(\*) Value referred to the sum of the absorptions external unit + internal unit (separate supplies)

(1) Combined with single-phase outdoor unit

(1) Value at nominal air capacity, considering only the pressure drop caused by the coil

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

# Floor Standing

Column-type internal unit  
with DC fan

2,1 kW ÷ 5,3 kW



COMMERCIAL



Display  
on board machine



Automatic opening panel



All functions are controllable on board  
machine



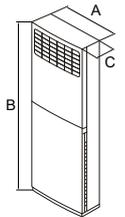
Dehumidification mode



Cooling mode



Heating mode



		CLN130R
Nominal cooling capacity	kW	14,06
	KBTU/h	48.000
Power input *	W	4,95
Absorbed current	A	8,00
S.E.E.R.		6,1 - A++
Heating capacity *	kW	16,11
	KBTU/h	55.000
Power input *	kW	5,10
Absorbed current *	A	8,5
S.C.O.P. Average		4,0 - A+
Indoor unit power supply	V~,Ph,Hz	230, 1, 50
Air flow	m³/h	2413/2222/2027
Sound pressure	dB(A)	53/50/48
Gas pipe	mm / inch	φ15,9(5/8")
Liquid pipe	mm / inch	φ9,53(3/8")
Dimensions AxBxC	mm	629x1935x456
Kg	kg	59

\* Value referred to the sum of the absorptions external unit + internal unit (separate supplies)

Cooling test conditions: in 27°C d.b. / 19,5°C w.b. - out 35°C d.b. / 24°C w.b. - Heating test conditions: in 20°C d.b. - out 7°C d.b. / 6°C w.b.

## Commercial range controllers and accessories

<b>SMART KIT</b>		Only for CONS35R model. Wi-Fi dongle enables the management of all major functions from smartphones or tablets, compatible with Android and iOS systems.
<b>AIRSET-C</b>		Wi-Fi touch remote control for wall installation for commercial series units (No Floor standing, No Console)
<b>Smart port</b>		Wi-Fi dongle for commercial R32 (CCST, SPV) indoor units. Enable APP usage for Android and iOS systems with all basic functions. Management of temperature, fan speed, timer daily or weekly timer.
<b>RFTD-01D</b>		Branch pipe to transform a cassette, floor ceiling or ducted type air conditioner into a Twin system (n°2 indoor units master&slave + n°1 outdoor unit)

## Accessori canalizzabili



### Air outlet plenum

Complete with oval connections made of PVC, with external insulation and elastic sheath for the junction to the ventilating unit. The use of PVC ensures the best quality of air combined with the extreme lightness and long lasting.

Model with duct connection	N° of collars and diameter	Dimensions (mm)
<b>PMC35</b> Plenum per CADS35R/DUCT35R1	2x160 mm	537 x 152
<b>PMC53</b> Plenum per CADS53R/DUCT53R1	2x200 mm	706 x 136
<b>PMC71</b> Plenum per CADS71R/DUCT71R1	3x160 mm	926 x 175
<b>PMC105</b> Plenum per CADS105R/DUCT105R1	3x200 mm	1186 x 175
<b>PMC140</b> Plenum per CAD140R/DUCT130R1	4x200 mm	1044 x 227
<b>PMC176</b> Plenum per CAD176R/DUCT176R1	4x200 mm	1044 x 227



### Air intake plenum with zone control

Complete of oval connections made of PVC, with insulation external and elastic sheath for the joint to the ventilating unit. The use of PVC ensures the best quality of air combined with the extreme lightness and long lasting. Equipped with practical kit of thermoregulation complete with motorized dampers already installed, the power module evolved from 2 to 6 zones, 12V power supply, already wired.

The control system of each zone can be controlled by an existing room thermostat, or chosen among the many available on the market and compatible with any model. The thermostat, by means of the connection to the regulation card, controls the regulation damper. An automatic by-pass compensates for the counter-pressures generated by closing the control dampers. When no need for heating / cooling, the system switches off the air conditioning unit. On the contrary, as soon as any zone is activated by its thermostat, the system immediately activates the air conditioning unit.

Model with duct connection	N° of collars and diameter	Dimensions (mm)
<b>PMZ35</b> Plenum per CADS35R/DUCT35R1	2x160 mm	537 x 152 mm
<b>PMZ53</b> Plenum per CADS53R/DUCT53R1	2x200 mm	706 x 136 mm
<b>PMZ71</b> Plenum per CADS71R/DUCT71R1	3x160 mm	926 x 175 mm
<b>PMZ105</b> Plenum per CADS105R/DUCT105R1	3x200 mm	1186 x 175 mm
<b>PMZ140</b> Plenum per CAD140R/DUCT130R1	4x200 mm	1044 x 227 mm
<b>PMZ176</b> Plenum per CAD176R/DUCT176R1	4x200 mm	1044 x 227 mm



### Air intake grid

Recovery grid in PVC profile complete with frame and magnets filter.

Model	Dimensions (mm)
GR-1	600 x 300
GR-2	800 x 300
GR-3	800 x 400

Indoor Units	A (kW)	B (kW)	C (kW)	D (kW)	E (kW)	Capacity (kW)			Power (kW)			SEER
						Min	Nom	Max	Min	Nom	Max	
<b>❄️ EXT2M42R</b>												
26	2,50	–				1,23	2,50	3,20	0,30	0,77	0,96	
35	3,50	–				1,23	3,50	3,90	0,30	1,08	1,35	
53	4,10	–				1,35	4,10	4,90	0,40	1,27	1,59	
26+26	2,05	2,05				1,76	4,10	4,92	0,44	1,27	1,59	6,80
26+35	1,76	2,34				1,76	4,10	4,92	0,44	1,27	1,59	6,80
<b>❄️ EXT2M53R</b>												
26	2,50	–				1,43	2,50	3,20	0,35	0,75	0,93	–
35	3,50	–				1,43	3,50	3,90	0,35	1,08	1,29	–
53	5,00	–				1,64	5,00	5,51	0,45	1,55	1,89	–
26+26	2,65	2,65				2,12	5,3	6,41	0,54	1,64	2,05	6,1
26+35	2,27	3,03				2,12	5,3	6,41	0,54	1,64	2,05	6,1
26+53	1,77	3,53				2,12	5,3	6,47	0,54	1,64	2,05	6,1
35+35	2,65	2,65				2,12	5,3	6,41	0,54	1,64	2,05	6,1
<b>❄️ EXT3M53R1</b>												
26	2,50											
35	3,50											
53	5,00											
26+26	2,65	2,64				1,58	5,27	6,32	0,24	1,63	2,12	6,09
26+35	2,27	3,03				1,58	5,27	6,32	0,23	1,55	2,02	6,05
26+53	1,77	3,53				1,59	5,30	6,36	0,22	1,49	1,93	6,14
35+35	2,65	2,65				1,59	5,29	6,34	0,22	1,50	1,95	6,00
35+53	2,65	3,53				1,59	5,28	6,34	0,21	1,42	1,85	6,12
26+26+26	1,76	1,76	1,76			1,58	5,28	6,33	0,23	1,50	1,95	6,30
<b>❄️ EXT3M62R</b>												
26	2,50	–	–			1,43	2,50	3,20	0,38	0,77	0,97	–
35	3,50	–	–			1,43	3,50	3,90	0,38	1,08	1,30	–
53	5,00	–	–			1,65	5,00	6,50	0,48	1,55	1,78	–
26+26	2,65	2,65	–			2,01	5,30	6,41	0,57	1,64	2,08	6,1
26+35	2,57	3,43	–			2,01	6,00	6,59	0,57	1,86	2,12	6,1
26+53	2,03	4,07	–			2,01	6,10	6,83	0,57	1,89	2,17	6,1
35+35	3,05	3,05	–			2,01	6,10	6,83	0,57	1,89	2,17	6,1
26+26+26	2,03	2,03	2,03			2,44	6,10	7,32	0,68	1,89	2,35	6,5
26+26+35	1,83	1,83	2,44			2,44	6,10	7,32	0,68	1,89	2,35	6,5
<b>❄️ EXT3M80R</b>												
26	3,00	–	–			1,64	3,00	3,20	0,40	0,80	1,01	–
35	3,80	–	–			1,64	3,80	3,90	0,40	1,02	1,22	–
53	5,20	–	–			1,89	5,20	7,22	0,50	1,39	1,59	–
26+26	3,00	3,00	–			2,30	6,00	7,39	0,58	1,62	2,21	3,8
26+35	2,70	3,60	–			2,30	6,30	7,80	0,58	1,70	2,32	3,8
26+53	2,33	4,67	–			2,30	7,00	8,21	0,58	1,89	2,43	3,8
35+35	3,25	3,25	–			2,30	6,50	7,96	0,58	1,75	2,39	3,8
35+53	2,80	4,20	–			2,30	7,00	8,21	0,58	1,89	2,43	3,8
26+26+26	2,74	2,74	2,74			2,87	8,21	9,85	0,69	2,21	2,76	4,0
26+26+35	2,46	2,46	3,28			2,87	8,21	9,85	0,69	2,21	2,76	4,0
26+35+35	2,24	2,99	2,99			2,87	8,21	9,85	0,69	2,21	2,76	4,0
35+35+35	2,74	2,74	2,74			2,87	8,21	9,85	0,69	2,21	2,76	4,0
<b>❄️ EXT4M82R</b>												
26	2,50	–	–	–		1,52	2,50	3,20	0,40	0,77	0,97	–
35	3,50	–	–	–		1,52	3,50	3,90	0,40	1,08	1,30	–
53	5,00	–	–	–		1,72	5,00	6,50	0,50	1,55	1,78	–
26+26	2,65	2,65	–	–		2,05	5,30	6,81	0,63	1,64	2,28	5,1
26+35	2,57	3,43	–	–		2,05	6,00	6,97	0,63	1,86	2,41	5,1
26+53	2,43	4,87	–	–		2,05	7,30	7,54	0,63	2,26	2,79	5,1
35+35	3,25	3,25	–	–		2,05	6,50	7,38	0,63	2,01	2,49	5,1
35+53	2,92	4,38	–	–		2,05	7,30	7,54	0,63	2,26	2,79	5,1
53+53	3,75	3,75	–	–		2,05	7,50	7,54	0,63	2,32	2,79	5,1
26+26+26	2,37	2,37	2,37	–		2,62	7,10	8,45	0,76	2,20	2,94	6,5
26+26+35	2,34	2,34	3,12	–		2,62	7,80	8,45	0,76	2,41	2,94	6,5
26+26+53	1,95	1,95	3,90	–		2,62	7,80	8,45	0,76	2,41	2,94	6,5
26+35+35	2,13	2,84	2,84	–		2,62	7,80	8,45	0,76	2,41	2,94	6,5

Indoor Units	A (kW)	B (kW)	C (kW)	D (kW)	E (kW)	Capacity (kW)			Power (kW)			SEER
						Min	Nom	Max	Min	Nom	Max	
26+35+53	1,80	2,40	3,60	—	—	2,62	7,80	8,45	0,76	2,41	2,94	6,5
35+35+35	2,60	2,60	2,60	—	—	2,62	7,80	8,45	0,76	2,41	2,94	6,5
26+26+26+26	2,05	2,05	2,05	2,05	—	2,87	8,20	9,92	0,86	2,54	3,17	7,0
26+26+26+35	1,89	1,89	1,89	2,52	—	2,87	8,20	9,92	0,86	2,54	3,17	7,0
<b>* EXT4M105R</b>												
26	2,50	—	—	—	—	1,58	2,50	3,20	0,45	0,76	0,95	—
35	3,50	—	—	—	—	1,58	3,50	3,90	0,45	1,07	1,28	—
53	5,00	—	—	—	—	1,79	5,00	6,50	0,58	1,52	1,75	—
70	7,00	—	—	—	—	2,21	7,00	8,00	0,62	2,13	2,45	—
26+26	2,65	2,65	—	—	—	2,21	5,30	6,83	0,62	1,62	2,44	5,2
26+35	2,57	3,43	—	—	—	2,21	6,00	7,35	0,62	1,83	2,60	5,2
26+53	2,50	5,00	—	—	—	2,21	7,50	9,45	0,62	2,29	2,93	5,2
26+70	2,59	6,91	—	—	—	2,21	9,50	9,98	0,62	2,90	3,12	5,2
35+35	3,50	3,50	—	—	—	2,21	7,00	7,88	0,62	2,13	2,76	5,2
35+53	3,40	5,10	—	—	—	2,21	8,50	9,98	0,62	2,59	2,93	5,2
35+70	3,33	6,67	—	—	—	2,21	10,00	10,50	0,62	3,09	3,19	5,2
53+53	5,00	5,00	—	—	—	2,21	10,00	10,50	0,62	3,09	3,25	5,2
26+26+26	2,50	2,50	2,50	—	—	2,84	7,50	9,98	0,78	2,31	3,41	5,8
26+26+35	2,55	2,55	3,40	—	—	2,84	8,50	10,50	0,78	2,62	3,41	5,8
26+26+53	2,50	2,50	5,00	—	—	2,84	10,00	11,55	0,78	3,09	3,58	5,8
26+26+70	2,14	2,14	5,71	—	—	2,84	10,00	11,55	0,78	3,09	3,58	5,8
26+35+35	2,59	3,45	3,45	—	—	2,84	9,50	11,55	0,78	2,93	3,58	5,8
26+35+53	2,31	3,08	4,62	—	—	2,84	10,00	11,55	0,78	3,09	3,58	5,8
26+35+70	2,00	2,67	5,33	—	—	2,84	10,00	11,55	0,78	3,09	3,58	5,8
26+53+53	2,00	4,00	4,00	—	—	2,84	10,00	11,55	0,78	3,09	3,58	5,8
35+35+35	3,33	3,33	3,33	—	—	2,84	10,00	11,55	0,78	3,09	3,58	5,8
35+35+53	2,86	2,86	4,29	—	—	2,84	10,00	11,55	0,78	3,09	3,58	5,8
35+35+70	2,50	2,50	5,00	—	—	2,84	10,00	11,55	0,78	3,09	3,58	5,8
35+53+53	2,50	3,75	3,75	—	—	2,84	10,00	11,55	0,78	3,09	3,58	5,8
26+26+26+26	2,63	2,63	2,63	2,63	—	3,68	10,50	13,65	0,88	3,25	3,97	6,5
26+26+26+35	2,42	2,42	2,42	3,23	—	3,68	10,50	13,65	0,88	3,25	3,97	6,5
26+26+26+53	2,10	2,10	2,10	4,20	—	3,68	10,50	13,65	0,88	3,25	3,97	6,5
26+26+35+35	2,25	2,25	3,00	3,00	—	3,68	10,50	13,65	0,88	3,25	3,97	6,5
26+26+35+53	1,97	1,97	2,63	3,94	—	3,68	10,50	13,65	0,88	3,25	3,97	6,5
26+35+35+35	2,10	2,80	2,80	2,80	—	3,68	10,50	13,65	0,88	3,25	3,97	6,5
26+35+35+53	1,85	2,47	2,47	3,71	—	3,68	10,50	13,65	0,88	3,25	3,97	6,5
35+35+35+35	2,63	2,63	2,63	2,63	—	3,68	10,50	13,65	0,88	3,25	3,97	6,5
<b>* EXT5M120R</b>												
26	2,50	—	—	—	—	1,66	2,50	3,20	0,45	1,28	1,60	—
35	3,50	—	—	—	—	1,66	3,50	3,90	0,45	1,79	2,15	—
53	5,00	—	—	—	—	1,85	5,00	6,50	0,58	1,98	2,28	—
70	7,00	—	—	—	—	2,09	7,00	8,20	0,70	2,30	2,42	—
26+26	2,68	2,68	—	—	—	2,34	5,35	8,00	0,65	1,90	2,55	5,1
26+35	2,67	3,56	—	—	—	2,34	6,23	8,61	0,65	2,21	2,59	5,1
26+53	2,65	5,31	—	—	—	2,34	7,96	11,07	0,65	2,83	2,86	5,1
26+70	2,62	6,98	—	—	—	2,34	9,60	12,30	0,65	3,41	3,24	5,1
35+35	3,55	3,55	—	—	—	2,34	7,09	9,23	0,65	2,52	2,70	5,1
35+53	3,53	5,30	—	—	—	2,34	8,83	11,69	0,65	3,14	3,12	5,1
35+70	3,49	6,98	—	—	—	2,34	10,47	12,30	0,65	3,72	3,43	5,1
53+53	5,28	5,28	—	—	—	2,34	10,56	12,30	0,65	3,75	3,43	5,1
53+70	4,93	6,57	—	—	—	2,34	11,50	12,50	0,65	3,88	3,43	5,1
26+26+26	2,62	2,62	2,62	—	—	2,89	7,86	10,46	0,80	2,26	3,81	5,3
26+26+35	2,62	2,62	3,49	—	—	2,89	8,73	12,92	0,80	2,51	3,62	5,3
26+26+53	2,62	2,62	5,23	—	—	2,89	10,47	12,30	0,80	3,01	3,81	5,3
26+26+70	2,59	2,59	6,92	—	—	2,89	12,11	12,92	0,80	3,48	3,96	5,3
26+35+35	2,62	3,49	3,49	—	—	2,89	9,60	11,07	0,80	2,76	3,62	5,3
26+35+53	2,62	3,49	5,23	—	—	2,89	11,34	11,69	0,80	3,26	3,81	5,3
26+35+70	2,60	3,46	6,92	—	—	2,89	12,98	12,92	0,80	3,73	3,96	5,3
26+53+53	2,61	5,23	5,23	—	—	2,89	13,07	12,92	0,80	3,76	3,96	5,3
35+35+35	3,49	3,49	3,49	—	—	2,89	10,47	11,07	0,80	3,01	3,73	5,3
35+35+53	3,49	3,49	5,23	—	—	2,89	12,20	12,92	0,80	3,51	3,96	5,3
35+35+70	3,46	3,46	6,92	—	—	2,89	13,84	12,92	0,80	3,98	3,96	5,3
35+53+53	3,48	5,23	5,23	—	—	2,89	13,94	12,92	0,80	4,01	3,96	5,3
35+53+70	2,67	4,00	5,33	—	—	2,89	12,00	12,92	0,80	4,15	3,96	5,3

Indoor Units	A (kW)	B (kW)	C (kW)	D (kW)	E (kW)	Capacity (kW)			Power (kW)			SEER
						Min	Nom	Max	Min	Nom	Max	
53+53+53	4,00	4,00	4,00	–	–	2,89	12,00	12,92	0,80	4,15	3,96	5,3
26+26+26+26	2,63	2,63	2,63	2,63	–	3,69	10,50	12,92	0,91	3,54	4,19	5,6
26+26+26+35	2,65	2,65	2,65	3,54	–	3,69	11,50	13,53	0,91	3,91	4,19	5,6
26+26+26+53	2,40	2,40	2,40	4,80	–	3,69	12,00	13,53	0,91	4,15	4,38	5,6
26+26+26+70	2,17	2,17	2,17	5,79	–	3,69	12,30	13,53	0,91	4,26	4,38	5,6
26+26+35+35	2,46	2,46	3,29	3,29	–	3,69	11,50	13,53	0,91	3,95	4,19	5,6
26+26+35+53	2,25	2,25	3,00	4,50	–	3,69	12,00	13,53	0,91	4,15	4,38	5,6
26+26+35+70	2,05	2,05	2,73	5,47	–	3,69	12,30	13,53	0,91	4,26	4,38	5,6
26+26+53+53	2,05	2,05	4,10	4,10	–	3,69	12,30	13,53	0,91	4,26	4,38	5,6
26+35+35+35	2,30	3,07	3,07	3,07	–	3,69	11,50	13,53	0,91	3,98	4,19	5,6
26+35+35+53	2,17	2,89	2,89	4,34	–	3,69	12,30	13,53	0,91	4,26	4,38	5,6
26+35+35+70	1,94	2,59	2,59	5,18	–	3,69	12,30	13,53	0,91	4,26	4,38	5,6
26+35+53+53	1,94	2,59	3,88	3,88	–	3,69	12,30	13,53	0,91	4,26	4,38	5,6
35+35+35+35	2,88	2,88	2,88	2,88	–	3,69	11,50	13,53	0,91	3,98	4,19	5,6
35+35+35+53	2,73	2,73	2,73	4,10	–	3,69	12,30	13,53	0,91	4,26	4,38	5,6
26+26+26+26+26	2,46	2,46	2,46	2,46	2,46	4,18	12,30	14,00	1,03	3,81	4,57	6,6
26+26+26+26+35	2,31	2,31	2,31	2,31	3,08	4,18	12,30	14,00	1,03	3,81	4,57	6,6
26+26+26+26+53	2,05	2,05	2,05	2,05	4,10	4,18	12,30	14,00	1,03	3,81	4,57	6,6
26+26+26+35+35	2,17	2,17	2,17	2,89	2,89	4,18	12,30	14,00	1,03	3,81	4,57	6,6
26+26+26+35+53	1,94	1,94	1,94	2,59	3,88	4,18	12,30	14,00	1,03	3,81	4,57	6,6
26+26+35+35+35	2,05	2,05	2,73	2,73	2,73	4,18	12,30	14,00	1,03	3,81	4,57	6,6
26+35+35+35+35	1,94	2,59	2,59	2,59	2,59	4,18	12,30	14,00	1,03	3,81	4,57	6,6

## MULTI SPLIT HEATING OUTPUTS AND COMBINATIONS

Indoor Units	A (kW)	B (kW)	C (kW)	D (kW)	E (kW)	Capacity (kW)			Power (kW)			SCOP
						Min	Nom	Max	Min	Nom	Max	
<b>☀️ EXT2M42R</b>												
26	2,92	–	–	–	–	1,32	2,90	3,35	0,28	0,78	0,97	–
35	3,75	–	–	–	–	1,32	3,80	4,31	0,28	1,02	1,28	–
53	4,40	–	–	–	–	1,45	4,40	5,24	0,38	1,19	1,48	–
26+26	2,20	2,20	–	–	–	1,89	4,40	5,28	0,42	1,19	1,48	4,00
26+35	1,89	2,51	–	–	–	1,89	4,40	5,28	0,42	1,19	1,48	4,00
<b>☀️ EXT2M53R</b>												
26	3,00	–	–	–	–	1,56	3,00	3,63	0,32	0,80	1,00	–
35	3,80	–	–	–	–	1,56	3,80	4,60	0,32	1,00	1,20	–
53	5,20	–	–	–	–	1,73	5,20	5,79	0,42	1,35	1,88	–
26+26	2,78	2,78	–	–	–	2,23	5,57	6,68	0,51	1,50	1,88	4,0
26+35	2,39	3,18	–	–	–	2,23	5,57	6,68	0,51	1,50	1,88	4,0
26+53	1,86	3,71	–	–	–	2,23	5,57	6,68	0,51	1,50	1,88	4,0
35+35	2,79	2,79	–	–	–	2,23	5,57	6,68	0,51	1,50	1,88	4,0
<b>☀️ EXT3M53R1</b>												
26	2,50	–	–	–	–	–	–	–	–	–	–	–
35	3,50	–	–	–	–	–	–	–	–	–	–	–
53	5,00	–	–	–	–	–	–	–	–	–	–	–
26+26	2,64	2,64	–	–	–	1,58	5,27	6,32	0,21	1,42	1,85	3,80
26+35	2,26	3,01	–	–	–	1,58	5,27	6,32	0,20	1,31	1,70	3,92
26+53	1,76	3,52	–	–	–	1,59	5,28	6,34	0,19	1,23	1,60	3,85
35+35	2,62	2,62	–	–	–	1,57	5,25	6,30	0,18	1,23	1,60	3,99
35+53	2,10	3,15	–	–	–	1,57	5,25	6,30	0,18	1,17	1,52	3,89
26+26+26	1,76	1,76	1,76	–	–	1,58	5,28	6,34	0,21	1,42	1,85	3,90
<b>☀️ EXT3M62R</b>												
26	3,00	–	–	–	–	1,43	3,00	3,63	0,35	0,81	1,01	–
35	3,80	–	–	–	–	1,43	3,80	4,60	0,35	1,02	1,23	–
53	5,20	–	–	–	–	1,74	5,20	6,64	0,45	1,40	2,00	–
26+26	2,95	2,95	–	–	–	2,13	5,90	6,77	0,52	1,59	1,91	3,8
26+35	2,70	3,60	–	–	–	2,13	6,30	6,96	0,52	1,70	1,95	3,8
26+53	2,20	4,40	–	–	–	2,13	6,60	7,22	0,52	1,78	2,00	3,8
35+35	3,15	3,15	–	–	–	2,13	6,30	7,22	0,52	1,70	2,00	3,8
26+26+26	2,15	2,15	2,15	–	–	2,26	6,44	7,74	0,63	1,74	2,17	4,0
26+26+35	1,93	1,93	2,58	–	–	2,26	6,44	7,74	0,63	1,74	2,17	4,0

Indoor Units	A (kW)	B (kW)	C (kW)	D (kW)	E (kW)	Capacity (kW)			Power (kW)			SCOP
						Min	Nom	Max	Min	Nom	Max	
<b>☀️ EXT3M80R</b>												
26	3,00	–	–			1,64	3,00	3,20	0,40	0,80	1,01	–
35	3,80	–	–			1,64	3,80	3,90	0,40	1,02	1,22	–
53	5,20	–	–			1,89	5,20	7,22	0,50	1,39	1,59	–
26+26	3,00	3,00	–			2,30	6,00	7,39	0,58	1,62	2,21	3,8
26+35	2,70	3,60	–			2,30	6,30	7,80	0,58	1,70	2,32	3,8
26+53	2,33	4,67	–			2,30	7,00	8,21	0,58	1,89	2,43	3,8
35+35	3,25	3,25	–			2,30	6,50	7,96	0,58	1,75	2,39	3,8
35+53	2,80	4,20	–			2,30	7,00	8,21	0,58	1,89	2,43	3,8
26+26+26	2,74	2,74	2,74			2,87	8,21	9,85	0,69	2,21	2,76	4,0
26+26+35	2,46	2,46	3,28			2,87	8,21	9,85	0,69	2,21	2,76	4,0
26+35+35	2,24	2,99	2,99			2,87	8,21	9,85	0,69	2,21	2,76	4,0
35+35+35	2,74	2,74	2,74			2,87	8,21	9,85	0,69	2,21	2,76	4,0
<b>☀️ EXT4M82R</b>												
26	3,00	–	–	–		1,63	3,00	3,20	0,40	0,80	1,00	–
35	3,80	–	–	–		1,63	3,80	3,90	0,40	1,01	1,22	–
53	5,60	–	–	–		1,85	5,60	6,77	0,50	1,48	1,70	–
26+26	3,00	3,00	–	–		2,20	6,00	7,30	0,59	1,57	2,13	3,4
26+35	3,00	4,00	–	–		2,20	7,00	7,47	0,59	1,84	2,25	3,4
26+53	2,63	5,27	–	–		2,20	7,90	8,09	0,59	2,05	2,61	3,4
35+35	3,75	3,75	–	–		2,20	7,50	7,91	0,59	1,97	2,32	3,4
35+53	3,20	4,80	–	–		2,20	8,00	8,09	0,59	2,08	2,61	3,4
53+53	4,00	4,00	–	–		2,20	8,00	8,09	0,59	2,08	2,61	3,4
26+26+26	2,87	2,87	2,87	–		2,81	8,60	9,06	0,71	2,32	2,75	4,0
26+26+35	2,58	2,58	3,44	–		2,81	8,60	9,06	0,71	2,32	2,75	4,0
26+26+53	2,15	2,15	4,30	–		2,81	8,60	9,06	0,71	2,32	2,75	4,0
26+35+35	2,35	3,13	3,13	–		2,81	8,60	9,06	0,71	2,32	2,75	4,0
26+35+53	1,98	2,65	3,97	–		2,81	8,60	9,06	0,71	2,32	2,75	4,0
35+35+35	2,87	2,87	2,87	–		2,81	8,60	9,06	0,71	2,32	2,75	4,0
26+26+26+26	2,20	2,20	2,20	2,20		3,08	8,79	10,64	0,81	2,37	2,96	4,00
26+26+26+35	2,03	2,03	2,03	2,70		3,08	8,79	10,64	0,81	2,37	2,96	4,00
<b>☀️ EXT4M105R</b>												
26	3,00	–	–	–		1,58	3,00	3,20	0,45	0,81	1,01	–
35	3,80	–	–	–		1,58	3,80	3,90	0,45	1,02	1,23	–
53	5,20	–	–	–		1,79	5,20	7,00	0,55	1,40	1,61	–
70	7,20	–	–	–		1,79	7,20	8,00	0,58	1,94	2,23	–
26+26	3,00	3,00	–	–		2,22	6,00	6,86	0,54	1,62	2,13	3,4
26+35	3,00	4,00	–	–		2,22	7,00	7,39	0,54	1,89	2,27	3,4
26+53	2,93	5,87	–	–		2,22	8,80	9,50	0,54	2,37	2,56	3,4
26+70	2,67	7,13	–	–		2,22	9,80	10,13	0,54	2,64	2,70	3,4
35+35	3,75	3,75	–	–		2,22	7,50	7,91	0,54	2,02	2,42	3,4
35+53	3,76	5,64	–	–		2,22	9,40	10,02	0,54	2,53	2,56	3,4
35+70	3,33	6,67	–	–		2,22	10,00	10,34	0,54	2,70	2,79	3,4
53+53	5,05	5,05	–	–		2,22	10,10	10,55	0,54	2,72	2,84	3,5
26+26+26	3,33	3,33	3,33	–		2,85	10,00	10,02	0,68	2,70	2,99	3,6
26+26+35	3,03	3,03	4,04	–		2,85	10,10	10,55	0,68	2,72	2,99	3,6
26+26+53	2,68	2,68	5,35	–		2,85	10,70	11,61	0,68	2,88	3,13	3,6
26+26+70	2,29	2,29	6,11	–		2,73	10,70	11,11	0,65	2,88	2,99	3,6
26+35+35	2,92	3,89	3,89	–		2,85	10,70	11,61	0,68	2,88	3,13	3,6
26+35+53	2,47	3,29	4,94	–		2,85	10,70	11,61	0,68	2,88	3,13	3,6
26+35+70	2,14	2,85	5,71	–		2,85	10,70	11,61	0,68	2,88	3,13	3,6
26+53+53	2,14	4,28	4,28	–		2,85	10,70	11,61	0,68	2,88	3,13	3,6
35+35+35	3,57	3,57	3,57	–		2,85	10,70	11,61	0,68	2,88	3,13	3,6
35+35+53	3,06	3,06	4,59	–		2,85	10,70	11,61	0,68	2,88	3,13	3,6
35+35+70	2,68	2,68	5,35	–		2,85	10,70	11,61	0,68	2,88	3,13	3,6
35+53+53	2,68	4,01	4,01	–		2,85	10,70	11,61	0,68	2,88	3,13	3,6
26+26+26+26	2,64	2,64	2,64	2,64		3,69	10,55	12,66	0,77	2,84	3,70	4,0
26+26+26+35	2,56	2,56	2,56	3,42		3,69	11,10	12,66	0,77	2,99	3,70	4,0
26+26+26+53	2,22	2,22	2,22	4,44		3,69	11,10	12,66	0,77	2,99	3,70	4,0
26+26+35+35	2,38	2,38	3,17	3,17		3,69	11,10	12,66	0,77	2,99	3,70	4,0
26+26+35+53	2,08	2,08	2,78	4,16		3,69	11,10	12,66	0,77	2,99	3,70	4,0
26+35+35+35	2,22	2,96	2,96	2,96		3,69	11,10	12,66	0,77	2,99	3,70	4,0
26+35+35+53	1,96	2,61	2,61	3,92		3,69	11,10	12,66	0,77	2,99	3,70	4,0
35+35+35+35	2,78	2,78	2,78	2,78		3,69	11,10	12,66	0,77	2,99	3,70	4,0

Indoor Units	A (kW)	B (kW)	C (kW)	D (kW)	E (kW)	Capacity (kW)			Power (kW)			SCOP
						Min	Nom	Max	Min	Nom	Max	
☀️ EXT5M120R												
26	3,00	—	—	—	—	1,66	3,00	3,20	0,45	0,80	1,00	—
35	3,80	—	—	—	—	1,66	3,80	3,90	0,45	1,01	1,22	—
53	5,20	—	—	—	—	1,85	5,20	7,00	0,58	1,38	1,59	—
70	7,20	—	—	—	—	2,09	7,20	8,50	0,70	1,90	2,00	—
26+26	3,00	3,00	—	—	—	2,34	6,00	8,00	0,56	1,58	2,22	3,0
26+35	2,91	3,89	—	—	—	2,34	6,80	8,62	0,56	1,79	2,26	3,0
26+53	2,93	5,87	—	—	—	2,34	8,80	11,08	0,56	2,32	2,49	3,0
26+70	2,78	7,42	—	—	—	2,34	10,20	12,31	0,56	2,68	2,82	3,0
35+35	3,75	3,75	—	—	—	2,34	7,50	9,23	0,56	1,97	2,35	3,0
35+53	3,76	5,64	—	—	—	2,34	9,40	11,69	0,56	2,47	2,72	3,0
35+70	3,50	7,00	—	—	—	2,34	10,50	12,31	0,56	2,76	2,99	3,0
53+53	5,50	5,50	—	—	—	2,34	11,00	12,31	0,56	2,89	2,99	3,0
53+70	4,93	6,57	—	—	—	2,34	11,50	12,51	0,56	3,01	2,99	3,0
26+26+26	3,33	3,33	3,33	—	—	2,89	10,00	12,31	0,70	2,60	3,32	3,2
26+26+35	3,30	3,30	4,40	—	—	2,89	11,00	12,31	0,70	2,86	3,15	3,2
26+26+53	2,88	2,88	5,75	—	—	2,89	11,50	12,31	0,70	2,99	3,32	3,2
26+26+70	2,57	2,57	6,86	—	—	2,89	12,00	12,92	0,70	3,12	3,45	3,2
26+35+35	3,14	4,18	4,18	—	—	2,89	11,50	12,31	0,70	2,99	3,15	3,2
26+35+53	2,77	3,69	5,54	—	—	2,89	12,00	12,92	0,70	3,12	3,32	3,2
26+35+70	2,40	3,20	6,40	—	—	2,89	12,00	12,92	0,70	3,12	3,45	3,2
26+53+53	2,40	4,80	4,80	—	—	2,89	12,00	12,92	0,70	3,12	3,45	3,2
35+35+35	3,83	3,83	3,83	—	—	2,89	11,50	12,31	0,70	2,99	3,25	3,2
35+35+53	3,43	3,43	5,14	—	—	2,89	12,00	12,92	0,70	3,12	3,45	3,2
35+35+70	3,00	3,00	6,00	—	—	2,89	12,00	12,92	0,70	3,12	3,45	3,2
35+53+53	3,00	4,50	4,50	—	—	2,89	12,00	12,92	0,70	3,12	3,45	3,2
35+53+70	2,67	4,00	5,33	—	—	2,89	12,00	12,92	0,70	3,12	3,45	3,2
53+53+53	4,00	4,00	4,00	—	—	2,89	12,00	12,92	0,70	3,09	3,45	3,2
26+26+26+26	3,00	3,00	3,00	3,00	—	3,69	12,00	13,54	0,80	3,07	3,65	3,4
26+26+26+35	2,77	2,77	2,77	3,69	—	3,69	12,00	13,54	0,80	3,07	3,65	3,4
26+26+26+53	2,40	2,40	2,40	4,80	—	3,69	12,00	13,54	0,80	3,07	3,82	3,4
26+26+26+70	2,17	2,17	2,17	5,79	—	3,69	12,30	13,54	0,80	3,15	3,82	3,4
26+26+35+35	2,57	2,57	3,43	3,43	—	3,69	12,00	13,54	0,80	3,07	3,65	3,4
26+26+35+53	2,25	2,25	3,00	4,50	—	3,69	12,00	13,54	0,80	3,07	3,82	3,4
26+26+35+70	2,05	2,05	2,73	5,47	—	3,69	12,30	13,54	0,80	3,15	3,82	3,4
26+26+53+53	2,00	2,00	4,00	4,00	—	3,69	12,00	13,54	0,80	3,07	3,82	3,4
26+35+35+35	2,40	3,20	3,20	3,20	—	3,69	12,00	13,54	0,80	3,07	3,65	3,4
26+35+35+53	2,12	2,82	2,82	4,24	—	3,69	12,00	13,54	0,80	3,07	3,82	3,4
26+35+35+70	1,94	2,59	2,59	5,18	—	3,69	12,30	13,54	0,80	3,15	3,82	3,4
26+35+53+53	1,89	2,53	3,79	3,79	—	3,69	12,00	13,54	0,80	3,07	3,82	3,4
35+35+35+35	3,00	3,00	3,00	3,00	—	3,69	12,00	13,54	0,80	3,07	3,65	3,4
35+35+35+53	2,67	2,67	2,67	4,00	—	3,69	12,00	13,54	0,80	3,07	3,82	3,4
26+26+26+26+26	2,46	2,46	2,46	2,46	2,46	4,19	12,31	14,96	0,90	3,32	4,15	3,8
26+26+26+26+35	2,31	2,31	2,31	2,31	3,08	4,19	12,31	14,96	0,90	3,32	4,15	3,8
26+26+26+26+53	2,05	2,05	2,05	2,05	4,10	4,19	12,31	14,96	0,90	3,32	4,15	3,8
26+26+26+35+35	2,17	2,17	2,17	2,90	2,90	4,19	12,31	14,96	0,90	3,32	4,15	3,8
26+26+26+35+53	1,94	1,94	1,94	2,59	3,89	4,19	12,31	14,96	0,90	3,32	4,15	3,8
26+26+35+35+35	2,05	2,05	2,74	2,74	2,74	4,19	12,31	14,96	0,90	3,32	4,15	3,8
26+35+35+35+35	1,94	2,59	2,59	2,59	2,59	4,19	12,31	14,96	0,90	3,32	4,15	3,8

## MULTI SPLIT WITH HEAT RECOVERY HEATING AND COOLING COMBINATIONS

Dual Configuration	Triad Configuration	Quadri Configuration
☀️ EXT3M53HR		
26 + TNK100HR	26+26 + TNK100HR	
35 + TNK100HR	26+35 + TNK100HR	
53 + TNK100HR	35+35 + TNK100HR	
☀️ EXT4M80HR		
26 + TNK190HR	26+26 + TNK190HR	26+26+26 + TNK190HR
35 + TNK190HR	26+35 + TNK190HR	26+26+35 + TNK190HR
53 + TNK190HR	26+53 + TNK190HR	26+26+53 + TNK190HR
70 + TNK190HR	35+35 + TNK190HR	26+35+35 + TNK190HR
	35+53 + TNK190HR	26+35+53 + TNK190HR
		35+35+35 + TNK190HR

# WiFi Smart port

## for multi & commercial indoor units

### Simplify climate control!

**Smart Port** WiFi, specially designed to control via smartphone or tablet the indoor units of the range R32, cassettes, ducted and ceiling floor.  
(Note: not available for Console and Column models.)

Thanks to integration with the **NetHome Plus** App, Smart Port offers intuitive and easy remote control via smartphone or tablet.

The compact size makes it discreet and easy to integrate. Each Smart Port must be connected to a single internal unit via serial cable. Through the app you can manage multiple units.



Connection to the main board via cable



Remote on or off



Control via the web and via the App



Weekly programs



Temperature Regulation



Compact size  
12 cm x 3 cm



Need for a pre-existing support WiFi network



Sleep Function



# Twin System

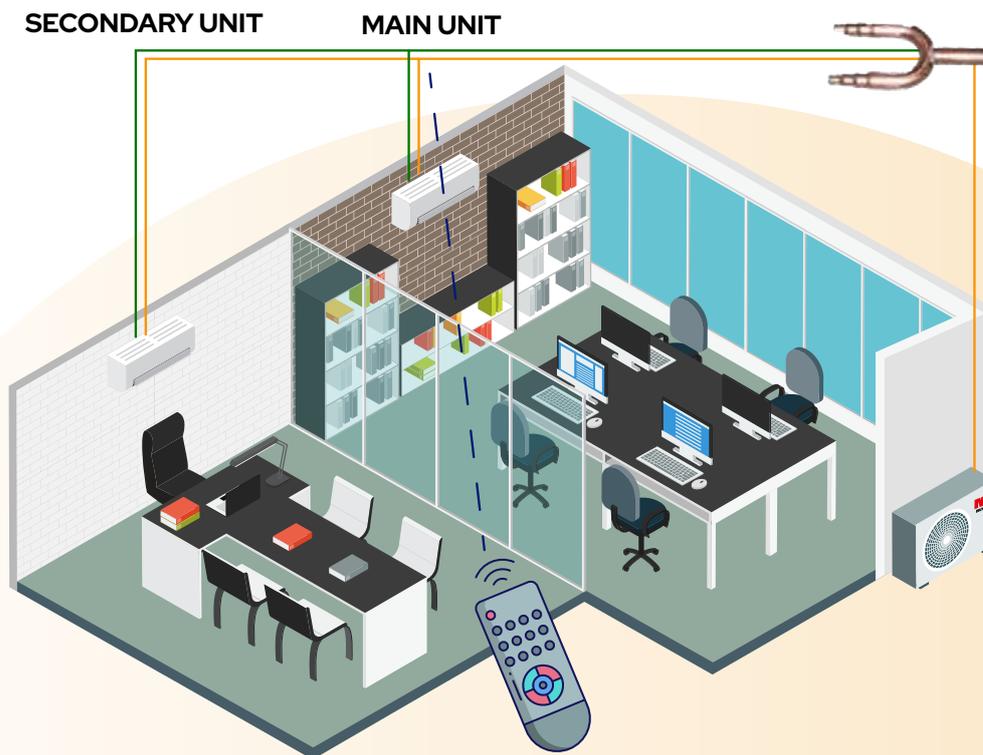
Transforms the commercial range into a Dual conditioner

Twins systems: one outdoor unit is connected with two same rating indoor units. Available for cassette, ducted and floor ceiling type.

The indoor units must be in the same ratings. The Twins System feature is optional for some models. Control rules: When a twin system is working, the controller can control only the main unit.

The secondary unit works in the same state as the main unit. 2 indoor units work in same state such as working mode, set temperature, fan-speed and etc.

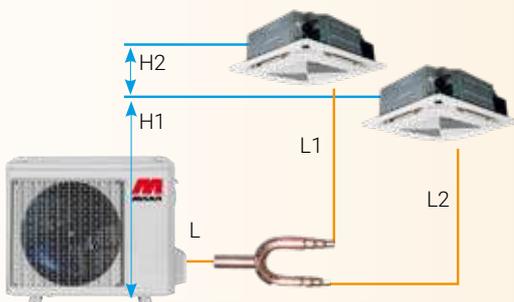
The outdoor unit output capacity is based on the sum of both indoor unit capacity request. When the main unit stops, the secondary unit will stop as well.



## Allowed combinations

Indoor unit	Outdoor unit
35 + 35	UECS71R
53 + 53	UECS105R
71 + 71	UECS130R
105 + 105	UECS176R

<b>Piping length</b>	Total piping length	35+35	25	L+MAX (L1, L2)
		53+53	30	
		71+71	50	
		105+105	50	
<b>Drop height</b>	Farthest distance from line pipe branch		15	L1, L2
	Farthest distance from the line pipe branch		10	L1-L2
	Drop height between indoor and outdoor unit		20	H1
	Drop height between two indoor units		0,5	H2



## Turns to water the air-to-air systems and saves space of external unit

A water-cooled unit can be installed in small spaces in the building as long as you have all of the hydraulic connections.

### Advantages

The water-cooled unit is useful to solve some difficulties different installation and especially in cases where it is not possible to place the outdoor unit to excessive distance or aesthetic issues or regulatory constraints.

### Water cooled units

The water-cooled unit is expected that the external original system drive, single or multi split, is amended as follows:

- Elimination of exchange coils in the air
- Elimination of the fan and the motor
- Inclusion of relevant material suitable to transfer heat or cold water
- Original casing replacement with a more compact and suitable for installations also tight places

### Installation

The unit is provided with water connections (inlet and outlet water) refrigerant connections (original) and electrical connections (original).



## New wire controller Airset R&C

New optional remote control, standard on DUCT models. Depending on the version, it can be connected to Tredis indoor units and to commercial series indoor units.

### Versions

**AIRSET-R** connection to the indoor unit through the SPC accessory, only for Tredis

**AIRSET-C** connection directly to the machine

### Main Features

- Two-way communication
- Full control of all features,
- 4.3" LCD
- Backlight
- Weekly programming
- Autorestart
- Integrated Wi-Fi (C version only)
- **NetHome Plus** app (C version only)



# Legend

	Multi speeds		Super Slim		Super DC Inverter		Filter cleaning monitor
	Auto swing		Flusso a 360°		Digital Scroll		Catechin filter
	Lock Function		Optical detector		Inverter pump		Formaldehyde filter
	Timer		Hot gas valve		Class A Pump		Filter changed monitor
	Dc Inverter		Electric heater		HP Scroll		Plasma Filter
	Low temperature work		Self-diagnosis		Shell and tube		Self-cleaning function
	Low noise fan		High EER		Plate		Refrigerant
	Installations view		WiFi		Rotary		Refrigerant
	Three BLDC motors		Follow-me function		DC Compressor		Refrigerant
	High COP		Turbo mode		Working logic		Refrigerant
	Sleep mode		Hydrophilic aluminium fin		EVI Scroll		Energy class
	Odor & dust sensor		Anti-rust cabinet		Screw		While stock lasts
	On-Off		3-Way valve		Scroll Compressor		Hot water up to 40°C
	Led display		Hot Sanitary Water		Radial		Build-in Drain water pump
	Digital signal processing		Built In Hydronic Group		Variable rotation pump		Water condensed available
	Autorestart		Reciprocating compressor		Silver Ions & Bio Filter		Solar Ready
	New V415 control		Recyclable material		Steam injection technology		Photovoltaic predisposition
	Compatible with radiant panels and radiators						







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