

ferroli



Omnia Life M

Monobloc air-water heat pump with natural refrigerant



OMNIA LIFE M

Efficiency, sustainability, comfort come together in our new heat pump



The new Ferrolife **OMNIA LIFE M** air-to-water heat pump is the result of Ferrolife's efforts to incorporate new, increasingly efficient and sustainable solutions into the market.

The unit incorporates a natural refrigerant (**R290**) with a very low environmental impact (**GWP 3**), in response to Ferrolife's concern for the environment.

In addition, it has high performance in heating, cooling and DHW production, which minimises the electrical consumption of the equipment. In this way, the user benefits from a lower economic cost in their electricity bill.

If we add to this the fact that it can be combined with a photovoltaic installation, it becomes an even more efficient and sustainable solution. **Its capacity to produce hot water up to 75°C without external support allows a high DHW production capacity, much higher than other heat pumps, which means more comfort for the user.**

In combination with other Ferrolife equipment such as the new **OMNIA FT** or the multiple options of DHW inter-accumulators, it's the perfect solution for both new buildings and refurbishments, and can be perfectly integrated with any type of thermal terminal as radiators, fan coils or underfloor heating.

NOTE: OMNIA LIFE M is available as standard without e-heater inside. Special version with e-heater inside also available.



NATURAL REFRIGERANT R290

Ready for the future... Now!



GAS R290

R290

What is it and why use it?

R290 is a natural hydrocarbon refrigerant with a low environmental impact.

It has a **GWP** (Global Warming Potential) of only **3**, which is very low compared to other currently used refrigerants such as R32 (WGP 675) or R410a (GWP 2088).

This means that in the event of a leakage of 1 kg of R290 refrigerant, the warming of the atmosphere that would occur is 225 times less than in the case of leakage of 1 kg of R32 or 696 times less in the case of R410.

From a sustainable and environmental point of view, this makes R290 the most suitable refrigerant at the moment, and probably in the coming years.

In addition, it has very good thermodynamic performance compared to these other refrigerants (R32, R410a), which makes it possible to obtain: higher water supply temperature in heating and DHW extended working ranges, being able to operate with temperatures from -25°C to 46°C, better performance in heating, cooling and DHW lower refrigerant charges in the equipment. More compact equipment.

Finally, the refrigerant R290 is out of the scope of the prohibitions of the F-GAS regulation (Reg UE 2024/573).

Its low environmental impact, coupled with its high thermodynamic performance, makes it the ideal refrigerant for achieving a successful transition to more efficient, sustainable and environmentally friendly air-water heat pumps.



HIGH EFFICIENCY

Top performances

35°C 

The high energy rating and performance of the OMNIA LIFE M allows high efficiency to be achieved while reducing the user's energy costs.

55°C 

Its high energy rating (A⁺⁺⁺) (*) together with a high SCOP of up to 7,11 (**) generates more savings compared to other air-to-water heat pumps and enables high energy savings.

SCOP in heating up to 7,11

Pay for 1 kW electricity - Obtain 7,11 kW energy for heating **(6,11 kW for FREE!)**



1 kW Electricity



7,11 kW for Heating
(6,11 for FREE!)



(*) Energy rating A⁺⁺⁺ in heating (Range A⁺⁺⁺ - D)
(**) EN 14825. Warm climate conditions, W35



HIGH WATER TEMPERATURE

Production up to 75°C



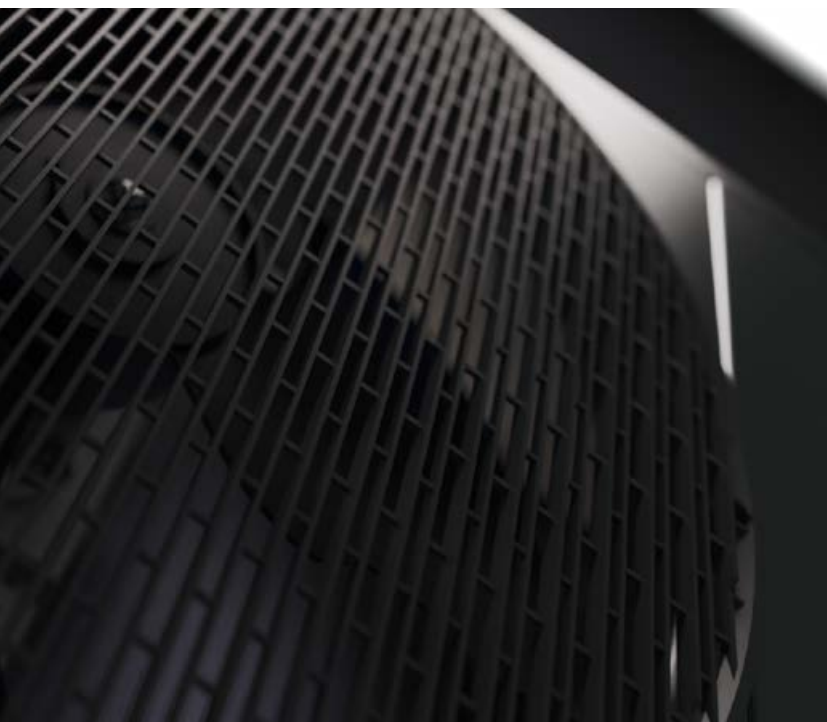
The use of the natural refrigerant R290 together with the special design of the equipment allows hot water production temperatures of 75°C to be obtained. This high production temperature allows this unit to be installed with any type of thermal emitter: underfloor heating, fan coils or even radiators.

In addition, the operating limits for low/high outside temperatures are extended, being able to work in heating down to -25°C, and in cooling down to +46°C.



DOMESTIC HOT WATER

High efficiency and confort



The OMNIA LIFE M heat pump achieves the highest DHW rating: A+.

High confort with minimum cost.

It is able to produce DHW in a tank at 70°C only with the heat pump, without any external support (electric resistance or boiler).

As it stores water at a higher temperature (70°C) than a normal heat pump (50°C), it increases the capacity to provide more shower services with the same DHW tank.

Furthermore, the heat pump can carry out water disinfection treatment (anti-legionella treatment) on its own (without the support of an electrical resistance) at a lower energy cost than other equipment that does require such a resistance to do so.





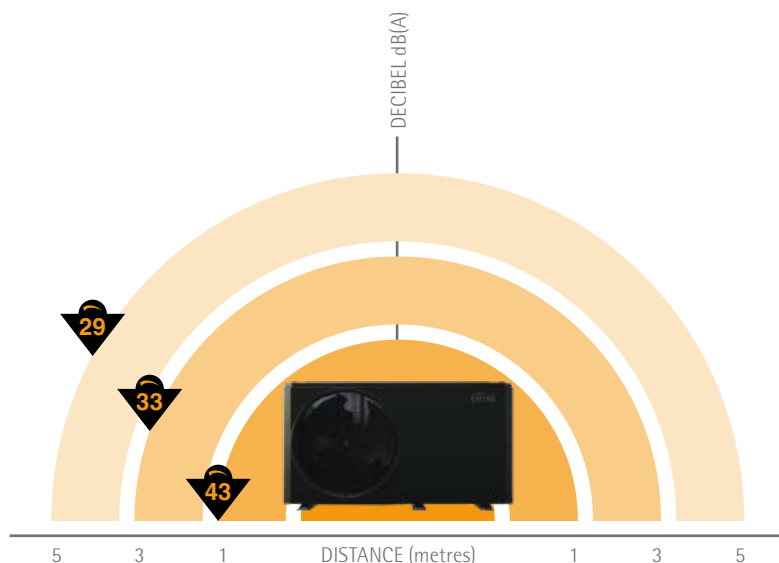
VERY QUIET

the sound of silence

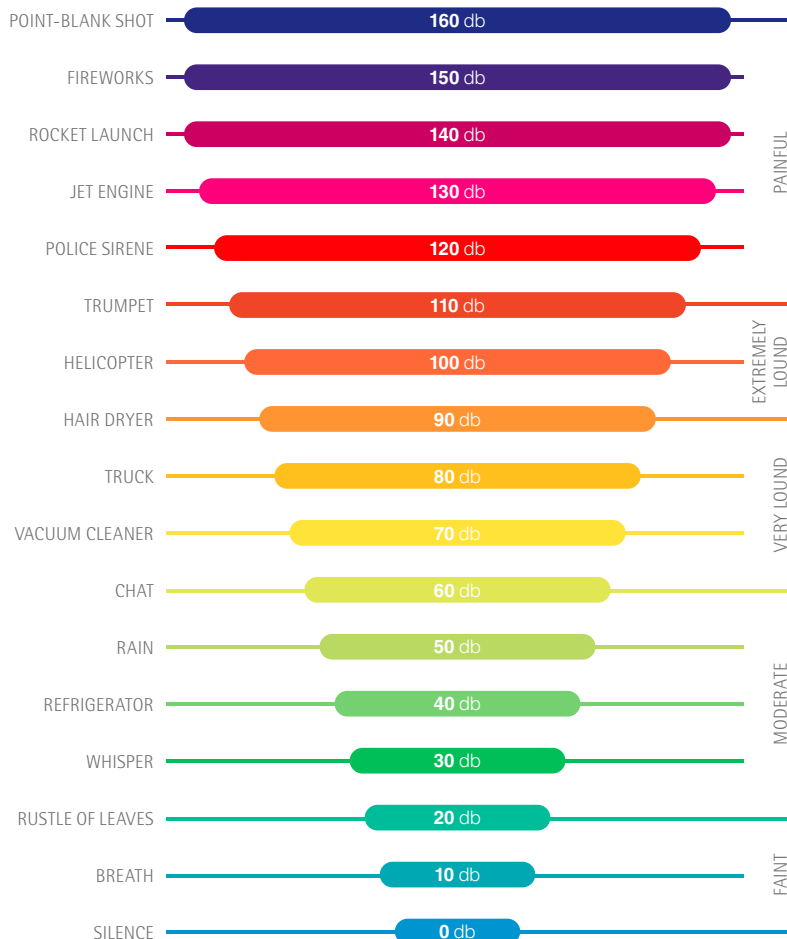
The OMNIA LIFE M heat pump achieves very low sound power level, thanks to its special design and acoustic isolation.

It's possible to select up to 2 silent modes in the control, reducing at maximum level the sound level emitted.

Its sound pressure level from as low as 33 dB(A) in quiet mode at a distance of 3 metres is similar to the sound level of a quiet conversation or the ambience of a library.



Decibel scale





CONTROL

Simple, intuitive and powerful at the same time

FUNCTIONS

WIFI+APP AS STANDARD



CONFIGURATION VIA USB



SMARTGRID READY



PHOTOVOLTATIC CONNECTION



CASCADE



The main control is a remote control (with only two connection wires) with a simple and intuitive user interface. (*)

The USB function allows the configuration of the equipment via a USB port

- Parameter setting transmission between wired controllers: Parameter setting can be copied from wired controller to USB. Installer can quickly copy the setting from one controller to another via USB
- Convenient program upgrade for unit: Installer can store the program in the USB. There is no need to carry other heavy equipment to upgrade

Wi-fi included as standard (inside remote control)

Remote control of the unit via APP (available for IOS and Android)

Weekly scheduling

Photovoltaic input

Smart Grid input

Management of up to 2 system zones (1 mixed and 1 direct)

Cascade function (up to 6 units: 1 master + 5 slaves)

(*) NOTE: it is mandatory to install the remote control for the equipment to work properly.



Scan the QR code to install the control APP

"MYOMNIA SMART"

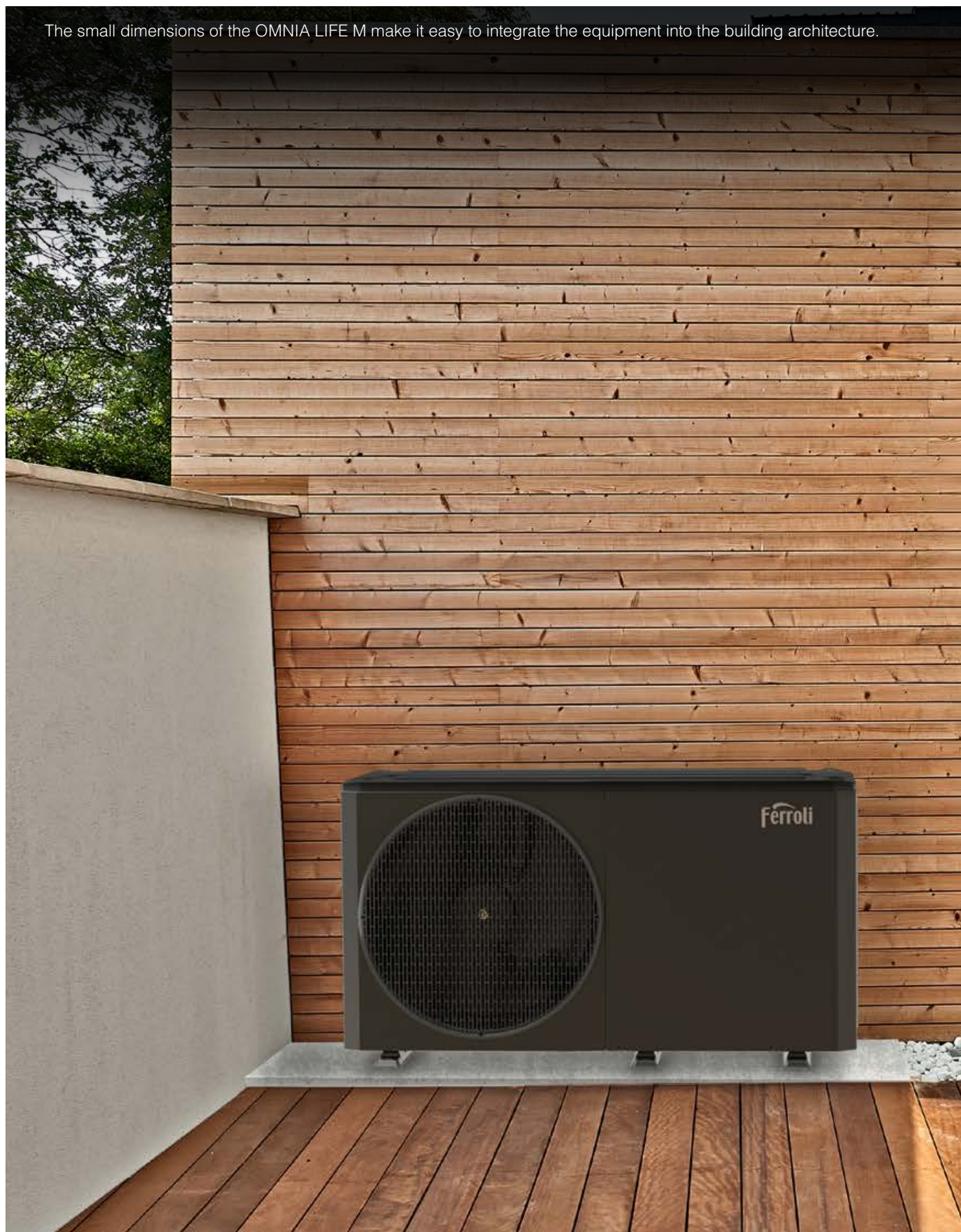




REDUCED DIMENSIONS

Easy integration in the building

The small dimensions of the OMNIA LIFE M make it easy to integrate the equipment into the building architecture.





REHABILITATION OR NEW PROJECT

Valid for all types of installation

The OMNIA LIFE M, combined with the new OMNIA FT Hydronic Internal Unit, or with the wide range of Ferrolí DHW tanks and buffer tanks available, adapts perfectly to any installation, whether it is a rehabilitation or a new construction project.

New constructions projects

The OMNIA LIFE M, combined with the new OMNIA FT Hydronic Indoor Unit, is ideal for this type of installation, where the space available for the equipment is limited and high performance is required to meet the new regulatory standards.



Rehabilitation projects

The OMNIA LIFE M is ideal for this purpose, as it can produce water at high temperatures (up to 75°C) and can be integrated with existing terminal heating elements (including radiators) without the need to modify the installation. If it is necessary to increase the water content of the installation, it can be combined with Ferrolí Ecopuffer HP buffer tanks, and if it is necessary to meet DHW needs, it can be combined with Ferrolí's wide range of DHW tanks.





EASY INSTALLATION

Range of optionals

The Ferroli OMNIA LIFE M heat pump is designed for easy installation. It also has a range of optional equipment that helps to reduce installation time and cost.

STANDARD ACCESSORIES INCLUDED

- TEMPERATURE PROBE for the integration of a supplementary heat source or to install inside a DHW storage tank
- Y WATER FILTER (assembled by the installer)

ACCESSORIES

- REMOTE CONTROL (NOTE: it is mandatory to install the remote control for the equipment to work properly)
- WATER TEMPERATURE PROBE. The temperature probe can be connected to perform the functions T1 / Tbt1 / Tbt2 / T5 / Tw2 / Tsolar (for more details refer to the installation and user manual of the unit)
- RUBBER ANTIVIBRATION DAMPERS

OMNIA FT

Hydronic indoor unit with integrated dhw tank in combination with OMNIA LIFE M



This series of hydronic indoor units with integrated DHW tank are designed to combine with any of Ferroli air-water heat pumps, to meet the needs of climatization and DHW of small and medium power residential and commercial installations

MAIN CHARACTERISTICS

- DHW production up to 70°C only with heat pump (in combination with OMNIA LIFE M)
- Reduced dimensions that allow the installation of both sizes (200 and 250) in standard kitchen cabinet recesses (600 mm wide)
- Model FT 250 can be combined with all heat pump models (4kW-16kW 1 phase)
- Hydraulic connections at the top to facilitate the connection of the equipment
- Wide range of hydraulic accessories to install inside the unit. No additional space needed
- DHW boiler in enamelled carbon steel (190 liters for mod. 200, 240 liters for mod. 250), insulated with thick polyurethane foam, complete with water drain tap and protected as standard with a 9 bar safety valve
- Can be integrated with 1.5 kW electric heater for DHW tank (accessory)
- 3-way diverter valve for DHW production
- System expansion vessel of 10 liters
- Electric system heater (3 kW single-phase or 6 kW three-phase)
- Water system multifunction group (mechanical filter, magnetic ring and dirt separator) complete with automatic air vent, water pressure gauge and 3 bar safety valve
- System filling tap



ACCESSORIES

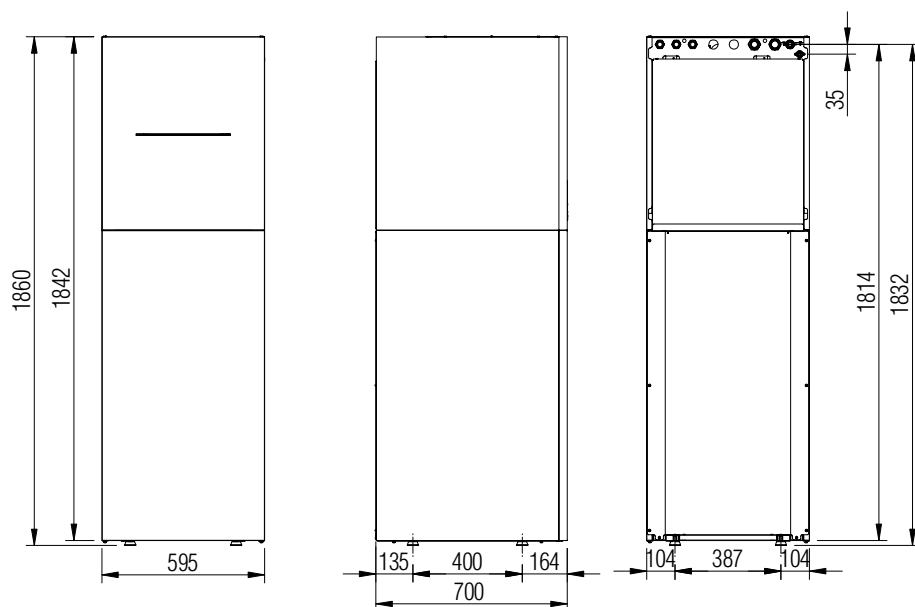
- CK** Hydraulic connections kit for an easy and quick installation
- AI** 18 liters system inertial tank complete with water drain valve and automatic air vent
- K2Z** 2 zone kit (direct and mixed) consisting of 2 circulators, mixing valve and mixed zone delivery temperature probe
- TBH** DHW storage electric heater (1.5 kW single-stage for all models)
- VEACS** 8 liter DHW expansion tank
- KS** Pipes kit for thermal solar
- KPS** Solar thermal kit complete with water circulator and plate exchanger



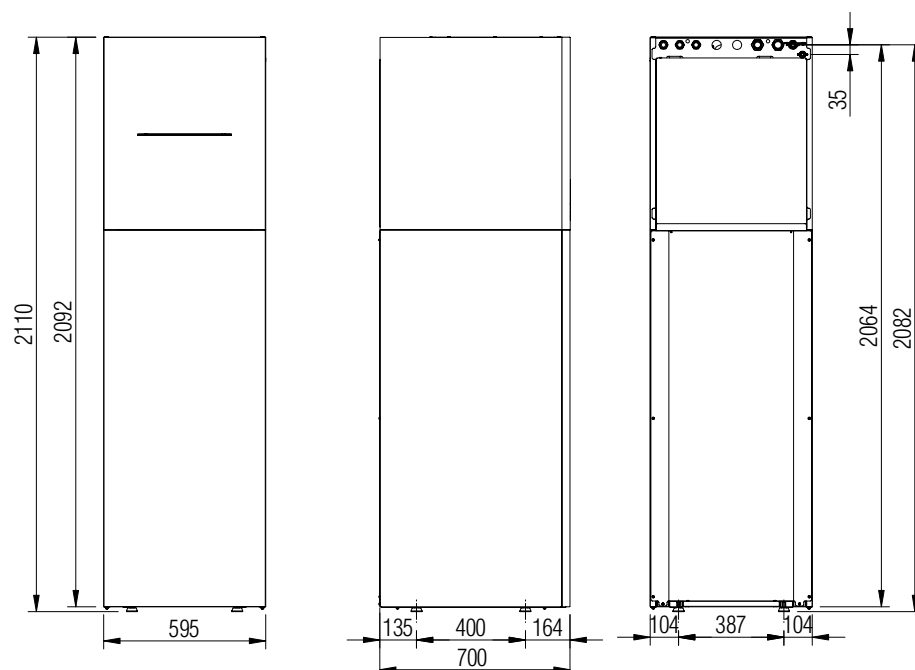
EASY INSTALLATION

Range of optionals

Model 200



Model 250



OMNIA FT		200	250	250T
Packaged unit (WxHxD)	mm	700 x 2050 x 800	700 x 2300 x 800	700 x 2300 x 800
Net weight (min-max) (*)	kg	158 / 184	180 / 206	180 / 206
Operation weight (*)	kg	349 / 393	421 / 465	421 / 465
Packaged unit weight	kg	164	187	187

(*) **min** = the weight refers to the basic unit without accessories / **max** = the weight refers to the basic unit with buffer tank and 2 zone kit accessories installed

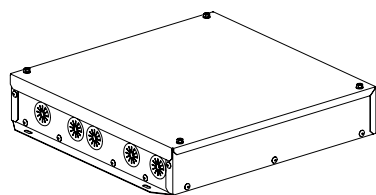


EASY INSTALLATION

Range of optionals

HYDRAULIC ELECTRONIC BOARD BOX

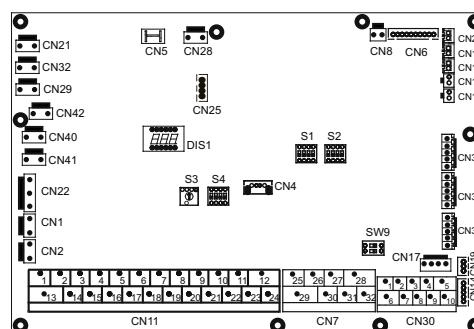
This accessory is used to shorten the field connection cable length between hydraulic module PCB on heat pump and the external components that are usually connected, such as 3-way valve, DHW heater, pumps, external electrical heater, boiler, etc., making the installation more flexible.



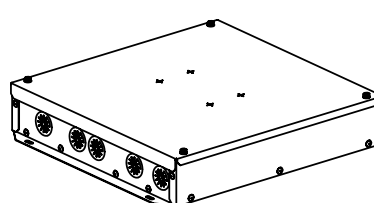
Only 3 shielded wires (3 x 0,75 mm²) are needed for communication between the heat pump and the hydraulic electronic board box

ADVANTAGES

- 1) Shorter installation time. No need for wiring from the equipment to the elements to be connected. Only from the hydraulic electronic board box
- 2) Lower installation cost. the wiring installation is much shorter, only 3 wires from the heat pump to the hydraulic electronic board box.

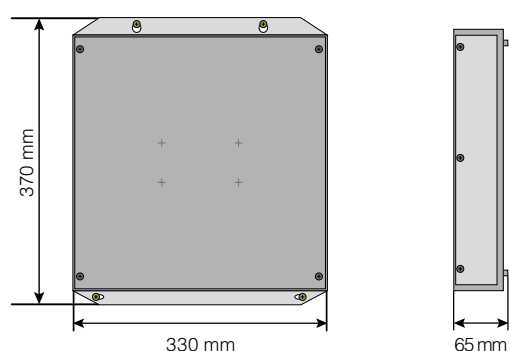


Communication cable ≤ 50m

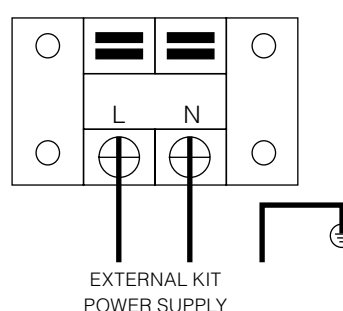


- TBH
- External backup heater
- AHS
-

DIMENSIONS



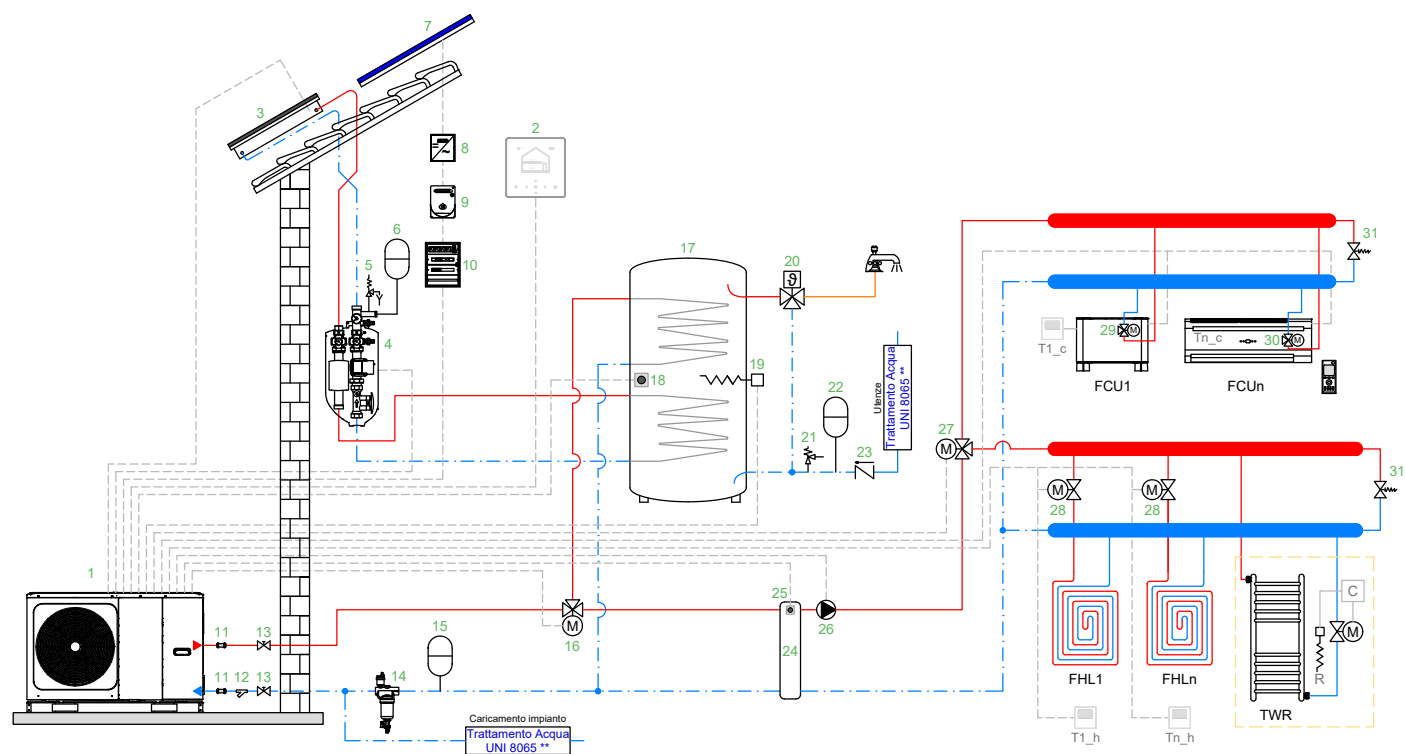
POWER SUPPLY



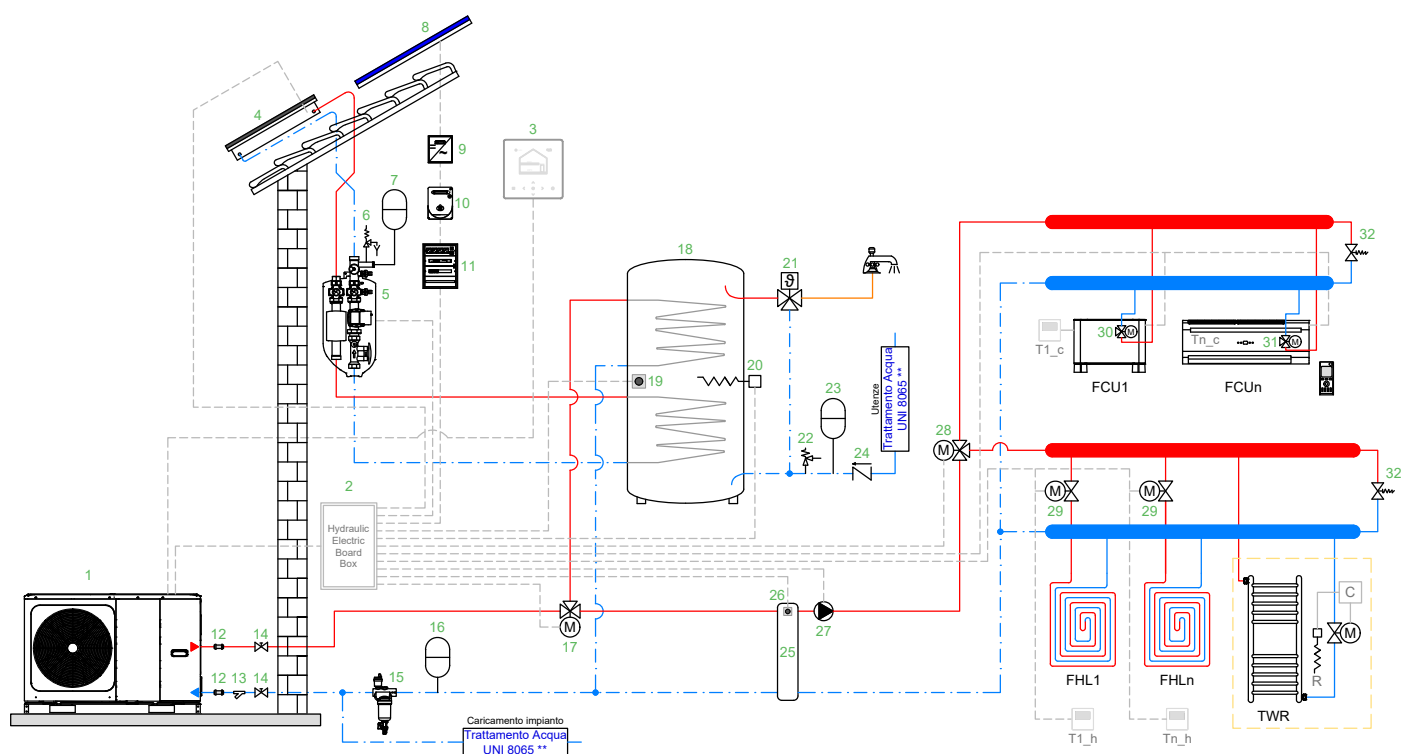
POWER SUPPLY VOLTAGE
220-240V AC
WIRING SIZE
1.5mm²



BEFORE INSTALLING THE HYDRAULIC ELECTRONIC BOARD BOX



AFTER INSTALLING THE HYDRAULIC ELECTRONIC BOARD BOX





TECHNICAL DATA

Summary table Omnia Life M

OMNIA LIFE M			4	6	8	10	12	14	16	12T	14T	16T
Space heating application	Low temperature (Water outlet at 35°C)	ηs (%)	200	193	204	200	184	182	181	184	182	181
		Class										
		SCOP	5.07	4.89	5.19	5.07	4.67	4.63	4.59	4.67	4.63	4.59
	Medium temperature (Water outlet at 55°C)	ηs (%)	149	150	150	150	142	141	140	142	141	140
		Class										
		SCOP	3.79	3.82	3.82	3.82	3.62	3.61	3.57	3.62	3.61	3.57
Space cooling application	Low temperature (Water outlet at 7°C)	SEER	5.23	5.32	5.86	5.55	5.19	5.18	5.12	5.19	5.18	5.12
	Medium temperature (Water outlet at 18°C)	SEER	6.36	6.85	8.14	8.16	6.42	6.75	6.65	6.42	6.75	6.65
DHW application	Warm climate (A14)	SCOP DHW (1)	3.54	3.5	3.43	3.41	3.56	3.54	3.53	3.56	3.54	3.53
	Average Climate (A7)	SCOP DHW (1)	3.25	3.21	3.17	3.16	3.29	3.23	3.21	3.29	3.23	3.21
	Cold Climate (A2)	SCOP DHW (1)	2.6	2.59	2.57	2.57	2.67	2.64	2.63	2.67	2.64	2.63

NOTE1: Declared in according to European Regulation 811/2013. Values refer to units without options and accessories. Energy Label rating on a scale of D to A+++ **NOTE2:** SCOP and SEER according to EN14825 **NOTE3:** SCOP DHW according to EN16147:2017. **(1)** Tested with DHW storage tank ECOUNIT HP 1C (200 for 4-6-8-10, and 300 for 12-14-16-...16T)

PERFORMANCE DATA			4	6	8	10	12	14	16	12T	14T	16T
A7W35	Heating capacity	kW	4.5	6.2	8.4	10	12	14	15	12	14	15
	Power input	kW	0.87	1.27	1.68	2.13	2.5	3.11	3.41	2.5	3.11	3.41
	COP	W/W	5.15	4.9	5	4.7	4.8	4.5	4.4	4.8	4.5	4.4
	Water flow rate	l/h	774	1066	1445	1720	2064	2408	2580	2064	2408	2580
	Available static pressure	kPa	89	88	79	70	64	54	49	64	54	49
A7W45	Heating capacity	kW	4.5	6.4	8.2	10	12	14	15	12	14	15
	Power input	kW	1.11	1.68	2.13	2.74	3.24	4	4.48	3.24	4	4.48
	COP	W/W	4.05	3.8	3.85	3.65	3.7	3.5	3.35	3.7	3.5	3.35
	Water flow rate	l/h	774	1101	1410	1720	2064	2408	2580	2064	2408	2580
	Available static pressure	kPa	89	87	80	70	64	54	49	64	54	49
A7W55	Heating capacity	kW	4.6	6.2	7.8	9.5	12	14	15	12	14	15
	Power input	kW	1.44	2	2.44	3.12	3.87	4.67	5.26	3.87	4.67	5.26
	COP	W/W	3.2	3.1	3.2	3.05	3.1	3	2.85	3.1	3	2.85
	Water flow rate	l/h	495	667	839	1021	1290	1505	1613	1290	1505	1613
	Available static pressure	kPa	89	89	86	86	86	81	78	86	81	78
A35W18	Heating capacity	kW	4.5	6.5	8.3	10	12	14	16	12	14	16
	Power input	kW	0.82	1.28	1.61	2.11	2.67	3.33	4.1	2.67	3.33	4.1
	EER	W/W	5.5	5.1	5.15	4.75	4.5	4.2	3.9	4.5	4.2	3.9
	Water flow rate	l/h	774	1118	1428	1720	2064	2408	2752	2064	2408	2752
	Available static pressure	kPa	89	87	80	70	64	54	44	64	54	44
A35W7	Heating capacity	kW	4.7	6.8	7.5	8.9	11.5	12.7	14	11.5	12.7	14
	Power input	kW	1.29	2.19	2.17	2.74	3.77	4.38	5.09	3.77	4.38	5.09
	EER	W/W	3.65	3.1	3.45	3.25	3.05	2.9	2.75	3.05	2.9	2.75
	Water flow rate	l/h	808	1170	1290	1531	1978	2184	2408	1978	2184	2408
	Available static pressure	kPa	89	87	83	77	66	60	54	66	60	54

NOTE: Values refer to units without options and accessories **Data declared according to EN14511:** EER (Energy Efficiency Ratio) = ratio of the total cooling capacity to the effective power input of the unit **COP** (Coefficient of Performance) = ratio of the total heating capacity to the effective power input of the unit **A7W35** = source air in 7°C d.b. 6°C w.b. / plant: water in 30°C out 35°C **A7W45** = source air in 7°C d.b. 6°C w.b. / plant: water in 40°C out 45°C **A7W55** = source air in 7°C d.b. 6°C w.b. / plant: water in 47°C out 55°C **A35W18** = source: air in 35°C d.b./ plant: water in 23°C out 18°C **A35W7** = source: air in 35°C d.b./ plant: water in 12°C out 7°C



TECHNICAL DATA

Summary table Omnia FT

OMNIA LIFE M			4	6	8	10	12	14	16	12T	14T	16T
OMNIA FT			200				-					
Domestic Hot Water (DHW)	Declared load profile for DHW production	-	L	L	L	L						
	Energy Efficiency Class for DHW production	class										
	DHW Heating Energy Efficiency	η DHW (%)	138	136	135	134						
	Warm climate (A14)	SCOP DHW (1)	3.75	3.75	3.69	3.67						
	Average climate (A7)	SCOP DHW (1)	3.22	3.18	3.15	3.13						
	Cold climate (A2)	SCOP DHW (1)	2.64	2.65	2.62	2.63						

OMNIA LIFE M			4	6	8	10	12	14	16	12T	14T	16T
OMNIA FT			250							250T		
Domestic Hot Water (DHW)	Declared load profile for DHW production	-	XL	XL	XL	XL	XL	XL	XL	XL	XL	XL
	Energy Efficiency Class for DHW production	class										
	DHW Heating Energy Efficiency	η DHW (%)	137	136	134	134	137	134	134	137	134	134
	Warm climate (A14)	SCOP DHW (1)	3.83	3.83	3.77	3.75	3.68	3.64	3.62	3.68	3.64	3.62
	Average climate (A7)	SCOP DHW (1)	3.27	3.23	3.2	3.19	3.26	3.19	3.18	3.26	3.19	3.18
	Cold climate (A2)	SCOP DHW (1)	2.69	2.69	2.66	2.67	2.67	2.62	2.59	2.67	2.62	2.59

NOTE: Declared in according to European Regulation 811/2013. Values refer to units without options and accessories. Energy Label rating on a scale of F to A* (1) SCOP DHW according to EN16147:2017

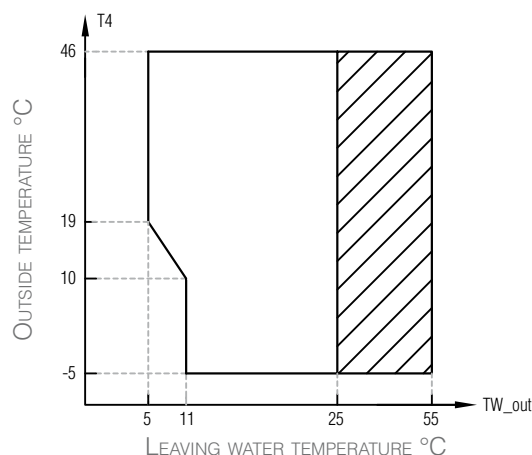
OMNIA FT		200	250	250T
Power supply	V-ph-Hz	230-150	230-1-50	400-3-50
System water connections	-	1" gas F		
DHW water connections	-	3/4" gas F		
Volume expansion vessel (installation)	l	10	10	10
Water content of the installation (min/recommended)	l	15 / 40	25 / 40	25 / 40
DHW tank volume	l	190	240	240
System electric heater	kW	3	3	6
DHW storage electric heater (accessory)	kW	1,5	1,5	1,5
DHW expansion vessel volume (accessory)	l	8	8	8
System safety water valve set	bar	3	3	3
DHW tank safety water valve set	bar	9	9	9
SWL - Sound Power Level	dB(A)	39	40	40
Max current input	A	14	14	10



TECHNICAL DATA

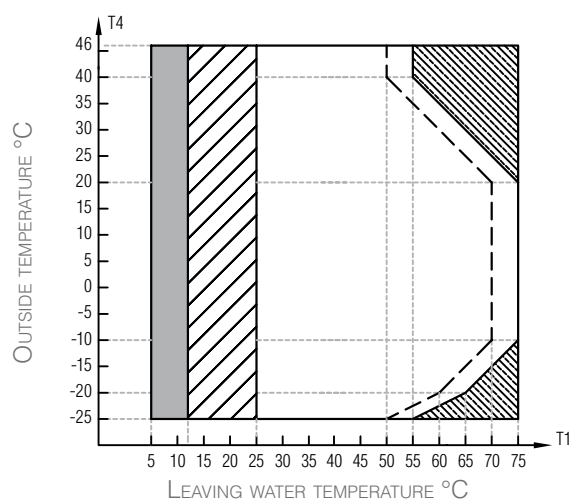
Operating limits

COOLING MODE



 Operating range of heat pump with possible limitation and protection

HEATING MODE



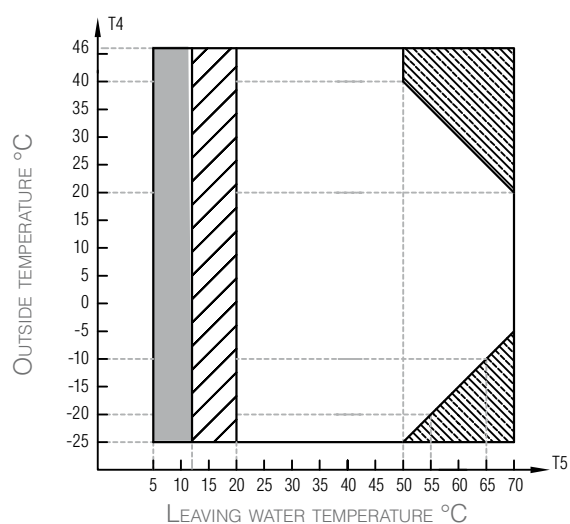
 Operating range of heat pump with possible limitation and protection

 If the IBH (backup heater) / AHS (boiler) setting is enabled, only IBH / AHS is activated; If the IBH / AHS setting is not enabled, only the heat pump is activated with possible limitations and protections

 The heat pump remains off and only IBH (backup heater) / AHS (boiler) turns on

 Maximum inlet water temperature line for heat pump operation

DHW MODE



 Operating range of heat pump with possible limitation and protection

 If the TBH (tank backup heater) / IBH (backup heater) / AHS (boiler) setting is enabled, only TBH / IBH / AHS is activated. If the TBH / IBH / AHS setting is not enabled, only the heat pump is activated with possible limitations and protections.

 The heat pump remains off and only TBH (backup heater) / IBH (electric heater) / AHS (boiler) turns on

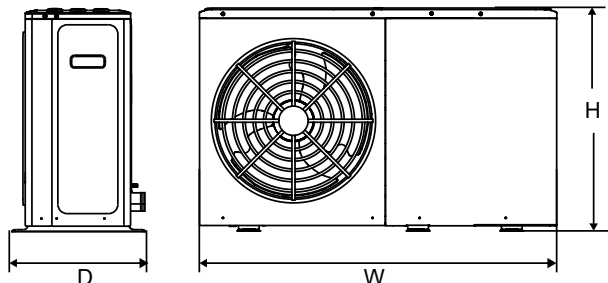
NOTE FOR DHW MODE: the maximum water temperature indicated in the graph is based on correct sizing of the coil surface of any DHW boiler.



TECHNICAL DATA

Summary table Omnia Life M

DIMENSIONS



MODELS		4	6	8	10	12	14	16	12T	14T	16T
Unit (WxHxD)	mm	1299 x 717 x 426			1385 x 865 x 523						
Packaging (WxHxD)	mm	1375 x 885 x 475			1465 x 1035 x 560						
Net / Gross weight	Kg	90 / 110			117 / 139			135 / 157			

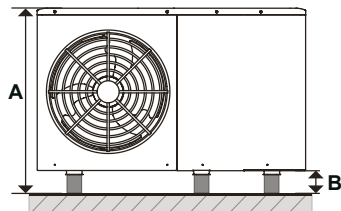
OMNIA LIFE M + E-HEATER INSIDE		HI3 4	HI3 6	HI3 8	HI3 10	HI9 12T	HI9 14T	HI9 16T
Net / Gross weight	kg	95 / 115	95 / 115	122 / 144	122 / 144	142 / 164	142 / 164	142 / 164

MINIMUM OPERATING AREA

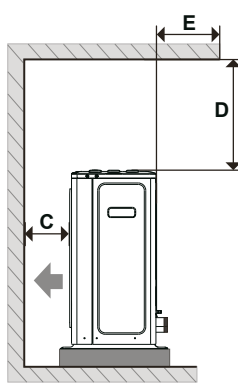
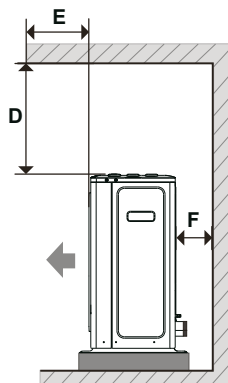
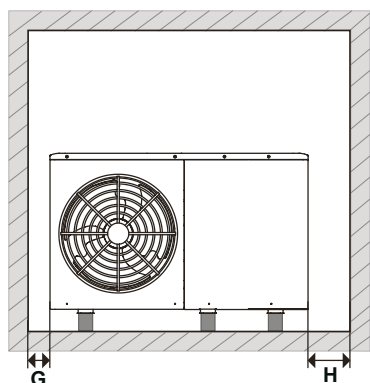
For ground installation and flat roof clearance - single unit

NOTE: Follow the instructions in the installation manual regarding the safety zone of the equipment.

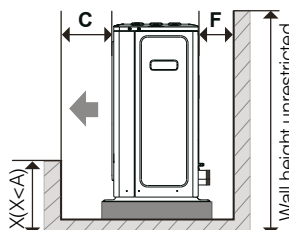
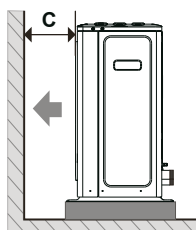
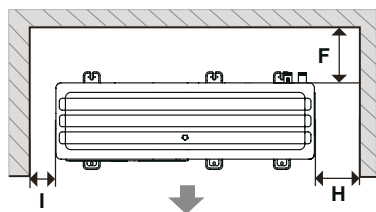
GENERAL



OBSTACLE OVER THE TOP



NO OBSTACLE OVER THE TOP



DATA	4 - 10 kW	12 - 16 kW
A (mm)	Unit height + B	Unit height + B
B (mm)	≥ 100 *	≥ 100 *
C (mm)	≥ 1000	≥ 1500
D	≥ 500	≥ 500
E	≤ 500	≤ 500
F	≥ 300	≥ 300
G	≥ 500	≥ 500
H	≥ 500	≥ 500
I	≥ 500	≥ 500

(*) In case of cold weather, take into account of snow on the ground



NOTICE FOR SALES AGENTS:

In view to constantly improve its production range and customer satisfaction levels, the Company hereby specifies that aesthetic and/or dimensional features, specifications and accessories may be subject to changes.

Please place the utmost care to ensure all technical and/or sales documents (lists, catalogues, brochures, etc.) provided to the final Customer are updated according to the latest edition.

Ferroli spa

37047 San Bonifacio (VR) Italy - Via Ritonda 78/A

tel. +39.045.6139411

fax +39.045.6100233

www.ferroli.com

export@ferroli.com