

# OMNIA LIFE M



NEW



CONTROL THROUGH CLIMA CONTROL DISPLAY  
ACCESSORY - THE INSTALLATION IS MANDATORY



SCAN THE QR CODE TO INSTALL THE CONTROL APP  
"MYOMNIA SMART"



## REVERSIBLE HEAT PUMP FOR OUTDOOR INSTALLATION WITH DC INVERTER COMPRESSOR AND R290 REFRIGERANT

### > UNIT DESCRIPTION

This series of air-water heat pumps meets the needs of winter and summer air-conditioning of small and medium power residential and commercial installations. All the units are suitable for outdoor installation and **being able to produce water up to 75°C**; they can be used in radiant systems, fan coils, radiators and for the indirect production of domestic hot water (DHW) via an external DHW storage tank (not provided).

The units are characterized by the **use of the ecological refrigerant R290** (with GWP: 3) and a DC inverter compressor that modulates the supplied power and come complete with a hydronic kit composed of all the essential components for quick and safe installation.

The units are characterised by high energy efficiency and reduced sound levels allowing them to be used as a single generator for the plant or integrated with other energy sources such as additional electric heating elements or boiler. All units are supplied as standard with a DHW water storage tank temperature probe (to be installed by the installer) and with an outdoor air temperature probe (already installed on the unit), to achieve climatic adjustment in heating and cooling.

For specific applications, the units can be installed in multiple "cascade" configuration with a **"MASTER" unit** (directly managed by the controller) and **up to 5 "SLAVE" units**, also different in their output power. The preparation of the domestic hot water is left to the master unit, while in the event of a failure of one of the slave units the remaining ones may continue to work in a normal way. All units are carefully built and individually tested in factory. Installation only requires electrical and hydraulic connections.

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

### > MAIN CHARACTERISTICS

- Ecological refrigerant R290, with very low GWP (only 3)
- Range from 4 up to 16 kW, with 7 models (230V) and 3 models (380V)
- High Efficiency class: A+++ (35°C) and A++ (55°C)
- Hot water production up to 75°C (with external air temperature: -10°C)
- Wide temperature operating limits. (Hot water production up to 55°C with external air temperature -25°C)
- WIFI included (in remote control)
- USB FUNCTION. Configuration via USB port. Parameter setting transmission between wired controllers; convenient program upgrade for unit.
- High COP (up to 5,15) and EER (up to 5,5)
- Reduced sound power level. From 56 dB(A) (4kW model) up to 69 dB(A) (16 kW model)
- Reduced dimensions with only one fan to facilitate the integration in the building
- Cascade control up to 6 units
- Finned coil with anti-corrosion treatment

### > THE CONTROL SYSTEM

- The user interface consists of a remote wired controller (2 wires, max 50 mt length from the unit) with menu in 18 languages
- USB FUNCTION. Configuration via USB port. Parameter setting transmission between wired controllers; convenient program upgrade for unit
- Heating and cooling system
- Domestic Hot Water production (DHW)
- **Additional sources of energy (boiler or electrical heater)**
- Electric heater of the DHW tank
- Fast DHW
- **Desinfect function (anti-legionella cycle)**
- **Silent mode**
- Remote ON/OFF using external contact
- ECO mode
- **Weekly scheduling**
- Antifreeze protection
- **Cascade function (up to 6 units: 1 master + 5 slaves)**
- **Management of up to 2 system zones (1 mixed and 1 direct)**
- **Photovoltaic input and Smart Grid Input**
- Current input limitation by parameter
- **Remote control of the unit via APP (available for IOS and Android)**
- Detailed alarms diagnostics with alarms history
- Display of all operating parameters

### > 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)

\* Keymark Certification in progress

## > ACCESSORIES

**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

**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

**REMOTE CONTROL** For the correct operation of the equipment it is essential to connect the remote control. In case of cascade installation of several units, only one control per cascade is necessary

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	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
		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	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++
		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 ECOUNT 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
CODE			2CP100AF	2CP100BF	2CP100CF	2CP100DF	2CP100EF	2CP100FF	2CP100GF	2CP100HF	2CP100IF	2CP100JF

**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

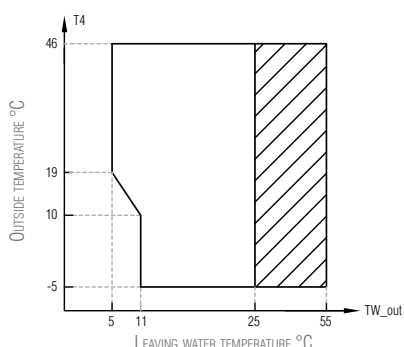
GENERAL DATA		4	6	8	10	12	14	16	12T	14T	16T
Power supply	V-ph-Hz	220/240-1-50							380/415-3N-50		
Compressor type	-	Twin rotary DC									
N° compressors / N° refrigerant circuits	n	1 / 1									
Plant side heat exchanger type	-	Stainless steel brazed plates									
Source side heat exchanger type	-	Finned coil with anti-corrosion treatment									
N° and type fans	-	1 x DC axial									
Nominal air flow	m³/h	2770	2770	4030	4030	4450	4450	5040	4450	4450	5040
Expansion tank volume	l	8									
Water safety valve set	bar	3									
Hydraulic fittings	"	1"		1" 1/4							
Minimum water content of the system	l	25					40				
DHW storage tank - minimum surface of the coil (minimum / recommended)	steel (m²)	1.4 / 2.5					1.6 / 4				
	enameled (m²)	2 / 3					2.5 / 5.6				
Refrigerant type	type	R290									
Refrigerant GWP	kg CO <sub>2</sub> eq	3									
Refrigerant charge	kg	0.7		1.1		1.25					
	ton CO <sub>2</sub> eq	0.0021		0.0033		0.00375					
Control type	-	Remote control (wired)									
SWL - Sound Power level (ERP)	dB(A)	56	58	60	61	65	65	69	65	65	69
SWL - Cooling (*)	A7W35	56	58	60	61	65	65	69	65	65	69
Max	dB(A)	58	60	62	63	67	68	70	67	68	70
Sil. 1 / Sil. 2	dB(A)	54 / 51	56 / 53	58 / 55	59 / 56	62 / 58	63 / 59	64 / 60	62 / 58	63 / 59	64 / 60
SWL - Heating (*)	A35W18	56	58	60	61	65	66	69	65	66	69
Max	dB(A)	58	60	62	63	66	67	70	66	67	70
Sil. 1 / Sil. 2	dB(A)	54 / 51	56 / 53	57 / 56	58 / 55	62 / 58	62 / 59	64 / 60	62 / 58	62 / 59	64 / 60
Max current input	A	12	13.5	16	17.5	25	26.5	28	8.5	9	9.5

(\*) SWL = Sound Power level, with reference to 1x10<sup>-12</sup> W with unit operating in conditions: **A7W35** = source air in 7°C d.b. 6°C w.b. / plant: water in 30°C out 35°C **A35W18** = source: air in 35°C d.b. / plant: water in 23°C out 18°C **Max** = at maximum conditions in heating / cooling mode **Sil 1** = if silent level 1 active in heating / cooling mode **Sil 2** = if silent level 2 active in heating / cooling mode - The total sound power level in dB(A) measured in compliance with ISO 9614 standards

OMNIA LIFE M + E-HEATER INSIDE			HI3 4	HI3 6	HI3 8	HI3 10	HI9 12T	HI9 14T	HI9 16T
A7W35	Heating capacity	kW	4.5	6.2	8.4	10	12	14	15
	COP	W/W	5.15	4.9	5	4.7	4.8	4.5	4.4
A35W18	Cooling capacity	kW	4.5	6.5	8.3	10	12	14	16
	EER	W/W	5.5	5.1	5.15	4.75	4.5	4.2	3.9
	Power source	V-ph-Hz	220/240-1-50				380/415-3N-50		
	Power source IBH	V-ph-Hz	220/240-1-50				380/415-3-50		
	Rated power input	kW	2.7	3	3.6	3.9	5.7	6	6.4
	Backup heater rated power input	kW	3.25	3.25	3.25	3.25	9	9	9

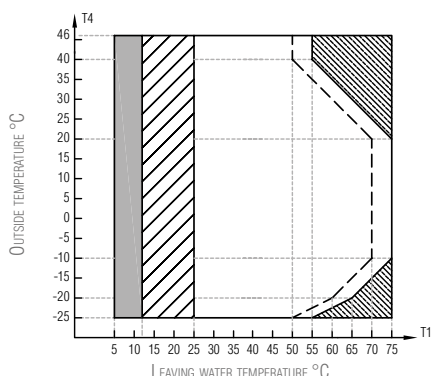
## OPERATING LIMITS

### COOLING MODE



Operating range of heat pump with possible limitation and protection

### HEATING MODE



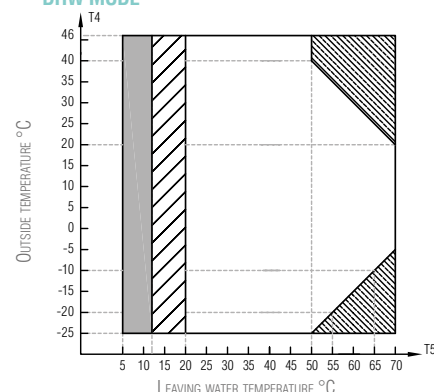
Operating range of heat pump with possible limitation and protection

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



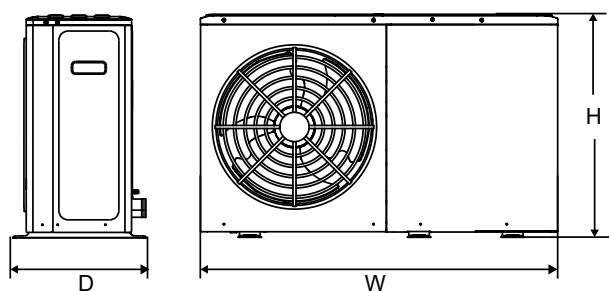
Operating range of heat pump with possible limitation and protection

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.

## DIMENSIONS



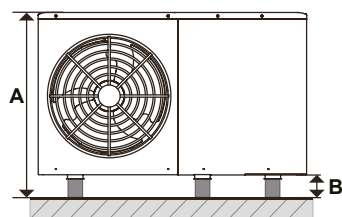
MODELS		4	6	8	10	12	14	16	12T	14T	16T
Unit (W×H×D)	mm	1299 x 717 x 426		1385 X 865 X 523							
Packaging (W×H×D)	mm	1375 x 885 x 475		1465 x 1035 x 560							
Net \ Gross weight	Kg	90 / 110		117 / 139		135 / 157		137 / 159			

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

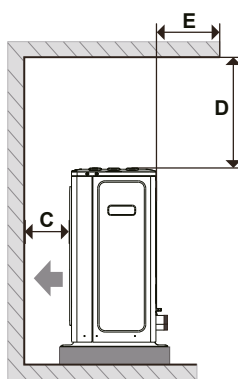
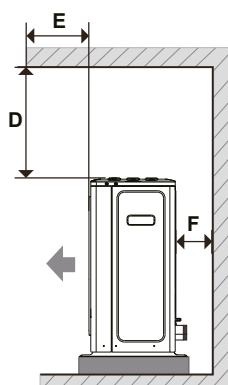
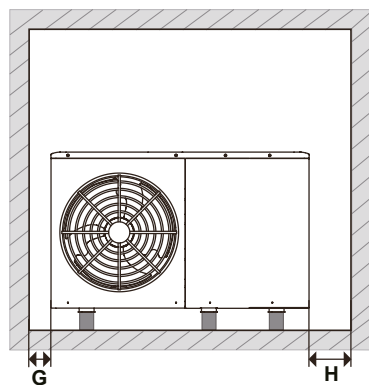
## MINIMUM OPERATING AREA

For ground installation and flat roof clearance - single unit

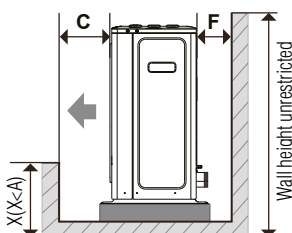
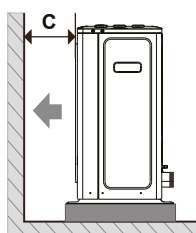
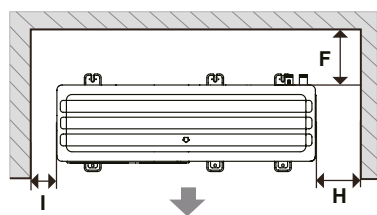
## GENERAL



## OBSTACLE OVER THE TOP



## NO OBSTACLE OVER THE TOP



OMNIA LIFE	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



**NEW**

### > UNIT DESCRIPTION

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



OMNIA LIFE M			4	6	8	10	12	14	16	12T	14T	16T
CODE			2CP100AF	2CP100BF	2CP100CF	2CP100DF	2CP100EF	2CP100FF	2CP100GF	2CP100HF	2CP100IF	2CP100JF
OMNIA FT			200									
CODE			0XHN1VWA									
Domestic Hot Water (DHW)	Declared load profile for DHW production	-	L	L	L	L						
	Energy Efficiency Class for DHW production	class	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>						
	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
CODE			2CP100AF	2CP100BF	2CP100CF	2CP100DF	2CP100EF	2CP100FF	2CP100GF	2CP100HF	2CP100IF	2CP100JF
OMNIA FT			250							250T		
CODE			0XHN2VWA							0XHN2WWA		
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	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>	A <sup>+</sup>
	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

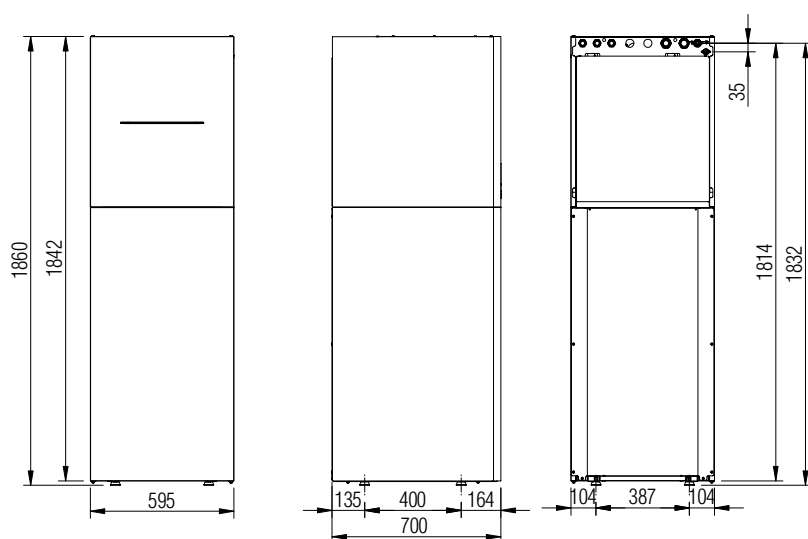
**NOTE:** Declared in according to European Regulation 811/2013. Values refer to units without options and accessories. Energy Label rating on a scale of F to A<sup>+</sup>

(1) SCOP DHW according to EN16147:2017

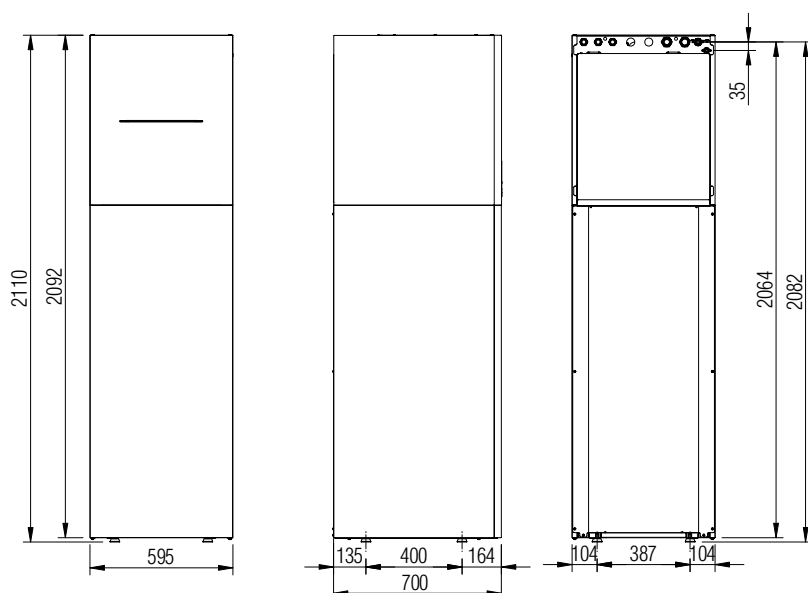
OMNIA FT		200	250	250T
Power supply	V-ph-Hz	230-150	230-1-50	400-3-50
System water connections	-		1" gas F	
DHW water connections	-		3/4" gas F	
Volume expansion vessel (installation)	l	10	10	10
Water content of the installation (minimum / recommended)	l	15 / 40	25 / 40	25 / 40
DHW tank volume	l	190	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

## DIMENSIONS

### Model 200



### Model 250

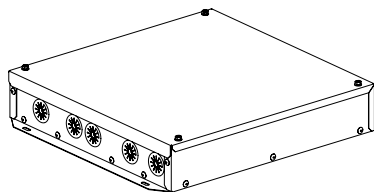


OMNIA FT		200	250	250T
Packaged unit (WxHxD)	mm	700 x 2050 x 800	700 x 2300 x 800	700 x 2300 x 800
Net weight (min-max) (*)	kg	158 / 184	180 / 206	180 / 206
Operation weight (*)	kg	349 / 393	421 / 465	421 / 465
Packaged unit weight	kg	164	187	187

(\*) **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

# HYDRAULIC ELECTRONIC BOARD BOX

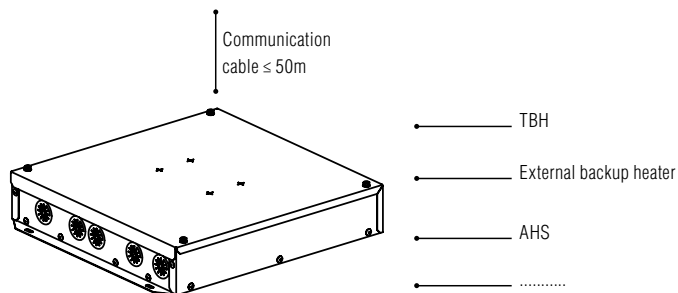
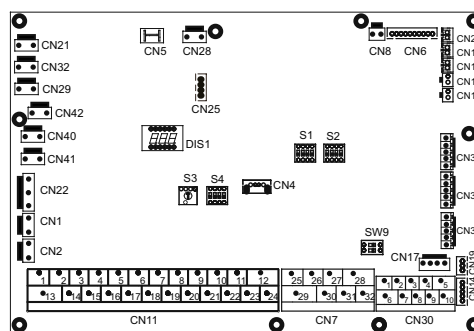
This accessory is used to shorten the field connection cable length between hydraulic module PCB on heat pump and the external components that are usually connected, such as 3-way valve, DHW heater, pumps, external electrical heater, boiler, etc., making the installation more flexible.



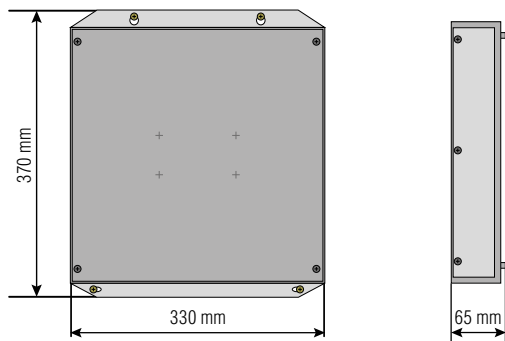
Only 3 shielded wires (3 x 0,75 mm<sup>2</sup>) are needed for communication between the heat pump and the hydraulic electronic board box

## ADVANTAGES

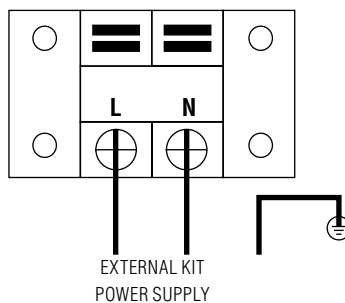
- 1) Shorter installation time. No need for wiring from the equipment to the elements to be connected. Only from the hydraulic electronic board box
- 2) Lower installation cost. the wiring installation is much shorter, only 3 wires from the heat pump to the hydraulic electronic board box.



## DIMENSIONS

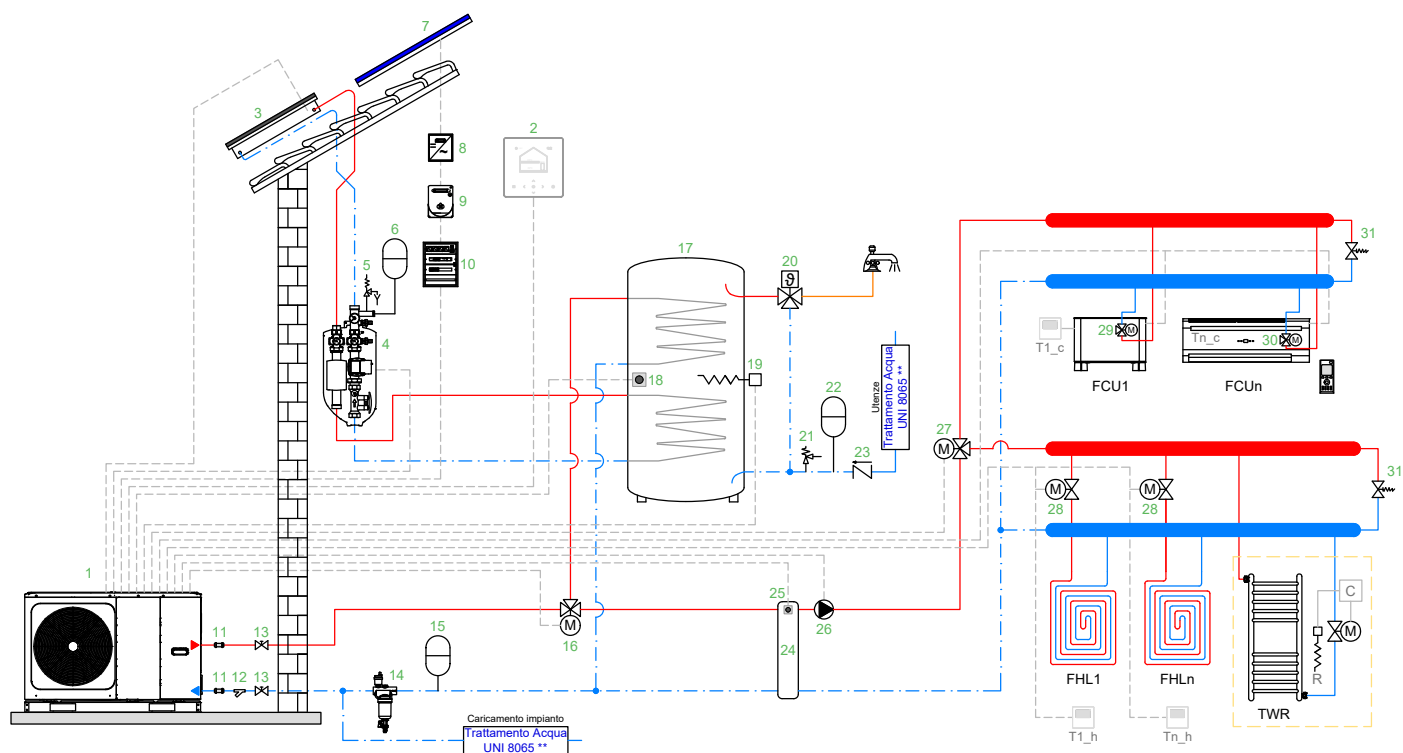


## POWER SUPPLY



**POWER SUPPLY VOLTAGE** 220-240V AC  
**WIRING SIZE** 1.5mm<sup>2</sup>

## BEFORE INSTALLING THE HYDRAULIC ELECTRONIC BOARD BOX



## AFTER INSTALLING THE HYDRAULIC ELECTRONIC BOARD BOX

