



TEMPLARI

THE HEAT PUMP

TECHNICAL  
CATALOGUE

Technology  
Made in Italy





# TECHNICAL CATALOGUE 2023

Residential air-to-water heat pumps

Industrial air-to-air heat pumps

Remote control



Templari was founded in 2006 by Gianluca and Massimo Masiero, with the goal of offering new-generation heat-pump systems with very low environmental impact.

The heart of the company, born from the passion and professionalism of the two brothers, is the R&D department where the best products are created, such as KITA, an innovative, unique heat pump entirely developed and designed in Italy. KITA AIR was designed to heat and cool workplaces such as offices, industrial sheds, warehouses and workshops. It's an air-to-air heat pump ideal for large spaces that require high performance and where operating costs and respect for the environment are priority requirements.

Over time, the KITA and KITA AIR product lines have evolved and important operational and design improvements have been implemented, leading to

the current product on the market: a heat pump that combines technology and innovation with a sophisticated design, guaranteeing high performance, even at extremely low outside temperatures (below -20°C).

The KITA Templari lines offer an environmentally friendly solution that does not require the integration of boilers, so as to permanently avoid the use of environmentally harmful fossil fuels. Every day Templari deploys massive resources, expertise and professionalism to ensure a constant evolution in the performance of its products, implementing new solutions and functions that make the KITA lines more and more efficient and ecological, in order to satisfy a wide range of customer needs.



# TEMPLARI

THE HEAT PUMP



# RESIDENTIAL AIR-TO-WATER HEAT PUMPS



## Residential

Templari obtained the EHPA certificate thanks to the results achieved in tests at the accredited Swiss institution WPZ.

The performance tests performed on the machines include measurements of the thermal power produced and the calculation of COP and SCOP, two fundamental parameters for defining the quality of a heat pump.

KITA air-water heat pumps have obtained record results in these tests, very close to those obtained by geothermal machines, at the top of the heat pump performance classifications. The EHPA (European Heat Pump Association) quality seal is a label that certifies the quality of the heat pump to the final consumer. To obtain the Quality Label, heat pumps must pass the stringent tests set by the most stringent European standards (EN 14511, EN 16147,...).

These tests are carried out in EN17025 accredited test centres.



### Applications



Small houses



Villas



Condons

### Advantages



Remote monitoring



Ease of installation

# INDUSTRIAL AIR-TO-AIR HEAT PUMPS



## Industrial

Conditioning large spaces with maximum efficiency. The KITA Air air-to-air heat pump units are the best solution for conditioning large internal spaces such as warehouses, production areas, warehouses and gyms, both for winter heating and for summer conditioning.

KITA Air allows you to avoid the hydraulic circuit and the installation between the outdoor and indoor units is simple, immediate and economical.



### Applications



Industrial areas



Warehouses



Commercial spaces

### Advantages



Remote monitoring



Ease of installation

# Index

<b>Residential</b>	<b>9</b>
<b>KITA HR-R410A</b>	<b>13</b>
<b>KITA SP-R290</b>	<b>19</b>
<b>KITA MP-R290</b>	<b>23</b>
<b>KITA LP-R290</b>	<b>27</b>
<b>KITA LP/Plus-R290</b>	<b>33</b>
<b>KITA LR-R32</b>	<b>35</b>
<b>REMOTE CONTROL</b>	<b>41</b>

<b>Industrial</b>	<b>45</b>
<b>KITA AIR</b>	<b>49</b>
<b>KITA AIR - KITA AIR COLD</b>	<b>50</b>
<b>KITA AIR PLUS</b>	<b>51</b>



# RESIDENTIAL AIR-TO-WATER HEAT PUMPS

 **TEMPLARI**  
THE HEAT PUMP

# RESIDENTIAL AIR-TO-WATER HEAT PUMPS MONOBLOCK/SPLIT SERIES

## Outdoor Unit



KITA HR



KITA SP



KITA MP



KITA LP



KITA LP/Plus

## ADVANTAGES

The Templari heat pumps of the KITA line are able to produce heating and cooling of rooms and at the same time produce hot water in all hot water in all seasons of the year.

The different models of pumps offer the possibility of being able to choose the best solution according to one's needs, making the most of the performance of the chosen heat pump.

The KITA line is ideal for single homes or large residential spaces such as terraced houses or large condominiums.

The KITA models can also be powered with electricity generated from a renewable source, creating energy savings by further reducing costs and the return on investment.

The technology of the KITA line allows, thanks to the use of the various devices integrated in the system, to be able to continuously monitor the correct functioning of the machine, with the possibility of being able to remotely change environmental parameters according to one's needs.

Thanks to a wide range of accessories, the pumps of the KITA models can be managed or integrated with Templari or third-party home automation systems, which allow remote control of the temperatures in the home.





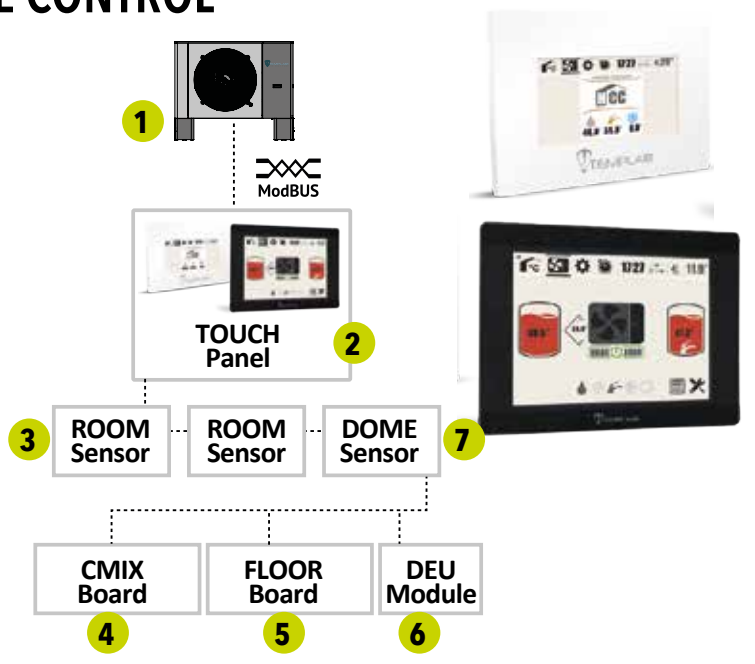
## REMOTE CONTROL

### HCC system

Comfort management in just a few Touches!  
 For precise and efficient control of our heat pumps, we have developed HOUSE CLIMATE CONTROL (HCC), a management software capable of optimizing the performance of the heat pump, guaranteeing optimal living comfort. The software also allows remote supervision of the entire system.

The HCC system consists mainly of:

- Touch Display: allows you to monitor and set all the system operating parameters;
- ROOM sensors: monitor the temperature and humidity of individual rooms in real time;
- FLOOR boards: acquire the readings of the ROOM sensors, and manage mixers and circulators.





**TEMPLARI**  
THE HEAT PUMP



RESIDENTIAL

## **KITA HR line**

High-efficiency reversible air-to-water

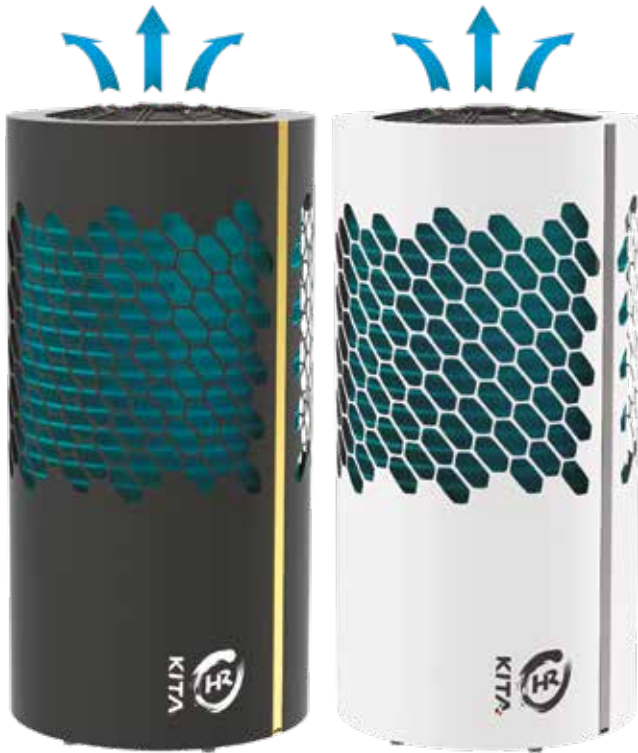
Technology  
Made in Italy





# KITA HR-R410A line

## High-efficiency reversible air-to-water



High efficiency air-water monoblock or reversible split heat pumps, with Inverter Scroll compressor. In addition to integrating into any standard home, its new shape allows the fan to be housed in the upper part, avoiding annoying air movements and at the same time making it extremely silent.

Smart Injection system with steam-injection Inverter Scroll compressor to ensure operation with maximum efficiency at outdoor temperatures below -20°C.

Full-Inverter operation: adapts the machine to the precise heat load requirements of the home, with savings over 30%.

Ideal for domestic hot water production up to 55°C.

KITA heat pumps are designed in Italy and integrate perfectly into both modern and classic buildings.

First-class electronics ensure total control over the operation of the machine, even remotely.

Kita is environmentally friendly as it doesn't rely on fossil fuels, providing heating and air conditioning without the need for an auxiliary boiler.

### Advantages:

- Energy class
- Heating
- Cooling
- Domestic Hot Water
- Made in Italy  
Italian technology
- Photovoltaic integration
- Single homes
- Villas
- Remote monitoring
- Easy to install
- Top ventilation
- 



### MODELS KITA HR

MODEL	MONOBLOCK CODE	CODE WITH SPLIT
HR 10	4.1.6.1	4.1.6.8
HR 10 3phase	4.1.6.2	4.1.6.9
HR12	4.1.6.3	4.1.6.10
HR 12 3phase	4.1.6.4	4.1.6.11
HR14	4.1.6.5	4.1.6.12
HR 14 3phase	4.1.6.6	4.1.6.13
HR 14 Cold 3phase	4.1.6.7	4.1.6.14

### TECHNICAL DATA - KITA HR

MODEL	Heating										DHW		Cooling			
	A 12°C / W 35° C		A 7°C / W 35° C		A 2°C / W 35° C		A -7°C / W 35° C		A -20°C / W 35° C		A 2°C / W 55° C		A 35°C / W 7° C		A 35°C / W 18° C	
	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qc	EER	Qc	EER
	kw		kw		kw		kw		kw		kw		kw		kw	
HR 10 HR 10 3phase	10,50	5,50	9,90	4,60	8,81	4,07	7,03	3,22	5,00	2,58	8,93	2,75	9,13	3,29	11,86	4,95
HR12 HR 12 3phase	11,50	5,40	12,16	4,30	10,79	3,91	8,44	3,12	5,80	2,42	9,81	2,59	10,04	3,28	13,06	4,76
HR14 HR 14 3phase	14,55	5,30	14,30	4,44	13,09	3,82	10,70	3,10	8,10	2,60	11,76	3,10	12,45	3,21	16,23	4,67
HR 14 Cold 3phase	14,55	5,30	14,30	4,44	14,00	3,78	14,00	2,85	11,80	2,52	14,00	2,49	12,45	3,21	16,23	4,67



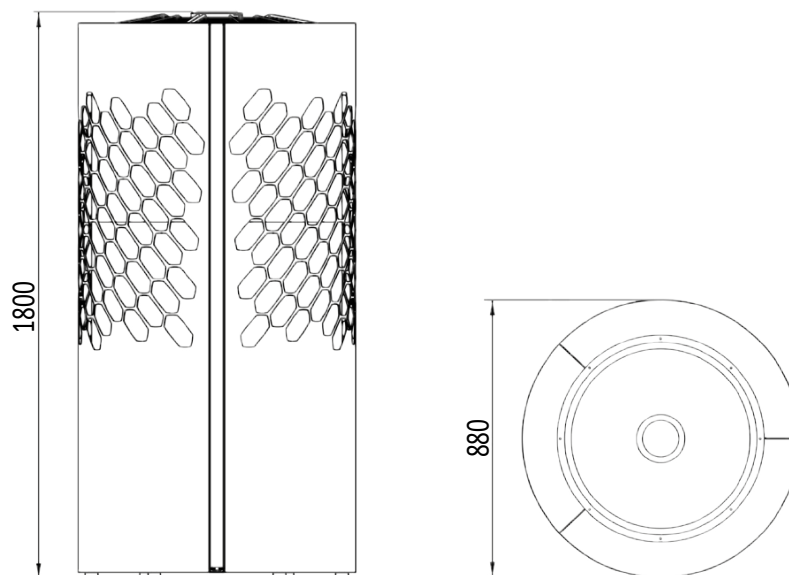
# KITA HR-R410A line

High-efficiency reversible air-to-water

## FEATURES MONOBLOCK

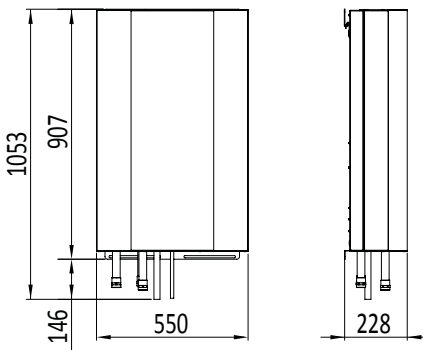
<b>Energy class:</b>	A+++	<b>Compressor:</b>	Steam-injection Inverter Scroll
<b>Power supply:</b>	HR10: 230 V - 1 ph - 50Hz HR10 3phase: 400 V - 3 ph - 50Hz HR12: 230 V - 1 ph - 50Hz HR12 3phase: 400 V - 3 ph - 50Hz HR14: 230 V - 1 ph - 50Hz HR14 3phase: 400 V - 3 ph - 50Hz HR14 Cold 3phase: 400 V - 3 ph - 50Hz	<b>External fan:</b>	Inverter typology: BLDC Nominal diameter: 630 mm Max Speed: 600 rpm
<b>Max electrical absorption A-20/W55:</b>	HR10: 2,31 kW HR10 3phase: 2,31 kW HR12: 3,36 kW HR12 3phase: 3,36 kW HR14: 4,02 kW HR14 3phase: 4,02 kW HR14 Cold 3phase: 7,57 kW	<b>Exchanger:</b>	Type: Plates Material: stainless steel
<b>Noise level:</b>	Max sound pressure at 1 meter distance:38 dB(A)	<b>Refrigerant:</b>	R410A Q.ty 6,5Kg
		<b>Diameter of water pipes:</b>	Input: 1" Output: 1"
		<b>Hydraulic circuit:</b>	Pump type: EC
		<b>Weight:</b>	230 Kg
		<b>Dimensions:</b>	880 mm (Ø) x 1800mm (h)

## DIMENSIONS





### INDOOR UNIT DIMENSIONS



### FEATURES WITH SPLIT

<b>Energy class:</b>	A+++
<b>Power supply:</b>	HR10: 230 V - 1 ph - 50Hz HR10 3phase: 400 V - 3 ph - 50Hz HR12: 230 V - 1 ph - 50Hz HR12 3phase: 400 V - 3 ph - 50Hz HR14: 230 V - 1 ph - 50Hz HR14 3phase: 400 V - 3 ph - 50Hz HR14 Cold 3phase: 400 V - 3 ph - 50Hz
<b>Max electrical absorption A-20/W55:</b>	HR10: 2,31 kW HR10 3phase: 2,31 kW HR12: 3,36 kW HR12 3phase: 3,36 kW HR14: 4,02 kW HR14 3phase: 4,02 kW HR14 Cold 3phase: 7,57 kW
<b>Noise level:</b>	Max sound pressure at 1 meter distance: 38 dB(A)
<b>Compressor:</b>	Steam-injection Inverter Scroll
<b>External fan:</b>	Inverter typology: BLDC - Nominal diameter: 630 mm Max Speed: 600 rpm
<b>Exchanger:</b>	Type: Plates - Material: stainless steel
<b>Refrigerant:</b>	R410A - Q.ty 6,5Kg
<b>Diameter of water pipes:</b>	Input: 1" - Output: 1"
<b>Diameter of Gas pipe:</b>	18 mm / 3/4"
<b>Diameter of liquid pipes:</b>	12 mm / 1/2"
<b>Hydraulic circuit:</b>	Pump type: EC
<b>Weight:</b>	Outdoor unit: 210 Kg - Indoor unit: 35 Kg
<b>Dimensions:</b>	Outdoor unit: 880 mm (Ø) x 1800mm (h) Indoor unit: 878,4 mm (h) x 550 mm (L) x 208 mm (P)

### Mandatory Accessories - Indoor Unit Wiring

Code	Description	Note
EL.CV_AL	Circulator and valve power supply cable. Available lengths: 10, 20 and 30 m	Cable connecting the machine to the circulator in the split
EL.CV_SN	B3-B4 probes and flowmeter cable. Available lengths: 10, 20 and 30 m	Cable connecting the machine to the probes in the split

### Mandatory Accessories - Indoor Unit wiring with resistance

Code	Description	Note
EL.CV_AL-A	Circulator, valve and resistance power supply cable. Available lengths: 10, 20 and 30 m	Cable connecting the machine to the circulator in the split
EL.CV_SN	B3-B4 probes and flowmeter cable. Available lengths: 10, 20 and 30 m	Cable connecting the machine to the probes in the split

### Electronic Accessories

Code	Description	Note
4.5.3.25	Electronic board for remote signaling - PDC Split	
4.5.3.24	Breakout board for communication with Split boards	Mandatory code with Tsplit card

### Plumbing add-ons

Code	Description	Note
4.5.4.2	Wilo Para 9 high flow circulator kit	Alternative to standard circulator
4.5.4.4	UPM XL GEO oversize circulator kit	Alternative to standard circulator
K-FY	Brass 2" Y-filter with 1 1/4" connections	

### Mandatory accessory, to be chosen from the options

Code	Description	Note
4.5.1.5	WHITE kit, covers for KITA HR outdoor unit	
4.5.1.6	BLACK kit, covers for KITA HR outdoor unit	

### Mandatory accessory, to be chosen from the options - Controller

Code	Description	Note
4.5.3.1	PGD display kit	With 4.5.3.1+4.5.3.2 it is mandatory to include cod. SCHEDA BMS
4.5.3.2	7" Touchscreen Panel	
HCC-F01	Recessed metal frame for touch screen panel	
HCC-F02	On wall metal frame for touch screen panel	Alternative to HCC-F01
4.5.3.16	Building Automation 9.7" touch panel display	Alternative to 4.5.3.2
4.5.1.14	Recessed metal frame for 9.7" touch screen panel	

### Mandatory Accessories - Outdoor Unit Wiring

Code	Description	Note
EL.CV_PT6	Flat telephone cable, length 6 m	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT10	EL.CV_PT10 Flat telephone cable, length 10mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT20	EL.CV_PT10 Flat telephone cable, length 20mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT30	EL.CV_PT10 Flat telephone cable, length 30mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_IM10	System and B2-B3 Puffer cable, length 10mt	Cable connecting the machine to the puffer probes
EL.CV_IM20	System and B2-B3 Puffer cable, length 20mt	Cable connecting the machine to the puffer probes
EL.CV_IM30	System and B2-B3 Puffer cable, length 30mt	Cable connecting the machine to the puffer probes

### Plumbing add-ons - 3-way valve kit for DHW consisting of:

Code	Description	Note
4.5.2.1	DHW module kit (K1 relay)	
4.5.4.1	3-WAY valve kit (body + motor)	
SN.NTCWP3M	SN.NTCWP3M DHW temperature sensor	
4.5.4.2	Wilo Para 9 high flow circulator kit	Alternative to standard circulator
2.4.3.1	Flexible stainless steel connection pipes kit with 1 1/4" F fittings	2 pieces
K-FY	Brass 2" Y-filter with 1 1/4" connections	
2.4.2.5	1 1/2" antifreeze valve	

### Electrical add-ons

Code	Description	Note
2.5.7.1	HCC, 100 m cable coil 2x0.50 sq mm for MODBUS connection	Modbus cable to connect the machine to the HCC (controller)
4.5.2.8	HCC, power supply kit - pair of 200 m cable coils (red+black) 1 sq mm	Modbus cable to connect the machine to the HCC (controller)
4.5.2.3	Integration module kit (K3 relay)	
4.5.3.18	T-split board kit	Board for digital communication between indoor and outdoor units
4.5.2.7	3ph 9 kW auxiliary heating element kit	Resistance for supply pipe. Separate installation
4.5.2.4	Integration module kit (K4 relay)	Required with code 4.5.2.7
4.5.2.5	SG-READY upgrade	Alternative to standard single power supply

### Electronic add-ons

Code	Description	Note
4.5.3.4	C-Mix board	
4.5.3.3	Floor board	
4.5.3.5	Room temperature and humidity sensor	Black
4.5.3.6	Room temperature and humidity sensor	White
SCHEDA BMS	Electronic board for additional serial port	Mandatory with the purchase of one or more of the following: 4.5.3.4, 4.5.3.3, 4.5.3.5/6

NOTE: Drain pipe heating cable is already included in all KITA HR models. 4.6.1.1: refrigerant gas cost not included. Variable based on market rates.





## **KITA SP-R290 line**

High-efficiency reversible air-to-water

Technology  
Made in Italy





# KITA SP-R290 line

## High-efficiency reversible air-to-water



High efficiency air-water reversible monoblock SP series heat pumps, with inverter scroll compressor, suitable for meeting the needs of buildings with low thermal demand.

Full-Inverter operation: adapts the machine to the precise heat load requirements of the home, with savings over 30%.

Ideal for domestic hot water production up to 65°C.

KITA heat pumps are designed in Italy and integrate perfectly into both modern and classic buildings.

First-class electronics ensure total control over the operation of the machine, even remotely.

Kita is environmentally friendly as it doesn't rely on fossil fuels, providing heating and air conditioning without the need for an auxiliary boiler.



### Advantages:



Energy class



Heating



Cooling



Domestic Hot Water



Italian technology



Photovoltaic integration



Single homes



Villas



Remote monitoring



Easy to install



Front ventilation



K-TOUCH remote control panels

### KITA SP/R290

MODEL	Heating										DHW		Cooling					
	A 12°C / W 35°C		A 7°C / W 35°C		A 2°C / W 35°C		A -7°C / W 35°C		A -15°C / W 35°C		A -20°C / W 35°C		A 2°C / W 65°C		A 35°C / W 7°C		A 35°C / W 18°C	
	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qc kW	EER	Qc kW	EER		
SP-8 4.1.7.1	9,20	6,11	8,19	5,26	7,00	4,59	5,20	3,62	4,10	2,89	3,40	2,46	5,90	2,02	6,99	3,48	9,66	4,70
SP-10 4.1.7.2	11,40	6,02	10,00	5,16	8,80	4,45	6,80	3,47	5,30	2,76	4,40	2,37	7,40	2,06	8,02	3,42	11,00	4,55
SP-12 4.1.7.3	14,30	5,94	12,50	5,06	10,60	4,37	8,00	3,37	6,20	2,67	5,20	2,29	10,90	2,05	9,04	3,36	12,32	4,38



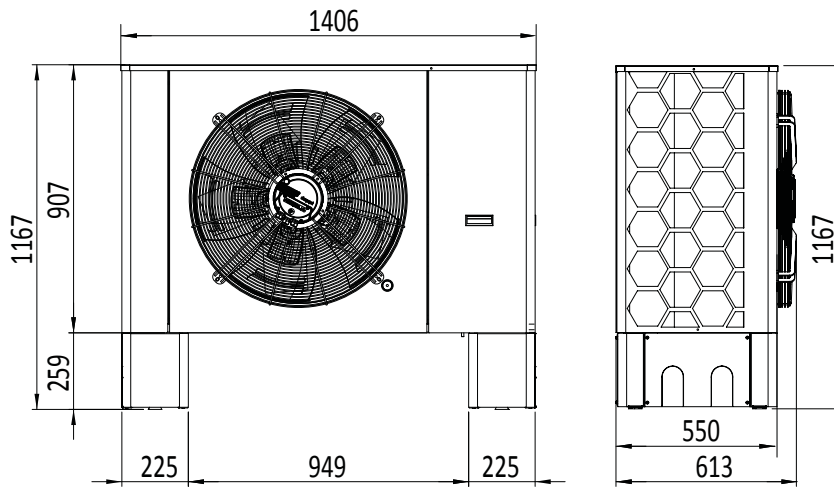
# KITA SP-R290 line

High-efficiency reversible air-to-water

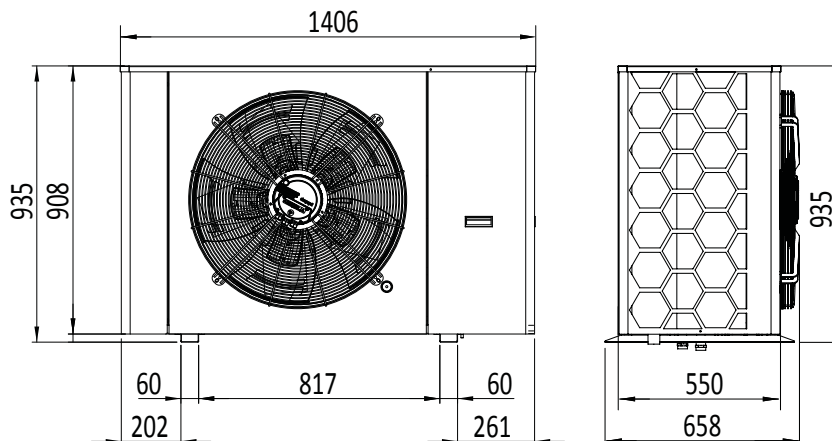
## TECHNICAL DATA

<b>Energy class:</b>	A+++	<b>Finned coil:</b>	Fin spacing: 2,5 mm
<b>Noise level:</b>	Max sound pressure at 1 meter distance:44 dB(A)	<b>Exchanger:</b>	Type: Plates Material: stainless steel
<b>Compressor:</b>	Compressor: Scroll	<b>Refrigerant:</b>	R290
<b>External fan:</b>	Type: EC Nominal diameter: 710 mm Max Speed: 600 rpm	<b>Diameter of water pipes:</b>	Input: 1" Output: 1"
		<b>Hydraulic circuit:</b>	Pump type: EC
		<b>Dimensions:</b>	908 mm (H) x 1406 mm (L) x 550 mm (P)

### DIMENSIONS WITH LEGS



### DIMENSIONS WITH BRACKETS



### Mandatory accessory to be chosen from the options - Outdoor Unit

Code	Description	Note
4.5.1.10	Support brackets for outdoor unit	To be used with 2.1.3.2 or 2.1.3.3
4.5.1.2	Metal legs for outdoor unit	Alternative to brackets 4.5.1.10

### Mandatory accessory, to be chosen from the options - Controller

Code	Description	Note
4.5.3.1	PGD display kit	With 4.5.3.1+4.5.3.2 it is mandatory to include cod. SCHEDA BMS
4.5.3.2	7" Touchscreen Panel	
HCC-F01	Recessed metal frame for touch screen panel	
HCC-F02	On wall metal frame for touch screen panel	Alternative to HCC-F01
4.5.3.16	Building Automation 9.7" touch panel display	Alternative to 4.5.3.2
4.5.1.14	Recessed metal frame for 9.7" touch screen panel	

### Mandatory Accessories - Outdoor Unit Wiring

Code	Description	Note
EL.CV_PT6	Flat telephone cable, length 6 m	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT10	EL.CV_PT10 Flat telephone cable, length 10mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT20	EL.CV_PT10 Flat telephone cable, length 20mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT30	EL.CV_PT10 Flat telephone cable, length 30mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
L.CV_IM10	System and B2-B3 Puffer cable, length 10mt	Cable connecting the machine to the puffer probes
EL.CV_IM20	System and B2-B3 Puffer cable, length 20mt	Cable connecting the machine to the puffer probes
EL.CV_IM30	System and B2-B3 Puffer cable, length 30mt	Cable connecting the machine to the puffer probes

### Plumbing add-ons

Code	Description	Note
4.5.2.1	DHW module kit (K1 relay)	
4.5.4.1	3-WAY valve kit (body + motor)	
SN.NTCWP3M	SN.NTCWP3M DHW temperature sensor	
4.5.4.2	Wilo Para 9 high flow circulator kit	Alternative to standard circulator
2.4.3.1	Flexible stainless steel connection pipes kit with 1 1/4" F fittings	2 pieces
K-FY	Brass 2" Y-filter with 1 1/4" connections	
2.4.2.5	1 1/2" antifreeze valve	

### Electrical add-ons

Code	Description	Note
2.5.7.1	HCC, 100 m cable coil 2x0.50 sq mm for MODBUS connection	Modbus cable to connect the machine to the HCC (controller)
4.5.2.8	HCC, power supply kit - pair of 200 m cable coils (red+black) 1 sq mm	Modbus cable to connect the machine to the HCC (controller)
4.5.2.3	Integration module kit (K3 relay)	
4.5.3.18	T-split board kit	Board for digital communication between indoor and outdoor units
4.5.2.7	3ph 9 kW auxiliary heating element kit	Resistance for supply pipe. Separate installation
4.5.2.4	Integration module kit (K4 relay)	Required with code 4.5.2.7
K-RSC	Drain pipe heating cable	
4.5.2.5	SG-READY upgrade	Alternative to standard single power supply

### Electronic add-ons

Code	Description	Note
4.5.3.4	C-Mix board	
4.5.3.3	Floor board	
4.5.3.5	Room temperature and humidity sensor	Black
4.5.3.6	Room temperature and humidity sensor	White
SCHEDA BMS	Electronic board for additional serial port	Mandatory with the purchase of one or more of the following: 4.5.3.4, 4.5.3.3, 4.5.3.5/6

### Optional

Code	Description	Note
4.5.1.7	Outdoor unit protection grid	Protection grid
4.5.1.12	Fan cover	Front Grid
2.1.3.2	Pair of 1200x700 mm wall brackets for outdoor unit	
2.1.3.3	BASE SBR floor supports, dimensions L250xH95xP130	Mandatory with brackets 4.5.1.10
2.1.3.4	EXTENSION floor supports for base, dimensions L250xH95xP130	Supplied with code 2.1.3.3

NOTE: 4.6.1.1: refrigerant gas cost not included. Variable based on market rates.



## **KITA MP-R290 line**

High-efficiency reversible air-to-water

Technology  
Made in Italy



# KITA MP-R290 line

## High-efficiency reversible air-to-water



High efficiency air-water reversible monoblock MP series heat pumps, with inverter scroll compressor.

Full-Inverter operation: adapts the machine to the precise heat load requirements of the home, with savings over 30%.

Ideal for domestic hot water production up to 65°C.

KITA heat pumps are designed in Italy and integrate perfectly into both modern and classic buildings.

First-class electronics ensure total control over the operation of the machine, even remotely.

Kita is environmentally friendly as it doesn't rely on fossil fuels, providing heating and air conditioning without the need for an auxiliary boiler.



### Advantages:

- Energy class
- Heating
- Cooling
- Domestic Hot Water
- Italian technology
- Photovoltaic integration
- Single homes
- Villas
- Remote monitoring
- Easy to install
- Front ventilation
- 



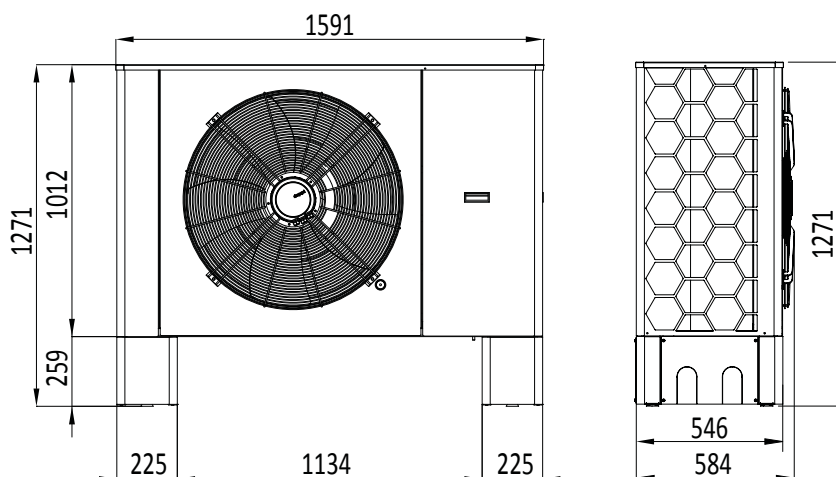
### KITA MP/R290

MODEL	Heating												DHW		Cooling			
	A 12°C / W 35° C		A 7°C / W 35° C		A 2°C / W 35° C		A -7°C / W 35° C		A -15°C / W 35° C		A -20°C / W 35° C		A 2°C / W 65° C		A 35°C / W 7° C		A 35°C / W 18° C	
	Q <sub>h</sub>	COP	Q <sub>h</sub>	COP	Q <sub>h</sub>	COP	Q <sub>h</sub>	COP	Q <sub>h</sub>	COP	Q <sub>h</sub>	COP	Q <sub>h</sub>	COP	Q <sub>c</sub>	EER	Q <sub>c</sub>	EER
	kW		kW		kW		kW		kW		kW		kW		kW		kW	
MP-16 4.1.8.2	17,10	5,58	15,00	4,73	13,10	4,03	10,10	3,08	7,80	2,43	6,60	2,08	11,00	1,90	11,81	3,97	16,90	5,51
MP-20 4.1.8.4	22,70	5,49	20,10	4,76	18,10	4,12	14,80	3,21	11,70	2,64	10,00	2,32	16,10	2,11	14,45	3,34	20,19	4,43

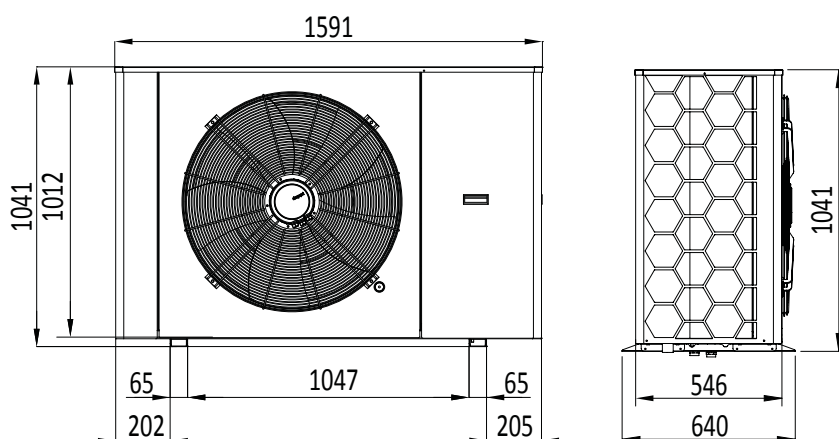
### TECHNICAL DATA

<b>Energy class:</b>	A+++	<b>Exchanger:</b>	Type: Plates Material: stainless steel
<b>Noise level:</b>	Max sound pressure at 1 meter distance: 45 dB(A)	<b>Refrigerant:</b>	R290
<b>Compressor:</b>	Inverter Scroll	<b>Diameter of water pipes:</b>	Input: 1" Output: 1"
<b>External fan:</b>	BLDC type Nominal diameter: 800 mm Max Speed: 600 rpm	<b>Hydraulic circuit:</b>	Pump type: EC
<b>Finned coil:</b>	Fin spacing: 2,5 mm	<b>Dimensions:</b>	1012 mm (H) x 1591 mm (L) x 546 mm (P)

### DIMENSIONS WITH LEGS



### DIMENSIONS WITH BRACKETS





# KITA MP-R290 line

## High-efficiency reversible air-to-water

### Mandatory accessory to be chosen from the options - Outdoor Unit

Code	Description	Note
4.5.1.1	Support brackets for outdoor unit	To be used with 2.1.3.2 or 2.1.3.3
4.5.1.2	Metal legs for outdoor unit	Alternative to brackets 4.5.1.10

### Mandatory accessory, to be chosen from the options - Controller

Code	Description	Note
4.5.3.1	PGD display kit	With 4.5.3.1+4.5.3.2 it is mandatory to include cod. SCHEDA BMS
4.5.3.2	7" Touchscreen Panel	
HCC-F01	Recessed metal frame for touch screen panel	
HCC-F02	On wall metal frame for touch screen panel	Alternative to HCC-F01
4.5.3.16	Building Automation 9.7" touch panel display	Alternative to 4.5.3.2
4.5.1.14	Recessed metal frame for 9.7" touch screen panel	

### Mandatory Accessories - Outdoor Unit Wiring

Code	Description	Note
EL.CV_PT6	Flat telephone cable, length 6 m	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT10	EL.CV_PT10 Flat telephone cable, length 10mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT20	EL.CV_PT10 Flat telephone cable, length 20mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT30	EL.CV_PT10 Flat telephone cable, length 30mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
L.CV_IM10	System and B2-B3 Puffer cable, length 10mt	Cable connecting the machine to the puffer probes
EL.CV_IM20	System and B2-B3 Puffer cable, length 20mt	Cable connecting the machine to the puffer probes
EL.CV_IM30	System and B2-B3 Puffer cable, length 30mt	Cable connecting the machine to the puffer probes

### Plumbing add-ons

Code	Description	Note
4.5.2.1	DHW module kit (K1 relay)	
4.5.4.1	3-WAY valve kit (body + motor)	
SN.NTCWP3M	SN.NTCWP3M DHW temperature sensor	
4.5.4.2	Wilo Para 9 high flow circulator kit	Alternative to standard circulator
2.4.3.1	Flexible stainless steel connection pipes kit with 1 1/4" F fittings	2 pieces
K-FY	Brass 2" Y-filter with 1 1/4" connections	
2.4.2.5	1 1/2" antifreeze valve	

### Electrical add-ons

Code	Description	Note
2.5.7.1	HCC, 100 m cable coil 2x0.50 sq mm for MODBUS connection	Modbus cable to connect the machine to the HCC (controller)
4.5.2.8	HCC, power supply kit - pair of 200 m cable coils (red+black) 1 sq mm	Modbus cable to connect the machine to the HCC (controller)
4.5.2.3	Integration module kit (K3 relay)	
4.5.3.18	T-split board kit	Board for digital communication between indoor and outdoor units
4.5.2.7	3ph 9 kW auxiliary heating element kit	Resistance for supply pipe. Separate installation
4.5.2.4	Integration module kit (K4 relay)	Required with code 4.5.2.7
K-RSC	Drain pipe heating cable	
4.5.2.5	SG-READY upgrade	Alternative to standard single power supply

### Electronic add-ons

Code	Description	Note
4.5.3.4	C-Mix board	
4.5.3.3	Floor board	
4.5.3.5	Room temperature and humidity sensor	Black
4.5.3.6	Room temperature and humidity sensor	White
SCHEDA BMS	Electronic board for additional serial port	Mandatory with the purchase of one or more of the following: 4.5.3.4, 4.5.3.3, 4.5.3.5/6

### Optional

Code	Description	Note
4.5.1.8	Outdoor unit protection grid	Protection grid
4.5.1.13	Fan cover	Front Grid
VE.800FG	SILENCE KIT surcharge for outdoor unit	Alternative to standard insulation
4.5.6.1	SILENCE KIT surcharge for outdoor unit	Alternative to standard insulation
2.1.3.2	Pair of 1200x700 mm wall brackets for outdoor unit	
2.1.3.3	BASE SBR floor supports, dimensions L250xH95xP130	Mandatory with brackets 4.5.1.1
2.1.3.4	EXTENSION floor supports for base, dimensions L250xH95xP130	Supplied with code 2.1.3.3

NOTE: 4.6.1.1: refrigerant gas cost not included. Variable based on market rates.



RESIDENTIAL

## **KITA LP-R290 line**

High-efficiency reversible air-to-water

Technology  
Made in Italy





# KITA LP-R290 line

## High-efficiency reversible air-to-water



High efficiency air-water reversible monoblock LP series heat pumps, with inverter scroll compressor.

Full-Inverter operation: adapts the machine to the precise heat load requirements of the home, with savings over 30%.

Ideal for domestic hot water production up to 65°C.

KITA heat pumps are designed in Italy and integrate perfectly into both modern and classic buildings.

First-class electronics ensure total control over the operation of the machine, even remotely.

Kita is environmentally friendly as it doesn't rely on fossil fuels, providing heating and air conditioning without the need for an auxiliary boiler.



### Advantages:



Energy class



Heating



Cooling



Domestic Hot Water



Italian technology



Photovoltaic integration



Villas



Condons



Remote monitoring



Easy to install



Front ventilation



K-TOUCH remote control panels

### KITA LP/R290

MODEL	Heating												DHW		Cooling			
	A 12°C / W 35° C		A 7°C / W 35° C		A 2°C / W 35° C		A -7°C / W 35° C		A -15°C / W 35° C		A -20°C / W 35° C		A 2°C / W 65° C		A 35°C / W 7° C		A 35°C / W 18° C	
	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qc	EER	Qc	EER
	kw		kw		kw		kw		kw		kw		kw		kw		kw	
LP-22 4.1.9.2	24,90	5,72	22,20	4,98	19,60	4,37	15,60	3,49	12,40	2,87	10,60	2,53	18,24	2,8	14,45	3,43	20,13	4,61
LP-26 4.1.9.1	29,70	6,15	26,20	5,30	25,20	4,49	22,60	3,40	18,00	2,80	15,60	2,52	19,92	1,89	20,85	2,57	27,97	3,18

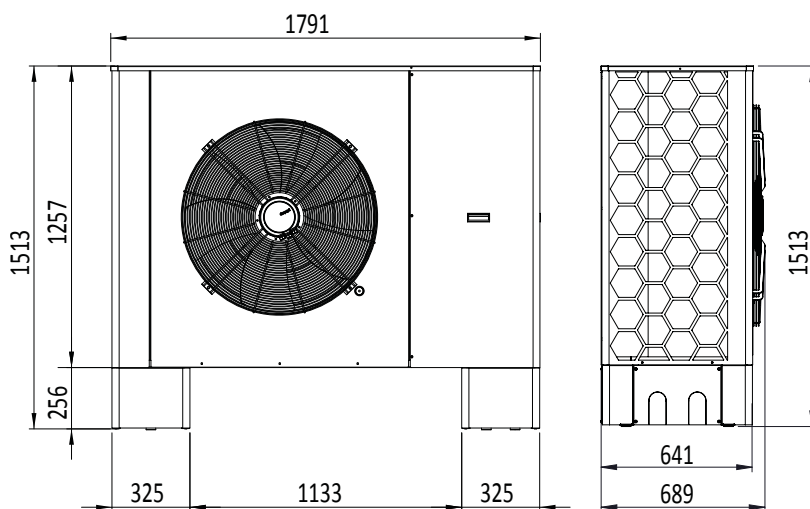
# KITA LP-R290 line

High-efficiency reversible air-to-water

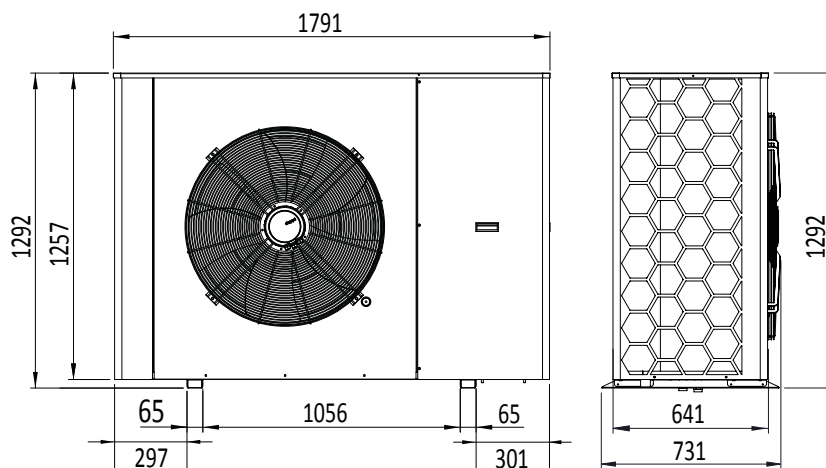
## TECHNICAL DATA

<b>Energy class:</b>	A+++	<b>Finned coil:</b>	Fin spacing: 2,5 mm
<b>Noise level:</b>	Max sound pressure at 1 meter distance: 52 dB(A)	<b>Exchanger:</b>	Type: Plates - Material: stainless steel
<b>Compressor:</b>	Inverter Scroll	<b>Refrigerant:</b>	R290A
<b>External fan:</b>	BLDC type	<b>Diameter of water pipes:</b>	Input; 1" - Output: 1"
		<b>Hydraulic circuit:</b>	Pump type: EC
		<b>Dimensions:</b>	1257 mm (H) x 1791 mm (L) x 641 mm (P)

### DIMENSIONS WITH BRACKETS



### DIMENSIONS WITH LEGS





# KITA LP-R290 line

## High-efficiency reversible air-to-water

### Mandatory accessory to be chosen from the options - Outdoor Unit

Code	Description	Note
4.5.1.3	Support brackets for outdoor unit	To be used with 2.1.3.2 or 2.1.3.3
4.5.1.4	Metal legs for outdoor unit	

### Mandatory accessory, to be chosen from the options - Controller

Code	Description	Note
4.5.3.1	PGD display kit	With 4.5.3.1+4.5.3.2 it is mandatory to include cod. SCHEDA BMS
4.5.3.2	7" Touchscreen Panel	
HCC-F01	Recessed metal frame for touch screen panel	
HCC-F02	On wall metal frame for touch screen panel	Alternative to HCC-F01
4.5.3.16	Building Automation 9.7" touch panel display	Alternative to 4.5.3.2
4.5.1.14	Recessed metal frame for 9.7" touch screen panel	

### Mandatory Accessories - Outdoor Unit Wiring

Code	Description	Note
EL.CV_PT6	Flat telephone cable, length 6 m	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT10	EL.CV_PT10 Flat telephone cable, length 10mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT20	EL.CV_PT10 Flat telephone cable, length 20mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT30	EL.CV_PT10 Flat telephone cable, length 30mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
L.CV_IM10	System and B2-B3 Puffer cable, length 10mt	Cable connecting the machine to the puffer probes
EL.CV_IM20	System and B2-B3 Puffer cable, length 20mt	Cable connecting the machine to the puffer probes
EL.CV_IM30	System and B2-B3 Puffer cable, length 30mt	Cable connecting the machine to the puffer probes

### Plumbing add-ons

Code	Description	Note
4.5.2.1	DHW module kit (K1 relay)	
4.5.4.1	3-WAY valve kit (body + motor)	
SN.NTCWP3M	SN.NTCWP3M DHW temperature sensor	
4.5.4.3	UPM XL GEO oversize circulator kit per KITA L33	Alternative to standard circulator
2.4.3.2	Kit giunti flessibili con bocchettoni F da 1"1/2	2 pieces
K-FY	Brass 2" Y-filter with 1 1/4" connections	
2.4.2.5	1 1/2" antifreeze valve	

### Electrical add-ons

Code	Description	Note
4.5.2.3	Integration module kit (K3 relay)	
2.5.7.1	HCC, 100 m cable coil 2x0.50 sq mm for MODBUS connection	Modbus cable to connect the machine to the HCC (controller)
4.5.2.8	HCC, power supply kit - pair of 200 m cable coils (red+black) 1 sq mm	Modbus cable to connect the machine to the HCC (controller)
4.5.3.18	T-split board kit	Board for digital communication between indoor and outdoor units
4.5.2.7	3ph 9 kW auxiliary heating element kit	Resistance for supply pipe. Separate installation
4.5.2.4	Integration module kit (K4 relay)	Required with code 4.5.2.7
K-RSC	Drain pipe heating cable	
4.5.2.5	SG-READY upgrade	Alternative to standard single power supply
4.5.2.6	QE doppia alimentazione 40A	Alternative to standard single power supply per L Cold

### Electronic add-ons

Code	Description	Note
4.5.3.4	C-Mix board	
4.5.3.3	Floor board	
4.5.3.5	Room temperature and humidity sensor	Black
4.5.3.6	Room temperature and humidity sensor	White
SCHEDA BMS	Electronic board for additional serial port	Mandatory with the purchase of one or more of the following: 4.5.3.4, 4.5.3.3, 4.5.3.5/6

### Optional

Code	Description	Note
VE.800FG	SILENCE KIT surcharge for outdoor unit	Alternative to standard insulation. Acc. optional solo per L33/L42
VE.910FG	Flow Grid for d.910 fan	Alternative to standard insulation. Acc. optional solo per L66/L Cold
4.5.5.1	D.910 fan surcharge	Only for L33/L42
4.5.6.2	SILENCE KIT surcharge for outdoor unit	Alternative to standard insulation
2.1.3.4	EXTENSION floor supports for base, dimensions L250xH95xP130	Supplied with code 2.1.3.3
2.1.3.2	Pair of 1200x700 mm wall brackets for outdoor unit	
2.1.3.3	BASE SBR floor supports, dimensions L250xH95xP130	Mandatory with brackets 4.5.1.3
4.5.1.9	Outdoor unit protection grid	Protection grid

NOTE: 4.6.1.1: refrigerant gas cost not included. Variable based on market rates.



RESIDENTIAL

## **KITA LP/Plus-R290** line

High-efficiency reversible air-to-water

Technology  
Made in Italy





# KITA LP/Plus-R290 line

## High-efficiency reversible air-to-water

High efficiency air-water reversible monoblock LP/Plus series heat pumps, with Inverter Scroll compressor.

Full-Inverter operation: adapts the machine to the precise heat load requirements of the home, with savings over 30%.

Ideal for domestic hot water production up to 65°C.

KITA heat pumps are designed in Italy and integrate perfectly into both modern and classic buildings.

First-class electronics ensure total control over the operation of the machine, even remotely.

Kita is environmentally friendly as it doesn't rely on fossil fuels, providing heating and air conditioning without the need for an auxiliary boiler.



### Advantages:



Energy class



Heating



Cooling



Domestic Hot Water



Italian technology



Photovoltaic integration



Villas



Condos



Remote monitoring



Easy to install



Front ventilation



K-TOUCH remote control panels

### KITA LP PLUS/R290

MODEL	Heating												DHW		Cooling			
	A 12°C / W 35° C		A 7°C / W 35° C		A 2°C / W 35° C		A -7°C / W 35° C		A -15°C / W 35° C		A -20°C / W 35° C		A 2°C / W 65° C		A 35°C / W 7° C		A 35°C / W 18° C	
	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qc kW	EER	Qc kW	EER
LP PLUS 28 4.1.10.1	32,30	6,06	28,30	5,20	25,10	4,45	19,80	3,41	15,50	2,76	13,30	2,46	23,00	2,22	17,43	2,91	23,66	3,63
LP PLUS 32 4.1.10.2	36,30	5,62	32,20	4,90	28,30	4,29	22,20	3,43	17,80	2,87	15,50	2,59	26,30	2,22	19,01	2,73	25,60	3,38
LP PLUS 35 4.1.10.3	39,70	5,47	35,10	4,79	30,90	4,21	24,20	3,37	19,30	2,81	16,70	2,55	19,60	2,26	20,58	2,54	27,54	3,12
LP PLUS 40 4.1.10.4	43,60	5,19	38,80	4,57	34,40	4,04	27,20	3,28	21,90	2,77	19,20	2,54	30,90	1,95	22,72	2,37	30,02	2,87



# KITA LP/Plus-R290 line

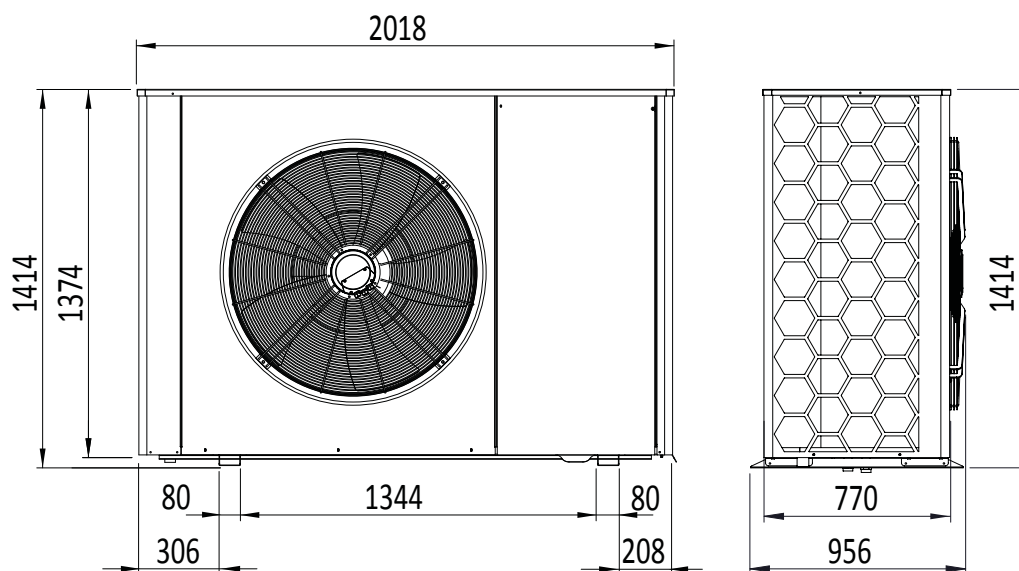
High-efficiency reversible air-to-water

## TECHNICAL DATA

<b>Energy class:</b>	A+++
<b>Power supply:</b>	400 V - 3 ph - 50Hz
<b>Max electrical absorption A-20/W55:</b>	20,12 kW
<b>Noise level:</b>	Max sound pressure at 1 meter distance: 52 dB(A)
<b>Compressor:</b>	Inverter Scroll
<b>External fan:</b>	Inverter typology: BLDC Nominal diameter: 910 mm Max Speed: 610 rpm
<b>Finned coil:</b>	Fin spacing: 2,5 mm

<b>Exchanger:</b>	Type: Plates Material: stainless steel
<b>Refrigerant:</b>	R290
<b>Diameter of water pipes:</b>	Input: 1" 1/2 Output: 1" 1/2
<b>Hydraulic circuit:</b>	Pump type: EC
<b>Dimensions:</b>	1414 mm (H) x 2018 mm (L) x 956 mm (P)

## DIMENSIONS WITH BRACKETS





# KITA LP/Plus-R290 line

## High-efficiency reversible air-to-water

### Mandatory accessory, to be chosen from the options - Controller

Code	Description	Note
4.5.3.1	PGD display kit	With 4.5.3.1+4.5.3.2 it is mandatory to include cod. SCHEDA BMS
4.5.3.2	7" Touchscreen Panel	
HCC-F01	Recessed metal frame for touch screen panel	
HCC-F02	On wall metal frame for touch screen panel	Alternative to HCC-F01
4.5.3.16	Building Automation 9.7" touch panel display	Alternative to 4.5.3.2
4.5.1.14	Recessed metal frame for 9.7" touch screen panel	

### Mandatory Accessories - Outdoor Unit Wiring

Code	Description	Note
EL.CV_PT6	Flat telephone cable, length 6 m	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT10	EL.CV_PT10 Flat telephone cable, length 10mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT20	EL.CV_PT10 Flat telephone cable, length 20mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT30	EL.CV_PT10 Flat telephone cable, length 30mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
L.CV_IM10	System and B2-B3 Puffer cable, length 10mt	Cable connecting the machine to the puffer probes
EL.CV_IM20	System and B2-B3 Puffer cable, length 20mt	Cable connecting the machine to the puffer probes
EL.CV_IM30	System and B2-B3 Puffer cable, length 30mt	Cable connecting the machine to the puffer probes

### Mandatory Plumbing Accessories

Code	Description	Note
2.4.1.1	Circulation pump YONOS PARA HF 30/12	

### Plumbing add-ons

Code	Description	Note
4.5.2.1	DHW module kit (K1 relay)	
4.5.4.1	3-WAY valve kit (body + motor)	
SN.NTCWP3M	SN.NTCWP3M DHW temperature sensor	
K-FY	Brass 2" Y-filter with 1 1/4" connections	
2.4.2.5	1 1/2" antifreeze valve	

### Electrical add-ons

Code	Description	Note
2.5.7.1	HCC, 100 m cable coil 2x0.50 sq mm for MODBUS connection	Modbus cable to connect the machine to the HCC (controller)
4.5.2.8	HCC, power supply kit - pair of 200 m cable coils (red+black) 1 sq mm	Modbus cable to connect the machine to the HCC (controller)
4.5.2.3	Integration module kit (K3 relay)	
4.5.2.7	3ph 9 kW auxiliary heating element kit	Resistance for supply pipe. Separate installation
4.5.2.4	Integration module kit (K4 relay)	Required with code 4.5.2.7
K-RSC	Drain pipe heating cable	
4.5.2.6	QE doppia alimentazione 40A	Alternative to standard single power supply per L Cold

### Electronic add-ons

Code	Description	Note
4.5.3.4	C-Mix board	
4.5.3.3	Floor board	
4.5.3.5	Room temperature and humidity sensor	Black
4.5.3.6	Room temperature and humidity sensor	White
SCHEDA BMS	Electronic board for additional serial port	Mandatory with the purchase of one or more of the following: 4.5.3.4, 4.5.3.3, 4.5.3.5/6

### Optional

Code	Description	Note
VE.910FG	Flow Grid for d.910 fan	Alternative to standard insulation
4.5.1.11	Outdoor unit protection grid	Protection grid
2.1.3.3	BASE SBR floor supports, dimensions L250xH95xP130	
2.1.3.4	EXTENSION floor supports for base, dimensions L250xH95xP130	Supplied with code 2.1.3.3

NOTE: 4.6.1.1: refrigerant gas cost not included. Variable based on market rates.



## **KITA LR-R32 line**

High-efficiency reversible air-to-water

Technology  
Made in Italy



# KITA LR-R32 line

## High-efficiency reversible air-to-water



LR series heat pumps monoblock with Smart Injection Inverter Scroll compressor.

Smart Injection system with steam-injection Inverter Scroll compressor to ensure operation with maximum efficiency at outdoor temperatures below -20°C.

Full-Inverter operation: adapts the machine to the precise heat load requirements of the home, with savings over 30%.

Ideal for domestic hot water production up to 55°C.

KITA heat pumps are designed in Italy and integrate perfectly into both modern and classic buildings.

First-class electronics ensure total control over the operation of the machine, even remotely.

Kita is environmentally friendly as it doesn't rely on fossil fuels, providing heating and air conditioning without the need for an auxiliary boiler.

### Advantages:



Energy class



Heating



Cooling



Domestic Hot Water



Italian technology



Photovoltaic integration



Villas



Condos



Remote monitoring



Easy to install



Front ventilation



K-TOUCH remote control panels

### KITA LR35/R32

MODEL	Heating											DHW		Cooling				
	A 12°C / W 35°C		A 7°C / W 35°C		A 2°C / W 35°C		A -7°C / W 35°C		A -15°C / W 35°C		A -20°C / W 35°C		A 2°C / W 55°C		A 35°C / W 7°C		A 35°C / W 18°C	
	Q <sub>h</sub> kW	COP	Q <sub>h</sub> kW	COP	Q <sub>h</sub> kW	COP	Q <sub>h</sub> kW	COP	Q <sub>h</sub> kW	COP	Q <sub>h</sub> kW	COP	Q <sub>h</sub> kW	COP	Q <sub>c</sub> kW	EER	Q <sub>c</sub> kW	EER
LR35 4.1.4.9	35,5	4,25	35	4,1	32	3,52	28,4	2,93	23,1	2,39	18,5	2,15	31,6	2,66	25,3	3,16	32,5	4,62
LR 35 Cold 4.1.4.10	35	4,7	35	4,37	35	3,67	35	2,8	34,2	2,43	30,2	2,25	35	2,7	25,3	3,25	32,5	4,76



# KITA LR-R32 line

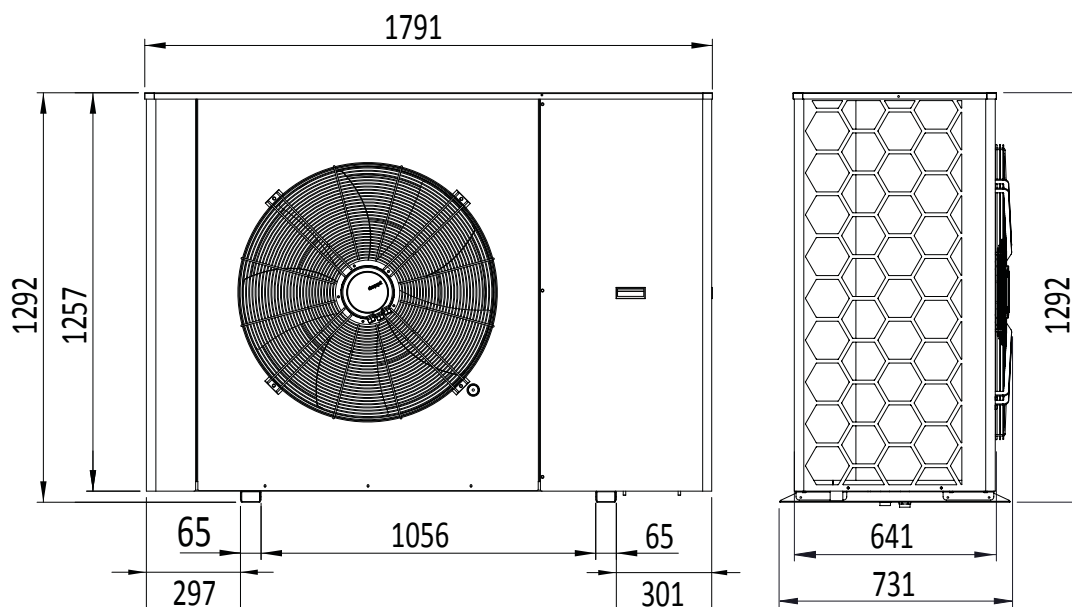
High-efficiency reversible air-to-water

## TECHNICAL DATA

<b>Energy class:</b>	A+++
<b>Power supply:</b>	400 V - 3 ph - 50Hz
<b>Max electrical absorption A-20/W55:</b>	12,50 kW (LR 35) 20,00 kW (LR 35 Cold)
<b>Noise level:</b>	Max sound pressure at 1 meter distance: 52 dB(A)
<b>Compressor:</b>	Scroll injection
<b>External fan:</b>	Inverter typology: BLDC Nominal diameter: 910 mm Max Speed: 610 rpm
<b>Finned coil:</b>	Fin spacing: 2,5 mm

<b>Exchanger:</b>	Type: Plates Material: stainless steel
<b>Refrigerant:</b>	R32 Q.ty: 7 kg
<b>Diameter of water pipes:</b>	Input: 1" Output: 1"
<b>Hydraulic circuit:</b>	Pump type: EC
<b>Dimensions:</b>	1257 mm (H) x 1791 mm (L) x 641 mm (P)

## DIMENSIONS WITH BRACKETS





# KITA LR Plus-R32 line

## High-efficiency reversible air-to-water



LR series heat pumps monoblock with Smart Injection Inverter Scroll compressor.

Smart Injection system with steam-injection Inverter Scroll compressor to ensure operation with maximum efficiency at outdoor temperatures below -20°C.

Full-Inverter operation: adapts the machine to the precise heat load requirements of the home, with savings over 30%.

Ideal for domestic hot water production up to 55°C.

KITA heat pumps are designed in Italy and integrate perfectly into both modern and classic buildings.

First-class electronics ensure total control over the operation of the machine, even remotely.

Kita is environmentally friendly as it doesn't rely on fossil fuels, providing heating and air conditioning without the need for an auxiliary boiler.

### Advantages:



Energy class



Heating



Cooling



Domestic Hot Water



Italian technology



Photovoltaic integration



Villas



Condos



Remote monitoring



Easy to install



Front ventilation



K-TOUCH remote control panels

### KITA LR-PLUS/R32

MODEL	Heating										DHW		Cooling					
	A 12°C / W 35° C		A 7°C / W 35° C		A 2°C / W 35° C		A -7°C / W 35° C		A -15°C / W 35° C		A -20°C / W 35° C		A 2°C / W 55° C		A 35°C / W 7° C		A 35°C / W 18° C	
	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qh kW	COP	Qc kW	EER	Qc kW	EER		
LR Plus 4.1.5.3	44,8	4,71	44,9	4,10	43,8	3,76	41,1	2,98	37	2,43	34	2,24	43,6	2,35	35,15	3,13	42,25	4,57



# KITA LR Plus-R32 line

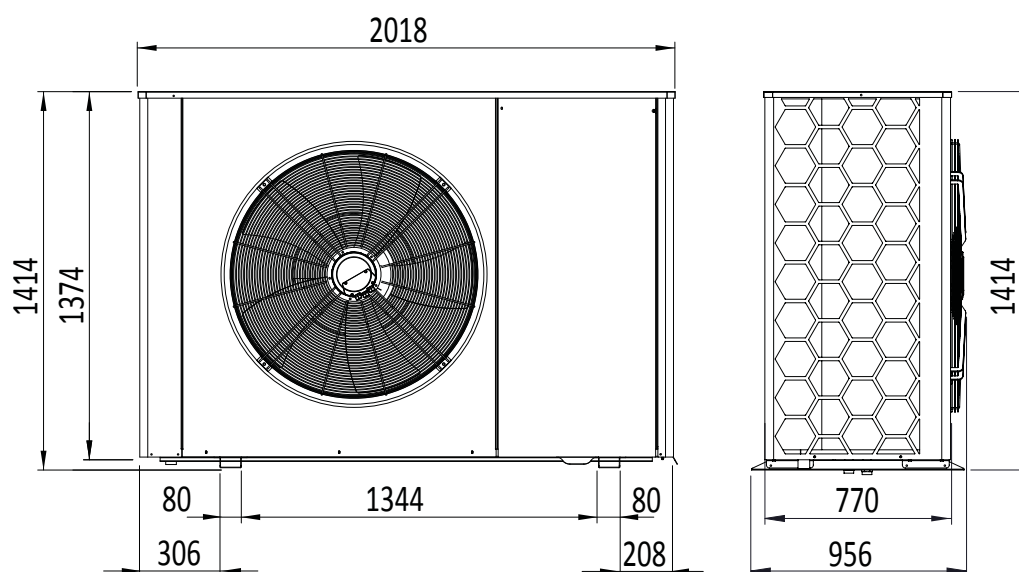
High-efficiency reversible air-to-water

## TECHNICAL DATA

<b>Energy class:</b>	A+++
<b>Power supply:</b>	400 V - 3 ph - 50Hz
<b>Max electrical absorption A-20/W55:</b>	12,50 kW (LR 35) 20,00 kW (LR 35 Cold)
<b>Noise level:</b>	Max sound pressure at 1 meter distance: 52 dB(A)
<b>Compressor:</b>	Scroll injection
<b>External fan:</b>	Inverter typology: BLDC Nominal diameter: 910 mm Max Speed: 610 rpm
<b>Finned coil:</b>	Fin spacing: 2,5 mm

<b>Exchanger:</b>	Type: Plates Material: stainless steel
<b>Refrigerant:</b>	R32 Q.ty: 7,4 kg
<b>Diameter of water pipes:</b>	Input: 1" Output: 1"
<b>Hydraulic circuit:</b>	Pump type: EC
<b>Dimensions:</b>	1414 mm (H) x 2018 mm (L) x 956 mm (P)

## DIMENSIONS WITH BRACKETS



RESIDENTIAL

### Mandatory accessory to be chosen from the options - Outdoor Unit

Code	Description	Note
4.5.1.3	Support brackets for outdoor unit	To be used with 2.1.3.2 or 2.1.3.3
4.5.1.4	Metal legs for outdoor unit	

### Mandatory accessory, to be chosen from the options - Controller

Code	Description	Note
4.5.3.1	PGD display kit	With 4.5.3.1+4.5.3.2 it is mandatory to include cod. SCHEDA BMS
4.5.3.2	7" Touchscreen Panel	
HCC-F01	Recessed metal frame for touch screen panel	
HCC-F02	On wall metal frame for touch screen panel	Alternative to HCC-F01
4.5.3.16	Building Automation 9.7" touch panel display	Alternative to 4.5.3.2
4.5.1.14	Recessed metal frame for 9.7" touch screen panel	

### Mandatory Accessories - Outdoor Unit Wiring

Code	Description	Note
EL.CV_PT6	Flat telephone cable, length 6 m	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT10	EL.CV_PT10 Flat telephone cable, length 10mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT20	EL.CV_PT10 Flat telephone cable, length 20mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
EL.CV_PT30	EL.CV_PT10 Flat telephone cable, length 30mt	Only necessary if PGD is present. Cable connecting the machine to the PGD (controller)
L.CV_IM10	System and B2-B3 Puffer cable, length 10mt	Cable connecting the machine to the puffer probes
EL.CV_IM20	System and B2-B3 Puffer cable, length 20mt	Cable connecting the machine to the puffer probes
EL.CV_IM30	System and B2-B3 Puffer cable, length 30mt	Cable connecting the machine to the puffer probes

### Plumbing add-ons

Code	Description	Note
4.5.2.1	DHW module kit (K1 relay)	
4.5.4.1	3-WAY valve kit (body + motor)	
SN.NTCWP3M	SN.NTCWP3M DHW temperature sensor	
4.5.4.3	UPM XL GEO oversize circulator kit per KITA L33	Alternative to standard circulator
2.4.3.2	Kit giunti flessibili con bocchettoni F da 1"1/2	2 pieces
K-FY	Brass 2" Y-filter with 1 1/4" connections	
2.4.2.5	1 1/2" antifreeze valve	

### Mandatory Plumbing Accessories

Code	Description	Note
2.4.1.1	Circulation pump YONOS PARA HF 30/12	Mandatory only with cod. 4.1.5.3

### Electrical add-ons

Code	Description	Note
2.5.7.1	HCC, 100 m cable coil 2x0.50 sq mm for MODBUS connection	Modbus cable to connect the machine to the HCC (controller)
4.5.2.8	HCC, power supply kit - pair of 200 m cable coils (red+black) 1 sq mm	
4.5.2.3	Integration module kit (K3 relay)	
4.5.3.18	T-split board kit	Board for digital communication between indoor and outdoor units
EL.CV_ETH10	Cat. 8 ethernet cable kit for Tsplit board, length 10 m	Required with code 4.5.3.18 or 4.5.3.25 - Cable + 2x RJ45 plugs
EL.CV_ETH20	Cat. 8 ethernet cable kit for Tsplit board, length 20 m	Required with code 4.5.3.18 or 4.5.3.25 - Cable + 2x RJ45 plugs
EL.CV_ETH30	Cat. 8 ethernet cable kit for Tsplit board, length 30 m	Required with code 4.5.3.18 or 4.5.3.25 - Cable + 2x RJ45 plugs
EL.CV_ETH50	Cat. 8 ethernet cable kit for Tsplit board, length 50 m	Required with code 4.5.3.18 or 4.5.3.25 - Cable + 2x RJ45 plugs
4.5.2.7	3ph 9 kW auxiliary heating element kit	Resistance for supply pipe. Separate installation
4.5.2.4	Integration module kit (K4 relay)	Required with code 4.5.2.7
K-RSC	drain pipe heating cable	
4.5.2.5	SG-READY upgrade	Alternative to standard single power supply
4.5.2.6	QE dual power supply 40A	Alternative to standard single power supply for L Cold



# KITA LR-R32 line

High-efficiency reversible air-to-water

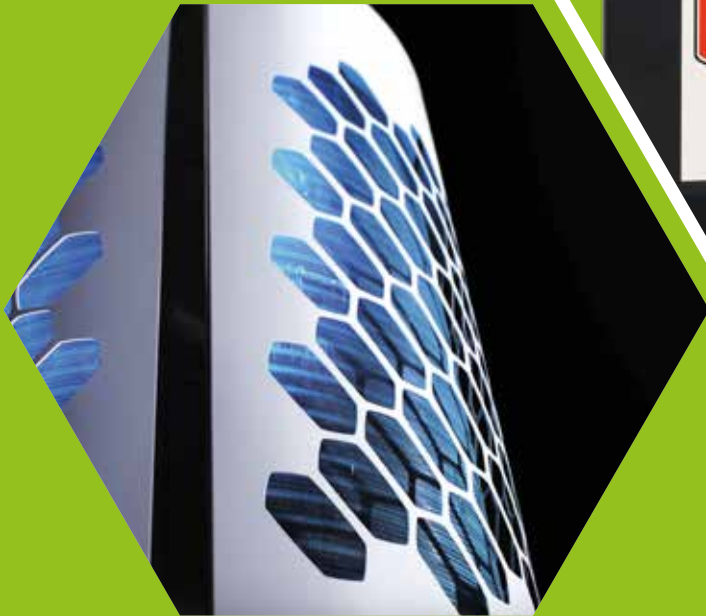
## Electronic add-ons

Code	Description	Note
4.5.3.4	C-Mix board	
4.5.3.3	Floor board	
4.5.3.5	Room temperature and humidity sensor	Black
4.5.3.6	Room temperature and humidity sensor	White
4.5.3.20	DOME sensor	Black
4.5.3.19	DOME sensor	White
<b>SCHEDA BMS</b>	Electronic board for additional serial port	Mandatory with the purchase of one or more of the following: 4.5.3.4, 4.5.3.3, 4.5.3.5/6
4.5.3.9	0-10 slave control board for DIN rail	
4.5.3.10	Dehumidifier Modbus board for DIN rail	
4.5.3.11	Pool Thermostat Modbus board for DIN rail	
4.5.3.12	3-way auxiliary valve Modbus board for DIN rail	
4.5.3.13	Auxiliary heating Modbus board for DIN rail	

## Optional

Code	Description	Note
<b>VE.800FG</b>	Flow Grid d.800 fan	Add-on accessory only for L33/L42
<b>VE.910FG</b>	Flow Grid d.910 fan	Add-on accessory only for L66/L Cold
4.5.5.1	d.910 fan surcharge	Only for L33/L42
4.5.6.2	SILENCE KIT surcharge for outdoor unit	Alternative to standard insulation
2.1.3.2	Pair of 1200x700 mm wall brackets for outdoor unit	
2.1.3.3	BASE SBR floor supports, dimensions L250xH95xP130	
4.5.1.9	Outdoor unit protection grid	Protection grid





**REMOTE  
CONTROL**

 **TEMPLARI**  
THE HEAT PUMP

# REMOTE CONTROL

## HCC and TBA comfort management

The HCC (House Climate Control) system enables management of the KITA heat pump via MODBUS and integrates it with the building's heating system. With additional accessories, a single panel can manage heating, cooling, dehumidification and the production of domestic hot water, as well as control the temperature and humidity of spaces and manage booster pumps, mixing and zone valves. The system can be customised according to the type of the building's system: up to 3 circuits with different flow temperatures and up to 12 independent spaces.

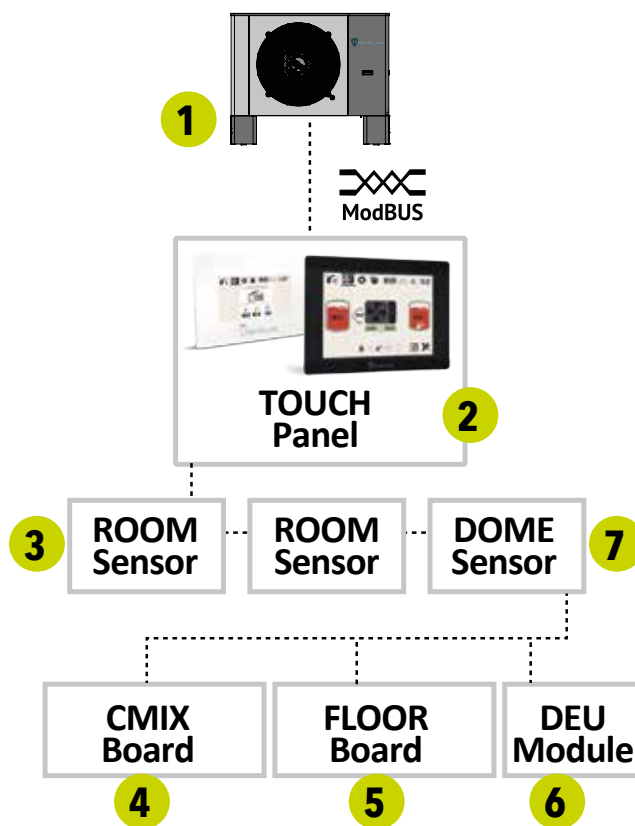
The accessories are: touchscreen panel, I/O floor board, room temperature and humidity sensors. 7" HCC panel dim. W238xH175xD51 mm, 9" TBA panel dim. W260.6xH203xD36.5 mm.

### HCC system

Comfort management in just a few Touches! For precise and efficient control of our heat pumps, we have developed HOUSE CLIMATE CONTROL (HCC), a management software capable of optimizing the performance of the heat pump, guaranteeing optimal living comfort. The software also allows remote supervision of the entire system.

### TBA system

The evolution of the HCC software is the TBA system. This software has the same functional TECHNICAL DATA as the HCC system, but allows the archiving of data relating to consumption or the operation of the air conditioning system for 5 years.



The HCC and TBA system consist of:

- 2) Touch Display: allows you to monitor and set all the system operating parameters;
- 3) ROOM sensors: they monitor the temperature and humidity of the individual rooms in real time;
- 4) CMIX boards: acquire the readings of the ROOM sensors, and manage mixers and circulators.
- 5) FLOOR boards: acquire the readings of the sensors
- 6) DEU module: they acquire the readings of the sensors



**ROOM sensor**

Temperature and humidity sensor communicates via MODBUS with the touch panel. In addition to displaying environmental information, it can be used to change the individual room setpoint.  
Dim. L107xH84xP13.5 mm



**C-Mix board**

Derived from the FLOOR board, it has a modified firmware to manage:

- 1 mixed circuit
- 1 direct, unmixed circuit (High Temperature, or HT).

The commands to activate the two circuits are transmitted via 2 dry contacts. The C-Mix board allows the Kita heat pump to be interfaced with conventional systems with a dry contact chronothermostat.  
Dim. L212.5xH97xP32.2 mm



**FLOOR board**

Electronic board that uses a relay to control the activation/de-activation of the devices in the system: on/off or modulating circulation pumps, zone valve heads, on/off or modulating mixing valves, dehumidifiers, and hydronic splits.  
Dim. L212.5xH97xP32.2 mm



**DEU Module**

Dehumidification/humidification control module that controls the dehumidification battery of the mechanical ventilation or the humidification system.



**DOME sensor**

It is a temperature and humidity sensor, it can be used to change the individual room setpoint. Available in black or white version.



N.B: the diagram is for illustrative purposes only.  
For the connections, refer to the wiring diagram in our manual.

### Compulsory Accessories - Controller

Code	Description	Note
4.5.3.1	PGD display kit	With 4.5.3.1+4.5.3.2 it is mandatory to include cod. SCHEDA BMS
4.5.3.2	7" Touchscreen Panel	
HCC-F01	Recessed metal frame for touch screen panel	
HCC-F02	On wall metal frame for touch screen panel	Alternative to HCC-F01
4.5.3.16	Building Automation 9.7" touch panel display	Alternative to 4.5.3.2
4.5.1.14	Recessed metal frame for 9.7" touch screen panel	

### Electrical add-ons

Code	Description	Note
2.5.7.1	HCC, 100 m cable coil 2x0.50 sq mm for MODBUS connection	Modbus cable to connect the machine to the HCC (controller)
4.5.2.8	HCC, power supply kit - pair of 200 m cable coils (red+black) 1 sq mm	Modbus cable to connect the machine to the HCC (controller)

### Electronic add-ons

Code	Description	Note
4.5.3.4	C-Mix board	
4.5.3.3	Floor board	
4.5.3.5	Room temperature and humidity sensor	Black
4.5.3.6	Room temperature and humidity sensor	White
SCHEDA BMS	Electronic board for additional serial port	Mandatory with the purchase of one or more of the following: 4.5.3.4, 4.5.3.3, 4.5.3.5/6
4.5.3.9	0-10 slave control card, for DIN rail	
4.5.3.10	Modbus Dehumidification card, for DIN bar	
4.5.3.11	Modbus Card Pool Thermostat, for DIN rail	
4.5.3.12	Modbus board Modbus board Auxiliary 3-way valve, for DIN bar	
4.5.3.13	Modbus card Auxiliary resistors, for DIN rail	

# Controlling multiple units remotely

## Multikita comfort management

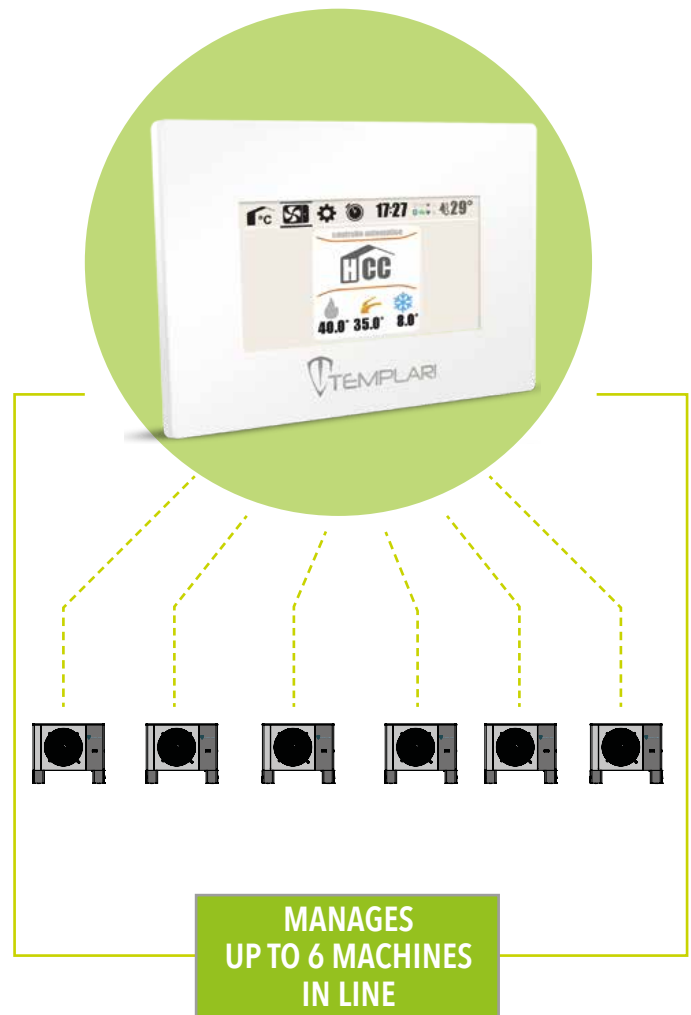
### Multikita

The Multikita system is the solution developed by Templari to monitor and integrate the power of several heat pumps in a single system, such as in commercial buildings and apartment blocks. By using a convenient 7" touch panel with simple, intuitive graphics you can manage and control up to six Kita units.

Using the probes installed on the first heat pump and thanks to its operating logic, the software calculates the system's demand and distributes it to all heat pumps while also managing domestic hot water (if any).



The user only has to set a few parameters via the touchscreen, and Multikita takes care of the rest. With its user-friendly management interface, the desired parameters can be entered with just a few taps. To make management even more flexible, Templari offers the option to remotely control the system via computer/tablet/mobile devices.



#### Compulsory Accessories - Controller

Code	Description	Note
4.5.3.1	PGD display kit	With 4.5.3.1+4.5.3.2 it is mandatory to include cod. SCHEDA BMS
4.5.3.7	MULTIKITA management module with 7" Touch screen panel	
HCC-F01	Recessed metal frame for touch screen panel	
HCC-F02	On wall metal frame for touch screen panel	Alternative to HCC-F01

#### Electrical add-ons

Code	Description	Note
2.5.7.1	HCC, 100 m cable coil 2x0.50 sq mm for MODBUS connection	Modbus cable to connect the machine to the HCC (controller)
4.5.2.8	HCC, power supply kit - pair of 200 m cable coils (red+black) 1 sq mm	Modbus cable to connect the machine to the HCC (controller)
4.5.3.9	0-10 slave control card, for DIN rail	
4.5.3.10	Modbus Dehumidification card, for DIN bar	
4.5.3.11	Pool Thermostat Modbus board for DIN rail	
4.5.3.12	Modbus board Modbus board Auxiliary 3-way valve, for DIN bar	
4.5.3.13	Modbus card Auxiliary resistors, for DIN rail	
4.5.3.14	Scheda Modbus Integrazione Multikita, per barra DIN	

#### Electronic add-ons

Code	Description	Note
4.5.3.4	C-Mix board	
4.5.3.3	Floor board	
4.5.3.5	Room temperature and humidity sensor	Black
4.5.3.6	Room temperature and humidity sensor	White
SCHEDA BMS	Electronic board for additional serial port	Mandatory with the purchase of one or more of the following: 4.5.3.4, 4.5.3.3, 4.5.3.5/6



# INDUSTRIAL AIR-TO-AIR HEAT PUMPS

 **TEMPLARI**  
THE HEAT PUMP

# INDUSTRIAL AIR-TO-AIR HEAT PUMPS

INDUSTRIAL AIR/AIR SOLUTIONS

**KITA** AIR

AIR/AIR Version - INVERTER

Outdoor unit



DUCTED



SPLIT



KITA AIR



KITA AIR PLUS

External unit

## ADVANTAGES

The Templari heat pumps of the KITA line are able to produce space heating and cooling.

The different lines of pumps offer the possibility of being able to choose the best solution according to one's needs, making the most of the performance of the chosen heat pump.

The KITA line is ideal for large industrial spaces such as warehouses, production areas, workshops and sheds of all kinds.

The KITA line can also be powered with electricity generated from a renewable source, creating energy savings by further reducing costs and the return on investment.

The technology of the KITA line allows, thanks to the use of the various devices integrated in the system, to be able to continuously monitor the correct functioning of the machine, with the possibility of being able to change parameters remotely according to one's needs.



# KITA AIR

AIR/AIR Version - INVERTER

Equipped with a compressor that develops up to 50 thermal kW, they have high efficiencies and optimal performance. The outdoor unit is combined via the R32 gas line with an indoor unit with the function of a highly silent unit heater capable of completely transferring the generated power. By avoiding the heat exchange with water, these units eliminate the particularly felt problem of the risk of ice during the coldest winter periods, typical of air/water systems.

In harmony with Templari's philosophy, the generous sizing of the indoor unit allows for maximum efficiency and maximum comfort to be obtained in all conditions, especially in terms of extremely limited acoustic impact, thanks to the use of a special low-energy inverter fan with a small number of laps.

To be able to satisfy even the needs of specific activities in which the direct air intake could create discomfort for the workers and the activity carried out internally, the new ducted internal unit was created: it can be perfectly integrated with the most modern piping systems for air transmission. Kita Air is also fully remotely controllable, thanks to the touch display available in several versions.



INDUSTRIAL

## INSTALLATION EXAMPLE

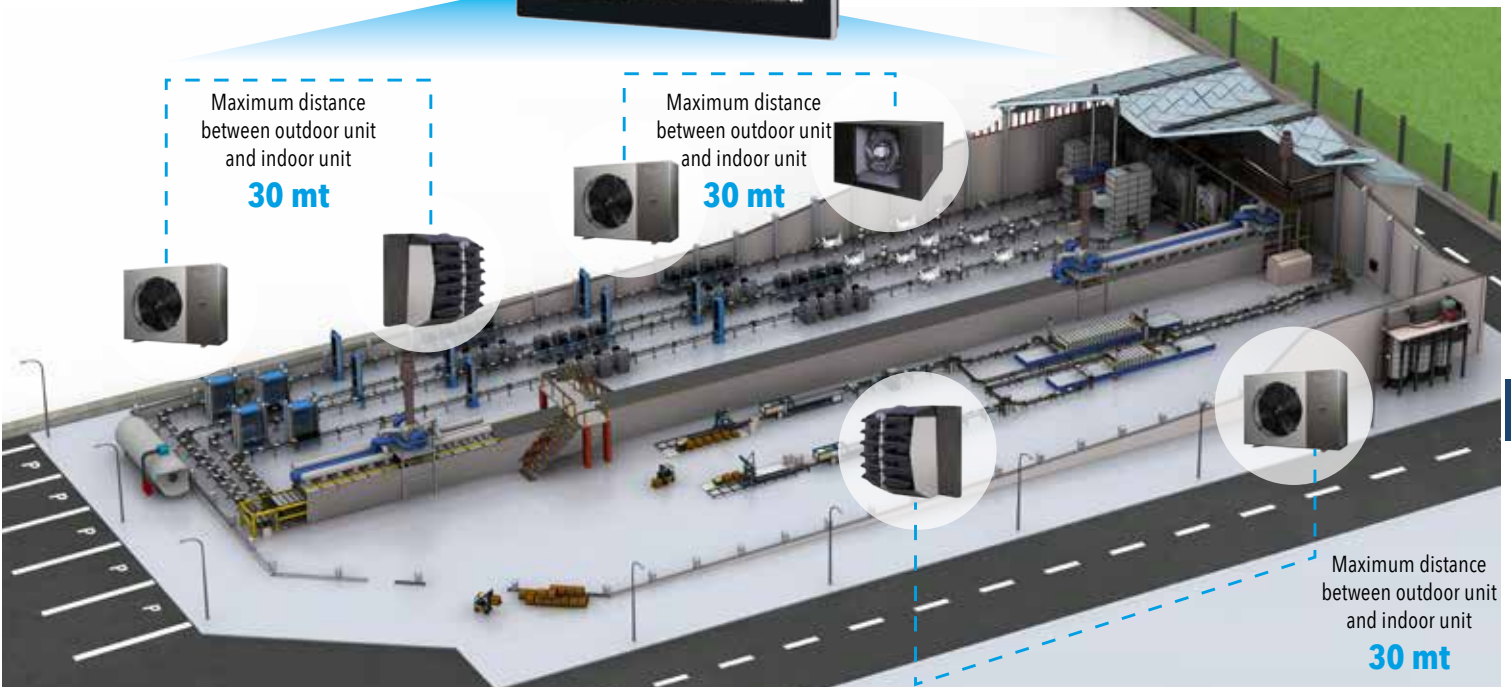


15" Multi-Air panel for multi-machine control.

Maximum distance between outdoor unit and indoor unit  
**30 mt**

Maximum distance between outdoor unit and indoor unit  
**30 mt**

Maximum distance between outdoor unit and indoor unit  
**30 mt**







# KITA AIR line

High efficiency air-to-air heat pump for industrial spaces

# KITA AIR line

## Air/air heat pump for air conditioning of industrial spaces



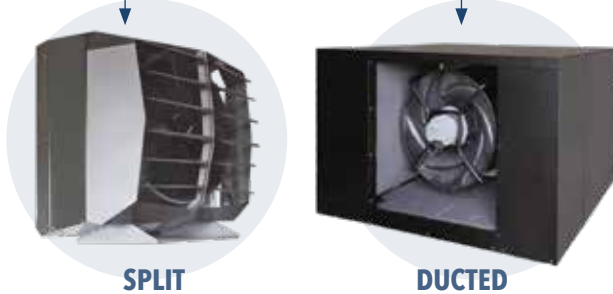
Kita Air is the ideal solution for winter and summer air conditioning of large industrial spaces such as warehouses, production areas, workshops and sheds, etc. The air-to-air outdoor unit is equipped with a Inverter Scroll compressor with injection which allows operation at outdoor temperatures of over -20°C. The direct exchange between the two units via refrigerant optimizes performance both as a heat pump and as a chiller. The indoor unit is also made with a special fan to minimize the acoustic impact within the environment in which it is located.

Fan with inverter motor (class A) at low speed, accurate acoustic insulation and main components mounted on refined anti-vibration suspensions.

The design of KITA heat pumps is Made in Italy.

First-class electronics ensure total control over the operation of the machine, even remotely.

**OPTION  
INDOOR UNIT**



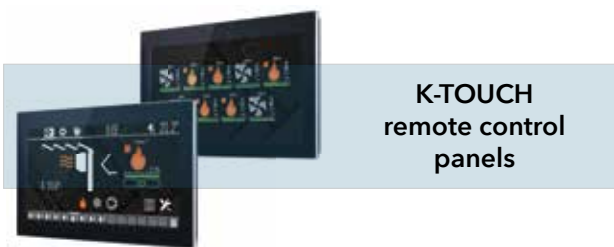
SPLIT

DUCTED



**Advantages:**

- Energy class
- Heating
- Cooling
- Italian technology
- Photovoltaic integration
- Industrial areas
- Warehouses
- Commercial spaces
- Remote monitoring
- Easy to install
- Front ventilation
- It does not require a hydraulic circuit
- 



**K-TOUCH**  
remote control  
panels

**TECHNICAL DATA**

MODEL	Heating												Cooling	
	A 12°C / A 20°C		A 7°C / A 20°C		A 2°C / A 20°C		A -7°C / A 20°C		A -15°C / A 20°C		A -20°C / A 20°C		A 35°C / A 27°C	
	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qc	EER
	kw		kw		kw		kw		kw		kw		kw	
<b>KITA AIR 4.3.1.4</b>	39,00	4,70	39,00	4,45	35,00	3,75	32,00	3,20	32,00	2,70	27,00	2,50	35,00	4,02
<b>KITA AIR Cold 4.3.1.5</b>	40,00	4,63	40,00	4,36	35,00	4,00	35,00	3,10	35,00	2,60	30,00	2,35	37,00	4,20

Qh= Thermal capacity COP= Coefficient of performance Qc= Cooling capacity EER= Cooling efficiency

## Air/air heat pump for air conditioning of industrial spaces

### OUTDOOR UNIT



<b>Power supply:</b>	V/Ph/Hz 400/3/50
<b>Max power consumption:</b>	12 Kw (KITA AIR - KITA AIR COLD)
<b>Max Current:</b>	24 A (KITA AIR) 35 A (KITA AIR COLD)
<b>Operating temperature:</b>	Winter heating -33°C / 35°C Summer conditioning -10°C / 50°C
<b>Compressor:</b>	Inverter Scroll - Injection Oil: FV505
<b>External fan:</b>	Inverter typology: BLDC Nominal diameter: 910 mm Maximum power consumption: 0,625 kW Max current: 1,1 A (3Ph) Maximum speed: 610 rps Maximum air flow: Nm <sup>3</sup> /h 15000
<b>Outdoor unit noise:</b>	External sound pressure (distance 5 mt): 38 dB(A)
<b>Outdoor unit dimensions (HxLxP):</b>	1257 x 1791 x 641 mm (KITA AIR - KITA AIR COLD)
<b>Refrigerant:</b>	R32 - Q.ty 7,4
<b>Coolant connections Ø:</b>	GAS: 28 mm (1 1/4") Liquid: 16 mm (5/16") Ømm
<b>Number of connectable indoor units:</b>	1
<b>External heat exchangers:</b>	No. of ranks: 3 Lug spacing: 2.5 mm Hydrophilic coating



### INDOOR UNIT SPLIT



<b>Type:</b>	Inverter BLDC
<b>Nominal diameter:</b>	800 mm
<b>Maximum power consumption:</b>	0,44 kW
<b>Max current:</b>	1,9 A (1Ph)
<b>Maximum speed:</b>	600 rpm
<b>Max air flow:</b>	6000 Nm <sup>3</sup> /h
<b>Indoor unit noise (distance 3 meters):</b>	External sound pressure 30dB(A)
<b>Indoor unit dimensions (HxLxP):</b>	1090 x 1253 x 765 mm
<b>External heat exchangers:</b>	No. of ranks 3 Lug spacing 1.8mm
<b>Weight:</b>	100 Kg



### DUCTED INDOOR UNIT



<b>Type:</b>	Inverter BLDC
<b>Nominal diameter:</b>	630 mm
<b>Maximum power consumption:</b>	1,4 kW
<b>Max current:</b>	2 A
<b>Maximum speed:</b>	1000 rpm
<b>Max air flow (only car):</b>	13500 Nm <sup>3</sup> /h
<b>Residual pressure:</b>	380 Pa
<b>Nominal air flow (machine+air duct):</b>	9800 Nm <sup>3</sup> /h
<b>Residual pressure:</b>	230 Pa
<b>Minimum air flow with filter:</b>	8200 Nm <sup>3</sup> /h
<b>Residual pressure:</b>	180 Pa
<b>Indoor unit dimensions (HxWxD):</b>	978 x 1598 x 1011 mm
<b>External heat exchangers:</b>	No. of ranks 4 Lug spacing 1.5 mm
<b>Weight:</b>	208 Kg



# KITA AIR Plus line

Air/air heat pump for air conditioning of industrial spaces



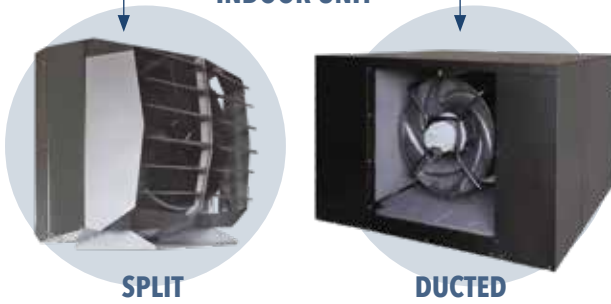
Kita Air Plus is the ideal solution for winter and summer air conditioning of large industrial spaces such as warehouses, production areas, workshops and sheds, etc. The air-to-air outdoor unit is equipped with a Inverter Scroll compressor with injection which allows operation at outdoor temperatures of over -20°C. The direct exchange between the two units via refrigerant optimizes performance both as a heat pump and as a chiller. The indoor unit is also made with a special fan to minimize the acoustic impact within the environment in which it is located.

Fan with inverter motor (class A) at low speed, accurate acoustic insulation and main components mounted on refined anti-vibration suspensions.

The design of KITA heat pumps is Made in Italy.

First-class electronics ensure total control over the operation of the machine, even remotely.

OPTION  
INDOOR UNIT



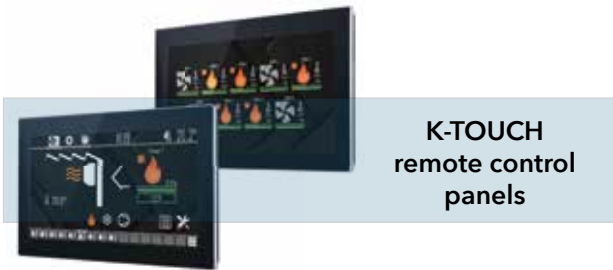
SPLIT

DUCTED



## Advantages:

- Energy class
- Heating
- Cooling
- Italian technology
- Photovoltaic integration
- Industrial areas
- Warehouses
- Commercial spaces
- Remote monitoring
- Easy to install
- Front ventilation
- It does not require a hydraulic circuit
- 



K-TOUCH  
remote control  
panels

## TECHNICAL DATA

MODEL	Heating												Cooling	
	A 12°C / A 20° C		A 7°C / A 20° C		A 2°C / A 20° C		A -7°C / A 20° C		A -15°C / A 20° C		A -20°C / A 20° C		A 35°C / A 27° C	
	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qh	COP	Qc	EER
	kW		kW		kW		kW		kW		kW		kW	
KITA AIR Plus 4.3.2.2	50,00	4,38	46,70	4,03	44,90	3,72	42,10	2,92	38,80	2,34	33,20	2,12	42,00	4,49

Qh= Thermal capacity COP= Coefficient of performance Qc= Cooling capacity EER= Cooling efficiency

### OUTDOOR UNIT



<b>Power supply:</b>	V/Ph/Hz 400/3/50
<b>Max power consumption:</b>	16 Kw
<b>Max Current:</b>	35 A
<b>Operating temperature:</b>	Winter heating -33°C / 35°C Summer conditioning -10°C / 50°C
<b>Compressor:</b>	Inverter Scroll - Injection Oil: FV505
<b>External fan:</b>	Inverter typology: BLDC Nominal diameter: 910 mm Maximum power consumption: 0,625 kW Max current: 1,1 A (3Ph) Maximum speed: 610 rps Maximum air flow: Nm <sup>3</sup> /h 15000
<b>Outdoor unit noise:</b>	External sound pressure (distance 5 mt): 38 dB(A)
<b>Outdoor unit dimensions (HxLxP):</b>	1414 x 2021 x 956 mm
<b>Refrigerant:</b>	R32 - Q.ty 7,4
<b>Coolant connections Ø:</b>	GAS: 28 mm (1 1/4") Liquid: 16 mm (5/16") Ømm
<b>Number of connectable indoor units:</b>	1
<b>External heat exchangers:</b>	No. of ranks: 3 Lug spacing: 2.5 mm Hydrophilic coating



### SPLIT INDOOR UNIT



<b>Type:</b>	Inverter BLDC
<b>Nominal diameter:</b>	800 mm
<b>Maximum power consumption:</b>	0,44 kW
<b>Max current:</b>	1,9 A (1Ph)
<b>Maximum speed:</b>	600 rpm
<b>Max air flow:</b>	6000 Nm <sup>3</sup> /h
<b>Indoor unit noise (distance 3 meters):</b>	External sound pressure 30dB(A)
<b>Indoor unit dimensions (HxLxP):</b>	1090 x 1253 x 765 mm
<b>External heat exchangers:</b>	No. of ranks 3 Lug spacing 1.8mm
<b>Weight:</b>	100 Kg



### DUCTED INDOOR UNIT



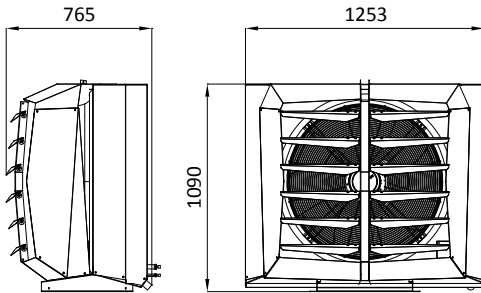
<b>Type:</b>	Inverter BLDC
<b>Nominal diameter:</b>	630 mm
<b>Maximum power consumption:</b>	1,4 kW
<b>Max current:</b>	2 A
<b>Maximum speed:</b>	1000 rpm
<b>Max air flow (only car):</b>	13500 Nm <sup>3</sup> /h
<b>Residual pressure:</b>	380 Pa
<b>Nominal air flow (machine+air duct):</b>	9800 Nm <sup>3</sup> /h
<b>Residual pressure:</b>	230 Pa
<b>Minimum air flow with filter:</b>	8200 Nm <sup>3</sup> /h
<b>Residual pressure:</b>	180 Pa
<b>Indoor unit dimensions (HxWxD):</b>	978 x 1598 x 1011 mm
<b>External heat exchangers:</b>	No. of ranks 4 Lug spacing 1.5 mm
<b>Weight:</b>	208 Kg



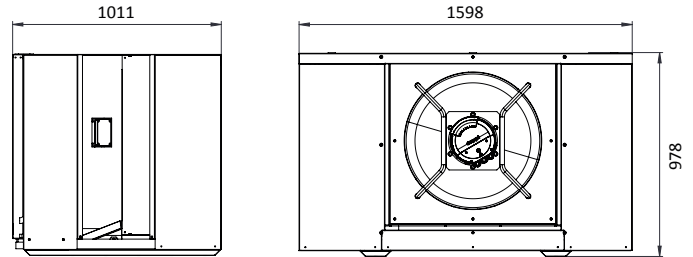
Air/air heat pump for air conditioning of industrial spaces

## DIMENSIONS

### Indoor unit



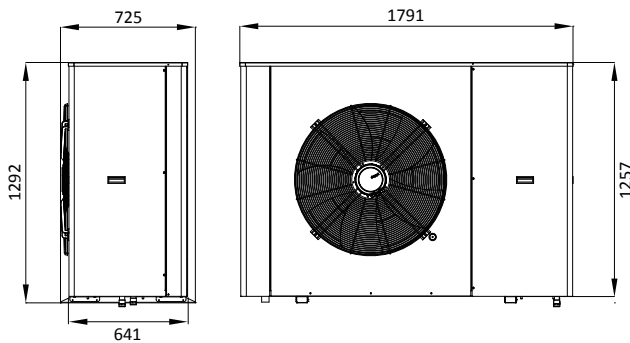
### Ducted indoor unit



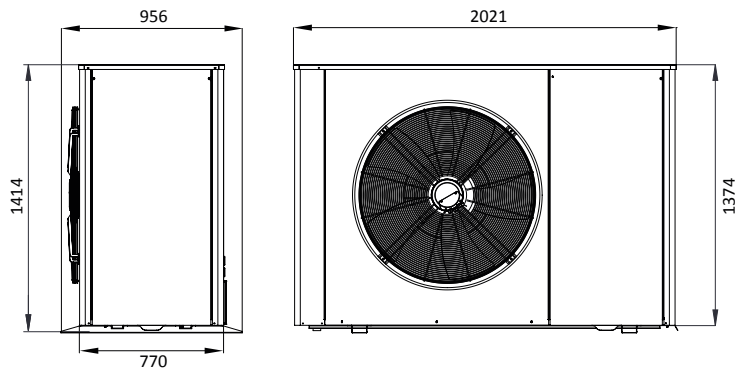
## KITA AIR / AIR COLD

## KITA AIR PLUS

### Outdoor Unit



### Outdoor Unit

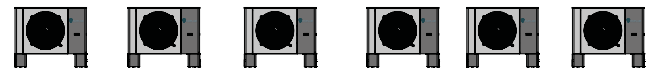
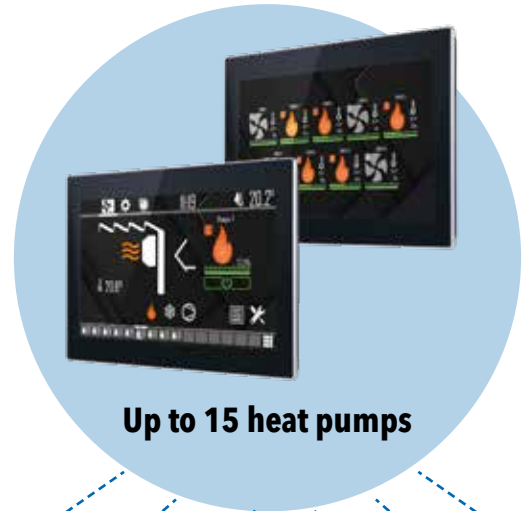


## REMOTE CONTROL

### Comfort management in just a few Touches!

For precise and efficient control of our heat pumps, we have developed a management software capable of optimizing the performance of the heat pump while guaranteeing optimal comfort.

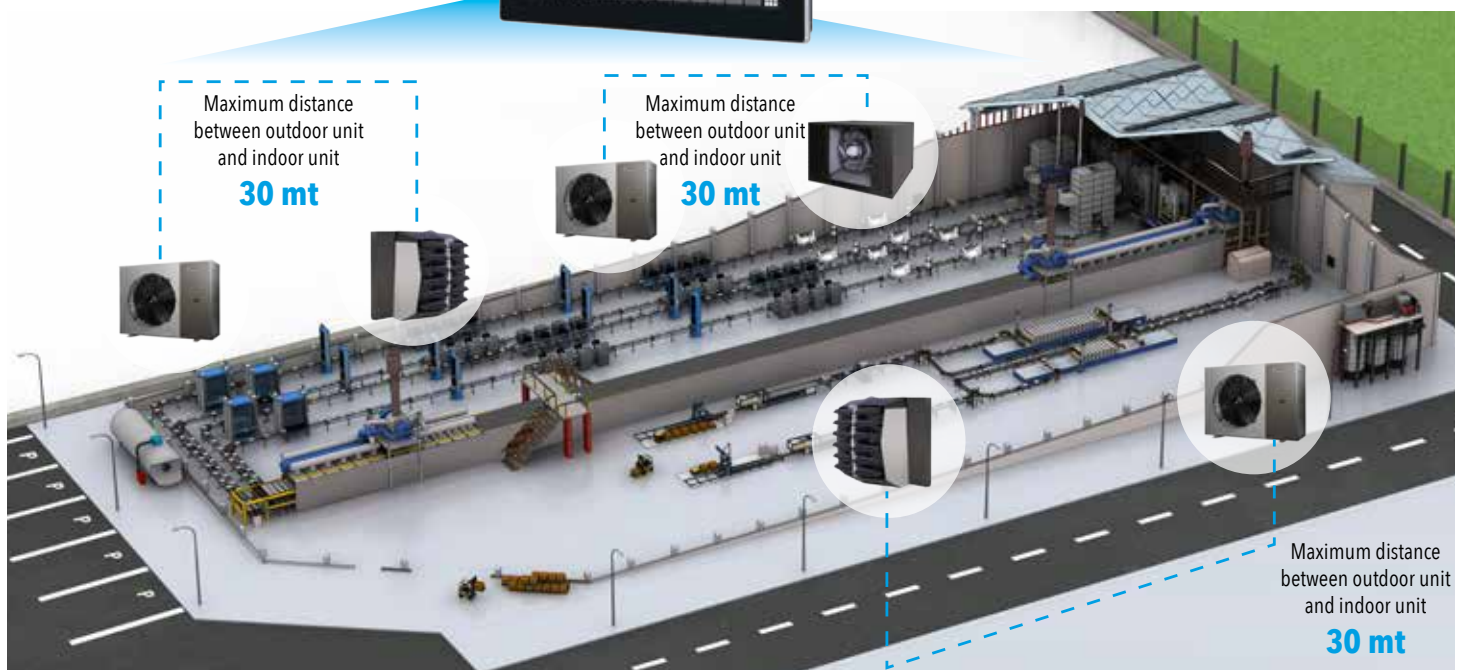
The software also allows remote supervision of the entire system.



## INSTALLATION EXAMPLE



15" Multi-Air panel for multi-machine control.



Maximum distance between outdoor unit and indoor unit

**30 mt**

Maximum distance between outdoor unit and indoor unit

**30 mt**

Maximum distance between outdoor unit and indoor unit

**30 mt**

## Air/air heat pump for air conditioning of industrial spaces

### Outdoor unit

Code	Description	Note
4.3.1.1C	KITA AIR outdoor unit with ducted indoor unit	
4.3.1.2C	KITA AIR COLD outdoor unit with ducted indoor unit	

### Indoor unit / Indoor unit with resistance

Code	Description	Note
4.4.2.1	KITA AIR/AIR PLUS indoor unit	Included in the heat pump price
4.4.1.2	KITA AIR 9KW auxiliary heating element	
4.4.1.3	KITA AIR 13,5KW auxiliary heating element	
4.4.1.4	KITA AIR ducted indoor unit	
4.4.2.1	KITA AIR indoor unit with R-32	
4.4.2.2	R32 KITA AIR auxiliary heating element 9 KW	
4.4.2.3	R32 KITA AIR auxiliary heating element 13,5 KW	

### Mandatory accessory to be chosen from the options - Outdoor Unit

Code	Description	Note
4.5.1.3	Support brackets for outdoor unit	To be used with 2.1.3.2 or 2.1.3.3
4.5.1.4	Metal legs for outdoor unit	

### Mandatory accessory, to be chosen from the options - Controller

Code	Description	Note
4.5.3.1	PGD display kit	With 4.5.3.1+4.5.3.2 it is mandatory to include cod. SCHEDA BMS
4.5.3.2	7" Touchscreen Panel	
HCC-F01	Recessed metal frame for touch screen panel	
HCC-F02	On wall metal frame for touch screen panel	Alternative to HCC-F01

### Mandatory Accessories - Outdoor Unit Wiring

Code	Description	Note
EL.CV_PT6	Flat telephone cable, length 6 m	Cable connecting the machine to the PGD (controller), IF PGD IS INCLUDED
EL.CV_PT10	EL.CV_PT10 Flat telephone cable, length 10mt	Cable connecting the machine to the PGD (controller), IF PGD IS INCLUDED
EL.CV_PT20	EL.CV_PT10 Flat telephone cable, length 20mt	Cable connecting the machine to the PGD (controller), IF PGD IS INCLUDED
EL.CV_PT30	EL.CV_PT10 Flat telephone cable, length 30mt	Cable connecting the machine to the PGD (controller), IF PGD IS INCLUDED

### Electrical add-ons

Code	Description	Note
2.5.7.1	HCC, 100 m cable coil 2x0.50 sq mm for MODBUS connection	Modbus cable to connect the machine to the HCC (controller)
4.5.2.8	HCC, power supply kit - Pair of 200 m coils (red+black) cable 1 sq mm	Modbus cable to connect the machine to the HCC (controller)
K-RSC	Drain pipe heating cable	Cable connecting the machine to the PGD (controller), IF PGD IS INCLUDED
4.5.2.5	SG-READY upgrade	Cable connecting the machine to the PGD (controller), IF PGD IS INCLUDED
4.5.2.6	QE dual power supply 40A	Cable connecting the machine to the PGD (controller), IF PGD IS INCLUDED
4.5.3.8	MULTI-AIR, 15.6" touchscreen panel	Including power supply and supports

### Electronic add-ons

Code	Description	Note
SCHEDA BMS	Electronic board for additional serial port	

### Electronic add-ons

Code	Description	Note
VE.910FG	Flow Grid for d.910 fan	Alternative to standard insulation
4.5.6.2	SILENCE KIT surcharge for outdoor unit	Alternative to standard insulation
2.1.3.5	Pair of wall brackets 1000x450 mm for indoor unit	
2.1.3.6	Pair of wall brackets 1600x830mm for KITA AIR PLUS outdoor unit	
2.1.3.2	Pair of wall brackets 1200x700 mm for outdoor unit	Only if with 4.5.1.3
2.1.3.3	BASE SBR floor supports, dimensions L250xH95xP130	
2.1.3.4	EXTENSION floor supports for base, dimensions L250xH95xP130	Supplied with code 2.1.3.3
4.5.1.9	Outdoor unit protection grid	Protection grid



## **BUFFER TANKS**



# Hot water enameled boiler for heat pump

Enamelled carbon steel boiler for the production and storage of DHW equipped with one or two internal fixed coil heat exchangers which can be fed by a heat pump and a solar system. The special parallel double spiral heat exchanger of the boiler allows a more effective transmission of the power supplied by the heat pump in colder regions thus reducing the number of start-up and shutdown cycles to the full advantage of the life and reliability of the system.



## Sanitary

- Material: S 235 Jr porcelain glass
- Treat. internal protective: Inorganic food enamel (DIN 4753.3)
- Treat. external protective: Anti-rust painting and industrial enamel
- Operation (P max. / T max.): 8 bar / 95°C
- Cathodic protection: Magnesium anode

## Technical data

- Capacity: 10 bars / 95°C
- Warranty: 5 years
- Insulation: Rigid polyurethane + pvc:
  - Fire resistance class B3 (DIN 4102)
- Flexible insulation in Polyester + PVC:
  - Fire resistance class B2 (DIN 4102)
- Reference legislation:
  - Directive 2014/68/EU (PED) Art. 4 Par. 3 (pressure equipment)
  - Ministerial Decree of 6 April 2004 N.174 (suitability of materials in contact with ACS)
  - Directive 2009/125/CE (Energy related Products)
- ErP: B from 300 to 600 Lt / C from 800 to 1000 Lt

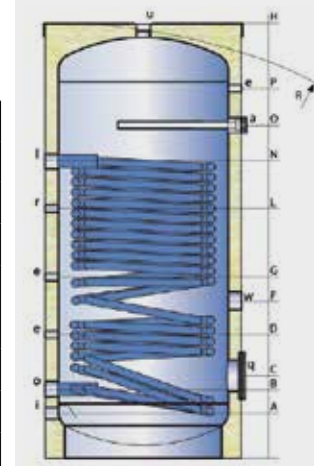
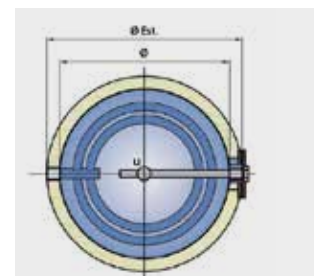
## Upper heat exchanger (heat pump)

- Material: S 235 Jr porcelain glass
- Treat. internal protective: Raw
- Treat. external protective: Inorganic food enamel (DIN 4753.3)
- Typology: Fixed coil with double parallel spiral
- Operation (P max. / T max.): 10 bar / 95°C

Code	Product	Insulation thick(mm)	Heat loss s (W)	Real capacity (Lt)	Heat exch. (m <sup>2</sup> ) / (Lt) *	Dimensions (mm)				Weight (Kg)
						Ø	H	H Est** hard/ soft ins.	R***	
2.4.4.16	200 LT	50	56,7	189,8	2,10 / 20,6	450	1320	550	1440	78
2.4.4.6	300 LT	50	69,2	290,3	3,50 / 34,3	500	1610	600	1730	110
2.4.4.13	400 LT	50	73,0	414,9	4,50 / 44,1	650	1410	750	1610	133
2.4.4.7	500 LT	50	81,6	500,3	5,70 / 55,9	650	1660	750	1835	159
2.4.4.33	600 LT	50	90,2	585,7	5,70 / 55,9	650	1910	750	2065	167
2.4.4.8	800 LT	100	106,6	749,8	6,00 / 58,8	790	1750	990 / 1050	1745	215
2.4.4.9	1000 LT	100	110,5	931,5	6,00 / 58,8	790	2110	990 / 1050	2095	251

For capacities from 200 to 600 litres, the tilt height refers to the insulated cylinder \*\* The insulation is removable except for models from 200 to 600 litres

Code	Dimensions (mm)										Connections (gas)						
	A	B	C	D	F	G	L	N	O	P	a	l	e	r	i	w	q
2.4.4.16	95	187	262	342	623	623	743	1077	953	1087	1"¼	1"	½"	½"	1"	1"½	120/180
2.4.4.6	120	210	300	320	495	780	925	1110	1160	1365	1"¼	1"¼	½"	½"	1"	1"½	120/180
2.4.4.13	145	240	310	340	525	680	870	1005	1030	1140	1"¼	1"¼	½"	½"	1"	1"½	120/180
2.4.4.7	145	240	310	350	570	810	1020	1250	1280	1390	1"¼	1"¼	½"	½"	1"	1"½	120/180
2.4.4.33	145	240	310	390	605	930	1070	1250	1510	1640	1"¼	1"¼	½"	½"	1"	1"½	120/180
2.4.4.8	150	275	345	405	620	840	1000	1170	1310	1425	1"¼	1"¼	½"	1"	1"½	1"½	120/180
2.4.4.9	150	275	345	475	750	1000	1120	1275	1615	1770	1"¼	1"¼	½"	1"	1"½	1"½	120/180



# Hot water enameled boiler for heat pump

Model		2.4.4.16				2.4.4.6				2.4.4.13				2.4.4.7				2.4.4.33				2.4.4.8				2.4.4.9							
	HEAT EXCH. (m <sup>2</sup> ) [L <sup>t</sup> ] <sup>1</sup>	2,1 [14,9]				3,5 [24,9]				4,5 [32,0]				5,7 [40,5]				5,7 [40,5]				6,0 [42,6]				6,0 [42,6]							
	PRIM .. FLOW (m <sup>3</sup> /h)	2				2				3				3				3				3				3							
	TPRIM.TEMP.(°C)	50	60	70	80	50	60	70	80	50	60	70	80	50	60	70	80	50	60	70	80	50	60	70	80	50	60	70	80	50	60	70	80
DHW FROM 10 TO 45°C	LITRES 1 O' (Lt/10') <sup>2</sup>	216	266	370	412	295	366	505	564	428	525	727	808	577	690	956	1049	658	771	1072	1165	902	1018	1424	1520	1075	1191	1671	1767				
	LITRES FIRST HOUR <sup>2</sup>	593	892	1215	1466	866	1295	1744	2099	1187	1769	2393	2875	1489	2167	2922	3479	1571	2247	3037	3595	1851	2548	3458	4032	2023	2721	3704	4278				
	CONT. DRAW (L) <sup>3</sup>	476	791	1067	1332	722	1173	1565	1938	960	1572	2104	2612	1153	1866	2483	3070	1153	1865	2482	3070	1198	1933	2569	3173	1198	1933	2568	3173				
	POWER (kW)	19	32	43	54	29	48	64	79	39	64	86	106	47	76	101	125	47	76	101	125	49	79	105	129	49	79	105	129				
	PREHEATING <sup>3</sup> (min)	21	12	9	7	19	11	8	6	21	12	9	7	26	15	11	9	32	19	14	11	47	27	20	16	58	34	24	19				
DHW FROM 10 TO 60°C	LITRES 1 O' (Lt/10') <sup>2</sup>	-	-	227	261	-	-	310	359	-	-	449	515	-	-	602	679	-	-	683	760	-	-	928	1007	-	-	1100	1180				
	LITRES FIRST HOUR <sup>2</sup>	-	-	659	864	-	-	961	1253	-	-	1316	1712	-	-	1640	2101	-	-	1721	2182	-	-	2005	2480	-	-	2178	2653				
	CONT. DRAW <sup>3</sup>	-	-	546	761	-	-	822	1130	-	-	1095	1512	-	-	1311	1796	-	-	1311	1796	-	-	1361	1861	-	-	1361	1861				
	POWER (kW)	-	-	32	44	-	-	48	66	-	-	63,7	87,9	-	-	76,2	104,5	-	-	76	104	-	-	79	108	-	-	79,2	108,2				
	PREHEATING <sup>3</sup> (min)	-	-	18	13	-	-	16	12	-	-	18	13	-	-	23	16	-	-	28	19	-	-	40	28	-	-	50	35				
	NL <sup>4</sup>	5				11				20				30				34				44				53							

(1) Volume of fluid contained in the heat exchanger (2) Obtainable with pre-heated cylinder (at 45 °C with primary side set at 50 or 60 °C and pre-heated at 60 °C in the other cases) and a running heat source  
(3) With a proper power heat source generator (4) Primary side 80 °C - Secondary side 10-45 °C

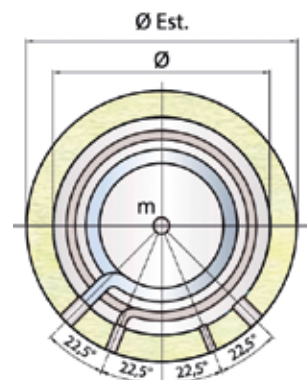
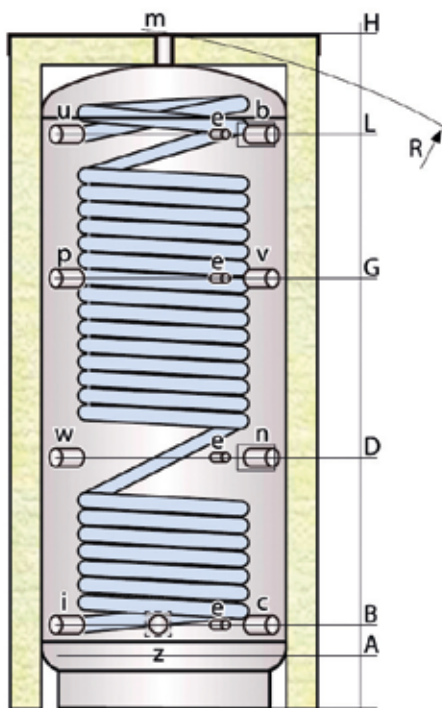
## Optional

Code	Description
2.4.4.10	INOX Heat Exchanger for Puffer - 3KW 1Ph 230V
2.4.4.11	INOX Heat Exchanger for Puffer - 3KW 3Ph 400V

# Buffer tank with instant DHW production



Thermal accumulator for the storage of heating water produced by continuous or discontinuous heat sources; instantaneous production of domestic hot water (DHW) by means of a Heat exch. corrugated heat sink in high efficiency AISI 316L stainless steel. Available in the versions: storage only, storage + one Heat exch. fixed coil primary heat exchangers, storage + two fixed coil primary heat exchangers. The heat transfer fluid contained in the external puffer and in the primary exchangers must operate in a "closed circuit" (i.e. without oxygen) in order to avoid corrosive phenomena.



- b. Biomass boiler flow
- c. Biomass boiler return
- e. Thermometer - Sensor
- i. Domestic cold water inlet
- m. Buffer vent
- n. Heating system return
- p. afree connection
- u. Domestic hot water outlet
- v. Heating system flow
- w. Opening for immersion heater
- z. Low temperature heating system return

## Sanitary:

Material: Stainless steel AISI 316L (1.4404)  
 Treat. internal and external protective: Pickling and passivation  
 Typology: Corrugated pipe  
 Operation (P max. / T max.): 6 bar / 95°C

## Puffer:

Material: S 235 Jr  
 Treat. internal protective: Raw  
 Treat. external protective: Painting with anti-rust and industrial enamel  
 Operation (P max. / T max.): 3 bar / 95°C

## Heat exch.:

Material: S 235 Jr. steel  
 Treat. internal and external protective: Raw  
 Typology: Fixed spiral  
 Operation (P max. / T max.): 10 bar/95°C

## General characteristics:

Capacity: 600 - 1000 Lt

Warranty: 5 years

Insulation:

- Soft insulation with polyester + PVC: Fire retardant class B2 (DIN 4102)
- Hard insulation:
- Polyurethane foam + PVC for 600/800/100/1500/2000 litres capacity:
  - Fire retardant class B3 (DIN 4102)
  - Polyester (15mm) + polystyrene (85mm) + PVC for 1250 litres capacity: Fire retardant class B2 (DIN 4102)
- Pressure Equipment Directive (PED) 2014/68/UE Art. 4 Para 3
- Italian MOH specifications (products suitable to contain potable water)
- Energy related Products (Erp) Directive 2009/125/CE

Code	Product	Dimensions (mm)				Insulation (mm)	Exchanger (Mq)			DHW Heat exchanger		Weight (Kg)
		Ø	H	Ø Est*	R		Lower	Upper	DHWInox	m2 (Lt)	DHW Contt. draw di ACS* (lt/h)	
2.4.4.23	600 LT	650	1895	750	2050*	50	2,50	1,80	36,0	5,5 (31,9)	1149	175
2.4.4.24	800 LT	790	1750	990/1050	1745	100	2,50	2,00	7,00	7,0 (40,6)	1651	212
2.4.4.27	1000 LT	790	2110	990/1050	2095	100	3,50	2,50	7,50	7,5 (43,5)	1824	253

\* For the 600 litres model, the tilt height refers to the insulated cylinder. \*\* The insulation is removable except for the 600 litres model.

Code	Heights (mm)					Connections (gas)			
	A	B	D	G	L	e	iu	d c m n p v w z	
2.4.4.23	135	235	700	1270	1630	1/2"	1"1/4	1"1/2	
2.4.4.24	170	275	655	1145	1410	1/2"	1"1/4	1"1/2	
2.4.4.27	170	275	810	1355	1755	1/2"	1"1/4	1"1/2	

Code	Lower heat exchanger performance					Upper heat exchanger performance				
	m <sup>2</sup> (Lt)	POWER (kW) ΔT* 10° C	ΔT* 15° C	ΔT* 20° C	ΔT* 25° C	m <sup>2</sup> (Lt)	Power (kW) ΔT* 10° C	ΔT* 15° C	ΔT* 20° C	ΔT* 25° C
2.4.4.23	2,5 (17,8)	16,0	24,0	32,0	40,0	1,8 (12,8)	11,5	17,3	23,0	28,8
2.4.4.24	2,5 (17,8)	16,0	24,0	32,0	40,0	2,0 (14,2)	12,8	19,2	25,6	32,0
2.4.4.27	3,5 (24,9)	22,4	33,6	44,8	56,0	2,5 (17,8)	16,0	24,0	32,0	40,0

\* ΔT: difference between the average temperature of the heating fluid (inside the heat exchanger) and the average temperature of the heated fluid (internal to the buffer in the area affected by the coil)

Code	2.4.4.23	2.4.4.24	2.4.4.27
DHW Heat exchanger m <sup>2</sup> (Lt)	5,5 (27,5)	7,0 (35,0)	7,5 (37,5)
DHW Power and flow rate (from 10 to 45°C) in continuous draw at different primary side temperature			
Primary a 55° C Kw (Lt/h)	31,8 (744)	45,7 (1069)	50,5 (1182)
Primary a 65° C Kw (Lt/h)	49,1 (1207)	70,6 (1733)	78,0 (1917)
Primary a 75° C Kw (Lt/h)	57,5 (1412)	82,5 (2028)	91,3 (2242)
DHW* producible with a 10 L/min flow rate from a totally heated buffer and a not running heat source			
Buffer at 55° C Kw (Lt/h)	170	265	352
Buffer at 65° C Kw (Lt/h)	232	357	476
Buffer at 75° C Kw (Lt/h)	441	564	701
DHW* producible with a 20 L/min flow rate from a totally heated buffer and a not running heat source			
Buffer at 55° C Kw (Lt/h)	115	170	221
Buffer at 65° C Kw (Lt/h)	157	248	331
Buffer at 75° C Kw (Lt/h)	263	376	486
DHW* producible with a 10 L/min flow rate, from a buffer heated only on the upper part and a not running heat source			
Buffer at 55° C Kw (Lt/h)	107	166	217
Buffer at 65° C Kw (Lt/h)	146	224	293
Buffer at 75° C Kw (Lt/h)	278	353	432
DHW* producible with a 20 L/min flow rate, from a buffer heated only on the upper part and a not running heat source			
Buffer at 55° C Kw (Lt/h)	73	106	136
Buffer at 65° C Kw (Lt/h)	99	155	331
Buffer at 75° C Kw (Lt/h)	166	235	486
NL**	2,1	3,2	4,0

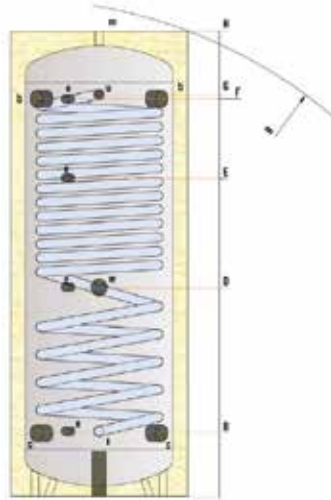
\* from 10 to 45 °C

\*\* Buffer at 70 °C, DHW from 10 to 45° C

## Optional

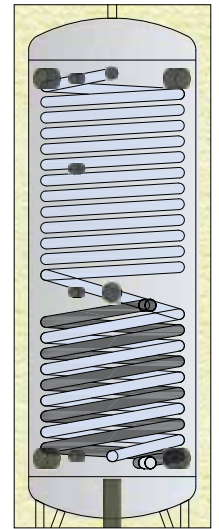
Code	Description
2.4.4.10	INOX Heat Exchanger for Puffer - 3KW 1Ph 230V
2.4.4.11	INOX Heat Exchanger for Puffer - 3KW 3Ph 400V

# Buffer tank with instant DHW production



- b. Heat source flow
- c. Heat source return
- e. Thermometer - Sensor
- i. Domestic cold water inlet
- m. Buffer vent
- u. Domestic hot water outlet
- w. Opening for immersion heater

The Smart combined thermal store is a primary water storage tank mainly intended for the instantaneous production of domestic hot water (DHW) by means of a Heat exch. corrugated heat exchanger in AISI 316L stainless steel with very high exchange efficiency. It is available in the storage only + DHW production or storage + DHW and Heat exch production version. of integration.



Combined storage tank Smart version with solar coil

Sanitary:  
Material: Stainless steel AISI 316L(1.4404)  
Treat. internal and external protective:  
Pickling and passivation  
Typology: Corrugated pipe  
Operation (P max. / T max.): 6 bar / 95°C

Puffer:  
Material: S 235 Jr  
Treat. internal protective: Raw  
Treat. external protective:  
Painting with anti-rust and industrial enamel  
Operation (P max. / T max.): 3 bar / 95°C

General features:  
Reference legislation  

- Directive 2014/68/EU (PED) Art. 4 Par. 3 (pressure equipment)
- Ministerial Decree of 6 April 2004 N.174 (suitability of materials in contact with ACS)
- Directive 2009/125/CE (Energy related Products)

 ErP: B

Heat exch.:  
Material: Stainless steel AISI 316L(1.4404)  
Treat. internal and external protective:  
Pickling and passivation  
Typology: Corrugated pipe  
Operation (P max. / T max.): 6 bar/95°C

Code	Product	Dimensions (mm)				Insulation (mm)	Heat exch. (m <sup>2</sup> ) Inf.	Heat exch. sanitario inox (m <sup>2</sup> )	POWER (kW)	DHW Contt. draw ACS* (lt/h)	Weight (Kg)
		Ø	H	Ø Est*	R						
2.4.4.21	300 LT	500	1580	600	1520	50	1,20	4,0	36,0	884	70
2.4.4.22	400 LT	600	1610	799	1660	50	1,40	5,0	45,0	1105	104
2.4.4.42	300 LT	500	1580	600	1520	50	1,20	4,0	36,0	884	70
2.4.4.20	400 LT	600	1610	799	1660	50	1,40	5,0	45,0	1105	104

\* Average buffer temp. 65 °C, DHW from 10 to 45° C

Code	DHW producible with a 10 L/min flow rate, with a totally heated buffer and a not running heat source			DHW producible with a 20 L/min flow rate, with a totally heated buffer a not running heat source			NL <sup>(3)</sup>
	Buffer at 55° C (Lt)	Buffer at 65° C (Lt)	Buffer at 70° C (Lt)	Buffer at 55° C (Lt)	Buffer at 65° C (Lt)	Buffer at 70° C (Lt)	
2.4.4.21	82	185	269	45	112	175	1
2.4.4.22	112	252	367	61	153	139	1,2
2.4.4.42	82	185	269	45	112	175	1
2.4.4.20	112	252	367	61	153	139	1,2

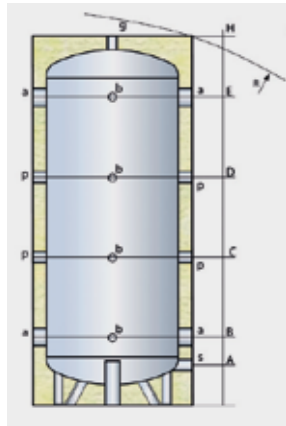
(2) from 10 to 45 °C-(3) Buffer at 70 °C, DHW from 10 to 45° C

Code	Dimensions (mm)					Connections (gas)		
	B	D	E	F	G	b c w	e m	i u
2.4.4.21	221	710	1080	1350	1365	1"1/2	1/2"	3/4"
2.4.4.22	230	644	1090	1350	1365	1"1/2	1/2"	3/4"
2.4.4.42	221	710	1080	1350	1365	1"1/2	1/2"	3/4"
2.4.4.20	230	644	1090	1350	1365	1"1/2	1/2"	3/4"

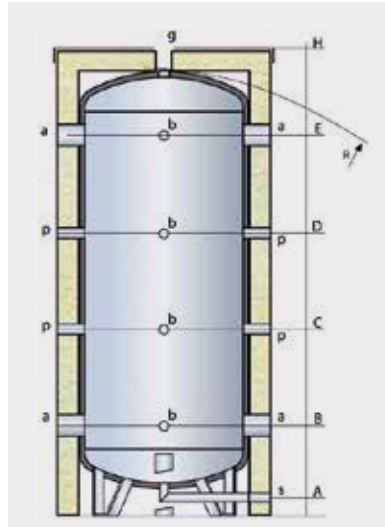
## Optional

Code	Description
2.4.4.10	INOX Heat Exchanger for Puffer - 3KW 1Ph 230V
2.4.4.11	INOX Heat Exchanger for Puffer - 3KW 3Ph 400V

# ACF - Heating & Cooling buffer store



Polyurethane insulation rigid and PVC coated



Anti-condensation insulation in PEXL + flexible polyester and PVC coating

- a. System Inlet/Outlet
- b. Control instruments
- g. Vent / safety valve
- p. Free connection
- s. Drain

## Tank:

Material: S 235 Jr

Treat. internal protective: Raw

Treat. external protective: Painted with anti-rust and industrial enamel

Operation (P max. / T max.): 6 bar / -10°C to +95°C

Capacity: 200/500 Lt - 800/1000 Lt - 1500 Lt

## TECHNICAL FEATURES:

Warranty: 5 years

Insulation:

- From 200 to 1000 L: 50 mm thick polyurethane foam + PVC: Fire retardant class B3 (DIN 4102)
- From 1500 to 2000 L: PEXL + soft polyester + PVC: Fire retardant class B2 (DIN 4102)
- Pressure Equipment Directive (PED) 2014/68/UE Art. 4 Para 3
- Energy related Products (Erp) Directive 2009/125/CE

Code	Product	Insulation thick(mm)	Heat loss s (w)	Real capacity (Lt)	Dimensions (mm)				Weight (Kg)
					Ø	H	Ø Est*	R*	
2.4.4.1	200 LT	50	58,9	189,3	450	1330	550	1450	33
2.4.4.2	300 LT	50	68,1	289,8	500	1610	600	1730	42
2.4.4.3	500 LT	50	80,5	499,8	650	1665	750	1840	68
2.4.4.4	800 LT	50	117,5	749,3	790	1700	890	1930	86
2.4.4.5	1000 LT	50	130,4	931,0	790	2060	890	2255	102
2.4.4.17	1500 LT	10	163,8	1472,4	1000	2145	1280	2235	147

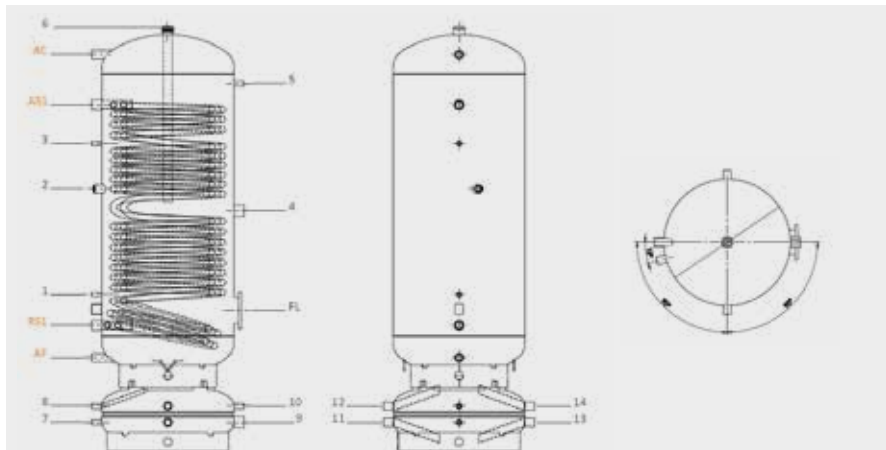
\* For capacities from 100 to 1000 litres, the tilt height refers to the insulated cylinder - \* The insulation is not removable except for models from 1500 to 5000 litres (only the soft poly ester insulation is removable)

Code	Dimensions (mm)					Connections (gas)				
	A	B	C	D	E	a	b	g	p	s
2.4.4.1	135	20	510	805	1095	1"1/2	1/2"	1"1/4	1"1/2	1"
2.4.4.2	125	275	625	975	1320	2"	1/2"	1"1/4	1"1/2	1"
2.4.4.3	155	305	655	1005	1350	3"	1/2"	1"1/4	1"1/2	1"
2.4.4.4	170	320	670	1020	1365	3"	1/2"	1"1/4	1"1/2	1"
2.4.4.5	170	320	785	1250	1710	3"	1/2"	1"1/4	1"1/2	1"
2.4.4.17	110	485	915	1350	1780	3"	1/2"	1"1/4	1"1/2	1"

## Optional

Code	Description
2.4.4.10	INOX Heat Exchanger for Puffer - 3KW 1Ph 230V
2.4.4.11	INOX Heat Exchanger for Puffer - 3KW 3Ph 400V

# Bi-puffer vetrificato



1	Sonda	Ø20	AC	Acqua calda sanitaria	1"
2	Ricircolo	1"	7	Attacco idraulico	1/2"
3	Sonda	Ø20	8	Attacco idraulico	1/2"
4	Resistenza elettrica	1" 1/2	9	Attacco idraulico	1" 1/2
5	Termometro	1/2"	10	Attacco idraulico	1/2"
6	Anodo al Magnesio	1" 1/2	11	Attacco idraulico	1"
FL	Flangia di ispezione	Ø180/120	12	Attacco idraulico	1"
RS1	Ritorno pompa di calore	1"	13	Attacco idraulico	1"
AS1	Mandata pompa di calore	1"	14	Attacco idraulico	1"
AF	Acqua fredda sanitaria	1"			

Il tubo dello scambiatore studiato appositamente per aumentare le correnti interne del bollitore e permettere la produzione di acqua calda anche se il liquido nello scambiatore non raggiunge temperature elevate.

Il puffer inferiore utilizzato negli impianti di riscaldamento assicura una temperatura media costante limitando gli interventi del compressore.

Codice	Scambiatore inferiore		Peso (Kg)	Volume (l)	Dispersioni (W)	Classe energetica
	(m <sup>2</sup> )	(l)				
2.4.4.34	3,7	25,9	147	300 + 100	80	C

Codice	1	2-4	3	5	FL	RS1	AF	AC	Ø	H	7	8	9-11-13	10-12-14
2.4.4.34	898	1318	1538	1738	828	748	609	1868	650	1982	127	386	196	316

Codice	Scambiatore fisso acqua tecnica				Prelievo ACS in continuo 10-45 °C 35 ΔT	
	Inferiore (mq)	Mandata (nello scambiatore)			Potenza	Portata
		Portata	ΔT	T		
2.4.4.34	3,7	2000 l/h	22	60°	52 kW	0,35 l/s 1273 l/h
		2000 l/h	35	70°	82kW	0,56 l/s 2015 l/h
		2000 l/h	45	80°	104kW	0,71 l/s 2546 l/h

Codice	Prelievo ACS			
	T prim.	T acc.	ACS prelevabile (lt)	
			10 min	60 min
2.4.4.34	55° C	50° C	412	1005
	65° C	60° C	594	1308
	70° C	60° C	643	1460
	80° C	60° C	695	1705

## Accessori opzionali

Codice	Descrizione
2.4.4.10	Resistenza elettrica INOX per Puffer - 3KW 1Ph 230V
2.4.4.11	Resistenza elettrica INOX per Puffer - 3KW 3Ph 400V

# Fancoil

The thinnest fancoil of the market. With its 12 cm of real thickness, all along its full height, it is 10% thinner than any direct competitors in its market segment. A feature that distinguishes the machine is the absence of front intake grilles, thanks to the innovative ventilation system that improves battery performance working at negative pressure.

## FHW - High Wall - DC Inverter fancoil, electronic board and remote control



Product	Code	Cooling 7-12°C	Heating 50°C
FHW400	4.7.1.1	1140 w	1610 w
FHW600	4.7.1.2	1620 w	2350 w
FHW800	4.7.1.3	2340 w	3250 w

- Prices are for products without accessories like valve, connection pipe, wall pad thermostat
- Water connection on left side and electric connection on right side

## FFS - Floor Standing - DC Inverter fancoil, electronic board



Product	Code	Cooling 7-12°C	Heating 50°C
FFS200	4.7.1.4	830 w	1090 w
FFS400	4.7.1.5	1760 w	2350 w
FFS600	4.7.1.6	2650 w	3190 w
FFS800	4.7.1.7	3340 w	4100 w

- Prices are for products without accessories like valve, connection pipe, thermostat
- Product could be vertically installed with connection left or right side. Electric connection always in the opposite side than hydraulic connection
- For horizontal ceiling installation, the accessory "condensate collector tray" must be added

## FSM - DC Inverter, low profile fancoil, electronic board



Product	Code	Cooling 7-12°C	Heating 50°C
FSM200	4.7.1.8	560 w	780 w
FSM400	4.7.1.9	1140 w	1610 w
FSM600	4.7.1.10	1620 w	2350 w
FSM800	4.7.1.11	2340 w	3250 w

- Prices are for products without accessories like valve, connection pipe, thermostat
- Product could be installed with connection left or right side electric connection always in the opposite side than hydraulic connection
- Only vertical installation is admitted

## FBT - DC Inverter fancoil with towel bar function, electronic board and remote control



Product	Code	Cooling 7-12°C	Heating 50°C
FBT 400	4.7.1.12	2340 w	3250 w

- Prices are for products without accessories like valve, connection pipe, wall pad thermostat
- Water and electric connection on the back side
- Only vertical (wall) installation is allowed

## Optional Accessories

Code	Description	Note
4.7.1.13	Touch-screen wall mounted or on board	(only FFS and FSM) thermostat, 2T/4T, weekly program, Wi-Fi, app
4.7.1.14	Kit consisting of 2 feet for floor installation for FFS and FSM	
4.7.1.15	3 way by pass valve + pipe connection for 2 pipe system for FFS 200/400/600	
4.7.1.16	Insulation shells kit for 3 way valve, 2 pipe, for horizontal installation FFS 200/400/600 version	
4.7.1.17	Insulation shells kit for 3 way valve, 2 pipe, for horizontal installation FFS 200/400/600 version	
4.7.1.18	Insulation shells kit for 3 way valve, 2 pipe, for horizontal installation FFS 200/400/600 version	
4.7.1.19	Insulation shells kit for 3 way valve, 2 pipe, for horizontal installation FFS 200/400/600 version	
4.7.1.20	Insulation shells kit for 3 way valve, 2 pipe, for horizontal installation FFS 200/400/600 version	
4.7.1.21	Insulation shells kit for 3 way valve, 2 pipe, for horizontal installation FFS 200/400/600 version	
4.7.1.22	Condensate collector tray for FFS for ceiling installation. To be combined with insulating shells	For horizontal installation

Code	Description	Note
4.7.1.23	Condensate collector tray for FFS for ceiling installation. To be combined with insulating shells	For horizontal installation
4.7.1.24	Condensate collector tray for FFS for ceiling installation. To be combined with insulating shells	For horizontal installation
4.7.1.25	Condensate collector tray for FFS for ceiling installation. To be combined with insulating shells	
4.7.1.26	Radiant panel Version FFS 200/400	
4.7.1.27	Radiant panel Version FFS 600/800	
4.7.1.28	Radiant panel Version FFS 200/400	
4.7.1.29	Radiant panel Version FFS 600/800	
4.7.1.30	Back panel made in tempered silver glass for FFS 200	
4.7.1.31	Back panel made in tempered silver glass for FFS 400	
4.7.1.32	Back panel made in tempered silver glass for FFS 600	
4.7.1.33	Back panel made in tempered silver glass for FFS 800	
4.7.1.34	Back panel made in tempered silver glass for FSM 200	
4.7.1.35	Back panel made in tempered silver glass for FSM 400	
4.7.1.36	Back panel made in tempered silver glass for FSM 600	
4.7.1.37	Back panel made in tempered silver glass for FSM 800	
4.5.3.22	TFan SS fancoil module, 3 speed	
4.5.3.23	TFan VS fancoil module, continuous speed	

