Heat Pumps

PRODUCT LIST 2022

RDZ
You Feel, We Care

RDZ

You Feel, We Care

You Feel, We Care

is our new tagline
and contains a renewed promise:
to work every day
with commitment and passion
while offering ***tangible benefits****.*

And we do this by developing systems
which are able to ensure
comfort and health
as well as a pleasant living space.

We continue to follow the principles
that have always inspired us:
the use of the ***best materials****,*
the research for ***advanced technologies****,*
and a ***specialized service*** *for design,*
technical assistance and training.

These are the same reasons
that guided us in
identifying the
perfect comfort system*.*

In our solution four elements
(surface heating/cooling, air handling,
temperature control, heat pumps)
interact synergistically
to spread in every room
the ***ideal living conditions****,*
in which our skin can perceive
a unique ***feeling of wellbeing****.*

HEAT PUMPS

RDZ high efficiency air to water heat pumps are renewable source generators capable of transferring the thermal energy present in the air to the radiant system fluid, to heat in winter, cool in summer and produce domestic hot water in the respect for the environment, with high energy savings.
Available in monobloc and split units, they are suitable for residential and commercial applications and can be effectively used both in new buildings and in the case of energy upgrading of existing systems.

Split
Heat pumps

Split heat pump units are an ideal green solution for heating, cooling and the production of domestic hot water in the residential and small commercial applications. Supplied as two separate units, they ensure silent operation, with reduced overall dimensions, and protection against low external temperatures.

Split heat pumps

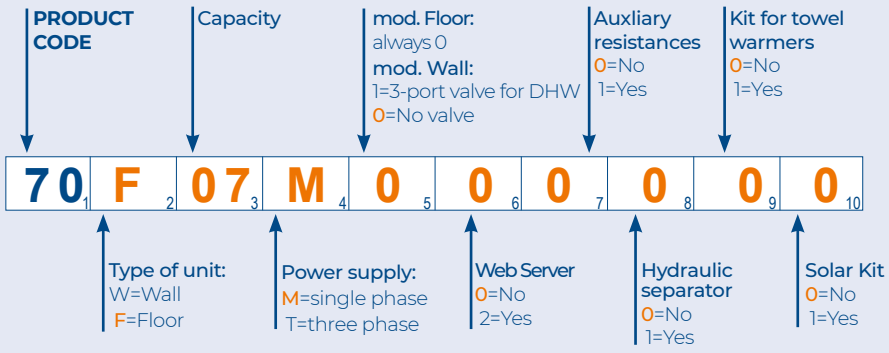
RDZ PDC are split heat pumps with reversible cycle for winter heating, summer cooling, and domestic hot water, available in different units ranging from 5 kW to 25 kW. Designed for residential and small commercial applications, they consist of two separate units (outdoor and indoor) connected to each other by a copper line for refrigerant (gas) circulation. This split construction implies compact size, silent running and protection against low outdoor temperatures.
Thanks to high SCOP levels (seasonal coefficient of performance), they ensure low energy consumption and optimal functioning from -20 °C up to +45 °C.

Available in stock within 4 weeks of order date

Product	Description
	PDC UE OUTDOOR UNITS *See p. 6*
Indoor units that can be combined with PDC UE Outdoor Unit	
	PDC WALL INDOOR UNITS *See p. 7*
	PDC FLOOR INDOOR UNITS *See p. 9*
	PDC FLOOR X INDOOR UNITS *See p. 10*

CODING SYSTEM FOR INDOOR UNITS

The following coding makes it possible to configure your PCD Wall or Floor indoor unit by some easy steps.



From the left to the right:
***1)** product code **2)** type of unit **3)** capacity **4)** power supply **5)** 3-port valve for DHW water (supplied as standard in all Floor models) **6)** remote control through Web Server **7)** electrical resistances as auxiliary heater **8)** hydraulic separator between primary and secondary circuits (available for Floor models onl**9)** connection for medium-temperature radiators such as towel warmers (available for* **Floor models only**)
***10)** connection to solar plant (available for Floor models only)*

Heat Pump outdoor units

This is a complete range of units from 5 to 25 thermal kW designed to be placed outdoors and connected to the indoor unit with copper line for refrigerant (gas) circulation. Characterized by high performance, these units are extremely efficient and boast an "A++" energy class rating.

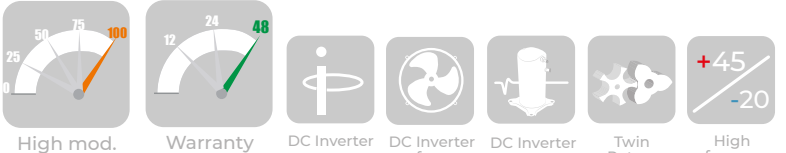
Product	Description	Code	
DC Inverter  	**PDC UE OUTDOOR UNIT** *The outdoor unit can work at outdoor temperature between -20 °C and +45 °C by using a climate control adjustment. This makes it possible to compensate the winter setpoint of the water system according to the outdoor temperature, thus improving heating capacity up to +30%. Furthermore, a special modulation logic ensures even higher performance during DHW heating to set value. The outdoor unit is pre-charged with R410a gas for a 30-m distance from the indoor unit, but pipe connection between outdoor and indoor units can be up to 50 m long considering extra gas amount. Modulation of the generated power can vary from 15 Hz to 110 Hz. Defrost cycle works using hot gas injection technology to avoid frequent inversions.* *The outdoor unit can be combined with Wall, Floor or Floor X indoor units.*		
		PDC 05 UE	*70E05M0*
		PDC 07 UE	*70E07M0*
		PDC 09 UE	*70E09M0*
		PDC 12 UE	*70E12M0*
		PDC 12T UE	*70E12T0*
		PDC 15 UE	*70E15M0*
		PDC 15T UE	*70E15T0*
		PDC 18T UE	*70E18T0*
		PDC 25T UE	*70E25T0*

Specifications

model	heating capac. kWt(1)	heating capac. kWt(2)	COP(2)	cooling capac. kWf (3)	EER(3)	volt.	heating sound pressure(4)	cooling sound pressure(4)	size mm lxdxh	weight Kg
PDC 05 UE	4.59	6.82	4.11	6.00	3.43	230	50 dB(A)	48 dB(A)	940x340x619	39
PDC 07 UE	7.20	12.53	4.34	11.01	4.03	230	50 dB(A)	48 dB(A)	940x340x619	40
PDC 09 UE	8.73	13.72	4.52	11.27	4.22	230	50 dB(A)	48 dB(A)	940x340x996	69
PDC 12 UE	11.70	18.32	4.45	16.74	4.33	230	52 dB(A)	52 dB(A)	940x340x1416	98
PDC 12T UE	11.70	18.32	4.45	16.74	4.33	400	52 dB(A)	52 dB(A)	940x340x1416	98
PDC 15 UE	14.74	22.76	4.59	18.56	3.98	230	53 dB(A)	53 dB(A)	940x340x1416	98
PDC 15T UE	14.74	22.76	4.59	18.56	3.98	400	53 dB(A)	53 dB(A)	940x340x1416	98
PDC 18T UE	17.36	26.94	4.37	23.15	4.27	400	55 dB(A)	54 dB(A)	940x340x1416	98
PDC 25T UE	18.37	31.07	4.06	32.64	4.20	400	58 dB(A)	57 dB(A)	940x340x1526	128

1) Hot water at 35° C, outdoor air temperature at -7° C R.H. 85% 2) Hot water at 35° C, outdoor air temperature at -7° C, R.H. 85%
3) Cold water at 18° C, outdoor air temperature at 35° C 4) Sound pressure level at a distance of 1 m
Note: Nominal performance according to UNI EN 14511. Energy efficiency according to UNI EN 14825.

Product	Description	Code	
	Accessories for PDC UE outdoor units		
RUBBER MOUNTS	*Set of anti-vibration adjustable feet from 10 to 14 cm, ivory colour, M10 thread.*	*7028076*	
PRESSURE RELIEF VALVE	*Differential by-pass valve with 3/4" connection, with graduated scale, adjustment range 10÷60 kPa.*	*C633005*	



High mod. of power · Warranty extension · DC Inverter · DC Inverter fans · DC Inverter compressor · Twin Rotary · High performances

Heat pump Wall indoor units

The PDC Wall are indoor units to hang on the wall, connected to the outdoor unit with copper line for refrigerant (gas) circulation. Efficient, versatile and compact, they can be easily controlled remotely, and easily installed and maintained thanks to their opening panel in the front side.

Product	Description	Code	
DC Inverter 	**PDC WALL UI INDOOR UNIT** *This indoor unit has been designed for wall installation, and it is suitable for heating/cooling systems in residential applications even with central supply. The heat pump includes 6-litre expansion tank, DHW sensor, safety valve and differential pressure switch for safe water circulation, high-efficiency DC primary circulation pump, external sensor, water filter, and water to gas heat exchanger. The control panel is easily accessible from the front side of the module, and makes it possible to check and set the main parameters (e.g. defrost, anti-legionella cycle, power modulation, alarms, additional boiler, supply water temperature according to the outdoor conditions). DHW can be produced by installing an external diverting valve. Max. temperature for the compressor: 56 °C; the use of auxiliary heaters makes it possible to reach 65 °C in the DHW tank. The optional components (the auxiliary heaters of 2/4/6 kWe and the Web Server to manage the combination with PV cells) are installed inside the unit, therefore they shall be specifically requested at time of order. All water and refrigerant connections are invisible and aligned at the bottom of the unit.*		
	PDC Wall 05	*70W05M000000*	
	PDC Wall 07	*70W07M000000*	
	PDC Wall 09	*70W09M000000*	
	PDC Wall 12	*70W12M000000*	
	PDC Wall 12T	*70W12T000000*	
	PDC Wall 15	*70W15M000000*	
	PDC Wall 15T	*70W15T000000*	
	PDC Wall 18T	*70W18T000000*	
	PDC Wall 25T	*70W25T000000*	

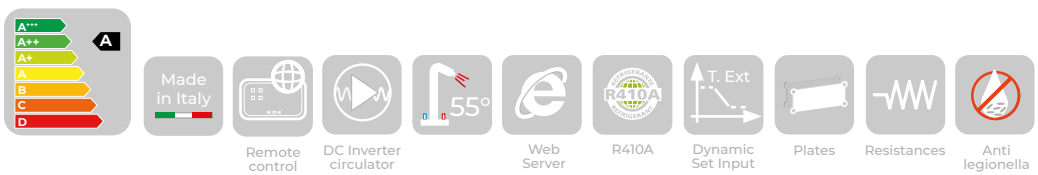
Specifications

model	voltage	sound pressure[1] dB(A)	size mm lxpxh	weight Kg
PDC Wall 05	*230*	*30*	*505x300x900*	*41*
PDC Wall 07	*230*	*30*	*505x300x900*	*41*
PDC Wall 09	*230*	*30*	*505x300x900*	*41*
PDC Wall 12	*230*	*31*	*505x300x900*	*41*
PDC Wall 12T	*400*	*31*	*505x300x900*	*41*
PDC Wall 15	*230*	*31*	*505x300x900*	*43*
PDC Wall 15T	*400*	*31*	*505x300x900*	*43*
PDC Wall 18T	*400*	*32*	*505x300x900*	*46*
PDC Wall 25T	*400*	*32*	*505x300x900*	*49*

1) Sound pressure (at 1 m)

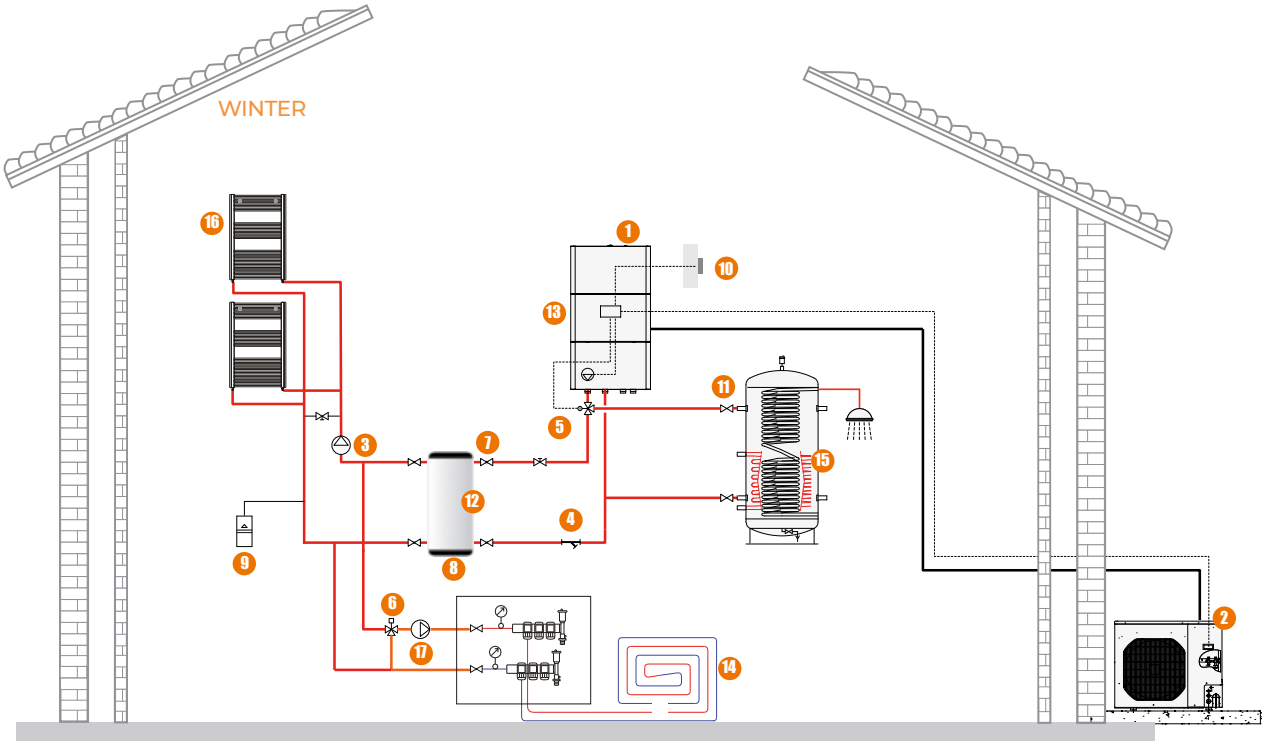
Accessory for code composition	Example	Description	
3-PORT VALVE FOR DHW	*70W05M**1**00000*	*Diverter valve for DHW and heating system*	
WEB SERVER	*70W05M0**2**0000*	*Remote control through Web Server*	
AUXILIARY RESISTANCES 6 kW	*70W05M001000*	*Settable 3 step electric support resistance (2-4-6 kW)*	

The addition of each item implies and extra price as shown in the table.

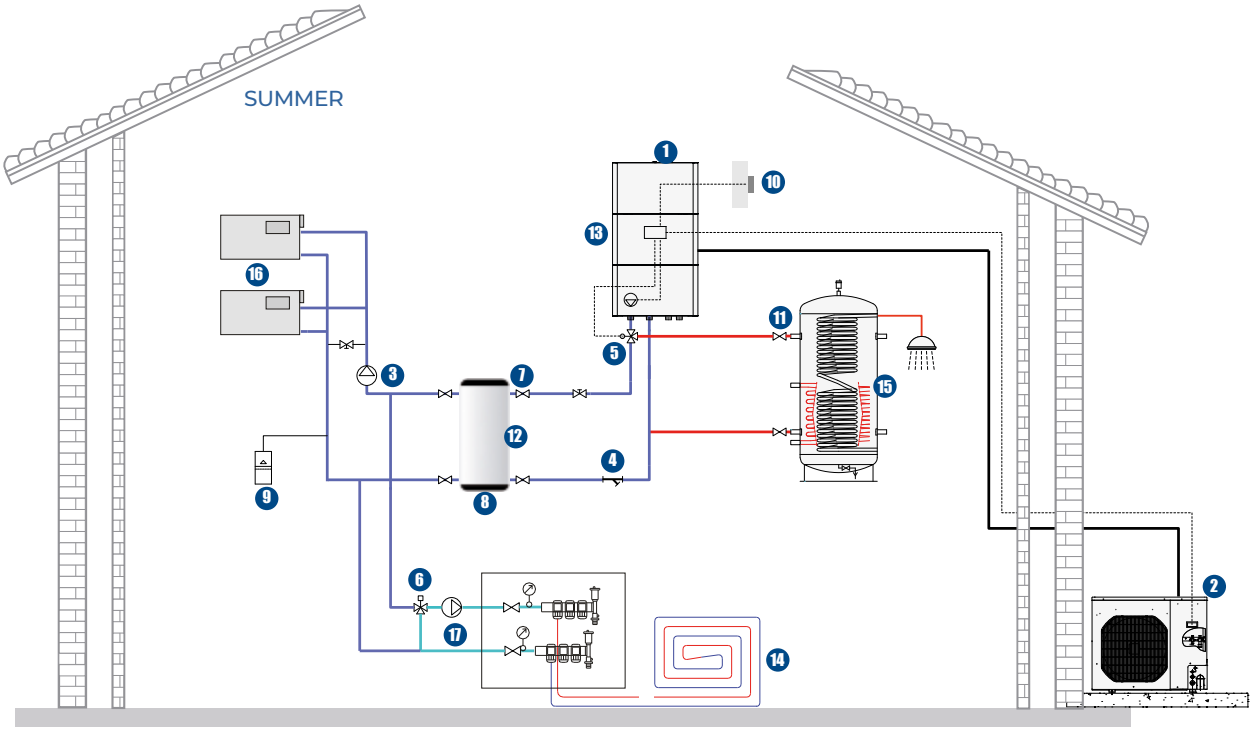


System Diagram with Wall UI Heat Pumps

The diagrams below show the distribution and the connection of the main hydraulic components of an underfloor heating and cooling system including air handling units (for summer dehumidification and additional sensible heating/cooling capacity). Energy generation at high efficiency is achieved through PDC split heat pump, consisting of one outdoor unit mod. PDC UE and one indoor unit mod. PDC Wall UI for wall-upright installation. If necessary, the system can be equipped with auxiliary resistances. Optionally you can install a DHW tank which can be connected with solar collectors.



1. PDC Wall UI indoor unit
2. PDC UE outdoor unit
3. HT secondary circulation pump
4. Water filter 500 micron
5. Diverter valve for heating / DHW
6. Mixing valve for radiant system
7. Shut-off valve
8. Temperature relief valve
9. Expansion vessel
10. Outdoor sensor
11. Stainless steel coil for DHW
12. Hydraulic separator
13. Room thermostat
14. Underfloor heating/cooling
15. DHW storage tank
16. Towel warmers or air handling units
17. Circulation pump for heating/cooling



Heat pump Floor indoor units

The PDC Floor are indoor units to place on the floor connected to the outdoor unit by a copper line for refrigerant (gas) circulation. Elegant, compact and complete, they include a 200L inertial storage tank with instantaneous heat exchanger for domestic hot water.

Product	Description	Code	
DC Inverter 	**PDC FLOOR UI INDOOR UNIT** *This indoor unit has been designed for floor-standing installation (60x60cm), and it is suitable for DHW production as well as heating/cooling systems in residential applications. The heat pump includes 24-litre expansion vessel, 200-L inertial storage tank with instantaneous heat exchanger, safety valve and differential pressure switch for safe water circulation, high-efficiency DC primary circulation pump, automatic air venting to release trapped air, DHW diverter valve, external sensor, water filter and water to gas heat exchanger. All water and refrigerant connections are invisible and aligned at the top of the unit. The control panel is easily accessible from the front side of the module, and makes it possible to check and set the main parameters (e.g. defrost, power modulation, alarms, supply water temperature according to the outdoor conditions, 0-10V control from PV cells, boiler management for DHW and system integration). Optional components are: auxiliary heaters of 2/4/6 kWe, Web Server to manage the combination with PV cells, hydraulic separator with circulation pump between primary and secondary circuits, circulation pump for solar collectors with electronic controller, thermostatic mixing valve and DHW integration. This unit ensures DHW in houses for 4 people with showers. Max. temperature for the compressor: 56 °C; the use of auxiliary heaters makes it possible to reach 65 °C in the DHW tank, even for frequent showers (necessary anti-scalding device).*		
	PDC 05 Floor	*70F05M000000*	
	PDC 07 Floor	*70F07M000000*	
	PDC 09 Floor	*70F09M000000*	
	PDC 12 Floor	*70F12M000000*	
	PDC 12T Floor	*70F12T000000*	
	PDC 15 Floor	*70F15M000000*	
	PDC 15T Floor	*70F15T000000*	

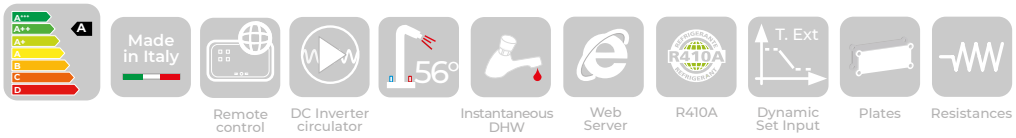
Specifications

model	voltage	sound pressure[1] dB(A)	size mm lxpxh	weight Kg
PDC 05 Floor	230	30	600x600x2000	172
PDC 07 Floor	230	30	600x600x2000	172
PDC 09 Floor	230	30	600x600x2000	172
PDC 12 Floor	230	31	600x600x2000	172
PDC 12T Floor	400	31	600x600x2000	172
PDC 15 Floor	230	31	600x600x2000	172
PDC 15T Floor	400	31	600x600x2000	172

1) Sound pressure (1 m)

Accessory	Sample code	Description	
WEB SERVER	70F05M020000	Remote control through Web Server	
AUXILIARY RESISTANCES 6 kW	70F05M001000	Auxiliary heaters which can be set at 2-4-6 kW	
SEPARATION KIT	70F05M000100	Hydraulic separator between primary and secondary circuits with circulation pump (mandatory accessory for PDC Floor UI 12 and 15, recommended for all the other models)	
KIT FOR TOWEL WARMERS	70F05M000010	High-temperature hydraulic module with dedicated circulation pump for radiators such as towel warmers	
SOLAR KIT	70F05M000001	Circulation pump for solar collectors, electronic controller, safety valve, pressure gauge, 24-L expansion vessel for the solar circuit, thermostatic mixing valve for DHW in order to prevent people from scalding	

The addition of each item implies and extra price as shown in the table.



Heat pump Floor X indoor units

The PDC Floor X are indoor units to place on the floor connected to the outdoor unit a copper line for refrigerant (gas) circulation. They already include a 200L tank for the production of DHW and a 24L buffer storage tank to guarantee the minimum technical water necessary for the right funcioning of the heat pump.

Product	Description	Code	
DC Inverter 	**PDC FLOOR X UI INDOOR UNIT** *This indoor unit has been designed for floor-standing installation (60x60cm), and it is suitable for DHW production as well as heating/cooling systems in residential applications. The heat pump includes 24-litre expansion vessel, 30-L storage tank for the heating/cooling system, 200-L storage tank with instantaneous heat exchanger, safety valve and differential pressure switch for safe water circulation, high-efficiency DC primary circulation pump, automatic air venting to release trapped air, DHW diverter valve, external sensor, water filter and water to gas heat exchanger. This version is characterized by the hydraulic separator and the storage tank with a circulation pump for the secondary circuit, which ensure high performance for the heating/cooling system in terms of both flow-rate and pressure. The optional components (the auxiliary heaters of 2/4/6 kWe and the Web Server to manage the combination with PV cells) are installed inside the unit, therefore they shall be specifically requested at time of order. The control panel is easily accessible from the front side of the module, and makes it possible to check and set the main parameters (e.g. defrost, power modulation, alarms, supply water temperature according to the outdoor conditions, boiler management for DHW and system integration). This unit ensures DHW in houses for 4 people. Max. temperature for the compressor: 56 °C; the use of auxiliary heaters makes it possible to reach 65 °C in the DHW tank, even for frequent showers (necessary anti-scalding device).*		
	PDC 05 Floor X	*70X05M0*	
	PDC 07 Floor X	*70X07M0*	
	PDC 09 Floor X	*70X09M0*	
	PDC 12 Floor X	*70X12M0*	

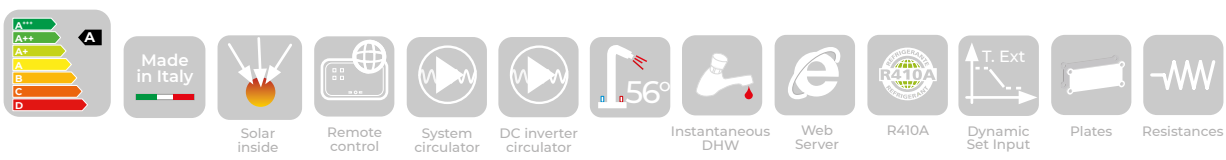
Specifications

model	*voltage*	*sound pressure[1] dB(A)*	*size mm lxpxh*	*weight Kg*
PDC 05 Floor X	*230*	*30*	*600x600x2000*	*180*
PDC 07 Floor X	*230*	*30*	*600x600x2000*	*180*
PDC 09 Floor X	*230*	*30*	*600x600x2000*	*180*
PDC 12 Floor X	*230*	*31*	*600x600x2000*	*180*

1) Sound pressure (1 m)

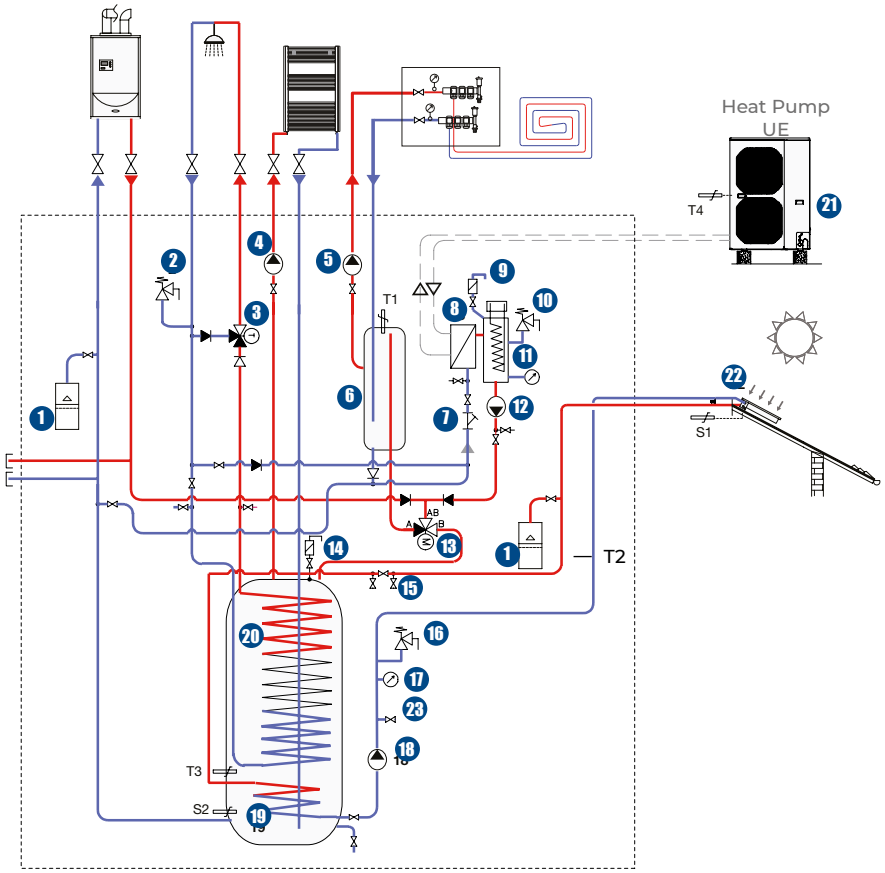
Accessory	Sample code	Description	
AUXILIARY RESISTANCES 6 kW	*70X05M1*	*Auxiliary heaters which can be set at 2-4-6 kW*	
WEB SERVER	*70X05M4*	*Remote control through Web Server*	
AUXILIARY RESISTANCES + WEB SERVER	*70X05M5*	*Auxiliary heaters which can be set at 2-4-6 kW. Remote control through Web Server*	

The addition of each item implies and extra price as shown in the table.



System Diagram with PDC Floor UI Heat Pumps

The diagram belows show the distribution and the connection of the main hydraulic components of an underfloor heating system. Energy generation at high efficiency is achieved through PDC split heat pump, consisting of one outdoor unit mod. PDC UE and one indoor unit mod. PDC Floor UI for floor-standing installation. If necessary, the system can be equipped with auxiliary resistances or it can be combined with a boiler.

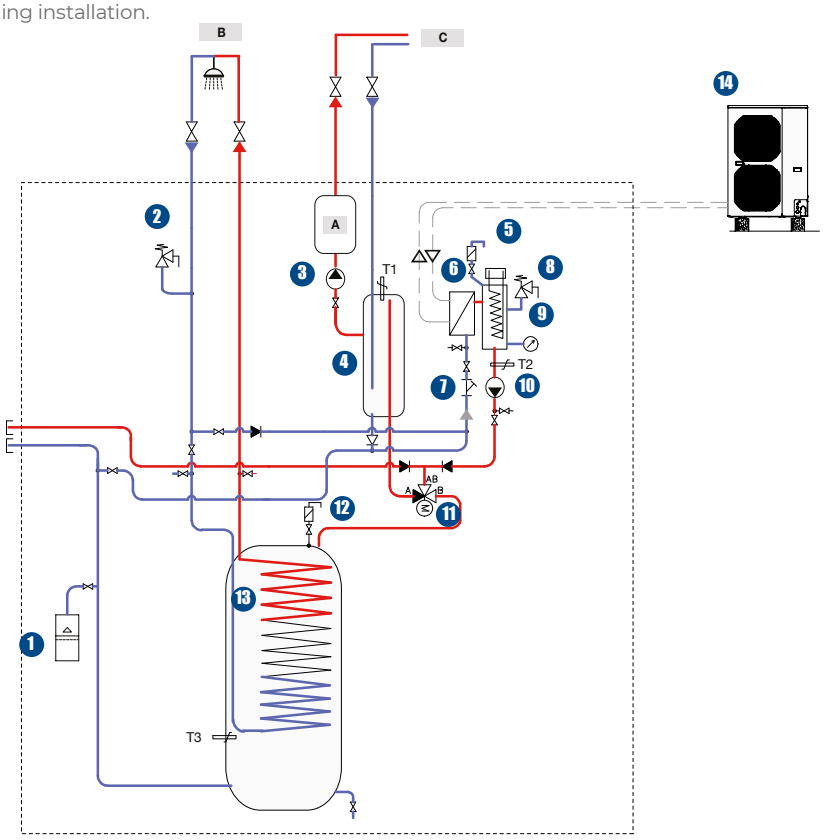


1. Expansion vessel (24 L) *
2. Safety relief valve (7 bar) *
3. Mixer
4. High-temperatura circulation pump **
5. System circulation pump
6. Hydraulic separator
7. Y-shaped filter
8. Heat exchanger
9. Air vent
10. Safety relief valve (3 bar)
11. Primary manifold
12. Heat pump circulator
13. 3-port valve for DHW
14. Air vent
15. Solar filling circuit **
16. Safety relief valve (4 bar) **
17. Pressure gauge **
18. Circulation pump for the solar circuit ** *
19. Solar coil **
20. DHW stainless steel coil
21. PDC UE outdoor unit
22. Solar panel
23. DHW storage tank (200 L)

System Diagram with PDC Floor X UI Heat Pumps

The diagram belows show the distribution and the connection of the main hydraulic components of an underfloor heating system. Energy generation at high efficiency is achieved through PDC split heat pump, consisting of one outdoor unit mod. PDC UE and one indoor unit mod. PDC Floor X UI for floor-standing installation.

A. Inertial tank
B. Domestic hot water
C. Heating and cooling system
1. Expansion vessel (24 L)
2. Safety relief valve (7 bar)
3. System circulation pump (P2)
4. Hydraulic separator
5. Automatic air vent
6. Plate heat exchanger
7. Y-shaped filter
8. Safety relief valve (3 bar)
9. Manifold with resistance
10. Heat pump circulator (P1)
11. 3-port valve
12. Air vent
13. Stainless steel coil for DHW
14. Outdoor unit
T1. Sensor for the hydraulic separator
T2. Exchanger outlet sensor
T3. DHW sensor



DHW and technical water tanks for split heat pumps

The DHW and technical water tanks for split heat pumps allow for the completion of the technical room, allowing simple and safe storage of domestic hot water and technical water for the system.

Product	Description	Code
	**FAST DHW BUFFER TANK** *Thermal store tank for heating water with stratifier and extractable exchanger for instantaneous DHW production made of copper with a 5-m² surface. Carbon steel casing with 100-mm thick insulation made of soft polyurethane. The heat exchanger makes for the instantaneous generation of domestic hot water and eliminates the need of antilegionella cycles. This is an ideal solution to be combined with a heat pump. If the storage temperature is This model is equipped with inertial tank with coil for the instantaneous DHW production.* ***With storage temperature:*** *· at 45 °C, the available DHW flow rate is 16 l/m at 40 °C (water supply network at 10 °C).* *· at 50 °C, the available DHW flow rate is 24 l/m at 40 °C (water supply network at 10 °C).* *· at 54 °C, the available DHW flow rate is 30 l/m at 40 °C (water supply network at 10 °C).* ***Available in two versions:*** *1- Inertial with coil for instantaneous DHW production* *2- Inertial with coil for instantaneous DHW production and coil for integration with solar thermal system.*	

model	capacity	size mm	DHW coil surface	solar coil DHW	Code
standard	300 L	Ø 700 - h 1550	5.0 m²	--	7030305
S1	300 L	Ø 700 - h 1550	5.0 m²	1.8 m²	7031305
standard	500 L	Ø 850 - h 1690	5.0 m²	--	7030505
S1	500 L	Ø 850 - h 1690	5.0 m²	2.4 m²	7031505
S1	800 L	Ø 990 - h 1790	8.5 m²	3.0 m²	7031808

ALL IN ONE CYLINDER

Carbon steel cylinder for domestic hot water with 2 coils, provided with anodic protection and inner treatment in compliance with DIN 4763-3 and UNI 10025 standards. Specifically designed to be combined with a heat pump. Thanks to the wide exchange surface of the coil, the cylinder makes it possible to produce domestic hot water at low temperature in the primary circuit. The unit is also equipped with a lower coil which can be combined with a solar heating system. In the lower part of the storage, there is an independent inertial tank of 80 L, completely insulated, which can be used for the heating/cooling system. This solution ensures the minimum content of technical water in the system, thus optimising the operation of the heat pump. The cylinder is also equipped with probe pocket and 50-mm thick insulation made of rigid polyurethane. Optionally, it is possible to provide the storage with 1.5 kW auxiliary heater.

capacity	size mm	DHW coil surface	solar coil DHW	Code
300 L	Ø 690 - h 1925	2.8 m²	0.9 m²	7032300
500 L	Ø 790 - h 2040	4.4 m²	1.5 m²	7032500
		auxiliary heater 1.5 kW		7030030

STORAGE TANK FOR BOILER ROOM

Water tank acting as a hydraulic separator between the heating/cooling system and the heat pump. It is made of steel, external insulation of 5 cm made of injected polyurethane. Upright installation. Horizontal installation is also possible, even fixed to the wall. The tank is equipped with brackets.

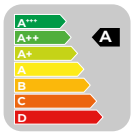
capacity	size mm	Code
25 L	Ø 400 - h 455	7029025
50 L	Ø 400 - h 935	7029050
100 L	Ø 500 - h 1095	7029100
200 L	Ø 550 - h 1395	7029200
300 L	Ø 600 - h 1560	7029300

Monoblock heat pumps

The range of HP monoblock heat pumps is an ideal solution for heating, cooling and producing domestic hot water while respecting the environment. Silent, reliable and with high energy saving performances, they are suitable for residential and small commercial applications.

Heat pumps monoblock units

This is a complete range of heat pumps from 6 to 14 kW that are versatile, reliable, silent and particularly efficient thanks to the use of Full DC Inverter technology. Equipped with a remotely accessible user interface with LCD display, they are also intuitive and easy to manage.

Product	Description	Code	
DC Inverter    	**HP MONOBLOCK UNIT** *Air to water monoblock heat pump for heating, cooling and DHW production with diverting valve combined to either FAST/ALL IN ONE tanks or SANIPLUS heat recovery unit to produce DHW in summer at low consumption. HP heat pump, boasting energy class A++, is equipped with high-efficiency modulating compressor (FULL INVERTER technology) and modulating primary circulation pump for surface heating/ cooling or air conditioning. Thanks to the integrated control panel, the user can easily check set-point values and main water/gas parameters. HP heat pump can be combined with Home/Building automation systems via digital input/output or with other devices connected via Modbus protocol. Smooth defrost function works in combination with a large external coil, thus limiting the change of status and the defrost cycles. The possibility to operate at lower sound levels also ensures very high acoustic comfort in special conditions.*		
	HP single-phase 06	*7028406*	
	HP single-phase 08	*7028408*	
	HP single-phase 11	*7028411*	
	HP three-phase 11T	*7028412*	
	HP three-phase 14T	*7028414*	

Specifications

model	Cooling capacity Kwf[1] - E.E.R.	Heating capacity Kwc[2] - COP	voltage	sound pressure dB(A)	size mm lxdxh
HP single-phase 06	(4.80 / 5.80) - 3.41	(5.80 / 6.60) - 4.12	230	40.0	1030x400x735
HP single-phase 08	(5.90 / 7.00) - 3.42	(8.10 / 9.30) - 4.18	230	43.0	1190x400x835
HP single-phase 11	(7.70 / 9.00) - 3.53	(10.40 / 12.50) - 4.09	230	46.0	1190x400x1070
HP three-phase 11T	(7.70 / 9.00) - 3.53	(10.40 / 12.50) - 4.09	400	46.0	1190x400x1070
HP three-phase 14T	(10.00 / 11.90) - 3.44	(13.60 / 15.50) - 4.05	400	49.0	1335x450x1270

1) Cold water from 23 to 18 °C, outside air temperature 35 °C. 2) Hot water from 30 to 35 °C, outside air temperature 7 °C

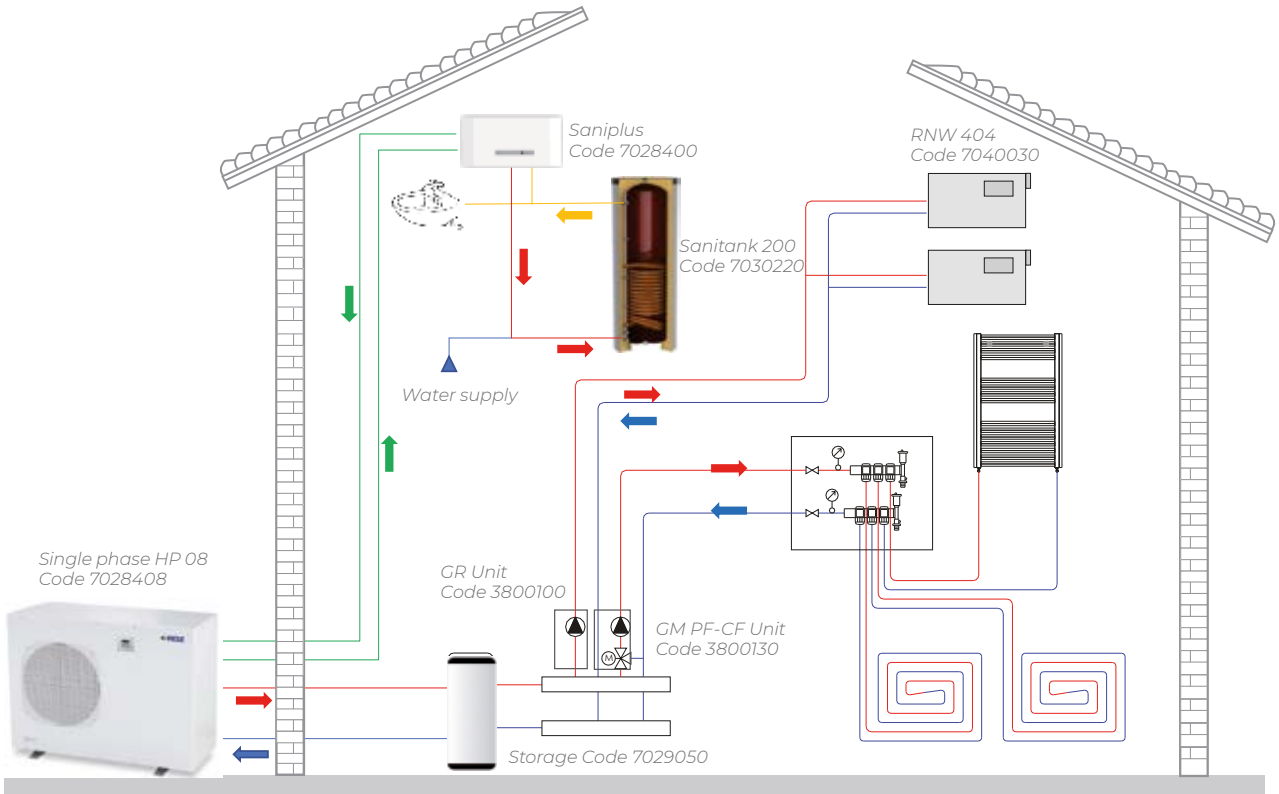
description	HP single-phase 06	HP single-phase 08	HP single-phase 11	HP three-phase 11T	HP three-phase 14T
Maximum supply water temperature [°C]	up to 58				
Outdoor temperature range for heating [°C]	-20 / +35				
Outdoor temperature range for cooling [°C]	+10 / + 47				
Nominal flow rate at 35 °C [m³/h]	1.00	1.39	1.78	1.78	2.31
Maximum power consumption [kW/A]	2.8 / 12.7	3.5 / 15.9	4.5 / 20.5	4.5 / 20.5	5.3 / - -
Minimum Water Volume [L]	40	40	80	80	80
Weight [Kg]	64	73	90	90	160

Warranty extension

DC Inverter · DC Inverter circulator · DC Inverter fans · Heat for DHW · DC Inverter compressor · ModBus · R410A · Dynamic Set Input · Exchanger

Product	Description	Code	
Accessories for HP monoblock units			
RUBBER MOUNTS *Set of anti-vibration adjustable feet from 10 to 14 cm, ivory colour, M10 thread.*		*7028076*	
Y-SHAPED FILTER Ø 1” *Inlet water filter. Mandatory component for warranty terms.*		*7028078*	
DHW DIVERTER VALVE Ø 1” *3-port valve to divert the flow DHW and heating system.*		*7028090*	
PI VALVE Ø 1" *Safety valve to empty the system in case of frosting.*		*7025402*	
DHW SWITCHBOARD FOR HP HEAT PUMPS *Control panel for DHW diverter valve and for anti-legionella cycle, backup and recirculation.*		*7028401*	
REMOTE CONTROL FOR HP HEAT PUMPS *User interface with LCD display for the remote control of HP monoblock heat pumps.*		*7028105*	

System Diagram with HP monoblock heat pumps

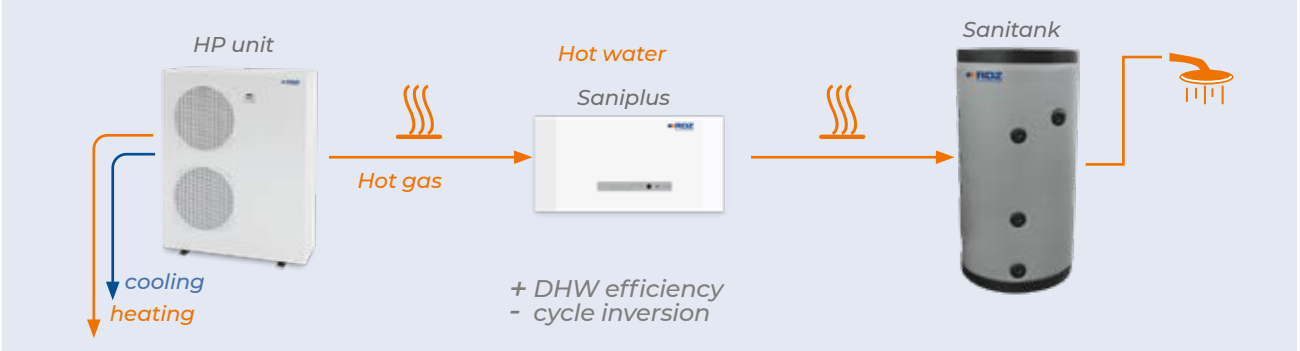


The diagram shows the distribution and the connection of the main hydraulic components of an underfloor heating and cooling system. Energy generation at high efficiency is achieved through HP monoblock heat pump. Saniplus ensures DHW production by transferring energy on a DWH tank.

DHW and technical water tanks for monoblock units

The DHW and technical water tanks for monoblock heat pumps allow for the completion of the technical room, allowing simple and safe storage of domestic hot water and technical water for the system.

Product	Description	Code	
  Heat recovery	**SANIPLUS MODULE** *DHW production module for HP monoblock units. Thanks to Saniplus, HP heat pumps are able to generate domestic hot water while producing energy for heating and cooling. In summer mode, with the application of a proper refrigerant circuit, Saniplus makes it possible to recover most of the condensation heat, which can be transferred to Sanitank in order to produce DHW. In winter mode, both heating and DHW are guaranteed at the same time. Saniplus module is also equipped with water-to-gas exchanger with circulation pump, and the built-in electronics can control up to 3 groups of auxiliary heaters. Furthermore, the integrated flow-meter, storing the number of DHW withdrawal per hour, can calculate the necessary time for the DHW to reach the set value. The module works properly if it is provided with the auxiliary resistance.*	7028400	
	AUXILIARY HEATER *1.5 kW Auxiliary Heater*	7030030	
	**SANITANK** *Storage tank for sanitary hot water production. Water heater made of carbon steel, complete with anodic protection, inside vitrification treatment according to DIN 4753-3 and UNI 10025. Sanitank ensures high efficiency and energy saving, and it is suitable for the combination with Saniplus. It is a versatile solution, which makes for fast and easy installation.* *Sanitank 200 technical features:* *· Total capacity: 212 L* *· Tot. height with insulation: 1280 mm* *· Weight empty: 70 kg* *Sanitank 300 technical features:* *· Total capacity: 291 L* *· Tot. height with insulation: 1680 mm* *· Weight empty: 105 kg* *Coil for Sanitank 300 technical features:* *· Absorbed Power: 43 kW* *· Exchanger Surface: 1.80 m²* *· Water Connections Ø ¾"* *· Weight: 11.7 kg*		
	model		
	Sanitank 200 L	7030220	
	Sanitank 300 L	7030231	
	Coil kit for Sanitank 300 L	7030222	



Product	Description	Code
	**FAST DHW BUFFER TANK** *Thermal store tank for heating water with stratifier and extractable exchanger for instantaneous DHW production made of copper with a 5-m² surface. Carbon steel casing with 100-mm thick insulation made of soft polyurethane. The heat exchanger makes for the instantaneous generation of domestic hot water and eliminates the need of antilegionella cycles. This is an ideal solution to be combined with a heat pump.* ***With storage temperature:*** *· at 45 °C, the available DHW flow rate is 16 l/m at 40 °C (water supply network at 10 °C).* *· at 50 °C, the available DHW flow rate is 24 l/m at 40 °C (water supply network at 10 °C).* *· at 54 °C, the available DHW flow rate is 30 l/m at 40 °C (water supply network at 10 °C).* ***Available in two versions:*** *1- Inertial with coil for instantaneous DHW production* *2- Inertial with coil for instantaneous DHW production and coil for integration with solar thermal system.*	

model	capacity	size mm	DHW coil surface	solar coil DHW	Code
standard	300 L	Ø 700 - h 1550	5.0 m²	--	7030305
S1	300 L	Ø 700 - h 1550	5.0 m²	1.8 m²	7031305
standard	500 L	Ø 850 - h 1690	5.0 m²	--	7030505
S1	500 L	Ø 850 - h 1690	5.0 m²	2.4 m²	7031505
S1	800 L	Ø 990 - h 1790	8.5 m²	3.0 m²	7031808

ALL IN ONE CYLINDER

Carbon steel cylinder for domestic hot water with 2 coils, provided with anodic protection and inner treatment in compliance with DIN 4763-3 and UNI 10025 standards. Specifically designed to be combined with a heat pump. Thanks to the wide exchange surface of the coil, the cylinder makes it possible to produce domestic hot water at low temperature in the primary circuit. The unit is also equipped with a lower coil which can be combined with a solar heating system. In the lower part of the storage, there is an independent inertial tank of 80 L, completely insulated, which can be used for the heating/cooling system. This solution ensures the minimum content of technical water in the system, thus optimising the operation of the heat pump. The cylinder is also equipped with probe pocket and 50-mm thick insulation made of rigid polyurethane. Optionally, it is possible to provide the storage with 1.5 kW auxiliary heater.

capacity	size mm	DHW coil surface	solar coil DHW	Code
300 L	Ø 690 - h 1925	2.8 m²	0.9 m²	7032300
500 L	Ø 790 - h 2040	4.4 m²	1.5 m²	7032500
		auxiliary heater	1.5 kW	7030030

STORAGE TANK FOR BOILER ROOM

Water tank acting as a hydraulic separator between the heating/cooling system and the heat pump. It is made of steel, external insulation of 5 cm made of injected polyurethane. Upright installation. Horizontal installation is also possible, even fixed to the wall. The tank is equipped with brackets.

capacity	size mm	Code
25 L	Ø 400 - h 455	7029025
50 L	Ø 400 - h 935	7029050
100 L	Ø 500 - h 1095	7029100
200 L	Ø 550 - h 1395	7029200
300 L	Ø 600 - h 1560	7029300

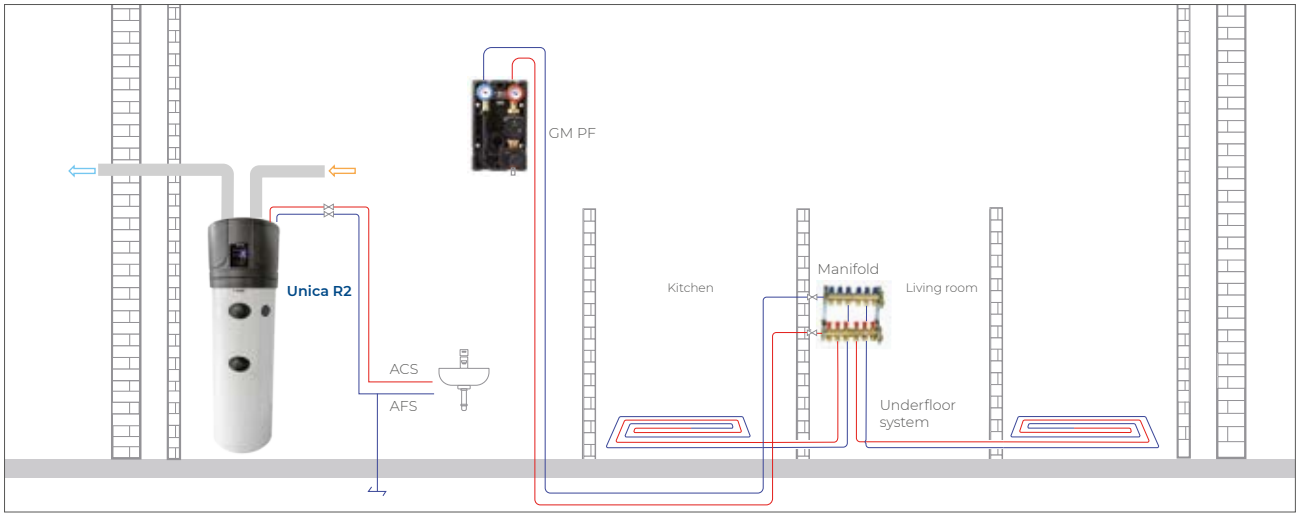
Unit for the autonomous production of domestic hot water

The water heaters operating with a heat pump exploit the thermal energy present in the environment or from renewable sources for the production of domestic hot water in complete safety and with high energy savings.

DHW production units

Product	Description	Code	
	**UNICA R2** *Heat pump for domestic hot water generation. It consists in a steel tank with vitrification layer and interior anti-corrosion system boasting 5-year warranty (upon documentation of regular maintenance). It is equipped with polyurethane foam thermal insulation, highly efficiency compressor with R134a refrigerant, electronic valve, a larger condenser, and 1.5-kW electrical heater managed by integrated controller. The use of a new high-efficiency compressor ensures high COP values in winter and shorter DHW heating time. The heat pump is provided with Touch Screen control panel to set time slots, alarm check and disinfection cycles. On/off remote control and thermal solar system integration are also available, while 0-10V input is suitable for connection with PV cells. Power supply 230 Vac. Power consumption 450 W + Electrical heater of 1500 W.* *UNICA R2 is available in the following versions, each can be combined with a 200 or 260 litre tank.* ***1.** Standard: considers the heat pump and the electric heater as heating sources* ***2.** S1: complete with auxiliary coil for use in combination with a system with solar panels (optional panel probe)* ***Note:*** *Provide externally:* *· a cooling/emptying system in case of superheating from the solar panels and boiler cooling;* *· a safety relief valves for DHW;* *· systems suitable for the treatment of mains water according to UNI 8065: 2019.* ***Recommended application:*** *UNICA 200 (set 60°) = accommodation up to 4 people with a shower* *UNICA 260 (set 60°) = accommodation up to 5 people with two showers*		
NEW COMPRESSOR MADE IN JAPAN COP=3.41-A14W55			

model	capacity	size mm	surface coil m²	weight Kg	Code	
L A						
standard	200 L	Ø 654 - h 1638	- -	98	7026231	
S1	200 L	Ø 654 - h 1638	S1=1.2	113	7026236	
XL A						
standard	260 L	Ø 654 - h 1888	- -	106	7026131	
S1	260 L	Ø 654 - h 1888	S1=1.2	121.5	7026136	
				solar sensor / DHW recirculation	7028154	



Our history

For over 40 years
we have been
a worldwide reference company
in the field of heating
and cooling systems.
We work with passion
to ensure indoor comfort
thanks to innovative solutions,
specifically for residential,
commercial and
industrial buildings.
We design and produce
high-efficient and
high-performance systems
which offer energy saving,
comfort and health
throughout the year.
Invisible solutions
spreading a unique sensation
of wellbeing in any room.

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