
HOT
Green Power

HEAT PUMP MONOBLOC R32 22-30 KW

Monobloc double-fan unit in air-to-water heat pump for cooling, heating and production of domestic hot water, for residential applications.

Available in capacities of 22, 26 and 30 kW.

The system can be installed by integrating it with additional heat sources. The monoblocs are already equipped with:

- *internal pump*
- *8-liter expansion vessel*
- *flow switch*
- *safety valve*
- *automatic air vent valve*

Smart grid

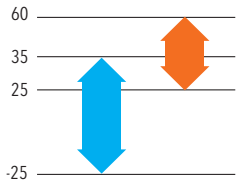
All units are SG Ready. Reading of the electrical network trend, energy saving guaranteed.

Wide operation in every mode 22-30 kW

Maximum values of water flow temperature in relation to the external temperature.

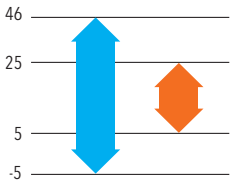
HEATING MODE

Operation from -25°C to 35°C.
Delivery temp. from 25°C to 60°C.



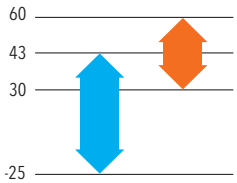
COOLING MODE

Operation from -5°C to 46°C.
Delivery temp. from 5°C to 25°C.

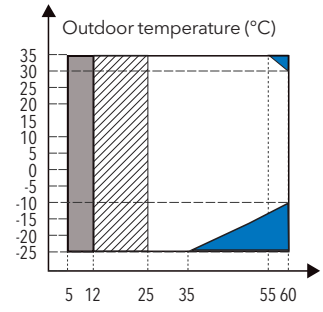


DHW PRODUCTION

Operation from -25°C to 43°C.
Delivery temp. for DHW from 30°C to 60°C.

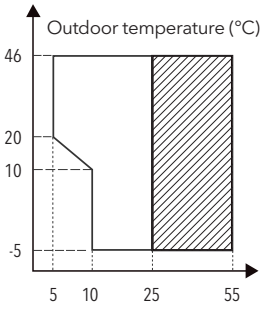


HEATING MODE



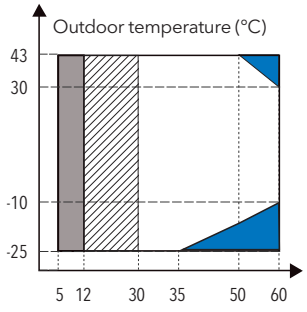
Water flow temperature (°C)

COOLING MODE



Water flow temperature (°C)

DHW PR



Water flow temperature (°C)

The heat pump switches off, only the resistors switch on

The heat pump works with possible limitations and protections

If present, only the resistors are turned on, otherwise only the heat pump works but with limitations and protections

Easy installation to ensure optimal efficiency

The compactness of the units ensures simple installation while respecting minimum spaces.

Frost protection and floor protection

All units are equipped with frost protection and floor protection.

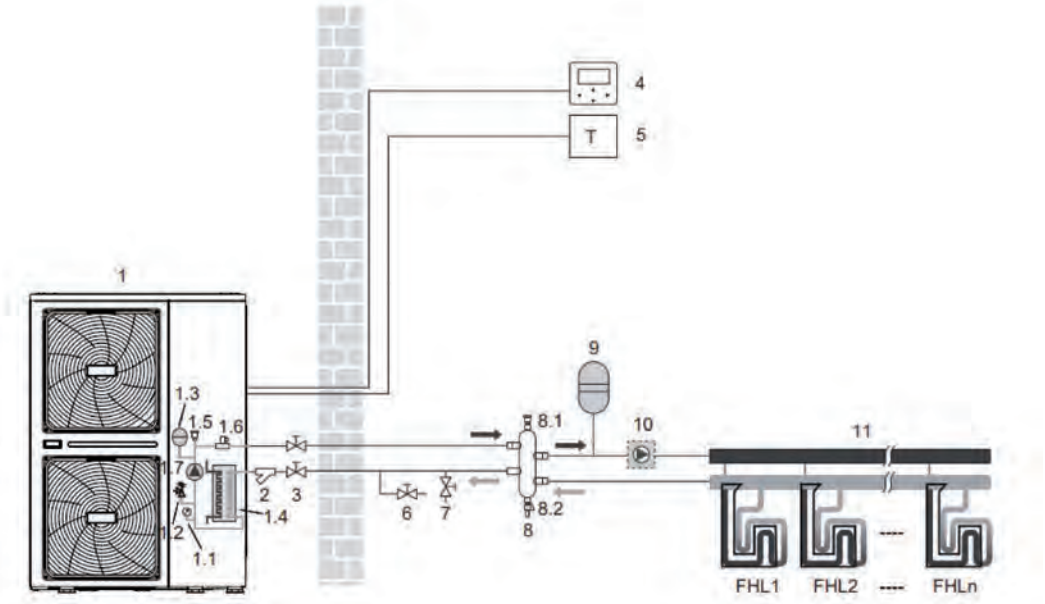
Frost protection

The heat pump activates the heating for low temperature or for domestic hot water, in order to protect the hydraulic system.

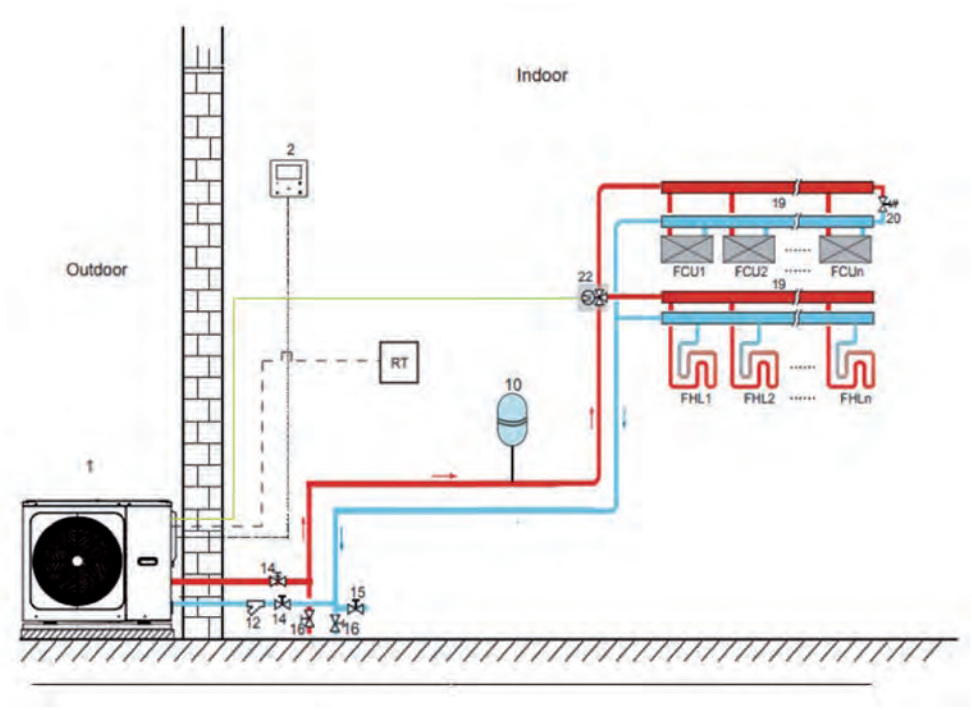
Floor protection

The floor drying mode and the preheating mode protect the floor from deformations and breakages.

APPLICATION 1: heating only mode with floor heating

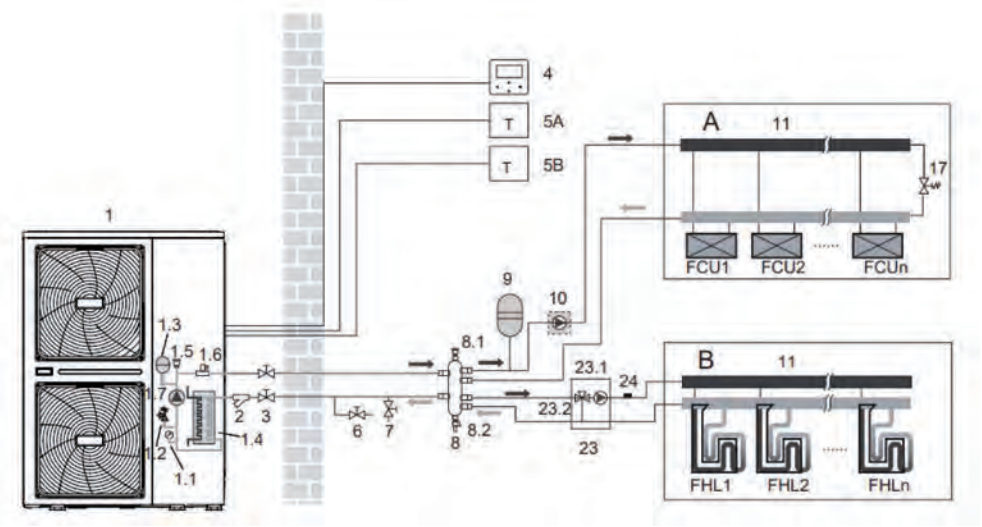


APPLICATION 2: separate heating and cooling mode



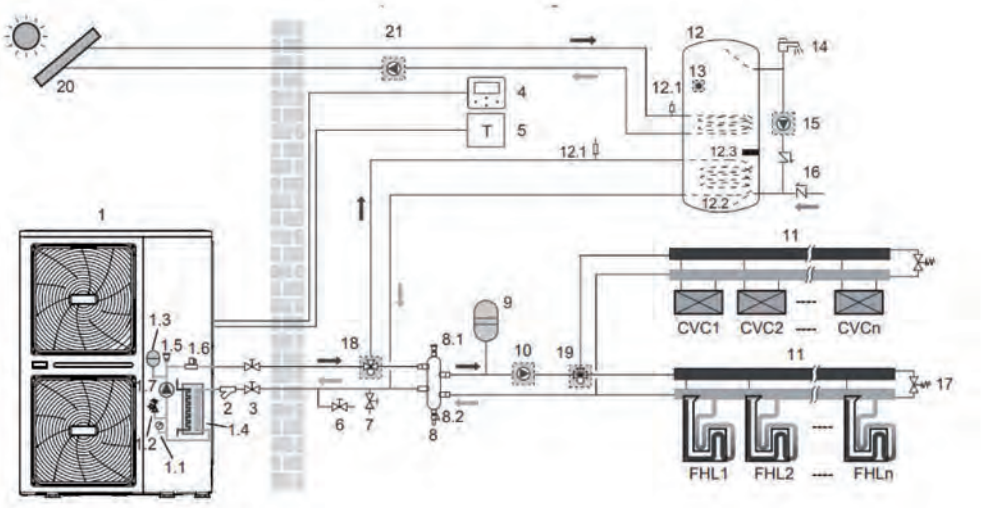
- Heating with floor heating
- Cooling with fan coil units
- 3-way hot /cold valve
- No separator / booster pump (check pressure drops)
- Additional expansion vessel
- Bypass valve

APPLICATION 3: heating mode – double temperature



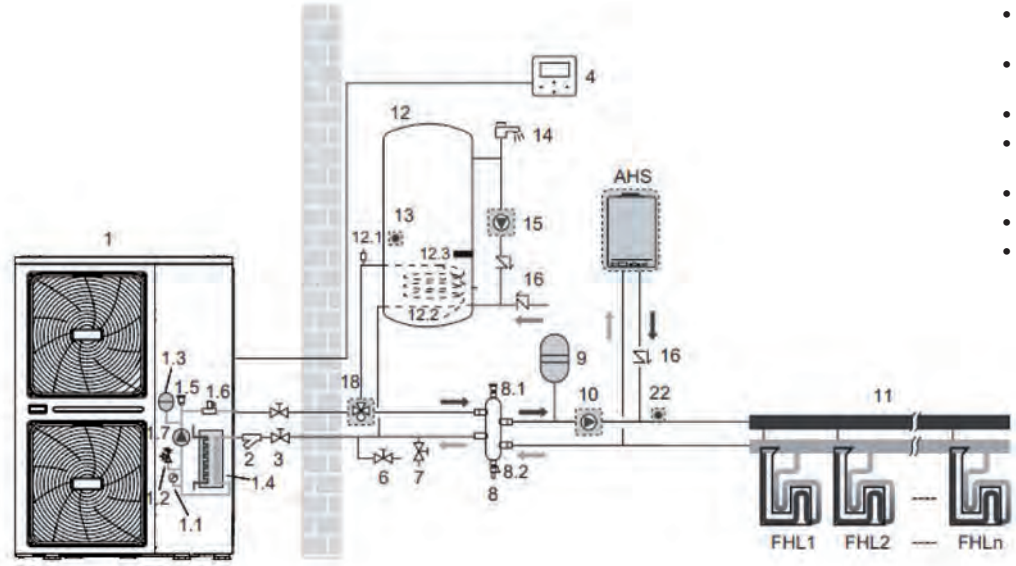
- Heating with fan coil units and floor heating
- Machine-controlled mixing station
- Separator and booster group
- Additional expansion vessel

APPLICATION 4: Heating mode + Cooling mode + DHW production



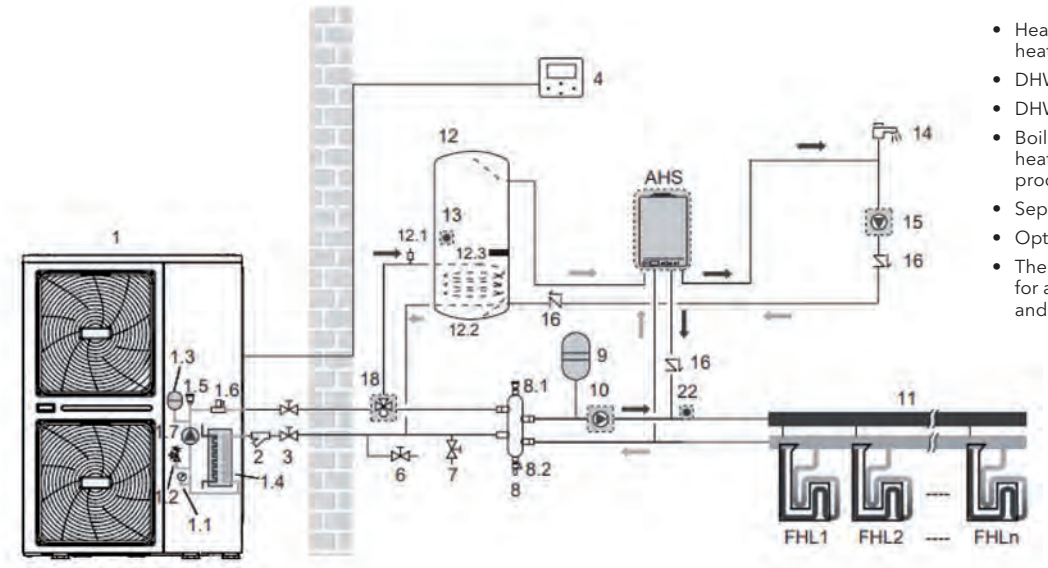
- Heating with fan coil units and floor heating
- DHW production
- DHW valve
- Shuttle valves
- Bypass valve

APPLICATION 5: Heating mode and DHW production with boiler integration



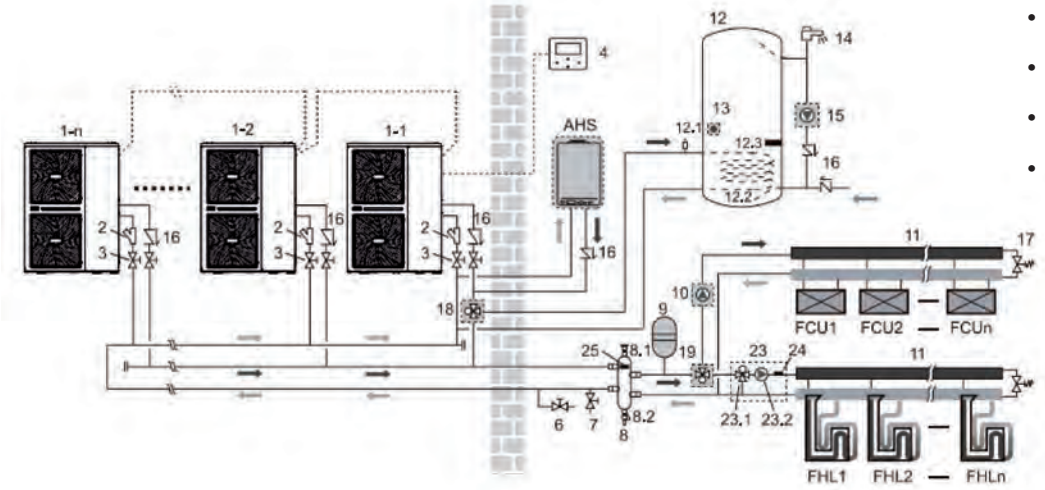
- Heating with floor heating
- DHW production (+ electric resistance)
- DHW valve
- Boiler integration, heating only
- Separator
- Optional mixing valve
- The boiler is responsible for a portion of the heating

APPLICATION 5a: heating mode and DHW production with boiler integration



- Heating with floor heating
- DHW production
- DHW valve
- Boiler integration for heating and DHW production
- Separator
- Optional mixing valve
- The boiler is responsible for a share of the heating and DHW production

APPLICATION 6: cascade configuration for heating, cooling, DHW production, with boiler/solar thermal integration



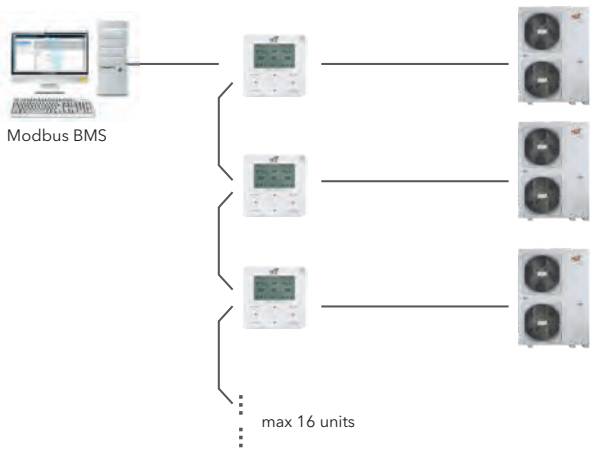
- Up to 6 units connectable
- A single wired controller (master unit)
- Only the master unit can produce DHW
- Machines of different sizes can also be connected to each other

Control

All units are R32 and are equipped with wired remote control and integrated Wi-Fi module.

Modbus control

- Up to 16 controllers managed on the same line.
- Maximum line length 150 m.
- Allows construction of large centralized/ decentralized systems depending on needs.



Technical specifications R32 heat pump

ENERGY CLASS

A+++ (22-26kW)
In heating mode with **35° C** flow water temperature.

A++ (30,1 kW)
In heating mode with **35° C** flow water temperature.

A++ (22 kW)
In heating mode with **55° C** flow water temperature.

A+ (26-30,1 kW)
In heating mode with **55° C** flow water temperature.

Model				GPCWSMS 2200 Z	GPCWSMS 2600 Z	GPCWSMS 3000 Z
Heating	Rated power	A7//W35	kW	22.00	26.00	30.10
	Electrical consumption			5.00	6.37	7.70
	Coefficient of performance		COP	4.40	4.08	3.91
	Rated power	A7/W45	kW	22.00	26.00	30.00
	Electrical consumption			6.47	8.39	10.35
	Coefficient of performance		COP	3.40	3.10	2.90
Cooling	Rated power	A35//W18	kW	23.00	27.00	31.00
	Electrical consumption			5.00	6.28	7.75
	Energy efficiency		EER	4.60	4.30	4.00
	Rated power	A35//W7	kW	21.00	26.00	29.50
	Electrical consumption			7.12	9.63	11.57
	Energy efficiency		EER	2.95	2.70	2.55
Seasonal heating data	Theoretical load (Pdesignh) @ -10°C	35/55	kW	22.00/22.00	25.00/26.00	29.00/30.00
	Seasonal energy efficiency(ηs)		%	178/126	177/123	165/123
	Energy efficiency class		-	A+++/A++	A+++/A+	A++/A+
	Annual energy consumption		kWh/y	10180/14390	11489/17204	14165/19316
Operation range	Outdoor air temperature	Heating	°C	-25~35		
		Cooling		-5~46		
		DHW		-25~43		
	Delivery water temperature	Heating	°C	25~60		
		Cooling		5~25		
		DHW		30~60		
Refrigerant circuit data	Refrigerant1		Type (GWP)	R32 (675)		
	Quantity (tons CO2)		kg (t)	5.0 (3.375)		
	Control system			Electronic expansion valve		
	Compressor		Type	Twin Rotary - DC Inverter		
Hydraulic data	Heat exchanger	Type		Stainless steel with brazed plates		
		Flow rate	m³/h	3.8	4.5	5.2
	Circulation pump			Included		
	Water pipe connections	Type		Threaded		
		Dimension	inches	1-1/4" BSP		
	Max working pressure		bar	3		
	Expansion vessel	Volume	L	8		
		Precharge	bar	1.0		
Electrical data	Power supply		Ph/V/Hz	3ph+N / 380~415V / 50Hz		
	Maximum current		A	28.00		
	Power cable (recommended)		Type	5x6 mm²	5x6 mm²	5x6 mm²
Product specifications	Fan	Type	q.ty	DC Inverter x 2	DC Inverter x 2	DC Inverter x 2
		Air flow	m³/h	11000	11300	11300
	Sound power level		dB(A)	73	75	77
	Sound pressure level at 1 m		dB(A)	59.8	61.5	63.5
	Dimensions	WxDxH	mm	1129x440x1558	1129x440x1558	1129x440x1558
	Weight	Net	kg	177	177	177
	Control (supplied)			Wired controller DHWZ CEM-Z		

GENERAL NOTE:
The above data refers to the following standards: EN 14511:2018; EN 14825:2019; EN50564:2011; EN12102-1:2018; EN12102-2:2019; (EU)No:811:2013; (EU)No:813:2013; OJ 2014/C 207/02:2014.

1. Refrigerant leakage contributes to climate change. Refrigerants with a lower global warming potential (GWP) contribute less to global warming when released into the atmosphere than those with a higher GWP. This appliance contains a refrigerant with a GWP of 675. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 675 times greater than 1 kg of CO2, over a period of 100 years. Under no circumstances should the user attempt to intervene on the refrigeration circuit or disassemble the product. If necessary, always contact qualified personnel.