



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 and commercial 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.

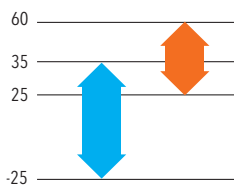


Wide operation in every mode 22-30 kW

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

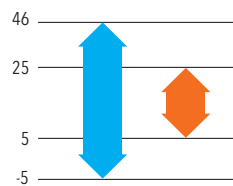
HEATING MODE

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



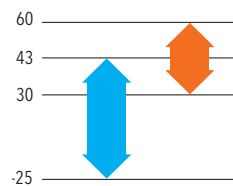
COOLING MODE

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

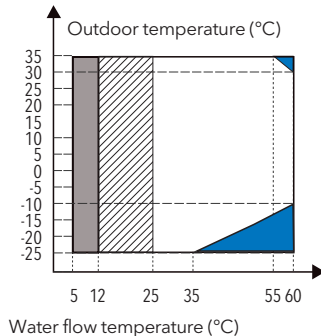


DHW PRODUCTION

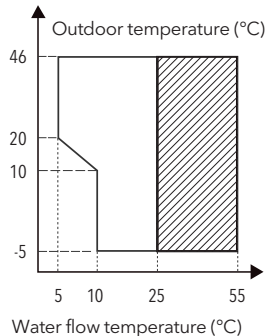
Operation from -25°C to 43°C.
Delivery temp. for DHW from 30°C to 60°C.



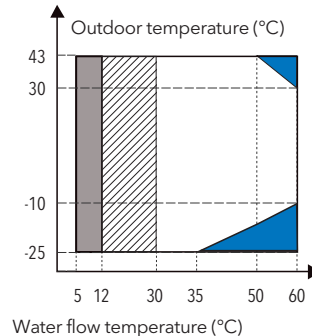
HEATING MODE



COOLING MODE



DHW PR



- 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.

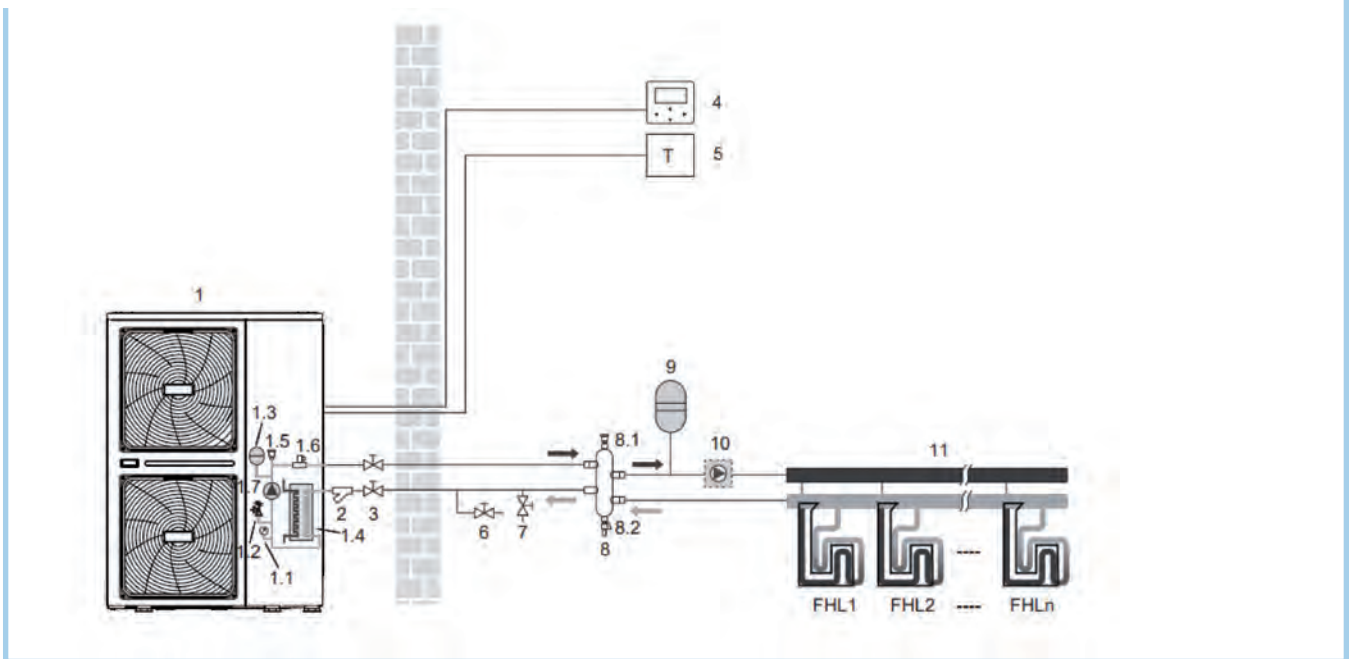
Frost protection

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

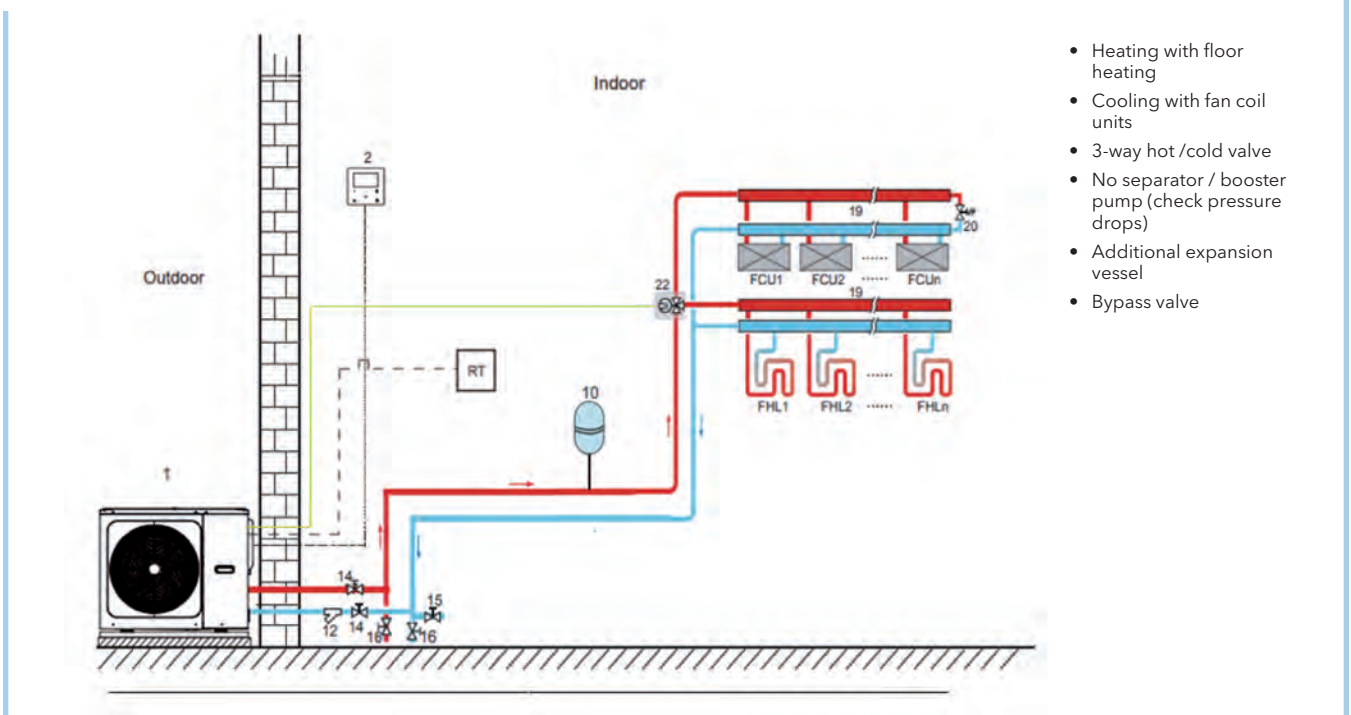
Floor protection

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

APPLICATION 1: heating only mode with floor heating

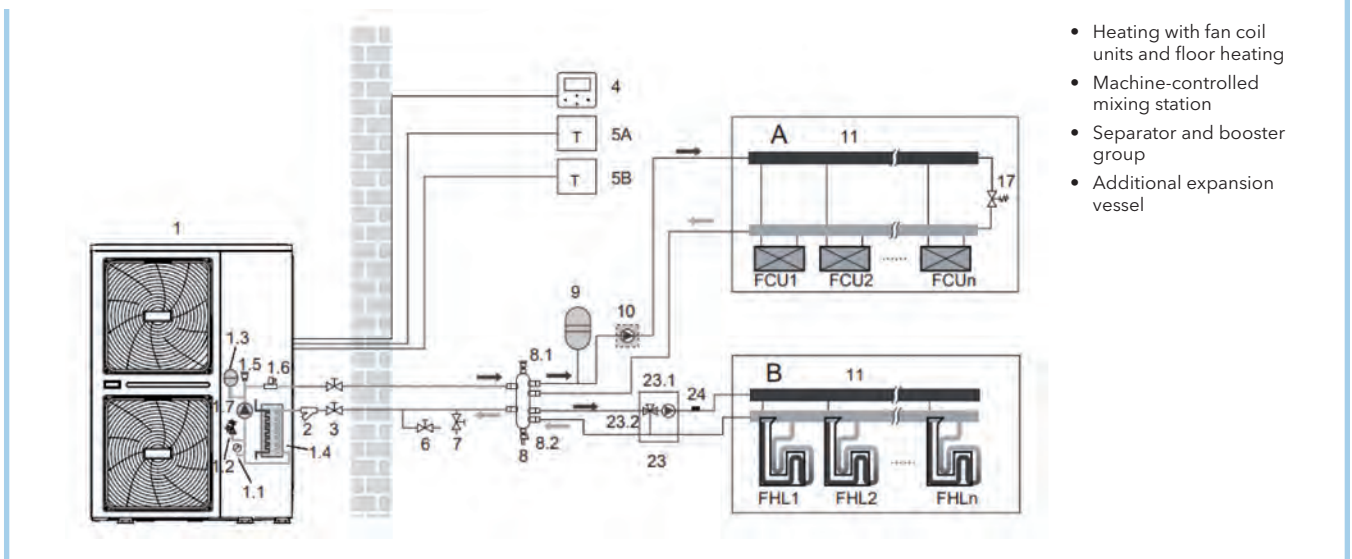


APPLICATION 2: separate heating and cooling mode



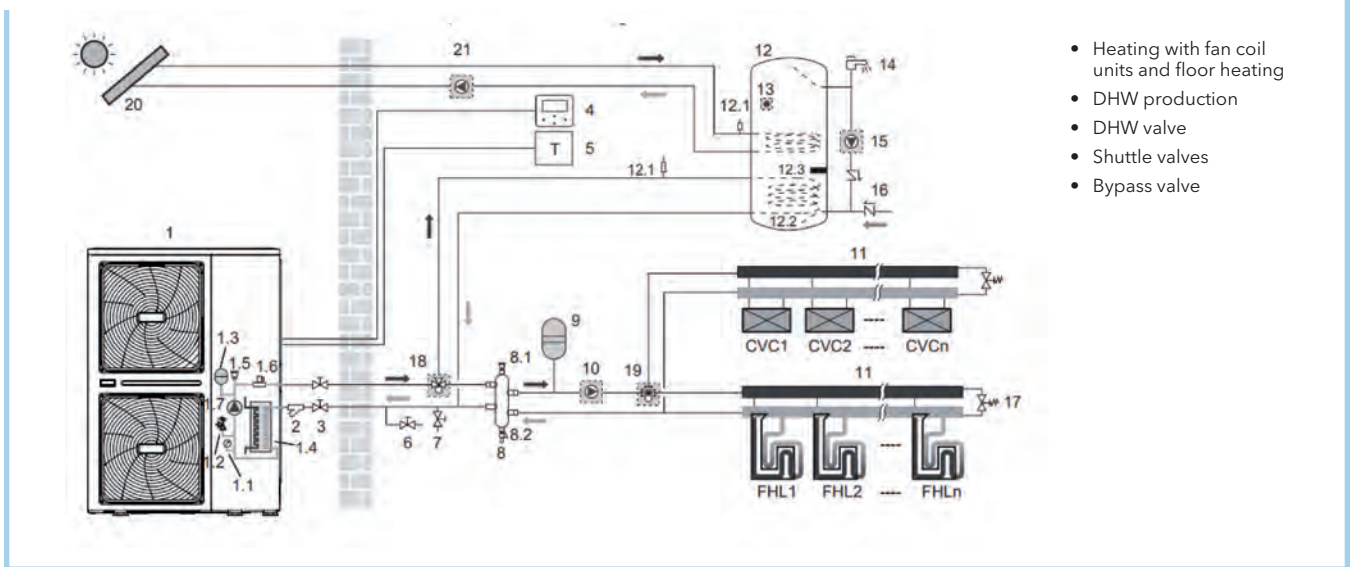
- Heating with floor heating
- Cooling with fan coil units
- 3-way hot /cold valve
- No separator / booster pump (check pressure drops)
- Additional expansion vessel
- Bypass valve

APPLICATION 3: heating mode - double temperature



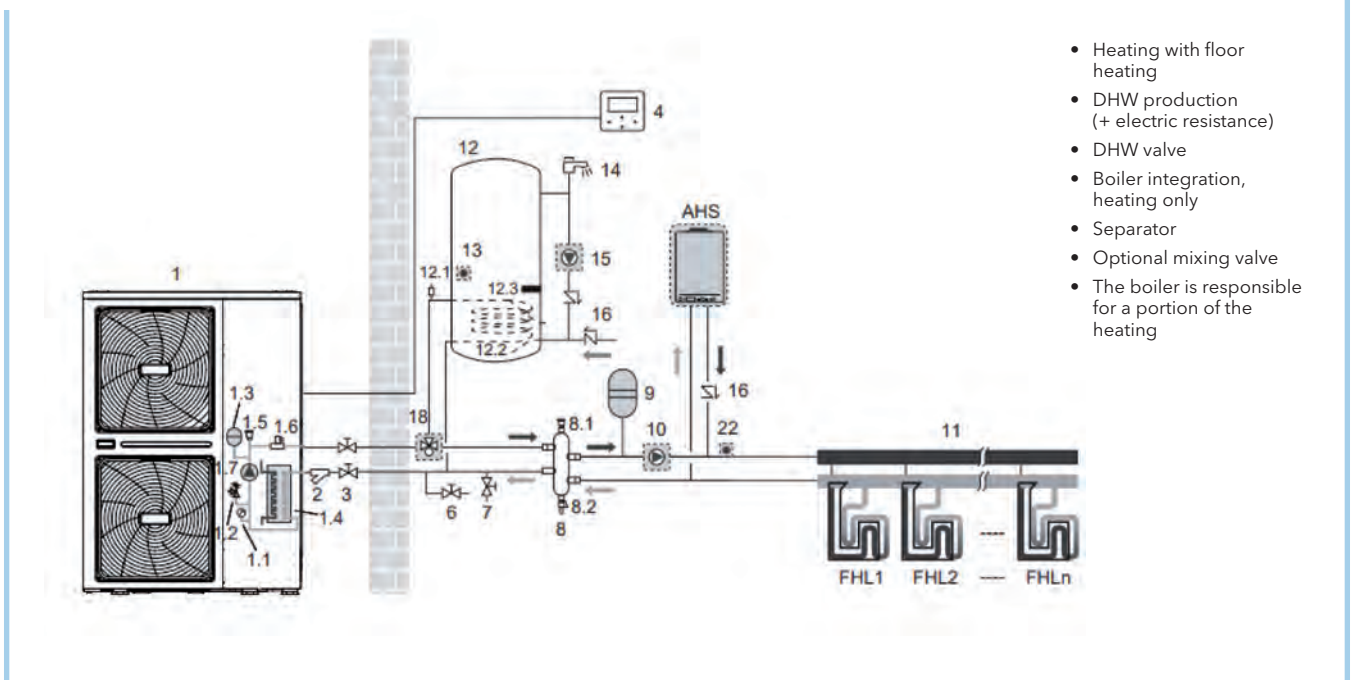
- Heating with fan coil units and floor heating
- Machine-controlled mixing station
- Separator and booster group
- Additional expansion vessel

APPLICATION 4: Heating mode + Cooling mode + DHW production



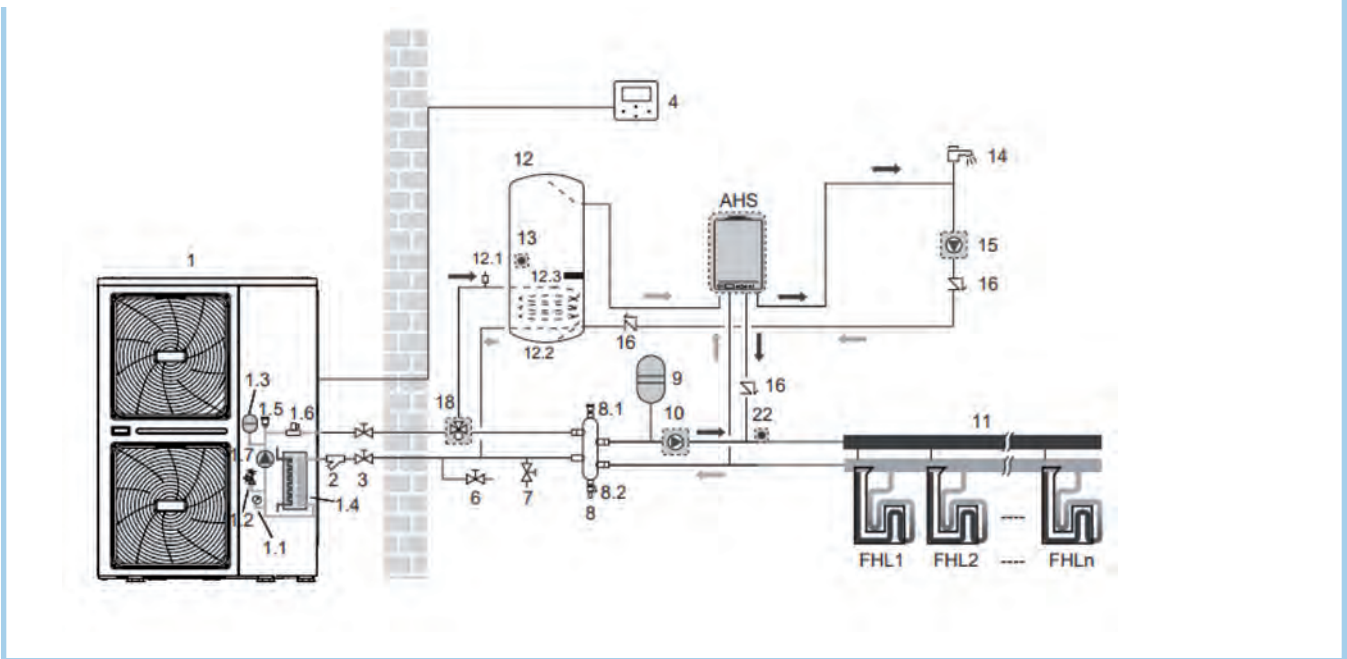
- Heating with fan coil units and floor heating
- DHW production
- DHW valve
- Shuttle valves
- Bypass valve

APPLICATION 5: Heating mode and DHW production with boiler integration

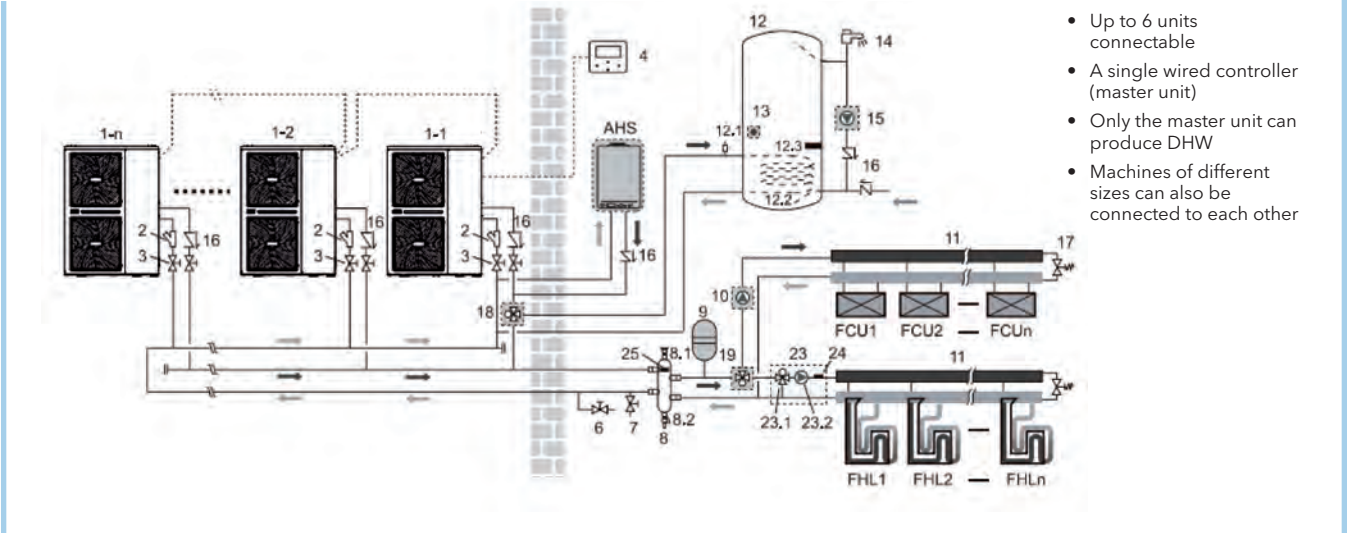


- Heating with floor heating
- DHW production (+ electric resistance)
- DHW valve
- Boiler integration, heating only
- Separator
- Optional mixing valve
- The boiler is responsible for a portion of the heating

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



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



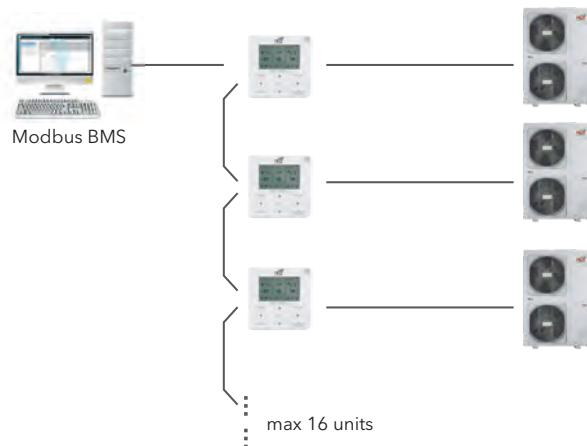
- Up to 6 units connectable
- A single wired controller (master unit)
- Only the master unit can produce DHW
- Machines of different sizes can also be connected to each other

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

INTEGRATED
Wi-Fi



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 performance coefficient | | SCOP | 4.53/3.23 | 4.50/3.15 | 4.20/3.15 |
| | Seasonal energy efficiency (ηs) | | % | 178/126 | 177/123 | 165/123 |
| | Energy efficiency class | | - | A+++/A++ | A+++/A+ | A++/A+ |
| | Annual energy consumption | | kWh/a | 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 | Refrigerant ¹ | 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 | | | | |
| 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 | 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.