
HOT
Green Power

HEAT PUMP MONOBLOC R290 50-70 KW

The new range of R290 modular heat pumps is ideal for cooling and heating in commercial and industrial buildings.

Available in capacities from 50 to 70 kW of thermal capacity, modularity is one of its most important advantages; in fact, it is possible to combine the three models up to 8 units, for a maximum of 560 kW of capacity.

Usable in single or cascade mode, it reaches up to 85°C of water flow temperature.

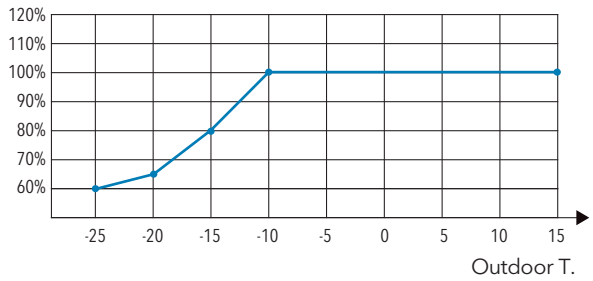
A+++

Energy Class in heating at 35°C

Maintaining power output

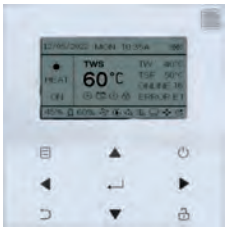
The unit is able to guarantee 100% of the power output in the presence of external temperatures down to -10°C.

Water delivery temperature 35°C



Controls

Control panel equipped with daily timer, weekly timer, compatible with Modbus protocol.



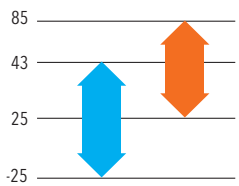
Operation range in Cooling and Heating

The wide operating range allows to satisfy all system requirements:

- hydronic terminals;
- floor heating.
- radiators;

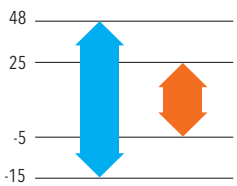
HEATING MODE

Operation from -25°C to 43°C.
Delivery temp. from 25°C to 85°C.



COOLING MODE

Operation from -15°C to 48°C.
Delivery temp. from -5°C to 25°C.

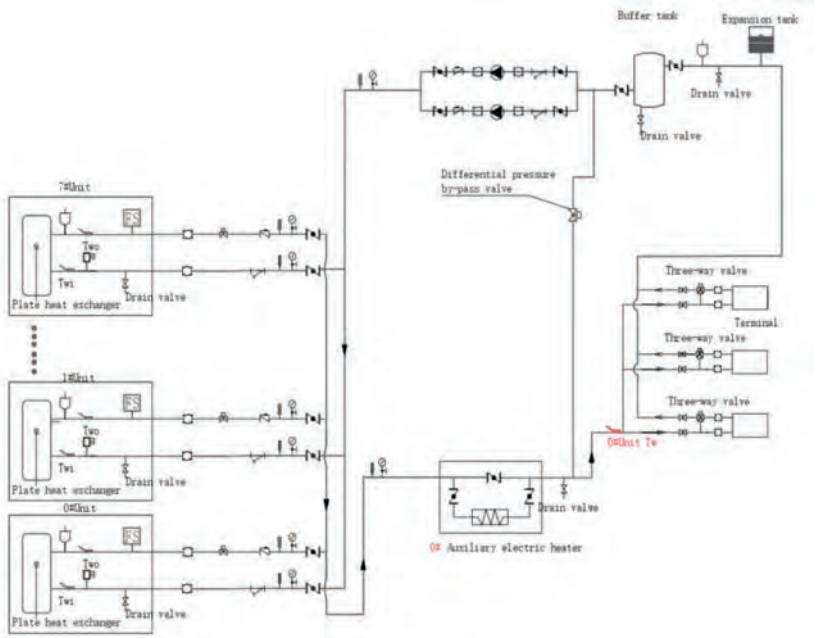


Outdoor air temperature
Water temperature

Cascade systems

The monoblocs can be connected in parallel for a maximum of 8 units and a total power of 560 kW. This makes the system ideal for commercial and industrial applications.

Example of cascade installation



Certifications

Quality Assurance ISO 9001

Environmental Management ISO 14001

Occupational Health and Safety Management ISO 45001

Technical specifications modular monobloc

ENERGY CLASS

A+++
In heating mode with **35° C** of water temperature in delivery.

A+++ (50-60 kW)
In heating mode with **55° C** of water temperature in delivery.

A++ (70 kW)
In heating mode with **55° C** of water temperature in delivery.

Model				GPCWSMS 5000 J	GPCWSMS 6000 J	GPCWSMS 7000 J
Heating	Rated power	A7//W35	kW	50.00	60.00	70,00
	Electrical consumption			10.64	13.95	17,50
	Coefficient of performance		COP	4.70	4.30	4,00
	Rated power	A7/W45	kW	50.00	60.00	70,00
	Electrical consumption			13.16	17.05	20,90
	Coefficient of performance		COP	3.80	3.52	3,35
Cooling	Rated power	A35//W18	kW	50.00	60.00	70,00
	Electrical consumption			10.42	13.33	16,87
	Energy efficiency		EER	4.80	4.50	4,15
	Rated power	A35//W7	kW	50.00	60.00	65,00
	Electrical consumption			15.15	20.00	23,21
	Energy efficiency		EER	3.00	3.00	2,80
Seasonal heating data	Theoretical load (Pdesignh) @ -10°C	35/55	kW	50.00/50.000	60.00/60.00	65,00/65,00
	Seasonal energy efficiency (ηs)		%	185/153	181/151	177/147,4
	Energy efficiency class		-	A+++/A+++	A+++/A+++	A+++/A++
	Annual energy consumption		kWh/y	21978/26324	26948/32176	29842/35694
Operation range	Outdoor air temperature	Heating	°C	-25~43		
		Cooling		-15~48		
	Delivery water temperature	Heating	°C	25~70 (25~85)1		
		Cooling		5~25		
Refrigerant circuit data	Refrigerant2		Type / kg	R290 / 2.8 x 2		
	Control system			Electronic expansion valve		
	Compressor		Type	DC Inverter EVI Scroll		
Hydraulic data	Heat exchanger	Type		Stainless steel with brazed plates		
		Flow rate	m^3/h	9.6~14.4		
	Circulation pump			NOT included		
	Water pipe connections	Type		Victaulic type grooved		
		Dimension	inches	2" (DN50)		
	Working pressure	Max	bar	6		
	Expansion vessel	Volume	L	Not included		
Electrical data	Power supply		Ph/V/Hz	3ph+N / 380~415V / 50Hz		
	Maximum current		A	70.00		
	Power cable	Recommended	Type	5x16 mm^2		
Product specifications	Fan	Type	q.ty	DC Inverter x 2		
		Air flow	m^3/h	28670		
	Sound power level	Max	dB(A)	80	84	87
	Sound pressure level at 1 m	Max	dB(A)	63	68	70
	Dimensions	WxDxH	mm	2000x960x1880		
	Weight	Net	kg	560		
	Control (supplied)			Wired remote control with Modbus connectivity		

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. In "High temperature" operating mode.
2. 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 0.02. Therefore, if 1 kg of this refrigerant were released into the atmosphere, the impact on global warming would be 50 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.