

MONOBLOC HEAT PUMP R290 8-40 KW

The reliable and cost-effective solution for residential and commercial applications.

The latest generation technology guarantees top-of-theline performance and energy savings.

COMPRESSORS

Twin Rotary for 8-16 kW units

It guarantees high efficiency, reliability and silence: thanks to the double rotation, it reduces vibrations and optimizes performance, ensuring precise power regulation.

It offers stable operation even at low temperatures, maximizing energy savings.

Scroll with EVI technology for 26-40 kW models

The 26-40 kW units are equipped with an R290 Inverter Scroll compressor with EVI (Enhanced Vapor Injection) technology, which allows medium pressure vapor injection into the compressor scroll.

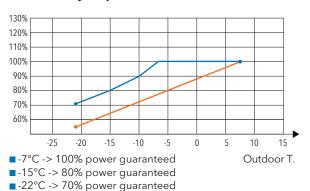
This innovation guarantees:

- higher delivery temperatures, ideal for high efficiency applications;
- greater yield even in harsh weather conditions;
- higher efficiency at low temperatures, optimising energy consumption.



Maintaining power output

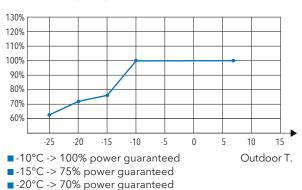
Models from 8 to 16 kW Water delivery temperature 35°C



Legend

—— Hot Green Power —— Other products

Models from 26 to 40 kW Water delivery temperature 55°C

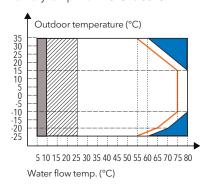


Wide operation in every mode 8-16 kW

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

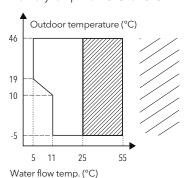
HEATING MODE

Operation from -25°C to 35°C. Delivery temp. from 25°C to 80°C.



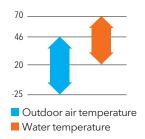
COOLING MODE

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



DHW PRODUCTION

Operation from -25°C to 46°C. Flow temp. for DHW from 20°C to 70°C.



The heat pump turns off, only the resistors turn 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

Maximum return temperature

MAX. GUARANTEED TEMPERATURE VALUES

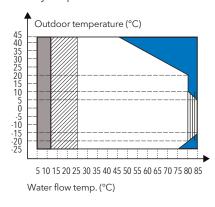
- ■-25/+35 -> max guaranteed flow temp. 60°C
- -20/+25 -> max guaranteed flow temp. 70°C
- ■-10/+15 -> max guaranteed flow temp. 80°C

Wide operation in every mode 26-40 kW

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

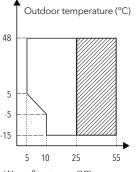
HEATING MODE

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



COOLING MODE

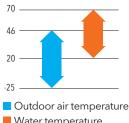
Operation from -15°C to 48°C. Delivery temp. from 5°C to 25°C.



Water flow temp. (°C)

DHW PRODUCTION

Operation from -25°C to 43°C. Flow temp. for DHW from 20°C to 75°C.



■ Water temperature

The heat pump turns off, only the resistors turn 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

A flow rate of 1.2 m3/h is required to operate under these conditions.

MAX. GUARANTEED TEMPERATURE VALUES

- -25/+25 -> max guaranteed flow temp. 75°C
- -20/+10 -> max guaranteed flow temp. 80°C
- ■-15/+5 -> max guaranteed flow temp. 85°C

HYDRAULIC ELEMENTS

Water circulation

All units are equipped with a circulator: max. **9 mca** and **12 mca** (meters of water column) respectively for single-fan and double-fan units.

They are also complete with:

- 3 bar safety valve;
- plate heat exchanger;
- threaded connections.

The 26-40 kW units are equipped with an integrated expansion vessel: 5 L volume and 8 bar pre-charge.

Controls

Control panel with large color display.

It is characterized by:

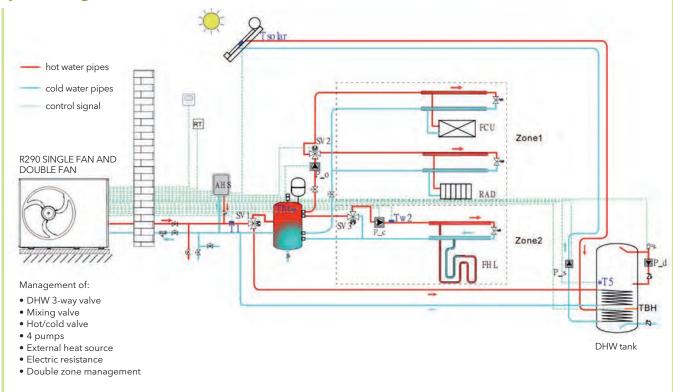
- liquid crystal display;
- touch keys;
- integrated Wi-Fi module as standard.

Compatible with Modbus protocol.

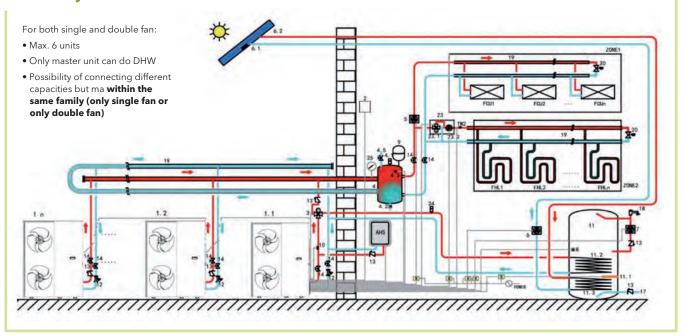
Control for both single and double fans.



System diagrams



Cascade systems



Technical specifications single fan monobloc

ENERGY CLASS

A+++

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



In heating mode with **55° C** of water temperature in delivery.



Model				GPCWNMS 800 J	GPCWNMS 1000 J	GPCWNMS 1200 J	GPCWNMS 1400 J	GPCWNMS 1600 J	GPCWSMS 800 J	GPCWSMS 1000 J	GPCWSMS 1200 J	GPCWSMS 1400 J	GPCWSMS 1600 J
Heating	Rated power	A7//W35	kW	8.00	9.50	12.10	14.00	15.50	8.00	9.50	12.10	14.00	15.50
	Electrical consumption			1.52	1.92	2.44	2.98	3.44	1.52	1.92	2.44	2.98	3.44
	Coefficient of performance		COP	5.25	4.95	4.95	4.70	4.50	5.25	4.95	4.95	4.70	4.50
	Rated power	A7/W45	1347	8.10	9.50	12.30	14.10	15.50	8.10	9.50	12.30	14.10	15.50
	Electrical consumption		kW	2.03	2.44	3.15	3.76	4.25	2.03	2.44	3.15	3.76	4.25
	Coefficient of performance		COP	4.00	3.90	3.90	3.75	3.65	4.00	3.90	3.90	3.75	3.65
Cooling	Rated power	A35//W18	kW	8.30	10.00	12.00	14.00	15.00	8.30	10.00	12.00	14.00	15.00
	Electrical consumption			1.58	2.17	2.61	3.18	3.53	1.58	2.17	2.61	3.18	3.53
	Energy efficiency		EER	5.25	4.60	4.60	4.40	4.25	5.25	4.60	4.60	4.40	4.25
	Rated power	A35//W7	kW	7.45	8.10	11.50	12.40	14.00	7.45	8.10	11.50	12.40	14.00
	Electrical consumption			2.22	2.61	3.77	4.13	5.19	2.22	2.61	3.77	4.13	5.19
	Energy efficiency		EER	3.35	3.10	3.05	3.00	2.70	3.35	3.10	3.05	3.00	2.70
Seasonal heating data	Theoretical load (Pdesignh) @ -10°C	7 1	kW	7.90/8.20	9.80/10.00	12.10/12.10	14.10/13.80	15.90/14.70	7.90/8.20	9.80/10.00	12.10/12.10	14.10/13.80	15.90/14.70
	Seasonal energy efficiency(ns)		%	211/159.6	210/157.5	194.5/155.4	187.5/151	185.6/151.5	211/159.6	210/157.5	194.5/155.4	187.5/151	185.6/151.5
	Energy efficiency class	35/55	-		A+++/A+++								
	Annual energy consumption	1	kWh/y	3051/4168	3802/5148	5064/6312	6118/7405	6966/7862	3051/4168	3802/5148		6118/7405	6966/7862
		Heating		-25~35									
	Outdoor air temperature	Cooling	°C		-5~46								
Operation range		DHW		-25~46									
	Delivery water temperature	Heating	%	25~80									
		Cooling	-(5~25									
	, ,	DHW		20~70									
D.C:	Refrigerant1 Type / k		Type / kg	R290 / 1.1 R290 / 1.5 R290 / 1.1 R290 / 1.5									
Refrigerant circuit data	Control system			Electronic expansion valve									
Udld	Compressor Type			Twin Rotary - DC Inverter									
	Heat avalence	Type					S	tainless steel w	ith brazed plate	25			
Hydraulic data	Heat exchanger	Flow rate	m³/h	0.4~1.65	0.4~2.1	0.7~2.5	0.7~2.75	0.7~3.0	0.4~1.65	0.4~2.1	0.7~2.5	0.7~2.75	0.7~3.0
	Circulation pump			Included									
	Type			Threaded									
	Water pipe connections	Dimension	inches	G1-1/4" BSP									
	Max working pressure bar			3									
	Expansion vessel			Not included									
Electrical data	Power supply Ph/V/Hz			1ph+N/220~240V/50Hz 3ph+N/380~415V/50Hz									
	Maximum current A		19.50 21.00 31.00				8.00 11.00						
	Power cable Recommended Type		Type	3x6 mm ² 5x2.5 mm ²									
Product specifications	Fan	Туре	q.ty	DC Inverter x 1									
		Air flow	m³/h	4680	4680	4780	4780	4780	4680	4680	4780	4780	4780
	Sound power level	ERP test	dB(A)	53	54	55	57	59	53	54	55	57	59
	Sound pressure level at 1 m	Max	dB(A)	40	41	43	46	49	40	41	43	46	49
	Dimensions	WxDxH	mm					1330x50)1x1051				
	Weight	Net kg			156 176 161 176								
	Control (supplied)			Wired remote control with integrated WiFi and 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. Refrigerant loss contributes to climate change. Refrigerants with a lower global warming potential (GWP) contribute less to global warming than those with a higher GWP when released into the atmosphere. 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.

Technical specifications double-fan monobloc

ENERGY CLASS

A+++ (26-30-35 kW)

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

A+++ (26 kW)

In heating mode with **55° C** of water temperature in delivery.

A++ (39 kW)

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

A++ (30-35-39 kW)

In heating mode with **55° C** of water temperature in delivery.



Model				GPCWSMS 2600 J	GPCWSMS 3000 J	GPCWSMS 3500 J	GPCWSMS 4000 J			
Heating	Rated power		114/	26.00	30.00	35.00	39.00			
	Electrical consumption	A7//W35	kW –	5.45	6.67	8.40	9.75			
	Coefficient of performance		COP	4.77	4.50	4.17	4.00			
	Rated power		1111	26.00	30.00	35.00	39.00			
	Electrical consumption	A7/W45	kW	6.82	8.26	10.05	11.90			
	Coefficient of performance		COP	3.81	3.63	3.48	3.28			
Cooling	Rated power		1147	26.00	30.00	35.00	39.00			
	Electrical consumption	A35//W18	kW	5.60	6.80	8.50	9.85			
	Energy efficiency		EER	4.64	4.41	4.12	3.96			
	Rated power	A35//W7	kW	26.00	30.00	32.00	32.00			
	Electrical consumption			8.40	10.70	11.98	11.98			
	Energy efficiency		EER	3.10	2.80	2.67	2.67			
Seasonal heating	Theoretical load (Pdesignh) @ -10°C	35/55	kW	26/26	30/30	35/35	39/39			
	Seasonal energy efficiency (ηs)		%	194.9/150.7	193.8/148.7	176.3/142.4	169.7/135.6			
	Energy efficiency class		-	A+++/A+++	A+++/A++	A+++/A++	A++/A++			
	Annual energy consumption	1	kWh/y	10856/13984	12600/16346	16131/19899	18665/23246			
Operation range	Outdoor air temperature	Heating	,	10030/13301	10005/25210					
		Cooling	%							
		DHW		-15~48 -25~43						
		Heating		25~85						
	Delivery water temperature	Cooling	%							
	beinely mater temperature	DHW		5~25 20~75						
Refrigerant circuit data	Refrigerant 1 Typ			R290 / 2.9						
	Control system			Electronic expansion valve						
	Compressor Typ			DC Inverter EVI Scroll						
Hydraulic data	<u> </u>	Type	.,,,,,		Stainless steel with brazed plates					
	Heat exchanger	Flow rate	m³/h	1.2-5.4	1.2-6.2	1,2~7,2	1.2~8.1			
	Circulation pump	110111010	,	112 311		uded	112 011			
			Threaded							
	Water pipe connections	Type Dimension	inches	G1" 1/4 M (DN32)						
	Working pressure	Max	bar	3						
	Expansion vessel	Volume	I							
	Power supply			5 3ph+N/380~415V/50Hz						
Electrical data	Power supply Ph/V/Hz Maximum current A			35.00						
				55.00 mm²						
Product specifications		Туре	q.ty	DC Inverter x 2						
	Fan	Air flow	m³/h	10500						
	Sound power level	ERP test	dB(A)	69	74	75	76			
	Sound pressure level at 1 m	Max	dB(A)	61	61	63	63			
	Dimensions	WxDxH	mm	1384x523x1861						
	Weight	Net	kg	260						
	Control (supplied)			Wired remote control with integrated WiFi and 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. Refrigerant leakage contributes to climate change. Refrigerants with a lower global warming potential (GWP) contribute less to global warming than those with a higher GWP when released into the atmosphere. 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.