

# SHP M PRO

MONOBLOC HEAT PUMPS AIR / WATER  
INVERTER WITH AXIAL FANS



## FULL INVERTER

Technology for scroll compressor, pump and fan



## REMOTE CONTROL

With Wi-Fi connectivity supplied as standard



## HERMETICALLY SEALED

Circuit to reduce F-Gas obligations for installer



## ANTI FREEZE RESISTORS

As standard for basement and plate exchanger



Reversible SHP M Pro air/water heat pumps are designed for residential and commercial applications, extremely versatile and designed for hot water production for heating and sanitary use up to a temperature of 65°C.

INVERTER brushless compressor technology, combined with electronic expansion valve and variable speed fans optimize consumption and refrigeration components operation efficiency.

The hermetically sealed refrigeration circuit, as defined by REG. EU no. 517/2014, allows installation and sale without a license and F-GAS obligations.

## TECHNICAL FEATURES

All units come standard with:

- ▶ HERMETICALLY SEALED as defined by EU Regulation No. 517/2014 (F-GAS).
- ▶ Twin rotary COMPRESSORS, DC inverter.
- ▶ Copper pipes and aluminum fins AIR EXCHANGERS.
- ▶ Brazed HEAT EXCHANGERS with cell insulation.
- ▶ 5 liter EXPANSION VESSEL integrated.
- ▶ Brushless high pressure CIRCULATORS.
- ▶ Variable speed FANS with low noise profile.
- ▶ ELECTRONIC EXPANSION VALVE.
- ▶ REVERSING VALVE with integrated defrost.
- ▶ ADVANCED ELECTRONICS with integrated climate control and complete system management.
- ▶ REMOTE CONTROL supplied as standard with Wi-Fi connectivity and dedicated App.
- ▶ ANTIFREEZE RESISTORS and plate exchanger supplied as standard.
- ▶ TANK PROBE for DHW storage or system management.
- ▶ Main heat exchanger and Y FILTER supplied as standard.

# TECHNICAL FEATURES

SHP M Pro			006	008	010	012	014	016	012T	014T	016T
Electrical data	Supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	380/3/50	380/3/50	380/3/50
	Maximum current consumption	A	13,0	14,5	16,0	25,0	26,5	28,0	9,5	10,5	11,5
Cooling	Cooling capacity <sup>[1]</sup> (nom/max <sup>[8]</sup> )	kW	6,5/9,27	8,3/10,41	10,0/10,38	12,2/16,51	13,9/16,51	15,4/16,51	12,2/16,51	13,9/16,51	15,4/16,51
	Power consumption <sup>[1]</sup>	kW	1,27	1,71	2,33	2,65	3,16	3,67	2,65	3,16	3,67
	EER <sup>[1]</sup>	W/W	5,1	4,85	4,30	4,60	4,40	4,20	4,60	4,40	4,20
	Cooling capacity <sup>[2]</sup> (nom/max <sup>[8]</sup> )	kW	5,5/6,92	7,40/8,72	9,0/9,58	11,6/14,13	13,4/15,48	14,0/16,01	11,6/14,13	13,4/15,48	14,0/16,01
	Power consumption <sup>[2]</sup> -	kW	1,69	2,35	3,10	3,74	4,57	4,83	3,74	4,57	4,83
	EER <sup>[2]</sup>	W/W	3,25	3,15	2,90	3,10	2,93	2,90	3,10	2,93	2,90
	SEER <sup>[5]</sup>		5,09	5,19	5,08	5,07	5,09	5,11	5,07	5,09	5,11
Heating	Thermal power <sup>[3]</sup> (nom/max <sup>[8]</sup> )	kW	6,5/8,47	8,40/9,56	10,0/11,2	12,2/14,4	14,1/16,4	16,0/18,6	12,2/14,4	14,1/16,4	16,0/18,6
	Power consumption <sup>[3]</sup>	kW	1,23	1,66	2,13	2,49	3,00	3,56	2,49	3,00	3,56
	COP <sup>[3]</sup>	W/W	5,3	5,05	4,70	4,90	4,70	4,50	4,90	4,70	4,50
	Thermal power <sup>[4]</sup> (nom/max <sup>[8]</sup> )	kW	6,60/8,14	8,50/9,28	10,2/10,9	12,5/14,5	14,5/16,7	16,2/19,1	12,5/14,5	14,5/16,7	16,2/19,1
	Power consumption <sup>[4]</sup>	kW	1,65	2,24	2,79	3,38	4,08	4,70	3,38	4,08	4,70
	COP <sup>[4]</sup>	W/W	4,00	3,80	3,65	3,70	3,55	3,45	3,70	3,55	3,45
	SCOP <sup>[6]</sup>		5,12	5,18	5,12	5,08	4,89	4,84	5,08	4,89	4,84
	Energy efficiency class (35°/55°)		A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Compressor	Type / Quantity	Twin Rotary DC Inverter / 1									
Fan motor	Type / Quantity	Motor DC Brushless / 1									
Refrigerant	Type / Quantity	kg	R32 / 1,25	R32 / 1,25	R32 / 1,25	R32 / 1,8	R32 / 1,8	R32 / 1,8	R32 / 1,8	R32 / 1,8	R32 / 1,8
	Quantity CO <sub>2</sub>	ton	0,85	0,85	0,85	1,22	1,22	1,22	1,22	1,22	1,22
Hydraulic circuit	Hydraulic connections		1" M	1" M	1" M	1 1/4" M	1 1/4" M	1 1/4" M	1 1/4" M	1 1/4" M	1 1/4" M
	Minimum volume of water	l	6,5	6,5	6,5	7	7	7	7	7	7
	Max working pressure	bar	3	3	3	3	3	3	3	3	3
Noise levels	Sound pressure <sup>[7]</sup>	dB(A)	60	63	65	70	72	72	70	72	72
Weights	Weights	kg	87 / 103	87 / 103	87 / 103	106 / 122	106 / 122	106 / 122	120 / 136	120 / 136	120 / 136

PERFORMANCES REFER TO THE FOLLOWING CONDITIONS:

- [1] COOLING: outdoor air temperature 35°C - water temperature in / out 23° / 18°C
- [2] COOLING: outdoor air temperature 35°C - water temperature in / out 12° / 7°C
- [3] HEATING: outdoor air temperature 7°C B.S. 6°C B.U. - Water inlet / outlet temperature 30° / 35°C
- [4] HEATING: outdoor air temperature 7°C B.S. 6°C B.U. - Water inlet / outlet temperature 40° / 45°C

[5] COOLING: water inlet/outlet temperature 7/12°C.

[6] HEATING: average climatic conditions, T<sub>biv</sub> = -7°C, water inlet/outlet temperature 30/35°C.

[7] SOUND POWER: condition heating mode [3]; value determined on the basis of measurements carried out in accordance with the UNI EN ISO 9614-2 standard, in compliance with the requirements of the Eurovent certification

[8] Activation of the maximum Hz function.

