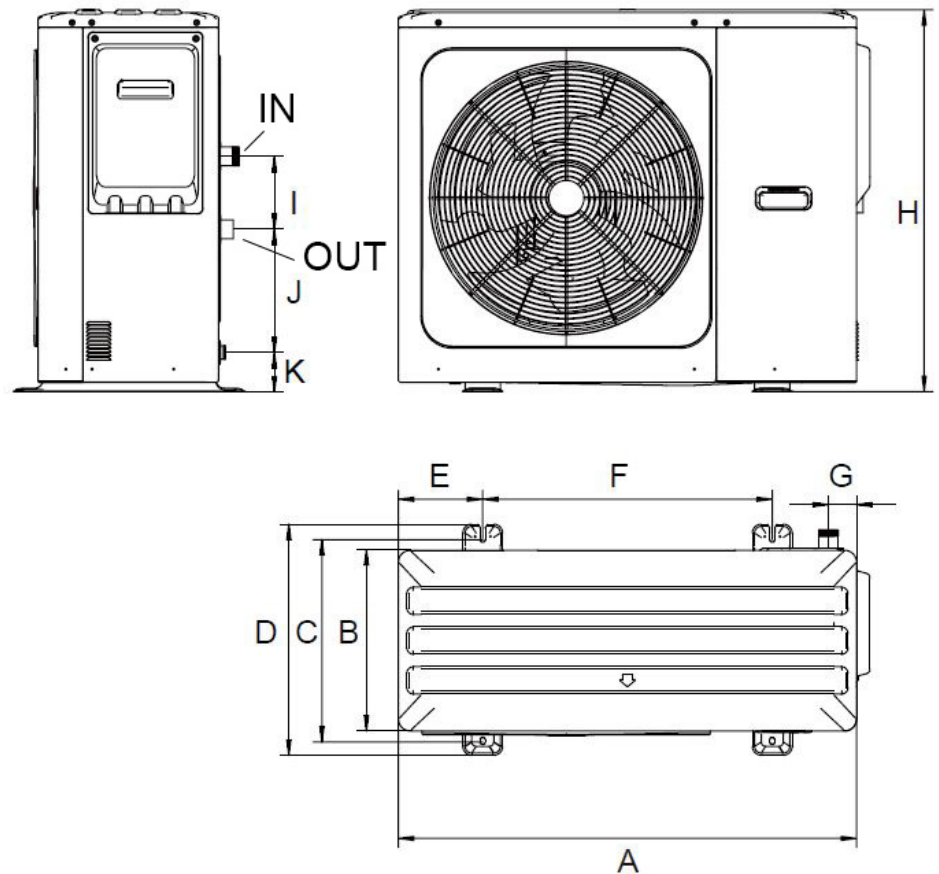


SHP M PRO series heat pumps have been designed for residential and commercial applications, they are extremely versatile and set up for heat pump operation with the production of hot water for space heating and DHW at temperatures up to 65°C.

All the units are equipped, as standard, with:

- a "hermetically sealed" coolant circuit containing eco-friendly R32 low GWP refrigerant gas
- an airtight twin rotary DC inverter compressor
- air exchangers made of copper pipes and aluminium fins
- a brazed stainless steel plate heat exchanger
- a modulating pump with a high efficiency brushless motor
- axial fans with an EC brushless motor
- an electronic expansion valve
- a cycle reversing valve
- an electronic system management module
- a standard remote control with room chronothermostat function and Wi-Fi connection for control via the dedicated App
- Exchanger and base anti-freeze heating elements

## OVERALL DIMENSIONS



A	B	C	D	E	F	G	H	I	J	K
1040	410	458	523	191	656	64	865	165	279	89

measurements in mm

Model		006	008	010	012	014	016	012T	014T	016T
Net weight	Kg	87			106			120		
Gross weight (with packaging)	Kg	103			122			136		

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans



## TECHNICAL DATA

TECHNICAL FEATURES		Unit	Model		
			006	008	010
Cooling	Cooling capacity (1) min/nom/max	kW	2.67 / 5.5 / 6.92*	2.64 / 7.40 / 8.72*	2.69 / 9.00 / 9.58*
	Power consumption (1)	kW	1.69	2.35	3.10
	E.E.R. (1)	W/W	3.25	3.15	2.90
	Cooling capacity (2) min/nom/max	kW	3.69 / 6.5 / 9.27*	3.72 / 8.3 / 10.41*	3.69 / 10.0 / 10.38*
	Power consumption (2)	kW	1.27	1.71	2.33
	E.E.R. (2)	W/W	5.1	4.85	4.30
	SEER (5)	W/W	5.09	5.19	5.08
	Water flow rate (1)	mc/h	1.12	1.44	1.72
	Exchanger load losses on the utility side (1)	kPa			
Heating	Heat output (3) min/nom/max	kW	2.98 / 6.5 / 8.47*	3.0 / 8.40 / 9.56*	3.00 / 10.0 / 11.2*
	Power consumption (3)	kW	1.23	1.66	2.13
	C.O.P. (3)	W/W	5.3	5.05	4.70
	Heat output (4) min/nom/max	kW	2.82 / 6.60 / 8.14*	2.85 / 8.50 / 9.28*	2.89 / 10.2 / 10.9*
	Power consumption (4)	kW	1.65	2.24	2.79
	C.O.P. (4)	W/W	4.00	3.80	3.65
	SCOP (6)	W/W	5.12	5.18	5.12
	Water flow rate (4)	mc/h	1.12	1.44	1.72
	Exchanger load losses on the utility side (4)	kPa			
	Energy efficiency water 35°C / 55°C	Class	A+++ / A++	A+++ / A++	A+++ / A++
Compressor	Type		Twin rotary DC		
	Number of compressors		1	1	1
	Coolant oil (type)		ESTER OIL VG75R		
	Coolant oil (quantity)	ml	620±15	620±15	620±15
	Coolant circuit		1	1	1
Coolant	Type		R32	R32	R32
	Q.ty of coolant (7)	kg	1.25	1.25	1.25
	Q.ty of coolant in tonnes of CO2 equivalent (7)	tonnes	0.85	0.85	0.85
Design pressure	(high/low) mod. heat pump	bar	43	43	43
	(high/low) mod. chiller	bar	43	43	43
External zone fans	Type		DC motor		
	Number		1	1	1
Internal exchanger	Internal exchanger type		Plate		
	No. of internal exchangers		1	1	1
	Water content	L	1.04	1.04	1.04
Expansion vessel	Volume	L	5		
	Max. operating pressure	bar	8	8	8
Flow switch		mc/h	0.36	0.36	0.36
Safety valve		bar	3	3	3
Hydraulic circuit	Available head (1)	kPa	83	73	66
	Water content in the hydronic circuit	L	6.5	6.5	6.5
	Maximum pressure on water side	bar	3	3	3
	Hydraulic connections	inch	G1" BSP	G1" BSP	G1" BSP
	Minimum water volume (8)	L	25	25	25
	Maximum power of pump	kW	95	95	95
	Max. power consumption of pump	A	0.75	0.75	0.75
Energy Efficiency Index (EEI) of pump		0.23	0.23	0.23	
Sound emissions	Sound power Lw (9)	dB(A)	60	63	65

## TECHNICAL DATA

TECHNICAL FEATURES		Unit	012	014	016
Cooling	Cooling capacity (1) min/nom/max	kW	4.77 / 11.6 / 14.13*	4.77 / 13.4 / 15.48*	4.77 / 14.0 / 16.01*
	Power consumption (1)	kW	3.74	4.57	4.83
	E.E.R. (1)	W/W	3.10	2.93	2.90
	Cooling capacity (2) min/nom/max	kW	6.72 / 12.2 / 16.51*	6.72 / 13.9 / 16.51*	6.72 / 15.4 / 16.51*
	Power consumption (2)	kW	2.65	3.16	3.67
	E.E.R. (2)	W/W	4.60	4.40	4.20
	SEER (5)	W/W	5.07	5.09	5.11
	Water flow rate (1)	mc/h	2.1	2.43	2.75
	Exchanger load losses on the utility side (1)	kPa			
Heating	Heat output (3) min/nom/max	kW	5.29 / 12.2 / 14.4*	5.48 / 14.1 / 16.4*	5.48 / 16.0 / 18.6*
	Power consumption (3)	kW	2.49	3.00	3.56
	C.O.P. (3)	W/W	4.90	4.70	4.50
	Heat output (4) min/nom/max	kW	5.25 / 12.5 / 14.5*	5.26 / 14.5 / 16.7*	5.26 / 16.2 / 19.1*
	Power consumption (4)	kW	3.38	4.08	4.70
	C.O.P. (4)	W/W	3.70	3.55	3.45
	SCOP (6)	W/W	5.08	4.89	4.84
	Water flow rate (4)	mc/h	2.1	2.43	2.75
	Exchanger load losses on the utility side (4)	kPa			
Energy efficiency water 35°C / 55°C	Class	A+++ / A++	A+++ / A++	A+++ / A++	
Compressor	Type		Twin rotary DC		
	Number of compressors		1	1	1
	Coolant oil (type)		ESTER OIL VG75R		
	Coolant oil (quantity)	ml	1000±15	1000±15	1000±15
Coolant	Coolant circuit		1	1	1
	Type		R32	R32	R32
	Q.ty of coolant (7)	kg	1.8	1.8	1.8
Flow switch	Q.ty of coolant in tonnes of CO2 equivalent (7)	tonnes	1.22	1.22	1.22
	Design pressure (high/low) mod. heat pump	bar	43	43	43
External zone fans	Design pressure (high/low) mod. chiller	bar	43	43	43
	Type		DC motor		
Internal exchanger	Number		1	1	1
	Internal exchanger type		Plate		
	No. of internal exchangers		1	1	1
Expansion vessel	Water content	L	1.37	1.37	1.37
	Volume	L		5	
Safety valve	Max. operating pressure	bar	8	8	8
	Flow switch	mc/h	0.6	0.6	0.6
Hydraulic circuit	Safety valve	bar	3	3	3
	Available head (1)	kPa	58	51	43
	Water content in the hydronic circuit	L	7	7	7
	Maximum pressure on water side	bar	3	3	3
	Hydraulic connections	inch	G1"1/4 BSP	G1"1/4 BSP	G1"1/4 BSP
	Minimum water volume (8)	L	40	40	40
	Maximum power of pump	kW	87	87	87
Sound emissions	Max. power consumption of pump	A	0.8	0.8	0.8
	Energy Efficiency Index (EEI) of pump		0.23	0.23	0.23
	Sound power Lw (9)	dB(A)	70	72	72

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans



## TECHNICAL DATA

TECHNICAL FEATURES		Unit	012T	014T	016T
Cooling	Cooling capacity (1) min/nom/max	kW	4.77 / 11.6 / 14.13*	4.77 / 13.4 / 15.48*	4.77 / 14.0 / 16.01*
	Power consumption (1)	kW	3.74	4.57	4.83
	E.E.R. (1)	W/W	3.10	2.93	2.90
	Cooling capacity (2) min/nom/max	kW	6.72 / 12.2 / 16.51*	6.72 / 13.9 / 16.51*	6.72 / 15.4 / 16.51*
	Power consumption (2)	kW	2.65	3.16	3.67
	E.E.R. (2)	W/W	4.60	4.40	4.20
	SEER (5)	W/W	5.07	5.09	5.11
	Water flow rate (1)	mc/h	2.1	2.43	2.75
	Exchanger load losses on the utility side (1)	kPa			
Heating	Heat output (3) min/nom/max	kW	5.29 / 12.2 / 14.4*	5.48 / 14.1 / 16.4*	5.48 / 16.0 / 18.6*
	Power consumption (3)	kW	2.49	3.00	3.56
	C.O.P. (3)	W/W	4.90	4.70	4.50
	Heat output (4) min/nom/max	kW	5.25 / 12.5 / 14.5*	5.26 / 14.5 / 16.7*	5.26 / 16.2 / 19.1*
	Power consumption (4)	kW	3.38	4.08	4.70
	C.O.P. (4)	W/W	3.70	3.55	3.45
	SCOP (6)	W/W	5.08	4.89	4.84
	Water flow rate (4)	mc/h	2.1	2.43	2.75
	Exchanger load losses on the utility side (4)	kPa			
	Energy efficiency water 35°C / 55°C	Class	A+++ / A++	A+++ / A++	A+++ / A++
Compressor	Type		Twin rotary DC		
	Number of compressors		1	1	1
	Coolant oil (type)		ESTER OIL VG75R		
	Coolant oil (quantity)	ml	1000±15	1000±15	1000±15
	Coolant circuit		1	1	1
Coolant	Type		R32	R32	R32
	Q.ty of coolant (7)	kg	1.8	1.8	1.8
	Q.ty of coolant in tonnes of CO2 equivalent (7)	tonnes	1.22	1.22	1.22
	Design pressure (high/low) mod. heat pump	bar	43	43	43
Design pressure (high/low) mod. chiller	bar	43	43	43	
External zone fans	Type		DC motor		
	Number		1	1	1
Internal exchanger	Internal exchanger type		Plate		
	No. of internal exchangers		1	1	1
	Water content	L	1.37	1.37	1.37
Expansion vessel	Volume	L	5		
	Max. operating pressure	bar	8	8	8
Flow switch		mc/h	0.6	0.6	0.6
Safety valve		bar	3	3	3
Hydraulic circuit	Available head (1)	kPa	58	51	43
	Water content in the hydronic circuit	L	7	7	7
	Maximum pressure on water side	bar	3	3	3
	Hydraulic connections	inch	G1"1/4 BSP	G1"1/4 BSP	G1"1/4 BSP
	Minimum water volume (8)	L	40	40	40
	Maximum power of pump	kW	87	87	87
	Max. power consumption of pump	A	0.8	0.8	0.8
Energy Efficiency Index (EEI) of pump		0.23	0.23	0.23	
Sound emissions	Sound power Lw (9)	dB(A)	70	72	72

## ELECTRICAL CHARACTERISTICS

Model	Outdoor unit				Power supply			Compressor		Probe	
	Voltage (V)	Hz	Min (V)	Max (V)	MCA (A)	TOCA (V)	MFA (A)	MSC (A)	RLA (A)	kW	FLA (A)
SHP M PRO 006	220~240	50	198	264	13	18	25	-	10.5	0.17	1.5
SHP M PRO 008	220~240	50	198	264	14.5	18	25	-	10.5	0.17	1.5
SHP M PRO 010	220~240	50	198	264	16	18	25	-	10.5	0.17	1.5
SHP M PRO 012	220~240	50	198	264	25	30	40	-	17	0.17	1.5
SHP M PRO 014	220~240	50	198	264	26.5	30	40	-	17	0.17	1.5
SHP M PRO 016	220~240	50	198	264	28	30	40	-	17	0.17	1.5
SHP M PRO 012T	220~240	50	342	456	9.5	14	16	-	16	0.17	0.7
SHP M PRO 014T	220~240	50	342	456	10.5	14	16	-	16	0.17	0.7
SHP M PRO 016T	220~240	50	342	456	11.5	14	16	-	16	0.17	0.7

RLA is based on the following conditions: indoor temperature. 27°CDB, 19°CWB; outdoor temperature 35°CDB

MSC indicates the maximum current during compressor start-up.

It is necessary to use MCA to select the correct wire cross-section. MCA can be considered as the maximum operating current.

MFA is used to select the automatic switch and the earth leakage breaker (circuit breaker).

TOCA indicates the total value of each OC set.

FLA: nominal operating current of the fan

### Performance related to the following conditions, according to Standard 14511:2018:

- (1) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 12/7°C.
- (2) Cooling: outdoor air temperature 35°C; inlet/outlet water temperature 23/18°C.
- (3) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; inlet/outlet water temp. 30/35°C.
- (4) Heating: outdoor air temperature 7°C d.b. 6°C w.b.; inlet/outlet water temp. 40/45°C.
- (5) Cooling: inlet/outlet water temperature 7/12°C.
- (6) Heating: average climate conditions; T<sub>biv</sub>=-7°C; inlet/outlet water temp. 30/35°C.
- (7) Indicative data which may be subject to change, For the correct data, always refer to the technical label on the unit.
- (8) Calculated for a decrease in system water temperature of 10°C with a defrost cycle lasting 6 minutes.
- (9) Sound power: heating mode according to condition (3); value determined on the basis of measurements made in accordance with Standard UNI EN ISO 9614-1, complying with Eurovent certification requirements.
- (10) LV cooling version: outdoor air temperature 35°C; inlet/outlet water temperature -3/-8°C. Fluid treated with 35% ethylene glycol

(\*) activating the maximum Hz function

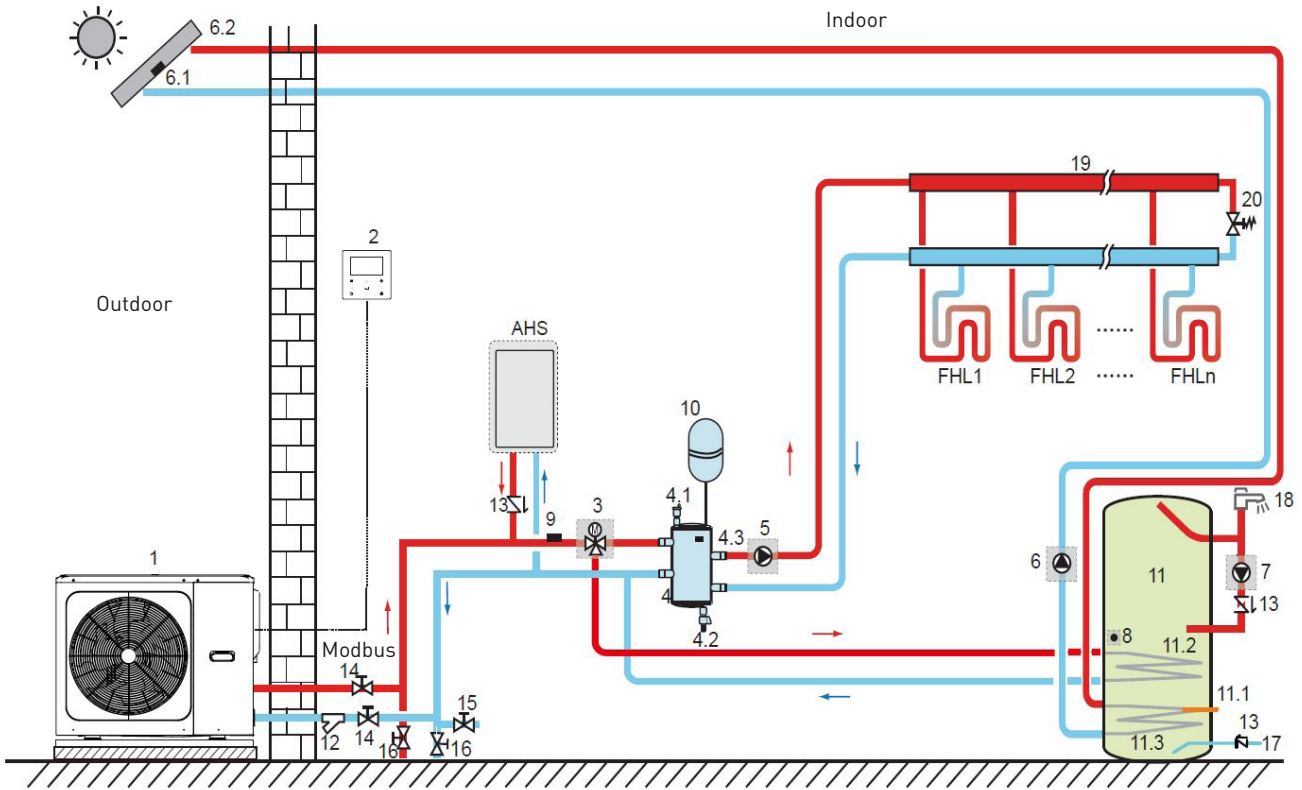
**N.B. the performance data given is indicative and may be subject to change. Moreover, the yields declared in points (1), (2), (3) and (4) refer to the instantaneous power according to Standard UNI EN 14511. The data declared in points (5) and (6) is determined according to Standard UNI EN 14825.**

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans

## STANDARD HYDRAULIC DIAGRAM - SPACE HEATING

All SHP M PRO units are equipped, as standard, with electronics capable of directly managing the following system diagrams. Refer to the use and maintenance manual for further information

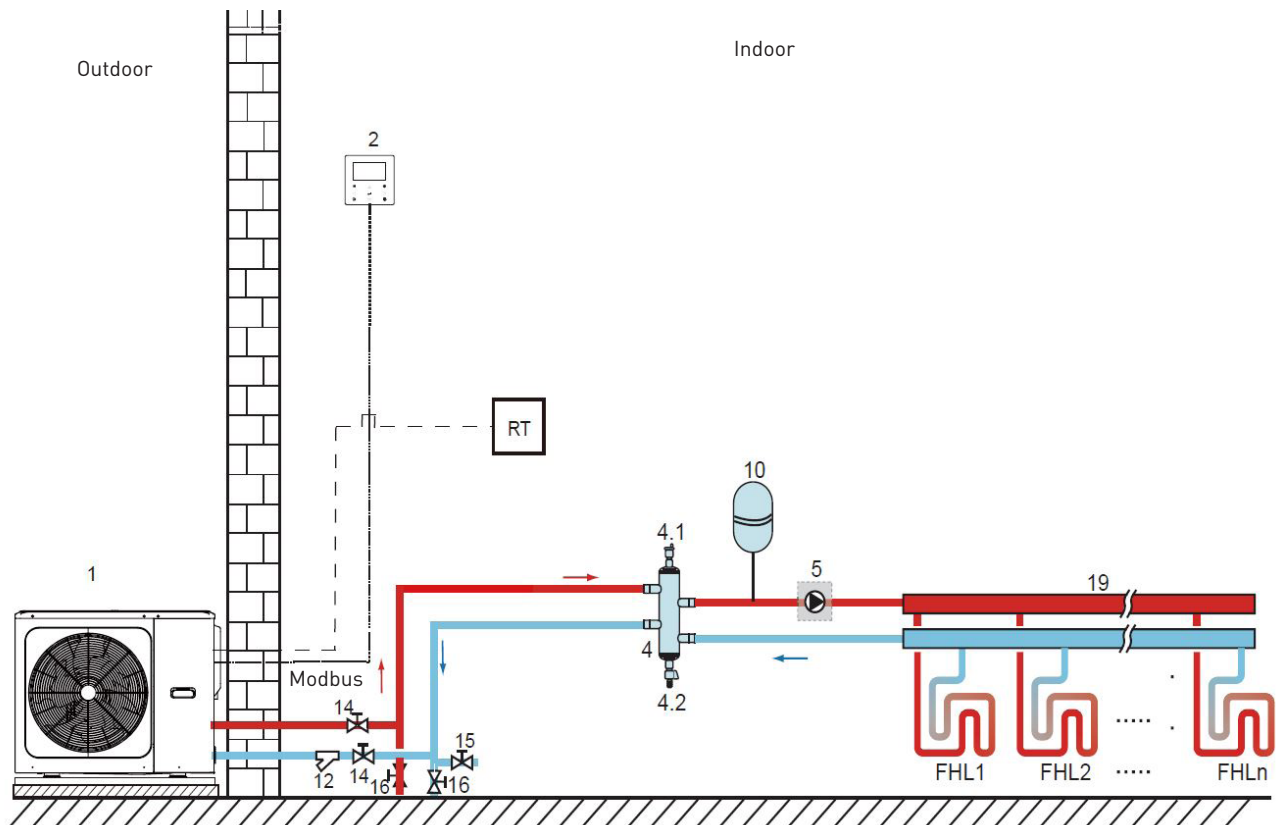


KEY	
1	Main unit
2	User interface
3	SV1: 3-way valve (Field supply)
4	Buffer tank (Field supply)
4.1	Automatic air bleeder valve
4.2	Discharge valve
4.3	Tbt: Buffer tank upper temperature sensor (optional)
5	P_o: External circulation pump (Field supply)
6	P_s: Solar pump (Field supply)
6.1	Tsolar: Solar temperature sensor (optional)

6.2	Solar panel (Field supply)
7	P_d: DHW piping pump (Field supply)
8	T5: DHW tank temperature sensor (accessory)
9	T1: Total water flow temperature sensor (optional)
10	Expansion vessel (Field supply)
11	DHW tank (Field supply)
11.1	TBH: DHW tank heater
11.2	Coil 1, heat exchanger for heat pump
11.3	Coil 2, heat exchanger for solar energy

12	Filter (accessory)
13	Control valve (Field supply)
14	Shut-off valve (Field supply)
15	Filling valve (Field supply)
16	Discharge valve (Field supply)
17	Tap water inlet pipe (Field supply)
18	Hot water tap (Field supply)
19	Manifold (Field supply)
20	Bypass valve (Field supply)
FHL 1..n	Underfloor heating circuit (Field supply)
AHS	Auxiliary heating source (Field supply)

## STANDARD HYDRAULIC DIAGRAM - 1 ZONE CONTROL



KEY	
1	Main unit
2	User interface
4	Buffer tank (Field supply)
4.1	Automatic air bleeder valve
4.2	Discharge valve

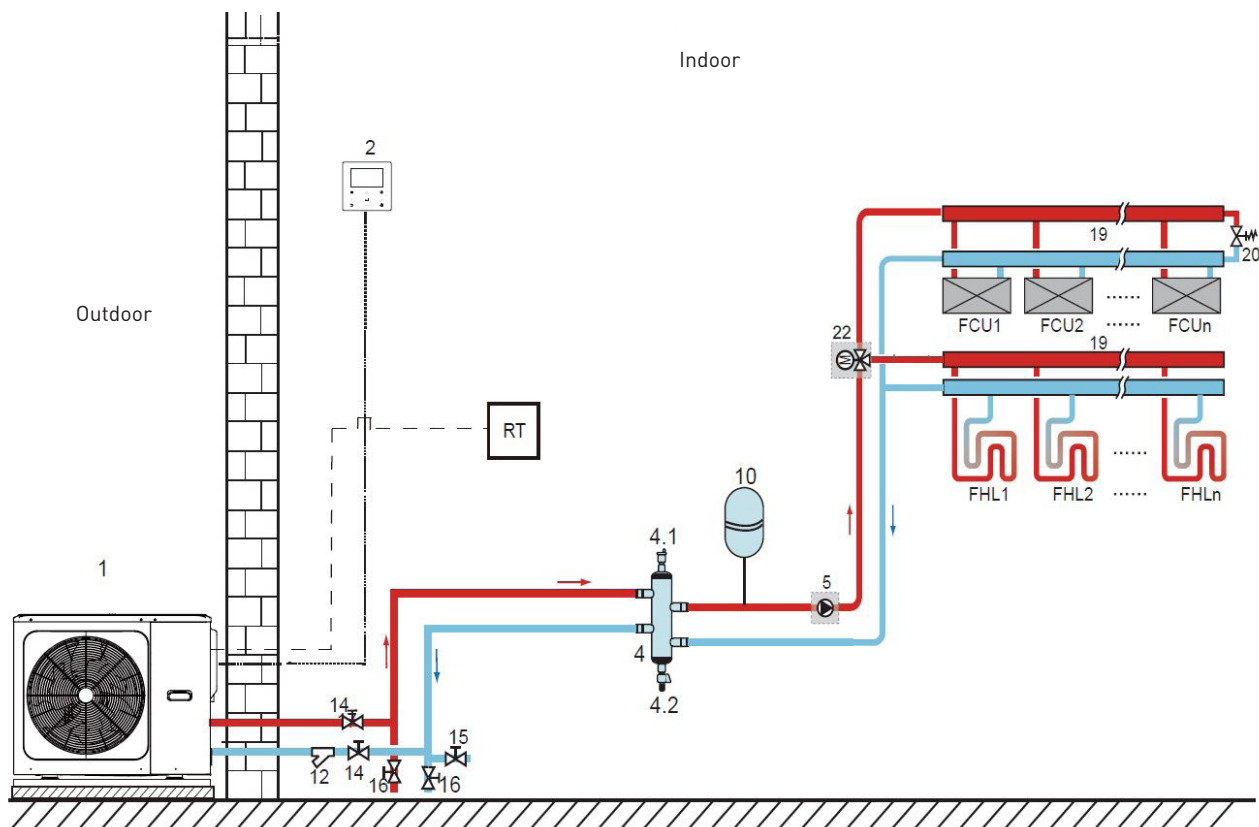
5	P <sub>o</sub> : External circulation pump (Field supply)
10	Expansion vessel (Field supply)
12	Filter (accessory)
14	Shut-off valve (Field supply)
15	Filling valve (Field supply)

16	Discharge valve (Field supply)
19	Manifold (Field supply)
RT	Low voltage room thermostat (Field supply)
FHL 1..n	Underfloor heating circuit (Field supply)

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans

## STANDARD HYDRAULIC DIAGRAM - MODE SETTING CONTROL



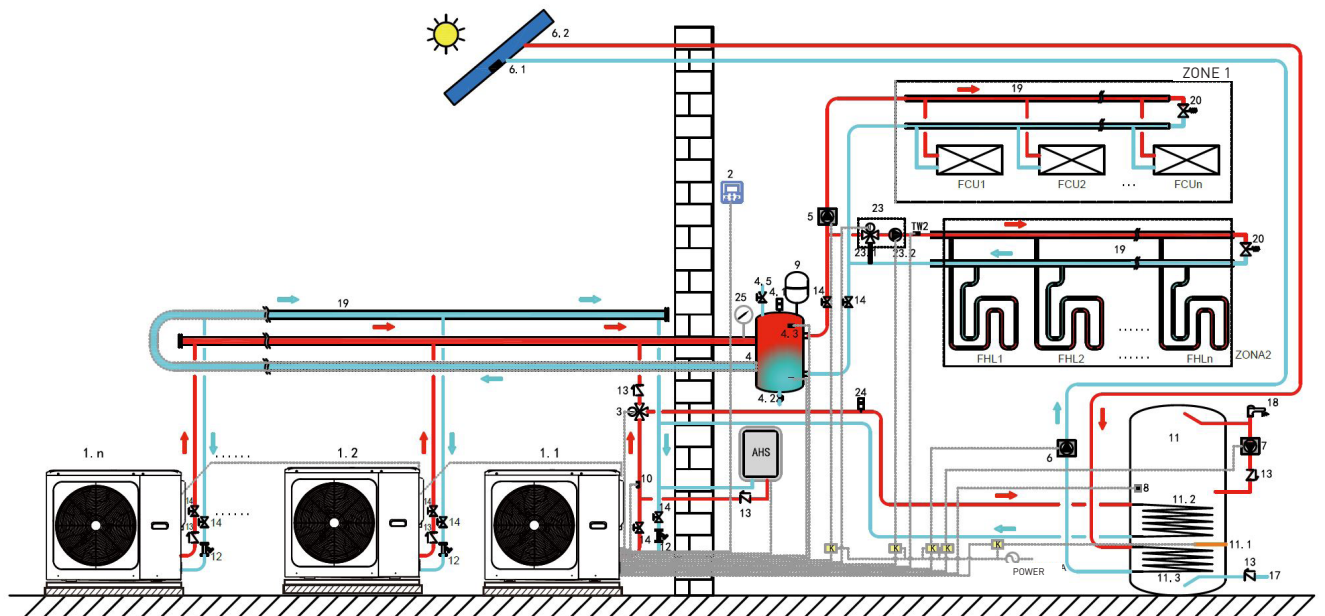
KEY	
1	Main unit
2	User interface
4	Buffer tank (Field supply)
4.1	Automatic air bleeder valve
4.2	Discharge valve

5	P_o: External circulation pump (Field supply)
10	Expansion vessel (Field supply)
12	Filter (accessory)
14	Shut-off valve (Field supply)
15	Filling valve (Field supply)
16	Discharge valve (Field supply)

19	Manifold/Distributor
20	Bypass valve (Field supply)
22	SV2: 3-way valve (Field supply)
RT	Low voltage room thermostat
FHL 1..n	Underfloor heating circuit (Field supply)
FCU 1..n	Fan coil unit (Field supply)



## STANDARD HYDRAULIC DIAGRAM - 2 ZONE CONTROL



KEY	
1	Main unit
2	User interface
4	Buffer tank (Field supply)
4.1	Automatic air bleeder valve
4.2	Discharge valve
5	P_o: External circulation pump (Field supply)
10	Expansion vessel (Field supply)

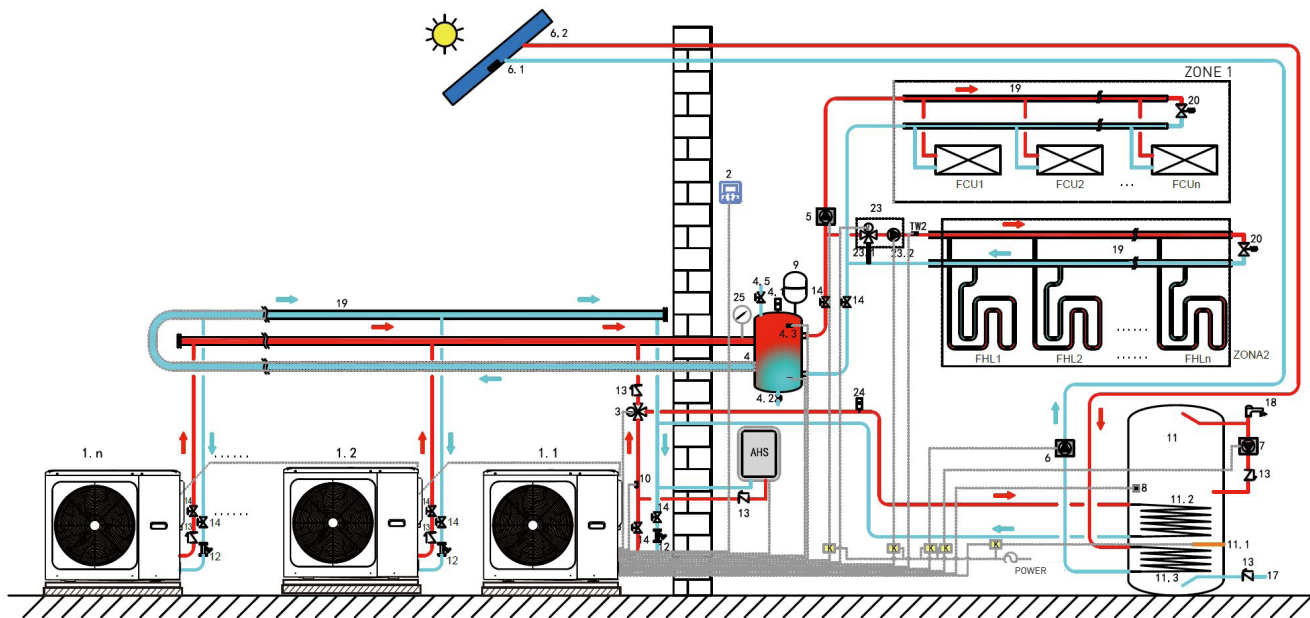
12	Filter (accessory)
14	Shut-off valve (Field supply)
15	Filling valve (Field supply)
16	Discharge valve (Field supply)
19	Manifold (Field supply)
20	Bypass valve (Field supply)
23	Mixing station (Field supply)
23.1	SV3: Mixing valve (Field supply)

23.2	P_C: Circulation pump (Field supply)
RT	Low voltage room thermostat (Field supply)
TW2	Zone 2 water delivery temperature sensor (optional)
FHL 1..n	Underfloor heating circuit (Field supply)
RAD 1..n	Radiator (Field supply)

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans

## STANDARD HYDRAULIC DIAGRAM - CASCADE SYSTEM

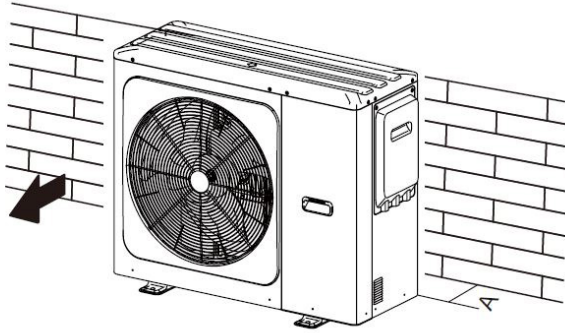


KEY	
1.1	Master unit
1.2...n	Slave unit
2	User interface
3	SV1: 3-way valve (Field supply)
4	Buffer tank (Field supply)
4.1	Automatic air bleeder valve
4.2	Discharge valve
4.3	Tbt: Buffer tank upper temperature sensor (optional)
4.5	Filling valve
5	P_0: External circulation pump (Field supply)
6.1	Tsolar: Solar temperature sensor (optional)
6.2	Solar panel (Field supply)
7	P_D: DHW piping pump (Field supply)

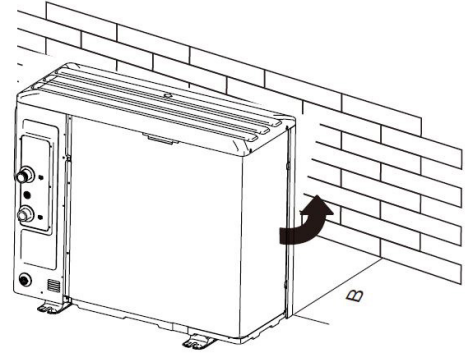
8	T5: DHW tank temperature sensor (accessory)
9	Expansion vessel (Field supply)
10	T1: Total water delivery temperature sensor (optional)
11	DHW tank (Field supply)
11.1	TBH: DHW tank heater
11.2	Coil 1, heat exchanger for heat pump
11.3	Coil 2, heat exchanger for solar energy
12	Filter (accessory)
13	Control valve (Field supply)
14	Shut-off valve (Field supply)
17	Tap water inlet pipe (Field supply)
18	Hot water tap (Field supply)
19	Manifold (Field supply)
20	Bypass valve (Field supply)

23	Mixing station (Field supply)
23.1	sV3: Mixing valve (Field supply)
23.2	P_C: Circulation pump (Field supply)
24	Automatic air bleeder valve (Field supply)
25	Water pressure gauge
TW2	Zone 2 water delivery temperature sensor (optional)
FCU 1..n	Fan coil unit (Field supply)
FHL 1..n	Underfloor heating circuit (Field supply)
K	Contacteur (Field supply)
ZONA1	The zone works in cooling or heating mode
ZONA2	The zone works in heating mode only
AHS	Auxiliary heating source (Field supply)

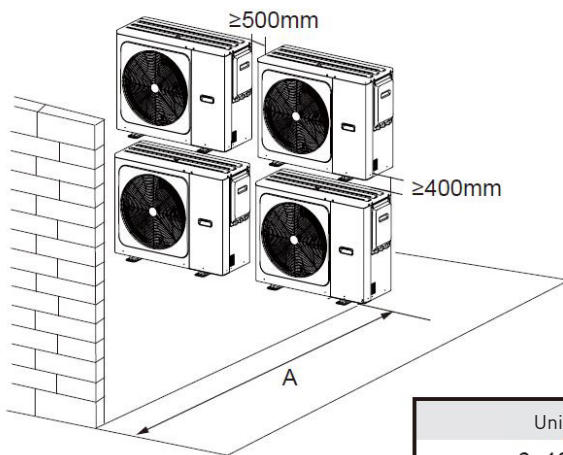
## RECOMMENDED SPACE FOR INSTALLATION, SERVICE AND MAINTENANCE



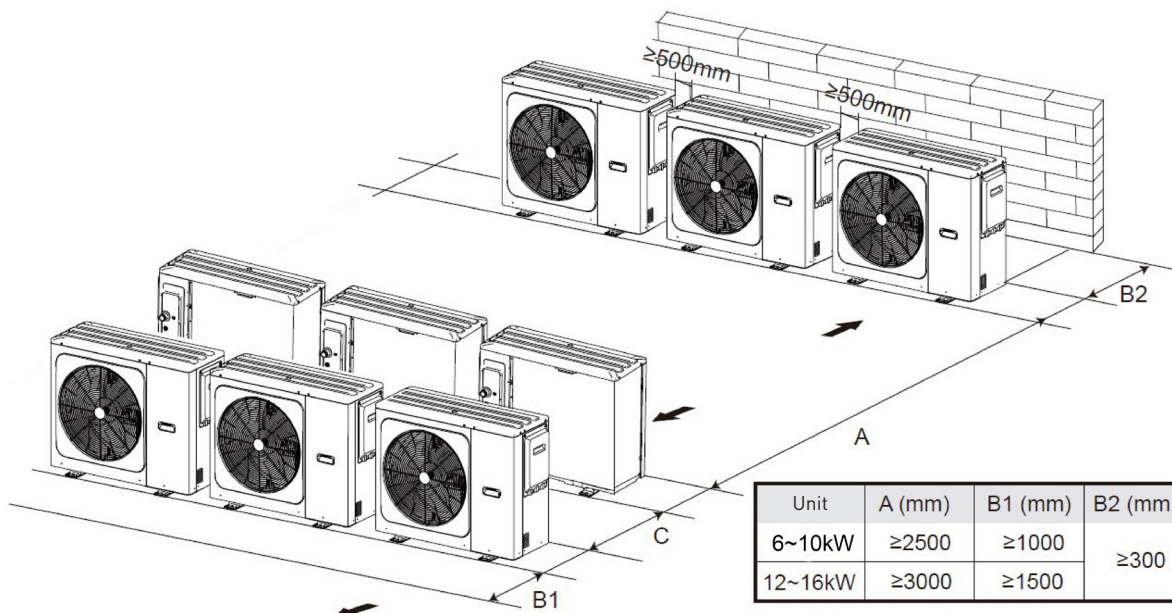
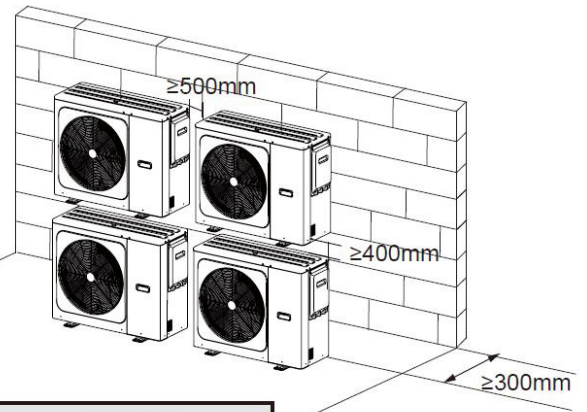
Unit	A (mm)
6~16kW	≥300



Unit	B(mm)
6~10kW	≥1000
12~16kW	≥1500



Unit	A (mm)
6~10kW	≥1000
12~16kW	≥1500



Unit	A (mm)	B1 (mm)	B2 (mm)	C (mm)
6~10kW	≥2500	≥1000	≥300	≥600
12~16kW	≥3000	≥1500	≥300	≥600

# SHP M PRO

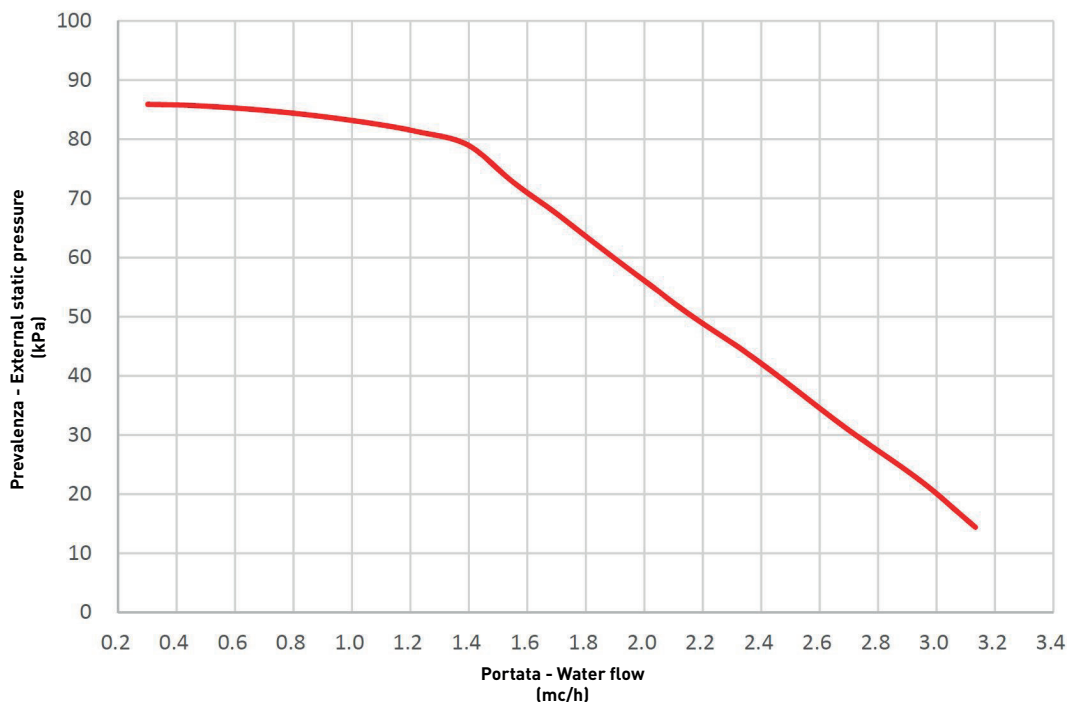
Air/water packaged inverter  
heat pumps with axial fans



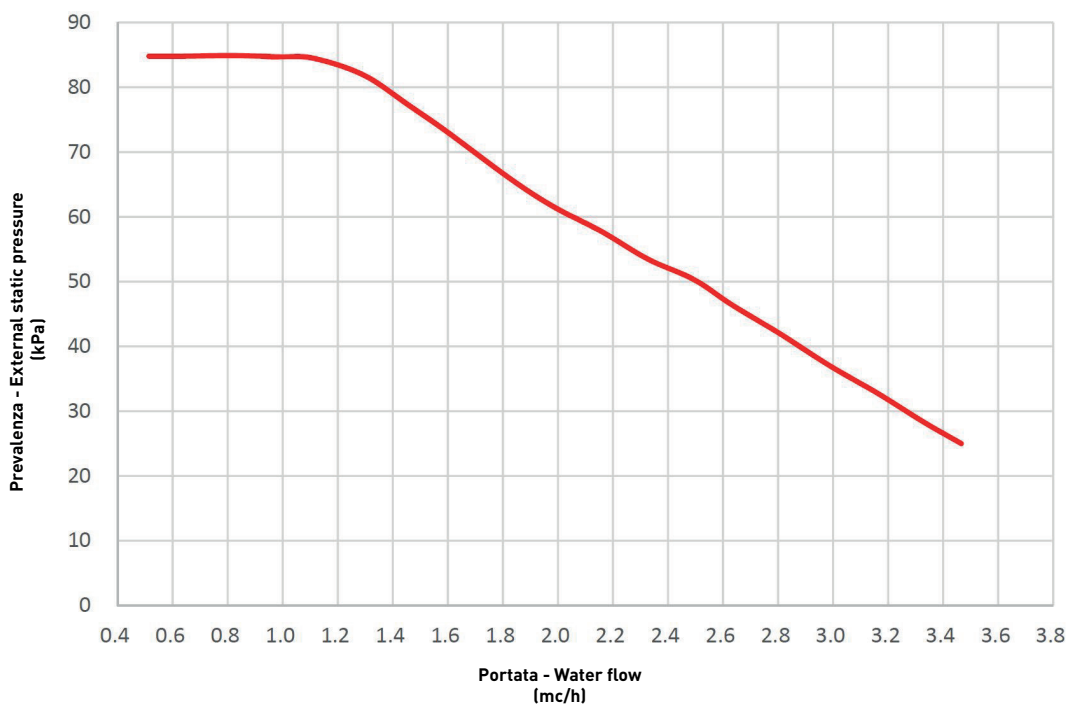
## AVAILABLE HEAD OF THE HYDRAULIC CIRCUIT

The characteristic head-flow rate curves net of pressure drops of the hydronic kit are shown below.

### SHP M PRO 006-008-010



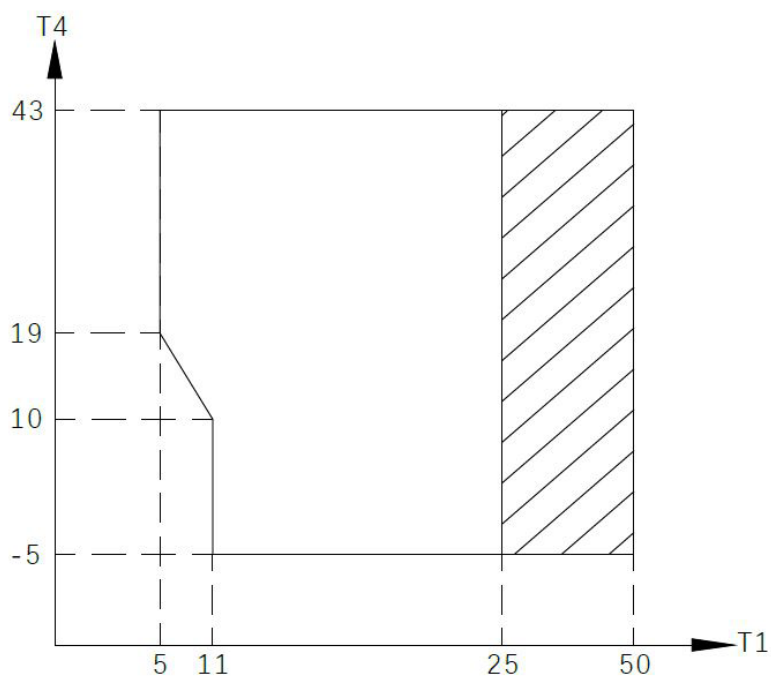
### SHP M PRO 012-014-016 and 012T-014T-016T




## OPERATING RANGE

Outlet water (Heating mode)		+15 ~ +65°C
Outlet water (Cooling mode)		+5 ~ +25°C
Domestic hot water		+15 ~ +60°C
Room temperature		-25 ~ +43°C
Water pressure		0.1~0.3MPa
Water flow rate	6 kW	0.40~1.25m <sup>3</sup> /h
	8 kW	0.40~1.65m <sup>3</sup> /h
	10 kW	0.40~2.10m <sup>3</sup> /h
	12 kW	0.70~2.50m <sup>3</sup> /h
	14 kW	0.70~2.75m <sup>3</sup> /h
	16 kW	0.70~3.00m <sup>3</sup> /h

In cooling mode, the temperature range of the flowing water (T1) at different outdoor temperatures (T4) is listed below:

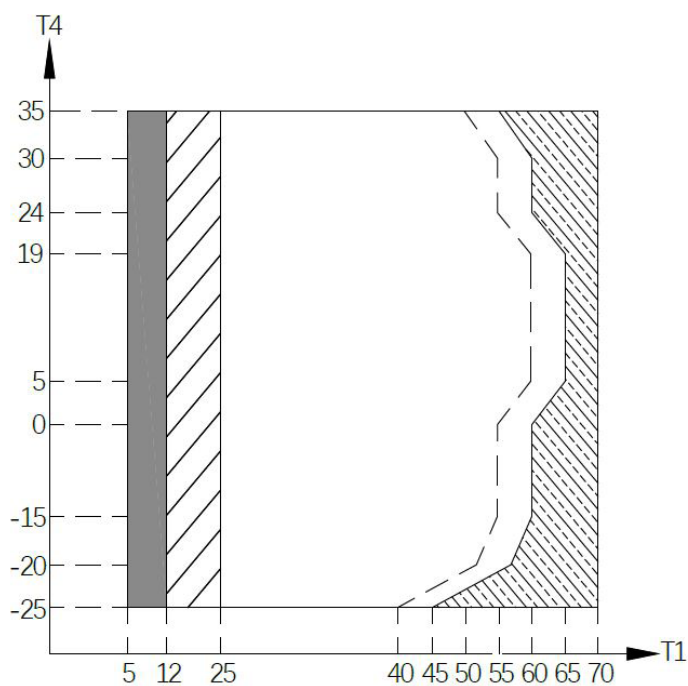



 Operating range with heat pump with possible limitation and protection.


# SHP M PRO


Air/water packaged inverter  
heat pumps with axial fans


In heating mode, the temperature range of the flowing water (T1) at different room temperatures (T4) is listed below:



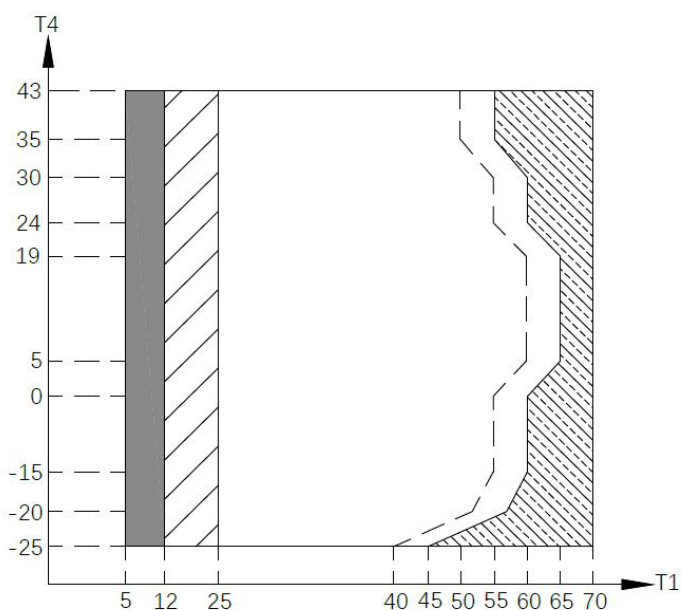
 If the IBH/AHS setting is valid, only IBH/AHS turns on; if the IBH/AHS setting is not valid, only the heat pump turns on; cases of limitation and protection may occur during heat pump operation.


 Operating range with heat pump with possible limitation and protection.


 The heat pump turns off, only IBH/AHS turns on. (IBH can heat the water up to 65°C, AHS can heat the water up to 70°C)


 Maximum inlet water temperature line for heat pump operation.


In DHW mode, the temperature range of the flowing water (T1) at different outdoor temperatures (T4) is listed below:



 If the IBH/AHS setting is valid, only IBH/AHS turns on; if the IBH/AHS setting is not valid, only the heat pump turns on; cases of limitation and protection may occur during heat pump operation.

 Operating range with heat pump with possible limitation and protection.

 The heat pump turns off, only IBH/AHS turns on. (IBH can heat the water up to 65°C, AHS can heat the water up to 70°C)

 Maximum inlet water temperature line for heat pump operation.

## PERFORMANCE TABLE - HEATING

The tables show the capacity, power consumption and efficiency values for different outdoor air temperatures. The data given is calculated according to Standard EN 14511:2018. It is indicative and may be subject to change.

### SHP M PRO 006 - HEATING

DB	LWT																										
	25			30			35			40			45			50			55			60			65		
	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP
-25	3.92	1.59	2.46	3.89	1.69	2.30	3.86	1.80	2.14	3.60	2.05	1.76	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
-20	4.76	1.73	2.75	4.72	1.84	2.56	4.68	1.97	2.38	4.57	2.24	2.04	4.51	2.39	1.89	1.74	/	/	/	/	/	/	/	/	/	/	
-15	5.70	1.85	3.08	5.65	1.98	2.85	5.59	2.12	2.64	5.45	2.42	2.25	5.37	2.58	2.08	1.93	3.31	1.86	1.78	/	/	/	/	/	/	/	
-10	6.47	1.84	3.51	6.53	2.03	3.21	6.24	2.10	2.97	6.13	2.45	2.50	6.00	2.61	2.30	2.14	5.51	2.80	1.97	/	/	/	/	/	/	/	
-7	6.54	1.73	3.79	6.55	1.90	3.45	6.26	1.97	3.17	6.33	2.20	2.88	6.10	2.35	2.60	2.42	5.70	2.65	2.15	2.84	2.08	/	/	/	/	/	
-5	6.69	1.61	4.15	6.58	1.79	3.67	6.32	1.89	3.35	6.67	2.22	3.01	6.30	2.27	2.77	6.12	2.42	2.53	2.61	2.19	/	/	/	/	/	/	
-2	6.57	1.47	4.47	6.49	1.62	4.00	6.11	1.68	3.64	6.64	2.06	3.22	6.40	2.18	2.93	6.34	2.38	2.66	2.52	2.48	2.28	/	/	/	/	/	
0	6.50	1.37	4.76	6.50	1.54	4.21	5.94	1.56	3.80	6.56	1.95	3.36	6.41	2.12	3.02	6.36	2.32	2.74	2.41	2.56	2.33	/	/	/	/	/	
2	6.62	1.31	5.07	6.58	1.48	4.44	5.60	1.33	4.20	6.58	1.87	3.52	6.50	2.06	3.15	6.37	2.24	2.85	2.25	2.80	2.40	/	/	/	/	/	
5	6.56	1.08	6.10	6.54	1.23	5.31	6.51	1.40	4.65	6.59	1.61	4.10	6.50	1.78	3.65	6.31	1.94	3.26	2.18	3.01	2.40	2.72	5.09	2.17	2.35		
7	6.58	0.98	6.71	6.53	1.14	5.73	6.50	1.23	5.30	6.54	1.50	4.35	6.60	1.65	4.00	6.22	1.81	3.43	2.00	3.20	2.83	2.24	2.83	5.17	2.13	2.43	
10	6.52	0.84	7.78	6.55	1.01	6.49	6.55	1.18	5.53	6.63	1.39	4.78	6.62	1.58	4.18	6.02	1.70	3.55	1.86	3.38	3.02	2.00	3.02	5.33	2.07	2.57	
12	6.48	0.75	8.68	6.58	0.93	7.09	6.50	1.09	5.98	6.58	1.29	5.12	6.61	1.49	4.44	5.95	1.55	3.85	1.72	3.51	3.15	1.93	3.15	5.38	2.01	2.68	
15	6.59	0.66	10.0	6.56	0.81	8.12	6.60	0.98	6.74	6.48	1.14	5.68	6.43	1.32	4.86	5.88	1.39	4.23	1.60	3.69	3.36	1.76	3.36	5.51	1.94	2.84	
20	6.43	0.56	11.5	6.57	0.71	9.25	6.50	0.85	7.67	6.46	1.02	6.32	6.42	1.17	5.48	6.08	1.33	4.57	1.39	4.08	3.80	1.47	3.80	/	/	/	
25	6.51	0.52	12.6	6.37	0.60	10.7	6.66	0.77	8.67	6.09	0.87	6.99	6.12	1.03	5.94	6.11	1.25	4.89	1.26	4.25	4.05	1.51	4.05	/	/	/	
30	/	/	/	6.48	0.56	11.6	6.29	0.66	9.52	6.31	0.77	8.20	6.21	0.92	6.73	5.48	1.02	5.38	1.02	4.95	4.69	1.50	4.69	/	/	/	
35	/	/	/	/	/	/	6.27	0.58	10.8	5.99	0.63	9.55	5.93	0.74	8.00	5.15	0.84	6.14	0.91	5.52	/	/	/	/	/	/	

LWT: Leaving water temperature (°C)

DB: Dry bulb temperature for Outdoor air temperature (°C)

HC: Total heating capacity (kW)

PI: Power input (kW)

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans



## SHP M PRO 008 - HEATING

DB	LWT																										
	25			30			35			40			45			50			55			60			65		
	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP
-25	4.26	1.80	2.37	4.23	1.91	2.22	4.19	2.02	2.07	4.15	2.15	1.93	3.90	2.27	1.72	/	/	/	/	/	/	/	/	/	/	/	/
-20	5.17	1.96	2.64	5.12	2.08	2.46	5.08	2.22	2.29	5.02	2.36	2.13	4.96	2.48	2.00	4.89	2.67	1.83	3.25	1.89	1.72	/	/	/	/	/	/
-15	6.20	2.09	2.96	6.14	2.23	2.75	6.07	2.39	2.54	6.00	2.55	2.35	5.92	2.69	2.20	5.82	2.90	2.01	5.72	2.99	1.91	3.59	2.04	1.76	/	/	/
-10	7.35	2.20	3.34	7.28	2.36	3.08	6.94	2.43	2.86	6.91	2.64	2.62	6.69	2.76	2.42	6.51	2.92	2.23	6.49	3.29	1.97	5.87	2.99	1.96	/	/	/
-7	7.84	2.15	3.64	7.75	2.32	3.34	7.10	2.25	3.15	7.13	2.52	2.83	6.80	2.72	2.50	6.78	2.85	2.38	6.60	3.14	2.10	6.31	3.05	2.07	/	/	/
-5	8.28	2.15	3.85	8.19	2.33	3.52	7.10	2.16	3.29	7.14	2.39	2.99	7.17	2.64	2.72	6.88	2.76	2.49	6.96	2.99	2.33	6.26	2.90	2.16	/	/	/
-2	8.34	1.99	4.19	8.40	2.22	3.78	7.12	2.02	3.53	6.84	2.14	3.20	7.54	2.64	2.86	7.05	2.69	2.62	7.30	2.99	2.44	6.54	2.91	2.25	/	/	/
0	8.34	1.89	4.42	8.40	2.12	3.96	7.24	1.97	3.67	7.29	2.22	3.29	7.66	2.60	2.95	7.17	2.67	2.69	7.58	3.06	2.48	6.56	2.88	2.28	/	/	/
2	8.40	1.78	4.71	8.47	2.02	4.19	7.10	1.80	3.95	7.28	2.11	3.45	7.50	2.46	3.05	7.29	2.61	2.79	7.60	2.81	2.70	6.95	2.93	2.37	/	/	/
5	8.55	1.50	5.70	8.47	1.68	5.03	7.94	1.76	4.52	8.09	2.02	4.01	8.56	2.42	3.53	8.17	2.57	3.18	7.46	2.70	2.76	7.73	2.88	2.68	5.31	2.26	2.35
7	8.40	1.32	6.38	8.32	1.51	5.52	8.40	1.66	5.05	8.34	1.96	4.26	8.50	2.24	3.80	8.27	2.47	3.35	8.20	2.60	3.15	7.95	2.84	2.80	5.39	2.22	2.43
10	8.47	1.15	7.38	8.25	1.32	6.24	8.47	1.57	5.38	8.31	1.77	4.69	8.62	2.10	4.11	8.02	2.29	3.50	8.07	2.42	3.34	8.14	2.71	3.00	5.60	2.18	2.57
12	8.09	0.98	8.26	8.45	1.25	6.77	8.39	1.44	5.81	8.49	1.70	5.00	8.58	1.97	4.36	7.85	2.07	3.79	8.23	2.40	3.43	8.13	2.60	3.13	5.66	2.11	2.68
15	8.36	0.87	9.65	8.45	1.09	7.74	8.37	1.29	6.51	8.20	1.48	5.55	8.58	1.80	4.76	7.76	1.87	4.16	8.39	2.30	3.64	7.84	2.35	3.33	5.78	2.04	2.84
20	8.30	0.76	10.89	8.15	0.93	8.72	8.45	1.16	7.27	8.10	1.32	6.13	8.15	1.52	5.35	8.13	1.82	4.47	7.82	1.95	4.01	7.36	1.96	3.76	/	/	/
25	6.51	0.52	12.57	8.52	0.89	9.57	8.33	1.04	8.00	7.63	1.15	6.63	7.56	1.32	5.73	7.91	1.67	4.74	7.15	1.67	4.29	7.18	1.76	4.07	/	/	/
30	/	/	/	/	0.84	10.25	8.26	0.96	8.62	7.83	1.02	7.70	8.03	1.24	6.49	7.15	1.38	5.20	7.57	1.59	4.75	7.09	1.61	4.41	/	/	/
35	/	/	/	/	/	/	8.09	0.87	9.35	7.55	0.89	8.48	7.64	1.03	7.40	6.73	1.15	5.83	8.46	1.66	5.09	/	/	/	/	/	/

LWT: Leaving water temperature [°C]

DB: Dry bulb temperature for Outdoor air temperature [°C]

HC: Total heating capacity (kW)

PI: Power input (kW)



## SHP M PRO 010 - HEATING

DB	LWT																												
	25			30			35			40			45			50			55			60			65				
	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP		
-25	4.40	1.86	2.36	4.37	1.98	2.21	4.41	2.15	2.05	1.92	2.28	4.37	2.28	1.92	2.97	1.72	1.73	/	/	/	/	/	/	/	/	/	/	/	
-20	5.34	2.04	2.62	5.30	2.17	2.44	5.33	2.35	2.27	2.11	2.50	5.28	2.50	2.11	5.22	2.66	1.96	5.15	2.83	1.82	3.44	2.01	1.71	/	/	/	/	/	
-15	6.61	2.27	2.91	6.55	2.43	2.70	6.48	2.59	2.50	2.32	2.76	6.41	2.76	2.32	6.33	2.96	2.14	6.23	3.13	1.99	6.12	3.24	1.89	3.69	2.11	1.75	/	/	
-10	7.84	2.40	3.27	7.76	2.57	3.02	7.68	2.76	2.78	2.56	2.96	7.58	2.96	2.56	6.99	2.99	2.34	7.11	3.25	2.19	6.92	3.43	2.02	6.48	3.34	1.94	/	/	
-7	8.65	2.45	3.53	8.50	2.62	3.25	8.00	2.67	3.00	2.78	2.81	7.81	2.81	2.78	7.40	3.08	2.40	7.43	3.18	2.34	7.20	3.51	2.05	6.98	3.40	2.05	/	/	
-5	8.94	2.38	3.75	8.92	2.61	3.42	8.31	2.54	3.27	2.90	2.67	7.73	2.67	2.90	7.55	2.80	2.70	7.61	3.09	2.46	7.40	3.29	2.25	7.14	3.35	2.13	/	/	
-2	9.47	2.34	4.05	9.36	2.56	3.66	8.36	2.38	3.51	3.13	2.56	8.00	2.56	3.13	7.86	2.77	2.84	7.85	3.04	2.58	7.77	3.31	2.35	7.34	3.31	2.22	/	/	
0	9.69	2.30	4.22	9.58	2.51	3.82	8.44	2.31	3.65	3.23	2.52	8.15	2.52	3.23	8.17	2.80	2.92	8.16	3.08	2.65	7.91	3.28	2.41	7.45	3.28	2.27	/	/	
2	10.1	2.26	4.48	10.0	2.47	4.05	8.20	2.16	3.80	3.36	2.55	8.56	2.55	3.36	8.50	2.88	2.95	8.39	3.06	2.74	8.40	3.17	2.65	7.63	3.26	2.34	/	/	
5	10.2	1.94	5.28	9.95	2.23	4.46	9.56	2.24	4.27	3.86	2.42	9.34	2.42	3.86	10.0	2.92	3.42	9.46	3.04	3.11	9.13	3.26	2.80	8.66	3.32	2.61	5.75	2.46	2.34
7	10.3	1.76	5.85	10.2	1.98	5.14	10.0	2.13	4.70	4.08	2.43	9.92	2.43	4.08	10.2	2.79	3.65	9.83	3.02	3.25	9.40	3.03	3.10	9.04	3.30	2.74	5.60	2.30	2.43
10	10.3	1.51	6.86	10.2	1.72	5.92	10.0	1.94	5.16	4.51	2.23	10.1	2.23	4.51	10.3	2.62	3.95	9.63	2.85	3.38	9.57	3.03	3.16	8.87	3.01	2.95	5.85	2.28	2.57
12	10.1	1.31	7.76	10.2	1.57	6.50	10.1	1.79	5.60	4.84	2.09	10.1	2.09	4.84	10.4	2.47	4.21	9.31	2.52	3.69	9.50	2.81	3.38	8.64	2.80	3.09	5.92	2.21	2.68
15	10.2	1.18	8.65	10.1	1.35	7.49	10.2	1.62	6.29	5.40	1.85	9.98	1.85	5.40	10.3	2.23	4.62	9.08	2.22	4.09	9.45	2.66	3.55	7.33	2.21	3.32	6.09	2.14	2.84
20	9.82	0.99	9.88	10.3	1.22	8.48	10.2	1.46	6.93	5.91	1.65	9.77	1.65	5.91	10.1	1.95	5.17	9.96	2.28	4.36	9.58	2.41	3.97	8.68	2.33	3.73	/	/	/
25	10.3	0.94	11.0	10.1	1.10	9.21	9.93	1.32	7.50	6.26	1.51	9.45	1.51	6.26	8.95	1.62	5.54	8.95	1.92	4.65	8.22	1.94	4.23	7.85	1.95	4.03	/	/	/
30	/	/	/	10.1	1.06	9.49	10.0	1.17	8.60	7.14	1.33	9.52	1.33	7.14	9.58	1.57	6.10	8.61	1.72	5.02	8.61	1.85	4.66	7.32	1.67	4.38	/	/	/
35	/	/	/	/	/	/	9.59	1.04	9.22	8.08	1.16	9.41	1.16	8.08	8.98	1.29	6.94	8.29	1.50	5.51	8.93	1.80	4.95	/	/	/	/	/	/

LWT: Leaving water temperature (°C)

DB: Dry bulb temperature for Outdoor air temperature (°C)

HC: Total heating capacity (kW)

PI: Power input (kW)

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans



## SHP M PRO 012 / 012T - HEATING

DB	LWT																		
	25		30		35		40		45		50		55		60		65		
	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	
-25	6.83	3.13	2.18	6.93	3.35	2.07	7.04	3.57	1.97	7.14	3.84	1.86	5.60	3.03	1.85	/	/	/	/
-20	8.18	3.38	2.42	8.30	3.62	2.29	8.42	3.90	2.16	8.53	4.16	2.05	8.63	4.47	1.93	8.73	4.80	1.82	1.79
-15	9.70	3.62	2.68	9.83	3.89	2.53	9.96	4.17	2.39	10.1	4.48	2.25	10.2	4.83	2.11	10.3	5.17	1.99	1.87
-10	11.4	3.82	2.99	11.6	4.11	2.81	11.7	4.42	2.64	11.8	4.79	2.47	11.9	5.14	2.32	12.0	5.54	2.17	2.05
-7	10.7	3.49	3.06	11.0	3.78	2.91	11.6	4.07	2.85	11.6	4.47	2.59	11.5	4.79	2.40	11.8	5.19	2.27	2.10
-5	10.9	3.35	3.24	11.2	3.66	3.07	11.6	3.98	2.90	11.8	4.35	2.71	11.7	4.64	2.51	11.8	5.04	2.35	2.27
-2	11.0	3.10	3.55	11.4	3.41	3.33	11.7	3.74	3.13	11.9	4.10	2.91	12.0	4.46	2.70	12.2	4.82	2.52	2.40
0	11.4	3.02	3.78	11.8	3.32	3.54	12.1	3.66	3.31	12.3	4.01	3.07	12.2	4.27	2.85	11.9	4.68	2.54	2.50
2	11.8	2.92	4.05	12.2	3.23	3.77	12.3	3.42	3.60	11.8	3.53	3.33	12.0	4.14	2.90	12.1	4.24	2.86	2.86
5	12.1	2.62	4.62	12.0	2.71	4.42	11.9	2.87	4.14	11.8	3.16	3.74	12.1	3.46	3.48	12.0	3.78	3.17	2.96
7	12.0	2.21	5.41	11.8	2.39	4.94	12.2	2.49	4.90	11.9	2.94	4.06	12.5	3.38	3.70	11.7	3.52	3.32	3.00
10	11.8	1.79	6.61	11.6	2.03	5.72	11.3	2.25	5.04	11.2	2.52	4.46	12.2	3.06	3.97	12.0	3.37	3.56	3.30
12	12.0	1.65	7.29	12.1	1.95	6.21	12.1	2.24	5.42	11.9	2.50	4.76	11.9	2.83	4.20	11.7	3.12	3.75	3.44
15	12.0	1.44	8.35	11.7	1.67	7.05	12.1	2.03	5.97	12.2	2.36	5.16	12.3	2.72	4.51	12.1	3.04	3.99	3.60
20	11.4	1.25	9.11	11.4	1.42	8.04	11.5	1.71	6.69	11.2	1.99	5.65	12.5	2.58	4.83	12.2	2.90	4.20	4.03
25	11.7	1.08	10.9	12.2	1.36	8.98	11.9	1.54	7.67	11.8	1.96	5.99	12.2	2.30	5.30	12.2	2.72	4.47	4.04
30	/	/	/	12.1	1.25	9.71	12.2	1.41	8.65	11.8	1.68	7.00	11.7	1.94	6.02	12.2	2.48	4.92	4.45
35	/	/	/	/	/	/	11.6	1.24	9.37	11.7	1.36	8.56	12.3	1.74	7.05	12.1	2.17	5.59	4.70

LWT: Leaving water temperature (°C)

DB: Dry bulb temperature for Outdoor air temperature (°C)

HC: Total heating capacity (kW)

PI: Power input (kW)

## SHP M PRO 014 / 014T - HEATING

DB	LWT																		
	25		30		35		40		45		50		55		60		65		
	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	
-25	7.30	3.41	2.14	7.44	3.67	2.03	7.57	3.92	1.93	7.70	4.21	1.83	5.60	3.03	1.85	/	/	/	/
-20	8.75	3.71	2.36	8.89	3.97	2.24	9.03	4.26	2.12	9.18	4.59	2.00	9.31	4.93	1.89	9.46	5.28	1.79	6.87
-15	10.4	3.98	2.61	10.6	4.29	2.46	10.7	4.60	2.33	10.8	4.93	2.20	11.0	5.31	2.07	11.1	5.71	1.95	10.7
-10	12.2	4.21	2.90	12.4	4.54	2.73	12.6	4.89	2.57	12.7	5.28	2.41	12.9	5.69	2.26	12.8	5.96	2.14	11.7
-7	11.7	4.01	2.92	12.1	4.34	2.79	12.5	4.46	2.80	12.8	5.14	2.50	12.5	5.43	2.30	12.8	5.78	2.22	11.7
-5	12.0	3.89	3.08	12.4	4.21	2.94	12.8	4.62	2.78	13.1	5.02	2.61	13.1	5.35	2.44	13.0	5.64	2.30	13.0
-2	12.3	3.71	3.32	12.8	4.05	3.15	13.2	4.43	2.97	13.4	4.83	2.78	13.7	5.25	2.61	13.7	5.58	2.45	13.4
0	12.6	3.53	3.56	13.0	3.88	3.35	13.4	4.26	3.15	13.7	4.67	2.93	13.9	5.06	2.75	13.8	5.36	2.57	13.9
2	13.1	3.45	3.79	13.5	3.81	3.55	13.0	3.71	3.50	13.6	4.38	3.11	13.0	4.64	2.80	13.0	4.68	2.77	13.0
5	14.2	3.23	4.39	14.0	3.33	4.20	13.8	3.53	3.91	14.1	3.94	3.58	14.2	4.19	3.39	14.3	4.60	3.10	14.3
7	13.9	2.65	5.23	14.0	3.01	4.66	14.1	3.00	4.70	14.2	3.60	3.95	14.5	4.08	3.55	14.2	4.32	3.28	14.0
10	14.1	2.25	6.27	14.0	2.54	5.50	13.9	2.85	4.87	13.9	3.20	4.35	14.0	3.57	3.91	14.3	4.04	3.53	14.5
12	13.9	2.01	6.88	13.8	2.32	5.96	13.9	2.66	5.23	13.7	2.95	4.63	13.7	3.31	4.13	13.4	3.60	3.72	14.7
15	13.9	1.73	7.99	13.9	2.08	6.68	14.3	2.49	5.73	14.2	2.84	5.00	13.9	3.16	4.40	13.7	3.49	3.91	14.0
20	14.1	1.60	8.81	14.1	1.85	7.64	14.2	2.22	6.39	14.5	2.64	5.48	14.2	2.99	4.73	13.9	3.38	4.12	13.3
25	14.1	1.32	10.7	14.2	1.68	8.44	14.1	1.90	7.43	13.8	2.42	5.69	14.2	2.79	5.09	14.2	3.27	4.33	14.6
30	/	/	/	13.8	1.47	9.37	13.8	1.68	8.21	14.2	2.16	6.55	13.8	2.41	5.72	13.4	2.82	4.74	13.2
35	/	/	/	/	/	/	13.7	1.52	9.00	14.3	1.86	7.67	13.7	2.08	6.59	13.7	2.58	5.32	16.5

LWT: Leaving water temperature (°C)

DB: Dry bulb temperature for Outdoor air temperature (°C)

HC: Total heating capacity (kW)

PI: Power input (kW)

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans



## SHP M PRO 016 / 016T - HEATING

DB	LWT																										
	25		30		35		40		45		50		55		60		65										
	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP	HC	PI	COP									
-25	7.89	3.83	2.06	8.04	4.10	1.96	8.20	4.41	1.86	8.24	4.63	1.78	5.60	3.03	1.85	/	/	/	/								
-20	9.45	4.18	2.26	9.62	4.50	2.14	9.80	4.83	2.03	9.81	5.06	1.94	10.1	5.57	1.82	10.2	5.84	1.74	6.87	3.84	1.79	/	/	/			
-15	11.2	4.50	2.49	11.4	4.85	2.35	11.6	5.22	2.22	11.8	5.61	2.10	12.0	6.04	1.98	11.9	6.28	1.89	11.0	6.06	1.81	7.01	3.94	1.78	/	/	
-10	13.2	4.78	2.76	13.4	5.15	2.60	13.6	5.55	2.45	13.8	6.00	2.30	13.7	6.24	2.19	13.2	6.26	2.11	12.2	6.10	2.00	11.9	6.19	1.92	/	/	/
-7	12.5	4.48	2.79	13.0	4.88	2.66	13.5	5.00	2.70	13.8	5.77	2.39	13.5	6.00	2.25	13.4	6.14	2.18	12.8	6.24	2.05	11.8	6.03	1.96	/	/	/
-5	12.8	4.34	2.95	13.3	4.73	2.81	13.8	5.16	2.67	14.1	5.59	2.52	13.6	5.72	2.38	13.5	5.96	2.27	13.6	6.17	2.20	11.5	5.72	2.01	/	/	/
-2	13.2	4.14	3.19	13.7	4.52	3.03	14.2	4.94	2.87	14.6	5.48	2.67	14.5	5.67	2.55	14.2	5.90	2.41	14.3	6.15	2.32	11.9	5.68	2.10	/	/	/
0	13.8	4.07	3.39	14.3	4.45	3.21	14.8	4.87	3.03	15.1	5.34	2.83	15.1	5.66	2.67	14.6	5.83	2.51	14.5	6.05	2.40	12.4	5.67	2.18	/	/	/
2	14.4	3.98	3.61	14.9	4.38	3.40	14.5	4.46	3.25	15.7	5.27	2.98	14.3	5.30	2.70	14.6	5.47	2.66	13.5	5.87	2.30	13.1	5.76	2.27	/	/	/
5	16.5	4.08	4.05	16.2	4.17	3.87	15.9	4.34	3.67	16.4	4.84	3.39	16.2	5.00	3.25	16.1	5.40	2.99	15.9	5.63	2.83	15.3	5.95	2.57	8.99	3.89	2.31
7	16.1	3.36	4.79	16.2	3.74	4.33	16.0	3.56	4.50	16.2	4.26	3.79	16.2	4.70	3.45	16.2	5.10	3.17	16.0	5.61	2.85	15.8	5.90	2.67	9.41	3.94	2.39
10	16.1	2.72	5.91	16.1	3.07	5.25	15.9	3.38	4.70	15.8	3.74	4.24	15.9	4.14	3.83	16.2	4.66	3.47	16.5	5.07	3.25	16.1	5.56	2.89	9.72	3.86	2.52
12	15.8	2.39	6.63	16.1	2.81	5.72	16.2	3.19	5.07	16.1	3.53	4.56	16.2	3.98	4.07	16.2	4.41	3.68	16.4	4.79	3.41	15.8	5.20	3.04	10.2	3.89	2.62
15	15.8	2.05	7.68	15.8	2.47	6.40	16.2	2.92	5.54	16.1	3.32	4.86	16.3	3.71	4.39	16.2	4.23	3.83	16.4	4.78	3.43	16.0	5.07	3.16	10.5	3.78	2.77
20	16.0	1.86	8.60	15.8	2.19	7.22	16.3	2.66	6.11	16.1	3.02	5.33	15.9	3.30	4.80	15.5	3.75	4.13	16.0	4.18	3.83	9.26	2.72	3.41	/	/	/
25	16.1	1.61	9.98	16.0	2.03	7.87	16.1	2.28	7.04	15.8	2.90	5.46	15.6	3.14	4.96	15.4	3.60	4.26	15.2	3.91	3.88	9.80	2.55	3.85	/	/	/
30	/	/	/	16.2	1.83	8.83	16.1	1.97	8.15	15.7	2.50	6.28	16.2	2.96	5.47	15.7	3.43	4.59	16.0	3.67	4.37	11.1	2.69	4.11	/	/	/
35	/	/	/	/	/	/	16.1	1.81	8.88	16.2	2.29	7.08	15.6	2.50	6.24	15.6	3.02	5.16	16.5	3.44	4.79	/	/	/	/	/	/

LWT: Leaving water temperature (°C)  
DB: Dry bulb temperature for Outdoor air temperature (°C)  
HC: Total heating capacity (kW)  
PI: Power input (kW)

## PERFORMANCE TABLE - COOLING

The tables show the capacity, power consumption and efficiency values for different outdoor air temperatures. The data given is calculated according to Standard EN 14511:2018. It is indicative and may be subject to change.

### SHP M PRO 006 - COOLING

DB	LWT																				
	5			7			10			15			18			20			25		
	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER
-5	/	/	/	/	/	/	/	/	/	4.56	0.56	8.21	4.79	0.57	8.41	4.96	0.58	8.60	5.47	0.60	9.04
0	/	/	/	/	/	/	/	/	/	4.56	0.56	8.21	4.79	0.57	8.41	4.96	0.58	8.60	5.47	0.60	9.04
5	/	/	/	/	/	/	/	/	/	4.67	0.58	8.13	4.92	0.59	8.31	5.04	0.59	8.51	5.57	0.62	8.91
10	/	/	/	/	/	/	/	/	/	4.98	0.63	7.84	5.21	0.65	8.02	5.34	0.64	8.37	5.87	0.68	8.57
15	/	/	/	/	/	/	6.34	0.80	7.97	6.51	0.85	7.62	6.54	0.86	7.57	6.51	0.81	8.07	6.57	0.78	8.37
20	5.62	1.00	5.62	5.66	0.94	6.00	6.43	1.00	6.44	6.48	0.91	7.11	6.49	0.95	6.86	6.50	0.85	7.61	6.48	0.79	8.22
25	5.66	1.21	4.67	5.50	1.07	5.12	6.55	1.19	5.52	6.60	0.95	6.96	6.83	1.06	6.43	6.49	0.69	9.39	6.57	0.86	7.60
30	5.45	1.37	3.99	5.77	1.37	4.20	6.55	1.43	4.57	6.65	1.20	5.55	6.57	1.09	6.01	6.57	0.93	7.07	6.29	0.92	6.86
35	5.32	1.68	3.16	5.50	1.69	3.25	6.51	1.69	3.85	6.64	1.45	4.57	6.50	1.27	5.10	6.63	1.19	5.58	6.81	1.06	6.43
40	5.42	1.85	2.93	5.60	1.85	3.02	6.68	2.05	3.26	6.63	1.73	3.84	6.87	1.64	4.19	6.65	1.45	4.58	6.85	1.25	5.50
43	5.24	1.96	2.68	5.35	1.92	2.79	6.48	2.17	2.99	6.66	1.93	3.45	6.67	1.75	3.81	6.74	1.66	4.06	6.65	1.36	4.90

### SHP M PRO 008 - COOLING

DB	LWT																				
	5			7			10			15			18			20			25		
	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER
-5	/	/	/	/	/	/	/	/	/	4.84	0.59	8.15	5.09	0.61	8.35	5.27	0.62	8.55	5.81	0.65	8.98
0	/	/	/	/	/	/	/	/	/	4.84	0.59	8.15	5.09	0.61	8.35	5.27	0.62	8.55	5.81	0.65	8.98
5	/	/	/	/	/	/	/	/	/	4.97	0.62	8.07	5.23	0.63	8.26	5.35	0.63	8.45	5.92	0.67	8.86
10	/	/	/	/	/	/	/	/	/	5.27	0.68	7.79	5.51	0.69	7.97	5.66	0.69	8.15	6.21	0.73	8.53
15	/	/	/	/	/	/	6.96	0.99	7.04	7.71	1.09	7.08	8.29	1.13	7.32	8.37	1.07	7.84	8.32	0.99	8.40
20	7.13	1.34	5.31	7.47	1.35	5.52	8.08	1.34	6.03	8.32	1.28	6.52	8.31	1.29	6.45	8.32	1.15	7.25	8.41	1.06	7.96
25	7.38	1.72	4.28	7.39	1.60	4.61	8.35	1.72	4.86	8.38	1.40	5.99	8.39	1.39	6.02	8.40	1.26	6.65	8.30	1.10	7.56
30	7.36	1.99	3.70	7.38	1.86	3.97	8.29	1.95	4.25	8.32	1.62	5.13	8.33	1.53	5.46	8.34	1.36	6.11	8.27	1.29	6.40
35	7.38	2.32	3.18	7.40	2.35	3.15	8.30	2.32	3.57	8.33	1.96	4.26	8.30	1.71	4.85	8.36	1.64	5.09	8.37	1.33	6.27
40	7.04	2.53	2.78	7.42	2.56	2.90	8.02	2.61	3.08	8.42	2.37	3.55	8.32	2.11	3.94	8.33	1.98	4.21	8.34	1.65	5.06
43	6.31	2.39	2.64	6.66	2.42	2.76	7.23	2.46	2.93	8.33	2.58	3.22	8.40	2.38	3.53	8.36	2.22	3.77	8.37	1.87	4.47

LWT: Leaving water temperature (°C)

DB: Dry bulb temperature for Outdoor air temperature (°C)

HC: Total heating capacity (kW)

PI: Power input (kW)

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans



## SHP M PRO 010 - COOLING

DB	LWT																				
	5			7			10			15			18			20			25		
	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER
-5	/	/	/	/	/	/	/	/	/	5.13	0.63	8.10	5.39	0.65	8.30	5.58	0.66	8.50	6.15	0.69	8.92
0	/	/	/	/	/	/	/	/	/	5.13	0.63	8.10	5.39	0.65	8.30	5.58	0.66	8.50	6.15	0.69	8.92
5	/	/	/	/	/	/	/	/	/	5.26	0.66	8.02	5.54	0.68	8.20	5.67	0.67	8.40	6.27	0.71	8.80
10	/	/	/	/	/	/	/	/	/	5.86	0.76	7.75	6.13	0.77	7.93	6.29	0.78	8.11	6.91	0.81	8.48
15	/	/	/	/	/	/	8.05	1.18	6.81	9.12	1.27	7.19	9.80	1.37	7.13	10.24	1.37	7.46	10.15	1.24	8.21
20	7.81	1.53	5.10	8.25	1.53	5.40	8.92	1.51	5.90	9.94	1.53	6.49	10.11	1.63	6.20	10.12	1.46	6.95	10.13	1.32	7.70
25	8.54	2.12	4.04	9.00	2.13	4.22	9.74	2.16	4.50	10.11	1.86	5.44	9.98	1.68	5.96	10.08	1.63	6.17	10.13	1.46	6.92
30	9.17	2.78	3.30	9.15	2.58	3.54	10.00	2.69	3.73	10.14	2.26	4.48	10.15	1.98	5.12	10.16	1.83	5.56	10.17	1.57	6.46
35	9.12	3.21	2.84	9.00	3.10	2.90	9.58	2.95	3.25	9.94	2.62	3.79	10.00	2.33	4.30	10.14	2.24	4.54	10.15	1.83	5.54
40	7.04	2.53	2.78	7.42	2.59	2.86	8.02	2.61	3.08	9.07	2.67	3.39	9.70	2.70	3.60	10.15	2.72	3.73	10.16	2.27	4.47
43	6.31	2.39	2.64	6.66	2.42	2.76	7.20	2.45	2.94	8.17	2.51	3.25	8.78	2.54	3.45	9.18	2.56	3.59	10.13	2.55	3.97

## SHP M PRO 012 / 012T - COOLING

DB	LWT																				
	5			7			10			15			18			20			25		
	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER
-5	/	/	/	/	/	/	/	/	/	10.28	1.47	7.00	10.92	1.55	7.04	11.60	1.49	7.77	11.19	1.39	8.03
0	/	/	/	/	/	/	/	/	/	10.53	1.30	8.08	11.11	1.43	7.76	11.70	1.44	8.15	11.17	1.42	7.88
5	/	/	/	/	/	/	/	/	/	10.53	1.31	8.03	11.11	1.44	7.69	11.60	1.51	7.70	11.24	1.38	8.16
10	/	/	/	/	/	/	/	/	/	10.54	1.31	8.06	11.89	1.48	8.02	11.63	1.48	7.87	11.26	1.36	8.25
15	/	/	/	/	/	/	11.19	1.51	7.43	11.81	1.52	7.76	11.96	1.44	8.33	11.91	1.30	9.16	11.44	1.25	9.12
20	11.70	2.31	5.07	11.45	2.06	5.57	11.93	1.91	6.23	11.40	1.80	6.33	11.58	1.21	9.59	11.39	1.69	6.72	11.61	1.36	8.56
25	11.31	2.63	4.30	11.49	2.48	4.63	11.54	2.25	5.13	11.96	2.37	5.04	11.84	1.61	7.36	11.95	1.51	7.93	11.83	1.22	9.69
30	10.96	2.98	3.68	11.18	2.84	3.93	12.05	2.82	4.27	12.19	2.39	5.11	12.07	2.08	5.80	12.07	1.90	6.34	11.76	1.46	8.08
35	11.31	3.58	3.16	11.60	3.74	3.10	12.14	3.35	3.62	11.87	2.76	4.30	12.20	2.65	4.60	12.16	2.38	5.11	11.75	1.86	6.31
40	11.56	4.27	2.71	11.36	3.96	2.87	12.24	4.00	3.06	11.34	3.11	3.65	12.26	3.14	3.90	12.26	2.95	4.16	10.77	2.07	5.21
43	9.76	3.77	2.59	9.96	3.65	2.73	9.96	3.36	2.96	9.93	2.90	3.43	10.21	2.72	3.76	10.21	2.55	4.01	10.21	2.16	4.72

LWT: Leaving water temperature (°C)

DB: Dry bulb temperature for Outdoor air temperature (°C)

HC: Total heating capacity (kW)

PI: Power input (kW)

**SHP M PRO 014 / 014T - COOLING**

DB	LWT																				
	5			7			10			15			18			20			25		
	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER
-5	/	/	/	/	/	/	/	/	/	10.76	1.62	6.66	11.51	1.72	6.68	12.08	1.73	6.99	13.20	2.00	6.60
0	/	/	/	/	/	/	/	/	/	11.02	1.44	7.64	11.51	1.73	6.66	12.29	1.60	7.68	13.20	2.01	6.58
5	/	/	/	/	/	/	/	/	/	11.02	1.45	7.60	11.70	1.61	7.27	12.29	1.61	7.64	13.33	1.94	6.87
10	/	/	/	/	/	/	/	/	/	11.63	1.62	7.19	12.49	1.65	7.57	13.54	1.89	7.16	13.84	2.13	6.50
15	/	/	/	/	/	/	12.19	1.75	6.97	13.98	1.74	8.02	13.89	1.78	7.80	13.53	1.89	7.15	14.10	2.56	5.50
20	13.01	2.70	4.82	13.28	2.57	5.16	13.56	2.35	5.77	13.57	1.90	7.16	13.58	1.58	8.58	13.63	2.43	5.61	13.80	1.83	7.56
25	13.44	3.32	4.05	13.35	3.10	4.31	12.87	2.71	4.75	13.82	2.40	5.76	13.70	2.07	6.63	13.55	1.94	6.99	13.92	1.75	7.96
30	13.22	3.79	3.49	12.88	3.45	3.73	13.55	3.34	4.06	13.39	2.74	4.88	13.24	2.43	5.44	13.23	2.24	5.91	13.85	1.89	7.34
35	13.02	4.38	2.97	13.40	4.57	2.93	13.58	3.97	3.42	13.28	3.29	4.04	13.90	3.16	4.40	13.24	2.75	4.82	13.84	2.39	5.79
40	12.84	5.00	2.57	13.17	4.88	2.70	12.96	4.38	2.96	12.68	3.66	3.46	13.22	3.52	3.76	13.22	3.30	4.01	12.67	2.60	4.88
43	9.76	3.77	2.59	9.96	3.65	2.73	9.96	3.36	2.96	9.93	2.90	3.43	10.21	2.72	3.76	10.21	2.55	4.01	10.21	2.16	4.72

**SHP M PRO 016 / 016T - COOLING**

DB	LWT																				
	5			7			10			15			18			20			25		
	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER	CC	PI	EER
-5	/	/	/	/	/	/	/	/	/	11.45	1.73	6.62	12.19	1.84	6.63	12.64	1.91	6.63	13.71	2.19	6.25
0	/	/	/	/	/	/	/	/	/	11.63	1.61	7.23	12.19	1.84	6.62	12.75	1.84	6.92	13.71	2.20	6.23
5	/	/	/	/	/	/	/	/	/	11.63	1.62	7.19	12.39	1.72	7.22	12.86	1.78	7.22	13.84	2.13	6.50
10	/	/	/	/	/	/	/	/	/	12.24	1.79	6.83	13.08	1.83	7.16	14.65	2.27	6.45	14.60	2.27	6.43
15	/	/	/	/	/	/	13.14	1.96	6.70	14.95	1.95	7.65	15.49	2.26	6.84	14.47	2.38	6.08	15.95	2.96	5.38
20	13.09	2.75	4.76	13.73	2.74	5.01	15.27	2.86	5.33	15.35	2.33	6.60	15.29	1.99	7.68	15.12	2.03	7.43	15.18	1.99	7.61
25	13.83	3.50	3.95	13.72	3.26	4.21	15.18	3.41	4.45	14.48	2.72	5.33	15.21	2.49	6.10	14.80	2.24	6.61	15.17	2.00	7.58
30	13.59	4.01	3.39	13.59	3.73	3.64	14.75	3.83	3.85	14.04	3.07	4.58	15.04	2.95	5.10	15.04	2.77	5.43	14.97	2.22	6.73
35	13.79	4.79	2.88	14.00	4.83	2.90	15.11	4.77	3.17	14.94	3.90	3.83	15.40	3.67	4.20	14.95	3.34	4.47	14.99	2.80	5.35
40	12.84	5.00	2.57	13.17	4.88	2.70	12.96	4.38	2.96	12.95	3.78	3.43	13.22	3.52	3.76	13.22	3.30	4.01	13.62	2.91	4.68
43	9.76	3.77	2.59	9.96	3.65	2.73	9.96	3.36	2.96	9.93	2.90	3.43	10.21	2.72	3.76	10.21	2.55	4.01	10.21	2.16	4.72

LWT: Leaving water temperature (°C)  
 DB: Dry bulb temperature for Outdoor air temperature (°C)  
 HC: Total heating capacity (kW)  
 PI: Power input (kW)

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans



## SPECIFICATIONS

SHP M PRO heat pump section

Packaged reverse cycle heat pump for heating, cooling and DHW production. Refrigeration cycle with reversing valve. The unit works with R32 refrigerant, which is included in the list of greenhouse gases (GWP 675) that meet the requirements of EU Regulation no. 517/2014 called "F-GAS" (mandatory in Europe).

The use of inverter technology together with brushless DC motors ensures a very high overall energy efficiency both in terms of the reduction of the specific consumption of each motor and the high modulation capacity. The use of these technologies in all components results in high COP and EER with a consistent increase in efficiencies at partial loads.

- Proprietary control system with microcontroller control, overheating control logic via electronic expansion valve.
- Compressors. Twin Rotary DC inverter silenced and with night-time "silent" function
- Fans. Of the axial type with brushless DC motor, with noise-optimised wing profile
- Source exchanger. Circuit optimised by a finned coil with pipes and aluminium fins
- Utility exchanger. With brazed stainless steel plates with reduced pressure drop on the water side.
- Refrigerating circuit. The circuit, made of copper pipes, is of the "hermetically sealed" type and it includes: condensation control, electronic expansion valve controlled by an inverter, reversing valve, pressure transducer, liquid separator and receiver, liquid filter.
- Built-in hydraulic circuit: high-efficiency variable-speed pump, flow switch, air vent valve, overpressure valve, "Y" filter, expansion vessel (5 litres).

### LOGIC AND CONTROLS:

- All units can operate in 3 different modes: heating, cooling and DHW, with specific programming that enhances performance in all conditions, with possible management of the climate curve.
- PRO series units are able to manage mixing valves, diverter valves and pumps on the secondary side; they are also able to control the solar thermal system, any integration with external heat sources, and integration with external Home/ Building automation or Domotics. The entire PRO series can also be controlled remotely via a dedicated APP.

### CERTIFICATIONS:

The units have been designed in compliance with the following directives and harmonised standards regarding safety of machinery:

- EU Directives, 2014/35/EU, 2014/30/EU, 2011/65/EU, 2012/19/EU, 2014/68/EU
- Standard IEC EN 60335-1, IEC EN 60335-2-40
- Standards IEC EN 55014-1, IEC EN 55014-2, IEC EN 61000-3-2, IEC EN 61000-3-3, IEC EN 61000-3-11, IEC EN 61000-3-12.

And the following directives, regulations and standards regarding ecodesign and energy labelling:

- EU Directive 2009/125/EU and subsequent transpositions
- EU Directive 2010/30/EU and subsequent transpositions
- EU Regulation no.811/2013
- EU Regulation no.813/2013
- EN 14511-1:2018, EN 14511-2:2018, EN 14511-3:2018, EN 14511-4:2018
- EN 14825:2018
- Machinery Directive 2006/42/EC
- EU Energy Labelling 2017/1369

### SHP M PRO 006

Air cooling capacity 35°C / water 7°C min/nom/max: 2.67 / 5.5 / 6.92 (\*) kW E.E.R. 3.25

Air cooling capacity 35°C / water 18°C min/nom/max: 3.69 / 6.5 / 9.27 (\*) kW E.E.R. 5.1



Air heating capacity 7°C / water 35°C min/nom/max: 2.98 / 6.5 / 8.47 (\*) kW C.O.P. 5.3  
Air heating capacity 7°C / water 45°C min/nom/max: 2.82 / 6.60 / 8.14 (\*) kW C.O.P. 4.00

#### SHP M PRO 008

Air cooling capacity 35°C / water 7°C min/nom/max: 2.64 / 7.40 / 8.72 (\*) kW E.E.R. 3.15  
Air cooling capacity 35°C / water 18°C min/nom/max: 3.72 / 8.3 / 10.41 (\*) kW E.E.R. 4.85  
Air heating capacity 7°C / water 35°C min/nom/max: 3.0 / 8.40 / 9.56 (\*) kW C.O.P. 5.05  
Air heating capacity 7°C / water 45°C min/nom/max: 2.85 / 8.50 / 9.28 (\*) kW C.O.P. 3.80

#### SHP M PRO 010

Air cooling capacity 35°C / water 7°C min/nom/max: 2.69 / 9.00 / 9.58 (\*) kW E.E.R. 2.90  
Air cooling capacity 35°C / water 18°C min/nom/max: 3.69 / 10.0 / 10.38 (\*) kW E.E.R. 4.30  
Air heating capacity 7°C / water 35°C min/nom/max: 3.00 / 10.0 / 11.2 (\*) kW C.O.P. 4.70  
Air heating capacity 7°C / water 45°C min/nom/max: 2.89 / 10.2 / 10.9 (\*) kW C.O.P. 3.65

#### SHP M PRO 012 - 012T

Air cooling capacity 35°C / water 7°C min/nom/max: 4.77 / 11.6 / 14.13 (\*) kW E.E.R. 3.10  
Air cooling capacity 35°C / water 18°C min/nom/max: 6.72 / 12.2 / 16.51 (\*) kW E.E.R. 4.60  
Air heating capacity 7°C / water 35°C min/nom/max: 5.29 / 12.2 / 14.4 (\*) kW C.O.P. 4.90  
Air heating capacity 7°C / water 45°C min/nom/max: 5.25 / 12.5 / 14.5 (\*) kW C.O.P. 3.70

#### SHP M PRO 014 - 014T

Air cooling capacity 35°C / water 7°C min/nom/max: 4.77 / 13.4 / 15.48 (\*) kW E.E.R. 2.93  
Air cooling capacity 35°C / water 18°C min/nom/max: 6.72 / 13.9 / 16.51 (\*) kW E.E.R. 4.40  
Air heating capacity 7°C / water 35°C min/nom/max: 5.48 / 14.1 / 16.4 (\*) kW C.O.P. 4.70  
Air heating capacity 7°C / water 45°C min/nom/max: 5.26 / 14.5 / 16.7 (\*) kW C.O.P. 3.55

#### SHP M PRO 016 - 016T

Air cooling capacity 35°C / water 7°C min/nom/max: 4.77 / 14.0 / 16.01 (\*) kW E.E.R. 2.90  
Air cooling capacity 35°C / water 18°C min/nom/max: 6.72 / 15.4 / 16.51 (\*) kW E.E.R. 4.20  
Air heating capacity 7°C / water 35°C min/nom/max: 5.48 / 16.0 / 18.6 (\*) kW C.O.P. 4.50  
Air heating capacity 7°C / water 45°C min/nom/max: 5.26 / 16.2 / 19.1 (\*) kW C.O.P. 3.45

(\*) Activating the maximum Hz function.

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans



## DATA FOR BUILDING ENERGY CERTIFICATION ACCORDING TO UNI/TS 11300-4 FOR HEAT PUMPS

The supplementary data of heat pumps for calculating the energy performance of buildings according to UNI/TS 11300 part 4 is indicated below.

The characteristic quantities that will be provided for each model, according to table 31 of the Standards, are illustrated below.

COLD source	OUTDOOR AIR	
Operating temperature (cut-off)	min	-20°C
	max	35°C

HOT source	WATER	
Operating temperature (cut-off)	min	25°C
	max	60°C

### Model SHP M PRO 006

	E	A T <sub>bival</sub>	B	C	D
Reference temperature	-10°C	-7°C	2°C	7°C	12°C
PLR (T des =-10°C)	100%	88%	54%	35%	15%
Pdh (Declared power)	6.52	5.77	3.74	2.32	1.87
COPd (Declared COP)	3.00	3.43	5.04	6.06	9.12
Cdh (Coeff. of degradation)	0.90	0.90	0.90	0.90	0.90

### Model SHP M PRO 008

	E	A T <sub>bival</sub>	B	C	D
Reference temperature	-10°C	-7°C	2°C	7°C	12°C
PLR (T des =-10°C)	100%	88%	54%	35%	15%
Pdh (Declared power)	7.46	6.99	4.51	2.81	1.87
COPd (Declared COP)	2.87	3.29	4.99	6.72	9.12
Cdh (Coeff. of degradation)	0.90	0.90	0.90	0.90	0.90

### Model SHP M PRO 010

	E	A T <sub>bival</sub>	B	C	D
Reference temperature	-10°C	-7°C	2°C	7°C	12°C
PLR (T des =-10°C)	100%	88%	54%	35%	15%
Pdh (Declared power)	7.88	8.02	5.06	3.22	1.87
COPd (Declared COP)	2.87	3.09	4.92	7.03	9.12
Cdh (Coeff. of degradation)	0.90	0.90	0.90	0.90	0.90

### Model SHP M PRO 012-012T

	E	A T <sub>bival</sub>	B	C	D
Reference temperature	-10°C	-7°C	2°C	7°C	12°C
PLR (T des =-10°C)	100%	88%	54%	35%	15%
Pdh (Declared power)	12.30	10.85	6.79	4.79	3.73
COPd (Declared COP)	2.80	3.11	4.86	6.98	9.02
Cdh (Coeff. of degradation)	0.90	0.90	0.90	0.90	0.90

## Model SHP M PRO 014-014T

	<b>E</b>	<b>A T<sub>bival</sub></b>	<b>B</b>	<b>C</b>	<b>D</b>
Reference temperature	-10°C	-7°C	2°C	7°C	12°C
PLR (T des =-10°C)	100%	88%	54%	35%	15%
Pdh (Declared power)	13.41	12.52	7.98	5.04	3.73
COPd (Declared COP)	2.66	2.97	4.56	7.01	9.02
Cdh (Coeff. of degradation)	0.90	0.90	0.90	0.90	0.90

## Model SHP M PRO 016-016T

	<b>E</b>	<b>A T<sub>bival</sub></b>	<b>B</b>	<b>C</b>	<b>D</b>
Reference temperature	-10°C	-7°C	2°C	7°C	12°C
PLR (T des =-10°C)	100%	88%	54%	35%	15%
Pdh (Declared power)	14.05	13.49	8.59	5.55	3.73
COPd (Declared COP)	2.65	2.87	4.53	7.01	9.02
Cdh (Coeff. of degradation)	0.90	0.90	0.90	0.90	0.90

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans



## PRODUCT DATA SHEET ACCORDING TO 811/2013 OF 18 FEBRUARY 2013

Product data sheet for medium-temperature applications (55°C)				
Model		006	008	010
Seasonal space heating energy efficiency class		A++	A++	A++
Rated heat output	average climate conditions	6.4 kW	7.3 kW	8.2 kW
	colder climate conditions	5.2 kW	6.1 kW	7.2 kW
	warmer climate conditions	6.2 kW	8.1 kW	9.0 kW
Seasonal space heating energy efficiency	average climate conditions	140.7%	143.6%	145.5%
	colder climate conditions	113.1%	117.7%	122.4%
	warmer climate conditions	170.9%	185.3%	193.4%
Annual energy consumption	average climate conditions	3655 kWh	4088 kWh	4539 kWh
	colder climate conditions	4428 kWh	4948 kWh	5665 kWh
	warmer climate conditions	1895 kWh	2303 kW	2458 kWh
SCOP	average climate conditions	3.59	3.67	3.71
	colder climate conditions	2.90	3.02	3.14
	warmer climate conditions	4.35	4.74	4.91
Sound power level, indoors LWA		-	-	-
Sound power level, outdoors LWA		60 dB(A)	63 dB(A)	65 dB(A)
Precautions for installation and maintenance		Read the precautions for installation and maintenance in the specific chapters of the user-installer manual.		

Product data sheet for low-temperature applications (35°C)				
Model		006	008	010
Seasonal space heating energy efficiency class		A+++	A+++	A+++
Rated heat output	average climate conditions	6.5 kW	7.9 kW	9.1 kW
	colder climate conditions	6.1 kW	7.5 kW	8.3 kW
	warmer climate conditions	6.2 kW	8.1 kW	9.0 kW
Seasonal space heating energy efficiency	average climate conditions	201.8%	204.0%	201.9%
	colder climate conditions	173.4%	174.6%	174.6%
	warmer climate conditions	268.2%	274.7%	279.1%
Annual energy consumption	average climate conditions	2631 kWh	3155 kWh	3654 kWh
	colder climate conditions	3425 kWh	4166 kWh	4591 kWh
	warmer climate conditions	1229 kWh	1551 kWh	1714 kWh
SCOP	average climate conditions	5.12	5.18	5.12
	colder climate conditions	4.41	4.44	4.44
	warmer climate conditions	6.78	6.94	7.05
Sound power level, indoors LWA		-	-	-
Sound power level, outdoors LWA		60 dB(A)	63 dB(A)	65 dB(A)
Precautions for installation and maintenance		Read the precautions for installation and maintenance in the specific chapters of the user-installer manual.		

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans



## PRODUCT DATA SHEET ACCORDING TO 811/2013 OF 18 FEBRUARY 2013

Product data sheet for medium-temperature applications (55°C)				
Model		012	014	016
Seasonal space heating energy efficiency class		A++	A++	A++
Rated heat output	average climate conditions	12.5 kW	14.2 kW	14.7 kW
	colder climate conditions	11.3 kW	12.5 kW	13.5 kW
	warmer climate conditions	12.0 kW	14.2 kW	14.5 kW
Seasonal space heating energy efficiency	average climate conditions	141.6%	141.8%	140.6%
	colder climate conditions	126.0%	126.6%	124.3%
	warmer climate conditions	179.0%	184.6%	184.0%
Annual energy consumption	average climate conditions	7148 kWh	8079 kWh	8471 kWh
	colder climate conditions	8628 kWh	9496 kWh	10473 kWh
	warmer climate conditions	3524 kWh	4040 kWh	4154 kWh
SCOP	average climate conditions	3.62	3.62	3.59
	colder climate conditions	3.23	3.24	3.18
	warmer climate conditions	4.55	4.63	4.72
Sound power level, indoors LWA		-	-	-
Sound power level, outdoors LWA		70 dB(A)	72 dB(A)	72 dB(A)
Precautions for installation and maintenance		Read the precautions for installation and maintenance in the specific chapters of the user-installer manual.		

Product data sheet for low-temperature applications (35°C)				
Model		012	014	016
Seasonal space heating energy efficiency class		A+++	A+++	A+++
Rated heat output	average climate conditions	12.3 kW	14.2 kW	15.2 kW
	colder climate conditions	12.5 kW	14.3 kW	15.1 kW
	warmer climate conditions	12.1 kW	13.2 kW	14.2 kW
Seasonal space heating energy efficiency	average climate conditions	200.1%	192.5%	190.5%
	colder climate conditions	168.8%	171.3%	170.9%
	warmer climate conditions	262.3%	260.5%	255.3%
Annual energy consumption	average climate conditions	5004 kWh	5984 kWh	6510 kWh
	colder climate conditions	7153 kWh	8095 kWh	8546 kWh
	warmer climate conditions	2437 kWh	2684 kWh	2937 kWh
SCOP	average climate conditions	5.08	4.89	4.84
	colder climate conditions	4.30	4.36	4.35
	warmer climate conditions	6.63	6.59	6.46
Sound power level, indoors LWA		-	-	-
Sound power level, outdoors LWA		70 dB(A)	72 dB(A)	72 dB(A)
Precautions for installation and maintenance		Read the precautions for installation and maintenance in the specific chapters of the user-installer manual.		

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans



## PRODUCT DATA SHEET ACCORDING TO 811/2013 OF 18 FEBRUARY 2013

Product data sheet for medium-temperature applications (55°C)				
Model		012T	014T	016T
Seasonal space heating energy efficiency class		A++	A++	A++
Rated heat output	average climate conditions	12.5 kW	14.2 kW	14.7 kW
	colder climate conditions	11.3 kW	12.5 kW	13.5 kW
	warmer climate conditions	12.0 kW	14.2 kW	14.5 kW
Seasonal space heating energy efficiency	average climate conditions	141.6%	141.8%	140.7%
	colder climate conditions	126.0%	126.6%	124.3%
	warmer climate conditions	179.0%	184.7%	184.0%
Annual energy consumption	average climate conditions	7148 kWh	8079 kWh	8470 kWh
	colder climate conditions	8628 kWh	9496 kWh	10473 kWh
	warmer climate conditions	3523 kWh	4039 kWh	4153 kWh
SCOP	average climate conditions	3.62	3.62	3.59
	colder climate conditions	3.23	3.24	3.18
	warmer climate conditions	4.55	4.64	4.72
Sound power level, indoors LWA		-	-	-
Sound power level, outdoors LWA		70 dB(A)	72 dB(A)	72 dB(A)
Precautions for installation and maintenance		Read the precautions for installation and maintenance in the specific chapters of the user-installer manual.		



Product data sheet for low-temperature applications (35°C)				
Model		012T	014T	016T
Seasonal space heating energy efficiency class		A+++	A+++	A+++
Rated heat output	average climate conditions	12.3 kW	14.2 kW	15.2 kW
	colder climate conditions	12.5 kW	14.3 kW	15.1 kW
	warmer climate conditions	12.1 kW	13.2 kW	14.2 kW
Seasonal space heating energy efficiency	average climate conditions	200.2%	192.5%	190.5%
	colder climate conditions	168.8%	171.3%	170.9%
	warmer climate conditions	262.5%	260.6%	255.5%
Annual energy consumption	average climate conditions	5003 kWh	5984 kWh	6509 kWh
	colder climate conditions	7153 kWh	8095 kWh	8546 kWh
	warmer climate conditions	2435 kWh	2683 kWh	2935 kWh
SCOP	average climate conditions	5.08	4.89	4.84
	colder climate conditions	4.30	4.36	4.35
	warmer climate conditions	6.64	6.59	6.46
Sound power level, indoors LWA		-	-	-
Sound power level, outdoors LWA		70 dB(A)	72 dB(A)	72 dB(A)
Precautions for installation and maintenance		Read the precautions for installation and maintenance in the specific chapters of the user-installer manual.		

# SHP M PRO

Air/water packaged inverter  
heat pumps with axial fans



## TECHNICAL PARAMETERS ACCORDING TO 813/2013 OF 2 AUGUST 2013

Technical parameters for heat pump space heaters For low-temperature application (35°C)											
Model			006	008	010	012	014	016	012T	014T	016T
Part	Symbol	Unit									
Rated heat output	Pnominale	kW	6.5	7.9	9.1	12.3	14.2	15.2	12.3	14.2	15.2
Declared capacity for heating for partial load at indoor temperature 20°C and outdoor temperature Tj											
Tj = -7°C	Pdh	kW	5.77	6.99	8.02	10.85	12.52	13.49	10.85	12.52	13.49
Tj = +2°C	Pdh	kW	3.74	4.51	5.06	6.79	7.98	8.59	6.79	7.98	8.59
Tj = +7°C	Pdh	kW	2.32	2.81	3.22	4.79	5.04	5.55	4.79	5.04	5.55
Tj = +12°C	Pdh	kW	1.87	1.87	1.87	3.73	3.73	3.73	3.73	3.73	3.73
Declared coefficient of performance or primary energy ratio for partial load at indoor temperature 20°C and outdoor temperature Tj											
Tj = -7°C	COPd		3.43	3.29	3.09	3.11	2.97	2.87	3.11	2.97	2.87
Tj = +2°C	COPd		5.04	4.99	4.92	4.86	4.56	4.53	4.86	4.56	4.53
Tj = +7°C	COPd		6.06	6.72	7.03	6.98	7.01	7.01	6.98	7.01	7.01
Tj = +12°C	COPd		9.12	9.12	9.12	9.02	9.02	9.02	9.02	9.02	9.02
Technical parameters for heat pump space heaters For low-temperature application (55°C)											
Model			006	008	010	012	014	016	012T	014T	016T
Part	Symbol	Unit									
Rated heat output	Pnominale	kW	6.4	7.3	8.2	12.5	14.2	14.7	12.5	14.2	14.7
Declared capacity for heating for partial load at indoor temperature 20°C and outdoor temperature Tj											
Tj = -7°C	Pdh	kW	5.62	6.42	7.21	11.06	12.52	13.03	11.06	12.52	13.03
Tj = +2°C	Pdh	kW	3.52	4.03	4.56	6.91	7.71	8.50	6.91	7.71	8.50
Tj = +7°C	Pdh	kW	2.20	2.56	2.84	4.64	5.07	5.27	4.64	5.07	5.27
Tj = +12°C	Pdh	kW	1.31	1.31	1.31	2.15	2.15	2.15	2.15	2.15	2.15
Declared coefficient of performance or primary energy ratio for partial load at indoor temperature 20°C and outdoor temperature Tj											
Tj = -7°C	COPd		2.36	2.31	2.24	2.15	2.20	2.16	2.15	2.20	2.16
Tj = +2°C	COPd		3.70	3.76	3.86	3.59	3.58	3.55	3.59	3.58	3.55
Tj = +7°C	COPd		4.21	4.48	4.58	5.07	5.06	5.05	5.07	5.06	5.05
Tj = +12°C	COPd		4.96	4.96	4.96	4.52	4.52	4.52	4.52	4.52	4.52