

Small Size Water Source Heat Pump

GSHP 4.5TC ÷ 75TC

Cooling capacity: 4.5 ÷ 75.3

Heating capacity: 4.9 ÷ 84



FEATURES

STRUCTURE

Panels and frame are made from galvanized steel protected with polyester powder painting to ensure total resistance to atmospheric agents.

HERMETIC COMPRESSORS

Single phase rotary type (mod.4.5÷6.5), single phase (mod. 8) and 3-phase (mod.10÷75) scroll type compressors, with built-in thermal overload cut-out and crankcase heater, mounted on rubber vibration dampers.

Mod. 10 and 12 are available with single phase compressors.

EVAPORATOR

High efficiency tube in tube heat exchanger, factory insulated with flexible close cell material.

CONDENSER

High efficiency tube in tube heat exchanger, factory insulated with flexible close cell material.

REFRIGERANT CIRCUIT

Copper tube connection with charge valves, filter drier, electronic expansion valve (capillary for mod. 4.5÷14), gas-liquid separator, high pressure switch and low pressure switch.

The heat pump units are complete also with 4-way valve and one way valve.

HYDRAULIC CIRCUIT

Built with user side and source side water inlet/outlet connectors, water discharge connectors, air vent valve, mod.4.5÷30 the user side is complete also with expansion vessel, water pump and water flow switch.

ELECTRIC PANEL

consists of:

- Compressor contactor,
- Compressor protection breaker,
- User side water pump contactor (for mod.4.5÷28)
- User side water pump breaker (for mod.4.5÷28)
- Microprocessor with function display

OPTIONAL

- Sight glass which must be installed in factory,
- Source side water flow switch,
- Source side water pump,
- Anti-vibration rubber,
- Metallic filter for the water circuit.

NOMENCLATURE

GSHP 10 T C H
① ② ③ ④ ⑤

- ① Water source heat pump
② Model
③ Heat exchanger:
T: tube in tube type
B: plate type

- ④ Refrigerant type
--: R22
A: R410a
B: R134a
C: R407c

- ⑤ Unit type:
--: heat pump
C: cooling only
H: heating only

TECHNICAL DATA

Mod. GSHP		4.5TC	6.5TC	8TC	10TC	12TC	16TC	20TC
Nominal cooling capacity*	kW	4.5	6.5	8.29	9.5	11.6	15.1	18.2
Nominal heating capacity**	kW	4.9	7.0	10.5	11.0	13.4	17.1	20.1
Hermetic compressors								
Qty/circuit nr.	Nr.	1/1	1/1	1/1	1/1	1/1	1/1	1/1
Cooling power input*	kW	0.9	1.28	1.8	1.9	2.3	2.95	3.4
Heating power input**	kW	1.2	1.7	2.34	2.6	3.2	4.2	4.8
User side heat exchanger								
Pressure drop	kPa	42	46	43	42	46	40	42
Water flow	m³/h	0.77	1.12	1.43	1.63	1.99	2.60	3.13
Source side heat exchanger								
Pressure drop	kPa	58	63	54	56	54	53	55
Water flow	m³/h	0.93	1.34	1.74	1.96	2.39	3.10	3.71
User side water pump								
Available pressure head	kPa	77	68	196	188	167	195	154
Power supply	V/Ph/Hz	<<<	220/1/50	>>>	<<<	380/3/50	>>>	>>>
Sound pressure level***	dB(A)	48	53	56	56	58	61	61
Overall dimensions								
Net weight	kg	115	115	160	160	180	200	250

Mod. GSHP		28TC	38TC	50TC	56TC	65TC	75TC
Cooling capacity*	kW	27.1	37.1	50.5	56.4	64.7	75.3
Heating capacity**	kW	29.3	39.5	54.1	61.2	72	84
Hermetic compressors							
Qty/circuit nr.	Nr.	1/1	1/1	2/2	2/2	2/2	2/2
Cooling power input*	kW	5.3	6.8	9.2	9.9	11.6	13.5
Heating power input**	kW	7.1	8.9	12.4	13.6	15.6	18.1
User side heat exchanger							
Pressure drop	kPa	40	42	38	40	43	45
Water flow	m³/h	4.66	6.38	8.68	9.70	11.13	12.95
Source side heat exchanger							
Pressure drop	kPa	52	60	51	53	58	58
Water flow	m³/h	5.57	7.55	10.27	11.40	13.12	15.27
User side water pump							
Available pressure head	kPa	166	--	--	--	--	--
Power supply	V/Ph/Hz	<<<			380/3/50		>>>
Sound pressure level***	dB(A)	63	63	67	69	70	72
Net weight	kg	300	330	450	460	540	560

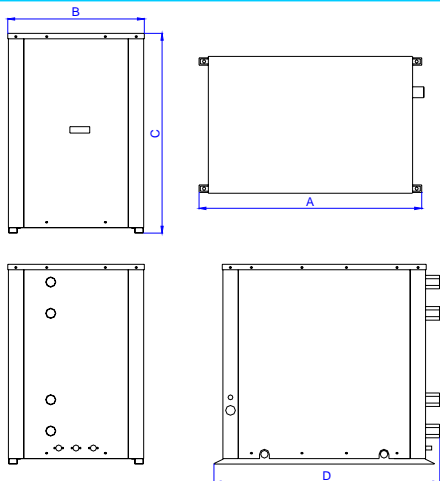
Performance values refer to the following conditions:

* Source side water inlet/outlet temperature 12°C/7°C, user side water inlet/outlet temperature 25°C/30°C,

** Source side water inlet/outlet temperature 13°C/8°C, user side water inlet/outlet temperature 40°C/45°C,

*** Sound pressure measured at a distance of 1 m and a height of 1.5 m above the ground in a clear field.

OVERALL DIMENSIONS



Mod.	4.5T	6.5T	8T	10T	12T	16T	20T
A	944	944	995	995	995	1106	1106
B	497	497	630	630	630	674	674
C	748	748	950	950	950	970	1030
D	944	944	981	981	981	1092	1092
Mod.	28T	38T	50T	56T	65T	75T	
A	1216	1216	1525	1525	1525	1525	
B	840	840	940	940	940	940	
C	1050	1070	1050	1050	1150	1150	
D	1202	1202	1552	1552	1552	1552	

The technical data in this document are not binding. Bright A/C reserves the right to make whatever modifications it deems necessary to improve the product at any time.

Shandong Bright Air Conditioning Co.,Ltd.

E-mail: intl@sbright.com.cn brightdz@gmail.com

www.brightaircon.com