

## GSHP 200÷2400G<sub>1</sub>

Cooling capacity: 111÷1333 kW

Heating capacity: 200÷2400 kW

# ZHR02



### FEATURES

- 19 sizes available ranging from 200 kW to 2400 kW heating capacity.
- Great environmental and economic benefit: no boiler or cooling tower; less space, less CO<sub>2</sub> and less initial investment.
- Acting as multi-function unit such as cooling, heating, sanitary hot water separately or simultaneously.
- Using energy from low temperature geothermic source, oil sewage, steel-making sewage, city sewage, etc.
- Semi-hermetic screw compressor for mod. 200÷2400. Each compressor is equipped with a crankcase heater and a thermal overload cut-out; the screw compressor is also complete with a built-in electronic protection with temperature sensor located directly in the motor winding and on the discharge line.
- The refrigerant circuit is complete with sight glass, filter drier, high and low pressure gauges, electronic expansion valve, high and low pressure switch.
- Shell and tube dry expansion type condenser, factory insulated with flexible close cell material.
- Shell and tube type evaporator, factory insulated with flexible close cell material.
- The electric panel consists of compressor breaker, compressor contactor, phase sequence relay, control circuit breaker, microprocessor control with function display.
- LCD display, touch screen control panel as standard.
- Automatic operation dramatically reducing maintenance cost thanks to reliable microprocessor system.
- For the units with semi-hermetic screw compressor, an infinitely variable capacity control system that is capable of exactly matching the demand requirement of the system is to be supplied. This system is to provide precise and stable control of supply water temperature over the complete range of operating conditions.

### NOMENCLATURE

**GSHP 200 G<sub>1</sub> H**

① ② ③ ④

① Ground source heat pump

② Size

③ Refrigerant

G<sub>1</sub>: ZHR02, Max. water outlet temperature 75 °C

G<sub>2</sub>: ZHR01, Max. water outlet temperature 85 °C

④ --: Standard version

H: with heat recovery

## TECHNICAL DATA

Model	GSHP	200G <sub>1</sub>	240G <sub>1</sub>	300G <sub>1</sub>	360G <sub>1</sub>	450G <sub>1</sub>	500G <sub>1</sub>	600G <sub>1</sub>	650G <sub>1</sub>	780G <sub>1</sub>	860G <sub>1</sub>
Heating capacity*	kW	200	240	300	360	450	500	600	650	780	860
Cooling capacity*	kW	111	133	167	200	250	278	333	361	433	478
<b>Compressor</b>											
type	/	Semi-hermetic screw									
Heating power input*	kW	45	55	68	82	102	114	136	148	177	195
Cooling power input*	kW	22	27	33	40	50	56	67	72	87	96
Energy control	/	25~100%									
<b>Evaporator</b>											
Water flow rate in cooling*	m <sup>3</sup> /h	19	23	29	34	43	48	57	62	78	82
Water flow rate in heating*	m <sup>3</sup> /h	13	16	20	24	30	33	40	43	52	57
Water side pressure drop	kPa	50	50	45	45	45	45	46	46	46	47
<b>Condenser</b>											
Water flow rate in cooling*	m <sup>3</sup> /h	10	13	16	19	23	26	31	34	41	45
Water flow rate in heating*	m <sup>3</sup> /h	21	26	32	39	48	54	64	70	84	92
Water side pressure drop	kPa	50	50	45	45	45	45	45	46	46	46
<b>Dimensions</b>											
Length	mm	2900	3190	2870	3020	3365	3435	3435	3435	3520	3520
Width	mm	1050	1045	1195	1205	1340	1310	1417	1417	1417	1417
Height	mm	1515	1520	1625	1630	1810	1845	1910	1990	1990	1990
Net weight	kg	1800	1900	2200	2640	3250	3550	3750	4000	4200	4400
Noise level**	dB(A)	72	72	74	74	74	74	76	76	77	78

Model	GSHP	920G <sub>1</sub>	1080G <sub>1</sub>	1200G <sub>1</sub>	1300G <sub>1</sub>	1560G <sub>1</sub>	1720G <sub>1</sub>	1840G <sub>1</sub>	2160G <sub>1</sub>	2400G <sub>1</sub>
Heating capacity*	kW	920	1080	1200	1300	1560	1720	1840	2160	2400
Cooling capacity*	kW	511	600	667	722	867	956	1022	1200	1333
<b>Compressor</b>										
type	/	Semi-hermetic screw								
Heating power input*	kW	209	245	273	295	355	391	418	491	545
Cooling power input*	kW	102	120	133	144	173	191	204	240	267
Energy control	/	25~100%			<<< >>>		12.5~100%			
<b>Evaporator</b>										
Water flow rate in cooling*	m <sup>3</sup> /h	88	103	115	124	149	164	176	206	229
Water flow rate in heating*	m <sup>3</sup> /h	61	72	80	86	104	114	122	144	159
Water side pressure drop	kPa	47	50	50	45	45	45	46	46	46
<b>Condenser</b>										
Water flow rate in cooling*	m <sup>3</sup> /h	48	56	63	68	81	90	96	113	125
Water flow rate in heating*	m <sup>3</sup> /h	99	116	129	140	168	185	198	232	258
Water side pressure drop	kPa	46	50	50	45	45	45	45	46	46
<b>Dimensions</b>										
Length	mm	3520	3635	3635	4360	4280	4380	4545	4650	4650
Width	mm	1417	1417	1417	1395	1480	1460	1480	1510	1510
Height	mm	1990	1990	1990	2020	2060	2035	2050	2175	2175
Net weight	kg	4600	4800	4900	5200	5600	6600	6800	7000	8000
Noise level**	dB(A)	78	79	79	79	79	80	80	81	81

\* Performance values refer to the following conditions:

Cooling: condenser water inlet/outlet temperature: 18°C/29°C, evaporator water inlet/outlet temperature: 12°C/7°C.

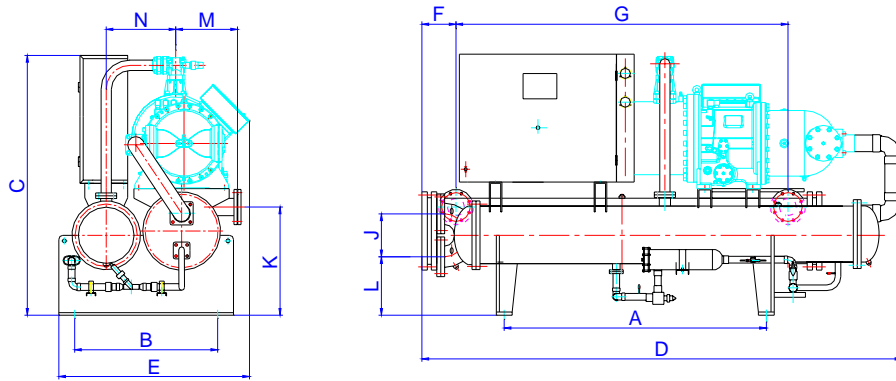
Heating: condenser water inlet/outlet temperature: 62°C/70°C (max75 °C) , evaporator water inlet/outlet temperature: 38°C/28°C.

\*\* Noise level measured in free field condition at distance of 1 meter.

Power supply: 380V/3N/50Hz

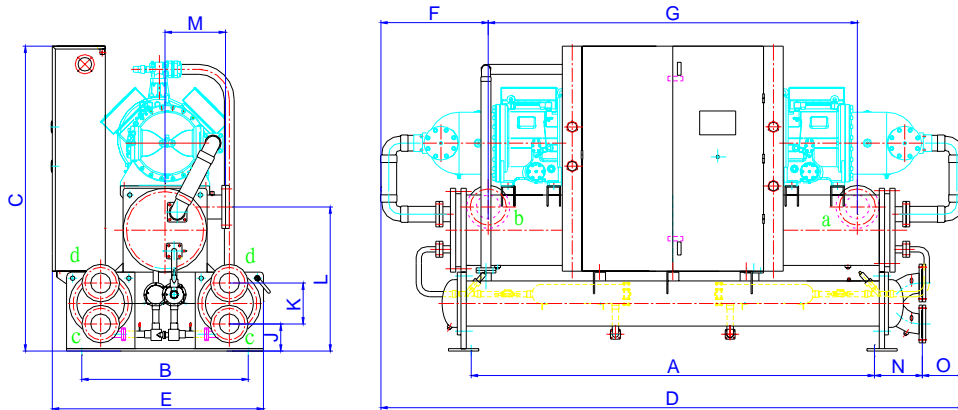
## OVERALL DIMENSIONS

### Mod. GSHP 200÷1200G<sub>1</sub>



Mod.	200G1	240G1	300G1	360G1	450G1	500G1	600G1	650G1	780G1	860G1	920G1	1080G1	1200G1
A	1780	1450	1800	1460	1650	1900	2300	1730	1760	1760	1760	1760	1730
B	760	900	900	1000	1000	1020	1020	1200	1200	1200	1200	1200	1200
C	1515	1520	1625	1630	1810	1845	1910	1990	1990	1990	1990	1990	1990
D	2900	3190	2870	3020	3365	3435	3435	3435	3520	3520	3635	3635	3635
E	1050	1045	1195	1205	1340	1310	1417	1417	1417	1417	1417	1417	1417
F	405	194	204	218	214	244	244	248	248	248	248	248	248
G	2220	2030	2410	1936	2090	2470	2670	2170	2200	2200	2200	2200	2200
J	166	213	230	256	270	327	269	250	250	250	250	250	250
K	510	530	542	612	677	830	830	717	725	725	725	725	725
L	327	331	335	369	366	437	465	490	500	500	500	500	500
M	300	330	300	350	350	350	350	400	400	400	400	400	400
N	370	399	435	485	475	525	525	554	554	554	554	554	554

### Mod. GSHP 1300÷2400G<sub>1</sub>



Mod.	A	B	C	D	E	F	G	J	K	L	M	N	O
1300G1	2965	1101	2020	4360	1395	710	2740	179	271	954	400	317	280
1560G1	3165	1101	2060	4280	1480	710	2940	179	271	954	400	317	280
1720G1	3065	1101	2035	4380	1460	715	2840	179	271	972	400	317	285
1840G1	3165	1171	2050	4545	1480	726	2940	180	269	1000	400	318	280
2160G1	3365	1191	2175	4650	1510	700	3140	210	269	1030	400	318	270
2400G1	3365	1232	2175	4650	1510	736	3070	216	298	1087	450	317	270

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.

**Bright Air Conditioning Co.,Ltd.**  
E-mail: intl@sbright.com.cn brightdz@gmail.com  
www.brightaircon.com