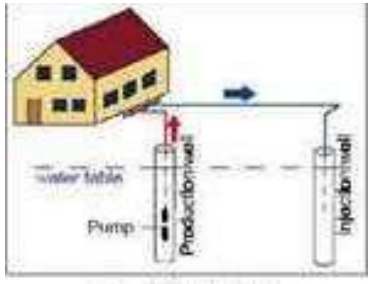
Product Introduction

（1） Water (ground) source heat pump unit description

Ground source heat pump (also known as ground source central air conditioning, water source heat pump)， use the earth's stored solar energy as a source of heat and cold， a heating, refrigeration and air conditioning system that can be converted。It takes advantage of the relatively stable temperature of underground soil or groundwater.

Winter:When the unit is in heating mode, it absorbs heat from the soil/water, concentrates heat from the ground through an electrically driven compressor and heat exchanger, and releases it indoors at a higher temperature.

Summer:When the unit is in the refrigeration mode, the cold capacity is extracted from the soil/water, and the cold capacity is concentrated through the operation of the unit and sent into the room. At the same time, the indoor heat is discharged into the soil/water to achieve the purpose of air conditioning.



A：Grondwater

B：Surface water

C：Ground heat

(2) Five advantages of water (ground) source heat pump unit

1.When heating, it can replace the boiler system, without burning process, avoiding smoke exhaust pollution and when cooling, it saves the cooling tower, avoiding the noise and pollution of the cooling tower, making the environment cleaner and more beautiful.

2.In winter, about 4-5KW heat energy can be obtained by putting 1KW electric energy into it.In summer, the cooling capacity of more than 5-6KW can be obtained by input 1KW electric energy, and the energy utilization rate is more than 3-4 times that of the electric heating method.

3.The boiler room and the supporting coal yard and slag field are omitted, and the land resources are saved

4.With water as the source body, absorb or release heat to it, so as to achieve the role of heating or cooling, neither consume water resources, nor cause pollution to it.

5.To realize cooling and heating through a system, the one-time investment is only 1 "-2" of the traditional cooling and heating investment & the operation cost is only 1/2-23 of the traditional way.

(3)Product configuration

1.Option superior

The main accessories of the unit are imported from international famous brands to ensure the efficient and reliable operation of the unit.

1)Famous brand high quality and high efficiency compressor

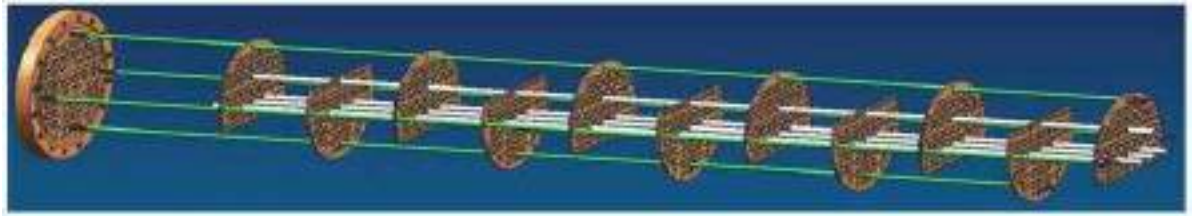
Original imported parts, The original imported parts, the rotation compensation balance force is extremely small, and the vibration and noise caused are extremely low. Part-load operation is balanced and efficient efficiency.



2)Shell and tube type evaporator with high efficiency heat exchange tube

①The most advanced DAE high-efficiency evaporative heat transfer tube is adopted, and the multi-head spiral thin ribs and spiral protrusions on the inner surface of the tube greatly improve the heat transfer coefficient and heat transfer capacity.

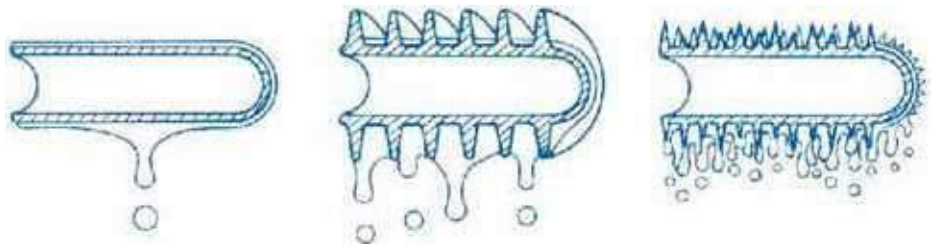

②The internal structure of the evaporator is optimally designed, and a high-efficiency liquid homogenizer is configured to solve the uniformity of the distribution of the refrigerant in the system.



③Using the unique heat exchanger refrigeration process design technology, reasonable system matching, to ensure the refrigeration process and water side cooling balance, give full play to the high efficiency of the heat exchanger;At the same time, the reasonable system matching makes the unit more energy saving.

3)Shell and tube water cooling condenser with high efficiency heat exchange tube

The most advanced DAC high efficiency condensing heat transfer tube is adopted, and the outer surface of the tube is multi-head spiral thin rib and spiral protruding, so that the heat transfer coefficient and heat transfer capacity are greatly improved.The following figures are three legends of light tube, ground finned tube and efficient heat exchange tube



The optimization design of the internal structure greatly improves the anti-corrosion and anti-fouling ability of the condenser, gives full play to the heat exchange effect of the condenser, so as to ensure that the unit reaches a higher performance level.

4)Matches famous brand refrigeration system accessories

The refrigeration system accessories used in the unit are all products from famous brand manufacturers, such as detachable filter drier, external balance thermal expansion valve, high-precision electronic expansion valve, sight glass, high and low pressure controller, exhaust temperature switch, etc. All use the products of world-class famous brand manufacturers to ensure that the unit has a high performance level.

5)Match advanced, high reliability intelligent control system and control technology

①In addition to the automatic configuration and functions of a single unit, the multi-unit control system also has the ability to display the operation of multiple units, and the computer automatically determines whether the air-conditioning system is running with some units or all units according to the return water temperature.

②Equipped with RS485/RS232 communication interface, which is convenient for users to realize centralized monitoring and remote monitoring of the unit.

③The unit has the function of controlling the balanced operation of multiple compressors to ensure the efficient operation of the unit.

WATER COOLED CHILLERS

Applicable area:≧1000m²
Applicable places:hotels, office buildings, factory,shopping malls,etc
Features: Adopt advanced structural design and reasonable system matching. The unit has high energy efficiency ratio and small volume; variable capacity adjustment, flexible start and stop, comfortable and energy saving;
Using large touch screen, powerful control function, with multiple functions such as fault self-diagnosis; Multiple safety protection measures, the unit runs safely and reliably.

Parameter of water cooled chiller R22

Work condition:
1.Summer:evaporator water in/out:12/7℃, condensor water in/out： 30/35℃, heat recovery water in/out: 40/45℃
2.Evaporator and condensor water side can work under 1.0MPa

Model		LSBLG180	LSBLG220	LSBLG260	LSBLG340	LSBLG450	LSBLG540
Cooling Cap.	kw	180	220	260	340	443	540
Total Power Input	kw	39	48	55	72	95	115
Max operating current	A	121	153	171	220	268	310
100% load energy efficiency ratio		4.62	4.58	4.73	4.72	4.66	4.7
Energy control		25%-100%					
Refrigeration circuits		1					
Compressor No.		1					
Compressor Type and NO.		Semi-closed double screw					
Noise	dB(A)	68	68	69	69	71	71
Voltage	V/Ph/Hz	380/3/50					
Refrigerant		R22					
Refrigerant Charge	kg	30	40	50	60	75	90
Chilled water inlet temp.	℃	12					
Chilled water outlet temp.	℃	7					
Chilled water flow	m3/h	31	38	45	59	76	93
Chilled water resistance	Kpa	43	43	44	44	44	44
Chilled water pipe		DN80	DN80	DN80	DN100	DN100	DN125
Cooling water inlet temperature	℃	30					
Cooling water outlet temp.	℃	35					
Cooling water flow	m3/h	38	46	54	71	93	113
Cooling water resistance	Kpa	43	43	44	44	44	44
Cooling water pipe		DN80	DN80	DN80	DN100	DN100	DN125
Partially recovered heat	kw	36	44	52	68	89	108
Partially recovered heat water flow	m3/h	6	8	9	12	15	19
Partially recovered heat water pressure drop	Kpa	30	30	31	32	30	32
Dimension (L*W*H)	mm	2800*1250*1440	2800*1250*1440	3050*1300*1470	3200*1300*1500	3500*1300*1500	3500*1300*1500
Weight(standard)	kg	2000	2000	2250	2300	2410	2500

Parameter of water cooled chiller R22

Work condition:
1.Summer:evaporator water in/out:12/7℃, condensor water in/out： 30/35℃, heat recovery water in/out: 40/45℃
2.Evaporator and condensor water side can work under 1.0MPa

Model		LSBLG620	LSBLG660	LSBLG700	LSBLG810	LSBLG860	LSBLG960	LSBLG1080
Cooling Cap.	kw	610	660	700	795	850	960	1050
Total Power Input	kw	128	140	148	168	180	203	223
Max operating current	A	355	377	393	453	498	534	620
100% load energy efficiency ratio		4.77	4.71	4.73	4.73	4.72	4.73	4.71
Energy control		25%-100%						
Refrigeration circuits		1						
Compressor No.		1						
Compressor Type		Semi-closed double screw						
Noise	dB(A)	68	68	69	69	71	71	71
Voltage	V/Ph/Hz	380/3/50						
Refrigerant		R22						
Refrigerant Charge	kg	110	130	145	165	170	185	205
Chilled water inlet temp.	℃	12						
Chilled water outlet temp.	℃	7						
Chilled water flow	m3/h	105	114	121	137	146	165	181
Chilled water resistance	Kpa	43	43	44	44	44	44	50
Chilled water pipe		DN125	DN125	DN150	DN150	DN150	DN150	DN150
Cooling water inlet temperature	℃	30						
Cooling water outlet temp.	℃	35						
Cooling water flow	m3/h	127	138	146	166	177	200	219
Cooling water resistance	Kpa	43	43	44	44	44	44	50
Cooling water pipe		DN125	DN125	DN150	DN150	DN150	DN150	DN150
Partially recovered heat	kw	122	132	140	159	170	192	210
Partially recovered heat water flow	m3/h	21	23	24	27	29	33	36
Partially recovered heat water pressure drop	Kpa	30	30	31	32	30	32	32
Dimension(L*W*H)	mm	3500*1400*1600	3500*1450*1750	3500*1450*1750	3600*1500*1800	3600*1500*1800	3700*1500*1900	3780*1550*1900
Weight(standard)	kg	3300	3380	3500	3650	3750	3900	4200

Parameter of water cooled chiller R22

Model		LSBLG1240	LSBLG1360	LSBLG1400	LSBLG1660	LS8LG1760	LSBLG1920	LSBLG2160
Cooling Cap.	kw	1200	1320	1400	1630	1700	1900	2100
Total Power Input	kw	255	280	290	340	360	395	445
Max operating current	A	355*2	377*2	393*2	453*2	498*2	534*2	620*2
100% load energy efficiency ratio		4.71	4.71	4.83	4.79	4.72	4.81	4.72
Energy control		12.5%-100%						
Refrigeration circuits		2						
Compressor No.		2						
Compressor Type		Semi-closed double screw						
Noise	dB(A)	68	68	69	69	71	71	71
Voltage	V/Ph/Hz	380/3/50						
Refrigerant		R22						
Refrigerant Charge	kg	230	280	310	330	350	370	420
Chilled water inlet temp.	℃	12						
Chilled water outlet temp.	℃	7						
Chilled water flow	m3/h	207	227	241	281	293	327	362
Chilled water resistance	Kpa	43	43	44	44	44	44	50
Chilled water pipe		DN150	0N200	DN200	DN200	DN250	DN250	DN250
Cooling water inlet temperature	℃	30						
Cooling water outlet temp.	℃	35						
Cooling water flow	m3/h	251	276	290	339	355	395	438
Cooling water resistance	Kpa	43	43	44	44	44	44	50
Cooling water pipe		DN150	DN200	DN200	DN200	DN250	DN250	DN250
Partially recovered heat	kw	240	264	280	326	340	380	420
Partially recovered heat water flow	m3/h	41	45	48	56	58	65	72
Partially recovered heat water pressure drop	Kpa	30	30	31	32	30	32	32
Dimension (L*W*H)	mm	4500*1550*1800	4500*1550*1800	4600*1560*1800	4700*1600*1850	4900*1700*1850	5000*1700*2000	5000*1800*2000
Weight(standard)	kg	5000	6520	6980	7350	7810	8520	9100

Work condition:
1.Summer:evaporator water in/out:12/7℃, condensor water in/out： 30/35℃, heat recovery water in/out: 40/45℃
2.Evaporator and condensor water side can work under 1.0MPa

Parameter of water cooled chiller R22

Model		LSBLG2480	LSBLG2700	LSBLG2800	LSBLG3300	LS8LG3500
Cooling Cap.	kw	2450	2680	2800	3200	3450
Total Power Input	kw	520	565	595	675	725
Max operating current	A	355*4	377*4	393*4	453*4	498*4
100% load energy efficiency ratio		4.71	4.74	4.71	4.74	4.76
Energy control		6.25%-100%				
Refrigeration circuits		4				
Compressor No.		4				
Compressor Type		Semi-closed double screw				
Noise	dB(A)	68	68	69	69	71
Voltage	V/Ph/Hz	380/3/50				
Refrigerant		R22				
Refrigerant Charge	kg	450	470	500	530	550
Chilled water inlet temp.	℃	12				
Chilled water outlet temp.	℃	7				
Chilled water flow	m3/h	422	462	482	551	594
Chilled water resistance	Kpa	43	43	44	44	44
Chilled water pipe		2--DN150	2--DN200	2--DN200	2--DN200	2--DN200
Cooling water inlet temperature	℃	30				
Cooling water outlet temp.	℃	35				
Cooling water flow	m3/h	512	559	585	667	719
Cooling water resistance	Kpa	43	43	44	44	44
Cooling water pipe		2--DN150	2--DN200	2--DN200	2--DN200	2--DN200
Partially recovered heat	kw	84	92	96	110	119
Partially recovered heat water flow	m3/h	30	30	31	32	30
Partially recovered heat water pressure drop	Kpa	30	30	31	32	30
Dimension(L*W*H)	mm	5000*2400*2300	5000*2400*2350	5000*2400*2350	5200*2500*2400	5200*2500*2480
Weight(standard)	kg	10900	11500	12300	13000	14000

Work condition:
1.Summer:evaporator water in/out:12/7℃, condensor water in/out: 30/35℃, heat recovery water in/out: 40/45℃
2.Evaporator and condensor water side can work under 1.0MPa

Parameter of water cooled chiller R134a

Noted: heat recovery water in/out: 40/45℃

Model		LSBLG180B	LSBLG220B	LSBLG260B	LSBLG340B	LSBLG380B	LSBLG430B	LSBLG560B
Cooling Cap.	kw	180	220	260	340	380	430	530
Total Power Input	kw	38	46	55	71	80	91	111
Max operating current	A	171	220	268	336	377	393	453
100% load energy efficiency ratio		4.74	4.78	4.73	4.79	4.75	4.73	4.77
Energy control		25%-100%						
refrigeration circuits		1						
Compressor No.		1						
Compressor Type		Semi-closed double screw						
Noise	dB(A)	68	68	69	69	71	71	71
Voltage	V/Ph/Hz	380/3/50						
Refrigerant		R134a						
Refrigerant Charge	kg	50	65	80	110	130	150	165
Chilled water inlet temp.	℃	12						
Chilled water outlet temp.	℃	7						
Chilled water flow	m3/h	31	38	45	59	65	74	91
Chilled water pressure	Kpa	43	43	44	44	44	44	45
Chilled water pipe		DN80	DN80	DN80	DN100	DN100	DN125	DN125
Cooling water inlet temperature	℃	30						
Cooling water outlet temp.	℃	35						
Cooling water flow	m3/h	38	46	54	71	79	90	110
Cooling water pressure	Kpa	43	43	44	44	44	44	45
Cooling water pipe		DN80	DN80	DN80	DN100	DN100	DN125	DN125
Partially recovered heat	kw	36	44	52	68	76	86	106
Partially recovered heating water flow	m3/h	6	8	9	12	13	15	18
Partially recovered heat water pressure	Kpa	30	30	31	32	30	32	33
Dimension(L*W*H)	mm	3000*1250*1440	3000*1250*1480	3050*1280*1480	3050*1300*1480	3200*1350*1600	3300*1420*1700	3530*1420*1780
Weight(standard)	kg	2300	2480	2570	2700	2880	2995	3200

Parameter of water cooled chiller R134a

Noted: heat recovery water in/out: 40/45℃

Model		LSBLG620B	LSBLG720B	LSBLG860B	LSBLG900B	LSBLG1020B	LSBLG1240B	LSBLG1420B
Cooling Cap.	kw	600	700	840	900	1000	1200	1400
Total Power Input	kw	125	145	173	185	208	247	285
Max operating current	A	534	620	710	786	906	1068	1240
100% load energy efficiency ratio		4.8	4.83	4.86	4.86	4.81	4.86	4.91
Energy control		25%-100%						
refrigeration circuits		1		2				
Compressor No.		1		2				
Compressor Type		Semi-closed double screw						
Noise	dB(A)	68	68	69	69	71	71	71
Voltage	V/Ph/Hz	380/3/50						
Refrigerant		R134a						
Refrigerant Charge	kg	190	210	240	270	290	320	350
Chilled water inlet temp.	℃	12						
Chilled water outlet temp.	℃	7						
Chilled water flow	m3/h	103	121	145	155	172	207	241
Chilled water pressure	Kpa	43	43	44	44	44	44	50
Chilled water pipe		DN125	DN125	DN150	DN150	DN150	DN150	DN200
Cooling water inlet temperature	℃	30						
Cooling water outlet temp.	℃	35						
Cooling water flow	m3/h	125	146	174	187	208	249	290
Cooling water pressure	Kpa	43	43	44	44	44	44	50
Cooling water pipe		DN125	DN125	DN150	DN150	DN150	DN150	DN200
Partially recovered heat	kw	120	140	168	180	200	240	280
Partially recovered heating water flow	m3/h	21	24	29	31	34	41	48
Partially recovered heat water pressure	Kpa	30	30	31	32	30	32	32
Dimension(L*W*H)	mm	3600*1500*1800	3700*1550*1850	4600*1600*1900	4600*1600*1900	4800*1700*1900	5000*1750*1900	5000*1800*2000
Weight(standard)	kg	3600	3890	4800	6100	7200	8500	9950

Parameter of water cooled chiller R134a

Noted: heat recovery water in/out: 40/45℃

Model		LSBLG1700B	LSBLG1800B	LSBLG2040B	LSBLG2480B	LSBLG2800B
Cooling Cap.	kw	1650	1750	2000	2420	2780
Total Power Input	kw	338	362	410	495	570
Max operating current	A	1420	1572	1812	2136	2480
100% load energy efficiency ratio		4.88	4.83	4.88	4.89	4.88
Energy control		6.25%-100%				
refrigeration circuits		4				
Compressor No.		4				
Compressor Type		Semi-closed double screw				
Noise	dB(A)	75	75	75	78	78
Voltage	V/Ph/Hz	380/3/50				
Refrigerant		R134a				
Refrigerant Charge	kg	380	410	430	460	500
Chilled water inlet temp.	℃	12				
Chilled water outlet temp.	℃	7				
Chilled water flow	m3/h	284	301	344	417	479
Chilled water pressure	Kpa	43	43	44	44	44
Chilled water pipe		2-DN125	2-DN150	2-DN150	2-DN150	2-DN200
Cooling water inlet temperature	℃	30				
Cooling water outlet temp.	℃	35				
Cooling water flow	m3/h	342	364	415	502	577
Cooling water pressure	Kpa	43	43	44	44	44
Cooling water pipe		2-DN125	2-DN150	2-DN150	2-DN150	2-DN200
Partially recovered heat	kw	330	350	400	484	556
Partially recovered heating water flow	m3/h	57	60	69	83	96
Partially recovered heat water pressure	Kpa	30	30	31	32	30
Dimension(L*W*H)	mm	4800*2300*2300	4900*2300*2350	5000*2400*2350	5200*2500*2400	5200*2500*2480
Weight(standard)	kg	10900	11500	12300	13000	14000

FLOODED TYPE WATER COOLED CHILLERS

Applicable area: ≧2000m^2

Applicable places: hotels, office buildings, factory,shopping malls,etc

Features: Using high-efficiency flooded evaporator, the COP value is greatly improved compared with the traditional dry evaporator. The operating cost is saved by about 15-25%; the high-efficiency secondary oil separation, the reliable ejection pump oil return system, perfectly solves the problem of flooding. The oil return problem of the liquid type unit ensures that the compressor runs for a long time without losing oil, so that the unit runs stably and reliably; the electronic expansion valve controls the liquid supply of the refrigerant in a timely and accurate manner, which greatly improves the efficiency of the unit.

Parameter of flooded type water cooled chiller R22

Noted: heat recovery water in/out: 40/45℃

Model		LSBLG220M	LSBLG260M	LSBLG300M	LSBLG340M	LS8LG400M	LSBLG450M	LSBLG520M
Cooling Cap.	kw	220	260	300	340	400	445	510
Total Power Input	kw	43	52	60	67	89	101	115
Max operating current	A	128	153	171	193	241	268	310
100% load energy efficiency ratio		5.12	5.00	5.00	5.07	5.00	5.00	5.05
Energy control		25%-100%						
refrigeration circuits		1						
Compressor No.		1						
Compressor Type		Semi-closed double screw						
Noise	dB(A)	68	68	69	69	71	71	68
Voltage	V/Ph/Hz	380/3/50						
Refrigerant		R22						
Refrigerant Charge	kg	50	60	75	80	90	100	110
Chilled water inlet temp.	℃	12						
Chilled water outlet temp.	℃	7						
Chilled water flow	m3/h	38	45	52	59	69	74	88
Chilled water pressure	Kpa	43	43	44	44	44	44	43
Chilled water pipe		DN80	DN80	DN80	DN100	DN100	DN125	DN125
Cooling water inlet temperature	℃	30						
Cooling water outlet temp.	℃	35						
Cooling water flow	m3/h	45	54	62	70	83	92	105
121Cooling water pressure	Kpa	43	43	44	44	44	44	43
Cooling water pipe		DN80	DN80	DN80	DN100	DN100	DN125	DN125
Partially recovered heat	kw	44	52	60	68	80	89	102
118Partially recovered heating water flow	m3/h	8	9	10	12	14	15	18
Partially recovered heat water pressure	Kpa	30	30	31	32	30	32	30
Dimension（L*W*H)	mm	3300*1300*1700	3300*1300*1700	3450*1350*1700	3450*1350*1700	3450*1350*1700	3500*1400*1730	3700*1400*1760
Weight(standard)	kg	2500	2800	3200	3450	3500	3680	3800

Parameter of flooded type water cooled chiller R22

Noted: heat recovery water in/out: 40/45℃

Model		LSBLG600M	LSBLG620M	LSBLG700M	LSBLG760M	LSBLG800M	LSBLG900M	LSBLG960M	LSBLG1060M
Cooling Cap.	kw	590	615	700	750	790	890	950	1050
Total Power Input	kw	115	120	135	145	155	172	185	205
Max operating current	A	310	336	355	377	393	453	498	534
100% load energy efficiency ratio		5.1	5.13	5.19	5.17	5.10	5.17	5.14	5.12
Energy control		25%-100%							
refrigeration circuits		1							
Compressor No.		1							
Compressor Type		Semi-closed double screw							
Noise	dB(A)	68	69	69	69	71	71	71	71
Voltage	V/Ph/Hz	380/3/50							
Refrigerant		R22							
Refrigerant Charge	kg	140	160	180	195	210	240	270	310
Chilled water inlet temp.	℃	12							
Chilled water outlet temp.	℃	7							
Chilled water flow	m3/h	102	106	121	129	136	153	164	203
Chilled water pressure	Kpa	43	44	44	44	44	44	50	55
Chilled water pipe		DN125	DN150	DN150	DN150	DN150	DN150	DN150	DN150
Cooling water inlet temperature	℃	30							
Cooling water outlet temp.	℃	35							
Cooling water flow	m3/h	121	127	144	154	163	183	196	243
Cooling water pressure	Kpa	43	44	44	44	44	44	50	55
Cooling water pipe		DN125	DN150	DN150	DN150	DN150	DN150	DN150	DN150
Partially recovered heat	kw	118	123	140	150	158	178	190	236
Partially recovered heating water flow	m3/h	20	21	24	26	27	31	33	41
Partially recovered heat water pressure	Kpa	30	30	30	30	30	32	32	33
Dimension（L*W*H)	mm	3800*1400*1760	3900*1400*1800	3900*1400*1800	4300*1500*1850	4300*1550*1850	4450*1580*1850	4450*1550*1850	4300*1550*1850
Weight(standard)	kg	4000	4200	4300	4450	4600	5000	5300	5680

Parameter of flooded type water cooled chiller R22

Noted: heat recovery water in/out: 40/45℃

Model		LSBLG1200M	LS8LG1400M	LSBLG1520M	LSBLG1600M	LSBLG1800M	LSBLG1920M	LSBLG2080M	LSBLG2400M
Cooling Cap.	kw	1180	1380	1520	1600	1780	1900	2050	2400
Total Power Input	kw	228	268	295	310	345	368	400	462
Max operating current	A	620	355*2	377*2	393*2	453*2	498*2	534*2	620*2
100% load energy efficiency ratio		5.18	5.15	5.15	5.16	5.16	5.16	5.13	5.19
Energy control		25%-100%							
refrigeration circuits		1							
Compressor No.		1							
Compressor Type		Semi-closed double screw							
Noise	dB(A)	71	69	69	69	71	71	71	71
Voltage	V/Ph/Hz	380/3/50							
Refrigerant		R22							
Refrigerant Charge	kg	310	350	370	380	400	435	470	530
Chilled water inlet temp.	℃	12							
Chilled water outlet temp.	℃	7							
Chilled water flow	m3/h	203	238	262	262	307	327	353	413
Chilled water pressure	Kpa	55	53	53	55	55	55	60	60
Chilled water pipe		DN150	DN200	DN200	DN200	DN200	DN200	DN200	DN200
Cooling water inlet temperature	℃	30							
Cooling water outlet temp.	℃	35							
Cooling water flow	m3/h	243	284	313	313	366	391	422	493
Cooling water pressure	Kpa	55	60	60	60	60	65	65	65
Cooling water pipe		DN150	DN200	DN200	DN200	DN200	DN200	DN200	DN200
Partially recovered heat	kw	236	276	304	304	356	380	410	480
Partially recovered heating water flow	m3/h	41	47	52	52	61	65	71	83
Partially recovered heat water pressure	Kpa	33	31	32	32	30	32	32	33
Dimension（L*W*H)	mm	4300*1550*1850	4720*1800*1800	4760*1800*1800	4760*1800*1800	4800*1800*1900	4800*1850*1950	4800*1900*2000	4800*1900*2000
Weight(standard)	kg	5680	6800	7000	7200	7780	8150	8600	9000

Parameter of flooded type water cooled chiller R134a

Model		LSBLG300BM	LSBLG320BM	LSBLG360BM	LSBLG390BM	LS8LG480BM	LSBLG500BM	LSBLG540BM	LSBLG640BM
Cooling Cap.	kw	300	320	360	390	450	500	540	620
Total Power Input	kw	57	61	69	74	86	96	103	119
Max operating current	A	241	268	310	336	355	377	453	498
100% load energy efficiency ratio		5.26	5.25	5.22	5.27	5.23	5.21	5.24	5.21
Energy control		25%-100%							
refrigeration circuits		1							
Condensor No.		1							
Condensor Type		Semi-closed double screw							
Noise	dB(A)	68	68	68	68	69	69	71	71
Voltage	V/Ph/Hz	380/3/50							
Refrigerant		R134a							
Refrigerant Charge	kg	70	80	96	110	130	145	190	220
Chilled water inlet temp.	℃	12							
Chilled water outlet temp.	℃	7							
Chilled water flow	m3/h	52	55	62	67	78	86	93	107
Chilled water pressure	Kpa	40	43	43	43	44	44	44	44
Chilled water pipe		DN100	DN100	DN100	DN100	DN100	DN125	DN125	DN125
Cooling water inlet temperature	℃	30							
Cooling water outlet temp.	℃	35							
Cooling water flow	m3/h	61	66	74	80	92	103	111	127
Cooling water pressure	Kpa	45	45	45	45	45	45	45	45
Cooling water pipe		DN100	DN100	DN100	DN100	DN100	DN125	DN125	DN125
Partially recovered heat	kw	60	64	72	78	90	100	108	124
Partially recovered heating water flow	m3/h	10	11	12	13	15	17	19	21
Partially recovered heat water pressure	Kpa	30	30	30	30	31	31	30	32
Dimesnion(L*W*H)	mm	3500*1300*1600	3600*1300*1680	3760*1400*1680	3800*1400*1700	3950*1400*1700	4100*1580*1700	4200*1580*1750	4250*1580*1750
Weight(standard)	kg	3000	3200	3450	3890	4100	4300	4800	5000

Noted: heat recovery water in/out: 40/45℃

Parameter of flooded type water cooled chiller R134a

Model		LSBLG700BM	LSBLG800BM	LSBLG960BM	LS8LG1000BM	LSBLG1120BM	LSBLG1260BM	LSBLG1400BM	LSBLG1600BM
Cooling Cap.	kw	690	785	950	990	1100	1250	1380	1580
Total Power Input	kw	132	150	182	190	210	240	265	303
Max operating current	A	534	620	710	754	786	906	1068	1240
100% load energy efficiency ratio		5.23	5.23	5.22	5.21	5.24	5.21	5.21	5.21
Energy control		25%-100%							
refrigeration circuits		1							
Condensor No.		1							
Condensor Type		Semi-closed double screw							
Noise	dB(A)	68	68	68	69	69	71	71	71
Voltage	V/Ph/Hz	380/3/50							
Refrigerant		R134a							
Refrigerant Charge	kg	242	260	290	320	350	380	450	500
Chilled water inlet temp.	℃	12							
Chilled water outlet temp.	℃	7							
Chilled water flow	m3/h	119	135	164	171	189	215	238	272
Chilled water pressure	Kpa	44	44	42	44	44	44	50	55
Chilled water pipe		DN125	DN125	DN125	DN150	DN150	DN150	DN200	DN200
Cooling water inlet temperature	℃	30							
Cooling water outlet temp.	℃	35							
Cooling water flow	m3/h	142	161	195	203	226	257	283	324
Cooling water pressure	Kpa	44	44	43	44	44	44	50	55
Cooling water pipe		DN125	DN125	DN125	DN150	DN150	DN150	DN200	DN200
Partially recovered heat	kw	138	157	190	198	220	250	276	316
Partially recovered heating water flow	m3/h	24	27	33	34	38	43	47	54
Partially recovered heat water pressure	Kpa	33	33	30	3	32	30	32	33
Dimesnion(L*W*H)	mm	4300*1580*1760	4300*1580*1780	4700*1650*1780	4700*1700*1800	4700*1700*1800	4780*1800*1800	4800*1900*2000	4800*1900*2000
Weight(standard)	kg	5300	5500	5900	6200	6600	7000	8000	8600

Noted: heat recovery water in/out: 40/45℃

FALLING FILM TYPE WATER COOLED CHILLERS

Applicable area: ≧2000m²

Applicable places: hotels, office buildings, factory,shopping malls,etc

Features: Optimized design, high efficiency and energy saving; product design is completely in accordance with international standards, designed in combination with China's actual national conditions; using falling film evaporator, high heat exchange efficiency, COP up to 5.5, excellent options, using high-quality brand compressors to ensure the high efficiency of the unit Reliable operation; electronic expansion valve, self-adaptive adjustment, precise control of liquid supply; self-developed falling film evaporator, high heat exchange efficiency, less refrigerant charge, stable oil return; green environmental protection R134a environmental protection working fluid available Select, the charging amount is reduced by 40%. High energy efficiency ratio, low power consumption, and carbon emission reduction.

Parameter of falling film type water cooled chiller R22

Model		LSBLG350P	LSBLG400P	LSBLG520P	LSBLG660P	LSBLG700P	LSBLG800P	LSBLG960P	LSBLG1060P	LSBLG1200P
Cooling Cap.	kw	350	400	520	660	700	800	950	1050	1180
Total Power Input	kw	65	75	97	122	130	150	175	195	218
Max operating current	A	193	220	268	336	355	393	498	534	620
100%load energy efficiency ratio		5.38	5.33	5.36	5.41	5.38	5.33	5.43	5.38	5.41
Energy control		25%-100%								
refrigeration circuits		1								
Compressor No.		1								
Compressor Type		Semi-closed double screw								
Noise	dB(A)	69	71	68	69	69	71	71	71	71
Voltage	V/Ph/Hz	380/3/50								
Refrigerant		R22								
Refrigerant Charge	kg	80	90	110	160	180	210	270	285	310
Chilled water inlet temp.	℃	12								
Chilled water outlet temp.	℃	7								
Chilled water flow	m3/h	60	69	90	114	121	138	164	181	203
Chilled water pressure	Kpa	44	44	43	44	44	44	50	55	55
Chilled water pipe		DN100	DN100	DN125	DN125	DN150	DN150	DN150	DN150	DN150
Cooling water inlet temperature	℃	30								
Cooling water outlet temp.	℃	35								
Cooling water flow	m3/h	71	82	106	135	143	164	194	214	241
Cooling water pressure	Kpa	44	44	43	44	44	44	50	55	55
Cooling water pipe		DN100	DN100	DN125	DN125	DN150	DN150	DN150	DN150	DN150
Partially recovered heat	kw	70	80	104	132	140	160	190	210	236
Partially recovered heating water flow	m3/h	12	14	18	23	24	28	33	36	41
Partially recovered heating water pressure	Kpa	32	30	30	30	30	30	32	33	33
Dimensions (L*W*H)	mm	3450*1350*1700	3450*1350*1700	3700*1400*1760	3900*1400*1800	3900*1400*1800	4300*1550*1850	4450*1550*1850	4300*1550*1850	4300*1550*1850
Weight(standard)	kg	3450	3500	3800	4200	4300	4600	5200	5400	5680

Parameter of falling film type water cooled chiller R22

Model		LSBLG1320P	LSBLG1400P	LSBLG1600P	LSBLG1820P	LSBLG2000P	LSBLG2200P	LSBLG2400P
Cooling Cap.	kw	1320	1380	1600	1780	1900	2050	2240
Total Power Input	kw	242	255	295	329	348	378	412
Max operating current	A	336*2	355*2	393*2	453*2	498*2	534*2	620*2
100%EER		5.45	5.41	5.42	5.41	5.46	5.42	5.44
Energy control		25%-100%						
refrigeration circuits		2						
Compressor No.		2						
Compressor Type		Semi-closed double screw						
Noise	dB(A)	68	69	69	71	71	71	71
Voltage	V/Ph/Hz	380/3/50						
Refrigerant		R22						
Refrigerant Charge	kg	330	350	380	400	435	470	530
Chilled water inlet temp.	℃	12						
Chilled water outlet temp.	℃	7						
Chilled water flow	m3/h	227	238	276	307	327	353	386
Chilled water pressure	Kpa	53	53	55	55	55	60	60
Chilled water pipe		DN200	DN200	DN200	DN200	DN250	DN250	DN250
Cooling water inlet temperature	℃	30						
Cooling water outlet temp.	℃	35						
Cooling water flow	m3/h	269	282	326	363	387	418	457
Cooling water pressure	Kpa	58	60	60	60	65	65	65
Cooling water pipe		DN200	DN200	DN200	DN200	DN250	DN250	DN250
Partially recovered heat	kw	264	276	320	356	380	410	448
Partially recovered heating water flow	m3/h	45	47	55	61	65	71	77
Partially recovered heating water pressure	Kpa	30	31	32	30	32	32	33
Dimensions (L*W*H)	mm	4650*1780*1800	4720*1800*1800	4760*1800*1800	4800*1800*1900	4800*1850*1850	4800*1900*2000	4800*1900*2000
Weight(standard)	kg	6500	6800	7200	7780	8150	8600	9000

Parameter of falling film type water cooled chiller R134a

Model		LSBLG300BP	LSBLG370BP	LSBLG480BP	LSBLG520BP	LSBLG580BP	LSBLG700BP	LSBLG800BP
Cooling Cap.	kw	300	370	470	510	570	680	785
Total Power Input	kw	55	67	85	92	103	122	142
Max operating current	A	241	310	355	377	453	498	620
100%EER		5.45	5.52	5.53	5.54	5.53	5.57	5.53
Energy control		25%-100%						
refrigeration circuits		1						
Compressor No.		1						
Compressor Type		Semi-closed double screw						
Noise	dB(A)	68	68	69	69	71	71	68
Voltage	V/Ph/Hz	380/3/50						
Refrigerant		R134						
Refrigerant Charge	kg	70	95	130	145	190	220	260
Chilled water inlet temp.	℃	12						
Chilled water outlet temp.	℃	7						
Chilled water flow	m3/h	52	64	81	88	98	117	135
Chilled water pressure	Kpa	43	44	44	44	44	44	44
Chilled water pipe		DN100	DN100	DN100	DN125	DN125	DN150	DN150
Cooling water inlet temperature	℃	30						
Cooling water outlet temp.	℃	35						
Cooling water flow	m3/h	61	75	96	104	116	138	160
Cooling water pressure	Kpa	45	45	45	45	45	45	44
Cooling water pipe		DN100	DN100	DN100	DN125	DN125	DN150	DN150
Partially recovered heat	kw	60	74	94	102	114	136	157
Partially recovered heating water flow	m3/h	10	13	16	18	20	23	27
Partially recovered heating water pressure	Kpa	30	30	31	31	30	32	33
Dimensions (L*W*H)	mm	3500*1300*1600	3760*1400*1680	3950*1400*1700	4100*1580*1700	4200*1580*1750	4250*1580*1750	4300*1580*1780
Weight(standard)	kg	3000	3450	4100	4300	4800	5000	5500

Parameter of falling film type water cooled chiller R134a

Model		LSBLG960BP	LSBLG1020BP	LSBLG1120BP	LSBLG1320BP	LSBLG1420BP	LSBLG1660BP
Cooling Cap.	kw	950	1000	1100	1300	1400	1580
Total Power Input	kw	170	180	198	235	252	285
Max operating current	A	710	754	786	906	1068	1240
100%EER		5.59	5.56	5.56	5.53	5.56	5.54
Energy control		25%-100%					
refrigeration circuits		1					
Compressor No.		1					
Compressor Type		Semi-closed double screw					
Noise	dB(A)	68	69	69	71	71	71
Voltage	V/Ph/Hz	380/3/50					
Refrigerant		R134a					
Refrigerant Charge	kg	290	320	350	380	450	500
Chilled water inlet temp.	℃	12					
Chilled water outlet temp.	℃	7					
Chilled water flow	m3/h	164	172	189	224	241	272
Chilled water pressure	Kpa	43	44	44	44	50	55
Chilled water pipe		DN150	DN150	DN150	DN200	DN200	DN200
Cooling water inlet temperature	℃	30					
Cooling water outlet temp.	℃	35					
Cooling water flow	m3/h	193	203	224	264	285	321
Cooling water pressure	Kpa	43	44	44	44	50	55
Cooling water pipe		DN150	DN150	DN150	DN200	DN200	DN200
Partially recovered heat	kw	190	200	220	260	280	316
Partially recovered heating water flow	m3/h	33	34	38	45	48	54
Partially recovered heating water pressure	Kpa	30	31	32	30	32	33
Dimensions (L*W*H)	mm	4700*1650*1780	4700*1700*1800	4700*1700*1800	4780*1800*1800	4800*1600*2000	4800*1600*2000
Weight(standard)	kg	5900	6200	6600	7000	8000	8600

Villa type water (ground) source heat pump

Applicable area: ≧50m²

Applicable places: Families, supermarkets, schools, shopping malls, hotels, hospitals, office buildings, entertainment places and other Spaces

Features:Environmental protection, energy saving,Different rooms can be cooled and heated at the same time, greatly improving the living comfort.The heat source side adopts large temperature difference system and small flow rate to save water.Microcomputer control, complete protection device, stable and reliable operation.Easy to operate, and the unit can be centralized monitoring and remote control.

Villa type water (ground) source heat pump

Water (ground) Source Heat Pump Unit Parameter （R22）														
Model		GSHP10	GSHP13	GSHP15	GSHP20	GSHP25	GSHP25(two)	GSHP30	GSHP30(two)	GSHP40	GSHP40(two)	GSHP50	GSHP60	GSHP80
Cooling Capacity(kw)		10	13	15	20	25	25	30	30	40	40	50	60	80
Heating Capacity(kw)(45℃ hot water)		11.5	15	17	24	30	30	38	38	48	48	56	68	90
Cooling Power input (kw)		2.2	2.6	3	4	5	2.5*2	6	3*2	7.5	4*2	10	11.5	15
Heating Power input (kw)(45℃ hot water)		2.8	3.5	4	5.7	6.7	3.4*2	8.5	4*2	10.8	5.7*2	13.4	16.8	21.6
Refrigerant	Type	R22												
Power	V/PH/Hz	380/3/50												
Compressor		Hermetic scroll												
Evaporator	Type	Tube-in-tube												
	Water resisitance(kpa)	30	30	33	33	35	35	40	40	40	40	45	45	52
Condenser	Form	Tube-in-tube												
	Water Resistance(kpa)	30	35	35	38	38	38	40	40	40	40	42	42	50
	Connection size	DN32	DN32	DN32	DN32	DN40	DN40	DN40	DN40	DN40	DN40	DN50	DN50	DN50
Use Side	Water Flow(m 3/h)	1.98	2.58	2.92	4.13	5.16	5.16	6.53	6.53	8.25	8.25	9.63	11.7	13.76
Heat Source Side	Water Flow(m 3/h)	1.07	1.41	1.6	2.25	2.86	2.86	3.62	3.62	4.57	4.57	5.23	6.29	8.24
Dimension	L （m m ）	1350	1350	1350	1350	1450	1450	1450	1450	1450	1450	1600	1750	1750
	W(m m)	700	700	700	700	700	700	700	700	700	700	900	900	900
	H(m m)	1000	1000	1000	1000	1150	1150	1150	1150	1150	1150	1330	1330	1330
Weight	Kg	120	150	160	220	260	260	300	300	320	320	380	400	550
Noise	dB (A)	54	56	58	60	60	60	60	60	60	60	60	60	65
Noted: Cooling conditions of underground water:usage side water input,12℃,output 7℃; heating source side water input,18℃,output 29℃.														
Heating conditions of underground water:usage side water input,40℃,output 45℃; heating source side water input,15℃,output 7℃.														

Modular Type Water (Ground) Heat Pump

Applicable area: ≧800m^2

Applicable places: hotels, villa,office buildings,station and factory,shopping malls,hospitals,banks, Families, supermarkets, schools, shopping malls, hotels, hospitals, office buildings, farms ,etc. large and medium-sized places

Features: high efficiency, energy saving, environmental protection, heat source renewability, convenient transportation and installation, quiet operation. The capacity of the machine can be expanded at will, and the free combination of the unit can be realized according to the capacity. The environmental and economic benefits are significant, and the application range is wide.

Parameter of modular type water(ground) source heat pump are tested under the following condition:

1.Underground water cooling condition :
use side water in/out: 12/7℃
heat source side water in/out: 18/39℃
2.Underground water heating condition :
use side water in/out: 40/45℃
heat source side water in/out: 15/7℃
3.Buried pipe cooling condition :
use side water in/out: 12/7℃
heat source side water in/out: 25/30℃
4.Buried pipe heating condition :
use side water in/out: 40/45℃
heat source side water in/out: 8/4℃
5.Heat recoverer water in/out: 40/50℃

Model		GSHP90K	GSHP130K	GSHP160K	GSHP200K	GSHP240K	GSHP90K-C
Cooling cap.(kw)		90	130	160	200	240	90
Heating cap.(kw)		95	139	172	215	255	95
Power supply		AC 380V/50Hz/3Ph					
Energy control		2	3	4	5	6	2
Max current(A)		2*26	3*26	4*26	5*26	6*26	2*26
Compressor	Type	Hermetic scroll type					
	NO.	2	3	4	5	6	2
	Cooling rated power(kw)	16.7	24.1	29.6	37	45	16.7
	Heating rated power(kw)	19.6	28.5	35.2	44	53	19.6
Refrigerant (R22)	charge (kg)	2*7	3*7	4*7	5*7	6*7	2*7
	Type	R22					
Evaporator	Type	Shell and tube type					
	Water side resistance(kpa)	50	56	58	60	60	50
	Water pipe	DN50	DN65	DN65	DN80	DN80	DN50
	Cooling flow rate (m3/h)	15.5	22.4	27.5	34.4	41.3	15.5
	Heating flow rate(m3/h)	8.3	12.0	14.8	18.5	22.3	8.3
Condensor	Type	Shell and tube type					
	Water side resistance(kpa)	40	45	50	50	50	40
	Water pipe	DN50	DN65	DN65	DN80	2-DN65	DN50
	Cooling flow rate (m3/h)	8.3	12.0	14.8	18.5	22.3	8.3
	Heating flow rate(m3/h)	15.5	22.4	27.5	34.4	41.3	15.5
Dimension of standard unit	length(mm)	1750	2500	2500	3200	3400	1750
	width(mm)	800	850	900	950	1050	800
	height(mm)	1400	1450	1450	1450	1600	680
Weight of standard unit (kg)		680	830	1080	1250	1500	680
Noise(dB)		≦76	≦76	≦76	≦76	≦76	≦76

Parameter of modular type water(ground) source heat pump are tested under the following condition:

1.Underground water cooling condition :
use side water in/out: 12/7℃
heat source side water in/out: 18/39℃
2.Underground water heating condition :
use side water in/out: 40/45℃
heat source side water in/out: 15/7℃
3.Buried pipe cooling condition :
use side water in/out: 12/7℃
heat source side water in/out: 25/30℃
4.Buried pipe heating condition :
use side water in/out: 40/45℃
heat source side water in/out: 8/4℃
5.Heat recoverer water in/out: 40/50℃

Model		GSHP130K-C	GSHP160K-C	GSHP200K-C	GSHP240K-C	GSHP180KA	GSHP280KA	GSHP360KA
Cooling cap.(kw)		130	160	160	200	240	175	270
Heating cap.(kw)		139	172	172	255	200	285	380
Power supply		AC 380V/50Hz/3Ph						
Energy control		3 stages	4 stages	5 stages	6 stages	2 stages	3 stages	4 stages
Max current(A)		3*26	4*26	5*26	6*26	2*62	3*62	4*62
Compressor	Type	Hermetic scroll type						
	NO.	3	4	5	6	2	3	4
	Cooling rated power(kw)	24.1	29.6	37	45	33	49.5	66
	Heating rated power(kw)	28.5	35.2	44	53	43	94.5	86
Refrigerant (R22)	charge (kg)	3*7	4*7	5*7	6*7	2*14	3*14	4*14
	Type	R22						
Evaporator	Type	Shell and tube type						
	Water side resistance(kpa)	56	58	60	60	60	60	60
	Water pipe	DN65	DN65	DN80	DN80	DN80	DN80	DN100
	Cooling flow rate (m3/h)	22.4	27.5	34.4	41.3	30.1	46.4	61.9
	Heating flow rate(m3/h)	12.0	14.8	18.5	22.3	13.4	25.0	33.3
Condensor	Type	Shell and tube type						
	Water side resistance(kpa)	45	50	50	50	52	55	55
	Water pipe	DN65	DN65	DN80	2-DN65	DN80	DN80	DN100
	Cooling flow rate (m3/h)	12.0	14.8	18.5	22.3	16.3	25.0	33.3
	Heating flow rate(m3/h)	22.4	27.5	34.4	41.3	30.1	46.4	61.9
Dimension of standard unit	length(mm)	2500	2500	3200	3400	2300	2750	3200
	width(mm)	850	900	950	1050	900	900	1000
	height(mm)	1450	1450	1450	1600	1550	1600	1800
Weight of standard unit (kg)		830	1080	1250	1500	1150	1600	2000
Noise(dB)		≦76		≦76	≦76	≦76	≦76	≦76

WATER (GROUND) SOURCE HEAT PUMP

Applicable area: ≧1000m^2

Applicable places: hotels, office buildings, factory,shopping malls,school,etc

Features: Wide range of applications, can be used for cooling and heating, providing hot water;
High efficiency and energy saving, cooling COP is above 5.0;
Environmentally friendly and economical, using renewable energy, no pollution;
Safe and reliable, multiple protections for the unit, and high degree of automatic control.

Parameter of water (ground) source heat pump R22

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP180	GSHP220	GSHP280	GSHP350	GSHP430	GSHP540	GSHP600	GSHP660	GSHP700
Cooling Cap.	kw	180	215	270	350	430	540	600	650	730
Power in cooling	kw	35	41	52	68	83	105	118	125	142
100% load cooling energy efficiency		5.14	5.24	5.19	5.15	5.18	5.14	5.08	5.20	5.14
Heating Cap.	kw	202	248	295	392	475	582	640	700	780
Power in heating	kw	44	55	65	85	105	128	140	255	172
100% load heating energy efficiency		4.59	4.51	4.54	4.61	4.52	4.55	4.57	4.52	4.53
Max operating current	A	121	124	171	220	268	298	315	355	393
Energy control		25%-100%								
refrigeration circuits		1								
Condensor No.		1								
Condensor Type		Semi-closed double screw								
Voltage	V/Ph/Hz	380/3/50								
Refrigerant		R22								
Refrigerant Charge	kg	35	42	50	60	73	82	95	110	125
Pipe of Evaporator		DN80	DN80	DN100	DN100	DN100	DN125	DN125	DN125	DN150
Cooling water flow	m3/h	31	37	47	60	74	93	103	112	126
Heating water flow	m3/h	17	20	25	33	40	51	56	61	68
Water pressure	Kpa	53	53	54	54	55	55	56	56	60
Pipe of condensor		DN80	DN100	DN100	DN100	DN100	DN125	DN125	DN125	DN150
Cooling water flow	m3/h	17	20	25	33	40	51	56	61	68
Heating water flow	m3/h	31	37	47	60	74	93	103	112	126
Water pressure	Kpa	34	34	34	34	35	35	36	36	38
Partially recovered heat	kw	36	43	54	70	86	108	120	130	146
Partially recovered heating water flow	m3/h	6	7	9	12	15	19	21	22	25
Partially recovered heating water pressure	Kpa	26	26	26	26	28	27	27	27	28
Dimension (L*W*H)	cm	280*130*144	280*130*144	300*135*147	330*135*165	330*140*165	330*140*165	350*140*170	350*340*170	360*155*170
Weight(standard model)	kg	2000	2200	2310	2400	2480	2650	3000	3400	3800
Noise(standard model)	dB(A)	69	69	69	70	70	70	73	73	73

Parameter of water (ground) source heat pump R22

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP860	GSHP920	GSHP1020	GSHP 1120	GSHP 1200	GSHP 1300	GSHP 1400	GSHP 1560	GSHP 1700
Cooling Cap.	kw	850	920	1000	1100	1200	1300	1400	1560	1700
Power in cooling	kw	162	178	194	212	234	255	268	298	329
100% load cooling energy efficiency		5.25	5.17	5.15	5.19	5.13	5.10	5.22	5.23	5.17
Heating Cap.	kw	900	950	1080	1150	1250	1350	1480	1600	1780
Power in heating	kw	195	210	238	252	272	295	325	342	382
100% load heating energy efficiency		4.62	4.52	4.54	4.56	4.60	4.58	4.55	4.68	4.66
Max operating current	A	453	498	534	620	630	710	754	784	906
Energy control		25%-100%				12.5%-100%				
refrigeration circuits		1				2				
Condensor No.		1				2				
Condensor Type		Semi-closed double screw								
Voltage	V/Ph/Hz	380/3/50								
Refrigerant		R22								
Refrigerant Charge	kg	155	170	180	196	208	225	240	256	274
Pipe of Evaporator		DN150	DN150	DN150	DN150	DN150	DN200	DN200	DN200	DN200
Cooling water flow	m3/h	146	158	172	189	207	224	241	269	293
Heating water flow	m3/h	79	86	93	103	112	122	131	145	159
Water pressure	Kpa	62	62	62	63	65	65	66	66	66
Pipe of condensor		DN150	DN150	DN150	DN150	DN150	DN200	DN200	DN200	DN200
Cooling water flow	m3/h	79	86	93	103	112	122	131	145	159
Heating water flow	m3/h	146	158	172	189	207	224	241	269	293
Water pressure	Kpa	40	40	42	42	43	43	45	45	45
Partially recovered heat	kw	255	276	300	330	360	390	420	468	510
Partially recovered heating water flow	m3/h	44	47	52	57	62	67	72	80	88
Partially recovered heating water pressure	Kpa	30	30	32	32	32	33	34	34	34
Dimension (L*W*H)	cm	370*155*178	370*160*178	380*160*180	390*160*185	435*165*160	435*165*165	458*170*180	470*170*180	500*175*185
Weight(standard model)	kg	3900	4150	4360	4600	5100	5600	6200	7000	7230
Noise(standard model)	dB(A)	69	69	69	70	70	70	73	73	75

Parameter of water (ground) source heat pump R22

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP1840	GSHP2040	GSHP2300	GSHP 2400	GSHP 2600	GSHP 2800	GSHP 3000	GSHP 3440	GSHP 3600
Cooling Cap.	kw	1800	2000	2250	2400	2550	2800	2950	3400	3500
Power in cooling	kw	348	385	432	458	488	535	568	647	663
100% load cooling energy efficiency		5.17	5.19	5.21	5.24	5.23	5.23	5.19	5.26	5.28
Heating Cap.	kw	1900	2100	2320	2500	2680	2900	3050	3500	3680
Power in heating	kw	408	445	498	535	582	630	665	755	805
100% load heating energy efficiency		4.66	4.72	4.66	4.67	4.60	4.60	4.59	4.64	4.57
Max operating current	A	996	1068	1240	1344	1420	1508	1572	1812	1992
Energy control		12.5%-100%			6.25%-100%					
refrigeration circuits		2			4					
Condensor No.		2			4					
Condensor Type		Semi-closed double screw								
Voltage	V/Ph/Hz	380/3/50								
Refrigerant		R22								
Refrigerant Charge	kg	300	330	365	400	448	490	520	550	578
Pipe of Evaporator		DN200	DN200	DN200	2-DN150	2-DN150	2-DN150	2-DN200	2-DN200	2-DN200
Cooling water flow	m3/h	310	344	388	413	439	482	508	586	603
Heating water flow	m3/h	168	187	210	224	238	261	275	317	326
Water pressure	Kpa	68	68	69	69	70	70	71	72	72
Pipe of condensor		DN200	DN200	DN200	2-DN150	2-DN150	2-DN150	2-DN200	2-DN200	2-DN200
Cooling water flow	m3/h	168	187	210	224	238	261	275	317	326
Heating water flow	m3/h	310	344	388	413	439	482	508	586	603
Water pressure	Kpa	45	46	50	65	65	65	67	67	67
Partially recovered heat	kw	360	400	450	480	510	560	590	680	700
Partially recovered heating water flow	m3/h	62	69	77	83	88	96	101	117	120
Partially recovered heating water pressure	Kpa	35	35	35	38	38	38	40	40	40
Dimension (L*W*H)	cm	490*175*190	520*180*200	520*180*200	500*220*230	500*235*235	500*235*235	520*250*240	520*250*248	520*250*248
Weight(standard model)	kg	7480	8000	8500	10400	13000	13500	13800	14000	14800
Noise(standard model)	dB(A)	73	73	73	73	75	75	75	75	75

Parameter of water (ground) source heat pump R134a

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP 180B	GSHP 220B	GSHP 280B	GSHP 3508	GSHP 430B	GSHP 480B	GSHP 540B	GSHP 660B	GSHP 780B
Cooling Cap.	kw	180	220	280	350	430	480	540	650	760
Power in cooling	kw	35	42	53	67	80	91	103	125	145
100% load cooling energy efficiency		5.22	5.24	5.28	5.22	5.38	5.27	5.24	5.20	5.24
Heating Cap.	kw	200	245	310	390	475	545	588	710	825
Power in heating	kw	43	53	67	84	102	117	125	152	178
100% load cooling energy efficiency		4.65	4.62	4.63	4.64	4.66	4.66	4.70	4.67	4.63
Max operating current	A	171	203	241	336	337	393	453	534	620
Energy control		25%-100%								
refrigeration circuits		1								
Condensor No.		1								
Condensor Type		Semi-closed double screw								
Voltage	V/Ph/Hz	380/3/50								
Refrigerant		R134a								
Refrigerant Charge	kg	60	75	90	120	145	160	185	205	230
Pipe of Evaporator		DN80	DN80	DN100	DN100	DN125	DN125	DN125	DN125	DN150
Cooling water flow	m3/h	31	38	48	60	74	83	93	112	131
Heating water flow	m3/h	17	21	26	33	40	45	50	61	71
Water pressure	Kpa	53	53	54	54	55	55	56	56	60
Pipe of condensor		DN80	DN80	DN100	DN100	DN125	DN125	DN125	DN125	DN150
Cooling water flow	m3/h	17	21	26	33	40	45	50	61	71
Heating water flow	m3/h	31	38	48	60	74	83	93	112	131
Water pressure	Kpa	34	34	34	34	35	35	36	36	36
Partially recovered heat	kw	36	44	56	70	86	96	108	130	152
Partially recovered heating water flow	m3/h	6	8	10	12	15	17	19	22	26
Partially recovered heating water pressure	Kpa	26	26	26	26	28	27	27	27	28
Dimension(L*W*H)	mm	280*120*144	280*120*144	330*130*148	330*140*160	345*155*170	355*155*175	355*160*178	370*160*180	370*160*185
Weight(standard model)	kg	1800	1900	2400	3000	3800	3900	4150	4360	4600
Noise(standard model)	dB(A)	60	60	65	65	65	68	68	68	70

Parameter of water (ground) source heat pump R134a

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP 860B	GSHP 960B	GSHP 1080B	GSHP 1200B	GSHP 1320B	GSHP 1520B	GSHP 1720B	GSHP 1920B	GSHP2200B
Cooling Cap.	kw	850	950	1050	1150	1300	1500	1700	1900	2160
Power in cooling	kw	163	180	201	220	248	285	323	362	412
100% load cooling energy efficiency		5.21	5.28	5.22	5.23	5.24	5.26	5.26	5.25	5.24
Heating Cap.	kw	900	1000	1130	1250	1380	1580	1800	2050	2280
Power in heating	kw	190	215	245	268	295	340	385	442	482
100% load cooling energy efficiency		4.74	4.65	4.61	4.66	4.68	4.65	4.68	4.64	4.73
Max operating current	A	710	786	906	996	1068	1240	1420	1572	1812
Energy control		25%-100%								
refrigeration circuits		2						4		
Condensor No.		2						4		
Condensor Type		Semi-closed double screw								
Voltage	V/Ph/Hz	380/3/50								
Refrigerant		R134a								
Refrigerant Charge	kg	270	300	330	370	400	435	470	500	540
Pipe of Evaporator		DN150	DN150	DN150	DN150	DN200	DN200	2-DN125	2-DN150	2-DN150
Cooling water flow	m3/h	146	164	181	198	224	258	293	327	372
Heating water flow	m3/h	79	88	98	107	121	140	158	177	201
Water pressure	Kpa	53	53	54	54	55	55	56	56	60
Pipe of condensor		DN150	DN150	DN150	DN150	DN200	DN200	2-DN125	2-DN150	2-DN150
Cooling water flow	m3/h	79	88	98	107	121	140	158	177	201
Heating water flow	m3/h	146	164	181	198	224	258	293	327	372
Water pressure	Kpa	34	34	34	34	35	35	36	36	36
Partially recovered heat	kw	170	190	210	230	260	300	340	380	432
Partially recovered heating water flow	m3/h	29	33	36	40	45	52	59	65	74
Partially recovered heating water pressure	Kpa	26	26	26	26	28	27	27	27	28
Dimension(L*W*H)	mm	460*178*165	470*180*180	475*180*185	490*175*190	490*175*200	490*180*200	500*220*230	500*230*235	510*230*235
Weight(standard model)	kg	5600	7000	7230	7480	8000	8500	10000	10800	12000
Noise(standard model)	dB(A)	70	70	70	70	73	73	73	73	73

Parameter of water (ground) source heat pump R134a

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP 2400B	GSHP 2650B	GSHP3000B
Cooling Cap.	kw	2350	2600	2980
Power in cooling	kw	445	495	569
100% load cooling energy efficiency		5.28	5.25	5.24
Heating Cap.	kw	2460	2730	3100
Power in heating	kw	525	578	655
100% load cooling energy efficiency		4.69	4.72	4.73
Max operating current	A	1992	2136	2480
Energy control		6.25%-100%		
refrigeration circuits		4		
Condensor No.		4		
Condensor Type		Semi-closed double screw		
Voltage	V/Ph/Hz	380/3/50		
Refrigerant		R134a		
Refrigerant Charge	kg	570	600	640
Pipe of Evaporator		2-DN150	2-DN200	2-DN200
Cooling water flow	m3/h	405	448	513
Heating water flow	m3/h	219	242	278
Water pressure	Kpa	53	53	54
Pipe of condensor		2-DN150	2-DN200	2-DN200
Cooling water flow	m3/h	219	242	278
Heating water flow	m3/h	405	448	513
Water pressure	Kpa	34	34	34
Partially recovered heat	kw	470	520	596
Partially recovered heating water flow	m3/h	81	90	103
Partially recovered heating water pressure	Kpa	26	26	26
Dimension(L*W*H)	mm	510*240*235	520*250*240	520*250*248
Weight(standard model)	kg	13000	14000	15000
Noise(standard model)	dB(A)	75	75	75

FLOODED TYPE GROUND SOURCE HEAT PUMP

Applicable area: ≧2000m^2

Applicable places: hotels, office buildings, factory,shopping malls,etc

Features: Using high-efficiency flooded evaporator, the COP value is greatly improved compared with the traditional dry evaporator. The operating cost is saved by about 15-25%; the high-efficiency secondary oil separation, the reliable ejection pump oil return system, perfectly solves the problem of flooding. The oil return problem of the liquid type unit ensures that the compressor runs for a long time without losing oil, so that the unit runs stably and reliably; the electronic expansion valve controls the liquid supply of the refrigerant in a timely and accurate manner, which greatly improves the efficiency of the unit.

Parameter of water (ground) source heat pump R22

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP220M	GSHP280M	GSHP350M	GSHP410M	GSHP430M	GSHP540M	GSHP620M
Cooling Cap.	kw	220	278	350	408	430	540	600
Power in cooling	kw	40	50	63	74	78	98	109
100% load cooling energy efficiency		5.50	5.56	5.56	5.51	5.51	5.51	5.50
Heating Cap.	kw	248	300	385	452	475	595	678
Power in heating	kw	50	61	78	91	96	120	138
100% load cooling energy efficiency		4.96	4.92	4.94	4.97	4.95	4.96	4.91
Max operating current	A	121	124	171	220	241	268	298
Energy control		25%-100%						
refrigeration circuits		1						
Condensor No.		1						
Condensor Type		Semi-closed double screw						
Voltage	V/Ph/Hz	380/3/50						
Refrigerant		R22						
Refrigerant Charge	kg	50	70	100	125	140	160	195
Pipe of Evaporator		DN80	DN100	DN100	DN125	DN125	DN125	DN125
Cooling water flow	m3/h	38	48	60	70	74	93	103
Heating water flow	m3/h	21	26	33	39	41	51	58
Water pressure	Kpa	53	53	54	54	54	55	55
Pipe of condensor		DN80	DN100	DN100	DN125	DN125	DN125	DN125
Cooling water flow	m3/h	21	26	33	39	41	51	56
Heating water flow	m3/h	38	48	60	70	74	93	103
Water pressure	Kpa	34	34	34	34	34	35	35
Partially recovered heat	kw	44	56	70	82	86	108	120
Partially recovered heating water flow	m3/h	8	10	12	14	15	19	21
Partially recovered heating water pressure	Kpa	26	26	26	26	26	28	27
Dimension(L*W*H)	mm	340*140*160	340*140*160	340*140*160	350*140*165	370*145*165	370*150*178	375*150*178
Weight(standard model)	kg	2300	2800	3100	3500	4000	4500	4800
Noise(standard model)	dB(A)	55	60	60	60	63	63	63

Parameter of water (ground) source heat pump R22

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP680M	GSHP720M	GSHP860M	GSHP960M	GSHP1080M	GSHP1120M	GSHP1240M
Cooling Cap.	kw	675	720	850	950	1050	1100	1200
Power in cooling	kw	122	130	154	172	190	200	218
100% load cooling energy efficiency		5.53	5.54	5.52	5.52	5.53	5.5	5.50
Heating Cap.	kw	720	800	900	1000	1130	1195	1300
Power in heating	kw	145	162	182	203	223	242	262
100% load cooling energy efficiency		4.97	4.94	4.95	4.93	5.07	4.94	4.96
Max operating current	A	315	355	393	453	498	534	596
Energy control		25%-100%						
refrigeration circuits		1						
Condensor No.		1						
Condensor Type		Semi-closed double screw						
Voltage	V/Ph/Hz	380/3/50						
Refrigerant		R22						
Refrigerant Charge	kg	195	220	260	290	335	358	378
Pipe of Evaporator		DN125	DN150	DN150	DN150	DN150	DN150	DN150
Cooling water flow	m3/h	116	124	146	164	181	189	207
Heating water flow	m3/h	62	69	77	86	97	102	111
Water pressure	Kpa	56	56	60	62	62	62	65
Pipe of condensor		DN125	DN150	DN150	DN150	DN150	DN150	DN150
Cooling water flow	m3/h	62	69	77	86	97	102	111
Heating water flow	m3/h	116	124	146	164	181	189	207
Water pressure	Kpa	36	36	38	40	40	42	43
Partially recovered heat	kw	135	144	170	285	315	330	360
Partially recovered heating water flow	m3/h	23	25	29	49	54	57	62
Partially recovered heating water pressure	Kpa	27	27	28	30	30	32	32
Dimension(L*W*H)	mm	380*150*178	380*150*178	400*150*178	425*165*190	425*150*180	430*150*180	460*170*190
Weight(standard model)	kg	5100	5500	5600	6280	6400	6580	7000
Noise(standard model)	dB(A)	65	65	65	69	69	69	70

Parameter of water (ground) source heat pump R22

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP1300M	GSHP1560M	GSHP1720M	GSHP1920M	GSHP2080M	GSHP2240M	GSHP2480M
Cooling Cap.	kw	1280	1530	1680	1900	2050	2200	2400
Power in cooling	kw	228	278	305	345	370	398	435
100% load cooling energy efficiency		5.61	5.50	5.51	5.51	5.54	5.53	5.52
Heating Cap.	kw	1360	1625	1810	2050	2160	2350	2620
Power in heating	kw	275	330	368	415	440	475	532
100% load cooling energy efficiency		4.95	4.92	4.92	4.94	4.91	4.95	4.92
Max operating current	A	630	710	786	906	996	1068	1240
Energy control		25%-100%						
refrigeration circuits		2						
Condensor No.		2						
Condensor Type		Semi-closed double screw						
Voltage	V/Ph/Hz	380/3/50						
Refrigerant		R22						
Refrigerant Charge	kg	420	486	550	590	660	700	780
Pipe of Evaporator		DN200	DN200	DN200	DN200	DN200	DN250	DN250
Cooling water flow	m3/h	220	264	289	327	353	379	413
Heating water flow	m3/h	118	142	155	176	189	203	222
Water pressure	Kpa	65	66	66	66	68	69	69
Pipe of condensor		DN200	DN200	DN200	DN200	DN200	DN250	DN250
Cooling water flow	m3/h	118	142	155	176	189	203	222
Heating water flow	m3/h	220	264	289	327	353	379	413
Water pressure	Kpa	43	45	45	45	45	50	50
Partially recovered heat	kw	384	459	504	570	410	440	480
Partially recovered heating water flow	m3/h	66	79	87	98	71	76	83
Partially recovered heating water pressure	Kpa	33	34	34	34	35	35	35
Dimension(L*W*H)	mm	475*170*190	475*175*190	475*175*190	475*180*195	480*185*195	480*190*200	480*190*200
Weight(standard model)	kg	7300	7500	7800	8200	8500	9000	9500
Noise(standard model)	dB(A)	70	72	73	75	75	75	77

Parameter of water (ground) source heat pump R134a

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP300BM	GSHP330BM	GSHP370BM	GSHP400BM	GSHP430BM	GSHP540BM	GSHP620BM	GSHP670BM
Cooling Cap.	kw	300	330	370	400	430	520	600	650
Power in cooling	kw	54	59	67	72	78	64	108	118
100% load cooling energy efficiency		5.56	5.59	5.52	5.56	5.51	5.53	5.56	5.51
Heating Cap.	kw	330	365	405	452	472	580	655	720
Power in heating	kw	65	72	80	90	94	115	130	142
100% load cooling energy efficiency		5.08	5.08	5.06	5.02	5.02	5.04	5.04	5.07
Max operating current	A	241	268	310	336	355	377	453	498
Energy control		25%-100%							
refrigeration circuits		1							
Condensor No.		1							
Condensor Type		Semi-closed double screw							
Voltage	V/Ph/Hz	380/3/50							
Refrigerant		R134a							
Refrigerant Charge	kg	95	102	110	125	145	160	200	220
Pipe of Evaporator		DN100	DN100	DN100	DN100	DN100	DN125	DN125	DN125
Cooling water flow	m3/h	52	57	64	69	74	90	103	112
Heating water flow	m3/h	28	30	34	37	40	48	55	60
Water pressure	Kpa	53	53	54	54	54	55	55	56
Pipe of condensor		DN100	DN100	DN100	DN100	DN100	DN125	DN125	DN125
Cooling water flow	m3/h	28	30	34	37	40	48	55	60
Heating water flow	m3/h	52	57	64	69	74	90	103	112
Water pressure	Kpa	34	34	34	34	34	35	35	36
Partially recovered heat	kw	60	66	74	80	86	104	120	130
Partially recovered heating water flow	m3/h	10	11	13	14	15	18	21	22
Partially recovered heating water pressure	Kpa	26	26	26	26	26	26	27	27
Dimension(L*W*H)	mm	370*130*160	370*130*320	380*140*170	382*140*170	400*145*170	405*150*178	420*150*180	420*150*180
Weight(standard model)	kg	3000	3200	3450	3700	4000	4250	4600	4850
Noise(standard model)	dB(A)	69	69	69	69	70	70	70	73

Parameter of water (ground) source heat pump R134a

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP700BM	GSHP860BM	GSHP920BM	GSHP1080BM	GSHP1200BM	GSHP1340BM	GSHP1450BM	GSHP1720BM
Cooling Cap.	kw	700	850	900	1050	1150	1300	1400	1700
Power in cooling	kw	126	154	162	190	208	235	252	305
100% load cooling energy efficiency		5.56	5.52	5.56	5.53	5.53	5.53	5.56	5.57
Heating Cap.	kw	760	915	965	1130	1260	1410	1515	1800
Power in heating	kw	150	182	192	223	249	280	300	355
100% load cooling energy efficiency		5.07	5.03	5.03	5.07	5.06	5.04	5.05	5.07
Max operating current	A	534	620	710	754	906	996	1068	1240
Energy control		25%-100%							
refrigeration circuits		1							
Condensor No.		1							
Condensor Type		Semi-closed double screw							
Voltage	V/Ph/Hz	380/3/50							
Refrigerant		R134a							
Refrigerant Charge	kg	255	270	320	350	400	440	510	540
Pipe of Evaporator		DN125	DN150	DN150	DN150	DN150	DN200	DN200	DN200
Cooling water flow	m3/h	121	146	155	181	198	224	241	293
Heating water flow	m3/h	65	79	83	97	106	120	129	157
Water pressure	Kpa	56	60	65	65	65	65	66	66
Pipe of condensor		DN125	DN150	DN150	DN150	DN150	DN200	DN200	DN200
Cooling water flow	m3/h	65	79	83	97	106	120	129	157
Heating water flow	m3/h	121	146	155	181	198	224	241	293
Water pressure	Kpa	36	38	42	42	43	43	45	45
Partially recovered heat	kw	140	170	270	315	345	345	390	420
Partially recovered heating water flow	m3/h	24	29	46	54	59	59	67	72
Partially recovered heating water pressure	Kpa	27	28	32	32	32	33	34	34
Dimension(L*W*H)	mm	425*156*180	430*156*180	473*165*185	475*165*190	478*170*190	480*170*190	480*175*190	488*180*200
Weight(standard model)	kg	5000	5300	6400	6850	7000	7300	7700	8500
Noise(standard model)	dB(A)	73	73	75	75	75	75	75	75

FALLING FILM TYPE WATER SOURCE HEAT PUMP UNIT

Applicable area: ≧2000m²

Applicable places: hotels, office buildings, factory,shopping malls,etc

Features: Optimized design, high efficiency and energy saving; product design fully complies with international standards, designed in combination with China's actual national conditions; using falling film evaporator with high heat exchange efficiency. "Large temperature difference, small flow" design concept. Reduce investment and reduce operating costs. Options Sophisticated, stable and reliable; high-quality brand compressors are used to ensure efficient and reliable operation of the unit, electronic expansion valves are used, self-adaptive adjustment, and precise control of liquid supply. Efficient falling film evaporator, high heat exchange efficiency, and less refrigerant charge , oil return is stable; 100% performance test is carried out before the unit leaves the factory to ensure the reliability of the unit; green environmental protection, R134a environmental protection working fluid, the charging amount is reduced by 40%. High energy efficiency ratio, low power consumption, reducing carbon emissions; wide application range, the temperature range of the unit's operating heat source inlet water is 8-25 ℃, it can provide 7/45 ℃ air-conditioning cold water, and can also provide 60℃ hot water.

Parameter of falling film type water (ground) source heat pump R22

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP350P	GSHP 430P	GSHP 540P	GSHP 660P	GSHP 750P	GSHP850P	GSHP 960P	GSHP 1080P	GSHP 1120P
Cooling Cap.	kw	350	430	540	680	730	850	950	1050	1100
Power in cooling	kw	62	75	95	118	129	150	168	185	193
100% load cooling energy efficiency		5.65	5.73	5.68	5.76	5.66	5.67	5.65	5.68	5.7
Heating Cap.	kw	385	485	590	720	810	910	1050	1120	1200
Power in heating	kw	74	94	115	140	157	178	205	217	235
100% load heating energy efficiency		5.2	5.16	5.13	5.14	5.16	5.11	5.12	5.16	5.11
Max operating current	A	171	241	268	315	355	393	453	498	534
Energy control		25%-100%								
refrigeration circuits		1								
Condensor No.		1								
Condensor Type		Semi-closed double screw								
Voltage	V/Ph/Hz	380/3/50								
Refrigerant		R22								
Refrigerant Charge	kg	90	125	150	210	245	260	290	315	320
Pipe of Evaporator		DN100	DN125	DN125	DN125	DN150	DN150	DN150	DN150	DN150
Cooling water flow	m3/h	60	74	93	117	126	146	164	181	189
Heating water flow	m3/h	33	42	51	62	70	79	91	97	101
Water pressure	Kpa	54	54	55	56	56	60	62	62	62
Pipe of condensor		DN100	DN125	DN125	DN125	DN150	DN150	DN150	DN150	DN150
Cooling water flow	m3/h	32	40	50	62	67	78	88	97	101
Heating water flow	m3/h	60	74	93	117	126	146	164	181	189
Water pressure	Kpa	34	34	35	36	36	38	40	40	42
Partially recovered heat	kw	70	86	108	136	146	170	285	315	330
Partially recovered heating water flow	m3/h	12	15	19	23	25	29	49	54	57
Partially recovered heating water pressure	Kpa	26	26	28	27	27	28	30	30	32
Dimesion (L*W*H)	cm	340*140*160	370*145*165	370*150*178	380*150*178	380*150*550	400*150*178	425*165*190	425*150*180	430*150*180
Weight(standard model)	kg	3100	4000	4500	5100	5500	5800	6280	6400	6580
Noise(standard model)	dB(A)	60	63	63	65	65	65	69	69	69

Parameter of falling film type water (ground) source heat pump R22

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP1300P	GSHP1320P	GSHP1560P	GSHP 1660P	GSHP 1920P	GSHP2440P	GSHP 2200P	GSHP 2520P
Cooling Cap.	kw	1280		1550	1660	1900	2040	2200	2500
Power in cooling	kw	225		270	292	335	360	385	440
100% load cooling energy efficiency		5.69		5.74	5.68	5.67	5.67	5.71	5.68
Heating Cap.	kw	1380	1400	1650	1780	2020	2200	2360	2600
Power in heating	kw	270	274	322	348	392	430	462	510
100% load heating energy efficiency		5.11	5.11	5.12	5.11	5.15	5.12	5.11	5.10
Max operating current	A	620	630	710	786	906	996	1068	1240
Energy control		25%-100%							
refrigeration circuits		1	2						
Condensor No.		1	2						
Condensor Type		Semi-closed double screw							
Voltage	V/Ph/Hz	380/3/50							
Refrigerant		R22							
Refrigerant Charge	kg	350	420	486	520	570	590	640	700
Pipe of Evaporator		DN150	DN200	DN200	DN200	DN200	DN200	DN200	DN200
Cooling water flow	m3/h	220	220	267	286	327	351	379	431
Heating water flow	m3/h	118	118	142	153	175	188	202	230
Water pressure	Kpa	220	220	267	286	327	351	379	431
Pipe of condensor		DN150	DN200	DN200	DN200	DN200	DN200	DN200	DN200
Cooling water flow	m3/h	118	118	142	153	175	188	202	230
Heating water flow	m3/h	220	220	267	286	327	351	379	431
Water pressure	Kpa	42	43	45	45	45	45	50	50
Partially recovered heat	kw	384	384	465	498	570	408	440	500
Partially recovered heating water flow	m3/h	66	66	80	86	98	70	76	86
Partially recovered heating water pressure	Kpa	32	33	34	34	34	35	35	35
Dimesion (L*W*H)	cm	430*150*180	475*170*190	475*175*190	475*175*190	475*180*195	480*185*195	480*190*200	480*190*200
Weight(standard model)	kg	6900	7300	7500	7800	8200	8500	9000	9500
Noise(standard model)	dB(A)	69	70	73	73	75	75	75	77

Parameter of falling film type water (ground) source heat pump R134a

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP 300BP	GSHP 330BP	GSHP 370BP	GSHP 400BP	GSHP 430BP	GSHP 540BP	GSHP 620BP	GSHP 670BP
Cooling Cap.	kw	300	330	370	400	430	530	600	650
Power in cooling	kw	52	58	65	70	75	93	105	115
100% load cooling energy efficiency		5.77	5.69	5.69	5.71	5.73	5.70	5.71	5.65
Heating Cap.	kw	330	365	408	440	475	595	658	724
Power in heating	kw	63	70	78	85	90	113	125	138
100% load heating energy efficiency		5.24	5.21	5.23	5.18	5.28	5.27	5.26	5.25
Max operating current	A	241	268	310	336	355	377	453	498
Energy control		25%-100%							
refrigeration circuits		1							
Condensor No.		1							
Condensor Type		Semi-closed double screw							
Voltage	V/Ph/Hz	380/3/50							
Refrigerant		R134a							
Refrigerant Charge	kg	95	102	110	125	145	160	200	220
Pipe of Evaporator		DN100	DN100	DN100	DN100	DN100	DN125	DN125	DN125
Cooling water flow	m3/h	52	57	64	69	74	91	103	112
Heating water flow	m3/h	28	30	34	37	40	49	55	60
Water pressure	Kpa	53	53	54	54	54	55	55	56
Pipe of condensor		DN100	DN100	DN100	DN100	DN100	DN125	DN125	DN125
Cooling water flow	m3/h	28	30	34	37	40	49	55	60
Heating water flow	m3/h	52	57	64	69	74	91	103	112
Water pressure	Kpa	34	34	34	34	34	35	35	36
Partially recovered heat	kw	60	66	74	80	86	106	120	130
Partially recovered heating water flow	m3/h	10	11	13	14	15	18	21	22
Partially recovered heating water pressure	Kpa	26	26	26	26	26	26	27	27
Dimesion (L*W*H)	cm	370*130*160	370*130*160	380*140*170	382*140*170	400*145*170	405*150*178	420*150*180	420*150*180
Weight(standard model)	kg	3000	3200	3450	3700	4000	4250	4600	4850
Noise(standard model)	dB(A)	69	69	69	69	70	70	70	73

Parameter of falling film type water (ground) source heat pump R134a

Working conditions:
Summer: evaporator inlet/outlet water Temp. 12/7°C,
condenser inlet/outlet water Temp. 18/29°C,

Winter: evaporator inlet/outlet water Temp. 15/7°C,
condenser inlet/outlet water Temp., 40/45°C,
Heat recover water Temp. is 40/45℃;
the pressure capacity of the water side of the evaporator and the condenser is 1.0MPa.

Model		GSHP700BP	GSHP 860BP	GSHP 920BP	GSHP 1080BP	GSHP1200BP	GSHP 1340BP	GSHP1450BP	GSHP 1720BP
Cooling Cap.	kw	700	850	900	1050	1180	1300	1400	1700
Power in cooling	kw	123	150	158	185	208	225	245	295
100% load cooling energy efficiency		5.69	5.67	5.7	5.68	5.67	5.78	5.71	5.76
Heating Cap.	kw	750	950	950	1150	1250	1400	1500	1800
Power in heating	kw	143	180	182	221	240	268	285	342
100% load heating energy efficiency		5.24	5.28	5.22	5.2	5.21	5.22	5.26	5.26
Max operating current	A	534	620	710	754	906	996	1068	1240
Energy control		25%-100%							
refrigeration circuits		2							
Condensor No.		2							
Condensor Type		Semi-closed double screw							
Voltage	V/Ph/Hz	380/3/50							
Refrigerant		R134a							
Refrigerant Charge	kg	255	270	320	350	370	390	430	500
Pipe of Evaporator		DN125	DN150	DN150	DN150	DN150	DN200	DN200	DN200
Cooling water flow	m3/h	121	146	155	181	203	224	241	293
Heating water flow	m3/h	64	78	83	97	109	119	129	156
Water pressure	Kpa	56	60	65	65	65	65	66	66
Pipe of condensor		DN125	DN150	DN150	DN150	DN150	DN200	DN200	DN200
Cooling water flow	m3/h	64	78	83	97	109	119	129	156
Heating water flow	m3/h	121	146	155	181	203	224	241	293
Water pressure	Kpa	36	38	42	42	43	43	45	45
Partially recovered heat	kw	140	170	270	315	354	354	390	420
Partially recovered heating water flow	m3/h	24	29	46	54	61	61	67	72
Partially recovered heating water pressure	Kpa	27	28	32	32	32	33	34	34
Dimesion (L*W*H)	cm	425*156*180	430*156*180	473*165*185	475*165*190	478*170*190	480*170*190	480*175*190	488*180*200
Weight(standard model)	kg	5000	5300	6400	6850	7000	7300	7700	8500
Noise(standard model)	dB(A)	73	73	75	75	75	75	75	75