



**SCREW TYPE LOW TEMPERATURE
WATER COOLED WATER CHILLER**

A decorative graphic at the bottom of the page consists of a dark green curved background. It features several white water droplets of varying sizes and three white starburst shapes, all arranged in a curved pattern.

RUIDONG GROUP

www.ruidonggroup.com



Ruidong Group Co., Ltd is one modern large-scale enterprise integrating design, production, sales and installation of central air-conditioning products.

Ruidong is located in Dezhou City, Shandong Province. The Beijing-Shanghai High-speed Railway and Beijing-Shanghai Expressway passing through the city, make Dezhou become a key coordinate of the national economic artery. The registered capital of the group is one hundred fifty five and a half million yuan, covering an area of 300,000 square meters and construction area of 180,000 square meters.

Main business coverage:

1. Host series:

- Water cooled series: centrifugal cold (hot) water unit, screw type cold water unit, screw type water (ground) source cooling and heating unit, scroll type water (ground) source cooling and heating unit.
- Air cooled series: screw type cold (hot) water unit, modular type cold (hot) water unit, mini type cold (hot) water unit, VRV series unit.
- Packaged Unitary unit: constant temperature and humidity unit, air (water) cooled unitary unit, dehumidification unit.

2. Direct expansion series: Rooftop packaged unit, ducted split unit.

3. Terminal series: Purification air handling unit, combined air handling unit, fresh air unit, fan coil unit series.



ENTERPRISE PROFILE

4. **Ventilation series:** Fire exhaust fan, roof fan, axial fan, diagonal fan, centrifugal fan, etc.
5. **Engine room equipment:** cyclone sand remover, water separator (separator), decontamination device, demineralized water device, plate heat exchange unit, constant pressure equipment, etc.
6. **Air conditioning accessories:** All kinds of fire valves, regulating valves, tuyere series.
7. **Other products:** Low-temperature industrial chillers, air-conditioning equipment for planting and breeding industries.

The R & D team composed of high-tech talents will continue to introduce new products, advanced production equipment and adopt the international ISO9001 quality management system as a strong guarantee for product quality. Precision testing equipment and rigorous testing methods are the fundamental insurance of quality and are timely and thoughtful. After-sales service solves the problems that may arise in use for you.

The company has established a complete sales and service system. Set up offices in 18 cities including Beijing, Tianjin, Shanghai, Xi'an, Shenyang, Chengdu and other cities to provide users with timely, efficient and high-quality pre-sales, sales and after-sales services.

Ruidong Air Conditioning wishes you: Cooling air for propitious summer, spring returns with warm air from Ruidong.

CERTIFICATIONS

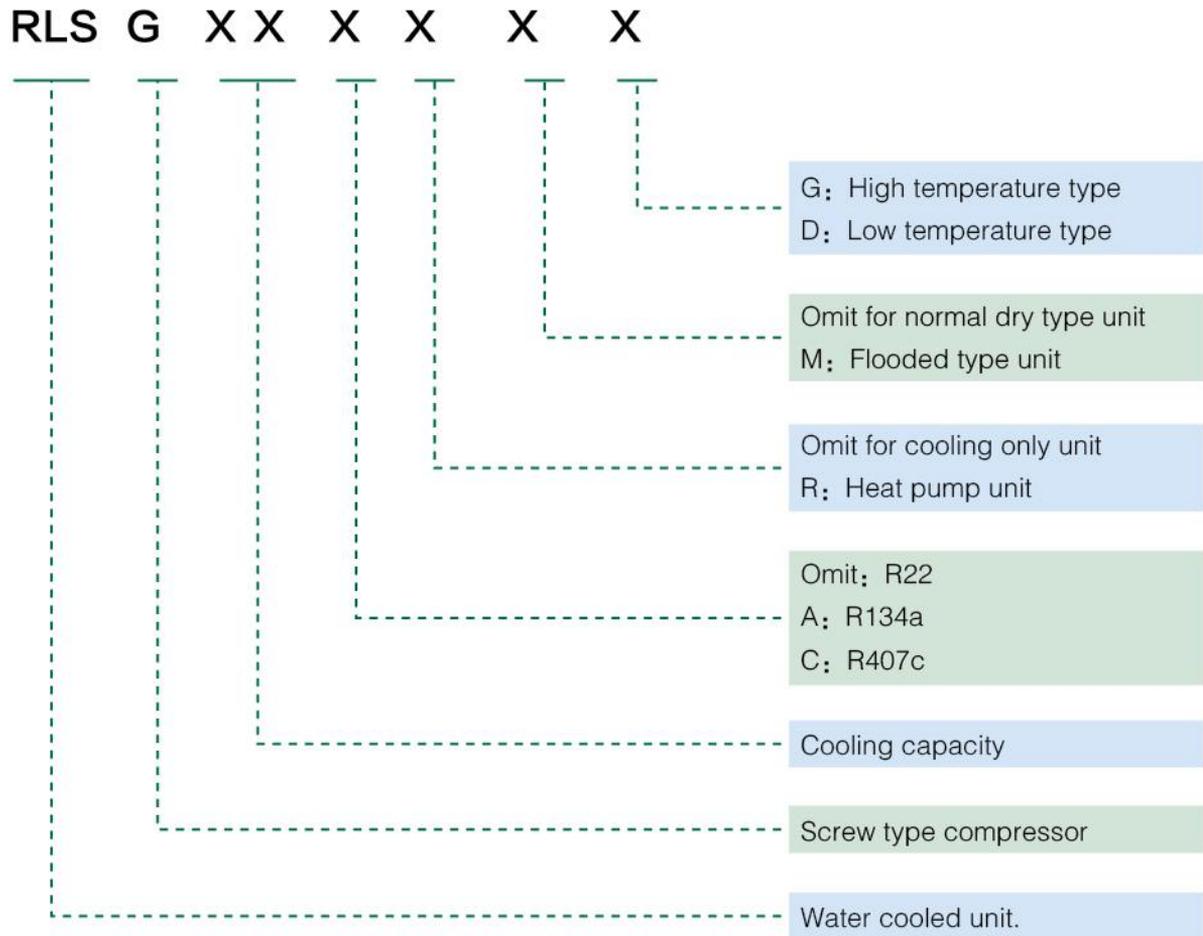
Ruidong group always takes "create first-class quality, offer sincere service" as the quality concept, builds customer-oriented quality management system, focuses on teamwork and insists on continuous innovation.



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1. NAMING SCHEME



2. BRIEF INTRODUCTION

This series of units are low-temperature chillers,refrigerant medium is ethylene glycol or brine.

The unit adopts high-efficiency semi-hermetic twin-screw compressor with high efficiency, low noise and long service life. The scope of application of the unit: factory, workshop process cold water equipment, ice rink facilities, ice making equipment.



Compressor

The semi-closed double-screw design compressor, the compression part is composed of two mutually meshing spiral rotors, the female rotor is driven by the male rotor, and the double torsion positive displacement constitutes a pure rotation action, so that the vibration is very small and the operating range is wide. The process from editing to exhaust has the characteristics of high efficiency and smooth air flow. The compressor uses differential pressure oil supply for lubrication and air tightness without the need for a lubricating oil pump.

The capacity control system can facilitate partial load operation, and the compressor can achieve 25%-100% segmented adjustment. Stepless energy adjustment can also be used to fully match the building load.

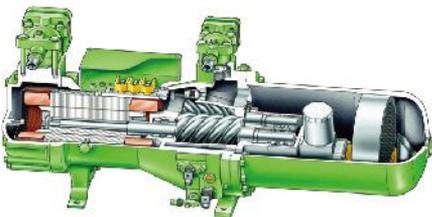
Semi-hermetic screw compressors have the following advantages: less moving parts are only 1/4 of piston compressors, simple structure, fewer wearing parts, high reliability and long life. The suction and exhaust are uniform and continuous, without pulsation, the exhaust temperature is low, the running vibration is small, it is not sensitive to wet compression, and the ability to resist liquid shock is strong.



Shell and tube condenser

Shell: Special high-quality steel plate for pressure vessel, made and tested in compliance with the requirements of JBT47012-2010 "Pressure Vessel for Refrigeration Equipment". The outer surface is made of flame-retardant and waterproof thermal insulation materials. The evaporator baffle is made of PVC engineering plastic, which has strong corrosion resistance and tight sealing. The chilled water moves up and down along the baffle to flow back, increasing the turbulence effect and improving the heat exchange capacity of the evaporator. The refrigerant inlet is specially equipped with a flow-equalizing device to make the refrigerant evenly distributed in each heat exchange copper tube and improve the heat exchange efficiency of the entire unit.

Copper tube: High-efficiency DAC corrugated internally threaded heat exchange copper tube, which greatly strengthens the heat exchange capacity of the refrigerant side and improves the heat transfer coefficient to ensure good cooling and heating effects of the unit.



Shell and tube condenser

High-efficiency DAC corrugated internally threaded heat exchange copper tube, which greatly strengthens the heat exchange capacity of the refrigerant side and improves the heat transfer coefficient to ensure good cooling and heating effects of the unit.



Expansion valve

The electronic expansion valve control system has a control accuracy of up to 2600 steps. According to the suction superheat and saturation pressure, the electronic control system can accurately control the refrigerant flow, so that the unit will always be kept in the best operating state and maximize the capacity of the unit.



Microcomputer controller

Cold water temperature setting and display.

Automatic energy control and start-stop function touch screen operation mode.

Display current (optional) and its set value, operating status, reporting status, compressor operating hours.

Accept remote start and stop signals.

If an external line fails and the power is cut off, the unit can automatically resume operation after the power supply is restored.

With password setting protection function.

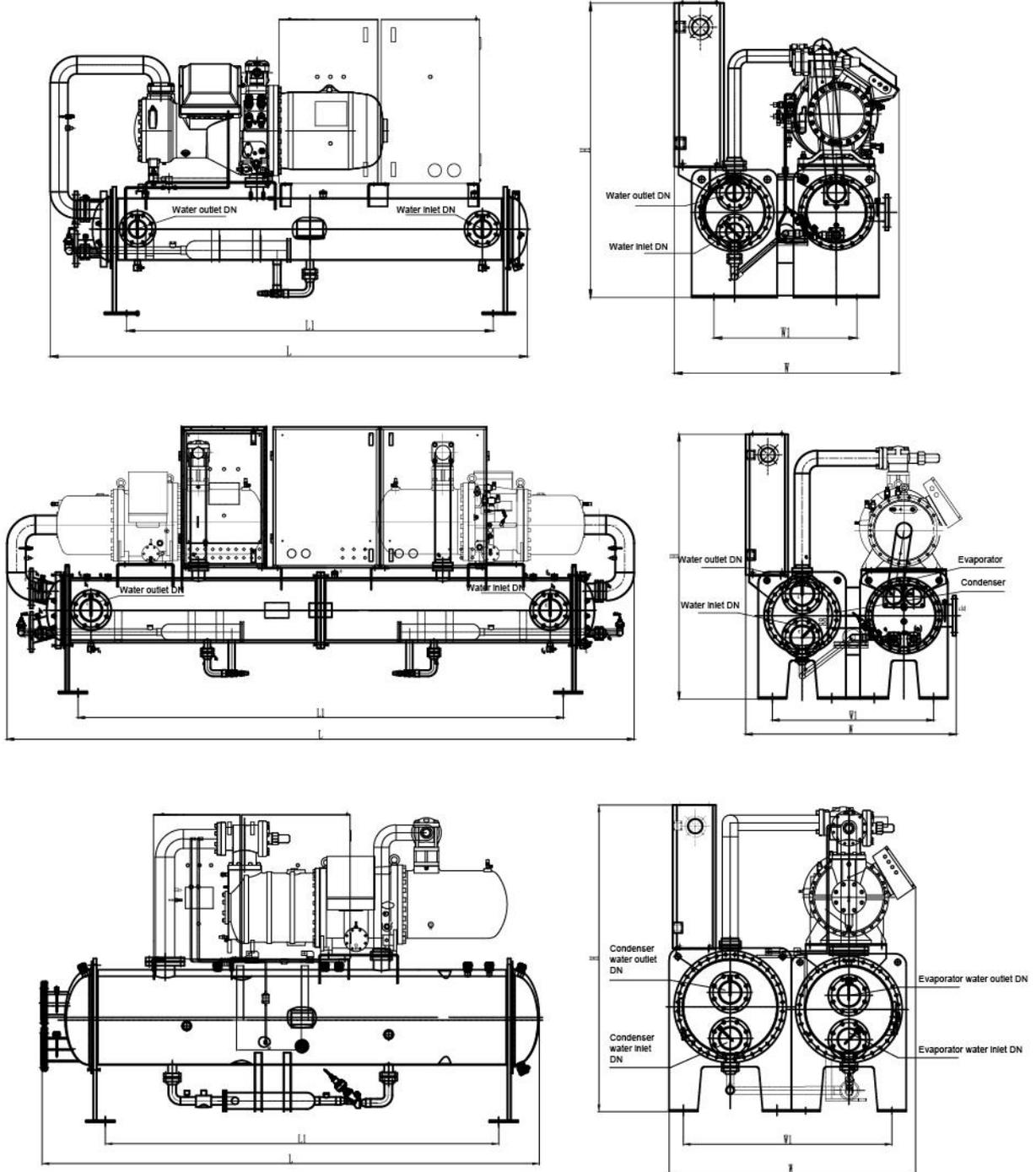
Mobile phone APP function

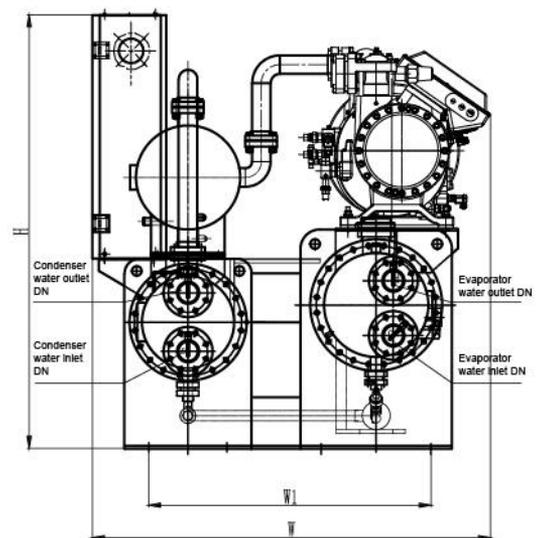
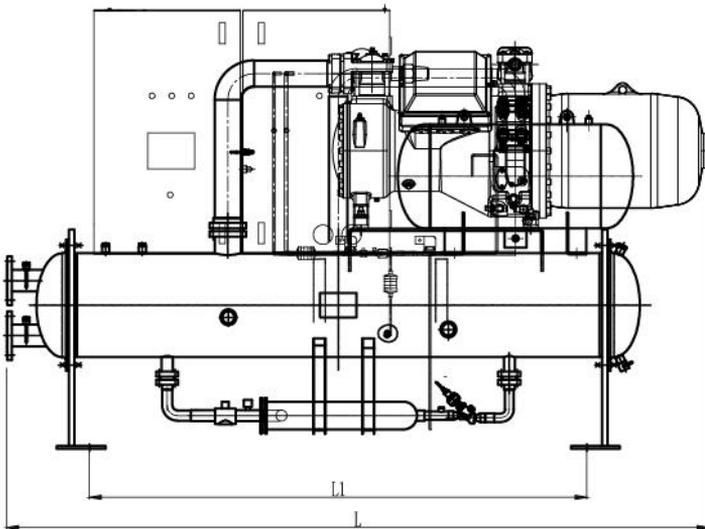
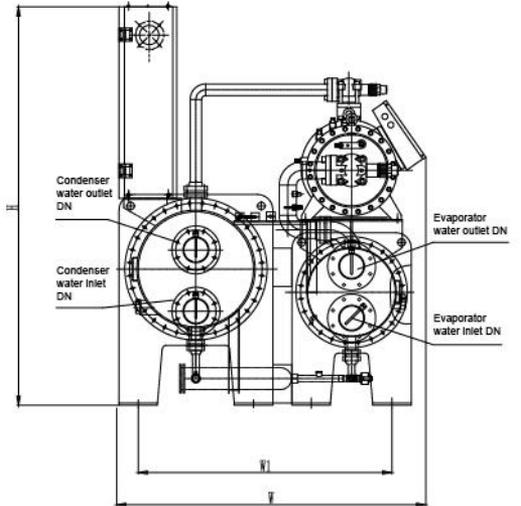
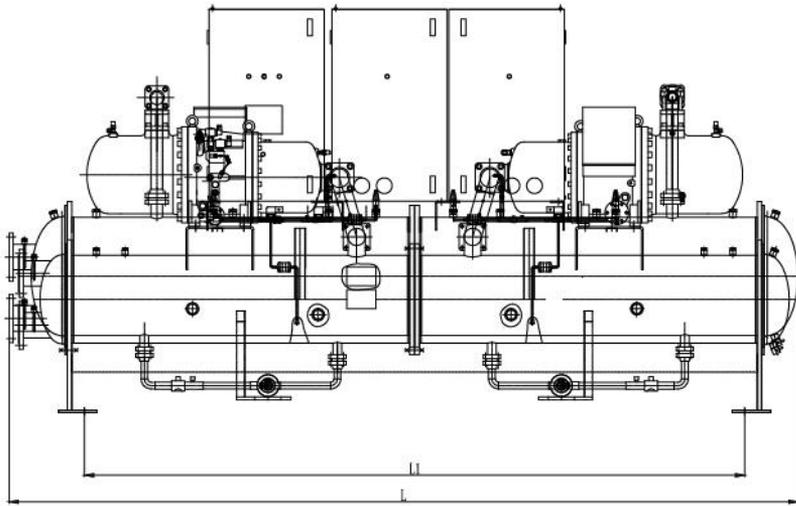
It can realize the functions of mobile phone to remotely control the start and stop of the unit, parameter setting, status inquiry, fault inquiry, monitoring operation data and so on.

Safety equipment

High and low pressure switch, antifreeze temperature control, oil heater, high pressure exhaust gas check valve, replaceable filter drier, pressure gauge, emergency stop switch, overload protector, power protector, refrigerant injection device.

3. STRUCTURE DIAGRAM





4. SPECIFICATION

-10°C outlet water R22 screw type water chiller

Unit model	RLSG-D	55	80	100	110	140	150	170	
Nominal cooling capacity	kW	52	72.6	95.4	102.4	127.3	137	161	
Input power	kW	21	28.3	35.5	39.1	46.8	51.1	57.9	
Running current	A	36.0	49.7	63.6	68.7	82.9	89.5	101.0	
Max.running current	A	50.0	66.0	83.6	91.3	110.6	120.1	135.9	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	3*16+2*10	3*25+2*16	3*25+2*16	3*35+2*16	3*35+2*16	3*50+2*25	3*50+2*25	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		8	12	16	18	22	23	28	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	1							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	80	80	80	80	80	100	100
	Water flow	m ³ /h	9	12	16	17	21	22	26
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	80	80	80	80	80	100	100
	Water flow	m ³ /h	13	17	23	24	30	32	38
Noise	dB(A)	73.1	73.7	74.8	78.4	79	79.2	79.6	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	2400	2400	3000	3000	3000	3000	3000	
	W	1250	1250	1250	1250	1250	1300	1350	
	H	1650	1650	1650	1650	1650	1650	1650	
Install dimension(mm)	L1	2230	2230	2230	2230	2230	2230	2230	
	W1	790	790	790	790	790	790	790	
Net weight	kg	1400	1400	1600	1600	1650	1700	1700	
Running weight	kg	1700	1700	1900	1950	2050	2150	2350	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	200	220	240	280	300	330	370	
Nominal cooling capacity	kW	190	204	223	270	282	312	351	
Input power	kW	67.2	72.9	80.4	96.2	98.5	110.8	124	
Running current	A	116.8	125.7	136.4	163.2	168.9	188.2	210.3	
Max.running current	A	157.5	170.6	187.3	224.3	229.5	258.1	288.9	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	3*70+2*35	3*70+2*35	3*95+2*50	3*120+2*50	3*120+2*50	3*150+2*70	3*150+2*70	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		32	35	38	46	48	53	60	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	1							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	100	100	125	125	125	150	150
	Water flow	m ³ /h	31	33	36	44	46	51	57
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	100	100	125	125	125	150	150
	Water flow	m ³ /h	44	48	52	63	65	73	82
Noise	dB(A)	80.4	81.5	83.1	84.2	85.2	86.3	86.9	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3000	3000	3000	3400	3400	3500	3500	
	W	1350	1350	1350	1450	1450	1500	1500	
	H	1800	1800	1800	1800	1800	2000	1850	
Install dimension(mm)	L1	2230	2230	2230	2735	2735	2735	2735	
	W1	880	880	880	880	880	1300	1300	
Net weight	kg	1900	2100	2300	2400	2600	2800	3100	
Running weight	kg	2500	2600	2900	3000	3250	3450	3900	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	430	460	500	570	650	740	830	
Nominal cooling capacity	kW	409	440	479	540	610	696	780	
Input power	kW	141.4	152.5	166.5	188.2	211.2	234.8	262.4	
Running current	A	238.7	257.3	280.8	317.2	369.2	406.6	450.0	
Max.running current	A	326.4	352.1	384.6	434.6	498.7	552.7	605.2	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	3*185+2*95	3*185+2*95	3*185+2*95	3*240+2*120	2*(3*150+2*70)	2*(3*150+2*70)	2*(3*185+2*95)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		70	75	82	97	104	119	134	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	1							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	150	150	150	150	200	200	200
	Water flow	m ³ /h	67	72	78	88	100	114	128
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	150	150	150	150	200	200	200
	Water flow	m ³ /h	95	102	111	125	141	160	179
Noise	dB(A)	87.1	87.3	87.6	88.4	90.1	90.5	90.8	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3500	3600	3600	3600	4200	4200	4200	
	W	1500	1500	1600	1600	1640	1640	1700	
	H	1850	1800	1950	1950	1900	1900	1900	
Install dimension(mm)	L1	2735	2735	2735	2735	3435	3435	3435	
	W1	1300	1300	1300	1300	1350	1350	1400	
Net weight	kg	3400	3500	3700	4000	4300	4600	5200	
Running weight	kg	4700	5000	5300	5700	6100	6600	7000	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	110	160	200	220	280	300	340	
Nominal cooling capacity	kW	104	145.2	190.8	204.8	254.6	274	322	
Input power	kW	40.8	56.6	71	78.2	93.6	102.2	115.8	
Running current	A	72.0	99.4	127.2	137.4	165.8	179.0	202.0	
Max.running current	A	100.0	132.0	167.2	182.6	221.2	240.2	271.8	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	2*(3*16+2*10)	2*(3*25+2*16)	2*(3*25+2*16)	2*(3*35+2*16)	2*(3*35+2*16)	2*(3*50+2*25)	2*(3*50+2*25)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		19	24	32	36	44	46	56	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	2							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	100	100	100	100	125	125	150
	Water flow	m ³ /h	18	25	33	35	44	47	55
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	100	100	100	100	125	125	150
	Water flow	m ³ /h	25	35	45	49	60	65	75
Noise	dB(A)	73.1	73.7	74.8	78.4	79	79.2	79.6	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3300	3300	3300	3650	3650	3650	3650	
	W	1400	1400	1400	1400	1400	1400	1500	
	H	1600	1600	1600	1600	1600	1600	1800	
Install dimension(mm)	L1	2735	2735	2735	2735	2735	2735	2735	
	W1	1000	1000	1000	1000	1000	1000	1140	
Net weight	kg	2200	2300	2400	2600	2800	3000	3100	
Running weight	kg	2900	3000	3100	3200	3500	3800	4100	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	400	440	480	560	600	660	740	
Nominal cooling capacity	kW	380	408	446	540	564	624	702	
Input power	kW	134.4	145.8	160.8	192.4	197	221.6	248	
Running current	A	233.6	251.4	272.8	326.4	337.8	376.4	420.6	
Max.running current	A	315.0	341.2	374.6	448.6	459.0	516.2	577.8	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	2*(3*70+2*35)	2*(3*70+2*35)	2*(3*95+2*50)	2*(3*120+2*50)	2*(3*120+2*50)	2*(3*150+2*70)	2*(3*150+2*70)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		64	70	76	92	96	106	120	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	2							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	150	150	150	150	150	200	200
	Water flow	m ³ /h	65	70	77	93	97	107	121
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	150	150	150	150	150	200	200
	Water flow	m ³ /h	88	95	104	126	131	145	163
Noise	dB(A)	80.4	81.5	83.1	84.2	85.2	86.3	86.9	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3750	4400	4400	4500	4500	4500	4500	
	W	1500	1500	1500	1700	1700	1700	1700	
	H	1900	1900	1900	2050	2050	2050	2050	
Install dimension(mm)	L1	2735	3435	3435	3435	3435	3435	3435	
	W1	1140	1140	1140	1140	1140	1350	1350	
Net weight	kg	3750	4000	4200	4400	4800	5000	5500	
Running weight	kg	4850	5100	5400	5900	6300	6600	7200	

Note: Cooling conditions: chilled water inlet/outlet temperature -5℃/-10℃, cooling water inlet/outlet temperature 30℃/35℃.

Unit model	RLSG-D	860	920	1000	1140	1300	1480	1660	
Nominal cooling capacity	kW	818	880	958	1080	1220	1392	1560	
Input power	kW	282.8	305	333	376.4	422.4	469.6	524.8	
Running current	A	477.4	514.6	561.6	634.4	738.4	813.2	900.0	
Max.running current	A	652.8	704.2	769.2	869.2	997.4	1105.4	1210.4	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	2*(3*185+2*95)	2*(3*185+2*95)	2*(3*185+2*95)	2*(3*240+2*120)	4*(3*150+2*70)	4*(3*150+2*70)	4*(3*185+2*95)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		140	150	164	184	208	238	268	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	2							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	200	200	200	200	250	250	250
	Water flow	m ³ /h	141	151	165	186	210	239	268
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	200	200	200	200	250	250	250
	Water flow	m ³ /h	189	204	222	251	282	320	359
Noise	dB(A)	87.1	87.3	87.6	88.4	90.1	90.5	90.8	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	4500	4500	4550	4550	4550	4550	4550	
	W	1700	1800	1920	1920	1920	1920	1920	
	H	2050	2100	2000	2000	2000	2000	2000	
Install dimension(mm)	L1	3435	3435	3435	3435	3435	3435	3435	
	W1	1350	1350	1350	1750	1780	1780	1780	
Net weight	kg	5900	6000	6200	6800	7400	8000	8500	
Running weight	kg	7600	7700	7800	8600	9400	9900	10500	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

-15°C outlet water R22 screw type water chiller

Unit model	RLSG-D	45	65	80	90	110	120	140	
Nominal cooling capacity	kW	43.2	59.8	78.5	84.4	104.8	112.9	133	
Input power	kW	20.6	27.3	34.2	37.7	45.1	49.3	55.9	
Running current	A	36.4	48.2	61.9	63.9	80.5	86.7	97.8	
Max.running current	A	50.0	66.0	83.6	91.3	110.6	120.1	135.9	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	3*16+2*10	3*25+2*16	3*25+2*16	3*35+2*16	3*35+2*16	3*50+2*25	3*50+2*25	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		7	10	13	14	18	19	23	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	1							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	80	80	80	80	80	100	100
	Water flow	m ³ /h	7	10	14	15	18	19	23
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	80	80	80	80	80	100	100
	Water flow	m ³ /h	11	15	19	21	26	28	32
Noise	dB(A)	73.1	73.7	74.8	78.4	79	79.2	79.6	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	2400	2400	3000	3000	3000	3000	3000	
	W	1250	1250	1250	1250	1250	1300	1350	
	H	1650	1650	1650	1650	1650	1650	1650	
Install dimension(mm)	L1	2230	2230	2230	2230	2230	2230	2230	
	W1	790	790	790	790	790	790	790	
Net weight	kg	1400	1400	1600	1600	1650	1700	1700	
Running weight	kg	1700	1700	1900	1950	2050	2150	2350	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	170	180	200	240	250	270	300	
Nominal cooling capacity	kW	156	169	183	223	232	236	289	
Input power	kW	64.8	70.3	77.5	92.8	95	106.9	119.6	
Running current	A	113.1	121.7	131.8	157.8	156.1	173.2	203.3	
Max.running current	A	157.5	170.6	187.3	224.3	229.5	258.1	288.9	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	3*70+2*35	3*70+2*35	3*95+2*50	3*120+2*50	3*120+2*50	3*150+2*70	3*150+2*70	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		27	29	31	38	42	42	50	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	1							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	100	100	125	125	125	150	150
	Water flow	m ³ /h	27	29	31	38	40	41	50
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	100	100	125	125	125	150	150
	Water flow	m ³ /h	38	41	45	54	56	59	70
Noise	dB(A)	80.4	81.5	83.1	84.2	85.2	86.3	86.9	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3000	3000	3000	3400	3400	3500	3500	
	W	1350	1350	1350	1450	1450	1500	1500	
	H	1800	1800	1800	1800	1800	2000	1850	
Install dimension(mm)	L1	2230	2230	2230	2735	2735	2735	2735	
	W1	880	880	880	880	880	1300	1300	
Net weight	kg	1900	2100	2300	2400	2600	2800	3100	
Running weight	kg	2500	2600	2900	3000	3250	3450	3900	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	360	380	420	470	530	610	680	
Nominal cooling capacity	kW	337	363	395	445	502	573	643	
Input power	kW	136.4	147.1	160.6	181.5	203.7	226.5	253	
Running current	A	231.2	249.2	271.8	307.1	357.5	393.4	435.8	
Max.running current	A	326.4	352.1	384.6	434.6	498.7	552.7	605.2	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	3*185+2*95	3*185+2*95	3*185+2*95	3*240+2*120	2*(3*150+2*70)	2*(3*150+2*70)	2*(3*185+2*95)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		58	62	68	76	86	98	110	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	1							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	150	150	150	150	200	200	200
	Water flow	m ³ /h	58	62	68	77	86	99	111
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	150	150	150	150	200	200	200
	Water flow	m ³ /h	81	88	96	108	121	138	154
Noise	dB(A)	87.1	87.3	87.6	88.4	90.1	90.5	90.8	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3500	3600	3600	3600	4200	4200	4200	
	W	1500	1500	1600	1600	1640	1640	1700	
	H	1850	1850	1950	1950	1900	1900	1900	
Install dimension(mm)	L1	2735	2735	2735	2735	3435	3435	3435	
	W1	1300	1300	1300	1300	1350	1350	1400	
Net weight	kg	3400	3500	3700	4000	4300	4600	5200	
Running weight	kg	4700	5000	5300	5700	6100	6600	7000	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	90	130	160	180	220	240	280	
Nominal cooling capacity	kW	86.4	119.6	157	168.8	209.6	225.8	266	
Input power	kW	41.2	54.6	68.4	75.4	90.2	98.6	55.9	
Running current	A	72.8	96.4	123.8	127.8	161	173.4	195.6	
Max.running current	A	100.0	132.0	167.2	182.6	221.2	240.2	271.8	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	2*(3*16+2*10)	2*(3*25+2*16)	2*(3*25+2*16)	2*(3*35+2*16)	2*(3*35+2*16)	2*(3*50+2*25)	2*(3*50+2*25)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		14	20	26	28	36	38	46	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	2							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	100	100	100	100	125	125	150
	Water flow	m ³ /h	15	21	27	29	36	39	46
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	100	100	100	100	125	125	150
	Water flow	m ³ /h	22	30	39	42	52	56	55
Noise	dB(A)	73.1	73.7	74.8	78.4	79	79.2	79.6	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3300	3300	3300	3650	3650	3650	3650	
	W	1400	1400	1400	1400	1400	1400	1500	
	H	1600	1600	1600	1600	1600	1600	1800	
Install dimension(mm)	L1	2735	2735	2735	2735	2735	2735	2735	
	W1	1000	1000	1000	1000	1000	1000	1140	
Net weight	kg	2200	2300	2400	2600	2800	3000	3100	
Running weight	kg	2900	3000	3100	3200	3500	3800	4100	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	340	360	400	480	500	540	600	
Nominal cooling capacity	kW	312	338	366	446	464	472	578	
Input power	kW	129.6	140.6	155	185.6	190	213.8	239.2	
Running current	A	226.2	243.4	263.6	315.6	312.2	346.4	406.6	
Max.running current	A	315.0	341.2	374.6	448.6	459.0	516.2	577.8	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	2*(3*70+2*35)	2*(3*70+2*35)	2*(3*95+2*50)	2*(3*120+2*50)	2*(3*120+2*50)	2*(3*150+2*70)	2*(3*150+2*70)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		54	58	62	76	80	80	100	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	2							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	150	150	150	150	150	200	200
	Water flow	m ³ /h	54	58	63	77	80	81	99
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	150	150	150	150	150	200	200
	Water flow	m ³ /h	76	82	90	109	112	118	141
Noise	dB(A)	80.4	81.5	83.1	84.2	85.2	86.3	86.9	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3750	4400	4400	4500	4500	4500	4500	
	W	1500	1500	1500	1700	1700	1700	1700	
	H	1900	1900	1900	2050	2050	2050	2050	
Install dimension(mm)	L1	2735	3435	3435	3435	3435	3435	3435	
	W1	1140	1140	1140	1140	1140	1350	1350	
Net weight	kg	3750	4000	4200	4400	4800	5000	5500	
Running weight	kg	4850	5100	5400	5900	6300	6600	7200	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	720	760	840	940	1060	1220	1360	
Nominal cooling capacity	kW	674	726	790	890	1004	1146	1286	
Input power	kW	272.8	294.2	321.2	363	407.4	453	506	
Running current	A	462.4	498.4	543.6	614.2	715	786.8	871.6	
Max.running current	A	652.8	704.2	769.2	869.2	997.4	1105.4	1210.4	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	2*(3*185+2*95)	2*(3*185+2*95)	2*(3*185+2*95)	2*(3*240+2*120)	4*(3*150+2*70)	4*(3*150+2*70)	4*(3*185+2*95)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		116	124	136	152	172	196	220	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	2							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	200	200	200	200	250	250	250
	Water flow	m ³ /h	116	125	136	153	173	197	221
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	200	200	200	200	250	250	250
	Water flow	m ³ /h	163	175	191	216	243	275	308
Noise	dB(A)	87.1	87.3	87.6	88.4	90.1	90.5	90.8	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	4500	4500	4550	4550	4550	4550	4550	
	W	1700	1800	1920	1920	1920	1920	1920	
	H	2050	2100	2000	2000	2000	2000	2000	
Install dimension(mm)	L1	3435	3435	3435	3435	3435	3435	3435	
	W1	1350	1350	1350	1750	1780	1780	1780	
Net weight	kg	5900	6000	6200	6800	7400	8000	8500	
Running weight	kg	7600	7700	7800	8600	9400	9900	10500	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

-20°C outlet water R22 screw type water chiller

Unit model	RLSG-D	40	50	70	75	90	95	110	
Nominal cooling capacity	kW	35.2	48.6	64	68.6	86.1	91.9	108.4	
Input power	kW	19.8	26.2	32.9	36.2	43.4	47.7	53.8	
Running current	A	35.2	46.8	60.1	64.7	77.9	83.8	94.6	
Max.running current	A	50.0	66.0	83.6	91.3	110.6	120.1	135.9	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	3*16+2*10	3*25+2*16	3*25+2*16	3*35+2*16	3*35+2*16	3*50+2*25	3*50+2*25	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		6	8	11	12	15	16	19	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	1							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	80	80	80	80	80	100	100
	Water flow	m ³ /h	6	8	11	12	15	16	19
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	80	80	80	80	80	100	100
	Water flow	m ³ /h	9	13	17	18	22	24	28
Noise	dB(A)	73.1	73.7	74.8	78.4	79	79.2	79.6	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	2400	2400	3000	3000	3000	3000	3000	
	W	1250	1250	1250	1250	1250	1300	1350	
	H	1650	1650	1650	1650	1650	1650	1650	
Install dimension(mm)	L1	2230	2230	2230	2230	2230	2230	2230	
	W1	790	790	790	790	790	790	790	
Net weight	kg	1400	1400	1600	1600	1650	1700	1700	
Running weight	kg	1700	1700	1900	1950	2050	2150	2350	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	140	150	160	190	200	220	250	
Nominal cooling capacity	kW	127	137	149	181	189	209	235	
Input power	kW	62.4	67.7	77.5	89.3	91.4	102.8	115	
Running current	A	109.4	117.5	127.2	152.2	158.1	175.6	196.1	
Max.running current	A	157.5	170.6	187.3	224.3	229.5	258.1	288.9	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	3*70+2*35	3*70+2*35	3*95+2*50	3*120+2*50	3*120+2*50	3*150+2*70	3*150+2*70	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		22	23	26	31	32	36	40	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	1							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	100	100	125	125	125	150	150
	Water flow	m ³ /h	22	24	26	31	33	36	40
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	100	100	125	125	125	150	150
	Water flow	m ³ /h	33	35	39	46	48	54	60
Noise	dB(A)	80.4	81.5	83.1	84.2	85.2	86.3	86.9	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3000	3000	3000	3400	3400	3500	3500	
	W	1350	1350	1350	1450	1450	1500	1500	
	H	1800	1800	1800	1800	1800	2000	1850	
Install dimension(mm)	L1	2230	2230	2230	2735	2735	2735	2735	
	W1	880	880	880	880	880	1300	1300	
Net weight	kg	1900	2100	2300	2400	2600	2800	3100	
Running weight	kg	2500	2600	2900	3000	3250	3450	3900	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	290	310	340	380	440	500	550	
Nominal cooling capacity	kW	275	295	322	363	409	468	525	
Input power	kW	131.2	141.5	160.6	174.6	203.7	217.9	243.4	
Running current	A	223.5	240.9	262.7	296.8	345.6	379.8	421.2	
Max.running current	A	326.4	352.1	384.6	434.6	498.7	552.7	605.2	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	3*185+2*95	3*185+2*95	3*185+2*95	3*240+2*120	2*(3*150+2*70)	2*(3*150+2*70)	2*(3*185+2*95)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		47	51	55	62	70	80	90	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	1							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	150	150	150	150	200	200	200
	Water flow	m ³ /h	47	51	55	62	70	80	90
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	150	150	150	150	200	200	200
	Water flow	m ³ /h	70	75	83	92	105	118	132
Noise	dB(A)	87.1	87.3	87.6	88.4	90.1	90.5	90.8	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3500	3600	3600	3600	4200	4200	4200	
	W	1500	1500	1600	1600	1640	1640	1700	
	H	1850	1850	1950	1950	1900	1900	1900	
Install dimension(mm)	L1	2735	2735	2735	2735	3435	3435	3435	
	W1	1300	1300	1300	1300	1350	1350	1400	
Net weight	kg	3400	3500	3700	4000	4300	4600	5200	
Running weight	kg	4700	5000	5300	5700	6100	6600	7000	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	80	100	140	150	180	190	220	
Nominal cooling capacity	kW	70.4	97.2	128	137.2	172.2	183.8	216.8	
Input power	kW	39.6	52.4	65.8	72.4	86.8	95.4	107.6	
Running current	A	70.4	93.6	120.2	129.4	155.8	167.6	189.2	
Max.running current	A	100.0	132.0	167.2	182.6	221.2	240.2	271.8	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	2*(3*16+2*10)	2*(3*25+2*16)	2*(3*25+2*16)	2*(3*35+2*16)	2*(3*35+2*16)	2*(3*50+2*25)	2*(3*50+2*25)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		12	16	22	24	30	32	38	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	2							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	100	100	100	100	125	125	150
	Water flow	m ³ /h	12	17	22	24	30	32	37
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	100	100	100	100	125	125	150
	Water flow	m ³ /h	19	26	33	36	45	48	56
Noise	dB(A)	73.1	73.7	74.8	78.4	79	79.2	79.6	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3300	3300	3300	3650	3650	3650	3650	
	W	1400	1400	1400	1400	1400	1400	1500	
	H	1600	1600	1600	1600	1600	1600	1800	
Install dimension(mm)	L1	2735	2735	2735	2735	2735	2735	2735	
	W1	1000	1000	1000	1000	1000	1000	1140	
Net weight	kg	2200	2300	2400	2600	2800	3000	3100	
Running weight	kg	2900	3000	3100	3200	3500	3800	4100	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	280	300	320	380	400	440	500	
Nominal cooling capacity	kW	254	274	298	362	378	418	470	
Input power	kW	124.8	135.4	155	178.6	182.8	205.6	230	
Running current	A	218.8	235	254.4	304.4	316.2	351.2	392.2	
Max.running current	A	315.0	341.2	374.6	448.6	459.0	516.2	577.8	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	2*(3*70+2*35)	2*(3*70+2*35)	2*(3*95+2*50)	2*(3*120+2*50)	2*(3*120+2*50)	2*(3*150+2*70)	2*(3*150+2*70)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		44	46	52	62	64	72	80	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor	qty	2						
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	150	150	150	150	150	200	200
	Water flow	m ³ /h	44	47	51	62	65	72	81
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	150	150	150	150	150	200	200
	Water flow	m ³ /h	65	70	78	93	96	107	120
Noise	dB(A)	80.4	81.5	83.1	84.2	85.2	86.3	86.9	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3750	4400	4400	4500	4500	4500	4500	
	W	1500	1500	1500	1700	1700	1700	1700	
	H	1900	1900	1900	2050	2050	2050	2050	
Install dimension(mm)	L1	2735	3435	3435	3435	3435	3435	3435	
	W1	1140	1140	1140	1140	1140	1350	1350	
Net weight	kg	3750	4000	4200	4400	4800	5000	5500	
Running weight	kg	4850	5100	5400	5900	6300	6600	7200	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	580	620	680	760	880	1000	1100	
Nominal cooling capacity	kW	550	590	644	726	818	936	1050	
Input power	kW	262.4	283	321.2	349.2	407.4	435.8	486.8	
Running current	A	447	481.8	525.4	593.6	691.2	759.6	842.4	
Max.running current	A	652.8	704.2	769.2	869.2	997.4	1105.4	1210.4	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	2*(3*185+2*95)	2*(3*185+2*95)	2*(3*185+2*95)	2*(3*240+2*120)	4*(3*150+2*70)	4*(3*150+2*70)	4*(3*185+2*95)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		94	102	110	124	140	160	180	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	2							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	200	200	200	200	250	250	250
	Water flow	m ³ /h	95	101	111	125	141	161	181
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	200	200	200	200	250	250	250
	Water flow	m ³ /h	140	150	166	185	211	236	264
Noise	dB(A)	87.1	87.3	87.6	88.4	90.1	90.5	90.8	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	4500	4500	4550	4550	4550	4550	4550	
	W	1700	1800	1920	1920	1920	1920	1920	
	H	2050	2100	2000	2000	2000	2000	2000	
Install dimension(mm)	L1	3435	3435	3435	3435	3435	3435	3435	
	W1	1350	1350	1350	1750	1780	1780	1780	
Net weight	kg	5900	6000	6200	6800	7400	8000	8500	
Running weight	kg	7600	7700	7800	8600	9400	9900	10500	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

-25°C outlet water R22 screw type water chiller

Unit model	RLSG-D	30	40	55	60	70	80	90	
Nominal cooling capacity	kW	28.2	39	51.4	55.1	68.6	73.7	87.1	
Input power	kW	18.6	25.2	31.6	34.8	41.7	45.5	51.6	
Running current	A	33.5	45.3	58.3	62.6	75.4	81	91.3	
Max.running current	A	50.0	66.0	83.6	91.3	110.6	120.1	135.9	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	3*16+2*10	3*25+2*16	3*25+2*16	3*35+2*16	3*35+2*16	3*50+2*25	3*50+2*25	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		5	7	9	9	12	13	15	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	1							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	80	80	80	80	80	100	100
	Water flow	m ³ /h	5	7	9	9	12	13	15
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	80	80	80	80	80	100	100
	Water flow	m ³ /h	8	11	14	15	19	21	24
Noise	dB(A)	73.1	73.7	74.8	78.4	79	79.2	79.6	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	2400	2400	3000	3000	3000	3000	3000	
	W	1250	1250	1250	1250	1250	1300	1350	
	H	1650	1650	1650	1650	1650	1650	1650	
Install dimension(mm)	L1	2230	2230	2230	2230	2230	2230	2230	
	W1	790	790	790	790	790	790	790	
Net weight	kg	1400	1400	1600	1600	1650	1700	1700	
Running weight	kg	1700	1700	1900	1950	2050	2150	2350	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	110	120	130	150	160	180	200	
Nominal cooling capacity	kW	102	110	120	145	152	168	189	
Input power	kW	59.9	65	71.6	85.8	87.7	98.7	110.5	
Running current	A	105.6	113.4	122.6	146.7	152.7	169.3	189	
Max.running current	A	157.5	170.6	187.3	224.3	229.5	258.1	288.9	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	3*70+2*35	3*70+2*35	3*95+2*50	3*120+2*50	3*120+2*50	3*150+2*70	3*150+2*70	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		18	19	21	25	26	29	32	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	1							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	100	100	125	125	125	150	150
	Water flow	m ³ /h	18	19	21	25	26	29	33
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	100	100	125	125	125	150	150
	Water flow	m ³ /h	28	30	33	40	41	46	52
Noise	dB(A)	80.4	81.5	83.1	84.2	85.2	86.3	86.9	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3000	3000	3000	3400	3400	3500	3500	
	W	1350	1350	1350	1450	1450	1500	1500	
	H	1800	1800	1800	1800	1800	2000	1850	
Install dimension(mm)	L1	2230	2230	2230	2735	2735	2735	2735	
	W1	880	880	880	880	880	1300	1300	
Net weight	kg	1900	2100	2300	2400	2600	2800	3100	
Running weight	kg	2500	2600	2900	3000	3250	3450	3900	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	230	250	280	310	350	390	440	
Nominal cooling capacity	kW	220	237	258	292	329	376	422	
Input power	kW	126	135.9	148.8	167.6	188.1	209.2	233.8	
Running current	A	215.9	232.7	253.7	286.6	333.7	366.2	406.6	
Max.running current	A	326.4	352.1	384.6	434.6	498.7	552.7	605.2	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	3*185+2*95	3*185+2*95	3*185+2*95	3*240+2*120	2*(3*150+2*70)	2*(3*150+2*70)	2*(3*185+2*95)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		38	41	44	50	56	64	72	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	1							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	150	150	150	150	200	200	200
	Water flow	m ³ /h	38	41	44	50	57	65	73
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	150	150	150	150	200	200	200
	Water flow	m ³ /h	60	64	70	79	89	101	113
Noise	dB(A)	87.1	87.3	87.6	88.4	90.1	90.5	90.8	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3500	3600	3600	3600	4200	4200	4200	
	W	1500	1500	1600	1600	1640	1640	1700	
	H	1850	1850	1950	1950	1900	1900	1900	
Install dimension(mm)	L1	2735	2735	2735	2735	3435	3435	3435	
	W1	1300	1300	1300	1300	1350	1350	1400	
Net weight	kg	3400	3500	3700	4000	4300	4600	5200	
Running weight	kg	4700	5000	5300	5700	6100	6600	7000	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	60	80	110	120	140	160	180	
Nominal cooling capacity	kW	56.4	78	102.8	110.2	137.2	147.4	174.2	
Input power	kW	37.2	50.4	63.2	69.6	83.4	91	103.2	
Running current	A	67.0	90.6	116.6	125.2	150.8	162.0	182.6	
Max.running current	A	100.0	132.0	167.2	182.6	221.2	240.2	271.8	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	2*(3*16+2*10)	2*(3*25+2*16)	2*(3*25+2*16)	2*(3*35+2*16)	2*(3*35+2*16)	2*(3*50+2*25)	2*(3*50+2*25)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		10	14	18	18	24	26	30	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	2							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	100	100	100	100	125	125	150
	Water flow	m ³ /h	10	13	18	19	24	25	30
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	100	100	100	100	125	125	150
	Water flow	m ³ /h	16	22	29	31	38	41	48
Noise	dB(A)	73.1	73.7	74.8	78.4	79	79.2	79.6	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3300	3300	3300	3650	3650	3650	3650	
	W	1400	1400	1400	1400	1400	1400	1500	
	H	1600	1600	1600	1600	1600	1600	1800	
Install dimension(mm)	L1	2735	2735	2735	2735	2735	2735	2735	
	W1	1000	1000	1000	1000	1000	1000	1140	
Net weight	kg	2200	2300	2400	2600	2800	3000	3100	
Running weight	kg	2900	3000	3100	3200	3500	3800	4100	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	220	240	260	300	320	360	400	
Nominal cooling capacity	kW	204	220	240	290	304	336	378	
Input power	kW	119.8	130	143.2	171.6	175.4	197.4	221	
Running current	A	211.2	226.8	245.2	293.4	305.4	338.6	378.0	
Max.running current	A	315.0	341.2	374.6	448.6	459.0	516.2	577.8	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	2*(3*70+2*35)	2*(3*70+2*35)	2*(3*95+2*50)	2*(3*120+2*50)	2*(3*120+2*50)	2*(3*150+2*70)	2*(3*150+2*70)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		36	38	42	50	52	58	64	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	2							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	150	150	150	150	150	200	200
	Water flow	m ³ /h	35	38	41	50	52	58	65
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	150	150	150	150	150	200	200
	Water flow	m ³ /h	56	60	66	79	82	92	103
Noise	dB(A)	80.4	81.5	83.1	84.2	85.2	86.3	86.9	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	3750	4400	4400	4500	4500	4500	4500	
	W	1500	1500	1500	1700	1700	1700	1700	
	H	1900	1900	1900	2050	2050	2050	2050	
Install dimension(mm)	L1	2735	3435	3435	3435	3435	3435	3435	
	W1	1140	1140	1140	1140	1140	1350	1350	
Net weight	kg	3750	4000	4200	4400	4800	5000	5500	
Running weight	kg	4850	5100	5400	5900	6300	6600	7200	

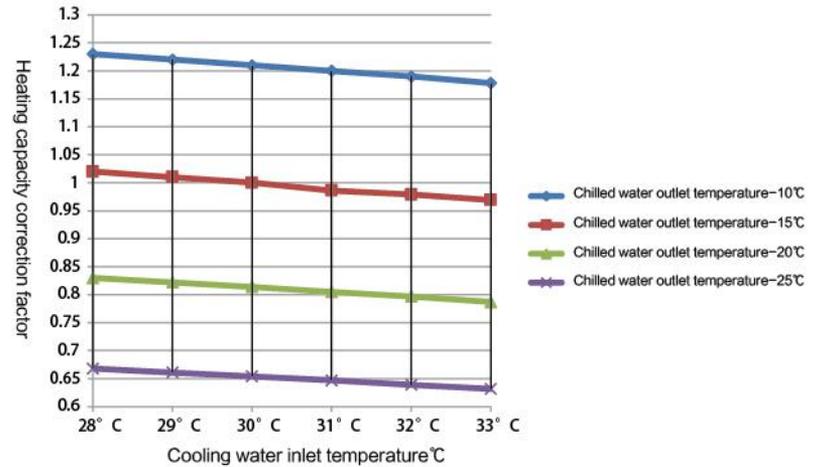
Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

Unit model	RLSG-D	460	500	560	620	700	780	880	
Nominal cooling capacity	kW	440	474	516	584	658	752	844	
Input power	kW	252	271.8	297.6	335.2	376.2	418.4	467.6	
Running current	A	431.8	465.4	507.4	573.2	667.4	732.4	813.2	
Max.running current	A	652.8	704.2	769.2	869.2	997.4	1105.4	1210.4	
Cable diameter (copper wire distance ≤ 20 meters)	mm ²	2*(3*185+2*95)	2*(3*185+2*95)	2*(3*185+2*95)	2*(3*240+2*120)	4*(3*150+2*70)	4*(3*150+2*70)	4*(3*185+2*95)	
Power voltage	3-380V-50Hz								
Starting mode	Y-Δ								
Refrigerant	R22								
Refrigerant charge		76	82	88	100	112	128	144	
Refrigerant control device	Electronic expansion valve(EXV)								
Compressor	Type	Semi-hermetic screw							
	Compressor qty	2							
Evaporator	Type	Shell & tube type							
	Water pressure drop	kPa	<200						
	Water pipe Dia.	DN	200	200	200	200	250	250	250
	Water flow	m ³ /h	76	82	89	100	113	129	145
Condenser type	Type	Shell & tube type							
	Water pressure drop	kPa	70-90						
	Water pipe Dia.	DN	200	200	200	200	250	250	250
	Water flow	m ³ /h	119	128	140	158	178	201	226
Noise	dB(A)	87.1	87.3	87.6	88.4	90.1	90.5	90.8	
Protection device	High and low voltage protection, antifreeze protection, temperature control, reverse phase and phase loss protection, high and low voltage protection, high pressure exhaust temperature protection, built-in motor overheat protection, overcurrent protection, check valve, safety valve								
Unit structure	Horizontal type								
Dimensions(mm)	L	4500	4500	4550	4550	4550	4550	4550	
	W	1700	1800	1920	1920	1920	1920	1920	
	H	2050	2100	2000	2000	2000	2000	2000	
Install dimension(mm)	L1	3435	3435	3435	3435	3435	3435	3435	
	W1	1350	1350	1350	1750	1780	1780	1780	
Net weight	kg	5900	6000	6200	6800	7400	8000	8500	
Running weight	kg	7600	7700	7800	8600	9400	9900	10500	

Note: Cooling conditions: chilled water inlet/outlet temperature -5°C/-10°C, cooling water inlet/outlet temperature 30°C/35°C.

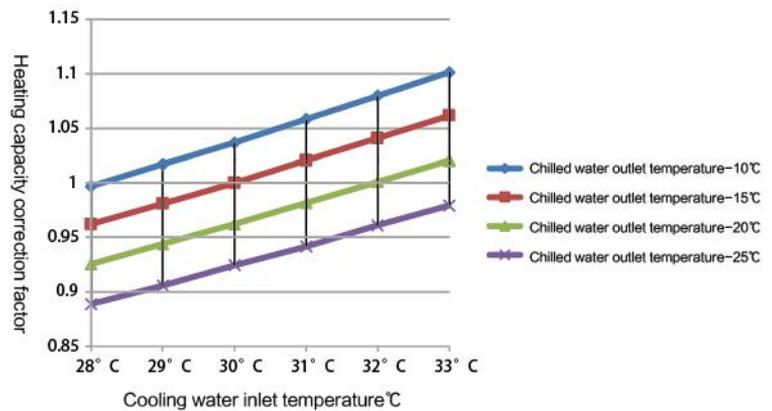
5. CORRECTION FACTOR

Cooling capacity correction factor



Outlet water temperature \ Cooling water inlet temperature	28°C	29°C	30°C	31°C	32°C	33°C
Chilled water outlet temperature-10°C	1.23	1.22	1.21	1.2	1.19	1.178
Chilled water outlet temperature-15°C	1.02	1.01	1	0.986	0.979	0.969
Chilled water outlet temperature-20°C	0.83	0.822	0.814	0.805	0.797	0.787
Chilled water outlet temperature-25°C	0.668	0.661	0.654	0.6467	0.639	0.6316

Input power correction factor



Outlet water temperature \ Cooling water inlet temperature	28°C	29°C	30°C	31°C	32°C	33°C
Chilled water outlet temperature-10°C	0.997	1.017	1.0366	1.0582	1.0797	1.1013
Chilled water outlet temperature-15°C	0.9623	0.981	1	1.0205	1.0409	1.0614
Chilled water outlet temperature-20°C	0.9256	0.944	0.9623	0.9817	1.0011	1.0205
Chilled water outlet temperature-25°C	0.889	0.906	0.9246	0.9418	0.9612	0.9795

6. INSTALLATION

6.1. Precautions before installation

6.1.1 General requirements

- Installation site must be clean, dry, free of debris and well-lit to facilitate operation and maintenance.

6.1.2 Space requirements

- Installation site should pay attention to whether there is enough space for the unit to enter and exit.
- Regardless of the type of machine, a maintenance space of at least 800-1000mm should be reserved on each side. In addition, it should be noted that there should be enough space at both ends of the unit to clean the condenser and evaporator copper pipes in the future.

6.1.3 Ventilation

- Indoor machine room needs proper ventilation. Even if there are no relevant regulations in many areas, it is best to install ventilation equipment in poorly ventilated places, which is conducive to the safe operation and operation of machinery and equipment.

6.1.4 Basics

- Foundation can be made of cement or steel plate, but it must be able to fully bear the operating weight of the unit, and the levelness must be within 3/1000.

6.1.5 Anti-vibration

- Foundation of the unit must be solid to minimize vibration transmission.
- Unit should be equipped with shock absorbers when necessary to prevent noise and vibration from spreading to the building.

6.1.6 Drainage

- When making the foundation, drainage ditch must be preset on the ground to discharge the water in the water pipes and equipment during the shutdown and maintenance.

- 6.1.7 The waterproof unit must not be installed under the condensation or water pipes, and where water may splash. Waterproofing is very important to the safety of electrical control equipment.

6.2. Goods receiving and handling

6.2.1 Receiving

- After the equipment is delivered to the site, first check whether the goods are consistent with the order, whether the accessories are missing, and whether they are damaged during transportation. If there is any missing, damaged or inconsistent with the order, you should immediately contact the delivery person or our company.

6.2.2 Moving

- Before installation, the less the unit is moved, the less chance it will be damaged. The accessories on the machine (such as electric control box, piping, pipe fittings, etc.) cannot be used to lift the machine or trample on it.
- When hoisting, the hoisting bar can be hoisted through the hoisting hole on the base of the unit. At the same time, pay attention to the electric control box, piping accessories and insulation materials, etc., not to be hurt. If it is a unit with a packing box, it should be lifted by the whole unit. When hoisting, it is necessary to avoid scratching or deformation of the unit's surface, and a protective pad should be placed on the contact surface of the steel cable and the body.
- When hoisting, the unit should be maintained in a vertical state, the inclination should be less than 300, collisions should be avoided, and sliding should be avoided. Personnel should not stand under or near the unit for safety.
- Pay attention to moving with care.

6.3. Water pipe piping of condenser and evaporator

- The water pipe can be assembled only after the unit has been leveled. An exhaust valve must be installed at the highest position of all pipelines. The water pipe piping of the evaporator should be insulated to prevent condensation. The water pipe piping of the condenser should be insulated according to local conditions and laws and regulations.
- The inlet and outlet water pipe piping connecting the condenser and evaporator of the chiller should be installed accord-

ing to the unit's mark and cannot be connected incorrectly.

- In order to record the operation of the unit, thermometers and pressure gauges should be installed on the inlet and outlet pipes of the condenser and evaporator.

- The inlet side of the water pipe piping of the cooling water and chilled water pumps needs to be equipped with a filter, because during the construction of the water pipe piping, there may be debris left in the water pipe and cannot be cleaned up. These debris may enter the water pump, The condenser and evaporator cause internal damage or block the heat transfer tube. After piping, the equipment can be operated in accordance with the requirements of the construction specification and the cleaning is completed.

- The lowest point of the inlet and outlet water pipes of the condenser and evaporator must be equipped with a drain valve, so that the water in the condenser and evaporator can be removed during shutdown and maintenance.

- The inlet and outlet water pipes of the condenser and evaporator must be equipped with flexible shockproof hoses to reduce vibration transmission and prevent the unit from bearing the weight of the pipeline.

- The inlet water pipe piping of the condenser should be equipped with a flow control valve to control the water volume, so that the condensing pressure of the unit can be maintained in a proper condition.

- The outlet of the condenser and evaporator must be correctly equipped with a flow switch to ensure that the unit has the water volume that meets the operating requirements when the unit is running. If it is not installed, once the water flow is interrupted, it may cause serious damage to the unit.

The circulating water pump should be installed at the inlet of the condenser and evaporator, or at the outlet side if space is limited.

- Before starting the chiller, please confirm that the air in the pipeline has been completely removed from the water pipeline to avoid damage caused by running without water.

- When the unit is not used in cold areas in winter, all water in the condenser and evaporator must be drained to avoid damage to the internal copper pipes after the water freezes.

6.4 Principles and requirements of water system

- Water quality: clean water or water that has been treated and meets engineering requirements.

- Water temperature: The water temperature of the water source should be moderate.

- Water volume: The water volume should be able to meet the needs of the user's cooling load.

6.5 Power distribution

- Electric engineering must comply with relevant laws and regulations.

- Wire size, electromagnetic switch, non-fuse switch and other specifications must comply with relevant laws and regulations. The phase sequence of the power supply must match the direction of rotation of the compressor.

- All wiring terminals must be uniform and appropriate, and screws must be tightened.

- After the line is connected, mark it for later maintenance.

6.6 Control circuit

- The external interlock circuit in the control circuit should be connected properly to prevent the compressor from starting before the pump is still running.

- When the oil heater circuit is stopped, do not cut off the power. If the power is cut off, before restarting, make sure that the oil heater has been heated for 8 hours or the oil temperature is above 23C.

6.7 Operation precautions

Before operating the unit, make sure that all valves that must be opened have been opened.

The condenser has good heat dissipation, otherwise the chiller will alarm and shut down due to the high condensing temperature and corresponding condensing pressure.

The cold water in the evaporator should be circulated normally, otherwise the cold water temperature will be too low and the cold water evaporation temperature and the corresponding evaporation pressure will be too low, causing the low-pressure protection device to alarm and stop or cause the cold water in the evaporator to freeze and damage the equipment.

The starting sequence of the chiller:

cooling water pump on → Chilled water pump on → Water chiller on → Cooling tower fan on

The shutdown sequence of the chiller:

Water chiller off → Cooling tower fan off → Cooling water pump off → Chilled water pump off

TESTING CENTER



Testing center covers an area of 6500 square meters; total investment of 50 million RMB, is the largest and most complete detection device in the north of China , the testing range is from household air conditioner to the centrifuge chillers.

Testing center adopt internationally renowned brand measuring instruments, including the United States Agilent data acquisition, Japan Yokogawa power meter, Saibi Ling platinum thermal resistance, to ensure the test accuracy.

Testing center can test multi-unit, air-cooled unit, fan coil unit, ceiling air handling unit, modular air handling unit, purifying air conditioning unit, water loop heat unit, air-cooled module chiller and air-cooled screw chiller.

MAIN PROJECTS



High school building in Brazil



Presidential palace of Kazakhstan



Shanxi Dingxiang County People's Court



Shanxi Yuncheng odd Star Technology Co., Ltd



Beijing Grand Oriental Hotel



Shanxi Linfen High Speed Rail Station



Beijing Sihui building materials city



Shanxi Tongmei Group Zhangze Power Puzhou Power Generation Branch



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The contents will be changed due to product updates without prior notice, please refer to the actual product.

This document has been proofread many times, but there may still be errors or omissions, please understand.