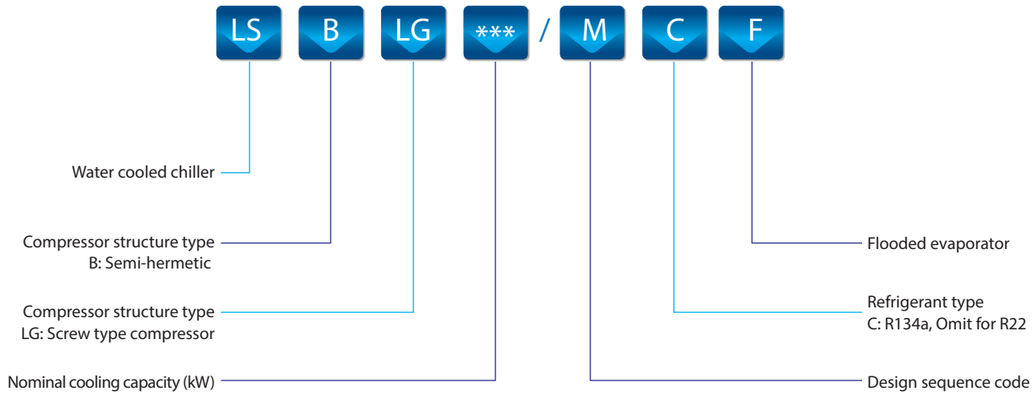
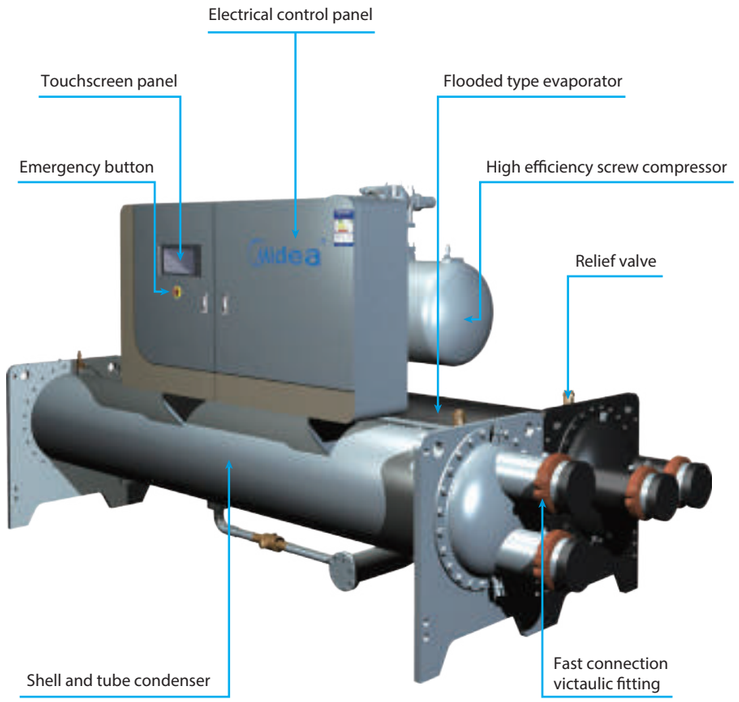
Nomenclature



Structure



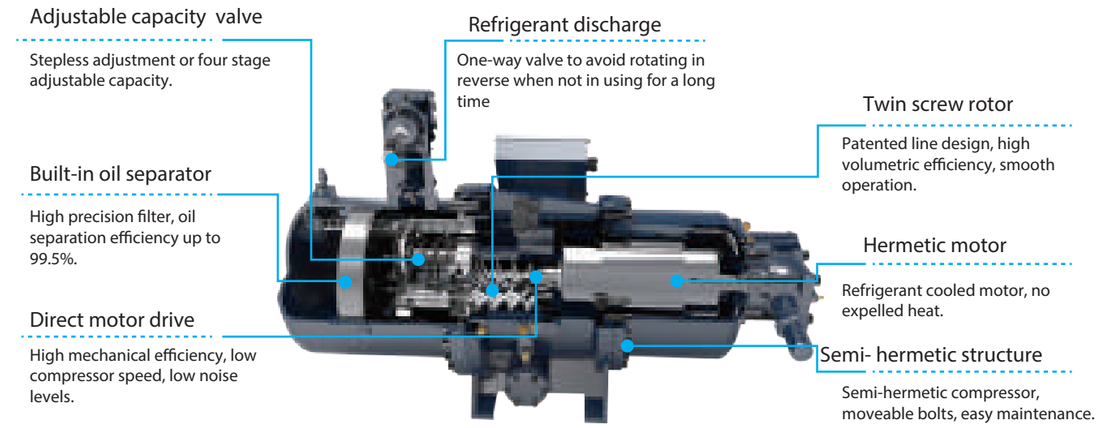
Features and benefits

Green chiller »

R134a environmentally friendly refrigerant:
Refrigerant is chlorine-free HFC with zero ODP (Ozone Depletion Potential).
Very low GWP (Global Warming Potential).

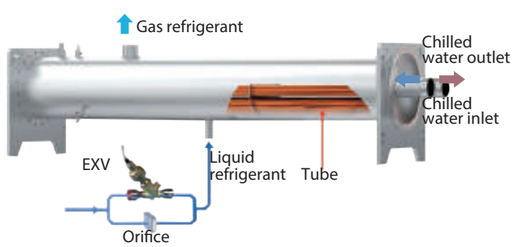
Stable and Reliable »

Advanced twin-rotor screw compressor

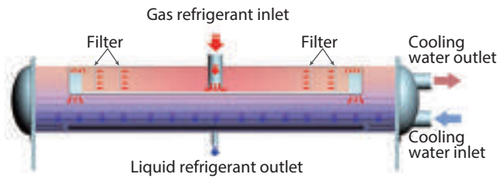


High efficiency heat exchange technology »

Evaporator



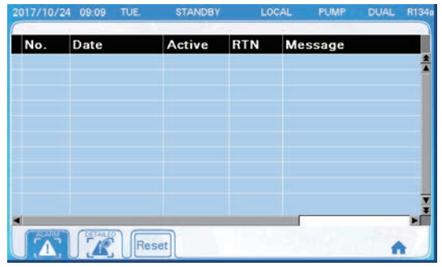
Condenser



High efficiency shell and tube heat exchanger, 2 passes, straight water pipe, easy to clean. Both sides of cover can be exchanged to meet customer's requirement for condenser.

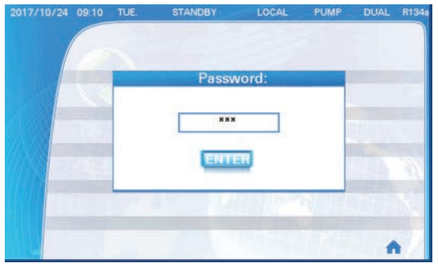
Data acquisition & storing »

Records a max. of 256 of the lastest alarms and 500 seconds of chilled/cooling water temperature trend display.



Password protection »

The user, installation and commissioning and as well as a factory password are pre-generated for each unit. Unauthorized access to the control is protected by randomly-generated passwords.



Self-Diagnosis »

Self-diagnosis is always performed prior to start-up to enable safe operation. Only after all the requirements are met, the chiller will start. If any malfunction occurs, it will be displayed on the screen.

Multiple protection features guarantee the safety and stability of the unit.

Items	Function
High/low pressure protection	Guarantees the Comp. runs in the right range thus ensuring its lifespan
Power open phase protection	Protects Comp. from damage in case of open phase or anti-phase
Anti-freeze protection in cooling mode	Protects the evaporators' copper pipes from damage caused by water freeze
Frequent startup protection	Protects Comp. motor winding from burnout caused by frequent startup
Overcurrent protection of Comp.	Protects Comp. from burnout caused by heavy current
Overheating protection of compressor	Protects Comp. from damage caused by a lack of refrigerant or lubricant
Water flow protection	Protects Comp. from burnout caused by heat-exchanger failure
Reversal protection control(APRS)	Guarantees the comp. motor runs in the right direction

Specifications

LSBLGXXX/MCF		340	440	540	720	805	890
Cooling capacity	kW	336.6	435.7	534.5	712.7	797.2	881.5
Power input	kW	59.77	76.71	93.65	127.0	143.7	154.4
COP	kW/kW	5.631	5.679	5.707	5.611	5.547	5.709
Semi-hermetic screw compressor							
Circuit A	Quantity	1	1	1	1	1	1
Circuit B	Quantity	--	--	--	--	--	--
Oil charge							
Circuit A	L	18	20	23	28	40	40
Circuit B	L	--	--	--	--	--	--
Refrigerant	Type	R134a					
Circuit A	kg	130	145	160	230	230	250
Circuit B	kg	--	--	--	--	--	--
Control Type		EXV+Orifice					
Evaporator	Type	Shell and Tube Flooded					
Water flow	m^3/h	52.17	67.55	82.83	110.5	123.6	136.7
Pressure drop	kPa	24.4	26.2	26.2	22.0	27.0	26.9
Max. pressure	kPa	1000	1000	1000	1000	1000	1000
Connection Type		Victaulic coupling					
Water inlet/outlet pipe dim.		DN150	DN150	DN150	DN200	DN200	DN200
Condenser	Type	Shell and Tube					
Water flow	m^3/h	65.18	84.42	103.6	138.1	154.5	170.8
Pressure drop	kPa	30.9	32.3	32.7	30.1	32.6	34.8
Max. pressure	kPa	1000	1000	1000	1000	1000	1000
Connection Type		Victaulic coupling					
Water inlet/outlet pipe dim.		DN150	DN150	DN150	DN200	DN200	DN200
Unit length	mm	3496	3496	3496	3521	3521	3521
Unit width	mm	1200	1200	1200	1400	1400	1400
Unit height	mm	1753	1824	1909	2089	2044	2044
Packing length	mm	3900	3900	3900	3900	3900	3900
Packing width	mm	1340	1340	1340	1560	1560	1560
Packing height	mm	2023	2094	2179	2359	2314	2314
Running weight	kg	2514	2592	3028	3696	4169	4281
Shipping weight	kg	2374	2422	2818	3406	3859	3951

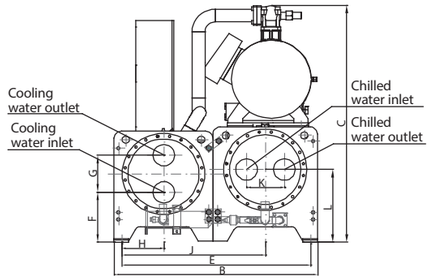
Note:
1. Nominal cooling capacities are based on the AHRI STANDARD 550/590-2015;
2. Cooling condition: chilled water outlet temp. is 6.67°C(44°F) , cooling water inlet temp. is 29.44°C(85°F);
3. The design fouling factor for evaporator is 0.0176m^2-°C/kW(0.0001h-ft^2-°F/Btu) ; and for condenser is 0.044m^2-°C/kW(0.00025h-ft^2-°F/Btu);
4. The working pressure of the water side for both the evaporator and condenser are 1.0MPa, 1.6Mpa,2.0Mpa can be customized;
5. As a result of the continuous improvement of the product, the above parameters may be changed, please refer to the product nameplate parameters and in-kind.

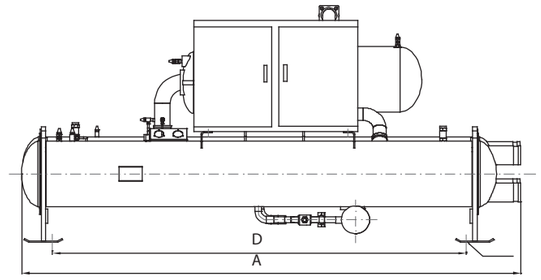
LSBLGXXX/MCF		1055	1200	1300	1410	1620	1780
Cooling capacity	kW	1045	1186	1286	1396	1600	1759
Power input	kW	185.9	205.2	230.7	248.7	290.3	304.8
COP	kW/kW	5.621	5.779	5.574	5.613	5.512	5.771
Semi-hermetic screw compressor							
Circuit A	Quantity	1	1	1	1	1	1
Circuit B	Quantity	--	1	1	1	1	1
Oil charge							
Circuit A	L	40	28	28	28	40	40
Circuit B	L	--	28	28	28	40	40
Refrigerant	Type	R134a					
Circuit A	kg	360	165	165	170	200	200
Circuit B	kg	--	165	165	170	200	200
Control Type		EXV+Orifice					
Evaporator	Type	Shell and Tube Flooded					
Water flow	m^3/h	162.0	183.8	199.3	216.4	248.0	272.7
Pressure drop	kPa	26.2	51.0	57.6	52.7	57.4	62.4
Max. pressure	kPa	1000	1000	1000	1000	1000	1000
Connection Type		Victaulic coupling					
Water inlet/outlet pipe dim.		DN200					
Condenser	Type	Shell and Tube					
Water flow	m^3/h	202.5	229.6	249.2	270.5	310.0	340.8
Pressure drop	kPa	30.7	58.6	66.3	66.7	68.0	69.8
Max. pressure	kPa	1000	1000	1000	1000	1000	1000
Connection Type		Victaulic coupling					
Water inlet/outlet pipe dim.		DN200					
Unit length	mm	3601	4593	4593	4593	4611	4611
Unit width	mm	1500	1500	1500	1500	1600	1600
Unit height	mm	2544	2188	2343	2343	2343	2343
Packing length	mm	3900	5000	5000	5000	5000	5000
Packing width	mm	1660	2080	2080	2080	2180	2180
Packing height	mm	2764	2458	2563	2563	2563	2563
Running weight	kg	5627	6662	6752	6903	8306	8449
Shipping weight	kg	5217	6102	6182	6293	7596	7699

Note:
1. Nominal cooling capacities are based on the AHRI STANDARD 550/590-2015;
2. Cooling condition: chilled water outlet temp. is 6.67°C(44°F) , cooling water inlet temp. is 29.44°C(85°F);
3. The design fouling factor for evaporator is 0.0176m^2·°C/kW(0.0001h-ft^2·°F/Btu) ; and for condenser is 0.044m^2·°C/kW(0.00025h-ft^2·°F/Btu);
4. The working pressure of the water side for both the evaporator and condenser are 1.0MPa, 1.6Mpa,2.0Mpa can be customized;
5. As a result of the continuous improvement of the product, the above parameters may be changed, please refer to the product nameplate parameters and in-kind.

Dimensions

Single compressor (LSBLG340~1055/MCF)

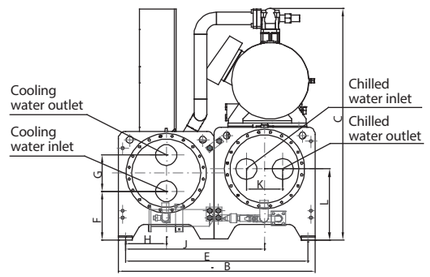


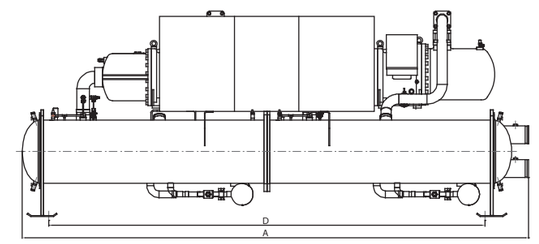


Unit: mm

Model	A	B	C	D	E	F	G	H	J	K	L	Water inlet/outlet
LSBLG340/MCF	3496	1200	1753	2850	1100	411	260	250	600	260	541	DN150
LSBLG440/MCF	3496	1200	1824	2850	1100	411	260	250	600	260	541	DN150
LSBLG540/MCF	3496	1200	1909	2850	1100	411	260	250	600	260	541	DN150
LSBLG720/MCF	3521	1400	2089	2850	1300	441	300	300	700	300	591	DN200
LSBLG805/MCF	3521	1400	2044	2850	1300	441	300	300	700	300	591	DN200
LSBLG890/MCF	3521	1400	2044	2850	1300	441	300	300	700	300	591	DN200
LSBLG1055/MCF	3601	1500	2544	2850	1400	443	350	325	750	375	618	DN200

Dual compressors (LSBLG1200~1780/MCF)





Unit: mm

Model	A	B	C	D	E	F	G	H	J	K	L	Water inlet/outlet
LSBLG1200/MCF	4593	1500	2188	3850	1400	443	350	325	750	350	618	DN200
LSBLG1300/MCF	4593	1500	2238	3850	1400	443	350	325	750	350	618	DN200
LSBLG1410/MCF	4593	1500	2238	3850	1400	443	350	325	750	350	618	DN200
LSBLG1620/MCF	4611	1600	2343	3850	1500	468	350	350	800	350	643	DN200
LSBLG1780/MCF	4611	1600	2343	3850	1500	468	350	350	800	350	643	DN200