Midea

COMMERCIAL AIR CONDITIONERS

Air cooled chillers 50Hz

ISO 9001 : 2000
Certificate No.: CC 454

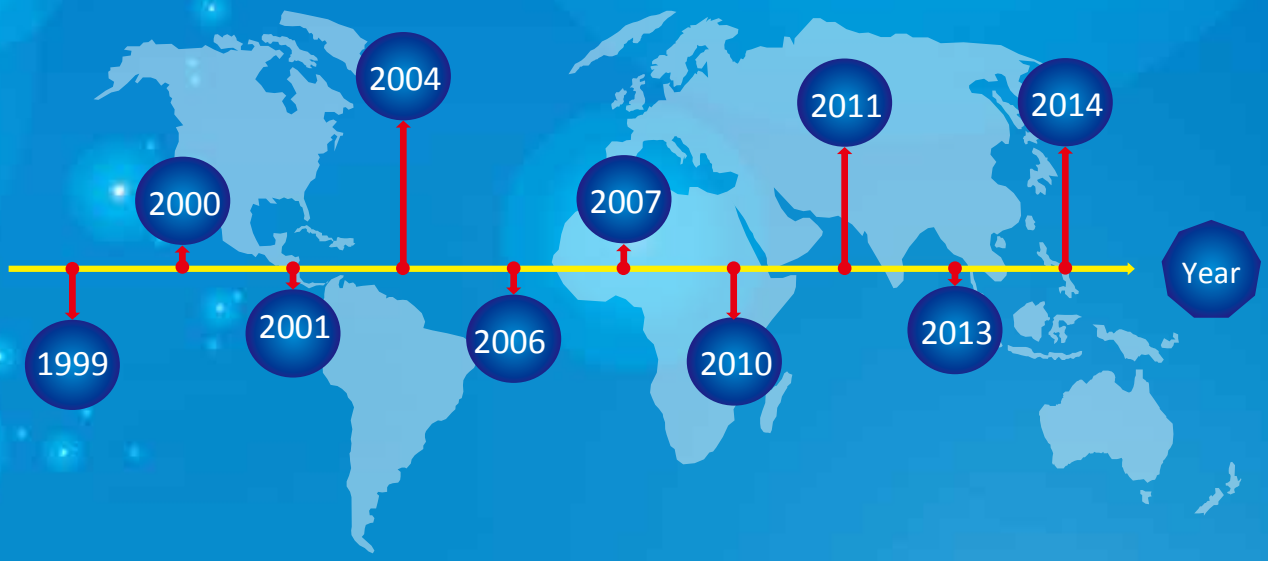
ISO 14001: 2004
Certificate No.:CC1417

Midea CAC (MCAC)

As a key subsidiary of Midea Group, the Midea Central Air Conditioner (MCAC) business unit has emerged as a leading supplier of commercial solutions. Since 1999 MCAC has contributed to the R&D and innovation of technologically-based commercial solutions. Cooperation with leading global enterprises coupled with independent R&D has enabled MCAC to implement thousands of commercial air-conditioning projects worldwide.

At present, MCAC is one of the globally leading product suppliers, underpinned by a mature marketing, sales, and project design framework.

There are three production bases in Shunde, Chongqing and Hefei.
MCAC Shunde: 38 product lines focusing on VRF (DC inverters and digital scroll products), split products, heat pump water heaters, and AHU/FCU.
MCAC Chongqing: 14 product lines focusing on water cooled centrifugal/screw/scroll chillers, air cooled screw/scroll chillers, and AHU/FCU.
MCAC Hefei: 11 product lines focusing on VRF, chillers, and heat pump water heaters.



2014 Launched the All DC Inverter V5X globally
2013 Launched the super high efficiency centrifugal chiller with full falling film technology
2011 Launched the DC Inverter V4 Plus globally
2010 Built the 3rd manufacturing base in Hefei
2007 Won the first Midea centrifugal chiller project oversea
2006 Launched the first VSD centrifugal chiller
2004 Acquired MGRE entered the chiller industry
2001 Partnered with Copeland to develop the digital scroll VRF system
2000 Developed the first inverter VRF With Toshiba
1999 Entered the CAC field

Midea air cooled chillers

Midea air-cooled chillers adopt air as the cooling/heating source and water as the cooling/heating medium to cooling/heating the indoor ambient temperatures through the indoor terminals (AHU/FCU).It includes air cooled scroll chiller and air cooled screw chiller. The capacity range is from 25kW to 1420kW for one unit. The maximum capacity output is up to 2000kW for combined air cooled scroll chiller,11360kW for combined air screw chiller. The chillers can be used in all types of climate,the wide selection of module makes it possible to build a system for any of the customers requirements.

Aqua Tempo Power Series

Air cooled scroll chiller 25~250kW

Refrigerate:R410A

Compressor type: Digital scroll+ fixed scroll

Max combined quantity: 16

Max combined capacity output:2000kW

Evaporator type: Double pipe&shell and tube

Aqua M Series

Air cooled screw chiller 380~1420kW

Refrigerate:R134a

Compressor type: Screw

Max combined quantity: 8

Max combined capacity output:11360kW

Evaporator type: Shell and tube

Contents

Aqua Tempo Power Series
Air cooled scroll chiller

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Product introduction

Midea air-cooled scroll chiller adopts air as the cooling/heating source and water as the cooling/heating medium to cooling/heating the indoor ambient temperatures through the indoor terminal (AHU/FCU). Air cooled chiller typically have a lower initial investment and maintenance cost than water cooled system, it does not require a cooling tower, condenser water pump and associated condenser water chemical treatment system.

Modular design concept makes the application from single unit to multiple form systems to several thousand tons of installed capacity. Adopting high reliable and excellent efficiency system,Midea air cooled Modular chiller becomes one of the best choice for all kinds of air cooled projects. With the latest Modular design technology, high efficiency V shape heat exchanger and precise gas flow control technology and digital compressor application, Midea air cooled scroll chiller system always work at the most high efficiency stage. Modular and compressor operation are adjusted by the real load requirement intelligently to keep the most economical working status. They are widely applied in school, hospital, shopping mall, office as well as the factory and manufacturing processing area.


School

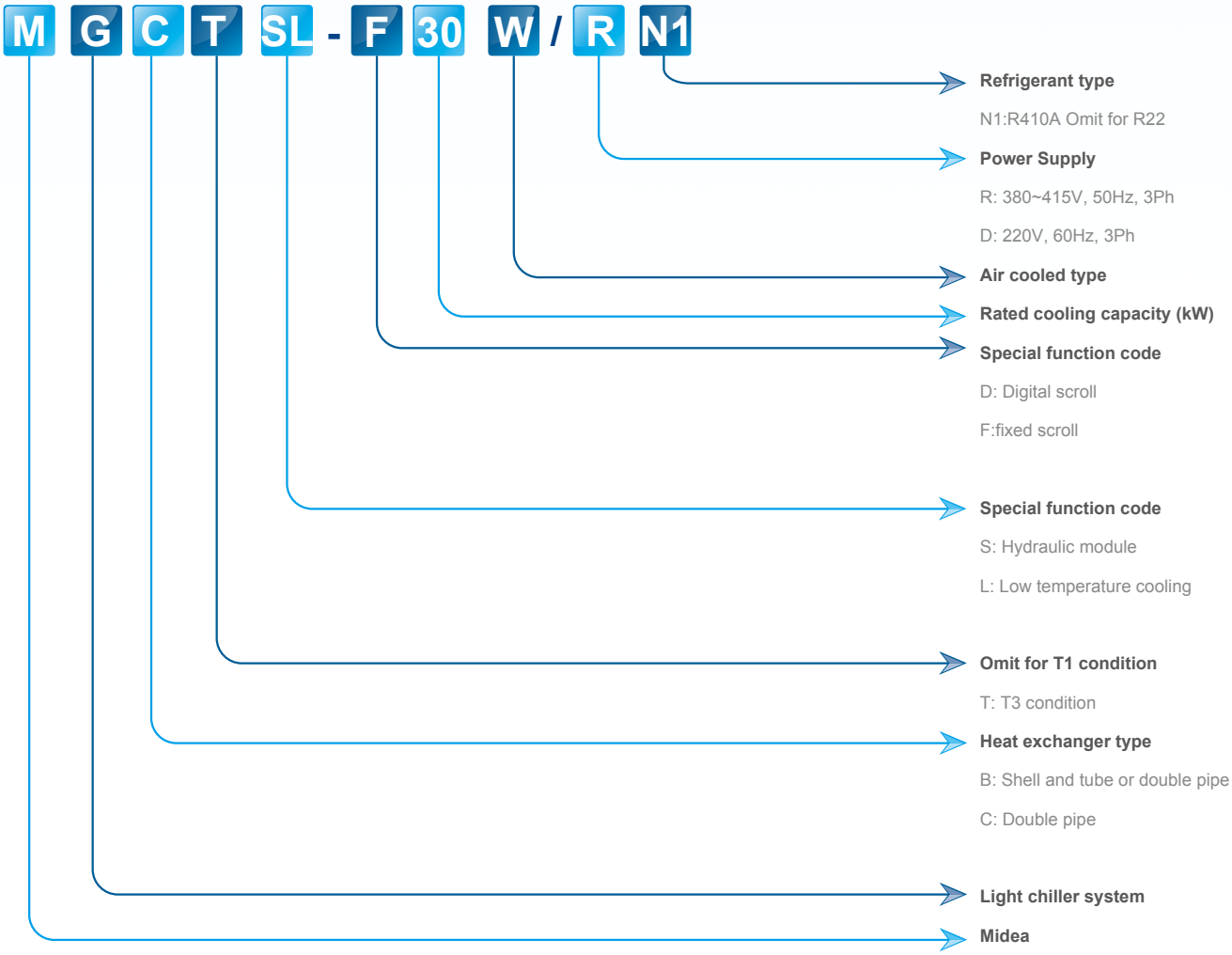

Factory


Hotel


Hospital


Office

Nomenclature



Product lineup

No	Model	Heat exchanger type	Compressor quantity(pcs)		Electrical controller no.	Maximum combinations	Maximum capacity(kW)	Wired controller
			Digital	Fixed				
1	MGB-F30W/RN1	Double pipe	0	2	1	16	480	KJRM-120D/BMK-E
2	MGB-D30W/RN1	Double pipe	1	1	1	16	480	KJRM-120D/BMK-E
3	MGCSL-F30W/RN1	Double pipe	0	2	1	1	30	KJRM-120D/BMK-E
4	MGCSL-D30W/RN1	Double pipe	1	1	1	1	30	KJRM-120D/BMK-E
5	MGCL-F30W/RN1	Double pipe	0	2	1	16	480	KJRM-120D/BMK-E
6	MGCL-D30W/RN1	Double pipe	1	1	1	16	480	KJRM-120D/BMK-E
7	MGB-F65W/RN1	Shell and tube	0	2	1	16	880	KJRM-120D/BMK-E
8	MGB-D65W/RN1	Shell and tube	1	2	1	16	1040	KJRM-120D/BMK-E
9	MGBL-F65W/RN1	Shell and tube	0	2	1	16	1040	KJRM-120D/BMK-E
10	MGBL-D65W/RN1	Shell and tube	1	2	1	16	1040	KJRM-120D/BMK-E
11	MGB-F130W/RN1	Shell and tube	0	4	2	8	1040	KJRM-120D/BMK-E
12	MGBL-F130W/RN1	Shell and tube	0	4	2	8	1040	KJRM-120D/BMK-E
13	MGB-F200W/RN1	Shell and tube	0	6	3	5	1040	KJRM-120D/BMK-E
14	MGBL-F200W/RN1	Shell and tube	0	6	3	5	1000	KJRM-120D/BMK-E
15	MGBT-F250W/RN1	Shell and tube	0	8	2	8	2000	KJRM-120D/BMK-E
16	MGBL-F250W/RN1	Shell and tube	0	8	2	8	2000	KJRM-120D/BMK-E

External appearance

30kW module

30kW module(integrated)

65kW module

130kW module

200kW module

250kW module

Features

Modular design

Modular design and mass production makes the stock possible to short the delivery time to the project.

Free capacity add-on in the future stage.

Whole system reliability by the backup modular.

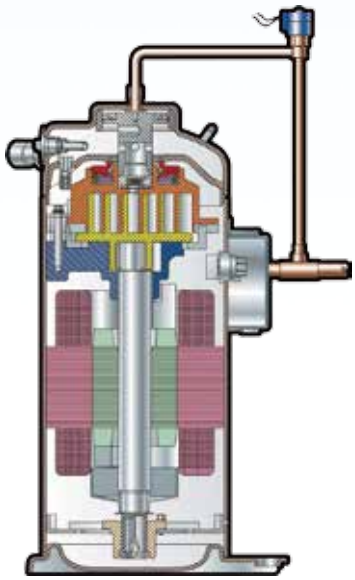
Master controller oversees operation of all connected modules.

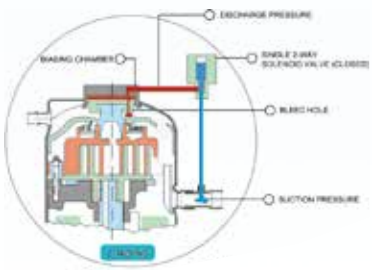
Low starting current without any inrush to the power supply.

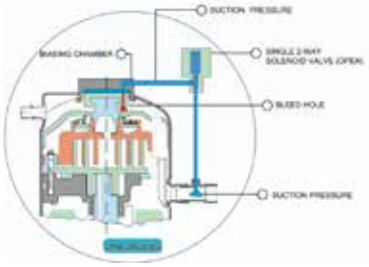
Digital scroll technology

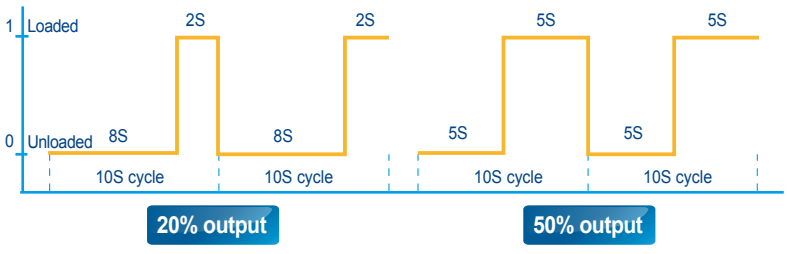
Digital scroll technology， provide maximum reliability, high efficiency and quiet operation.The widest capacity output can be achieved, comfort room temperature, efficiency of the whole system can be improved significantly.

Advanced digital scroll technology for small modules (30/65kW) maximizes reliability, ensures efficient and silent operations, optimizes capacity output, and provides a comfortable room temperature.



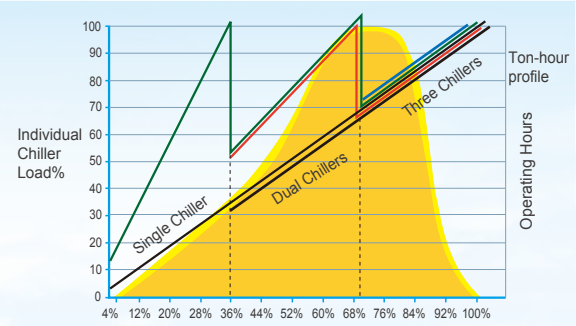




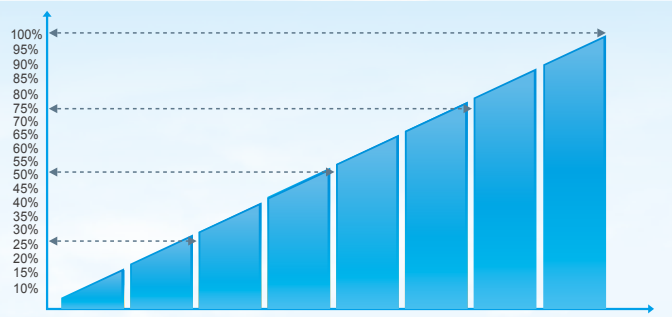


Energy saving

In chiller system the output capacity is proportional to the load of the building. In the partial load condition the single chiller system will operate at 10% to 70% which is a very low efficiency for a system and lead to a very low IPLV/NPLV. In a multiple system the system output capacity is not proportion to the load of the building and only one chiller will operate in the low efficiency area and other chiller will work in the high efficiency area. The IPLV/NPLV will be increased significantly by the scroll design.



Example of three chillers operation profile



Stepless capacity control

Wide range of ambient temperature

The ambient temperature can go down to - 10˚C in cooling mode.
The wide ambient temperature range is optional, and can be adjusted to meet different requirements.
(To be available modules, please see the "specifications" on page 12~16.)

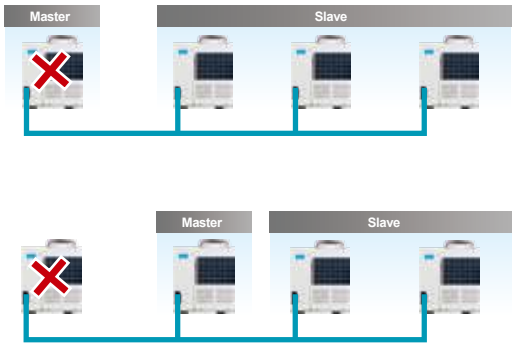
Mode		Ambient temp.
Cooling	Normally（S8 address OFF）	10~46˚C
	*Low temp. (S8 address ON)	-10~46˚C
Heating		-10~21˚C

User friendly remote control

Switch the S7 address on the PCB to ON to enable the following remote control operations:
- Remote ON/OFF.
- Remote mode selection: heating or cooling.
- Remote alarm.

Note:
When use the remote control function, the wired controller will be invalid.

Backup functions



When unit is failed.
- If master unit fails, all the units will stop.
- If one slave unit fails, this unit will stop but the others will keep running.
- When the master unit fails, any of the slave one can be set as the master unit by manual setting.

When unit is under protection.
- If master unit's protection occurs, this unit will stop but the others will keep running.
- If slave unit's protection occurs, this unit will stop but the others will keep running.
- (Except PE, P9 protection happens)

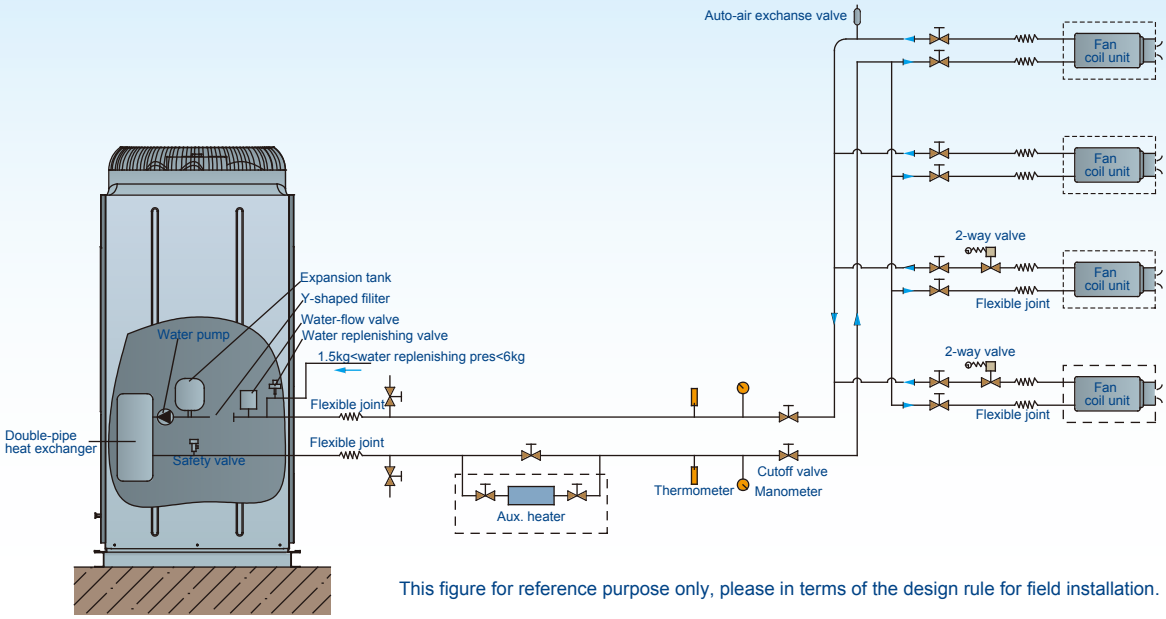
PE: Low-temperature protection of evaporator.
P9: Outlet and inlet water temperature difference protection.

Optimized electrical design

The standardized hardware and program design efficiently manages raw materials via programming parameters written onto a EEPROM chip, which enables after-sales modifications, customization and troubleshooting.
The electrical panels provide a clear visual representation of the wiring scheme completed during assembly.

Built-in hydraulic module

The unit's built-in hydraulic module simplifies installation, saves space, improves aesthetics, and cuts costs.
(Available for MGCSL-F(D)30W/RN1.)

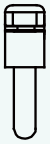


This figure for reference purpose only, please in terms of the design rule for field installation.

Standard features/options

Description	Standard features	Options
Hermetic scroll compressor	●	
Compressor crankcase heaters	●	
Compressor circuit breakers	●	
Compressor overload protection	●	
Condenser fan-direct drive, axial type	●	
Condenser fan(Metal)	●	
Condenser fan guard	●	
Condenser motor circuit breakers		●
Aluminum fins condenser coils	●	
Low pressure switch	●	
High pressure switch	●	
Wired controller KJRM-120D/BMK-E	●	
Wired controller KJR-120A/MBTE		●
BMS gateway(Lonworks)		●
Remote control input	●	
Alarm signal output	●	
Anti-freezing protection	●	
Over-load protection	●	
Power phases sequence protection	●	
Anti-corrosion fins		●
Water flow switch		●
Three phase power protector		●
65kW hydraulic module		●
130kW hydraulic module		●

Accessories

Item	Name of accessory	Type	Qty	Shape	Usage
1	Installation and owner's manual	---	1		Installation and using instruction.
2	The total outlet water temperature test kit	LSQWRF65M/A-C.ZL.10	1		Inspection the temperature of total outlet water.
3	Wired controller	KJRM-120D/BMK-E	1		Control the system.

Specifications

Model			MGB-F30W/RN1	MGB-D30W/RN1
Cooling Capacity		kW	30	30
Heating Capacity		kW	32	32
Power input	Cooling	kW	10.0	10.0
	Cooling rated current	A	16.3	16.3
	Heating	kW	9.8	9.8
	Heating rated current	A	16.0	16.0
Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50
Power supply	Manual switch	A	50	50
	Fuse	A	36	36
EER		kW/kW	3.00	3.00
COP		kW/kW	3.27	3.27
Compressor	Type		Scroll (fixed speed)	Scroll (digital+fixed speed)
	Brand		Copeland	Copeland
	Model		ZP67KCE-TFD-522	ZPD67KCE-TFD-532/ ZP67KCE-TFD-522
	Quantity	Pieces	2	1/1
	Refrigerant oil	ml	1892	1892/1656
Refrigerant	Type		R410A	R410A
	Refrigerant control		EXV	EXV
	Weight	kg	3.5×2	3.5×2
Condenser (Air side)	Type		Fin-coil	Fin-coil
	Number of rows		3	3
	Fan motor model		YDK400-8-YA	YDK400-8-YA
	Quantity of fan motor	Pieces	1	1
	Air flow	$\times 10^3 m^3/h$	12	12
	Fan motor rated current	A	3.1	3.1
	Fan motor input	kW	0.67	0.67
Evaporator (Water side)	Type		Double-pipe	Double-pipe
	Water pressure drop	kPa	60	60
	Volume	L	10	10
	Water inlet/outlet pipeline inside normal diameter	mm	DN40	DN40
	Water flow volume	m^3/h	5.2	5.2
	Max. design pressure	MPa	1	1
	Water pipe connection type		Flexible joint	Flexible joint
Dimension	Net(D×H×W)	mm	1514×1865×841	1514×1865×841
	Packing(D×H×W)	mm	1590×2065×995	1590×2065×995
Weight	Net weight	kg	380	380
	Operation weight	kg	420	420
Connection wiring	Power wire	mm^2	10×4+10×1	10×4+10×1
	Signal wire	mm^2	0.75×3-core with shielding	0.75×3-core with shielding
Control type			Wired controller	Wired controller
Noise level		dB(A)	65	65
Safety protection device			1) Protection for over-high discharge pressure. 7) Protection for compressor overload. 2) Protection for over-low suction pressure. 8) Outlet and inlet water temperature difference protection. 3) Power supply phase sequence protection. 9) Compressor discharge temperature protection. 4) Anti-freezing protection in cooling mode. 10) Water flow cut-off protection. 5) Anti-freezing protection in Winter. 11) Sensor malfunction protection. 6) Protection for compressor over current. 12) Low-temperature protection of shell and tube heat exchanger.	
Operation water temp		°C	Cooling：5～17 Heating：45～50	
Ambient temp		°C	Cooling：10～46 Heating：-10～21	

Note: Specifications are based on the following conditions:

- Cooling : chilled water inlet/outlet: 12°C / 7°C, and outdoor ambient temp. of 35°C DB.
- Heating : warm water inlet/outlet: 40°C / 45°C, and outdoor ambient temp. 7°CDB/6°CWB.
- Water side fouling factor: 0.086m2·°C/kW.
- 1m away in open field(sound pressure).

Model			MGCSL-F30W/RN1	MGCSL-D30W/RN1	MGCL-F30W/RN1	MGCL-D30W/RN1
Cooling Capacity		kW	30	30	30	30
Heating Capacity		kW	32	32	32	32
Power input	Cooling	kW	10+1.2(Pump)	10+1.2(Pump)	10.0	10.0
	Cooling rated current	A	18.3	18.3	16.3	16.3
	Heating	kW	9.8+1.2(Pump)	9.8+1.2(Pump)	9.8	9.8
	Heating rated current	A	17.8	17.8	16.0	16.0
Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Power supply	Manual switch	A	50	50	50	50
	Fuse	A	36	36	36	36
EER		kW/kW	2.68	2.68	3.00	3.00
COP		kW/kW	3.20	3.20	3.27	3.27
Compressor	Type		Scroll (fixed speed)	Scroll (digital+fixed speed)	Scroll (fixed speed)	Scroll (digital+fixed speed)
	Brand		Copeland	Copeland	Copeland	Copeland
	Model		ZP67KCE-TFD-522	ZPD67KCE-TFD-532/ ZP67KCE-TFD-522	ZP67KCE-TFD-522	ZPD67KCE-TFD-532/ ZP67KCE-TFD-522
	Quantity	Pieces	2	1/1	2	1/1
	Refrigerant oil	ml	1892	1892/1656	1892	1892/1656
Refrigerant	Type		R410A	R410A	R410A	R410A
	Refrigerant control		EXV	EXV	EXV	EXV
	Weight	kg	3.5×2	3.5×2	3.5×2	3.5×2
Condenser (Air side)	Type		Fin-coil	Fin-coil	Fin-coil	Fin-coil
	Number of rows		3	3	3	3
	Fan motor model		YDK550-6E	YDK550-6E	YDK550-6E	YDK550-6E
	Quantity of fan motor	Pieces	1	1	1	1
	Air flow	×10³m³/h	12	12	12	12
	Fan motor rated current	A	4.0	4.0	3.1	3.1
	Fan motor input	kW	0.865	0.865	4.0	4.0
Evaporator (Water side)	Type		Double-pipe	Double-pipe	Double-pipe	Double-pipe
	Water pressure drop	kPa	/	/	60	60
	Volume	L	10	10	10	10
	Water inlet/outlet pipeline inside normal diameter	mm	DN40	DN40	DN40	DN40
	Water flow volume	m³/h	5.2	5.2	5.2	5.2
	Max. design pressure	MPa	1	1	1	1
	Water pipe connection type		Flexible joint	Flexible joint	Flexible joint	Flexible joint
Dimension	Net(D×H×W)	mm	1514×1865×841	1514×1865×841	1514×1865×841	1514×1865×841
	Packing(D×H×W)	mm	1590×2065×995	1590×2065×995	1590×2065×995	1590×2065×995
Weight	Net weight	kg	430	430	375	375
	Operation weight	kg	450	450	400	400
Connection wiring	Power wire	mm²	10×4+6×1	10×4+6×1	10×4+6×1	10×4+6×1
	Signal wire	mm²	0.75×3-core with shielding	0.75×3-core with shielding	0.75×3-core with shielding	0.75×3-core with shielding
Control type			Wired controller	Wired controller	Wired controller	Wired controller
Noise level		dB(A)	67	67	65	65
Safety protection device			1) Protection for over-high discharge pressure. 2) Protection for over-low suction pressure. 3) Power supply phase sequence protection. 4) Anti-freezing protection in cooling mode. 5) Anti-freezing protection in Winter. 6) Protection for compressor over current. 7) Protection for compressor overload. 8) Outlet and inlet water temperature difference protection. 9) Compressor discharge temperature protection. 10) Water flow cut-off protection. 11) Sensor malfunction protection. 12) Low ambient temperature drive-up protection 13) Low temperature protection of shell and tube heat exchanger.			
Operation water temp		°C	Cooling：0～17(Less than 5°C must add antifreeze) Heating：22～50			
Ambient temp		°C	Cooling：-10～46 Heating：-10～21			

Note: Specifications are based on the following conditions:

■ Cooling : chilled water inlet/outlet: 12°C / 7°C, and outdoor ambient temp. of 35°C DB.

■ Heating : warm water inlet/outlet: 40°C / 45°C, and outdoor ambient temp. 7°CDB/6°CWB.

■ Water side fouling factor: 0.086m2·°C/kW.

■ 1m away in open field(sound pressure).

Model			MGB-F65W/RN1	MGB-D65W/RN1
Cooling Capacity		kW	65	65
Heating Capacity		kW	69	69
Power input	Cooling	kW	20.4	20.4
	Cooling rated current	A	36.5	36.5
	Heating	kW	21.5	21.5
	Heating rated current	A	37.2	37.2
Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50
Power supply	Manual switch	A	100	100
	Fuse	A	70	70
EER		kW/kW	3.18	3.18
COP		kW/kW	3.20	3.20
Compressor	Type		Scroll (fixed speed)	Scroll (fixed speed+digital)
	Brand		Danfoss	Copeland
	Model		SH140A4ALC	ZP144KCE-TFD-522 / ZPD72KCE -TFD-433 / ZP67KCE-TFD-420
	Quantity	Pieces	2	3
	Refrigerant oil	ml	3300	3200/1893/1685
Refrigerant	Type		R410A	R410A
	Refrigerant control		EXV+ capillary	EXV+ capillary
	Weight	kg	7.0×2	7.0×2
Condenser (Air side)	Type		Fin-coil	Fin-coil
	Number of rows		3	3
	Fan motor model		YDK550-6D	YDK550-6E
	Quantity of fan motor	Pieces	2	2
	Air flow	×10³m³/h	24	24
	Fan motor rated current	A	4.0×2	4.0×2
	Fan motor input	kW	0.865×2	0.865×2
Evaporator (Water side)	Type		Shell-tube	Shell-tube
	Water pressure drop	kPa	15	15
	Volume	L	42	42
	Water inlet/outlet pipeline inside normal diameter	mm	DN100	DN100
	Water flow volume	m³/h	11.2	11.2
	Max. design pressure	MPa	1	1
	Water pipe connection type		Flexible joint	Flexible joint
Dimension	Net(D×H×W)	mm	2000×1880×900	2000×1880×900
	Packing(D×H×W)	mm	2090×2055×985	2090×2055×985
Weight	Net weight	kg	580	600
	Operation weight	kg	650	670
Connection wiring	Power wire	mm²	16×4+10×1	25×4+16×1
	Signal wire	mm²	0.75×3-core with shielding	0.75×3-core with shielding
Control type			Wired controller	Wired controller
Noise level		dB(A)	67	67
Safety protection device			1) Protection for over-high discharge pressure. 2) Protection for over-low suction pressure. 3) Power supply phase sequence protection. 4) Anti-freezing protection in cooling mode. 5) Anti-freezing protection in Winter. 6) Protection for compressor over current. 7) Protection for compressor overload. 8) Outlet and inlet water temperature difference protection. 9) Compressor discharge temperature protection. 10) Water flow cut-off protection. 11) Sensor malfunction protection. 12) Low-temperature protection of shell and tube heat exchanger.	
Operation water temp		°C	Cooling：5～17 Heating：45～50	Cooling：0～17(Less than 5°C must add antifreeze) Heating：22～50
Ambient temp		°C	Cooling：10～46 Heating：-10～21	

Note: Specifications are based on the following conditions:

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■ Water side fouling factor: 0.086m2·°C/kW.

■ 1m away in open field(sound pressure).

Model			MGBL-F65W/RN1	MGBL-D65W/RN1	MGB-F130W/RN1	MGBL-F130W/RN1
Cooling Capacity		kW	65	65	130	130
Heating Capacity		kW	69	69	138	138
Power input	Cooling	kW	20.4	20.4	40.8	40.8
	Cooling rated current	A	36.5	36.5	73	73
	Heating	kW	21.5	21.5	43	43
	Heating rated current	A	37.2	37.2	74.4	74.4
Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Power supply	Manual switch	A	100	100	200	200
	Fuse	A	70	70	150	150
EER		kW/kW	3.18	3.18	3.18	3.18
COP		kW/kW	3.21	3.21	3.21	3.21
Compressor	Type		Scroll (fixed speed)	Scroll (fixed speed+digital)	Scroll (fixed speed)	Scroll (fixed speed)
	Brand		Danfoss	Copeland	Danfoss	Danfoss
	Model		SH140A4ALC	ZP144KCE-TFD-522 / ZPD72KCE -TFD-433 / ZP67KCE-TFD-420	SH140A4ALC	SH140A4ALC
	Quantity	Pieces	2	3	4	4
	Refrigerant oil	ml	3300	3200/1893/1685	3300	3300
Refrigerant	Type		R410A	R410A	R410A	R410A
	Refrigerant control		EXV+ capillary	EXV+ capillary	EXV+ capillary	EXV+ capillary
	Weight	kg	7.0×2	7.0×2	7.0×4	7.0×4
Condenser (Air side)	Type		Fin-coil	Fin-coil	Fin-coil	Fin-coil
	Number of rows		3	3	3	3
	Fan motor model		YDK550-6E	YDK550-6E	YDK550-6D	YDK550-6E
	Quantity of fan motor	Pieces	2	2	4	4
	Air flow	×10³m³/h	24	24	48	48
	Fan motor rated current	A	4.0×2	4.0×2	4.0×4	4.0×4
	Fan motor input	kW	0.865×2	0.865×2	0.865×4	0.865×4
Evaporator (Water side)	Type		Shell-tube	Shell-tube	Shell-tube	Shell-tube
	Water pressure drop	kPa	15	15	25	25
	Volume	L	42	42	64	64
	Water inlet/outlet pipeline inside normal diameter	mm	DN100	DN100	DN65	DN65
	Water flow volume	m³/h	11.2	11.2	22.4	22.4
	Max. design pressure	MPa	1	1	1	1
	Water pipe connection type		Flexible joint	Flexible joint	Flexible joint	Flexible joint
Dimension	Net(D×H×W)	mm	2000×1880×900	2000×1880×900	2000×2090×1685	2000×2090×1685
	Packing(D×H×W)	mm	2106×2090×998	2106×2090×998	2090×2240×1755	2090×2240×1755
Weight	Net weight	kg	580	610	1150	1150
	Operation weight	kg	650	680	1270	1270
Connection wiring	Power wire	mm²	25×4+16×1	25×4+16×1	35×3+16×2	35×3+16×2
	Signal wire	mm²	0.75×3-core with shielding	0.75×3-core with shielding	0.75×3-core with shielding	0.75×3-core with shielding
Control type			Wired controller	Wired controller	Wired controller	Wired controller
Noise level		dB(A)	67	67	70	70
Safety protection device			1) Protection for over-high discharge pressure. 2) Protection for over-low suction pressure. 3) Power supply phase sequence protection. 4) Anti-freezing protection in cooling mode. 5) Anti-freezing protection in Winter. 6) Protection for compressor over current. 7) Protection for compressor overload. 8) Outlet and inlet water temperature difference protection. 9) Compressor discharge temperature protection. 10) Water flow cut-off protection. 11) Sensor malfunction protection. 12) Low-temperature protection of shell and tube heat exchanger.			
Operation water temp		°C	Cooling: 0～17(Less than 5°C must add antifreeze) Heating: 22～50		Cooling：5～17 Heating：45～50	Cooling：0～17(Less than 5°C must add antifreeze) Heating：22～50
Ambient temp		°C	Cooling: -10～46 Heating: -10～21		Cooling: 10～46 Heating: -10～21	Cooling: -10～46 Heating: -10～21

Note: Specifications are based on the following conditions:

- Cooling : chilled water inlet/outlet: 12°C / 7°C, and outdoor ambient temp. of 35°C DB.
- Heating : warm water inlet/outlet: 40°C / 45°C, and outdoor ambient temp. 7°CDB/6°CWB.
- Water side fouling factor: 0.086m2·°C/kW.
- 1m away in open field(sound pressure).

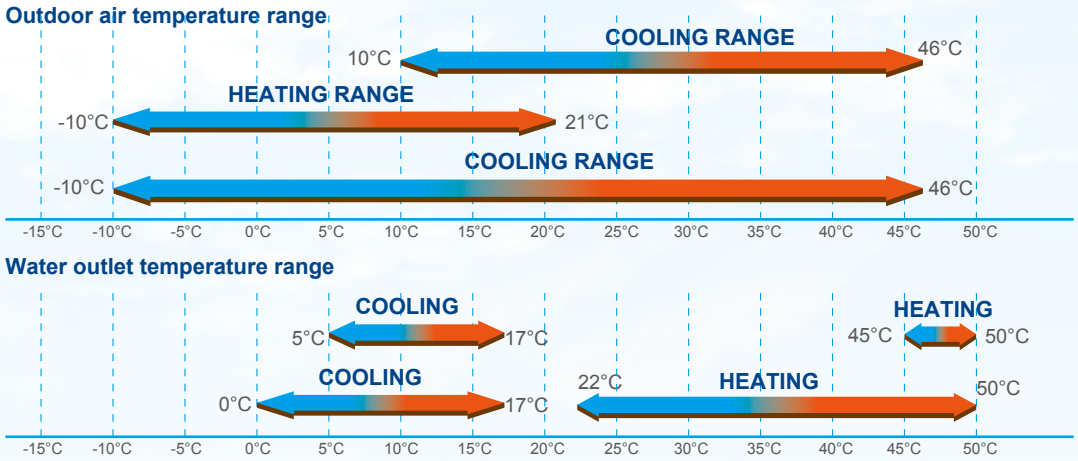
Model			MGB-F200W/RN1	MGBL-F200W/RN1	MGBT-F250W/RN1	MGBL-F250W/RN1
Cooling Capacity		kW	185	185	250	250
Heating Capacity		kW	200	200	270	270
Power input	Cooling	kW	63	63	78.3	78.3
	Cooling rated current	A	110	110	141.9	141.9
	Heating	kW	61	61	80	80
	Heating rated current	A	107	107	146	146
Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
Power supply	Manual switch	A	300	300	450	450
	Fuse	A	200	200	300	300
EER		kW/kW	2.93	2.93	3.19	3.19
COP		kW/kW	3.27	3.27	3.38	3.38
Compressor	Type		Scroll (fixed speed)	Scroll (fixed speed)	Scroll (fixed speed)	Scroll (fixed speed)
	Brand		Danfoss	Danfoss	Danfoss	Danfoss
	Model		SH140A4ALC	SH140A4ALC	SH120A4ALC	SH120A4ALC
	Quantity	Pieces	6	6	8	8
	Refrigerant oil	ml	3300	3300	3300	3300
Refrigerant	Type		R410A	R410A	R410A	R410A
	Refrigerant control		EXV+ capillary	EXV+ capillary	EXV+ capillary	EXV+ capillary
	Weight	kg	7.0×6	7.0×6	15×4	15×4
Condenser (Air side)	Type		Fin-coil	Fin-coil	Fin-coil	Fin-coil
	Number of rows		3	3	3	3
	Fan motor model		YDK550-6D	YDK550-6E	YS700-6F-1/YS700-6F-2	YDK550-6E
	Quantity of fan motor	Pieces	6	6	6/2	8
	Air flow	×10³m³/h	72	72	96	96
	Fan motor rated current	A	4.0×6	4.0×6	1.8×8	4.0×8
	Fan motor input	kW	0.865×6	0.865×6	0.9×8	0.865×8
Evaporator (Water side)	Type		Shell-tube	Shell-tube	Shell-tube	Shell-tube
	Water pressure drop	kPa	30	30	40	40
	Volume	L	90	90	131	131
	Water inlet/outlet pipeline inside normal diameter	mm	DN80	DN80	DN100	DN100
	Water flow volume	m³/h	31.8	31.8	43	43
	Max. design pressure	MPa	1	1	1	1
	Water pipe connection type		Flexible joint	Flexible joint	Flexible joint	Flexible joint
Dimension	Net(D×H×W)	mm	2850×2110×2000	2850×2110×2000	3800×2130×2000	3800×2130×2000
	Packing(D×H×W)	mm	2980×2260×2135	2980×2260×2135	3900×2200×2100	3900×2200×2100
Weight	Net weight	kg	1730	1730	2450	2450
	Operation weight	kg	2000	2000	2600	2600
Connection wiring	Power wire	mm²	75×3+35×2	75×3+35×2	185×4+70×1	150×4+70×1
	Signal wire	mm²	0.75×3-core with shielding	0.75×3-core with shielding	0.75×3-core with shielding	0.75×3-core with shielding
Control type			Wired controller	Wired controller	Wired controller	Wired controller
Noise level		dB(A)	74	74	74	74
Safety protection device			1) Protection for over-high discharge pressure. 7) Protection for compressor overload. 2) Protection for over-low suction pressure. 8) Outlet and inlet water temperature difference protection. 3) Power supply phase sequence protection. 9) Compressor discharge temperature protection. 4) Anti-freezing protection in cooling mode. 10) Water flow cut-off protection. 5) Anti-freezing protection in Winter. 11) Sensor malfunction protection. 6) Protection for compressor over current. 12) Low-temperature protection of shell and tube heat exchanger.			
Operation water temp		°C	Cooling：5～17 Heating：45～50	Cooling：0～17(Less than 5°C must add antifreeze) Heating：22～50		
Ambient temp		°C	Cooling：10～46 Heating：-10～21	Cooling：-10～46 Heating：-10～21	Cooling：10～52 Heating：-10～21	Cooling：-10～46 Heating：-10～21

Note: Specifications are based on the following conditions:

- Cooling : chilled water inlet/outlet: 12°C / 7°C, and outdoor ambient temp. of 35°C DB.
- Heating : warm water inlet/outlet: 40°C / 45°C, and outdoor ambient temp. 7°CDB/6°CWB.
- Water side fouling factor: 0.086m2·°C/kW.
- 1m away in open field(sound pressure).

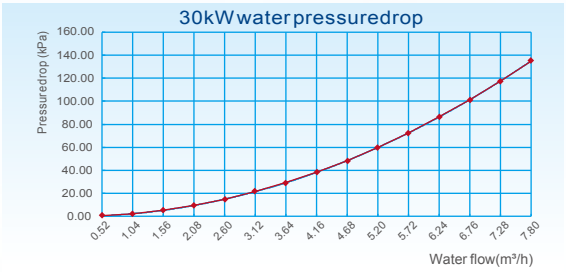
Application range

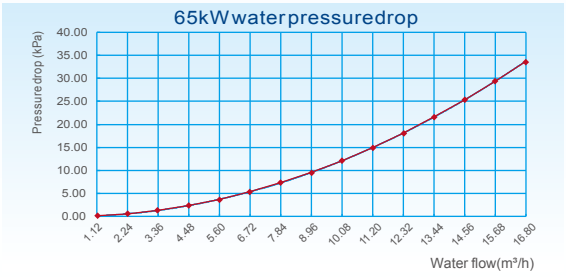
Operation temperature range

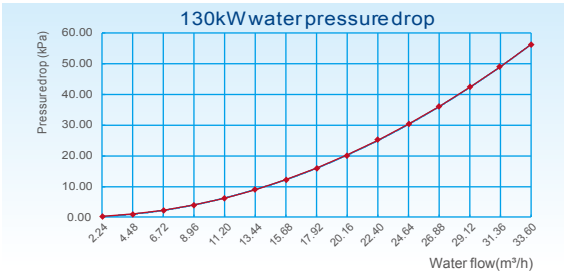


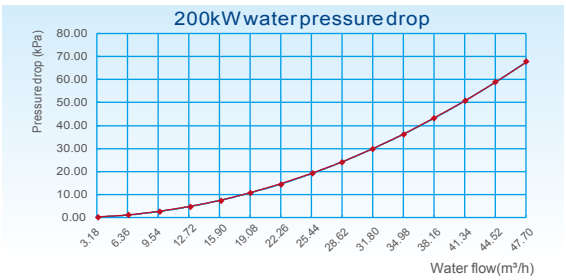
Mode	Outdoor ambient temperature range	Water outlet temperature range
Cooling	10°C~46°C	0°C~17°C (7°C is default, less than 5°C must add antifreeze)
	-10°C~46°C	5°C~17°C (7°C is default)
Heating	-10°C~21°C	22°C ~ 50°C (45°C is default)

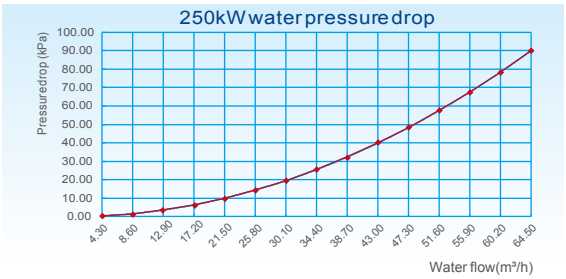
Water pressure drop











Glycol factors

A glycol solution is required when the unit with condition as mentioned. The use of glycol will reduce the performance of the unit depending on concentration.

Ethylene glycol:

Quality of glycol%	Modification coefficient				Freezing point ° C
	Cooling capacity modification	Power modification	Water resistance	Water flow modification	
0	1.000	1.000	1.000	1.000	0
10	0.984	0.998	1.118	1.019	-4.000
20	0.973	0.995	1.268	1.051	-9.000
30	0.965	0.992	1.482	1.092	-16.000
40	0.960	0.989	1.791	1.145	-23.000
50	0.950	0.983	2.100	1.200	-37.000

Propylene glycol:

Quality of glycol%	Modification coefficient				Freezing point ° C
	Cooling capacity modification	Power modification	Water resistance	Water flow modification	
0	1.000	1.000	1.000	1.000	0
10	0.976	0.996	1.071	1.000	-3.000
20	0.961	0.992	1.189	1.016	-7.000
30	0.948	0.988	1.380	1.034	-13.000
40	0.938	0.984	1.728	1.078	-22.000
50	0.925	0.975	2.150	1.125	-35.000

Fouling factor

ALTITUDE (m)	Difference of water inlet and outlet temp (°C)	Fouling Factor							
		0.018m 2 °C /kW		0.044m 2 °C /kW		0.086m 2 °C /kW		0.172m 2 °C /kW	
		C	P	C	P	C	P	C	P
Sea level	3	1.036	1.077	1.019	1.076	0.991	0.975	0.963	0.983
	4	1.039	1.101	1.022	1.080	0.994	0.996	0.971	0.984
	5	1.045	1.105	1.028	1.086	1.000	1.000	0.977	0.989
	6	1.051	1.109	1.034	1.093	1.006	1.004	0.983	0.994
600	3	1.024	1.087	1.008	1.064	0.980	0.984	0.951	0.991
	4	1.027	1.111	1.011	1.068	0.983	1.005	0.959	0.992
	5	1.034	1.115	1.017	1.074	0.989	1.009	0.965	0.997
	6	1.043	1.115	1.026	1.084	0.998	1.009	0.973	0.999
1200	3	1.013	1.117	0.996	1.052	0.969	1.011	0.942	1.002
	4	1.015	1.118	0.998	1.055	0.971	1.012	0.948	1.003
	5	1.023	1.122	1.006	1.063	0.979	1.015	0.955	1.005
	6	1.031	1.125	1.015	1.072	0.987	1.018	0.962	1.007
1800	3	1.002	1.128	0.986	1.042	0.959	1.021	0.935	1.007
	4	1.005	1.129	0.989	1.045	0.962	1.022	0.941	1.010
	5	1.012	1.132	0.995	1.051	0.968	1.024	0.945	1.012
	6	1.018	1.134	1.001	1.058	0.974	1.026	0.949	1.014

C--Cooling capacity P--Power

Performance data

Cooling

Chilled water outlet temp	Model	Ambient temp (°C)											
		21		25		30		35		40		46	
		Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power
(°C)		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
5	30kW	33.59	8.81	31.63	9.08	29.84	9.36	28.2	9.65	26.42	10.13	24.31	10.64
	65kW	72.77	17.97	68.52	18. 52	64.64	19.1	61.1	19.69	57.25	20.67	52.67	21.7
	130kW	145.54	35.93	137.04	37.05	129.29	38.19	122.2	39.37	114.5	41.34	105.34	43.41
	200kW	207.12	55.49	195.03	57.2	183.99	58.97	173.9	60.8	162.94	63.83	149.91	67.03
	250kW	279.89	68.96	263.55	71.09	248.63	73.29	235	75.56	220.2	79.34	202.58	83.3
6	30kW	34.72	8.94	32.66	9.22	30.79	9.51	29.07	9.8	27.27	10.29	25.11	10.8
	65kW	75.23	18.25	70.77	18.81	66.7	19.39	62.99	19.99	59.08	20.99	54.41	22.04
	130kW	150.46	36.49	141.54	37.62	133.4	38.78	125.97	39.98	118.16	41.98	108.83	44.08
	200 kW	214.11	56.35	201.42	58.09	189.84	59.89	179.27	61.74	168.15	64.83	154.87	68.07
	250kW	289.34	70.03	272.19	72.2	256.54	74.43	242.25	76.73	227.23	80.57	209.28	84.6
7	30kW	35.93	9.13	3377	9.41	31.8	9.7	30	10	28.17	10.5	25.97	11.03
	65kW	77.85	18.62	73.17	19.19	68.9	19.79	65	20.4	61.04	21.42	56.27	22.49
	130kW	155.71	37.24	146.34	38.39	137.8	39.58	130	40.8	122.07	42.84	112.55	44.98
	200kW	221.59	57.5	208.26	59.28	196.1	61.11	185	63	173.72	66.15	160.17	69.46
	250kW	299.44	71.46	281.43	73.67	265	75.95	250	78.3	234.75	82.22	216.44	86.33

Note: The inlet/outlet water temperature difference is 5°C.

Chilled water outlet temp.	Model	Ambient temp (°C)											
		21		25		30		35		40		46	
		Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power
(°C)		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
8	30kW	37.04	9.4	34.78	9.69	32.72	9.99	30.84	10.3	28.99	10.82	26.76	11.36
	65kW	80.26	19.18	75.36	19.77	70.9	20.38	66.82	21.01	62.81	22.06	57.97	23.17
	130kW	160.52	38.35	150.72	39.54	141.79	40.76	133.64	42.02	125.62	44.13	115.95	46.33
	200kW	228.44	59.22	214.49	61.06	201.78	62.94	190.18	64.89	178.77	68.13	165	71.54
	250kW	308.7	73.61	289.86	75.88	272.68	78.23	257	80.65	241.58	84.68	222.98	88.92
9	30kW	38.09	9.49	35.73	9.79	33.58	10.09	31.62	10.4	29.75	10.92	27.49	11.47
	65kW	82.52	19.36	77.41	19.96	72.76	20.58	68.51	21.22	64.47	22.28	59.57	23.39
	130kW	165.05	38.73	154.83	39.92	145.52	41.16	137.02	42.43	128.94	44.55	119.14	46.78
	200kW	234.87	59.8	220.33	61.65	207.08	63.55	194.99	65.52	183.49	68.8	169.54	72.24
	250kW	317.4	74.32	297.75	76.62	279.84	78.99	263.5	81.43	247.95	85.5	229.11	89.78
10	30kW	39.53	9.63	37.05	9.93	34.79	10.24	32.73	10.56	30.83	11.08	28.52	11.64
	65kW	85.65	19.65	80.27	20.26	75.38	20.89	70.91	21.53	66.8	22.61	61.79	23.74
	130kW	171.31	39.31	160.55	40.52	150.75	41.78	141.82	43.07	133.59	45.22	123.57	47.48
	200kW	237.19	60.7	222.3	62.57	208.73	64.51	196.36	66.5	184.97	69.83	171.1	73.32
	250kW	329.43	75.44	308.75	77.77	289.9	80.17	272.72	82.65	256.9	86.79	237.64	91.13
11	30kW	40.63	9.73	38.05	10.03	35.69	10.34	33.54	10.66	31.63	11.19	29.29	11.75
	65kW	88.04	19.85	82.44	20.46	77.33	21.09	72.68	21.75	68.54	22.83	63.47	23.98
	130kW	176.08	39.69	164.87	40.92	154.66	42.19	145.36	43.49	137.08	45.67	126.93	47.95
	200kW	243.81	61.29	228.28	63.19	214.15	65.14	201.27	67.16	189.8	70.52	175.75	74.0 4
	250kW	338.62	76.18	317.06	78.53	297.43	80.96	279.54	83.47	263.61	87.64	244.1	92.02
12	30kW	41.56	9.87	38.88	10.18	36.44	10.49	34.22	10.82	32.3	11.36	29.94	11.92
	65kW	90.06	20.14	84.24	20.76	78.95	21.4	74.13	22.06	69.98	23.17	64.87	24.33
	130kW	180.11	40.28	168.49	41.52	157.91	42.81	148.27	44.13	139.97	46.34	129.75	48.65
	200kW	249.38	62.19	233.29	64.11	218.64	66.1	205.29	68.14	193.8	71.55	179.65	75.13
	250kW	346.37	77.29	324.01	79.68	303.66	82.15	285.13	84.69	269.16	88.92	249.52	93.37
13	30kW	42.31	9.95	39.54	10.26	37.02	10.58	34.73	10.9	32.82	11.45	30.46	12.02
	65kW	91.66	20.3	85.67	20.93	80.21	21.57	75.25	22.24	71.11	23.35	65.99	24.52
	130kW	183.33	40.6	171.33	41.85	160.42	43.15	150.49	44.48	142.22	46.71	131.98	49.04
	200kW	253.84	62.69	237.23	64.63	222.13	66.63	208.37	68.69	196.91	72.12	18274	75.73
	250kW	352.55	77.91	329.49	80.32	308.51	82.81	289.41	85.37	273.49	89.64	253.8	94.12

Note: The inlet/outlet water temperature difference is 5°C.

Chilled water outlet temp.	Model	Ambient temp (°C)											
		21		25		30		35		40		46	
		Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power
(°C)		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
14	30kW	43.36	10.02	40.48	10.33	37.87	10.65	35.49	10.98	33.58	11.53	31.19	12.1
	65kW	93.94	20.44	87.72	21.07	82.05	21.72	76.9	22.4	72.75	23.52	67.58	24.69
	130kW	187.89	40.88	175.43	42.14	164.11	43.45	153.8	44.79	145.5	47.03	135.17	49.38
	200kW	260.15	63.12	242.91	65.08	227.23	67.09	212.96	69.16	201.46	72.62	187.15	76.25
	250kW	361.32	78.45	337.37	80.88	315.59	83.38	295.78	85.96	279.8	90.26	259.94	94.77
15	30kW	43.92	10.07	40.97	10.38	38.29	10.7	35.85	11.03	33.95	11.58	31.57	12.16
	65kW	95.15	20.54	88.76	21.18	82.95	21.83	77.67	22.51	73.55	23.63	68.41	24.81
	130kW	190.3	41.08	177.52	42.35	165.9	43.66	155.34	45.01	147.11	47.26	136.81	49.63
	200kW	263.49	63.43	245.79	65.4	229.71	67.42	215.09	69.5	203.69	72.98	189.43	76.63
	250kW	365.96	78.84	341.38	81.28	319.05	83.79	298.73	86.38	282.9	90.7	263.1	95.24

Note: The inlet/outlet water temperature difference is 5℃.

Heating

Hot water outlet temp	Model	Ambient temp (°C)											
		-10		-6		-2		2		7		10		13	
		Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power
(°C)		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
40	30kW	19.89	6.13	24.86	6.97	29.25	7.74	32.5	8.42	35.33	8.86	39.57	9.39	45.5	10.14
	65kW	42.89	13.45	53.61	15.29	63.07	16.99	70.08	18.46	76.17	19.43	85.31	20.6	98.11	22.25
	130kW	85.78	26.91	107.22	30.57	126.14	33.97	140.16	36.93	152.34	38.87	170.63	38.33	196.22	41.39
	200kW	124.31	38.17	155.39	43.37	182.81	48.19	203.13	52.38	220.79	55.14	247.28	58.45	284.38	63.12
	250kW	167.82	50.06	209.78	56.88	246.8	63.2	274.22	68.7	298.07	72.31	333.83	76.65	383.91	82.78
41	30kW	19.22	6.26	24.06	7.11	28.34	7.9	31.52	8.59	34.3	9.04	38.34	9.58	44.02	10.35
	65kW	41.45	13.73	51.87	15.6	61.1	17.33	67.96	18.84	73.95	19.83	82.68	21.02	94.92	22.7
	130kW	82.89	27.45	103.75	31.2	122.2	34.66	135.93	37.68	147.91	39.66	165.36	39.11	189.83	42.24
	200kW	120.14	38.95	150.36	44.26	177.1	49.18	197	53.45	214.36	56.26	239.65	59.64	275.12	64.41
	250kW	162.18	51.08	202.98	58.04	239.08	64.49	265.94	70.1	289.38	73.79	323.53	78.22	371.41	84.47
42	30kW	18.6	6.38	23.39	7.26	27.58	8.06	30.72	8.76	33.46	9.22	37.34	9.78	42.79	10.56
	65kW	40.25	14.01	50.44	15.92	59.48	17.69	66.23	19.22	72.15	20.24	80.52	21.45	92.28	23.17
	130kW	80.5	28.01	100.87	31.83	118.96	35.37	132.47	38.45	144.3	40.47	161.04	39.91	184.55	43.1
	200kW	116.66	39.74	146.19	45.16	172.4	50.18	191.98	54.54	209.13	57.41	233.39	60.86	267.46	65.73
	250kW	157.5	52.12	197.36	59.23	232.74	65.81	259.18	71.53	282.33	75.3	315.08	79.81	361.08	86.2

Note: The inlet/outlet water temperature difference is 5°C.

Hot water outlet temp	Model	Ambient temp (°C)													
		-10		-6		-2		2		7		10		13	
		Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power
(°C)		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
43	30kW	1822	6.52	22.86	7.4	26.98	8.23	30.08	8.94	32.8	9.41	36.54	9.98	41.81	10.77
	65kW	39.28	14.29	49.28	16.24	58.18	18.05	64.86	19.62	70.74	20.65	78.8	21.89	90.15	23.64
	130kW	78.55	28.59	98.56	32.48	116.37	36.09	129.73	39.23	141.47	41.3	157.6	40.72	180.29	43.98
	200kW	113.85	40.55	142.84	46.08	168.65	51.2	188.01	55.66	205.03	58.58	228.4	62.1	261.29	67.07
	250kW	153.69	53.18	192.84	60.44	227.67	67.15	253.82	72.99	276.79	76.83	308.34	81.44	352.75	87.96
44	30kW	17.86	6.65	22.44	7.55	26.53	8.39	29.61	9.12	32.32	9.6	35.94	10.18	41.04	10.99
	65kW	38.52	14.58	48.39	16.57	57.2	18.42	63.84	20.02	69.69	21.07	77.5	22.33	88.5	24.12
	130kW	77.03	29.17	96.78	33.15	114.39	36.83	127.67	40.03	139.38	42.14	154.99	41.55	177	44.88
	200kW	111.64	41.38	140.26	47.02	165.79	52.25	185.03	56.79	202	59.78	224.62	63.37	256.52	68.44
	250kW	150.72	54.27	189.35	61.67	223.81	68.52	249.79	74.48	272.7	78.4	303.24	83.1	346.3	89.75
45	30kW	17.6	6.78	22.14	7.71	26.21	8.57	29.28	9.31	32	9.8	35.52	10.39	40.49	11.22
	65kW	37.96	14.88	47.75	16.91	56.51	18.79	63.14	20.43	69	21.5	76.59	22.79	87.31	24.61
	130kW	75.92	29.76	95.49	33.82	113.01	37.58	126.27	40.85	138	43	153.18	45.58	174.63	49.23
	200kW	110.03	42.22	138.4	47.98	163.79	53.31	183	57.95	200	61	222	64.66	253.08	69.83
	250kW	148.54	55.38	186.84	62.93	221.11	69.92	247.05	76	270	80	299.7	84.8	341.66	91.58
46	30kW	17.26	6.85	21.74	7.79	25.76	8.65	28.81	9.4	31.52	9.9	34.92	10.49	39.74	11.33
	65kW	37.22	15.03	46.87	17.08	55.54	18.98	62.12	20.63	67.97	21.72	75.31	23.02	85.7	24.86
	130kW	74.43	30.06	93.74	34.16	111.07	37.96	124.24	41.26	135.93	43.43	150.61	46.04	171.39	49.72
	200kW	107.87	42.65	135.86	48.46	160.97	53.85	180.06	58.53	197	61.61	218.28	65.31	248.4	70.53
	250kW	145.63	55.93	183.41	63.56	217.31	70.62	243.08	76.76	265.95	80.8	294.67	85.65	335.34	92.5
47	30kW	16.75	6.99	21.12	7.94	25.06	8.82	28.06	9.59	30.73	10.1	33.99	10.7	38.61	11.56
	65kW	36.12	15.33	45.54	17.42	54.03	19.36	60.5	21.04	66.27	22.15	73.29	23.48	83.26	25.36
	130kW	72.23	30.66	91.09	34.85	108.05	38.72	121	42.08	132.53	44.3	146.58	46.96	166.52	50.71
	200kW	104.69	43.5	132.01	49.43	156.6	54.92	175.36	59.7	192.08	61.81	212.43	66.61	241.33	71.94
	250kW	141.33	57.05	178.22	64.83	211.41	72.03	236.74	78.3	259.3	82.42	286.79	87.36	325.79	94.35
48	30kW	16.09	7.2	20.31	8.18	24.13	9.09	27.05	9.88	29.66	10.4	32.74	11.02	37.13	11.9
	65kW	34.69	15.79	43.8	17.95	52.02	19.94	58.32	21.67	63.95	22.81	70.6	24.18	80.06	26.12
	130kW	69.38	31.58	87.6	35.89	104.04	39.88	116.64	43.35	127.89	45.63	141.19	48.37	160.11	52.23
	200kW	100.55	44.8	12696	50.91	150.78	56.57	169.04	61.49	185.35	63.67	204.63	68.61	232.05	74.1
	250kW	135.75	58.76	171.4	66.77	203.56	74.19	228.21	80.64	250.23	84.89	276.25	89.98	313.27	97.18

Note: The inlet/outlet water temperature difference is 5°C.

Hot water outlet temp	Model	Ambient temp (°C)													
		-10		-6		-2		2		7		10		13	
		Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power	Capacity	Power
(°C)		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
49	30kW	15.21	7.49	19.23	8.51	22.87	9.45	25.67	10.27	28.17	10.81	31.05	11.46	35.15	12.38
	65kW	32.8	16.42	41.47	18.66	49.31	20.74	55.34	22.54	60.75	23.73	66.95	25.15	75.78	27.16
	130kW	65.61	32.85	82.94	37.33	98.62	41.47	110.69	45.08	121.5	47.45	133.89	50.3	151.56	54.32
	200kW	95.08	46.6	120.2	52.95	142.93	58.83	160.41	63.95	176.08	66.21	194.05	71.36	219.66	77.06
	250kW	128.36	61.11	162.27	69.44	192.95	77.16	216.56	83.87	237.71	88.28	261.96	93.58	296.54	101.07
50	30kW	14.23	7.86	18.02	8.93	21.45	9.92	24.1	10.79	26.48	11.36	29.13	12.04	32.92	13
	65kW	30.69	17.24	38.85	19.6	46.25	21.77	51.96	23.67	57.1	24.91	62.81	26.41	70.98	28.52
	130kW	61.38	34.49	77.7	39.19	92.5	43.55	103.93	47.33	114.21	49.83	125.63	52.81	141.96	57.04
	200kW	88.96	48.93	112.61	55.6	134.05	61.78	150.62	67.15	165.52	69.52	182.07	74.92	205.74	80.92
	250kW	120.09	64.17	152.02	72.92	180.97	81.02	203.34	88.06	223.45	92.7	245.8	98.26	277.75	106.12

Note: The inlet/outlet water temperature difference is 5°C.

Electrical data

Model	Outdoor Unit				Power Supply		Compressor		OFM	
	Hz	Voltage	Min.	Max.	TOCA	MFA	LRA(each)	RLA(each)	KW	FLA
MGB-F30W/RN1	50	380-415	342	456	24	36	74	11.8	0.67	3.1
MGB-D30W/RN1	50	380-415	342	456	24	36	74	10.6/11.8	0.67	3.1
MGCSL-F30W/RN1	50	380-415	342	456	25.3	36	74	11.8	0.865	4
MGCSL-D30W/RN1	50	380-415	342	456	25.3	36	74	10.6/11.8	0.865	4
MGCL-F30W/RN1	50	380-415	342	456	21.1	36	74	11.8	0.865	4
MGCL-D30W/RN1	50	380-415	342	456	21.1	36	74	10.6/11.8	0.865	4
MGB-F65W/RN1	50	380-415	342	456	54.5	70	147	21.4	0.865 (×2)	4.0(×2)
MGB-D65W/RN1	50	380-415	342	456	54.5	70	144/82.4/74	21.1/12.7/11.8	0.865(×2)	4.0(×2)
MGBL-F65W/RN1	50	380-415	342	456	54.5	70	147	21.4	0.865(×2)	4.0(×2)
MGBL-D65W/RN1	50	380-415	342	456	54.5	70	144/82.4/74	21.1/12.7/11.8	0.865(×2)	4.0(×2)
MGB-F130W/RN1	50	380-415	342	456	109	150	147	21.4	0.865 (×4)	4.0(×4)
MGBL-F130W/RN1	50	380-415	342	456	109	150	147	21.4	0.865 (×4)	4.0(×4)
MGB-F200W/RN1	50	380-415	342	456	150	200	147	21.4	0.865 (×6)	4.0(×6)
MGBL-F200W/RN1	50	380-415	342	456	150	200	147	21.4	0.865 (×6)	4.0(×6)
MGBT-F250W/RN1	50	380-415	342	456	200	300	142	20.7	0.7(×8)	1.8(×8)
MGBL-F250W/RN1	50	380-415	342	456	200	300	142	20.7	0.8(×8)	3.7(×8)

Remark:

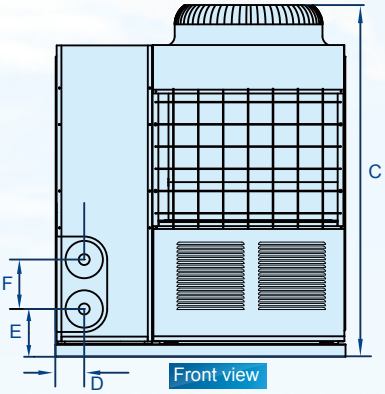
TOCA: Total Over-current Amps. (A) MFA: Max. Fuse Amps. (A) LRA: Locked Rotor Amps. (A)

RLA: Rated Load Amps. (A) OFM: Outdoor Fan Motor.

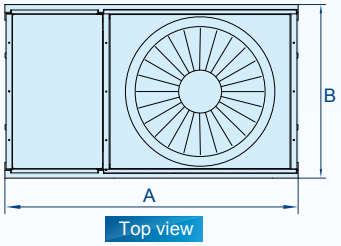
KW: Rated Motor Input (kW) FLA: Full Load Amps.

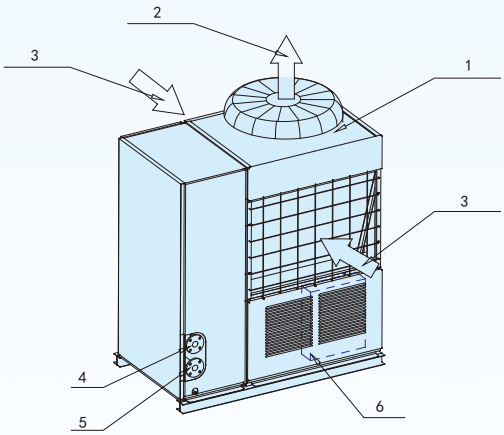
Dimensions

30kW module



Model	Unit	A	B	C	D	E	F
MGBL-F(D)30W/RN1	mm	1514	841	1865	115	315	172
	inch	59.6	33.11	73.43	4.53	12.4	6.77

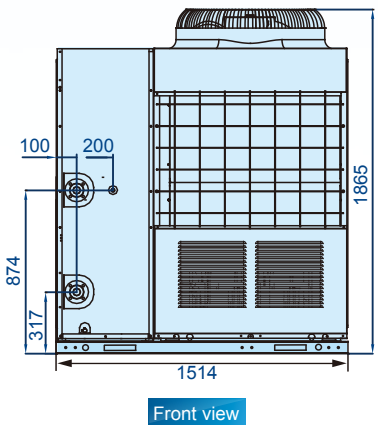


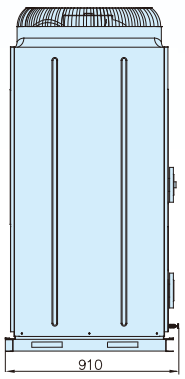


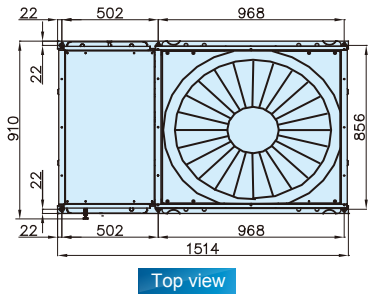
1 Top cover
2 Air outlet
3 Air inlet
4 Water outlet
5 Water inlet
6 Electric control box

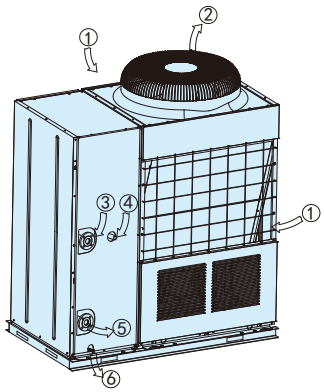
30kW module(Integrated)

(Available for MGCSL-F30W/RN1 and MGCSL-D30W/RN1)



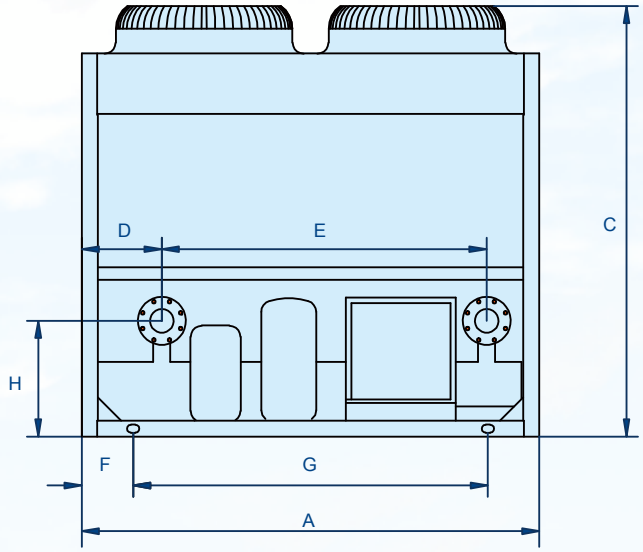




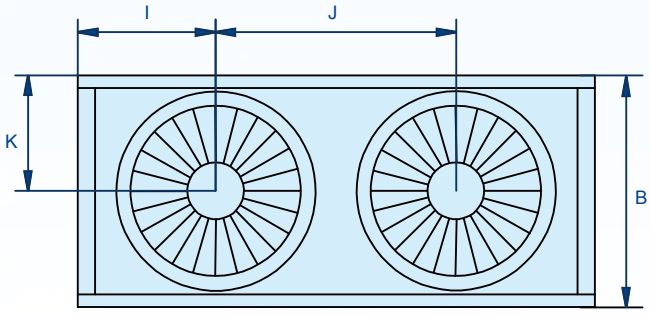


1 Air inlet
2 Air outlet
3 Water inlet
4 Make up water inlet
5 Water outlet
6 Drain

65kW module

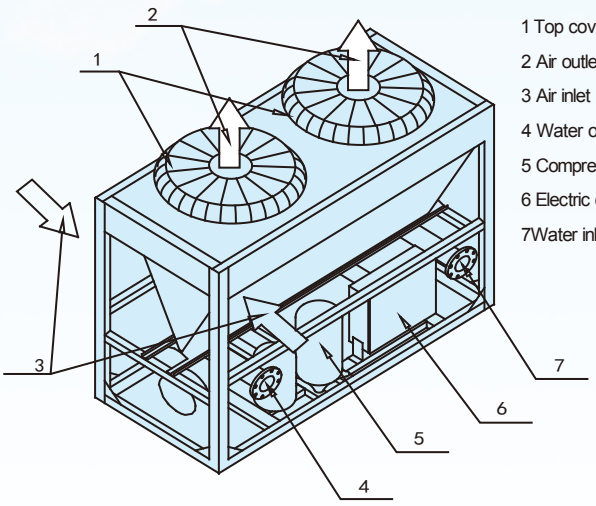


Front view



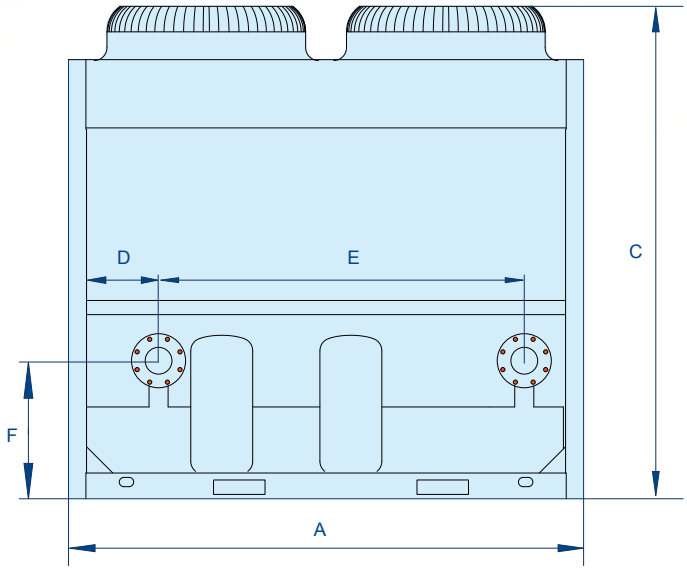
Top view

Model	Unit	A	B	C	D	E	F	G	H	I	J	K
MGB-F65W/RN1 MGB-D65W/RN1	mm	2000	900	1880	350	1420	225	1500	506	530	930	450
MGBL-F65W/RN1 MGBL-D65W/RN1	inch	78.74	35.4	74	13.78	55.91	8.86	59.06	19.92	20.87	36.61	17.72

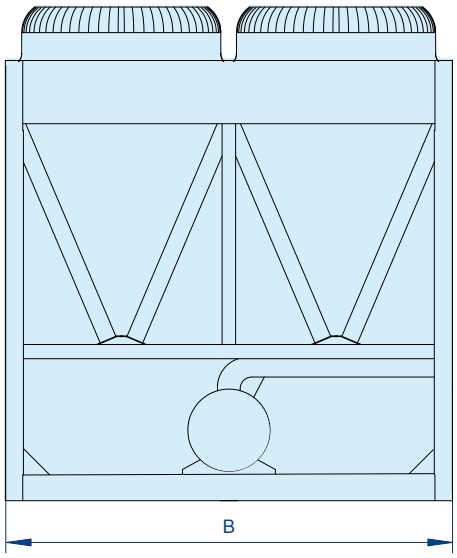


1 Top cover
2 Air outlet
3 Air inlet
4 Water outlet
5 Compressor
6 Electric control box
7Water inlet

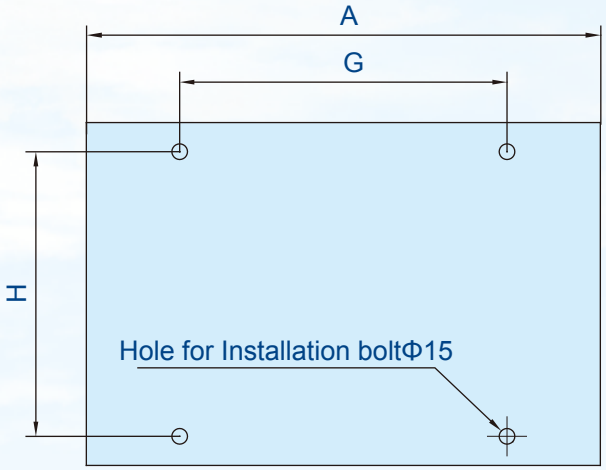
130kW module



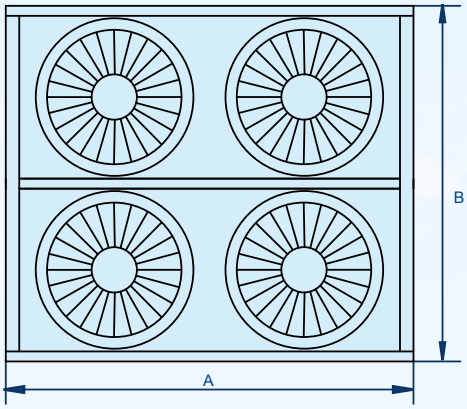
Front view



Side view



Installation hole



Top view

1 Top cover

2 Condenser

3 Compressor

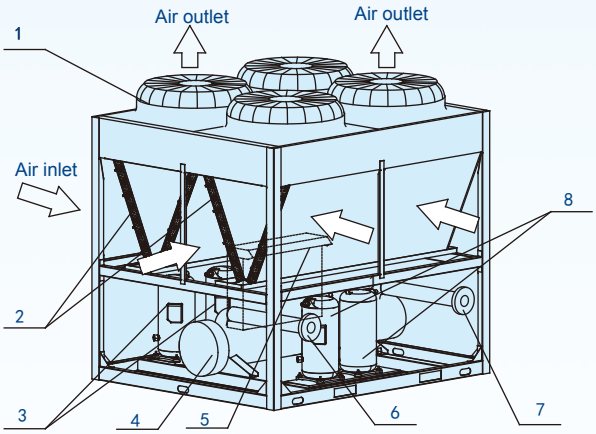
4 Evaporator

5 Electric control box Air inlet

6 Water outlet

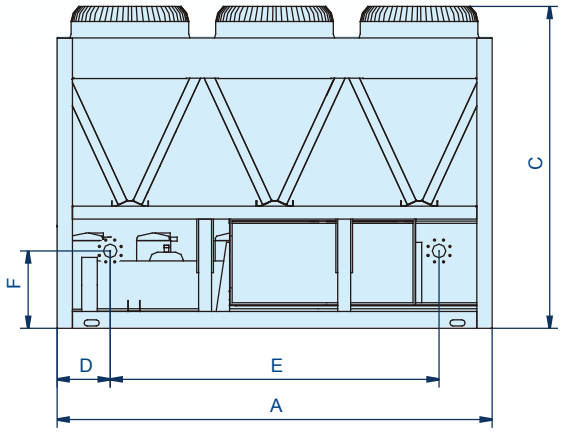
7Water inlet

8 Compressor

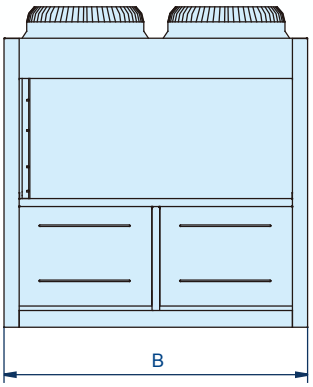


Model	Unit	A	B	C	D	E	F	G	H
MGB-F130W/RN1 MGBL-F130W/RN1	mm	2000	1685	2080	350	1420	506	1550	1586
	inch	78.74	66.34	81.89	13.78	55.91	19.92	61.02	62.44

200kW module

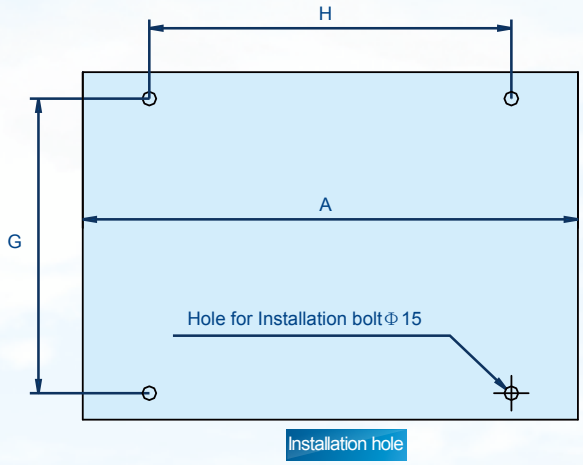


Front view

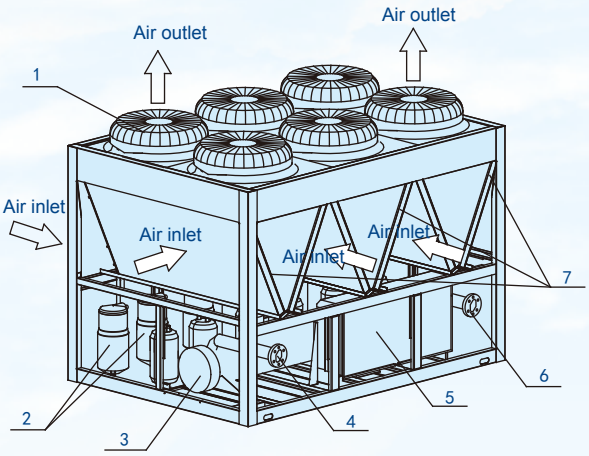


Left view

Model	Unit	A	B	C	D	E	F	G	H
MGB-F200W/RN1 MGBL-F200W/RN1	Mm	2850	2000	2110	3470	2156	506	1888	2388
	inch	112.2	78.74	83.07	136.61	84.88	19.92	74.33	94.02

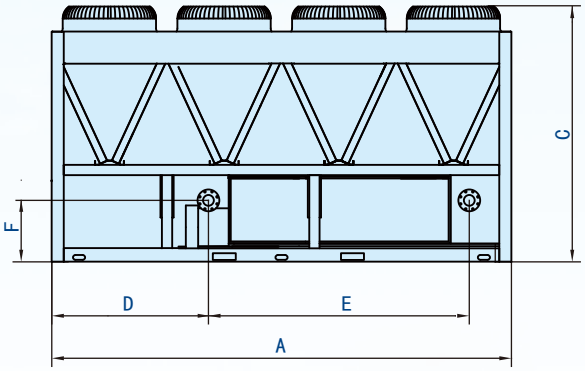


Installation hole

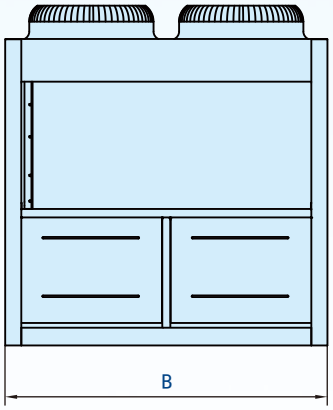


1.Top cover
2.Compressor
3.Evaporator
4.Water outlet
5.Electric control box
6.Water inlet
7.Condenser

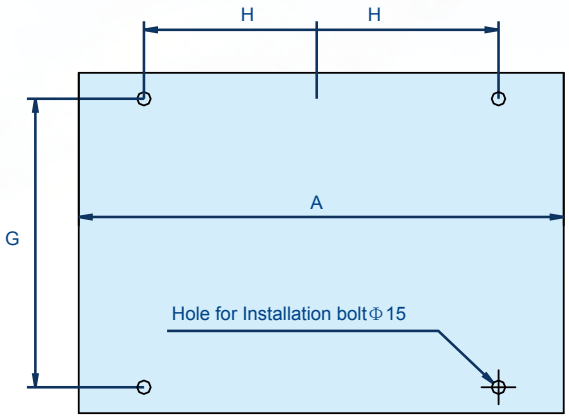
250kW module



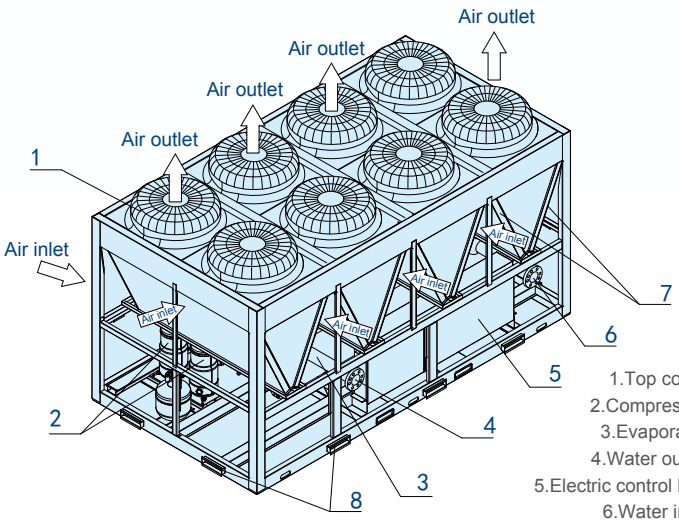
Front view



Left view



Installation hole



1.Top cover
2.Compressor
3.Evaporator
4.Water outlet
5.Electric control box
6.Water inlet
7.Condenser
8 .Transportation guard plate
(Be removed off after installation)

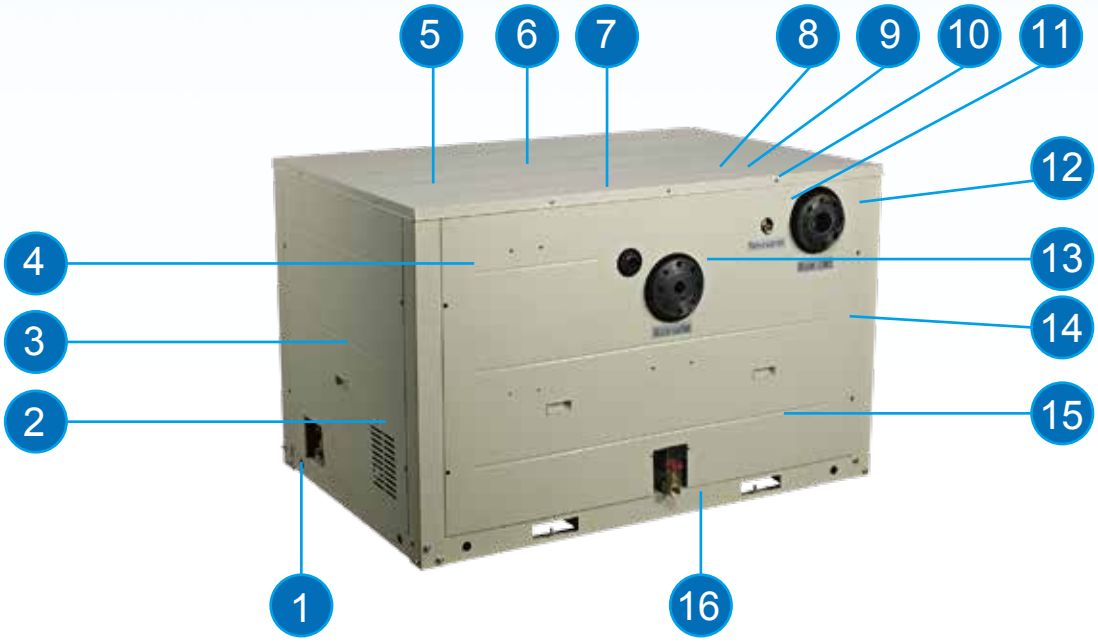
Model	Unit	A	B	C	D	E	F	G	H
MGBT-F250W/RN1 MGBL-F250W/RN1	Mm	3800	2000	2130	1235	2156	573	1888	1551
	inch	149.6	78.74	83.86	48.62	84.88	22.56	74.33	61.06

Hydraulic module

HM/II-65S
HM/II-130S

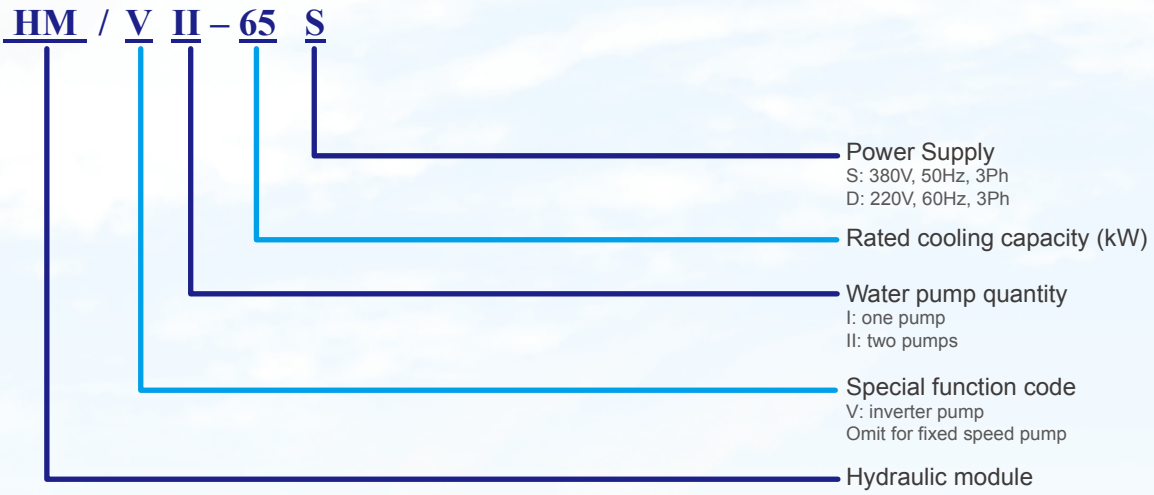
Feature

■ Highly reliable quality
Whole stainless steel or metal with special coating and anti-rust treatment. High-class main component, dustproof and waterproof.
■ Good performance, stable and reliable
Built-in two pumps, one is backup to ensure the system uninterrupted operation.
■ Intelligent control, energy security
■ Easy installation, low malfunction
Integrated design, much faster and easier to finish the installation, the installation quality is much better than traditional machine.
■ Save the installation space and cost
Compact design, it will reduce 80% labor cost and 40% material contrasted with other same grade system.
■ Wide range of ambient temperature, from -15˚C to 46˚C.

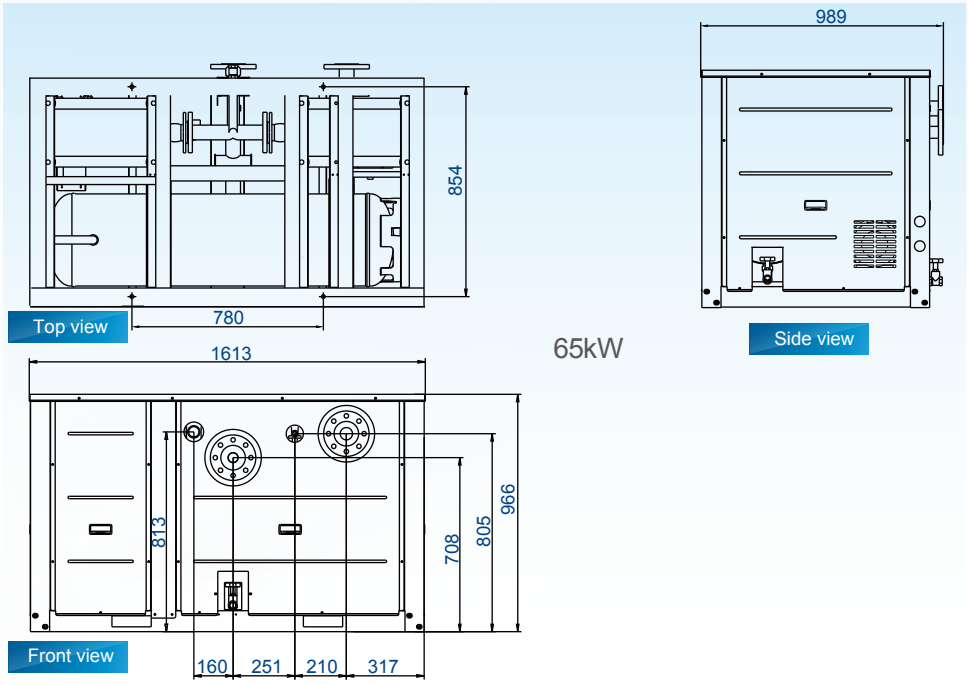


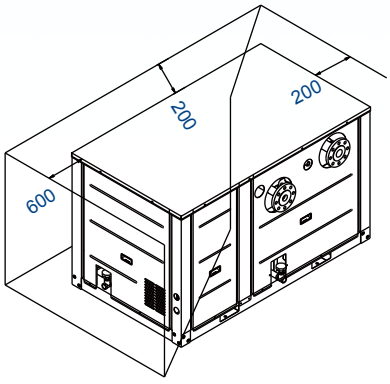
No.	Name	No.	Name
1	Pumping rod type brass gate valves	9	Exhaust valve
2	Pump	10	Water flow controller
3	Water box	11	Water replenishing valve
4	Electrical box	12	Water inlet assembly
5	Y-shape filter	13	Water outlet assembly
6	Exhaust valve	14	Expansion tank
7	Pressure different by-pass valve	15	Pump
8	Safety valve(There is change,goods in kind prevail.)	16	Pumping rod type brass gate valves

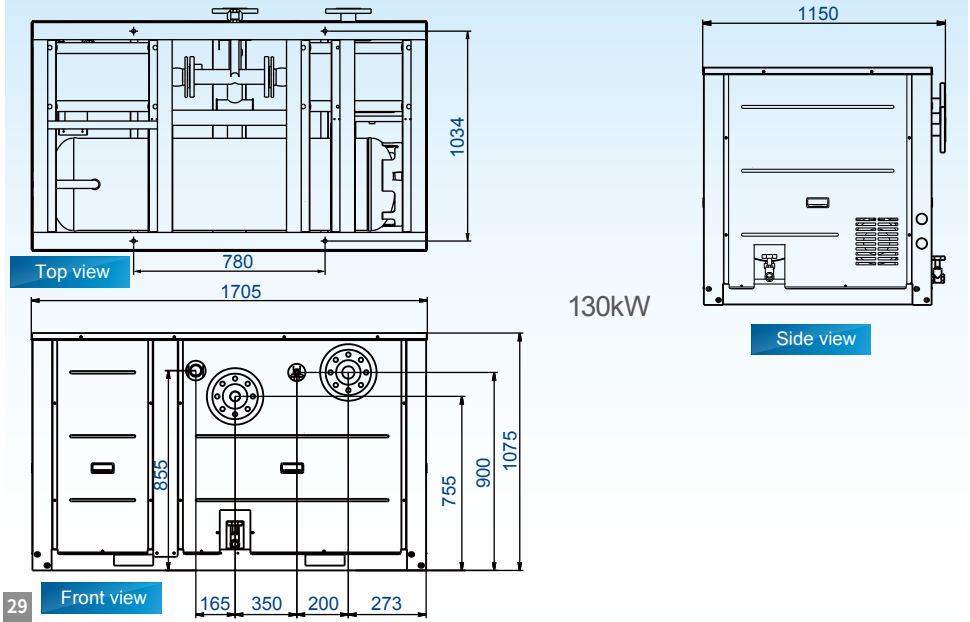
Nomenclature



Installation Dimension





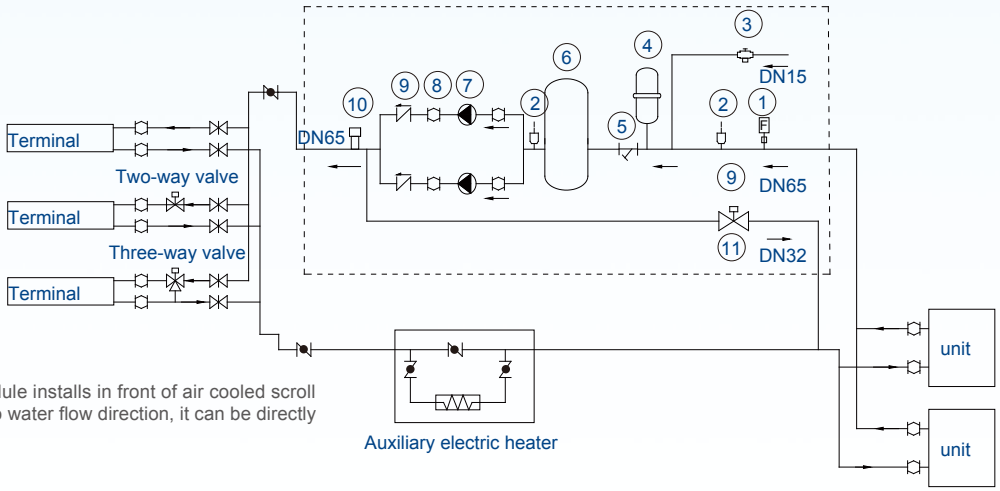


Specifications

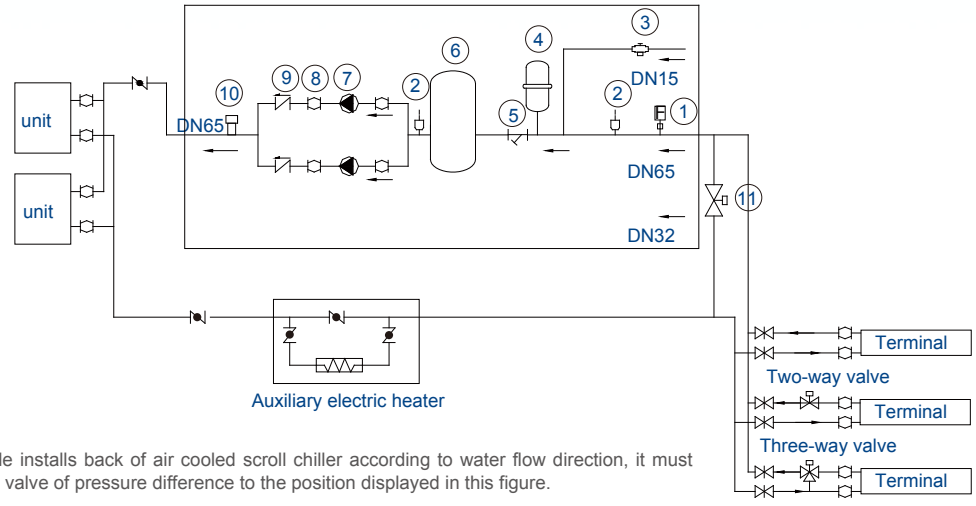
Model			HM/II-65S	HM/II-130S
Cooling capacity		kW	(65)	(130)
Electrical data				
Voltage, frequency, phase		V/Hz/Ph	380/50/3	380/50/3
Performance				
Motor power input		kW	1.8	3.5
Water pump head		m	16	17
Water flow		m³/h	11	22
Water pressure drop		kPa	16	17
Safety valve return pressure		kPa	600	600
Protection class			IP24	IP24
Electric shock protection class			F	F
Noise level		dB(A)	68	68
Dimension & weight				
Water inlet & outlet pipe diameter		mm	DN65	DN65
Net dimension	D×H×W	mm	1615×990×965	1705×1120×1050
Packing size	D×H×W	mm	1640×1026×1120	1721×1160×1225
Net weight		kg	290	400
Operation weight		kg	310	420

Note:Specifications are based on the following conditions: Water side fouling factor: 0.086m2˚C /kW.

System Pipeline Installation



The hydraulic module installs in front of air cooled scroll chiller according to water flow direction, it can be directly used in this figure.



The hydaulic module installs back of air cooled scroll chiller according to water flow direction, it must change the by-pass valve of pressure difference to the position displayed in this figure.

No.	Name	No.	Name	No.	Name
1	Water flow switch	5	Y-shape filter	9	Check valve
2	Automatic discharge valve	6	Water storage tank	10	Pressure relief valve
3	Water replenishment valve	7	Circulating pump	11	Pressure by-pass valve
4	Expansion tank	8	Flexible joint		

Control system →

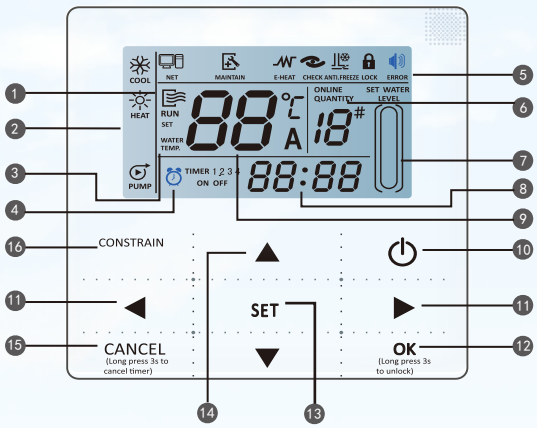
Control system

Control Devices

Type		Function Descriptions
Wired Controller	 KJRM-120D/BMK-E	(Standard) ■ Parameter setting and display. ■ Real time clock control. ■ Malfunction manual reset. ■Hysteresis temp. setting. ■Touch key operation It can connect max. 16PCBs. MODBUS gateway is available by communication port X Y E in wired controller,it can be customized.
	 KJR-120A/MBTE	(Optional) ■ Parameter setting and display. ■ Real time clock control. ■ Malfunction manual reset. ■Hysteresis temp. setting. ■ Weekly timing fucntion. It can connect max. 16PCBs.
LONWORKS Gateway		(Optional) ■ Operation mode setting. ■ Outlet water temperature setting. ■ Hysteresis setting. ■ Alarm clear setting. It can connect max. 16PCBs.
Network control software		(Optional) ■ Control operation mode in the refrigeration system. ■ Query real-time operating parameter in the main system and subsystem. ■ Set up the weekly timing that could realizes the schedule management for the refrigeration system. ■ Record refrigeration system error.It can connect max.16 wired controllers by ars485/232 converter, each wired controller can connect max. 16 PCBs.
Modbus gateway		(Optional) ■ Parameter setting and display. ■ Real time clock control. ■ Malfunction manual reset. ■Hysteresis temp. setting. ■Touch key operation One system can connect max. 16 Modbus gateway, each gateway can connect max 16PCBs.

Wired controller KJRM-120D/BMK-E(Standard)

The setting and operation order can be send to the main board and the running condition can be displayed by the wired controller. It can connect max. 16PCBs. It is available for all Midea air cooled scroll chillers.
The MODBUS gateway can be customized,it is available by communication port X,Y and E in wired controller.



Item	Description	Item	Description
1	Operation icon	9	Water temp.
2	Mode area	10	ON/OFF Key
3	Setting temperature	11	Right, Left Key
4	Timing On/Off	12	OK key
5	Function Icon	13	Setting key
6	On-line Unit Qty. Indication	14	Add, Reduce key
7	Reserved	15	Cancel key
8	Clock	16	Reserved. key

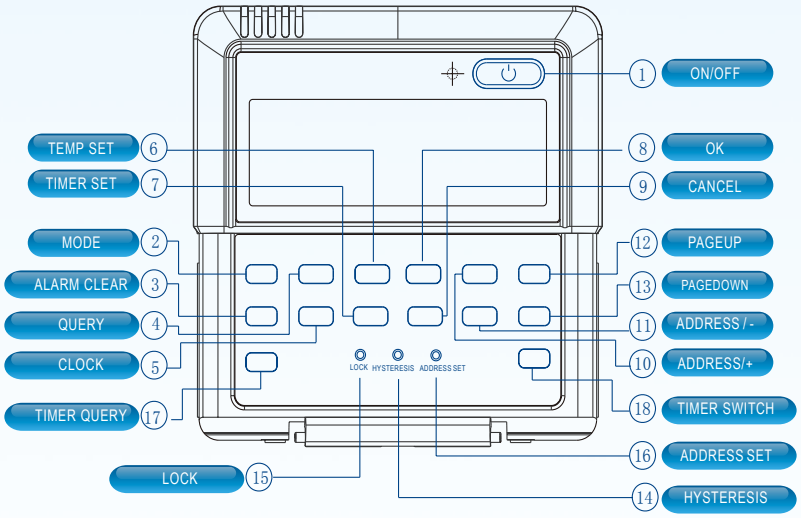
Function comparison of wired controller:

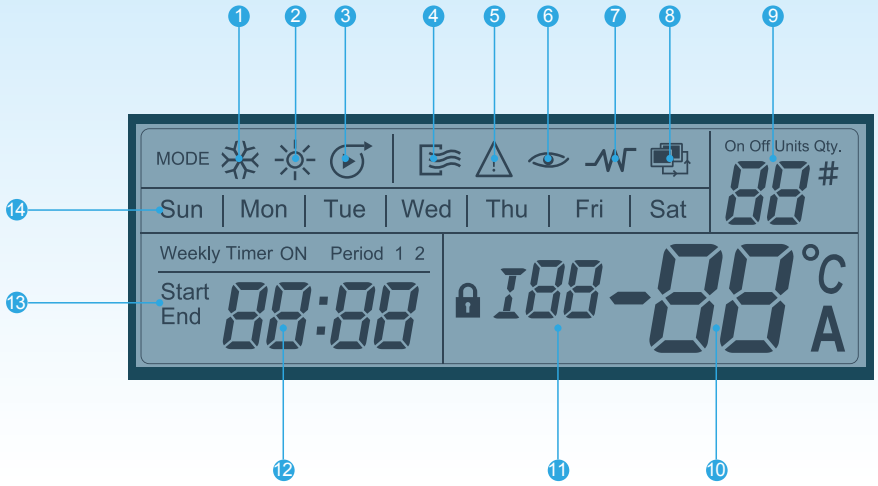
Function \ Wired controller	KJR-120A/MBTE	KJRM-120D/BMK-E
Parameter setting and display	●	●
Real time clock control	●	●
Malfunction manual reset	●	●
Long-distance control icon display	●	●
Weekly timer function	●	
Hysteresis temp. setting	●	●
Touch key operation		●
Network control software	●	
MODBUS gateway		●
LONWORKS gateway	●	●

Wired controller KJR-120A/MBTE(Optional, with weekly timer)

The wired controller KJR-120A/MBTE is functional design, it is available for all Midea air cooled scroll chiller, it can automatically adjust the module which is new or old to execute the related indicator.The main functions as following:

- Provide the timing startup function.
- The temp. difference between start up temperature and setting temperature (It can be adjusted,the range is 2,3,4,5℃(2℃ is default)).
- Real-time timer function instead of relative time.
- Operation parameter checking button.
- Remote control icon display function.
- Malfunction manual reset.

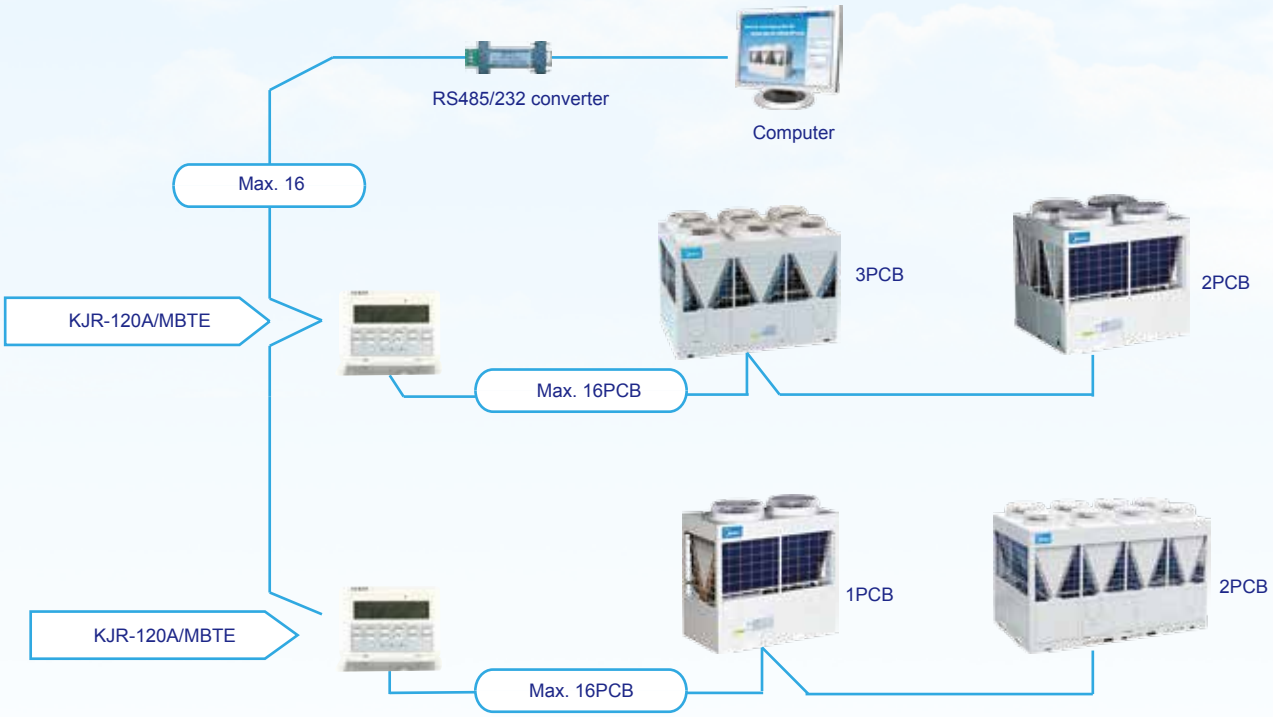




Item	Description	Item	Description
1	Cooling mode.	8	Remote control is on or off.
2	Heating mode.	9	Display the units quantity on line/ON,OFF state.
3	Pump mode.	10	Display temp.,current,error codes,protection codes.
4	Normal running, the light is on.	11	Display the checking parameters(IA/IB/T3A/T3B).
5	The unit has error, the light is on.	12	Real time display./Week timing check and query display.
6	When querying, the light is on.	13	Display the week timing state. / The week timing set period display.
7	The electric heater works, the light is on.	14	Set week timing.

Network control system

The intelligent network control system of the Midea air-cooled scroll chiller mainly comprises the RS485/232 converter, which can connect max. 16 wired controllers, each wired controller can control max. 16 PCBs.



Main functions:

Controls the refrigeration system's operating mode.

Queries operation parameters in the main and subsystems in real time.

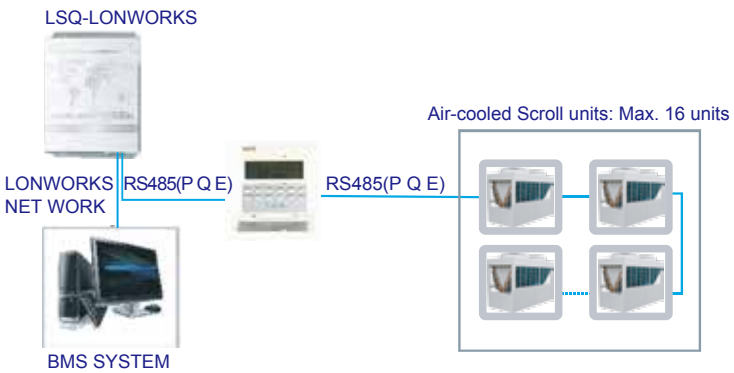
Provides a weekly timer for managing the refrigeration system.

Records refrigeration system errors.

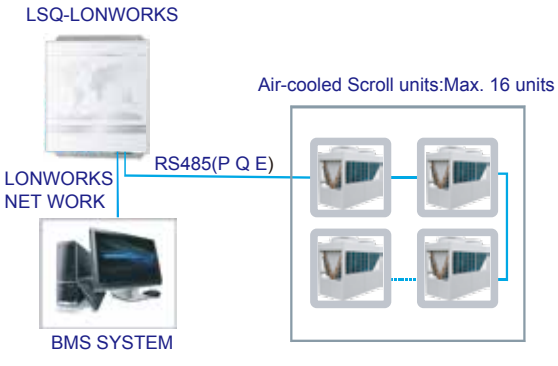
LONWORKS gateway

The unit's LONWORKS gateway controls the central A/C to facilitate the building management system (BMS). LONWORKS provides four settings to control the air-cooled chillers: Operation Mode, Outlet Water Temperature, Hysteresis, and Clear Alarm.

Connection 1

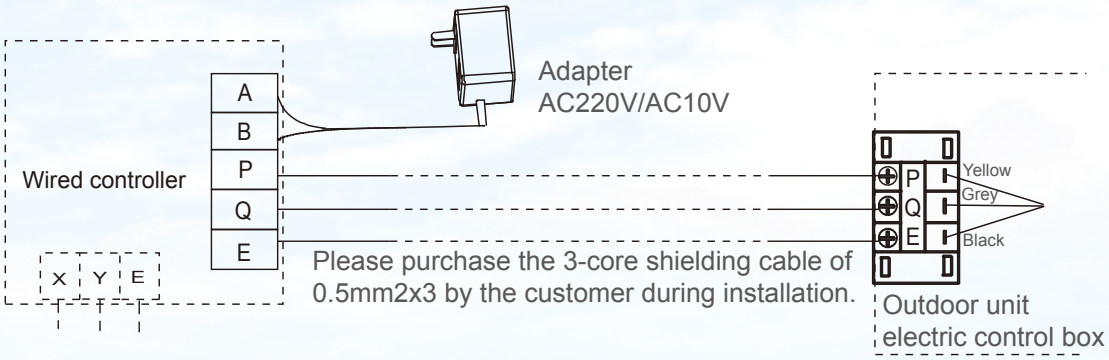


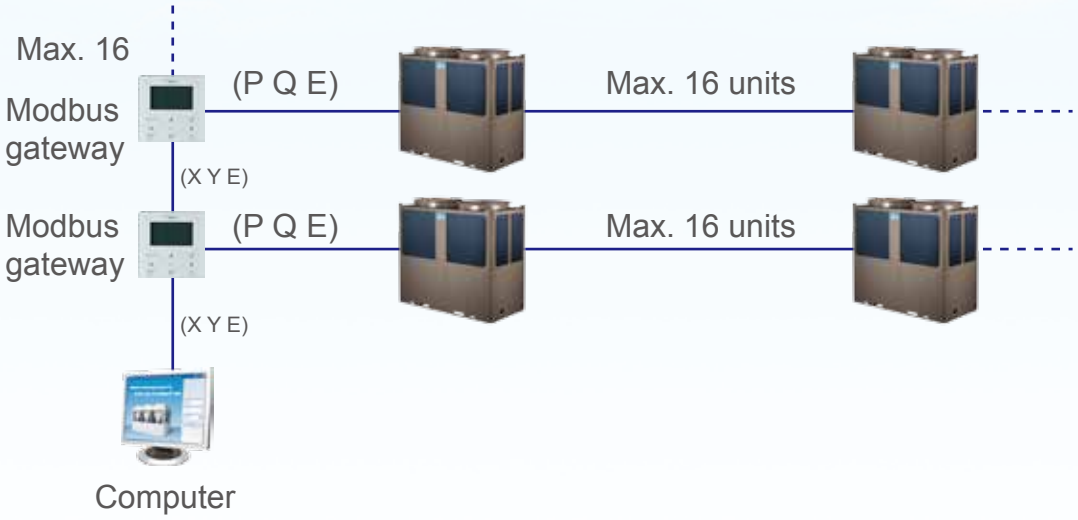
Connection 2



MODBUS gateway

The Modbus gateway can be customized, it realizes intelligent network control by X Y E ports. It can connect max. 16 wired controllers, each wired controller can control max.16 units.

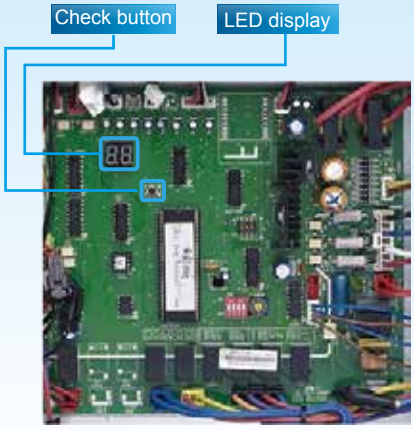




Protection

The main board's LED shows all alarm and protection information. The chiller controller continually performs self-diagnostic checks; monitors the system's temperature, pressure and protection devices; it will automatically shut down faulty compressors, refrigerant circuits or the entire unit if a fault occurs.

- Users can press Check on the LED to display the system's operational status.
- The LED displays protection or error codes if either condition occurs.



Compressor current protection

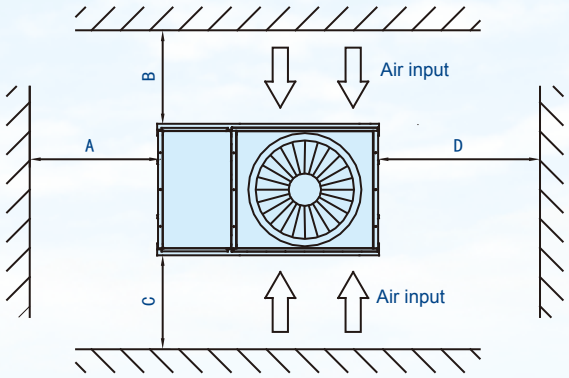
Phase protection

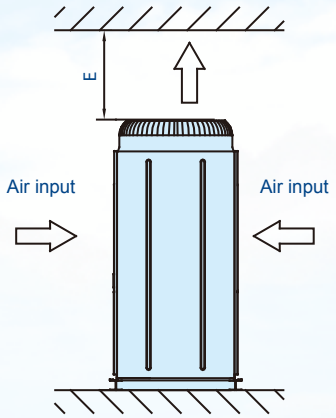
Error codes

No	Code	Trouble	No	Code	Trouble
1	E0	EEPROM error	16	P0	High pressure or air discharge temperature protection in system A
2	E1	Power phase sequence error	17	P1	Low pressure protection in system A
3	E2	Communication error	18	P2	High pressure or air discharge temperature protection in system B
4	E3	Total water outlet temperature sensor error	19	P3	Low pressure protection in system B
5	E4	Outlet water temperature sensor error in heat exchanger	20	P4	Current protection in system A
6	E5	Pipe temperature sensor error in condenser A	21	P5	Current protection in system B
7	E6	Pipe temperature sensor error in condenser B	22	P6	Condenser high pressure protection in system A
8	E7	Outdoor ambient temperature sensor error or power supply protection	23	P7	Condenser high pressure protection in system B
9	E8	Output error of the power protector	24	P8	(Reserved failure code)
10	E9	Water flow detection error	25	P9	Outlet and inlet water temperature difference protection
11	EA	(Reserved failure code)	26	PA	Low ambient temperature drive-up protection
12	Eb	Anti-freezing temperature sensor 1 error in shell and tube exchanger	27	Pb	System anti-freezing protection
13	EC	Wired controller detected that the units on-line have decreased	28	Pc	Anti-freezing pressure protection in system A
14	Ed	(Reserved failure code)	29	Pd	Anti-freezing pressure protection in system B
15	EF	Inlet water temperature sensor error	30	PE	Low-temperature protection of shell and tube heat exchanger

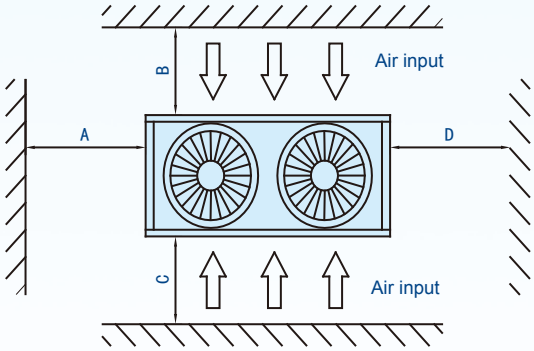
Installation clearance

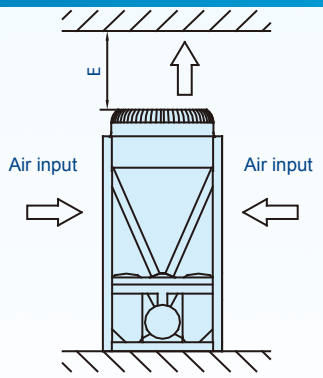
30kW module



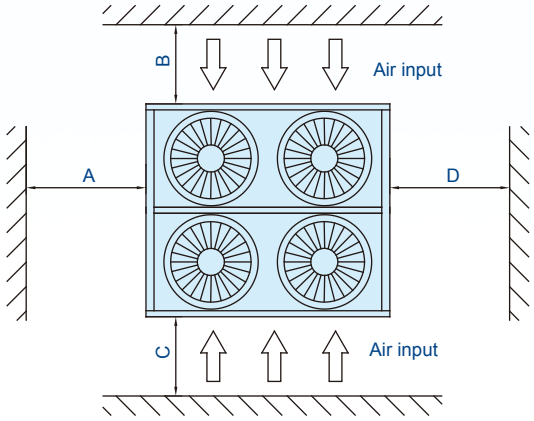


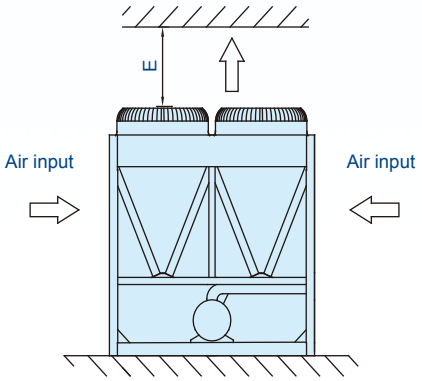
65kW module



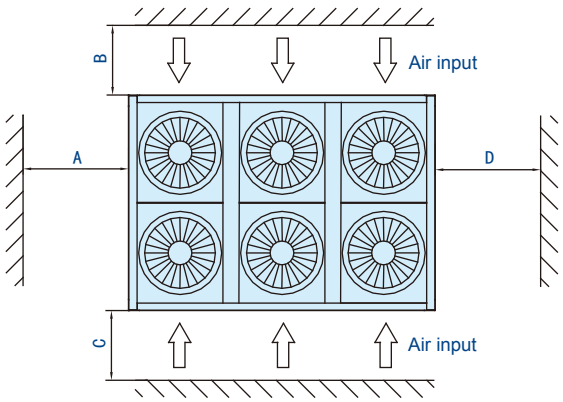


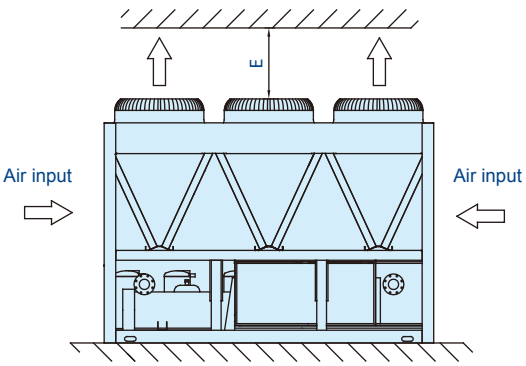
130kW module



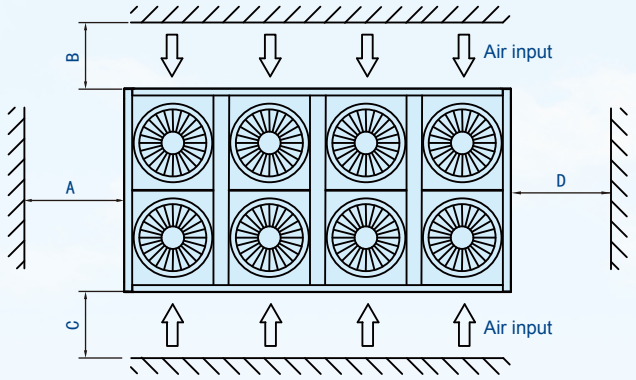


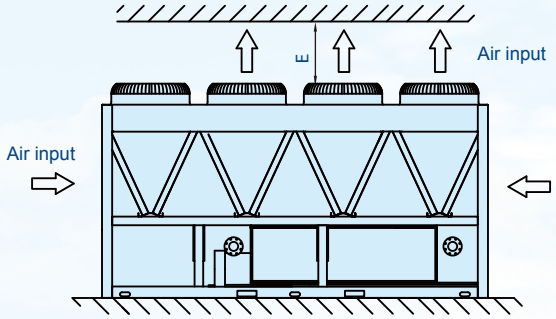
200kW module



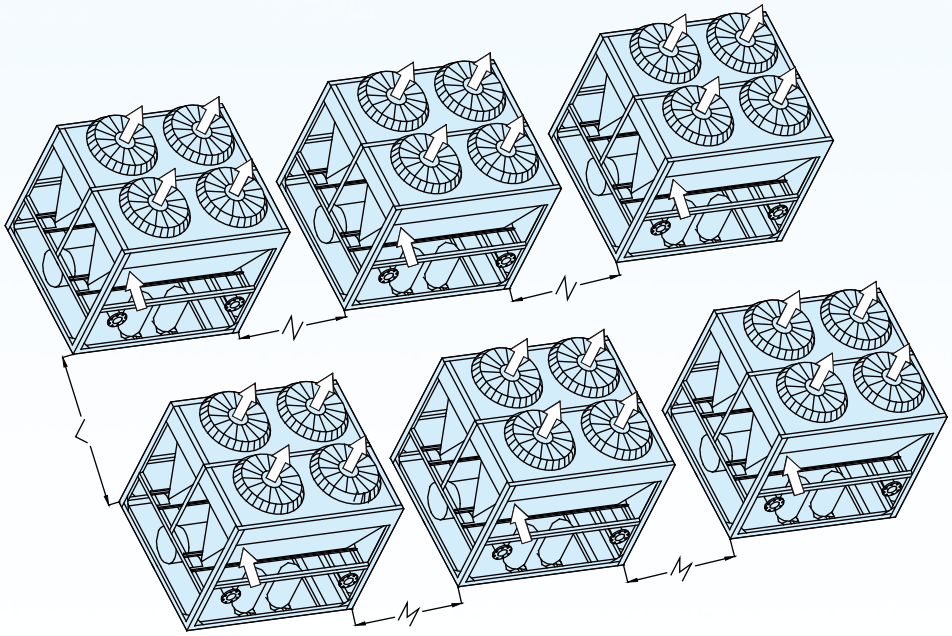


250kW module





Modules combination



The recommend space parameter:

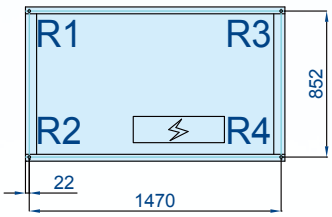
No	Model	Max unit combined quantity	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	L(mm)	M(mm)	N(mm)
1	MGB-F(D)30W/RN1	16	≥1500	≥2000	≥2000	≥1500	≥8000	≥ 600	≥ 300	≥ 300
2	MGCSL-F30W/RN1	1						≥ 600	≥ 300	≥ 300
3	MGCSL-D30W/RN1	1						≥ 600	≥ 300	≥ 300
4	MGCL-F30W/RN1	1						≥ 600	≥ 300	≥ 300
5	MGCL-D30W/RN1	1						≥ 600	≥ 300	≥ 300
6	MGB-F65W/RN1	16						≥ 600	≥ 300	≥ 300
7	MGB-D65W/RN1	16						≥ 600	≥ 300	≥ 300
8	MGBL-F65W/RN1	16						≥ 600	≥ 300	≥ 300
9	MGBL-D65W/RN1	16						≥ 600	≥ 300	≥ 300
10	MGB-F130W/RN1	8						≥ 600	≥ 300	≥ 300
11	MGBL-F130W/RN1	8						≥ 600	≥ 300	≥ 300
12	MGB-F200W/RN1	5	≥2000					≥ 600	≥ 300	≥ 300
13	MGBL-F200W/RN1	5						≥ 600	≥ 300	≥ 300
14	MGBT-F250W/RN1	8				≥2000		≥ 600	≥ 300	≥ 300
15	MGBL-F250W/RN1	8						≥ 600	≥ 300	≥ 300

Load distribution

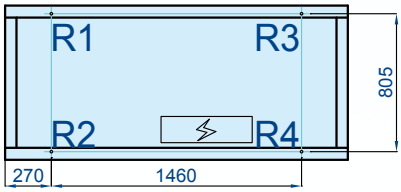
Unit:KG

No	Model	R 1	R 2	R 3	R 4	R 5	R 6
3	MGB-F30W/RN1	81	68	139	112	/	/
4	MGB-D30W/RN1	81	68	139	112	/	/
5	MGCSL-F30W/RN1	90	77	157	131	/	/
6	MGCSL-D30W/RN1	90	77	157	131	/	/
7	MGCL-F30W/RN1	81	68	139	112	/	/
8	MGCL-D30W/RN1	81	68	139	112	/	/
11	MGB-F65W/RN1	170	180	145	155	/	/
12	MGB-D65W/RN1	180	190	145	155	/	/
13	MGBL-F65W/RN1	170	180	145	155	/	/
14	MGBL-D65W/RN1	170	180	145	155	/	/
15	MGB-F130W/RN1	350	340	295	285	/	/
16	MGBL-F130W/RN1	350	340	295	285	/	/
17	MGB-F200W/RN1	567	433	567	433	/	/
18	MGBL-F200W/RN1	567	433	567	433	/	/
19	MGBT-F250W/RN1	373	344	487	462	539	395
20	MGBT-F250W/RN1	373	344	487	462	539	395

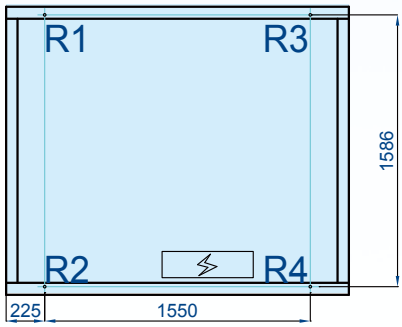
Dimension unit: mm



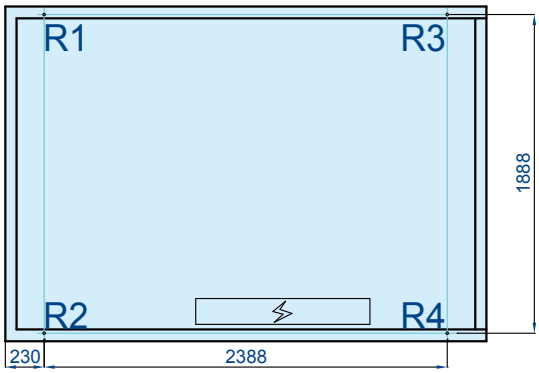
30kW module



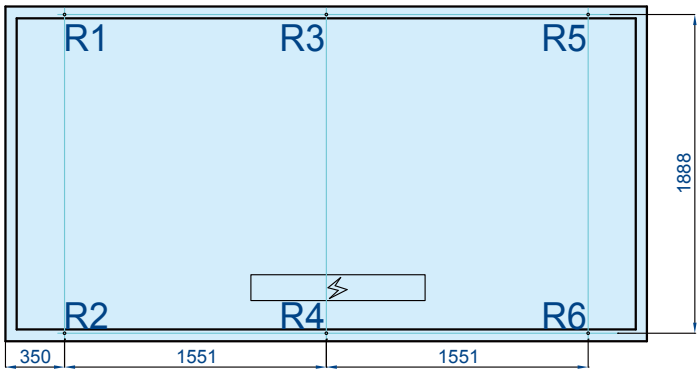
65kW module



130kW module



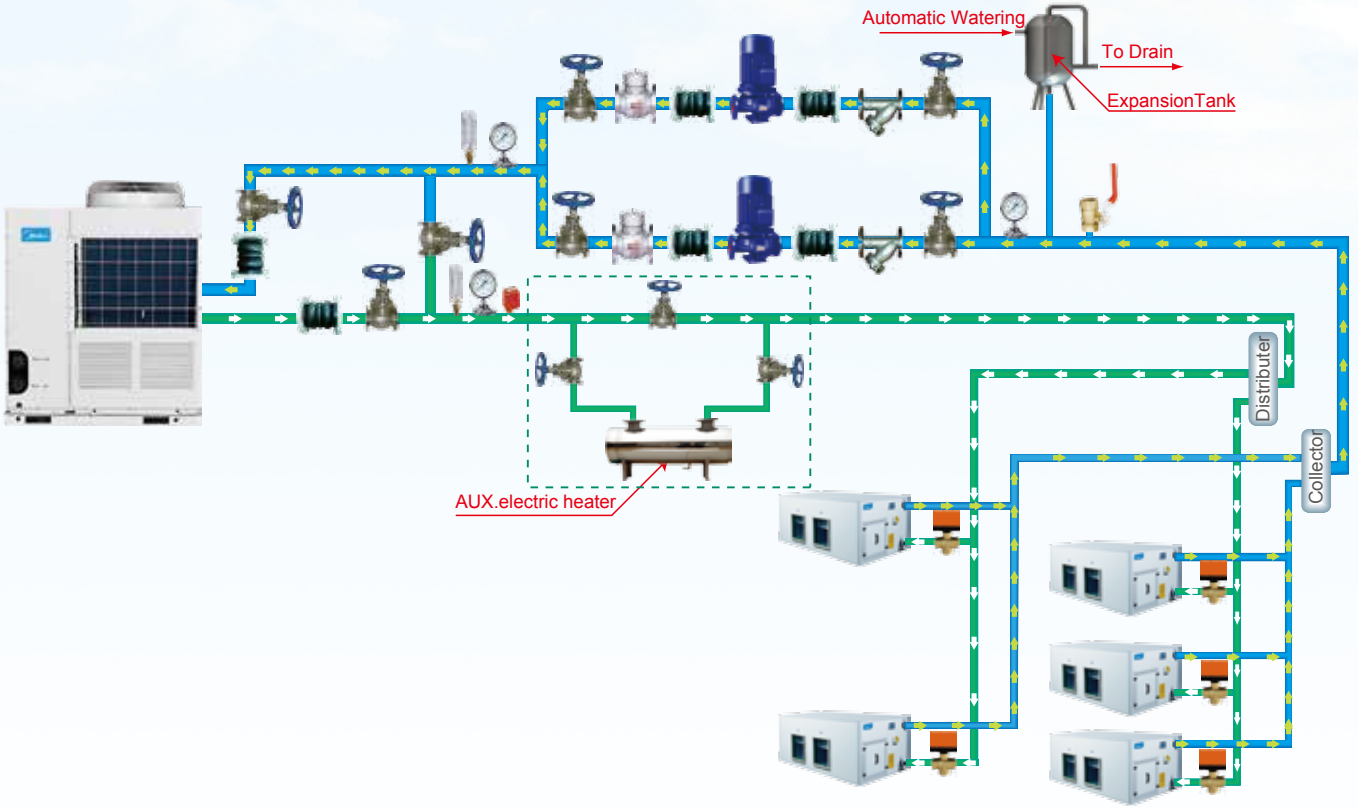
200kW module



250kW module

Typical piping

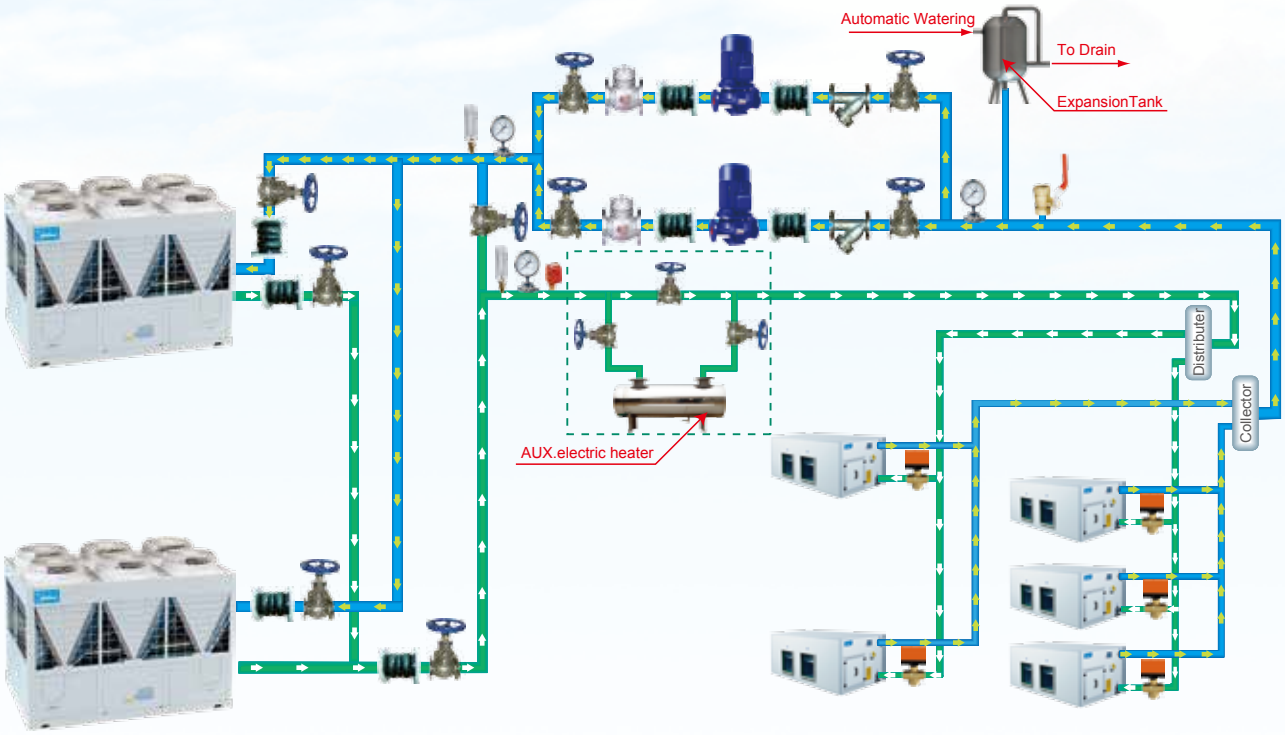
30kW module water pipeline sketch drawing



The table below describes the symbols.

Symbol	Symbol Explanation	Symbol	Symbol explanation
	Stop Valve		Y-Shaped Filter
	Pressure Gauge		Thermometer
	Water Flow Switch		Water Pump
	3-Way Valve		Check Valve
	Soft Joint		Air Vent

200kW module water pipeline sketch drawing



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	Water Flow Switch		Water Pump
	3-Way Valve		Check Valve
	Soft Joint		Air Vent

Aqua M Series

Air cooled screw chiller

Contents

With half century experience in chiller industry, Midea Chongqing chiller manufacturing base is becoming one of the largest chiller companies in China. It covers an area of 800 Mu (137 acre), with a registered capital of 12.5 million US $ and a total investment of over 0.85 billion US$. There are 6 product series and over 100 model products including centrifugal chillers, screw water chillers, scroll water chillers, water-cooled packaged units, and central air-conditioning indoor terminal devices(AHU/FCU). Five chiller manufacture shops with 14 flexible production lines lead a manufacturing capacity of 500 units centrifugal chillers, 1000 units of air cooled screw, 2000 units of water cooled screw and 200000 units of AHU products.

Strong R&D and manufacturing capacity makes Midea Chongqing general become the fastest developing company in chiller industry. The chiller test lab which is certified by China National Refrigeration Equipment Inspection Center gets the largest refrigeration test capacity in Asia. The engineer team with 100 top engineers and international chiller experts who are working many years in structure, electricity, and performance testing and software aspect make Midea the headship in chiller industry. In the year of 2011 Midea CAC invested another 150 million RMB for test lab as ARI test stand, big capacity air cooled screw life span testing room, 1500kW compressor motor test lab etc.

Concentrating on energy-saving and environment protection, Midea Chongqing chiller factory commits itself to the reliable and high efficiency products for the world. The chiller products are widely used in different countries and obtain good public praise from the clients. The solutions for the Beijing capital international airport, Jakarta international airport, China rapid transit station win good feedback and commendation. Continuing with the past and opening up the future, Midea chiller brand will go further and create an illustrious future.

Product introduction

Air cooled screw chiller is a kind of central air-conditioning unit which adopts air as the cooling or (Heating) source and water as the cooling or (heating) medium to cool down or (heat) the indoor ambient temperature through the indoor terminal(AHU/FCU). Midea air cooled screw chillers are the premium solution for industrial and commercial applications where installation contractors, consultants and building owners require optimal performances and optimized quality.Air cooled chiller typically have a lower initial investment and maintenance cost than water cooled system since it does not require a cooling tower, condenser water pump, and associated condenser water chemical treatment system.

Midea air cooled screw chillers are designed to meet current and future requirements in terms of reliability, energy efficiency and intelligent control. We use the best technologies available today :Twin-rotor screw compressors with a variable capacity valve are ideally matched to coolers and condensers optimally configured for superior heat transfer and unit efficiency. They are wildly applied in school, hospital, shopping mall, office as well as the factory and manufacturing processing area.


School

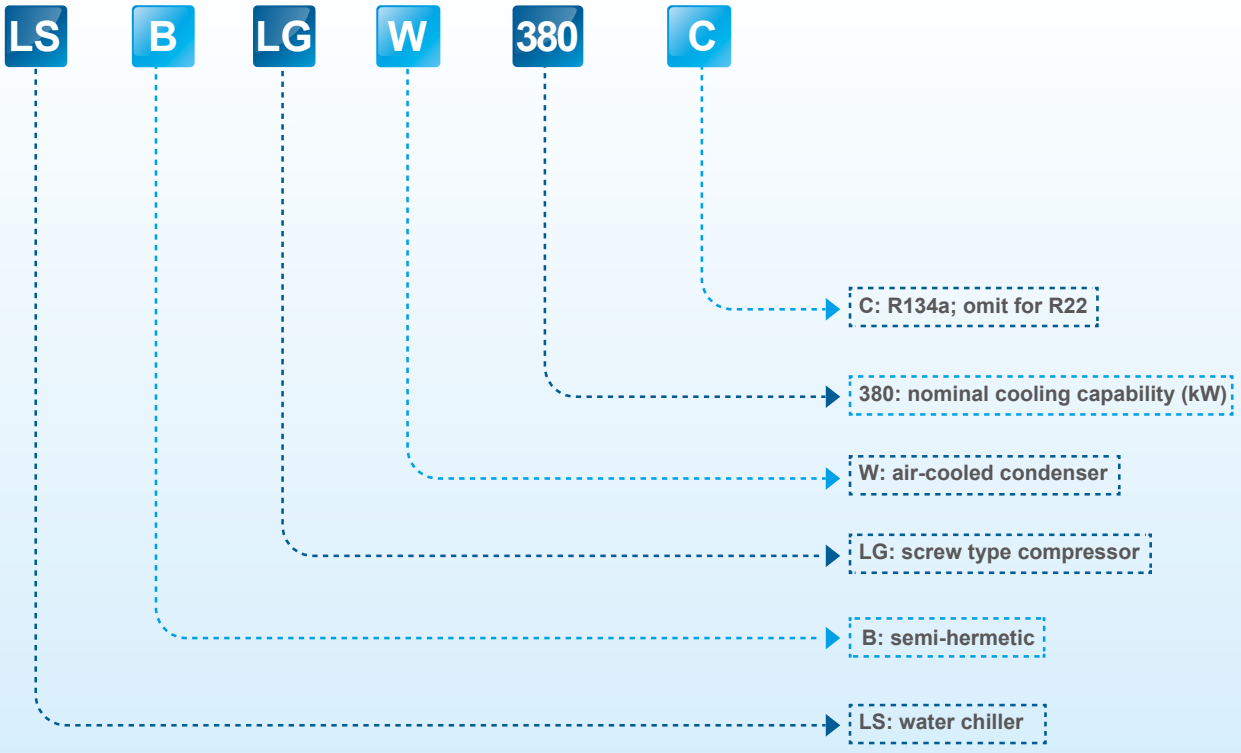

Factory


Hotel


Hospital


Office

Nomenclature

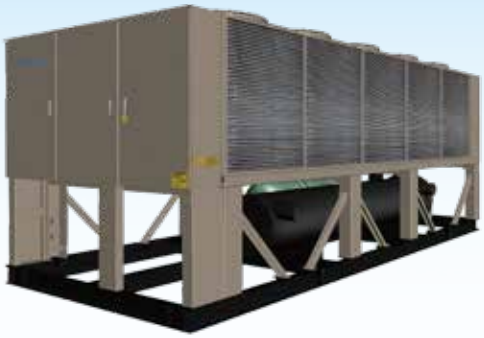


Product lineup

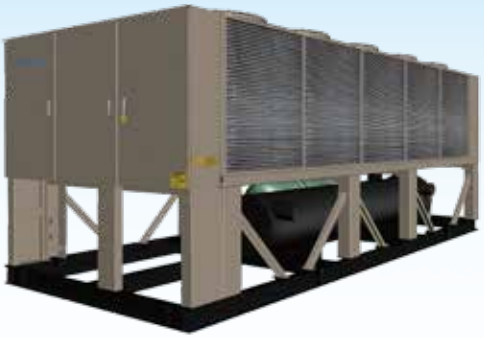
LSBLGW380C

LSBLGW500C

LSBLGW600C



LSBLGW720C



LSBLGW900C

LSBLGW1000C

LSBLGW1200C

LSBLGW1420C

Features and benefits

Environmental responsibility

- A more efficient chiller means less electricity generation, which reduces greenhouse gas(CO_2) emissions.
- R134a friendly refrigerant has no ozone-depletion potential.
- Helps You AchieveLEED® Certification.
- Less refrigerant charge.
- High efficiency.

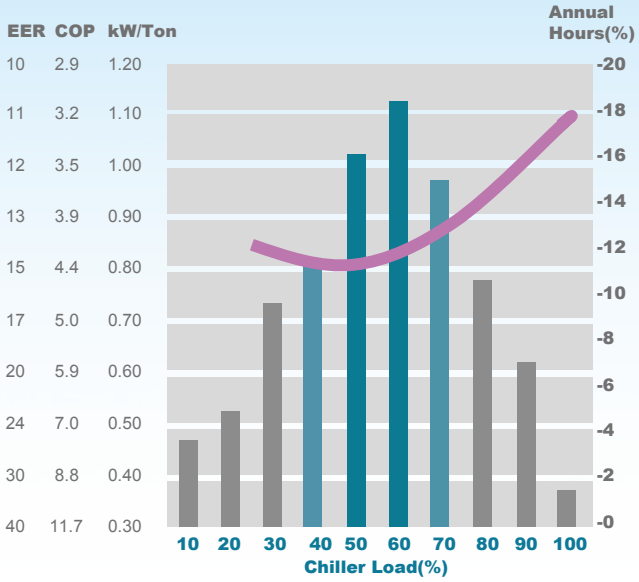
Operating cost savings

- Better IPLV:

Follows AHRI 550/590 calculation that notes the 99% of operating hours are not at full load.

The COP was design to the best on the 50% ~ 75% part load conditions.

Larger ΔT of cooler reducing HVAC system running cost.



Lowest total cost of ownership

Reliability low risk of uncomfortable downtime.

- The best parts, Bitzer Comp. &Danfoss EXV, Shneider electric.

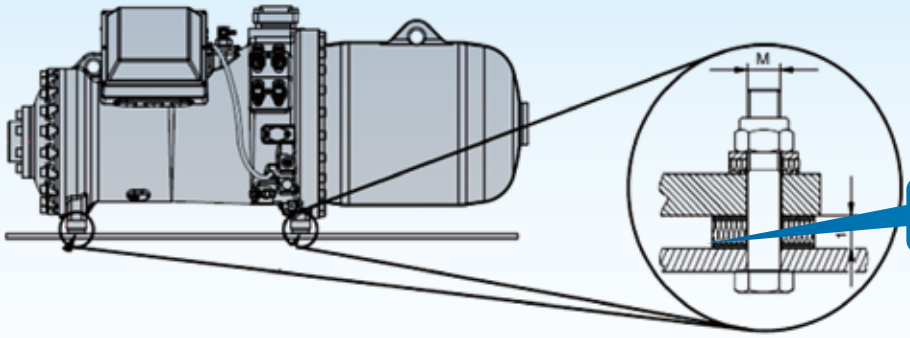
- World-class testing facilities

Each unit was extensively tested to verify that their operation is robust and that a smooth start-up is ensured.

- Serviceability low maintenance costs.

Be quiet, the best neighborhood

■ The larger dimension impeller,
the lower speed, then reduce noise.
■ The lower ambient temperature,
the lower fan air flow, then reduce noise.



Specifications

LSBLGWXXX/C		380	500	600	720	900	1000	1200	1420
Cooling capacity	kW	376	496	594	720	902	996	1203	1419
Power input	kW	124	159	187	234	285	318	381	466
COP	kW/kW	3.03	3.12	3.17	3.07	3.16	3.13	3.15	3.04
Semi-hermetic screw compressor									
Circuit A	Quantity	1	1	1	1	1	1	1	1
Circuit B	Quantity	--	--	--	--	1	1	1	1
Oil recharge	Type	BSE170	BSE170	BSE170	BSE170	BSE170	BSE170	BSE170	BSE170
Circuit A	L	30	30	30	32	30	30	30	32
Circuit B	L	--	--	--	--	30	30	30	32
Refrigerant	Type	R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
Circuit A	kg	76	90	105	140	76	90	105	140
Circuit B	kg	--	--	--	--	90	90	105	140
Control type		EXV	EXV	EXV	EXV	EXV	EXV	EXV	EXV
Evaporator	Type	Shell and tube heat exchanger(DX)							
Water content	L	222	308	340	520	620	600	770	910
Water flow	m³/h	65.4	86	103.2	123.8	154.8	172	206.4	244.2
Pressure drop	kPa	39	54	56	58	74	75	71	69
Max. design pressure	MPa	1	1	1	1	1	1	1	1
Pipe connection type		Victaulic coupling							
Water inlet/outlet pipe dim.	mm	125	125	125	150	150	150	200	200
Condenser	Type	Fin-coil	Fin-coil	Fin-coil	Fin-coil	Fin-coil	Fin-coil	Fin-coil	Fin-coil
Fan	Quantity	6	8	10	10	14	16	16	20
Total air flow	m³/h	23000*6	23000*8	23000*10	23000*10	23000*14	23000*16	23000*16	23000*20
Fan speed	rpm	940	940	940	940	940	940	940	940
Unit length	mm	3810	4680	5800	5800	8800	9640	9640	11700
Unit width	mm	2280	2280	2280	2280	2280	2280	2280	2280
Unit height	mm	2370	2370	2370	2370	2430	2430	2430	2430
Shipping weight	kg	3320	4330	5000	5500	7750	8900	9100	11100
Running weight	kg	3540	4640	5340	6020	8370	9500	9870	12010

Safety protection device	The following safity devices are equipped as standard: High pressure protection Low pressure protection Compressor overload protection Fans overload protection High discharge temp. protection Power failure protection Contactor protection Water flow protection Motor protection Low oil level protection Differential pressure protection

Note:
1) Nominal cooling capacities are based on the following conditions:
Chilled water inlet/outlet temp: 12℃/7℃; Outdoor temp (DB/WB):35℃/24℃,
Evaporator fouling factor=0.086 m2 ℃/kW
2) The applicable ambient temperature range of R134a air-cooled screw units is 15℃ ~ 43℃。

Noise Preventer
While running,the operator should wear the noise preventer

Optional accessories

No.	Name	Model	Introduction	Picture
1	Water flow switch	WFS-1001-H (Honeywell)	Installed on evaporator outlet pipe to prevent heat exchange pipe from frost crack.	
2	Vibration damper	MHD Series	To avoid vibration and noise, it must be used between base and foundation when install the unit.	
3	Remote control cabinet	YCKZ-P	Can be installed in the control room. Through the cable connected to the unit touch screen, it can display all states information andcomplete all the operations of unit (startup/shutdown, error confirm, etc.)	

Applicable range

Content	Running range
Ambient TEMP.	T1 Condition:15°C~43°C
Out water TEMP.	5°C~15°C
Max inlet/outlet water TEMP. difference	8°C
Voltage tolerance	Rating Voltage±10%
Power supply frequency	Rating frequency±2%
Compressor max. start count	4 times per hour
Environment quality	High corrosive environment and high humidity should be avoid.

Performance Data

Model	Outlet Temp. /°C	Ambient Temperature/℃													
		15		20		25		30		35		40		43	
		Cooling Capacity /kW	Power Input /kW	Cooling Capacity /kW	Power Input /kW	Cooling Capacity /kW	Power Input /kW	Cooling Capacity /kW	Power Input /kW	Cooling Capacity /kW	Power Input /kW	Cooling Capacity /kW	Power Input /kW	Cooling Capacity /kW	Power Input /kW
LSBLGW380/C	5	418.0	93.0	397.3	101.4	380.6	108.1	362.3	115.7	349.8	120.8	324.3	130.8	310.1	137.1
	6	436.0	94.5	414.3	103.0	396.6	109.7	376.9	117.3	362.5	122.4	337.5	132.6	322.0	138.8
	7	453.9	96.0	431.3	104.5	412.6	111.3	392.0	119.0	376.0	124.0	350.6	134.3	334.5	140.6
	8	471.9	97.5	448.3	106.1	428.6	112.9	407.0	120.6	390.7	125.8	363.8	136.1	347.1	142.4
	9	489.8	99.0	465.3	107.6	444.7	114.5	422.1	122.3	404.8	127.5	376.9	137.8	359.7	144.2
	10	507.8	100.4	482.3	109.2	460.7	116.1	437.2	123.9	417.2	129.0	390.1	139.6	370.7	145.7
	11	525.8	101.9	499.3	110.7	476.7	117.7	452.2	125.6	433.1	131.0	403.2	141.4	384.9	147.7
	12	543.7	103.4	516.3	112.2	492.8	119.3	467.3	127.2	447.2	132.7	416.3	143.1	397.5	149.5
	13	561.7	104.9	533.3	113.8	508.8	120.9	482.3	128.9	461.3	134.4	429.5	144.9	410.0	151.3
	14	579.6	106.4	550.3	115.3	524.8	122.5	497.4	130.6	475.4	136.1	442.6	146.7	422.6	153.1
	15	597.6	107.9	567.3	116.9	540.8	124.1	512.5	132.2	490.5	138.0	455.8	148.4	436.0	155.0
LSBLGW500/C	5	527.4	120.7	504.5	131.3	489.1	139.4	470.0	148.9	461.8	154.7	431.7	167.6	413.1	175.3
	6	552.2	122.1	527.8	132.8	510.5	141.2	489.6	150.7	478.4	156.8	447.9	169.8	428.7	177.8
	7	576.9	123.4	551.1	134.3	532.3	143.0	509.9	152.7	496.0	159.0	465.3	172.3	445.4	180.3
	8	601.6	124.7	574.5	135.8	554.0	144.7	530.3	154.7	515.6	161.5	482.7	174.7	462.2	182.8
	9	626.3	126.0	597.8	137.3	575.8	146.5	550.6	156.7	534.3	163.8	500.1	177.2	478.9	185.3
	10	651.0	127.3	621.2	138.8	597.6	148.3	570.9	158.7	550.5	165.8	517.5	179.6	493.2	187.5
	11	675.7	128.7	644.5	140.3	619.4	150.0	591.2	160.7	571.5	168.5	535.0	182.1	512.4	190.4
	12	700.4	130.0	667.8	141.8	641.2	151.8	611.6	162.7	590.2	170.8	552.4	184.5	529.2	192.9
	13	725.0	131.3	691.2	143.3	663.0	153.6	631.9	164.7	608.8	173.2	569.8	187.0	545.9	195.4
	14	749.7	132.6	714.5	144.8	684.7	155.3	652.2	166.7	627.4	175.5	587.2	189.4	562.6	197.9
	15	774.3	133.9	737.9	146.4	706.9	157.1	673.3	168.8	647.5	178.0	605.9	192.1	580.6	200.6
LSBLGW600/C	5	634.0	133.6	609.2	147.7	591.0	159.7	569.4	172.7	557.4	182.6	526.4	198.7	507.2	208.6
	6	653.3	135.9	627.9	150.1	609.5	162.0	587.5	175.1	575.2	184.8	543.7	201.2	524.0	211.1
	7	674.0	138.5	647.9	152.8	629.3	164.6	606.9	177.6	594.0	187.0	562.2	203.7	541.8	213.8
	8	694.6	141.2	667.9	155.5	649.1	167.2	626.3	180.2	614.5	189.5	580.7	206.3	559.7	216.5
	9	715.3	143.8	687.9	158.2	668.9	169.8	645.7	182.8	634.1	191.9	599.3	208.8	577.5	219.2
	10	735.9	146.4	705.4	160.2	688.7	172.4	665.1	185.4	651.3	194.0	617.8	211.4	593.2	221.6
	11	756.6	149.1	727.9	163.5	708.5	175.0	684.4	188.0	673.4	196.6	636.3	213.9	613.2	224.5
	12	777.2	151.7	747.9	166.2	728.3	177.6	703.8	190.6	693.1	199.0	654.9	216.5	631.1	227.2
	13	797.9	154.3	767.9	168.9	748.1	180.2	723.2	193.1	712.8	201.3	673.4	219.0	648.9	229.9
	14	818.5	157.0	787.9	171.6	767.9	182.8	742.6	195.7	732.4	203.7	691.9	221.6	666.8	232.6
	15	840.6	159.9	809.2	174.6	789.0	185.4	763.2	198.5	753.5	206.2	711.7	224.3	685.7	235.4
LSBLGW720/C	5	767.1	177.6	744.1	189.9	717.3	204.2	690.5	218.7	676.9	227.9	636.8	247.1	611.2	259.2
	6	790.8	180.9	767.3	193.6	739.5	207.8	711.8	222.1	697.9	230.8	657.0	250.3	630.8	262.6
	7	815.4	184.8	791.4	197.4	763.2	211.5	735.1	225.6	720.0	234.0	678.5	253.9	650.9	266.3
	8	840.0	188.6	815.5	201.1	787.0	215.1	758.4	229.1	744.1	237.6	699.9	257.5	671.1	269.9
	9	864.6	192.4	839.6	204.9	810.7	218.7	781.8	232.6	767.3	241.0	721.3	261.2	691.2	273.5
	10	887.3	195.2	863.7	208.6	834.4	222.3	805.1	236.1	787.8	243.7	742.8	264.8	709.9	276.7
	11	913.7	200.1	887.8	212.4	858.1	226.0	828.5	239.6	813.5	247.8	764.2	268.4	731.4	280.8
	12	938.3	203.9	911.9	216.1	881.8	229.6	851.8	243.1	836.6	251.3	785.7	272.1	751.5	284.5
	13	962.9	207.7	936.0	219.9	905.6	233.2	875.1	246.6	859.7	254.7	807.1	275.7	771.6	288.1
	14	987.5	211.6	960.1	223.6	929.3	236.8	898.5	250.1	882.8	258.1	828.5	279.4	791.8	291.8
	15	1013.0	215.9	985.2	227.3	954.5	240.5	923.8	253.7	907.4	261.9	851.2	283.4	811.9	295.4

Note: The inlet/outlet water temperature difference is 5℃.

Model	Outlet Temp. /℃	Ambient Temperature/℃													
		15		20		25		30		35		40		43	
		Cooling Capacity /kW	Power Input /kW	Cooling Capacity /kW	Power Input /kW	Cooling Capacity /kW	Power Input /kW	Cooling Capacity /kW	Power Input /kW	Cooling Capacity /kW	Power Input /kW	Cooling Capacity /kW	Power Input /kW	Cooling Capacity /kW	Power Input /kW
LSBLGW900/C	5	900.8	222.9	886.6	235.5	864.6	249.9	842.4	267.1	820.0	277.7	778.6	300.7	743.9	314.9
	6	936.7	225.7	921.0	236.9	900.8	252.9	878.5	270.2	854.0	281.2	808.0	304.7	771.9	318.8
	7	976.6	227.8	959.6	239.5	938.2	256.0	914.6	273.6	902.0	285.0	837.3	308.8	800.0	323.0
	8	1016.5	229.8	998.2	242.2	975.6	259.1	950.6	277.0	921.9	289.1	866.7	313.0	828.1	327.2
	9	1056.4	231.9	1036.8	244.8	1013.1	262.2	986.7	280.5	955.8	293.1	896.0	317.1	856.1	331.4
	10	1096.3	234.6	1075.4	247.5	1050.5	265.2	1022.8	283.9	989.8	297.1	925.4	321.2	884.2	335.6
	11	1136.2	237.2	1114.0	250.2	1087.9	268.3	1058.9	287.3	1023.8	301.0	954.8	325.3	912.3	339.8
	12	1176.1	239.5	1152.6	252.8	1125.4	271.4	1095.0	290.7	1057.7	305.0	984.1	329.4	940.3	344.0
	13	1216.0	241.7	1191.2	255.5	1162.8	274.4	1131.0	294.1	1091.7	308.9	1013.5	333.6	968.4	348.2
	14	1255.9	243.6	1229.8	258.1	1200.2	277.5	1167.1	297.6	1125.6	312.9	1042.8	337.7	996.5	352.4
	15	1295.8	246.2	1268.4	262.1	1237.7	280.6	1203.2	301.3	1159.6	317.2	1072.2	341.9	1024.6	357.0
LSBLGW1000/C	5	1047.0	244.0	1002.7	264.9	975.8	280.5	940.2	298.8	929.6	309.6	869.0	335.4	831.3	351.3
	6	1107.1	246.2	1058.0	267.4	1024.5	283.6	983.2	302.4	961.8	313.7	900.6	339.9	861.2	355.8
	7	1156.0	248.3	1104.1	269.9	1067.2	286.8	1022.8	306.1	996.0	318.0	934.0	344.6	893.4	360.7
	8	1204.9	250.3	1150.3	272.4	1110.0	290.0	1062.5	309.8	1033.4	322.8	967.5	349.4	925.5	365.5
	9	1253.8	252.4	1196.4	274.9	1152.7	293.1	1102.1	313.5	1069.2	327.3	1001.0	354.2	957.7	370.4
	10	1302.8	254.5	1242.5	277.5	1195.5	296.3	1141.8	317.2	1105.0	331.9	1034.4	358.9	985.3	374.5
	11	1351.7	256.6	1288.6	280.0	1238.2	299.5	1181.4	320.9	1140.9	336.4	1067.9	363.7	1022.0	380.2
	12	1400.6	258.7	1334.8	282.5	1280.9	302.6	1221.1	324.6	1176.7	341.0	1101.4	368.4	1054.1	385.0
	13	1449.6	260.8	1380.9	285.0	1323.7	305.8	1260.7	328.3	1212.5	345.5	1134.8	373.2	1086.3	389.9
	14	1498.5	262.9	1427.0	287.5	1366.4	308.9	1300.4	331.9	1248.3	350.1	1168.3	378.0	1118.4	394.8
	15	1536.3	264.9	1464.0	290.1	1403.2	312.1	1336.7	335.8	1286.7	355.0	1203.6	383.0	1152.8	400.1
LSBLGW1200/C	5	1316.6	271.8	1260.9	299.9	1216.0	323.3	1165.7	350.3	1131.1	370.7	1065.1	402.6	1024.8	422.0
	6	1367.3	274.4	1308.5	303.0	1259.8	327.2	1206.0	354.6	1166.1	375.7	1098.5	408.1	1056.8	427.7
	7	1417.8	276.9	1356.1	306.1	1304.3	331.0	1247.5	359.1	1203.0	381.0	1134.0	413.9	1090.7	433.7
	8	1468.3	279.4	1403.7	309.2	1348.8	334.9	1289.0	363.6	1242.7	386.8	1169.5	419.7	1124.5	439.7
	9	1518.8	282.0	1451.3	312.3	1393.3	338.7	1330.5	368.1	1281.0	392.3	1205.0	425.6	1158.4	445.8
	10	1569.3	284.5	1498.9	315.4	1437.8	342.6	1372.0	372.7	1315.1	397.1	1240.5	431.4	1188.5	451.1
	11	1619.8	287.0	1546.5	318.4	1482.3	346.5	1413.5	377.2	1357.6	403.3	1276.0	437.3	1226.2	457.8
	12	1670.3	289.6	1594.1	321.5	1526.8	350.3	1455.0	381.7	1395.8	408.9	1311.5	443.1	1260.0	463.8
	13	1720.8	292.1	1641.7	324.6	1571.3	354.2	1496.5	386.2	1434.1	414.4	1347.0	449.0	1293.9	469.9
	14	1771.3	294.7	1689.3	327.7	1615.8	358.0	1538.0	390.8	1472.4	419.9	1382.5	454.8	1327.8	475.9
	15	1821.6	297.1	1736.9	330.8	1661.0	361.9	1580.7	395.5	1513.1	425.8	1420.0	461.0	1363.6	482.3
LSBLGW1420/C	5	1516.8	353.6	1469.6	378.0	1416.0	406.7	1362.3	435.6	1331.3	453.7	1255.0	492.3	1206.7	516.6
	6	1562.6	360.0	1515.5	385.4	1460.4	413.8	1405.3	442.3	1375.8	459.7	1296.5	498.7	1245.4	523.4
	7	1610.9	367.5	1563.1	392.7	1507.4	421.0	1451.6	449.2	1419.0	466.0	1339.2	505.9	1285.2	530.6
	8	1659.2	375.0	1610.7	400.1	1554.3	428.1	1497.9	456.1	1468.8	473.3	1381.8	513.1	1325.0	537.8
	9	1707.6	382.5	1658.3	407.5	1601.3	435.3	1544.2	463.0	1515.3	480.2	1424.4	520.3	1364.7	545.0
	10	1755.9	390.0	1705.9	414.9	1648.2	442.4	1590.5	469.9	1561.8	487.0	1467.1	527.5	1404.5	552.1
	11	1804.2	397.5	1753.5	422.2	1695.2	449.6	1636.7	476.9	1608.3	493.8	1509.7	534.7	1444.2	559.3
	12	1852.6	405.0	1801.1	429.6	1742.1	456.7	1683.0	483.8	1654.8	500.7	1552.3	541.9	1484.0	566.5
	13	1900.9	412.5	1848.7	437.0	1789.1	463.8	1729.3	490.7	1701.3	507.5	1595.0	549.1	1523.8	573.7
	14	1949.2	420.0	1896.3	444.3	1836.0	471.0	1775.6	497.6	1747.8	514.3	1637.6	556.3	1563.5	580.9
	15	2000.1	428.5	1945.7	451.7	1885.5	478.1	1825.3	504.8	1794.5	521.6	1681.4	564.3	1603.3	588.0

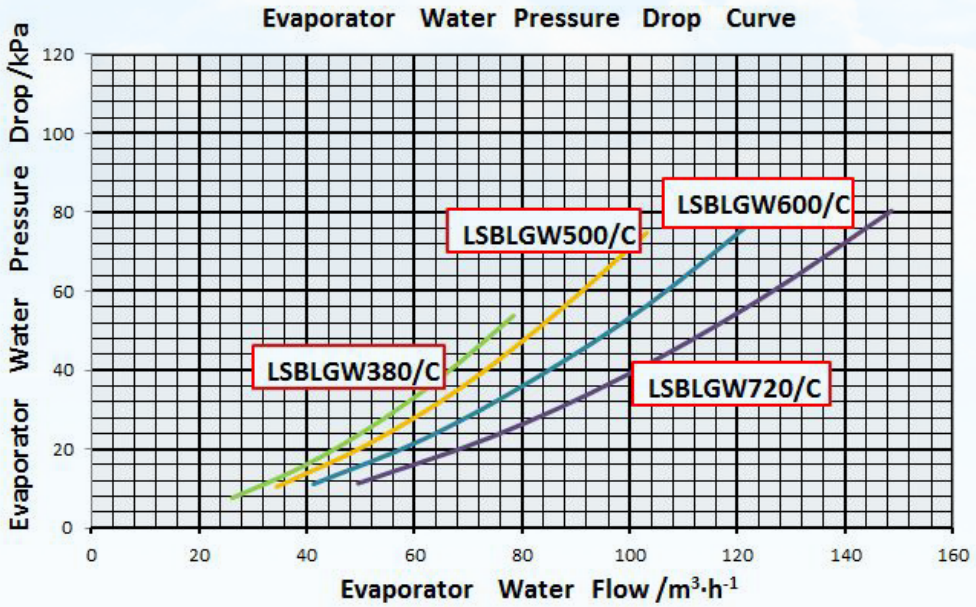
Note: The inlet/outlet water temperature difference is 5℃.

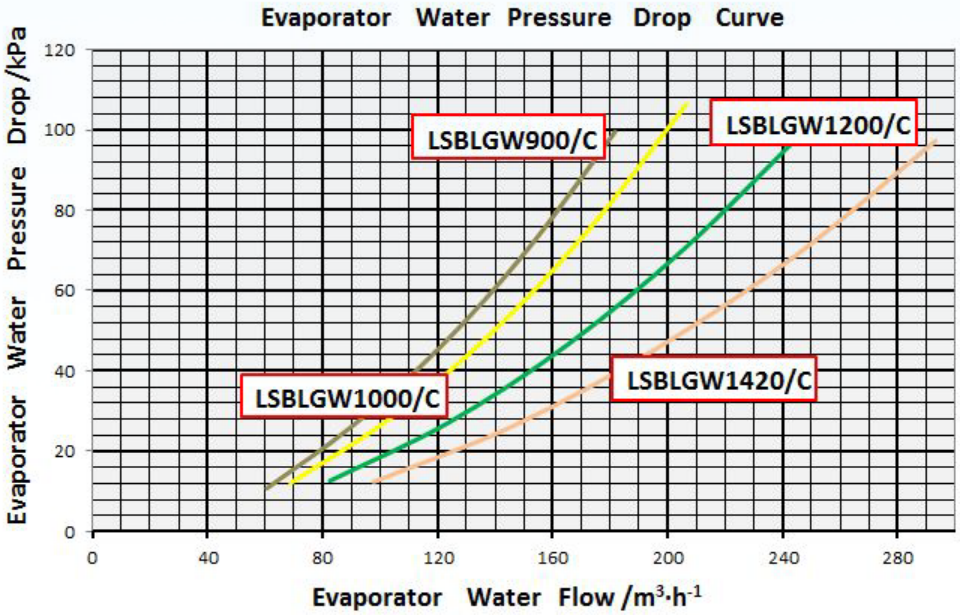
Electrical data

LSBLGWXXX/C	Unit	380	500	600	720	900	1000	1200	1420
Standard voltage	V	380V 3Ph 50Hz							
Voltage range	V	340~420							
Max. running current	A	287	368	412	523	655	368	824	1046
Rated power	kW	124	159	187	234	285	318	381	466
Rated current	A	212	271	319	398	483	542	650	796
Compressor A									
Locked rotor Amps.	A	586	805	805	917	586	805	805	917
Max. allowed current	A	370	450	450	480	370	450	450	480
Rated current	A	187	239	278	358	187	239	292	358
Rated power	kW	109.6	139.8	163	210	109.6	139.8	171.3	210
Compressor B									
Locked rotor Amps.	A	--	--	--	--	805	805	805	917
Max. allowed current	A	--	--	--	--	450	450	450	480
Rated current	A	--	--	--	--	239	239	292	358
Rated power	kW	--	--	--	--	139.8	139.8	171.3	210
Fan									
Full load Amps.(each)	A	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Power input(each)	kW	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Total input	kW	14.4	19.2	24	24	33.6	38.4	38.4	48
Crankcase heater									
Voltage	V	220	220	220	220	220	220	220	220
Total input	kW	0.3	0.3	0.3	0.3	0.6	0.6	0.6	0.6
Total Amps.	A	1.36	1.36	1.36	1.36	1.36	2.72	2.72	2.72

NOTE:
1.Customer to specify the exact nominal power supply available at site so that electrical components are selected accurately.
2.Main power must be supplied from a single field supplied and mounted fused circuit breaker.
3.The compressor crankcase heaters must be energized for hours before the unit is initially started or after a prolonged power disconnection.
4.All field wiring must be in accordance with local standards.
5.Neutral line required on 380V-3Ph-50Hz(5 wires) power supply.
6.Rated load Amps values are on nominal conditions.
7.The ±10% voltage variation from the nominal is allowed for a short time only,not permanent.

Water pressure drop



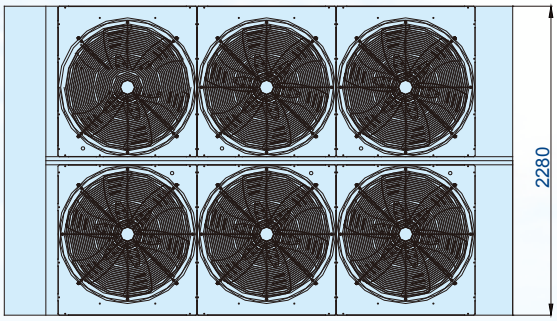


Unit Model	Min. Flow Rate		Max. Flow Rate	
	m³/h	GPM	m³/h	GPM
LSBLGW380/C	53	233	79	348
LSBLGW500/C	69	304	104	458
LSBLGW600/C	83	365	124	546
LSBLGW720/C	99	436	149	656
LSBLGW900/C	124	546	186	819
LSBLGW1000/C	138	608	207	912
LSBLGW1200/C	165	727	248	1092
LSBLGW1420/C	196	863	293	1290

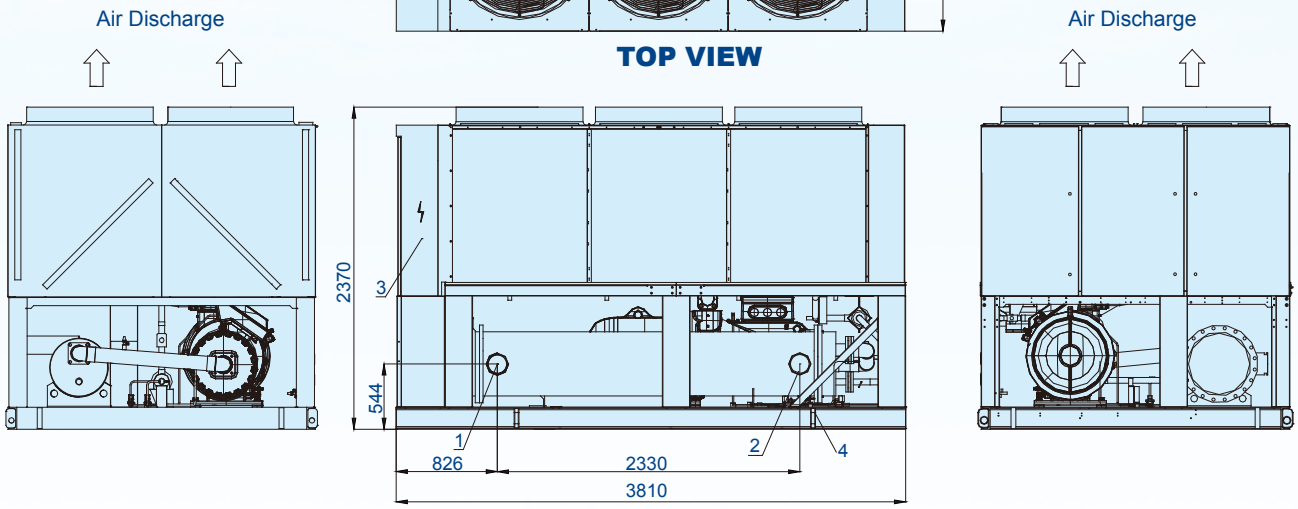
Dimensions

LSBLGW380/C

①CHILLED WATER OUTLET
②CHILLED WATER INLET
③ELECTRICAL CONTROL BOX
④LIFTING POINTS



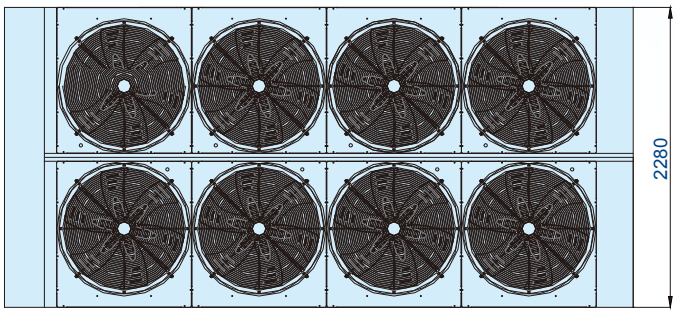
TOP VIEW



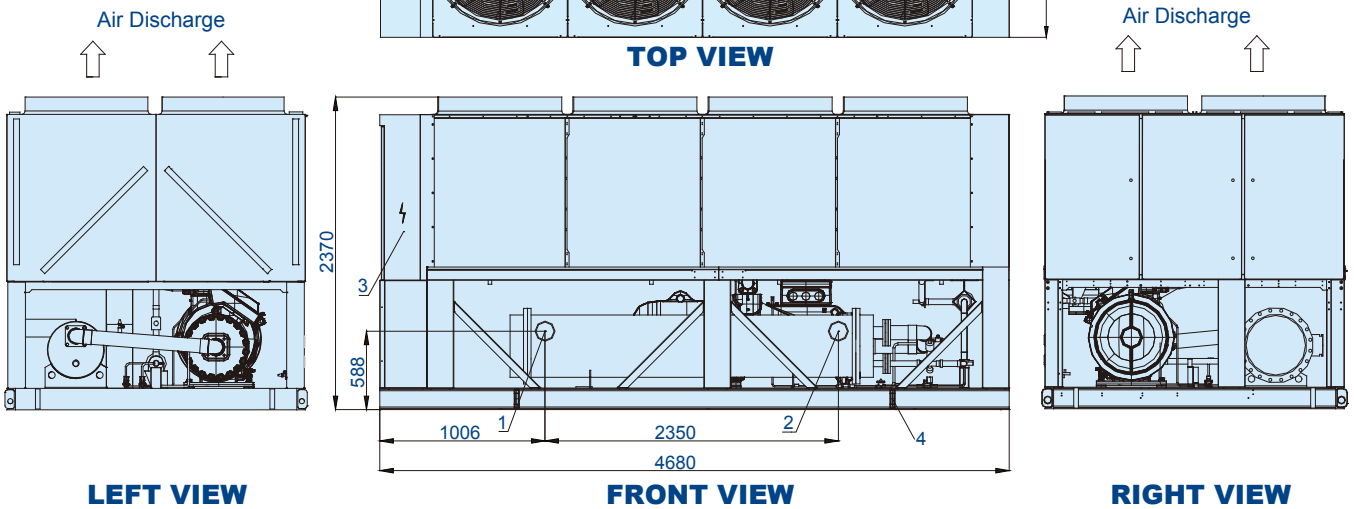
LEFT VIEW　　FRONT VIEW　　RIGHT VIEW

LSBLGW500/C

①CHILLED WATER OUTLET
②CHILLED WATER INLET
③ELECTRICAL CONTROL BOX
④LIFTING POINTS



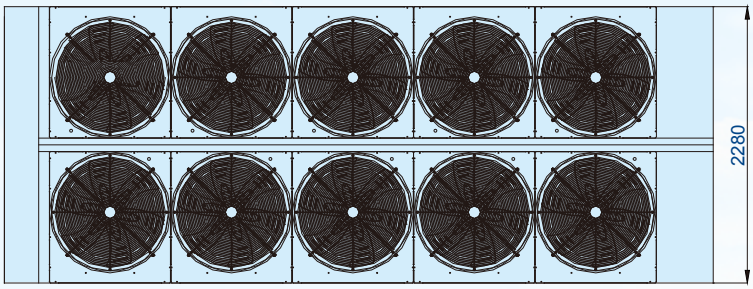
TOP VIEW



LEFT VIEW　　FRONT VIEW　　RIGHT VIEW

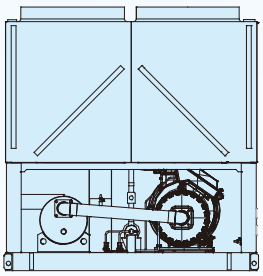
LSBLGW600/C

①CHILLED WATER OUTLET
②CHILLED WATER INLET
③ELECTRICAL CONTROL BOX
④LIFTING POINTS

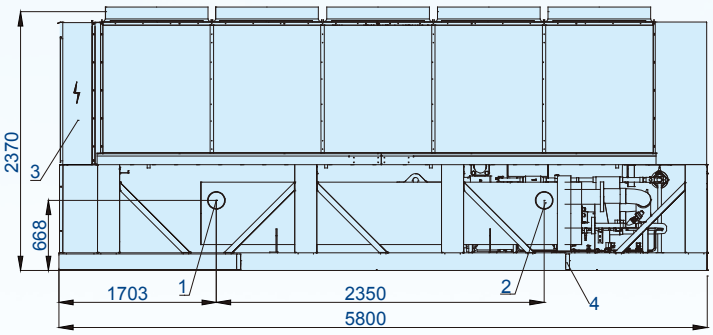


TOP VIEW

Air Discharge

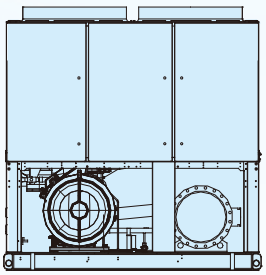


LEFT VIEW



FRONT VIEW

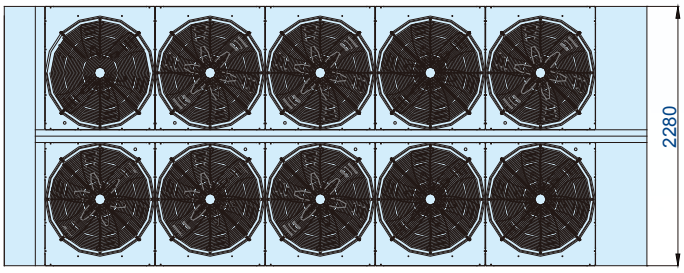
Air Discharge



RIGHT VIEW

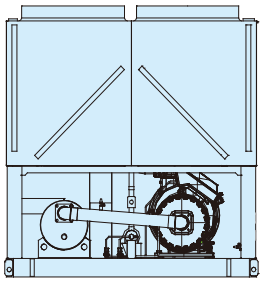
LSBLGW720/C

①CHILLED WATER OUTLET
②CHILLED WATER INLET
③ELECTRICAL CONTROL BOX
④LIFTING POINTS

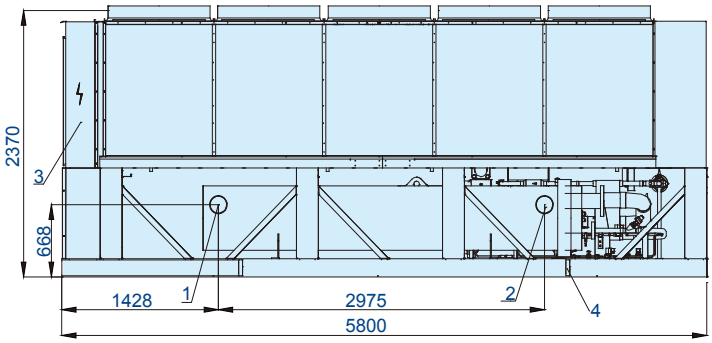


TOP VIEW

Air Discharge

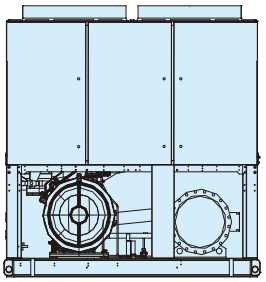


LEFT VIEW



FRONT VIEW

Air Discharge



RIGHT VIEW

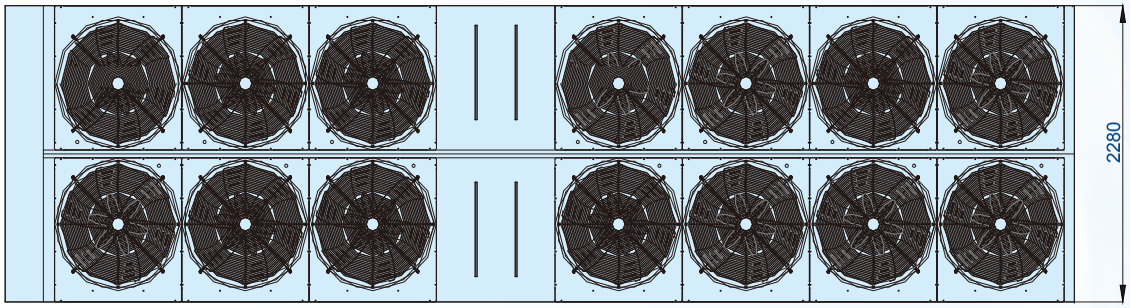
① CHILLED WATER INLET

② CHILLED WATER OUTLET

③ ELECTRICAL CONTROL BOX

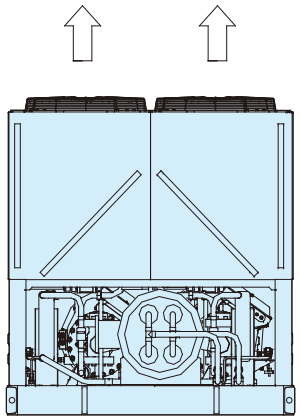
④ LIFTING POINTS

LSBLGW900/C

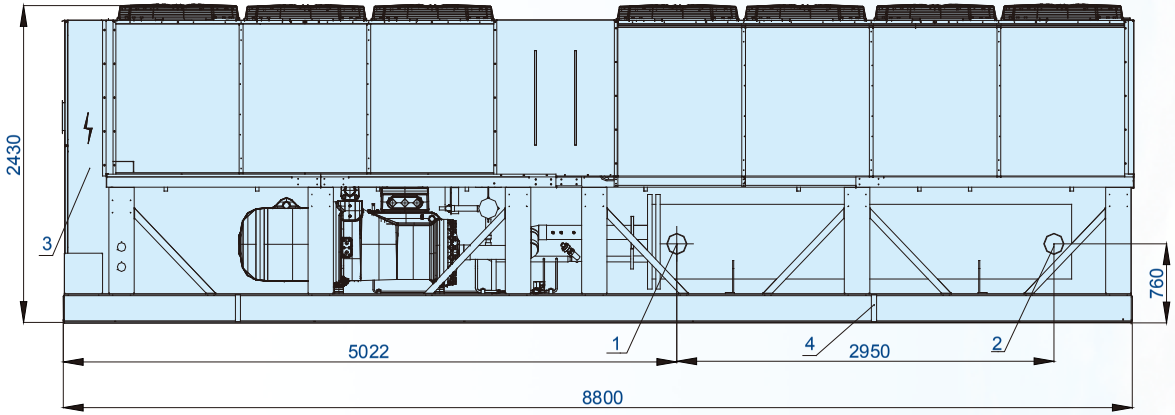


TOP VIEW

Air Discharge

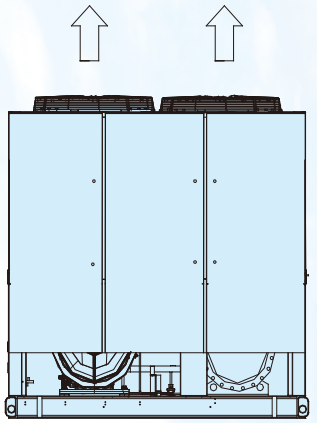


LEFT VIEW



FRONT VIEW

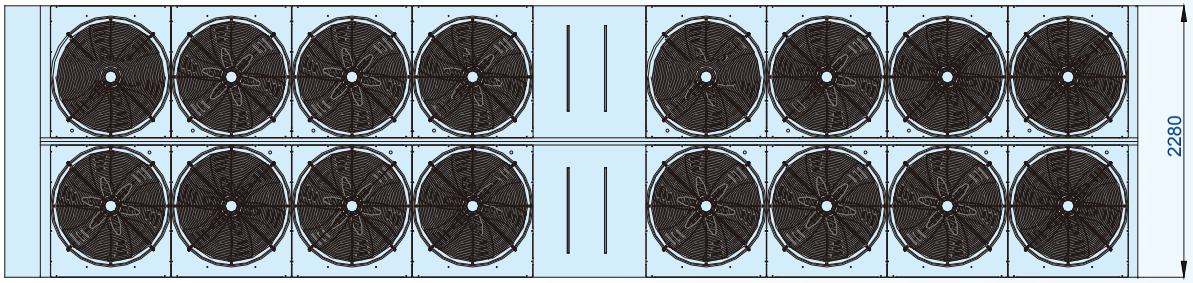
Air Discharge



RIGHT VIEW

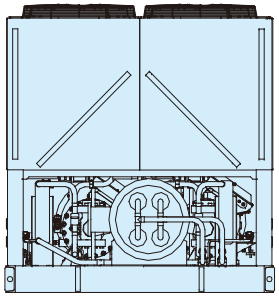
LSBLGW1000/C

① CHILLED WATER INLET
② CHILLED WATER OUTLET
③ ELECTRICAL CONTROL BOX
④ LIFTING POINTS

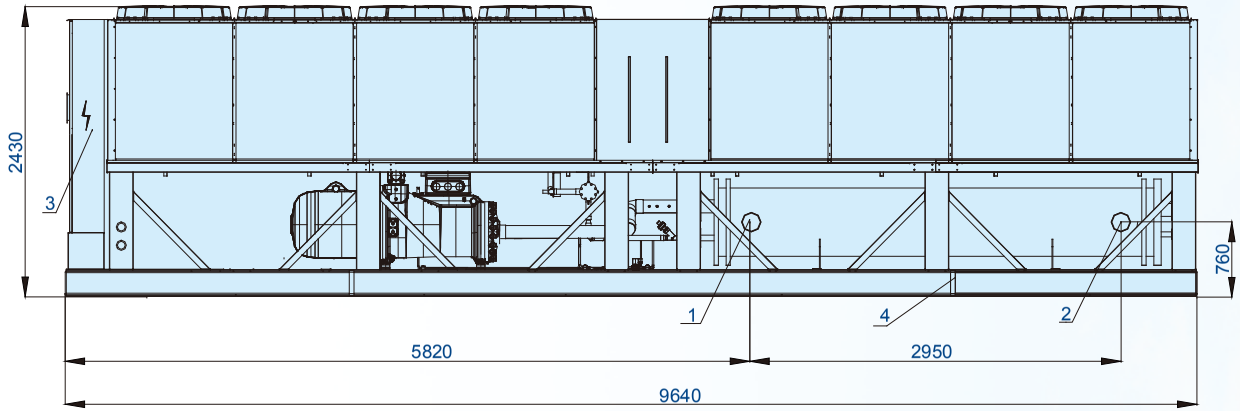


TOP VIEW

Air Discharge

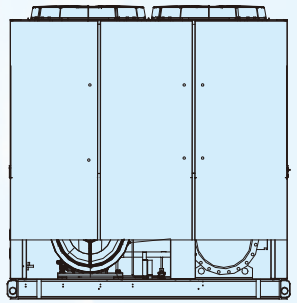


LEFT VIEW



FRONT VIEW

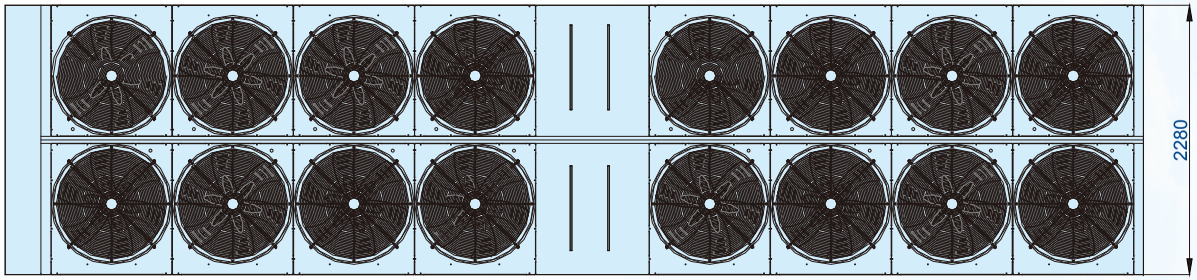
Air Discharge



RIGHT VIEW

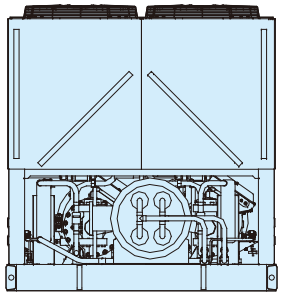
LSBLGW1200/C

① CHILLED WATER INLET
② CHILLED WATER OUTLET
③ ELECTRICAL CONTROL BOX
④ LIFTING POINTS

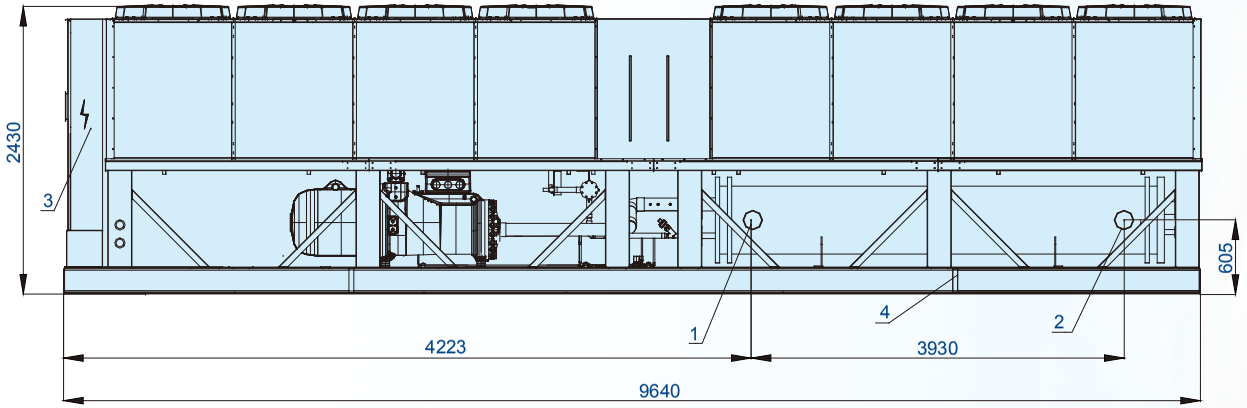


TOP VIEW

Air Discharge

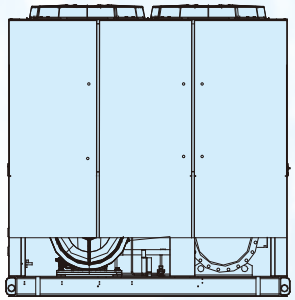


LEFT VIEW



FRONT VIEW

Air Discharge



RIGHT VIEW

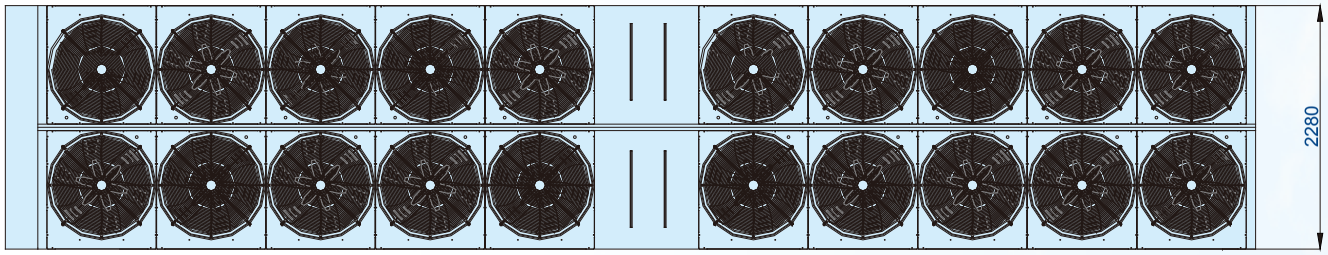
① CHILLED WATER INLET

② CHILLED WATER OUTLET

③ ELECTRICAL CONTROL BOX

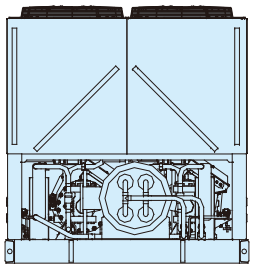
④ LIFTING POINTS

LSBLGW1420/C

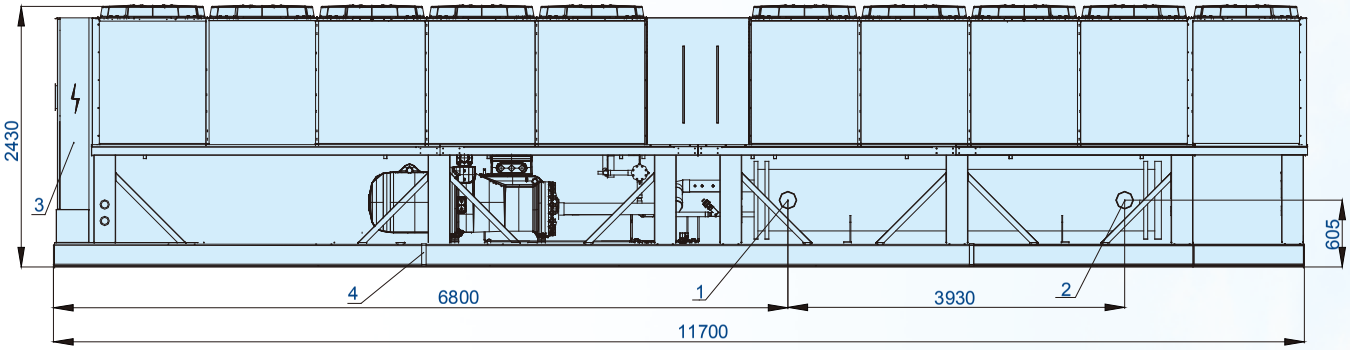


TOP VIEW

Air Discharge

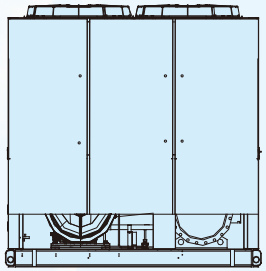


LEFT VIEW



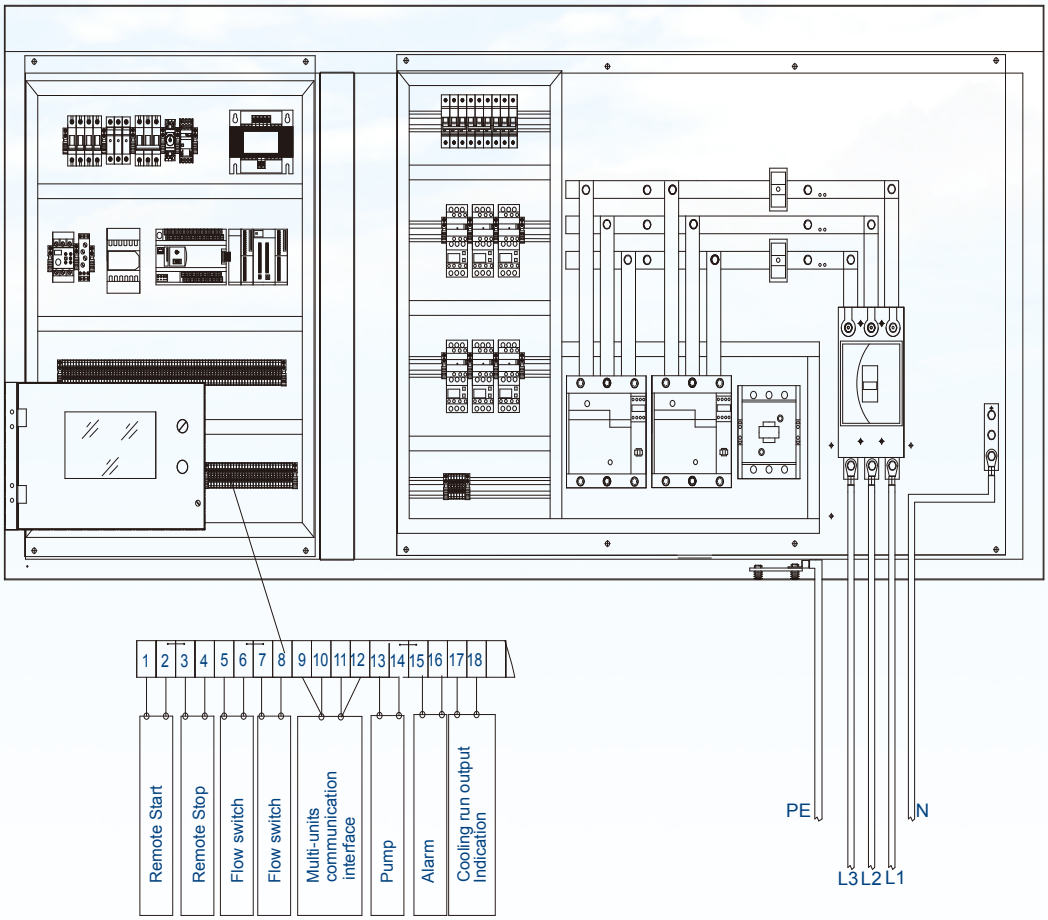
FRONT VIEW

Air Discharge

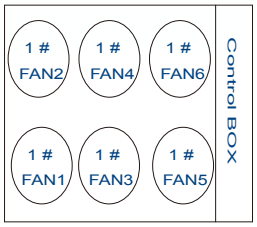


RIGHT VIEW

Typical schematic wiring diagram



FAN NUMBER



TA1 TA2	Current Transformer	SQ3 SQ4	Protection Switch	SQ2	Anti-Freeze Switch
1QF	Moulded Case Circuit Breaker	SL1	Oil Level Switch	KA1	Intermediate Relay
QF1 QF2 QF3	Air Switch	RTD1~RTD5 NTC6	Temperature Sensor	EXV	Electrical Expansion Valve
FU1 FU2 FU3	Fuse	YV1~YV8	Solenoid Valve	2QF 3QF 4QF 5QF 6QF	Miniature Circuit Breaker
KR1	Power Protection Module	SP1 SP2 SP3	Pressure Switch	A10	Power of Electrical Expansion Valve
KM11 KM12 KM13	Compressor Contactor	TP1 TP2	Pressure Transducer	SA	Key Switch
FR FR1~FR10	Overload Relay	A1	CPU Module of PLC		
M	Motor	A2	Extended Adaptor of PLC		
KT1	Time Relay	A3	Extended Output Module of PLC		
KM1~KM10	Fan Contactor	A6	Temperature Module of PLC		
T1	Isolation Transformer	A7	Analog Singles Mixed Module of PLC		
SB	Emergency Stop	A9	Switch Power		
EH1 EH2	Compressor Heater	A8	Electrical Expansion Valve Module		
SQ1	Water Flow Switch	HMI	Touch Screen		

Rigging instructions

Attention to riggers:

Hooking rigging sling thru holes in base rail, as shown below.

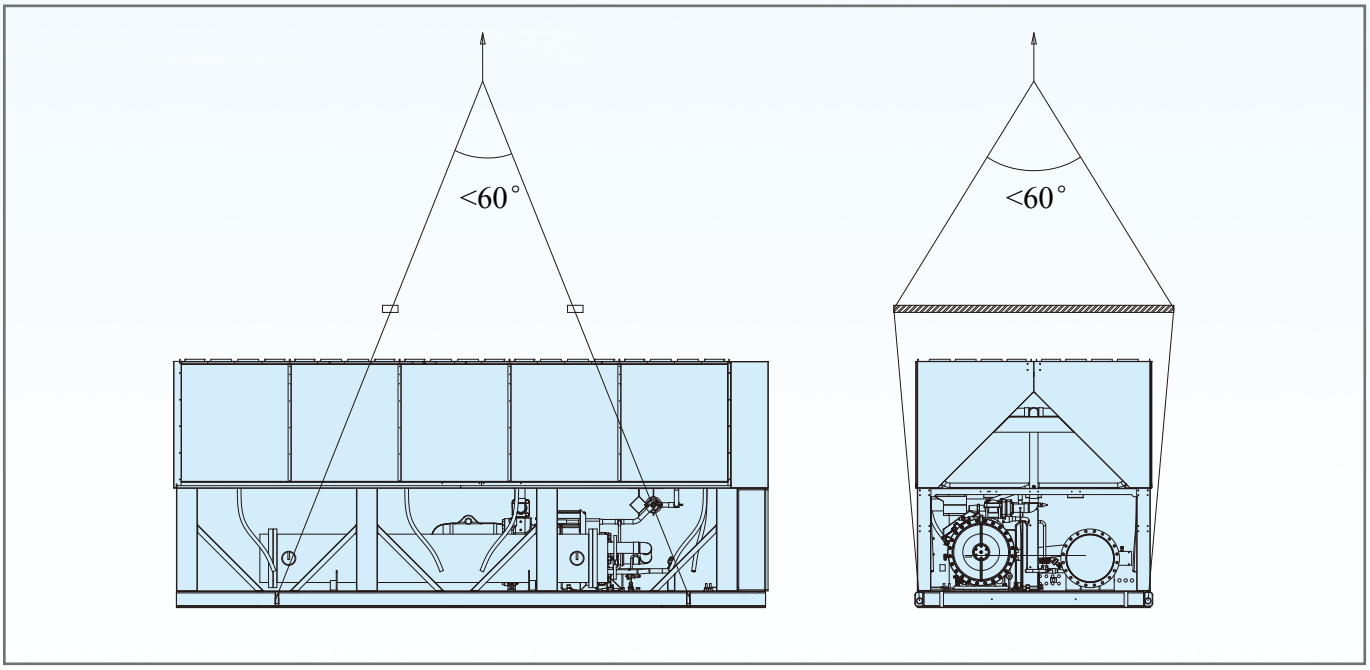
Center of gravity is not unit center line. Ensure center of gravity aligns with the main lifting point before lifting.

Use spreader bar when rigging, to prevent the slings from damaging the unit.

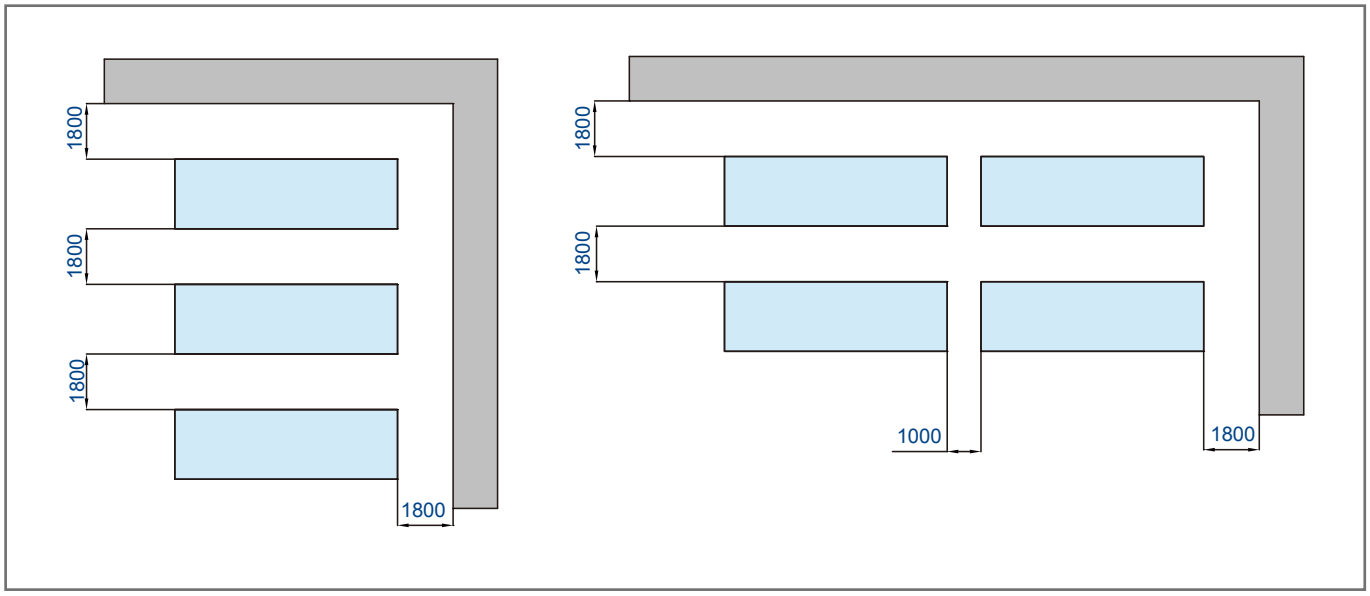
Caution:

All panels should be in place when rigging. Care must be taken to avoid damage to the coils during handing.

Insert packing material between coils & slings as necessary.

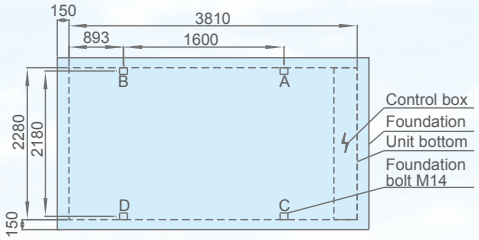


Installation clearance

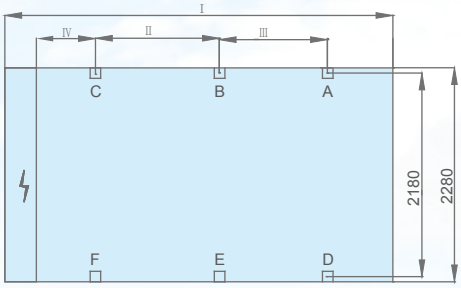


Mounting location

LSBLGW380/C

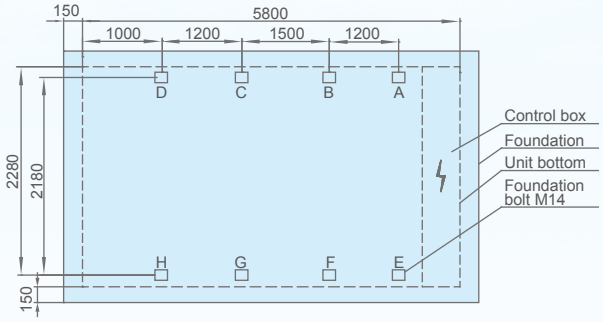


LSBLGW500(600)/C

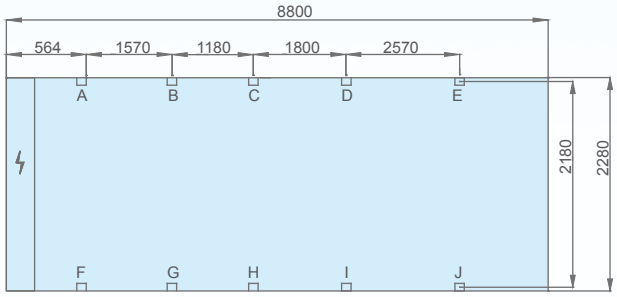


MODEL	500C	600C
I	4680	5800
II	1630	1500
III	2070	1500
IV	530	2000

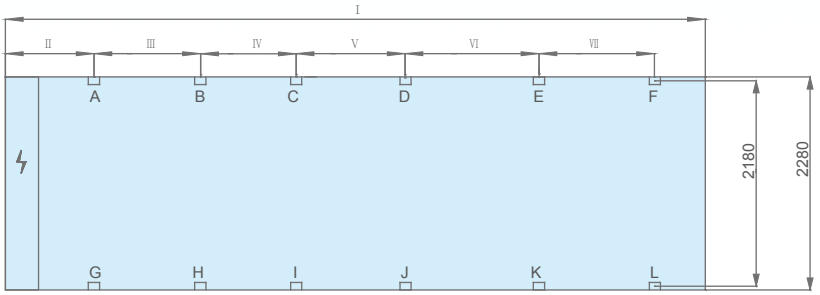
LSBLGW720/C



LSBLGW900/C

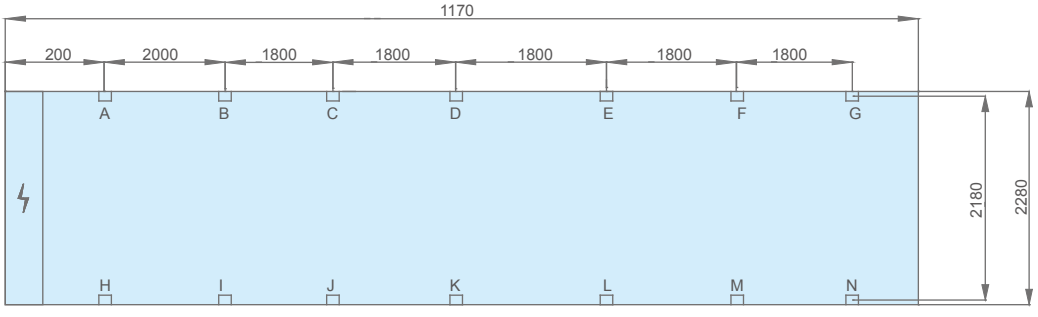


LSBLGW1000(1200)/C



MODEL	1000C	1200C
I	9640	9640
II	390	400
III	1790	1800
IV	1500	1500
V	1500	1500
VI	1800	1800
VII	1800	1800

LSBLGW1420/C

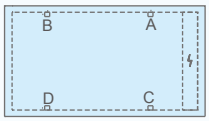


Note: All dimensions are in mm

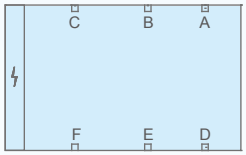
Load distribution

Unit:KG

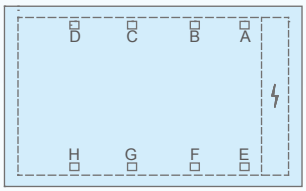
Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N
LSBLGW380/C	869	901	869	901	-	-	-	-	-	-	-	-	-	-
LSBLGW500/C	633	855	832	633	855	832	-	-	-	-	-	-	-	-
LSBLGW600/C	815	934	921	815	934	921	-	-	-	-	-	-	-	-
LSBLGW720/C	687	765	800	758	687	765	800	758	-	-	-	-	-	-
LSBLGW900/C	814	944	947	747	733	814	944	947	747	733	-	-	-	-
LSBLGW1000/C	726	912	917	732	731	732	726	912	917	732	731	732	-	-
LSBLGW1200/C	789	912	905	779	777	773	789	912	905	779	777	773	-	-
LSBLGW1420/C	794	925	954	936	800	798	798	794	925	954	936	800	798	798



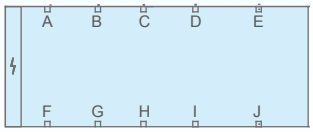
LSBLGW380/C



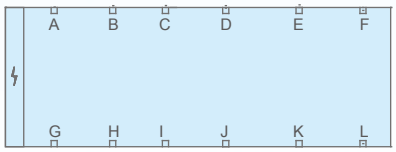
LSBLGW500(600)/C



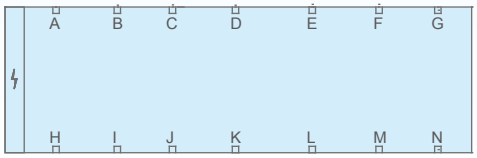
LSBLGW720/C



LSBLGW900/C



LSBLGW1000(1200)/C



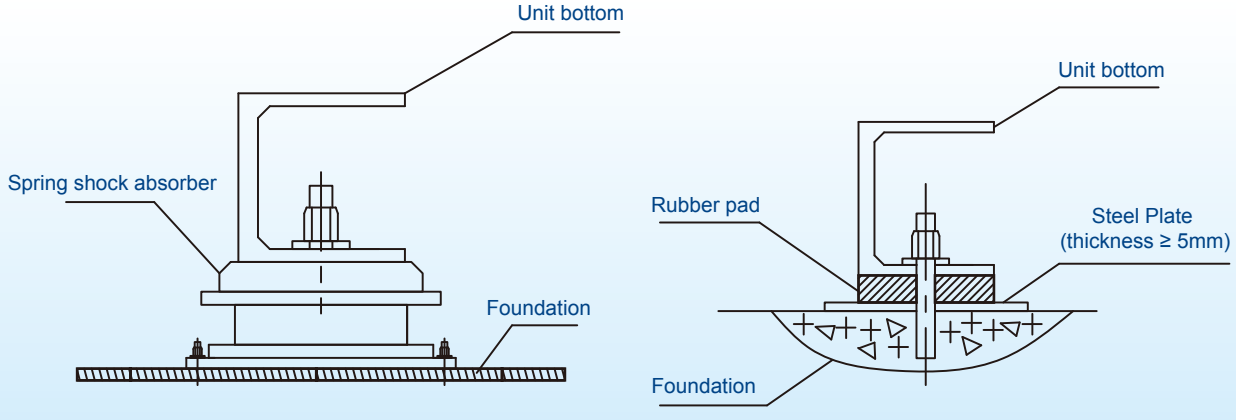
LSBLGW1420/C

Installation requirements:

■1. Be sure to take the base preparation and structure into consideration seriously during installation,especially avoid the intensity and noise of floor when the machine is installed on the top stoery ofbuildings. It is recom mended to discuss with the building designer before conducting installation.

■2. The surrounding of the base shall be equipped with drainage ditch and make sure it can dewatering freely for convenient in drain.

■3. Anti-vibration pad shall be placed between the base frame and fundation in order to avoid transmitting vibration and noise during the runtime of the unit, and make sure the unit is aclinic during installation.



Memo

1503-1C1411

GD Midea Heating & Ventilating Equipment Co., Ltd.
Is certified under the ISO 14001 International standard
for environmental management.
Certificate No.15912E10020R0L

GD Midea Heating & Ventilating Equipment Co., Ltd.
Is certified under the ISO 9001 International standard
for quality assurance.
NO.01 100 019209

GD Midea Heating & Ventilating Equipment Co., Ltd.
Certificate of Occupational Health and Safety Management System
Certificate No. 15912S20006R0L-1.

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Note: The data in this book may be changed without notice for further improvement on quality and performance.

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