

Aqua Tempo Super Series



Product Lineup

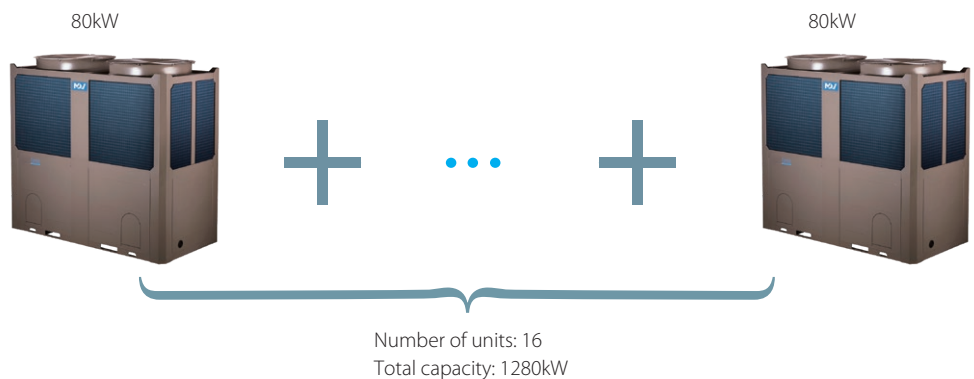
Capacity (kW)	35	65	80
Appearance			
Series			
SS-LA	●	●	●

SS-LA: Super series with low ambient temperature cooling function

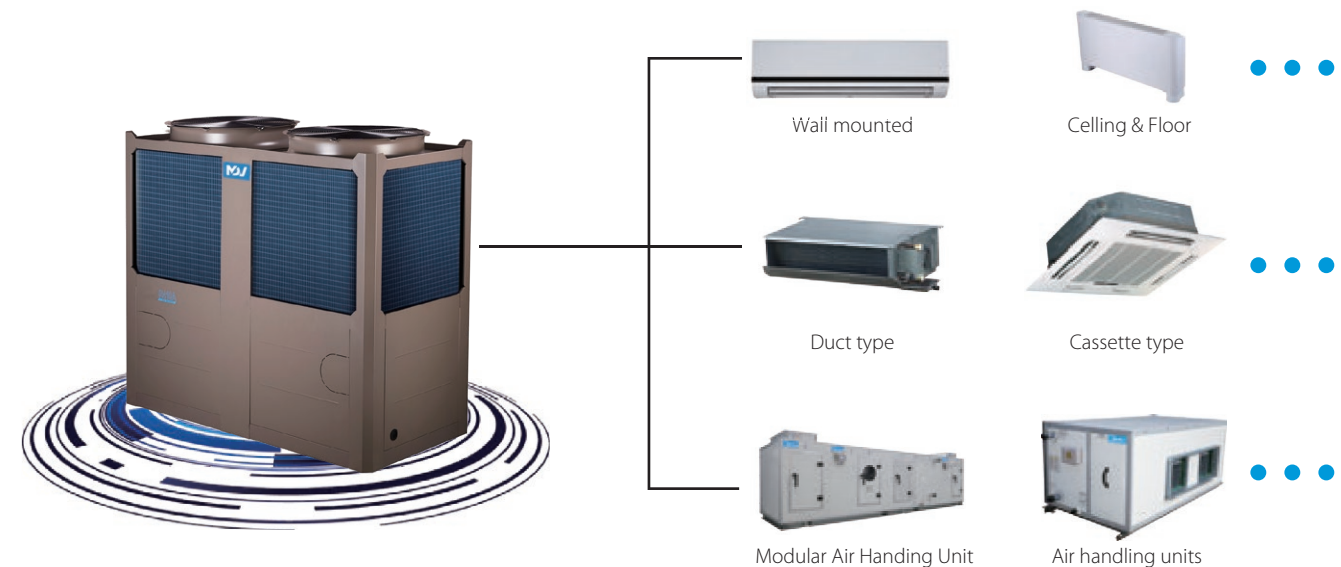
Features

Wide application range

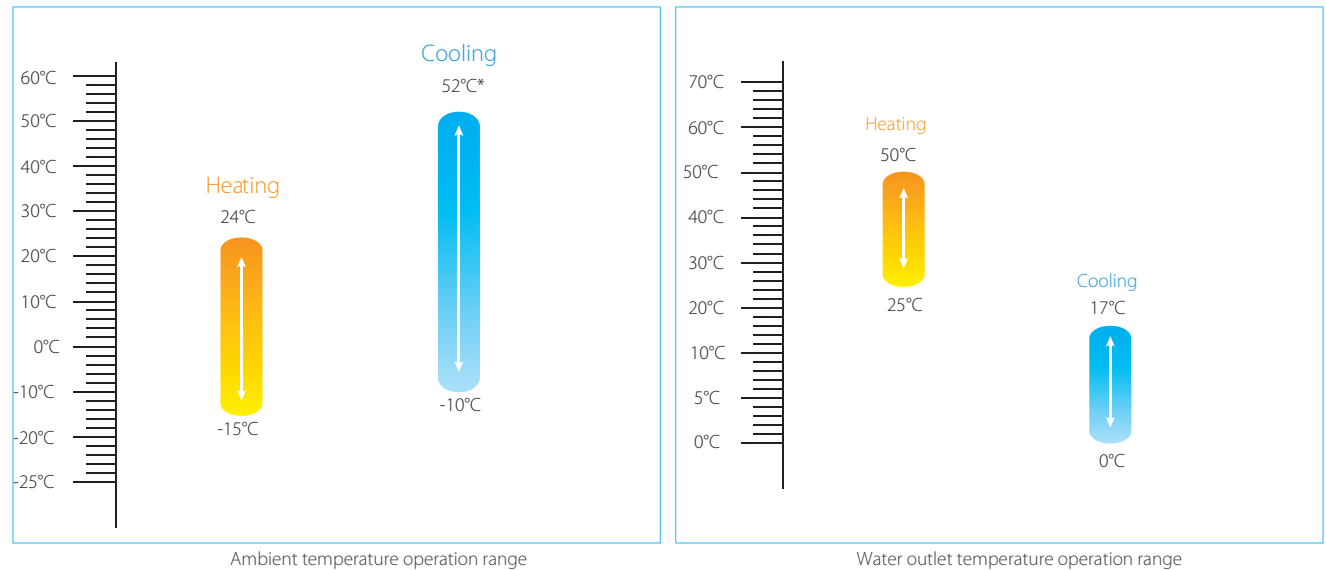
- Aqua Tempo Super chillers with cooling capacity ranging from 35kW to 80kW, combination capacity can be up to 1280kW.



- Freely combine with fan coil units and air handling units. Home owners may choose the best types according to their functional needs.



- Wide ambient temperature and water outlet temperature operation ranges

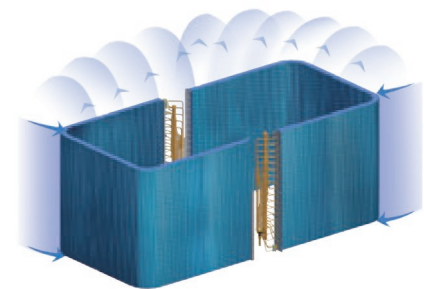


*It is the maximum range that can be covered by the series. For specific models' range, please refer to the specifications.

High quality components

- H shape high performance heat exchanger

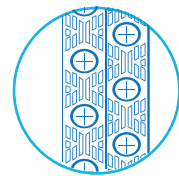
The chillers use new structure design, H shape condenser, 360°air intake, increase the heat exchanging area, efficiently enhance the heat exchange efficiency, and decrease the covering area.



H shape condenser uses inner grooved copper tube and hydrophilic aluminum foil, greatly improve the heat exchange efficiency.

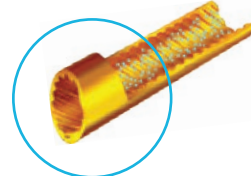
● High performance heat exchanger

Enlarge heat-exchanging area



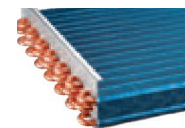
Fin

Enhance heat transfer



Inner-threaded pipe

High efficiency



Fin + inner-threaded pipes

Hydrophilic film fins and inner-threaded copper pipes optimize heat exchange efficiency. The specially coated blue fins enhance durability and protect against corrosion from air, water and other corrosive agents, assures a longer coil service life.

Heat exchanger aluminum foil

> Standard products:
200h of neutral salt mist

> Heavy anti-corrosion products:
1000h of neutral salt mist
140h of acid salt mis

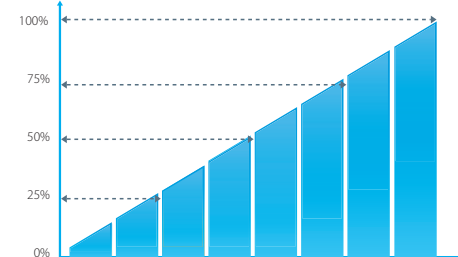
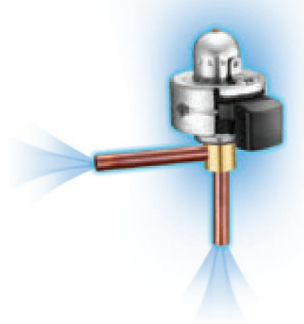
Heat exchanger copper pipe

> Standard products:
24h of neutral salt mist

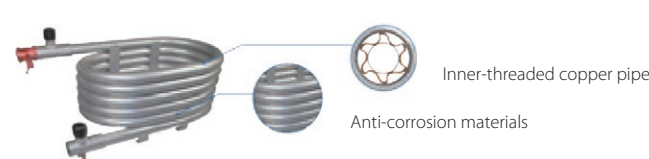
> Heavy anti-corrosion products:
150h of neutral salt mist

● EXV for more precise flow control

Patented liquid distribution components to maximize performance and minimize defrost impact.
500 steps EXV plus capillary for stable and accurate gas flow control.
Fast response resulting in higher efficiency and improved reliability.

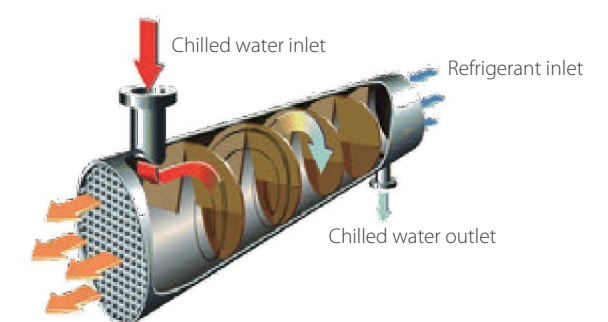
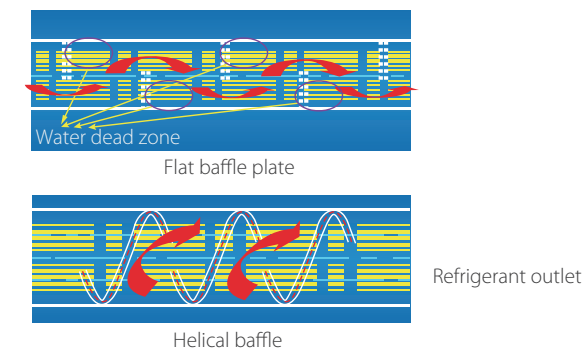


● Tube-in-tube & shell-tube heat exchanger



Inner grooved copper pipe, increased area of heat exchange, improved efficiency.

Anti-corrosion shell increases the life span of heat exchanger.



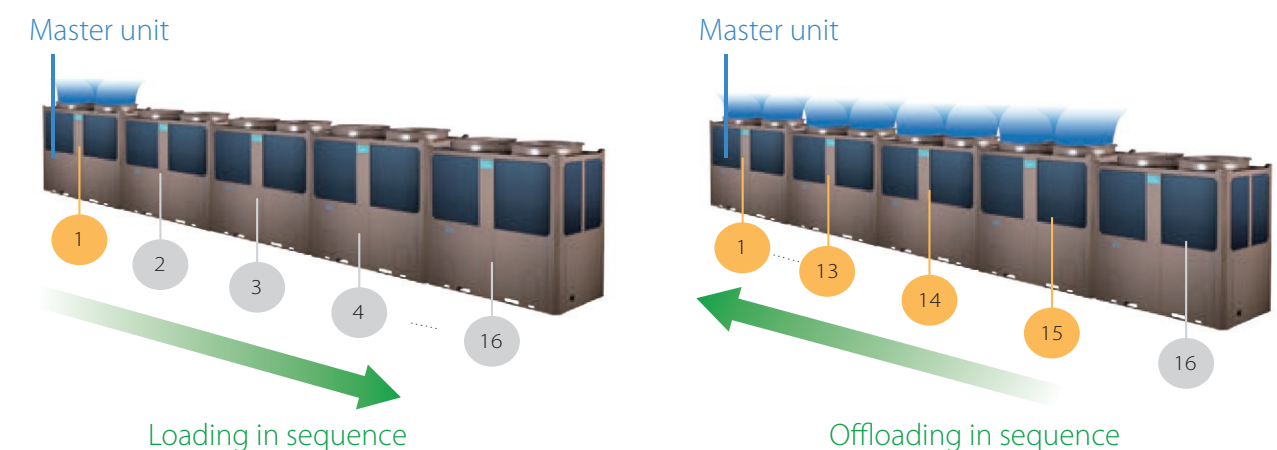
For shell-tube heat exchanger, the module adopts the new helical baffle design to avoid the rectangular place of water dead zone, greatly improve the heat exchange efficiency.

High reliability

● Alternative cycle duty operation

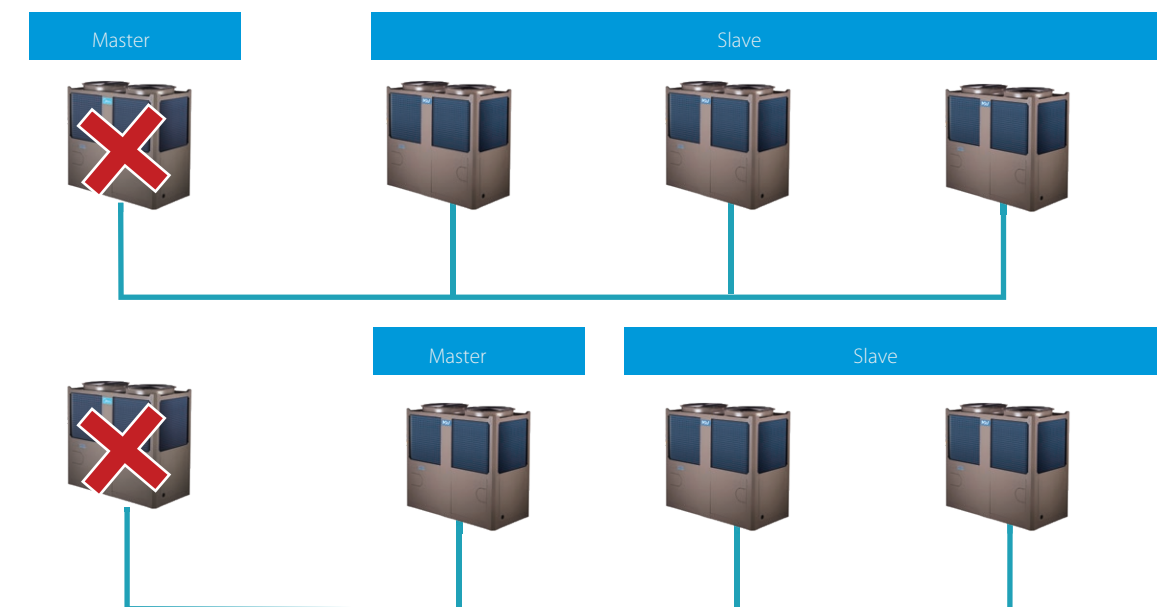
In one combination module, all slave units operate as alternative in cycle duty to keep equal running time, realize higher stability, better reliability and longer lifespan.

For example, 16 modules combination, no.1 is master unit, others are slave units.



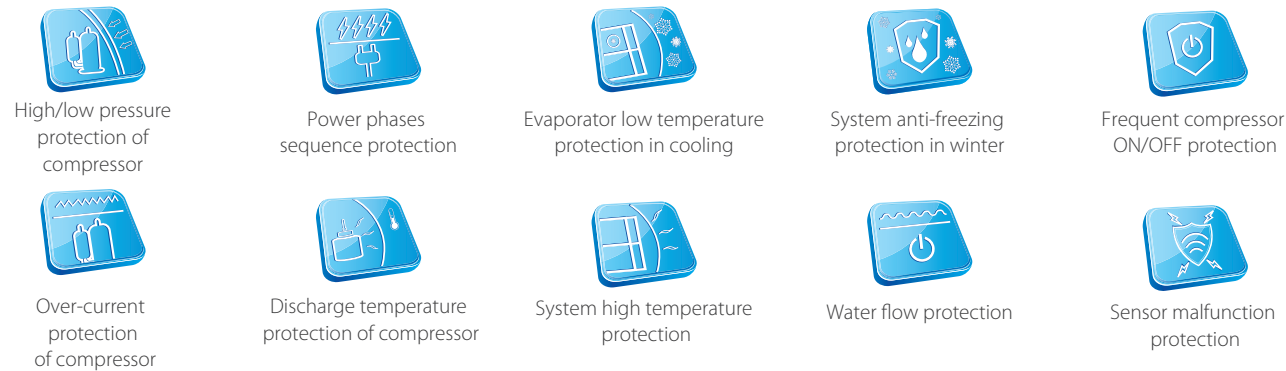
● Back-up functions

In a combination system, if one module fails, other modules can be used as backup and continue the operation.



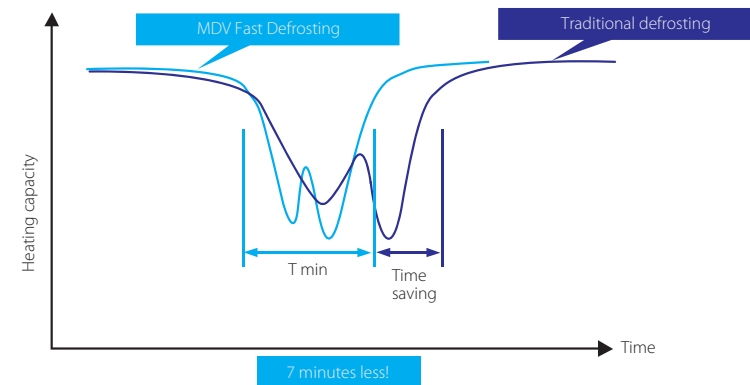
● Reliable protections

Multiple protections are adopted to ensure system stable running.



● Intelligent defrosting technology

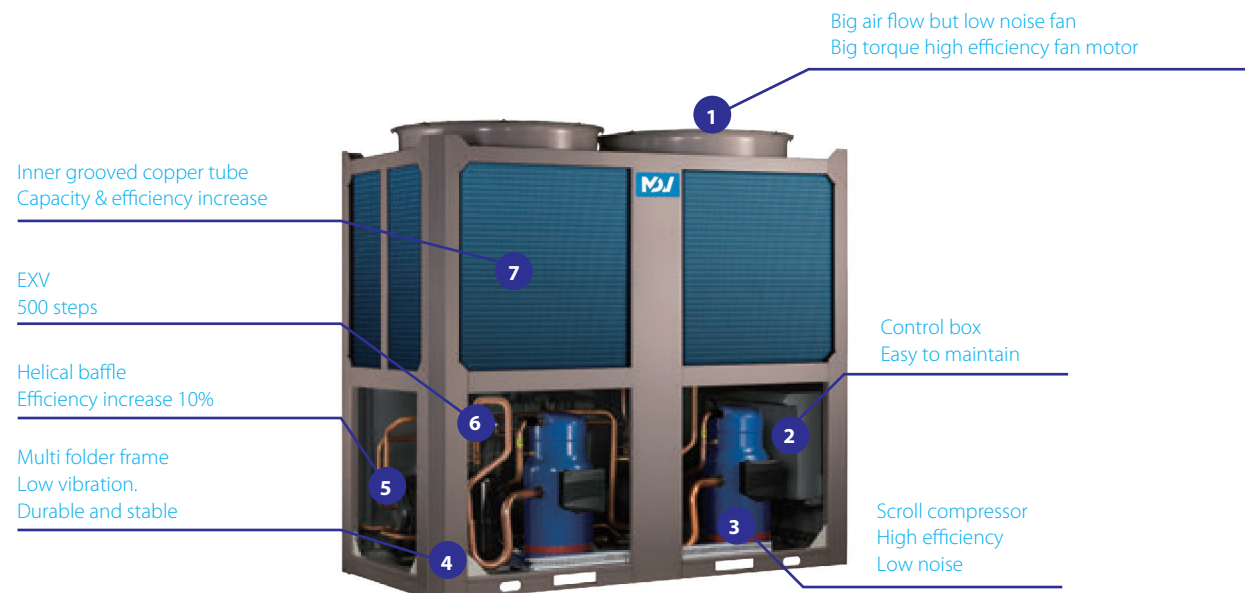
Model alternative defrosting technology ensures little fluctuation on water temperature. Manual defrosting program is available for service purpose.



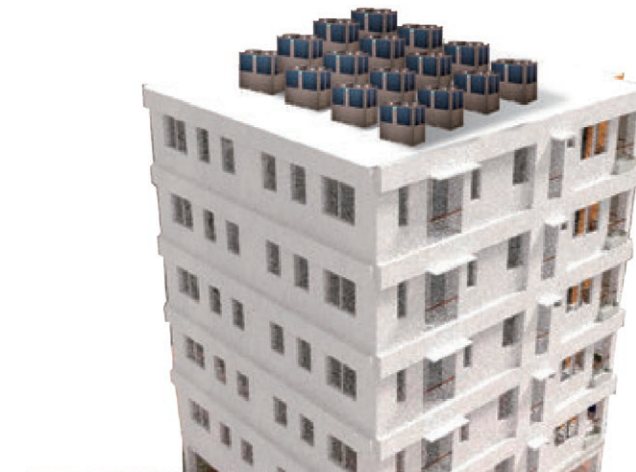
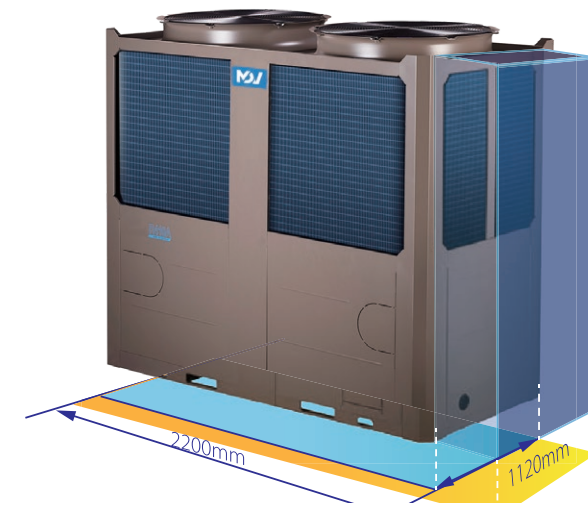
Flexible installation

● Compact structure design

Super power chiller uses compact structure design, light weight, easy for transportation and installation.





Compact design saves space and transportation cost.



Easy control

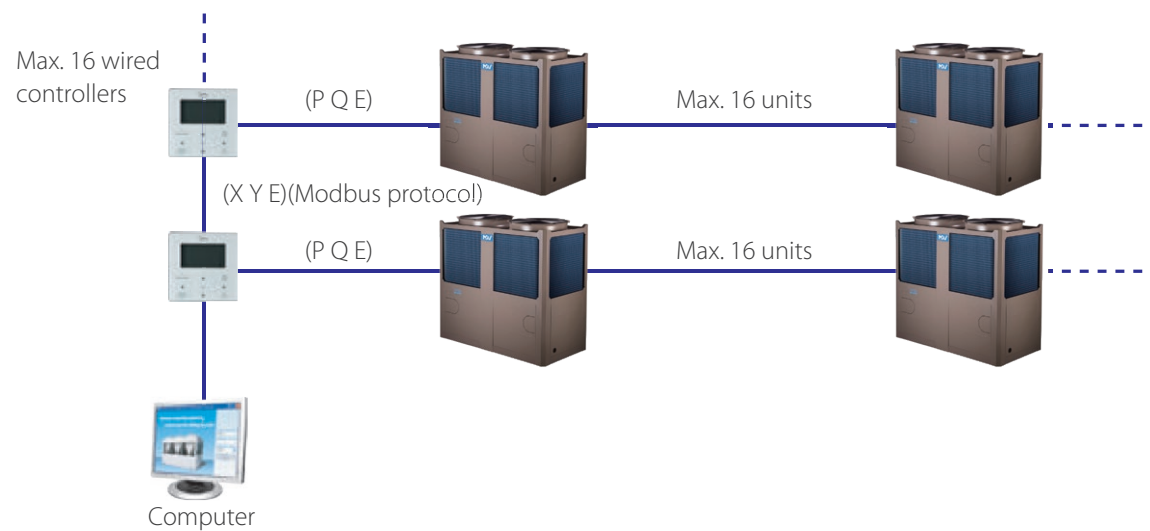
- Touch key wired controller as standard accessory to control the chillers.



Model	KJRM-120D/BMK-E(standard)	KJR-120A/MBTE(optional)
Appearance		
Main Functions	Touch key operation Parameter setting and LCD display Real time clock control. Multiple timer Power-off memory function Modbus(Customized) Address setting Parallel function	Mechanical butoon Parameter setting and LCD display Real time clock control. Multiple timer Power-off memory function Address setting Parallel function Weekly timing function
Max. connection PCBs	16	16

● Modbus function

Modbus is an open protocol that is widely used, especially in BMS building control systems. Modbus function can be customized by adding X, Y, E ports on wired controller KJRM-120D/BMK-E. It can connect Max. 16 wired controllers and each controller can control Max. 16 units.



● Convenient operation

Remote on/off function, remote heating/cooling function and alarm function can be easily realized by connecting switches or light/sound devices with PCB.



Note: When use the remote control function, KJRM-120D/BMK-E should not be connected to the unit and water setting temperature is default. If water temperature setting is needed, KJR-120A/MBTE wired controller can be used to connect to the unit.

Specifications

SS-LA series

Model			MDVM-35BR1-S	MDVM-65BR1-S	MDVM-80BR1-S
Series			SS-LA	SS-LA	SS-LA
Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling ¹	Capacity	kW	35	65	80
	Input	kW	11.5	20.4	25.8
	EER		3.04	3.19	3.10
Heating ²	Capacity	kW	37	69	85
	Input	kW	11.3	21.5	26.5
	COP		3.27	3.21	3.21
Compressor	Type		Fixed Scroll	Fixed Scroll	Fixed Scroll
	Quantity	Pieces	1	1	2
Air side heat exchanger	Type		Finned tube	Finned tube	Finned tube
	Fan motor type		AC Motor	AC Motor	AC Motor
	Quality of fan motor	Pieces	1	2	2
Water side heat exchanger	Type		Tube-in-tube	Shell-tube	Shell-tube
Refrigerant	Type		R410A	R410A	R410A
	Charged volume	kg	6	10.5	13
Throttle type			EXV	EXV	EXV
Sound pressurer level ³		dB(A)	65	67	67
Unit net dimension(DxHxW)		mm	1,020×1,770×980	2,000×1,770×960	2,000×1,770×960
Packing dimension(DxHxW)		mm	1,070×1,900×1,030	2,090×1,890×1,030	2,090×1,890×1,030
Net/Gross weight		kg	300/310	530/590	645/710
Pipe connections		mm	DN40	DN65	DN65
Ambient temperature range	Cooling	°C	-10~52	-10~46	-10~46
	Heating	°C	-15~24	-15~24	-15~24
LWT setting range	Cooling	°C	5~17	5~17	5~17
	Heating	°C	40~50	40~50	40~50
LWT setting range	Cooling	°C	0~17	0~17	0~17
	Heating	°C	25~50	25~50	25~50

Notes:

1. Water inlet/outlet temperature: 12/7°C; Outdoor ambient temperature 35°C DB.

2. Water inlet/outlet temperature: 40/45°C; Outdoor ambient temperature 7°C DB/6°C WB.

3. 1m away in open field.

4. The data is for low water outlet temperature function

Dimensions (Unit:mm)

MC-SS35-RN1L-B

MC-SS65/RN1L
MC-SS80/RN1L

Model	A	B	C	D	E	F
MC-SS35-RN1L-B	1020	980	1770	237	152	400
MC-SS65/RN1L MC-SS80/RN1L	2000	960	1770	336	506	1420

