

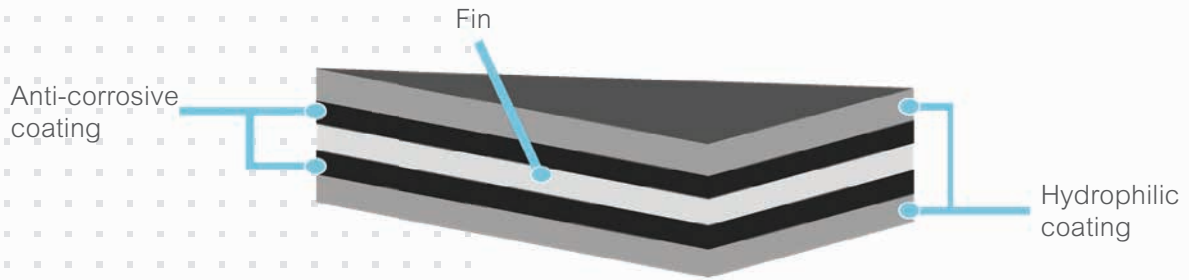


ROOFTOP PACKAGED UNIT

2023-2024

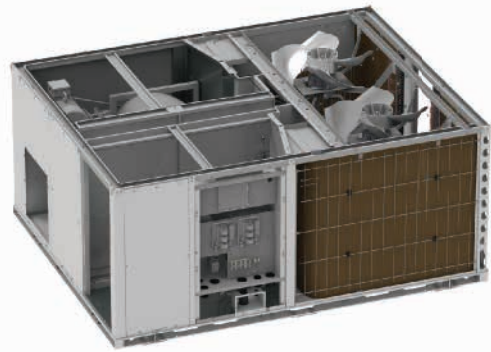
Anti-corrosion heat exchanger

The outdoor heat exchanger fins are treated with anti-corrosive golden coating to pass the 1000h neutral spray test, which is with good corrosion resistance.



High anti-corrosion outer case

All external sheet metals adopt spraying treatment, which can bear 500h of neutral salt spray test, while the general sheet metal can only withstand 200h of salt spray test; the durability has been improved by 250%. All bolts use stainless steel materials, with high corrosion resistance.



**More convenient
and comfortable**



Control of dual wired controllers

In order to provide convenient operation to users, we have developed the control function of dual wired controllers. In this case, the user can install the wired controller in different places for convenient operation.



Power-off memory function

The user can set power-off memory function. If this function is activated, the unit will automatically operate in previous setting mode when power recovers after power failure.

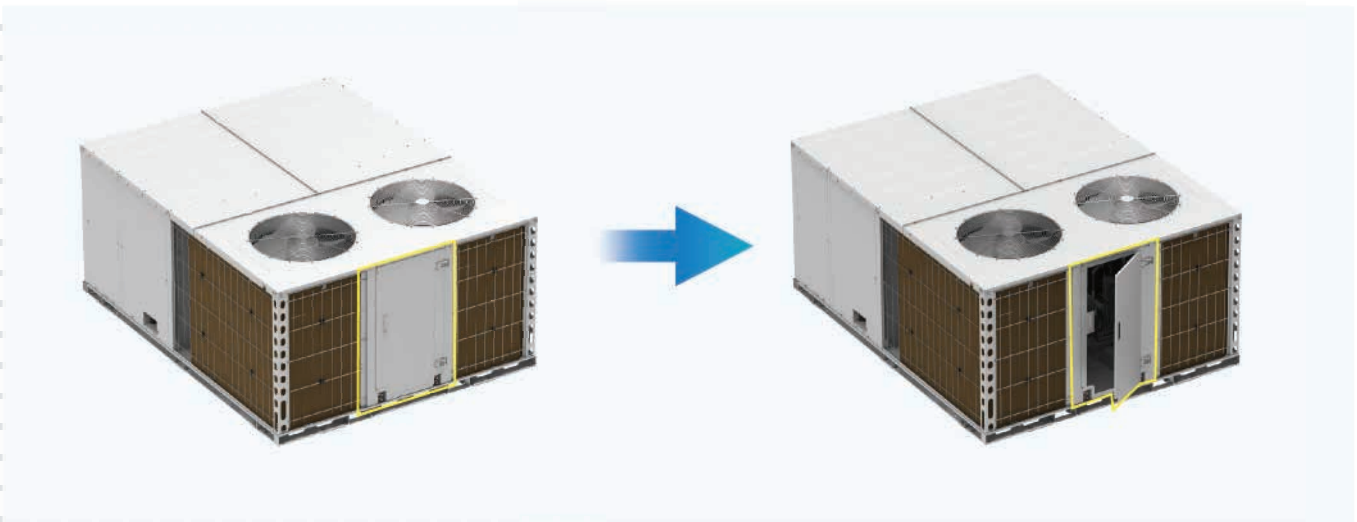
Cold air prevention function

When the unit just starts heating or the outdoor unit just finishes defrosting, the temperature of indoor evaporator is quite low. If the indoor fan operates in this case, cold air will blow out. Our products are optimized in design to prevent cold air so as to improve the user's comfort.

Maintenance and Installation

Convenient for disassembly and assembly (outdoor case)

- > The outdoor cavity has a hinge-type access door. The access door can be opened and closed, no need to remove screws (bolts).
- > The width of the access door is 540mm (only applicable for 30 tons of heat pump unit). The after-sales person can get into the outdoor cavity for maintenance.
- > It's convenient to check and replace the compressor, outdoor motor, four-way valve, etc.



Convenient for disassembly and assembly (indoor case)

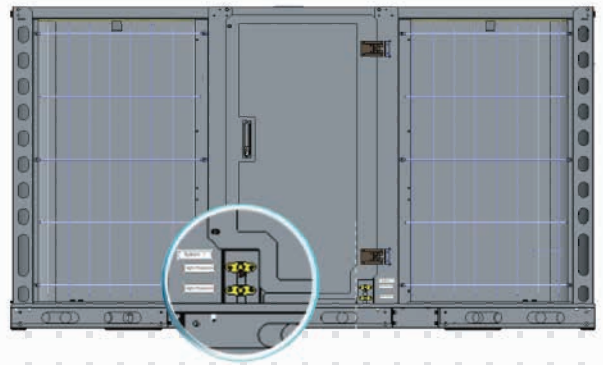
The case panels at the fan side of the indoor cavity and electric box side are easy for disassembly, convenient for electric wiring and belt maintenance.



Rooftop Packaged Unit General Features

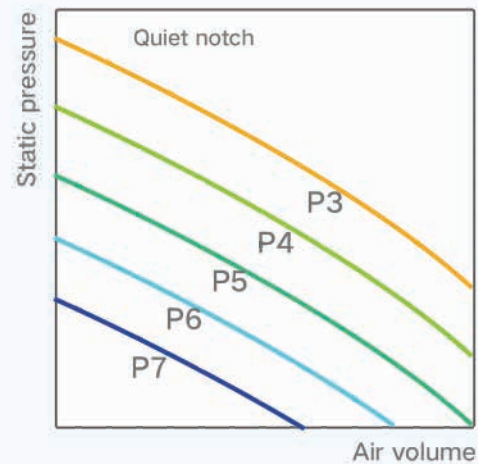
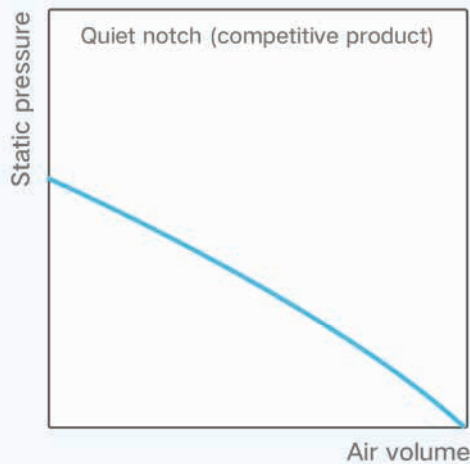
Detection for high/low pressure

All units are designed with outdoor detection port for high/low pressure, which can measure the high/low pressure even if the unit is still working, convenient for the after-sales person to check the system pressure, vacuum pump and add refrigerant.



Adjustable static pressure of indoor fan

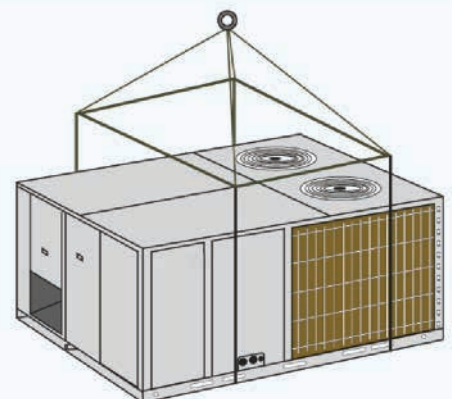
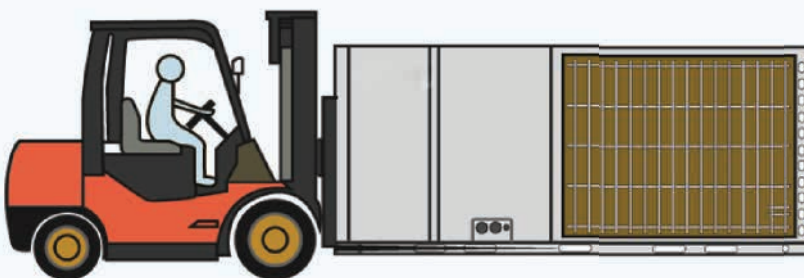
The indoor fan has five static pressure modes for flexible selection based on different installation requirements, with high engineering adaptability. Static pressure can be set by the wired controller, convenient for operation.



Note: Only for 10ton or below units.

Flexible transformation

The sheet metal of the base is made from thick galvanized stainless steel and includes holes for forklift and hoisting. Therefore, the unit can be transported via forklift and hoisting, flexible and convenient.



Inverter Rooftop Packaged Unit (220V)

It adopts DC inverter design with capacity range from 3~20 tons. Side supply and side return air discharge way are applied. It can be installed on rooftops and outdoor flat floors, which is applicable for shopping malls, hotels, halls, apartments, villas and other buildings.



- The whole series adopts DC inverter compressor, and the compressor will adjust the frequency intelligently. Temperature control is accurate, and energy efficiency and reliability are high.
- The outdoor side applies DC inverter motor with high back electromotive force. The efficiency is greatly improved compared with the AC motor.
- Adopt the self-innovated closed loop startup control mode to make the output torque rapidly follow the load torque, which needs small startup electricity current, reliable for startup.
- The high-efficiency fan blade adopts CFD simulation technology to optimize the matching of blade type and blade angle. In addition to the special trail edge design, the working area of blade is effectively increased and the air volume is also greatly increased.
- The working area of blade is effectively increased and the air volume is also greatly increased.
- Sinclair rooftop units are with high voltage protection, low voltage protection, overcurrent protection, discharge protection, phase sequence protection and other protections.
- Sinclair rooftop units are with strong anti-grid fluctuations design. The performance is stable in ultra wide voltage range from 198V to 264V.
- Anti-wind startup design is used to solve the problem that the unit cannot start smoothly in the reverse operation under the high wind environment.
- The outdoor heat exchanger fins are treated with anti-corrosive golden coating to pass the 1000h neutral spray test, which has good corrosion resistance.
- The sheet metal of base is made of thick galvanized steel sheet. It is designed with forklift holes and hanging holes, so that you can choose forklifting or hanging during installation, which is flexible and convenient.
- Centralized control is available without connecting the wired controller. Maximum 36 sets of unit can be controlled at the same time.

Inverter Rooftop Packaged Unit (220V)

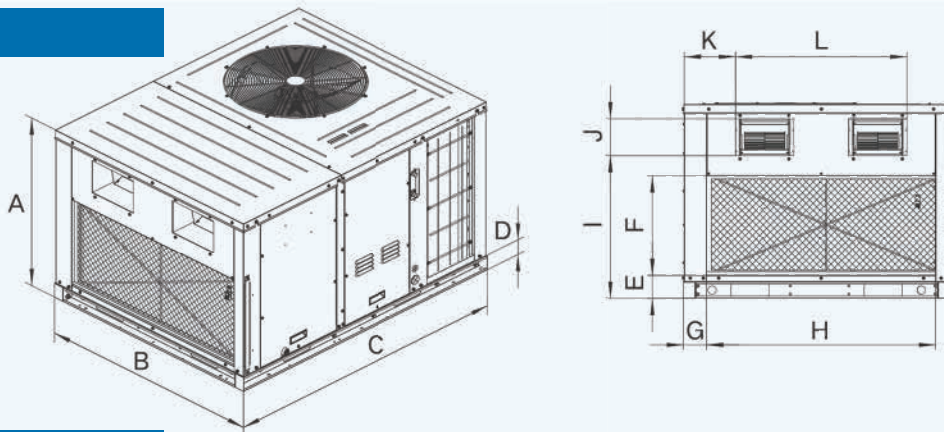
Item	Nominal operating condition (temperature)				Operating range (temperature)	
	Outdoor condition		Indoor condition		Outdoor condition	
	DB (°C)	WB (°C)	DB (°C)	WB (°C)	DB (°C)	
Cooling	35	24	27	19	18-48	
Heating	7	6	20	15	-10-24	

Specifications

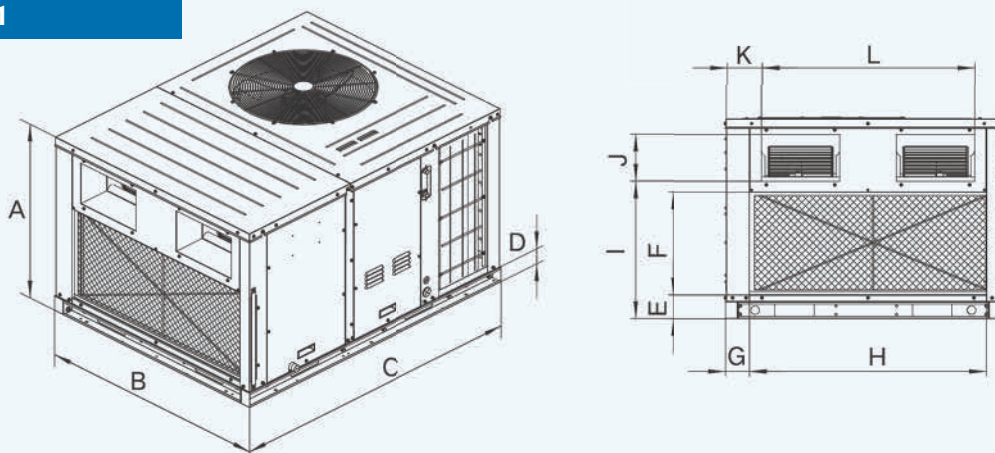
Model			SRI010A1	SRI019A1
Capacity	Cooling/Heating	kW	10.50/11.50	19.50/20.50
	Cooling/Heating	RT	3.00/3.27	5.50/5.83
Power supply		V/Ph/Hz	220-240V ~ 50/60Hz	220-240V ~ 50/60Hz
Power input	Cooling	kW	3.1	6.8
	Heating	kW	3.2	5.8
Current input	Cooling	A	13.5	30.0
	Heating	A	14.0	25.5
Refrigerant charge volume		kg	3.5	5.0
Airflow volume		CFM	1177	1942
		m³/h	2000	3300
Sound pressure level		dB(A)	61	68
ESP	Rated	Pa	50	60
	Range	Pa	0-150	0-180
Drainage Connection Size (Outer diameter × wall thickness)		inch	3/4"(NPT)	3/4"(NPT)
Dimension (W × D × H)	Outline	mm	1450 × 1120 × 815	1450 × 1120 × 815
	Package	mm	1463 × 1133 × 860	1463 × 1133 × 860
Net weight/Gross weight		kg	206/227	268/289
Loading quantity	40'GP	unit	32	32
	40'HQ	unit	48	48

Dimensions

SRI010A1



SRI019A1



Unit: mm

DIMENSION	A	B	C	D	E	Size of air return		G	I	Size of air supply		K
						F	H			J	L	
SRI010A1	815	1120	1450	70	96	419	962	98	599	155	720	216
SRI019A1	815	1120	1450	70	96	419	962	98	599	191	866	142

Note: Above diagrams may be different from actual mode.

Inverter Rooftop Packaged Unit (380V)

It adopts DC inverter design with capacity range from 5.5~30 tons. Side supply and side return air discharge way are applied. It can be installed on rooftops and outdoor flat floors, which is applicable for shopping malls, hotels, halls, apartments, villas and other buildings.



- The whole series adopts DC inverter compressor, and the compressor will adjust the frequency intelligently. Temperature control is accurate, and energy efficiency and reliability are high.
- The outdoor side applies DC inverter motor with high back electromotive force. The efficiency is greatly improved compared with the AC motor.
- Adopt the self-innovated closed loop startup control mode to make the output torque rapidly follow the load torque, which needs small startup electricity current, reliable for startup.
- The high-efficiency fan blade adopts CFD simulation technology to optimize the matching of blade type and blade angle. In addition to the special trail edge design, the working area of blade is effectively increased and the air volume is also greatly increased.
- The working area of blade is effectively increased and the air volume is also greatly increased.
- Sinclair rooftop units are with high voltage protection, low voltage protection, overcurrent protection, discharge protection, phase sequence protection and other protections.
- Sinclair rooftop units are with strong anti-grid fluctuations design. The performance is stable in ultra wide voltage range from 342V to 456V.
- Anti-wind startup design is used to solve the problem that the unit cannot start smoothly in the reverse operation under the high wind environment.
- The outdoor heat exchanger fins are treated with anti-corrosive golden coating to pass the 1000h neutral spray test, which has good corrosion resistance.
- The sheet metal of base is made of thick galvanized steel sheet. It is designed with forklift holes and hanging holes, so that you can choose forklifting or hanging during installation, which is flexible and convenient.
- Centralized control is available without connecting the wired controller. Maximum 36 sets of unit can be controlled at the same time.

Inverter Rooftop Packaged Unit (380V)

Item	Nominal operating condition (temperature)				Operating range (temperature)	
	Outdoor condition		Indoor condition		Outdoor condition	
	DB (°C)	WB (°C)	DB (°C)	WB (°C)	DB (°C)	
Cooling	35	24	27	19	18-52	
Heating	7	6	20	15	-10-24	

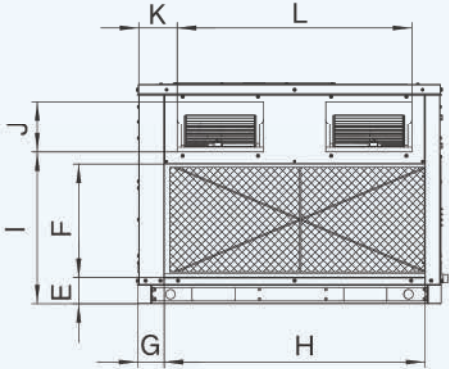
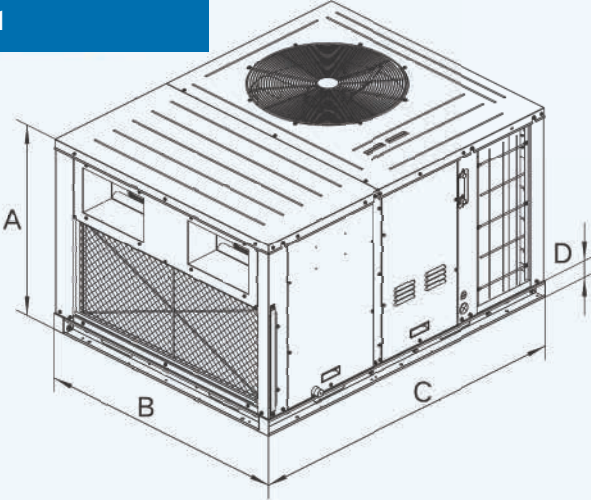
Specifications

Model			SRI022A1	SRI023A1	SRI029A1	SRI034A1
Capacity	Cooling/Heating	kW	22/26	23/28	29/32	34/39
	Cooling/Heating	RT	5.5/7.5	6.2/8.0	7.5/9.0	10.0/12.0
Power supply		V/Ph/Hz	380-415V 3N~ 50/60Hz			
Power input	Cooling	kW	8.5	8.5	9.0	13.5
	Heating	kW	7.5	7.5	8.0	11.5
Current input	Cooling	A	15	15	16	21
	Heating	A	13.5	13.5	14.5	18
Refrigerant charge volume		kg	5	5	8	10
Air flow volume		CFM	1766	1765.5	2589	3413
		m³/h	3000	3000	4400	5800
Sound pressure level		dB(A)	66	66	68	72
ESP	Rated	Pa	60	60	80	90
	Range	Pa	0-180	0-180	0-210	0-210
Drainage Connection Size (Outer diameter × wall thickness)		inch	3/4"(NPT)	3/4"(NPT)	3/4"(NPT)	3/4"(NPT)
Dimension (W × D × H)	Outline	mm	1450 × 1120 × 815	1450 × 1120 × 815	1450 × 1120 × 815	1450 × 1120 × 815
	Package	mm	1463 × 1133 × 860	1463 × 1133 × 860	1463 × 1133 × 860	1463 × 1133 × 860
Net weight/Gross weight		kg	268/289	268/289	348/368	1100/1150
Loading quantity	40'GP	set	32	32	16	16
	40'HQ	set	48	48	32	32

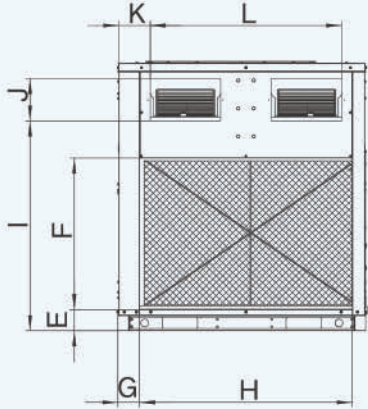
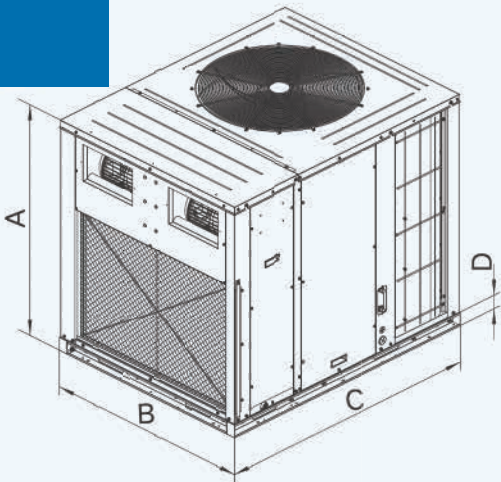
Model			SRI050A1	SRI063A1	SRI085A1	SRI105A1
Capacity	Cooling/Heating	kW	50.1/56.0	63.5/75.0	89.0/101.0	108/128
	Cooling/Heating	RT	14.5/16.0	18.0/21.0	24.0/26.0	30.0/36.0
Power supply		V/Ph/Hz	380-415V 3N~ 50Hz			
Power input	Cooling	kW	23.0	28.5	32.0	43.0
	Heating	kW	16.5	25.0	30.0	38.0
Current input	Cooling	A	39.0	48.0	54.0	73.0
	Heating	A	28.0	42.0	51.0	64
Refrigerant charge volume		kg	12	16	25	14+14
Air flow volume		CFM	5591	8824	9706	9710.25
		m³/h	9500	15000	16500	16500
Sound pressure level		dB(A)	74	76	77	77
ESP	Rated	Pa	130	150	200	125
	Range	Pa	130/200	150/220	200/250	125 / 310
Drainage Connection Size (Outer diameter × wall thickness)		inch	3/4"(NPT)	3/4"(NPT)	3/4"(NPT)	3/4"(NPT)
Dimension (W × D × H)	Outline	mm	2260 × 1140 × 1245	2240 × 1880 × 1250	2850 × 2240 × 1270	2850 × 2240 × 1240
	Package	mm	2283 × 1163 × 1290	2258 × 1898 × 1300	2893 × 2253 × 1290	2863 × 2253 × 1285
Net weight/Gross weight		kg	590/618	820/870	1180/1224	1009/1070
Loading quantity	40'GP	set	10	6	4	4
	40'HQ	set	20	12	8	8

Dimensions

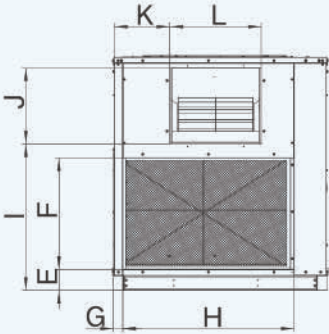
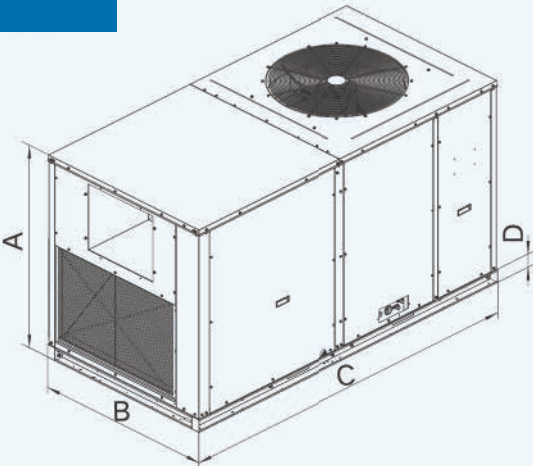
SRI022A1
SRI023A1



SRI029A1
SRI034A1

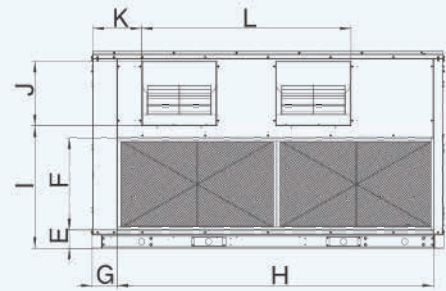
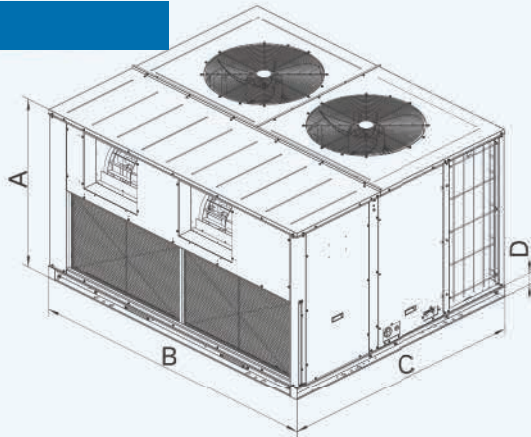


SRI050A1

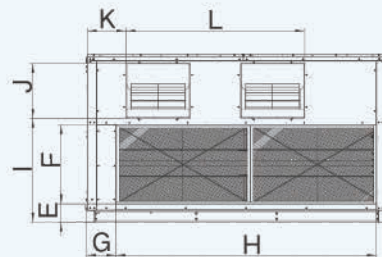
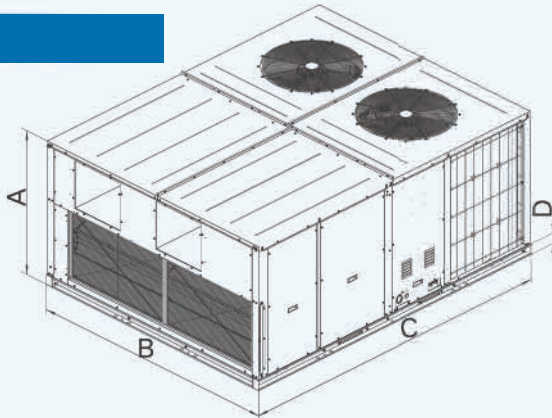


Inverter Rooftop Packaged Unit (380V)

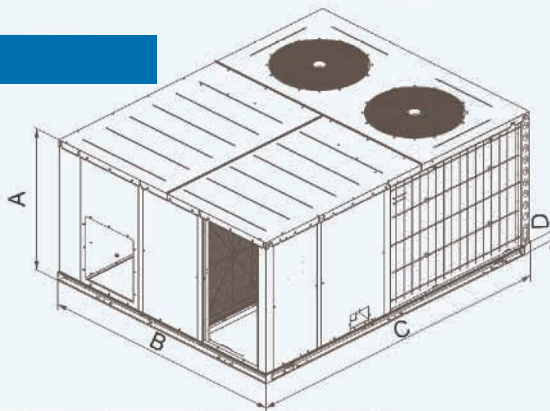
SRI063A1



SRI085A1



SRI105A1



Unit: mm

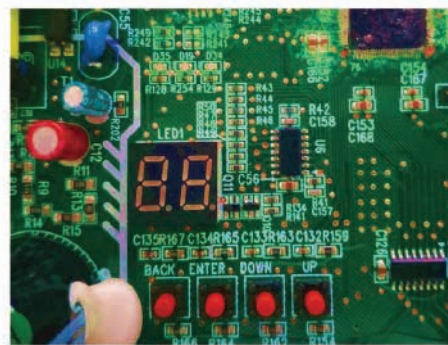
DIMENSION	A	B	C	D	E	Size of air return		G	I	Size of air supply		K
						F	H			J	L	
SRI022A1	815	1120	1450	70	96	419	962	98	599	155	720	216
SRI023A1	815	1120	1450	70	96	419	962	98	599	155	720	216
SRI029A1	1215	1120	1450	70	96	686	962	98	951	191	866	142
SRI034A1	1215	1120	1450	70	96	686	962	98	951	191	866	142
SRI050A1	1245	1140	2260	80	111	595	914	50	782	406	487	297
SRI063A1	1250	2240	1880	85	116	597	2017	158	779	411	1336	309
SRI085A1	1270	2240	2880	90	137	590	1944	220	775	410	1335	290
SRI105A1	1240	2240	2850	80	111	1081	603	90	129	553	513	293

Note: Above diagrams may be different from actual mode.

Controllers

Nixie tube display

The “88” nixie tubes on the indoor wired controller (display board) and the main board inside the outdoor electric box will also display the operation status, error codes, etc. It’s convenient for checking by users and after-sales maintenance.



Intelligent control

Wired controller (standard)

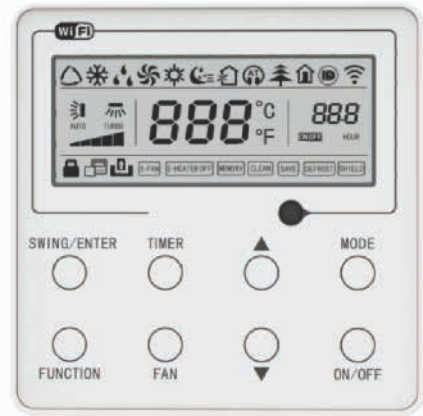
- Standard wired controller;
- Fashionable and compact appearance, with 8 touch buttons and moisture-proof structure;
- Support infrared remote control signal;
- 7 fan speeds;
- Switchover among auto, cooling, dry, fan and heating modes is available;
- With sleep, air, quiet, SE, E-heater, x-fan, memory, low-temperature dry, leave (heating) and filter cleaning reminder functions;
- Adopt two-core communication, low cost, easy to extend and wrong connection prevention.



Wired controller XK117

WiFi control (optional)

- The unit can select Sinclair optional WiFi wired controller for WiFi control;
- Add WiFi function for matching with Sinclair+ APP for remote control; some functions can be set by APP, such as ON/OFF, mode, temperature, timer, etc.



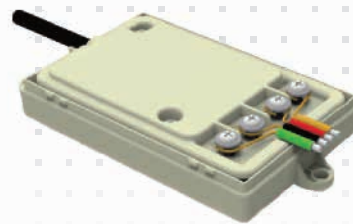
Wired controller XE70-13/G2

Centralized control (optional)

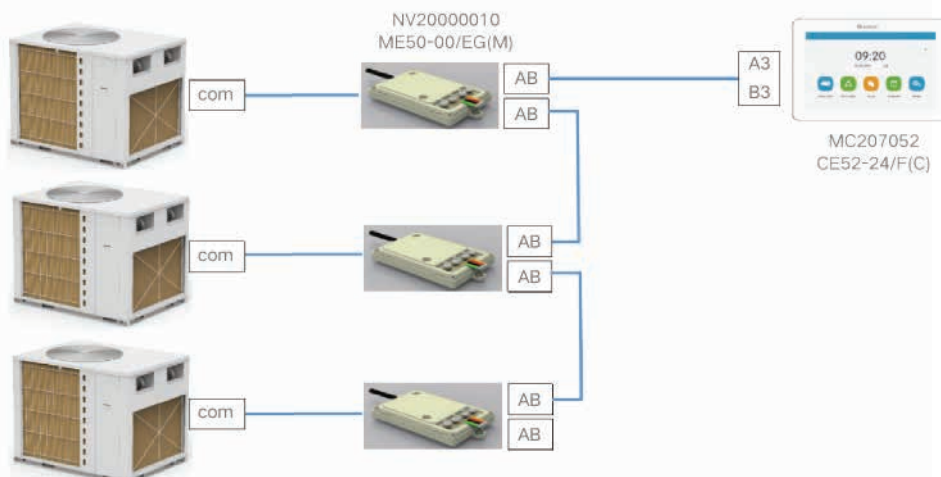
The unit can select Sinclair centralized controller for the centralized control, convenient for the management. It can control maximum 36 units simultaneously. Moreover, it can control the functions such as ON/OFF, mode, fan temperature, etc. for a single unit or a group of units and the operation is easy.



Centralized controller CE52 - 24/F(C)



Modbus gateway ME50-00/EG(M)



Remote monitoring (optional)

The unit can connect with remote control or building control based on requirements. One controller can connect 255 units at the most, which is very efficient and convenient for monitoring all air conditioners in a project.



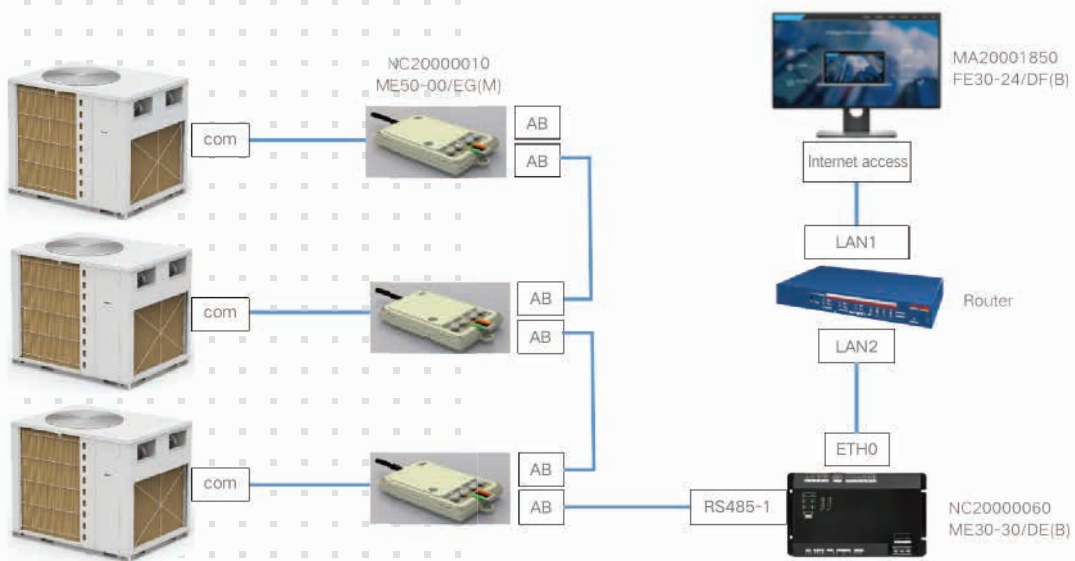
Remote monitoring software
FE30-24/DF(B)



Remote monitoring controller
ME30-30/DE(B) Modbus

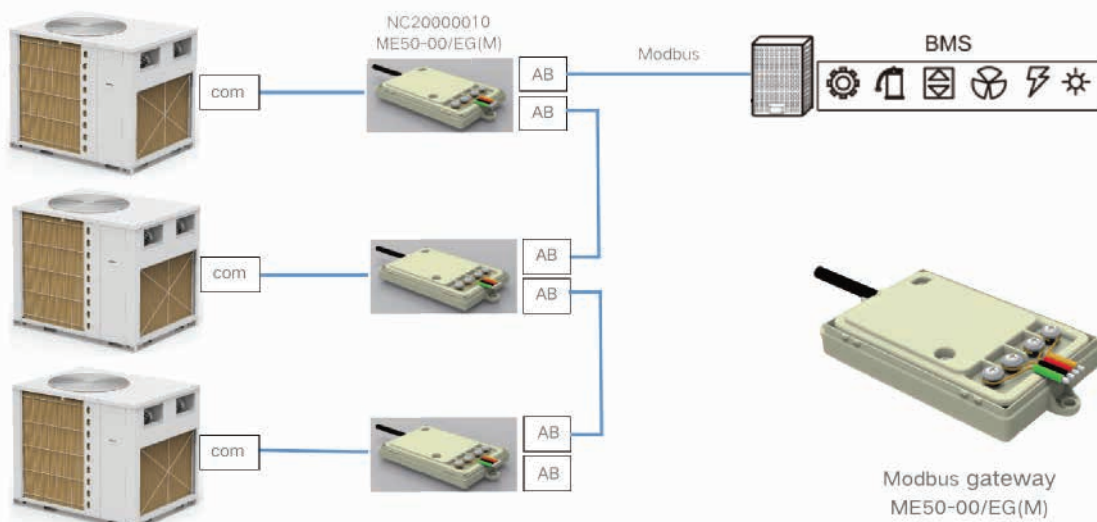


Modbus gateway
ME50-00/EG(M)



BMS building control Modbus protocol (optional)

The unit can select the optional modbus gateway, which can connect with the third party BMS system. It can connect 255 units at the most.



BMS building control Bacnet protocol (optional)

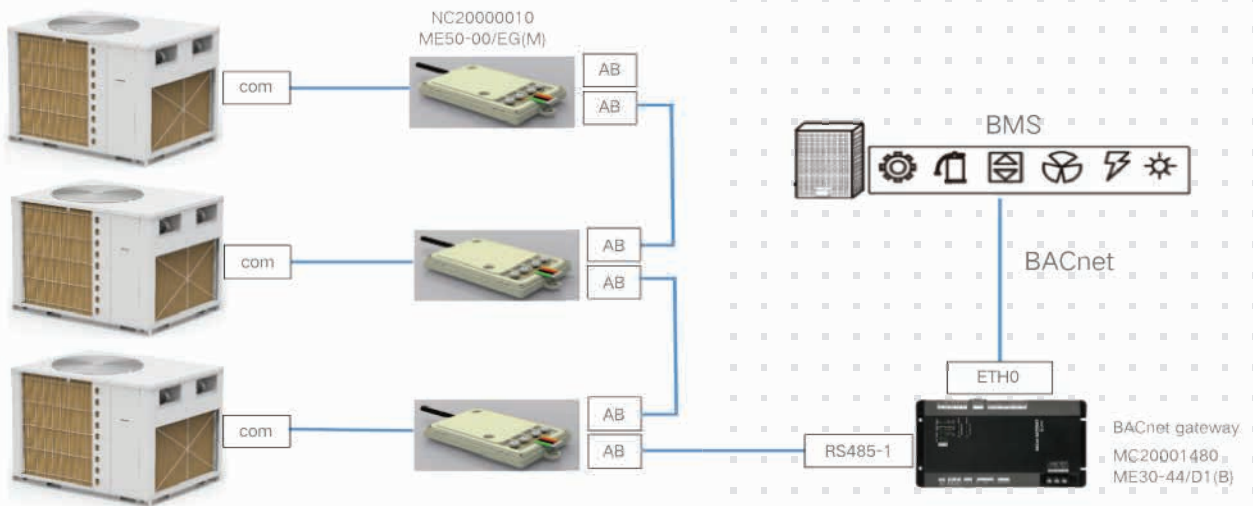
The unit can select the optional BACnet gateway, which can connect with the third party BMS system. It can connect 255 units at the most.



BACnet gateway ME30-44/D1(B)



Modbus gateway ME50-00/EG(M)





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