

➔ Rooftop package Unit

Our Rooftop package Air Conditioning Unit is designed for efficient, direct air supply to enclosed spaces. Installed on the roof, this system features an advanced refrigeration system, air circulation and purification devices, along with humidification, and ventilation functions.

The unit is available in multiple configurations to suit different working conditions:

T3 Condition: For cooling only units



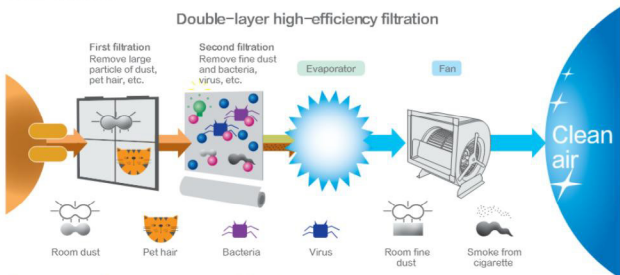
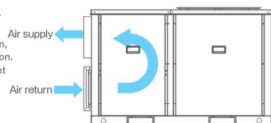
System Principle

The Rooftop package Air Conditioning Unit is built using a modular design, allowing for flexible and segmented installation.

The unit comprises several key sections, including the condensing section, air treatment section, surface cooling section, heating section, and fan section. Additionally, it can be customized with various non-standard designs to meet specific requirements.

Germicidal filter (optional)

The Rooftop package Air Conditioning Unit features a unique double-layer, high-efficiency air filtration system, ensuring the delivery of high-quality, clean air to your space.

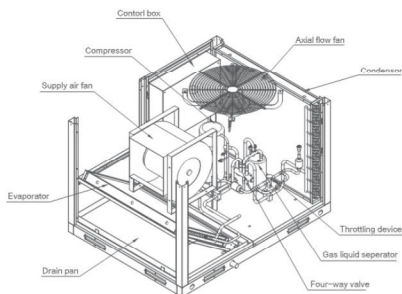


Component

The unique double-layer high-efficiency air filtration system of the rooftop unit will provide you with high-quality and clean air.



Structure



➔ Features

Wide application range
Easy installation
Easy maintenance
Outstanding reliability
Flexible choice of accessories



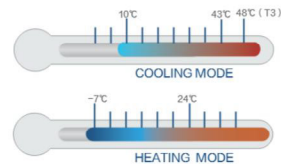
Wide application range

Wide capacity range

- Wide capacity range from 3 to 30 tons
- Heat pump and cooling only products are available.

Wide Operation Range

- Rooftop package units can operate stably in a wide ambient temperature range.
- Heat pump type from 10°C to 43°C in cooling mode and from -7°C to 24°C in heating mode.



Flexible structure

- Vertical side-discharge structure design.
- Flanges of air flow inlet and outlet as standard.
- It is suitable for installation on rooftop and ground.



Easy installation

Convenient for wires connection

- Removable access door on the electric box. It is easy to move the cover of the electric box.
- Only connect the wires of power supply, and no need to connect any signal wires.

Easy for connection of drainage pipe

- Reserved external drainage port, quickly and accurately connect the rubber drainage pipe.



Easy maintenance

Easy maintenance

- The Rooftop package Air Conditioning Unit is equipped with external pressure gauge ports, allowing for quick and easy system pressure checks.

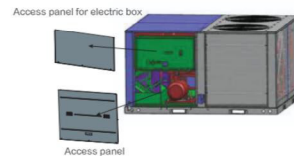


Washable filter



Easy access doors design

- The Rooftop package Air Conditioning Unit features removable access doors on the filter, fan motor, and electrical box sections. This design provides convenient access to system components, making maintenance and servicing quick and efficient.



Outstanding reliability

Durable construction

- Pre-painted exterior cabinet panels pass 500 hours Salt Spray Test for durability.
- Weather-resistant construction with capped steams and sloped top panels.
- G90 galvanized heavy gauge plate conforming to ASTM-A-653.



Customized anti-corrosion treatment

- The rooftop package air conditioners with special anti-corrosion treatment are suitable for seaside areas



- All PCB parts in the unit are coated with double-side moisture proof paint. The outer side of electric box metal cover is spray-painted.
- Special anti-corrosion treatment of heat exchanger provides 5 to 6 times greater resistance against acid rain and salt corrosion.
- All screws are anti-rust.
- Casings of the unit and motors are anti-rust.

Reliable scroll compressor

- No complex internal suction and discharge valves for quieter operation and higher reliability.
- Compact, light-weight, and fewer moving parts design.



INVOTEC

Multi-protection design

- Multiply measures to ensure units operate normally and reliably: System current protection, High/low pressure protection, Temperature Sensor protection, etc.
- Three-phase protector can be customized.
- The unit is designed with the compressor rotation system: in the multi-system unit, the equipment adopts to activate the compressors one by one according to the time and the load, and according to the cumulative running time of the compressors, it gives priority to start the compressor which has the shortest running time, so as to ensure the balance of each compressor's running time and to prolong the service life of the whole unit.

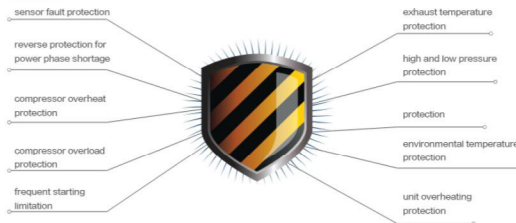


HPLP switch



Temperature sensor

Several Protections



Flexible choice of accessories

Controllers

- Optional standard wired controller.
- Besides standard wired controller, others can be chosen too.



- 24V can be connected thermostat
- The unit can choose different levels of filters, primary filter 01-04, ON (nylon mesh filter), GH (metal mesh filter), GC (activated carbon filter), GT (high temperature coarse filter), Intermediate filters F5-F9, high efficiency filters H12-H14, U15-U17.



Standard wired controller

Cooling only rooftop air conditioning unit

		Refrigeration	Ton	3	5
		Model	Case	SCT-030CWN1-D	SCT-050CWN1-D
		Power Specifications		220V/1N/60HZ	220V/1N/60HZ
Cooling only rooftop air conditioning unit	Capacity	Btu/h		35820	59710
		kW		10.5	17.5
	Power	kW		3.3	5.3
Maximum Power		kW		4.0	6.4
Maximum current		A		20.5	35.2
Energy efficiency	Air volume	CFM		1300	1650
	ESP	Pa		50	50
	EER	Btu/h/W		10.9	11.3
Evaporator	Fin coil type	Golden hydrophilic membrane corrugated fin			
	Distance between fin	mm		1.6	1.6
	Pipe diameter	mm		7	7
	Dimension	mm		560*75*445	620*75*445
	number of rows			2	4
Blower	Type	Double-Inlet centrifugal type			
	Quantity			1	1
	Drive mode	Direct drive			
	Motor Quantity			1	1
	Motor model	KTW250(375W-4P)/LK28-7(500W-4P)			KTW250(500W-4P)/LK28-8(600W-4P)
Compressor	Startup mode	Direct start up			
	Motor speed	rpm		1100	1150
	Type	Rotary			
Refrigerant	Quantity			1	1
	Brand	GMCC			Panasonic
	Model	ASQ330N1UMU			C-58P160H16A
Condenser	Fin coil type	Golden hydrophilic membrane corrugated fins			
	Distance between fin	mm		1.8	1.8
	Pipe diameter	mm		7	7
	Dimension	mm		1150*25*735	1150*25*735
	number of rows			1	2
Compressor	Type	Axial flow type			
	Quantity			1	1
	Drive mode	Direct drive			
	Motor Quantity			1	1
	Motor Model	5.5C-250W-8P			5.5C-250W-8P
Refrigerant	Startup mode	Start directly			
	Motor speed	rpm		850	850
Refrigerant	Name of material	R410a			R410a
	Charging volume	kg		1.5	1.95
	Throttling methods	capillary			
Unit noise		dB(A)		64	65
Standard air filter		Nylon filtration primary effect G3			
Dimensions (L*W*H)		mm		1120*730*830	1120*730*830
Package Size (L*W*H)		mm		1150*760*850	1150*760*850
Weight		kg		145	170
Package Weight		kg		150	175

Note: 1. Nominal refrigeration capacity test conditions: outdoor dry bulb temperature: 35°C, outdoor wet bulb temperature: --- indoor dry bulb temperature: 26.7°C, outdoor 2. The operating environment temperature of the unit is -7°C~43°C (T1 working condition).