

# Air Conditioning Rooftop Unit

From 3 and 5 Tons

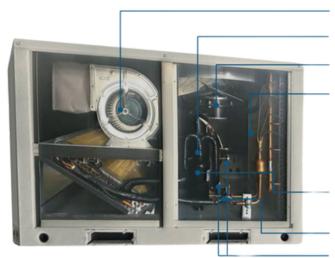








## **Equipment Components**



Centrifugal blower with double air intake.

High efficiency scroll compressor.

High efficiency fan motor.

Copper coil with aluminum fins and gold fin protection.

Special anti-corrosion treatment of the heat exchanger provides 5 to 6 times higher resistance against acid rain and salt corrosion.

Suction accumulator to separate liquid and vapor refrigerant.

Thermostatic expansion valve.

High and low pressure switches.



Electric panel with electronic control card for greater reliability.

24 V connection for temperature control.

Direct drive motor.

Air discharge by bellows to reduce noise and vibration.



## **Excellent Reliability**

#### Long-lasting manufacturing

- Pre-painted exterior box panels have a 500-hour Salt Fog Spray Test for durability. Weather resistant construction with capped posts and sloped top panels. Heavy-gauge G90 galvanized plate conforms to ASTM-A-653.



All parts of the PCB in the unit are coated with moisture-proof paint on both sides.

The outside of the metal casing of the electrical box is spray painted.

All screws are rustproof, as are the unit and motor housings.

#### Reliable spiral compressor

High efficiency scroll compressor. No complex internal suction and discharge valves for quieter operation and greater reliability. Compact, lightweight design with fewer moving parts.

Multiple protection design

The unit is designed with a compressor rotation system: in the multi-system unit, the unit is activated to start the compressors one by one according to the time and load. Based on the cumulative running time of the compressors, priority is given to start the compressor with the shortest running time, so as to ensure the balance of the running time of each compressor and prolong the service life of the whole unit.





## **Excellent Reliability**



IHighly efficient heat exchanger.

The units stand out for their ability to facilitate highly efficient heat exchange. Their optimized design ensures optimum heat transfer, which translates into superior energy performance and greater efficiency in space conditioning.



Low noise fan motor.

The advanced f a n motor design enables quiet operation without compromising performance. This provides a quieter and more comfortable environment, especially in noise - sensitive environments such as offices, hospitals and residences. In addition, its energy efficiency contributes to energy savings and a smaller environmental footprint.

### **Multiple Protections**



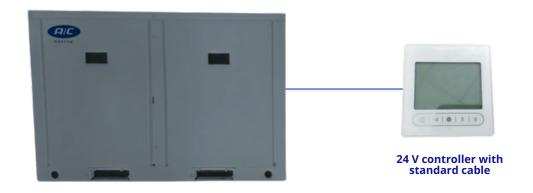
**Features** 



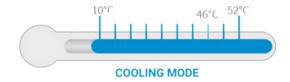
## **Smart Accessory Choice**

#### **Controllers**

Temperature controllers with 24 V signal.



# **Wide Range of Application**



#### **Design flexibility**

- Side discharge structure design. Air flow inlet and outlet flanges as standard. Suitable for ceiling and floor installation.

#### Convenient cable connection

- Removable access door on the electrical box . It is easy to remove the cover of the electrical box.
- Only connect power cables, no need to connect any signal cables.

#### Easy connection of the drainage pipe

External drain port reserved, quickly and accurately connect the rubber drain pipe.

#### Wide capacity range

• Cooling capacity varies from 3 to 30 tons.

#### Wide operation range

• Our ARMOR units can operate stably in a wide range of environ mental temperatures.





# **Easy Maintenance**

#### **Internal gauge ports**

The unit provides internal gauge ports for convenient and quick verification of system pressure.

#### Easy access door design

- Removable access doors on filter, fan motor and electrical box sections.
  Provides convenient access to system components for maintenance and service.

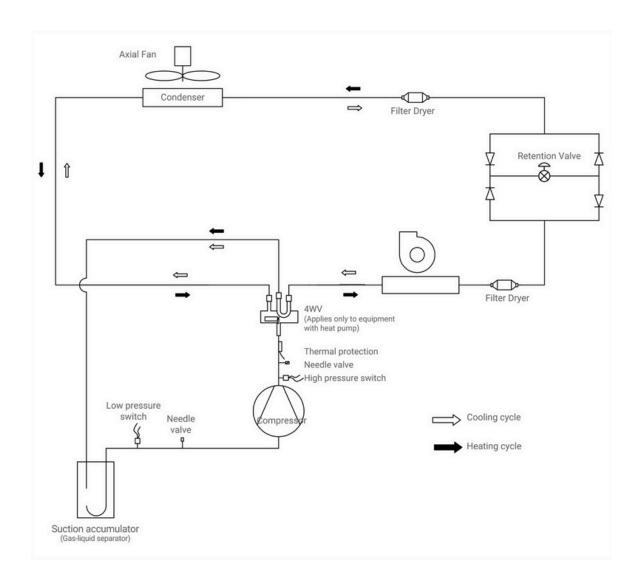


Model A/C Cooling			50PAC363HOT1	50PAC603HOT1
Cooling TONS			3	5
Power Specifications			220V/1ph/60HZ	220V/1ph/60HZ
Cooling	Capacity	Btu/h	36,000	60,000
		kW	10,5	17,5
	Power	kW	3,3	5,3
Maximum Power		kW	4,0	6,4
Maximum Current A		А	7,9	12,7
Efficiency	Air Volume	CFM	1300	2000
	Static Pressure	Pa	50	50
	EER	Btu/h/W	10,9	11,3
Evaporator			Golden hydrophilic membrane	Golden hydrophilic membrane
	Fin Form		corrugated fins	corrugated fins
	Fins Distance	mm	1,6	1,6
	Pipe Diameter	mm	7	7
Motor	Туре		Double air inlet centrifugal	Double air inlet centrifugal
	Quantity		1	1
	Drive Mode		Direct Drive	Direct Drive
	Motor Quantity		1	1
	Motor Model		KTW250(375W-6P)	KTW250I(550W-6P)
	Start Mode		Direct Start	Direct Start
Compressor	Туре		Scroll	Scroll
	Quantity		1	1
Condenser	Fin Form		Golden hydrophilic membrane corrugated fins	Golden hydrophilic membrane corrugated fins
	Fin Distance	mm	1,8	2,5
	Pipe Diameter	mm	Capilary tube	Capilary tube
Condenser fan	Туре		Axial Flow	Axial Flow
	Quantity		1	1
	Drive Mode		Direct Drive	Direct Drive
	Motor Quantity		1	1
	Motor Model		4.5C-200W-8P	5.5C-250W-8P
	Start Mode		Direct Start	Direct Start
Refrigerant	Refrigerant Type		R410a	R410a
	Charge	kg	1,5	2,5
	Throttle M		Capillary tube	Capillary tube
Noise Level d		dB(A)	64	65
Standard Air Filter		Nylon Filter G3	G3 Nylon Filter	
Unit dimensions(length*width*height) mm		1150*750*850	1300*850*850	
Paking dimensions (length*width*height) mm		mm	1180*780*870	1330*880*870
		kg	230	270
Gross Weight		kg	240	280

Note: 1.Nominal cooling capacity test conditions: outdoor dry bulb temperature:  $35^{\circ}$ C, outdoor wet bulb temperature: indoor dry bulb temperature:  $26.7^{\circ}$ C, indoor wet bulb temperature:  $19.4^{\circ}$ C; 2.Operating temperature range  $16^{\circ}$ C~ $43^{\circ}$ C (working condition T1).

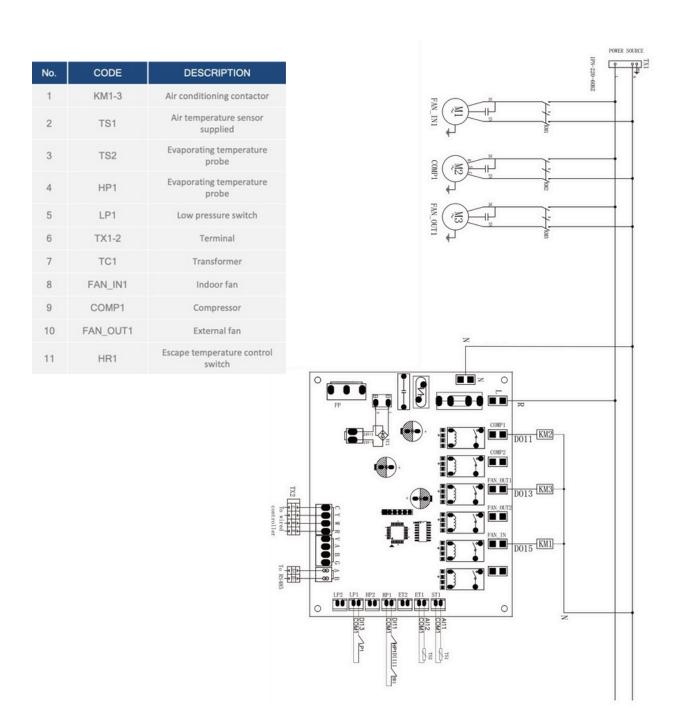


# **Cooling System Diagram**



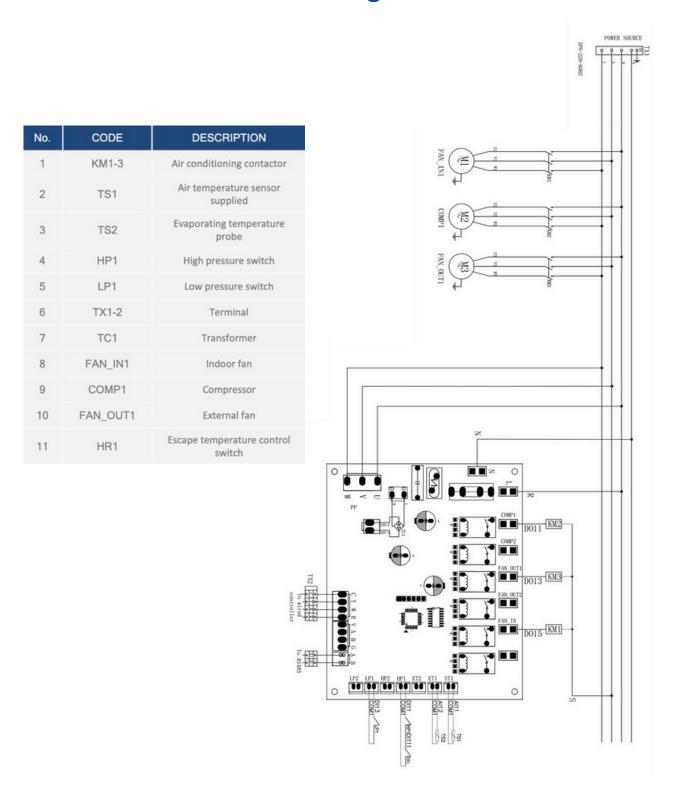






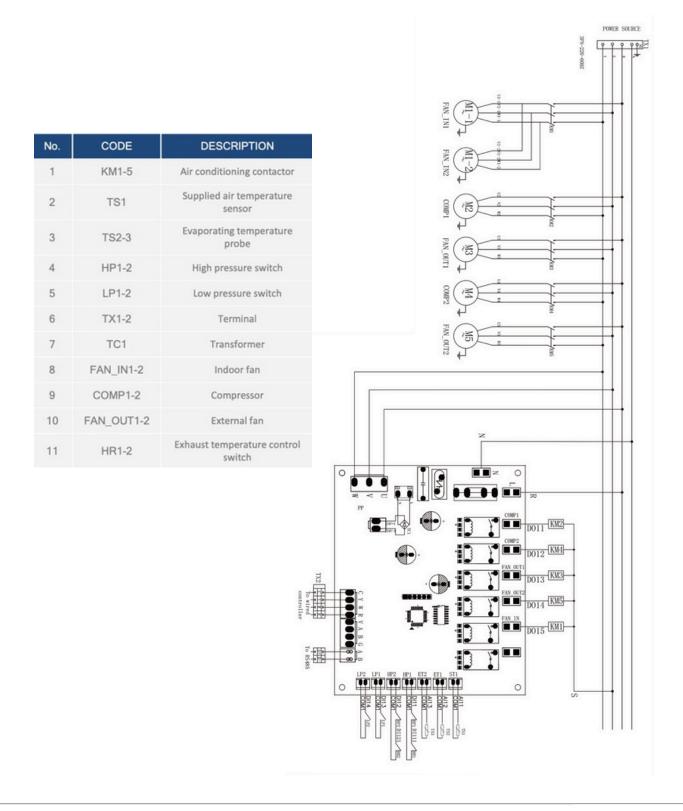






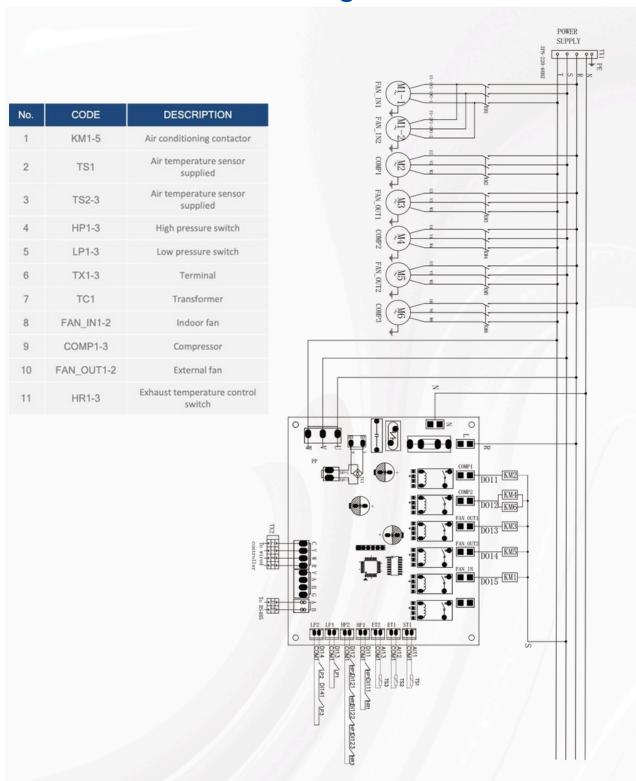








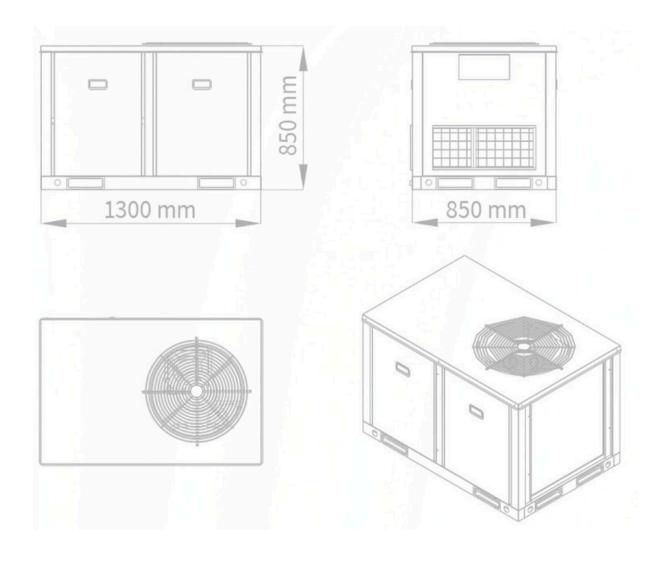








## **Unit dimensions**



50PAC363HOT1 / 50PAC603HOT1