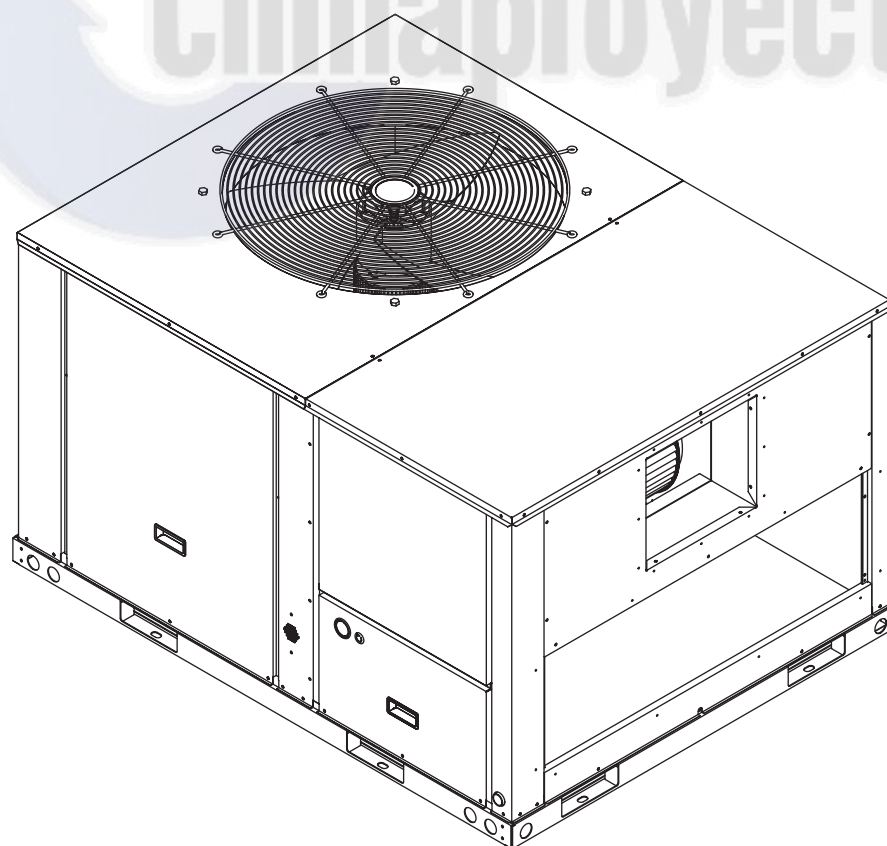




INSTALLATION & OWNER'S MANUAL

*Rooftop Package Type
R410A*



Thank you very much for purchasing our air conditioner,
Before using your air conditioner, please read this manual carefully and keep it for future reference.



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■ **Nomenclature**

CODE	NAME
C/O	Cooling Only
E/Heater+C	Cooling units with Electric Heater
Hor.& Dow.	Horizontal & Downflow Units (Optional)
Hor.	Horizontal Units
Dow.	Downflow Units

1. ACCESSORIES

Tab.1-1

Name of accessories	Qty	Shape
Manual	1	
Drain outlet	1	
Snap ring	1	
Drain pipe	1	
Wire controller and wire	1	

2. GENERAL INFORMATION

Warnings and Cautions appear at appropriate locations throughout this manual.

Read these carefully.



WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alarm against unsafe practices and where property-damage-only accidents could occur.



CAUTION

- Read this entire manual before beginning installation procedures.
- Bodily injury can result from high voltage electrical components, fast moving fans. For protection from these inherent hazards during installation and servicing, the electrical supply must be disconnected.
- If operating checks must be performed with the unit operating, it is the technicians responsibility to recognize these hazards and proceed safely.



WARNING

- **Ask your dealer for installation of the air conditioner.**
Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.
- **Ask your dealer for improvement, repair, and maintenance.**
Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.
- **In order to avoid electric shock, fire or injury, or if you detect any abnormality such as smell of fire, turn off the power supply and call your dealer for instructions.**
- **Never replace a fuse with that of wrong rated current or other wires when a fuse blows out.**
Use of wire or copper wire may cause the unit to break down or cause a fire.
- **Do not insert fingers, rods or other objects into the air inlet or outlet.**
When the fan is rotating at high speed, it will cause injury.
- **Never use a flammable spray such as hair spray, lacquer or paint near the unit.** It may cause a fire.
- **Never inspect or service the unit by yourself.**
Ask a qualified service person to perform this work.
- **Keep far away from high-frequency equipment.**
- **Keep away from the following places:**
A place where it is full of oil, gas; places where salty air surrounding(near the coast); and a place where is caustic gas(the sulfide in hot spring). Location in above places may cause malfunction or shorten the life span of the machine.
- **In the case of extremely strong wind, please prevent the air from flowing backwards into the outdoor unit.**
- **Snow canopy is necessary in snowfall places on the outdoor unit. Please consult the local dealer for details.**
- **In the frequent thunderstruck place, lightning proof actions should be taken.**
- **To prevent refrigerant leak, contact your dealer.**
When the system is installed and runs in a small room, it is required to keep the concentration of the refrigerant, if by any chance coming out, below the limit. Otherwise, oxygen in the room may be affected, resulting in a serious accident.
- **The refrigerant in the air conditioner is safe and normally does not leak.**
If the refrigerant leaks in the room, contact with a fire of a burner, a heater or a cooker may result in a harmful gas.
- **Turn off any combustible heating devices, ventilate the room, and contact the dealer where you purchased the unit.**
Do not use the air conditioner until a service person confirms that the portion where the refrigerant leaks is repaired.
- **If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.**
- **The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.**
- **The appliance should not be used by children without supervision.**



WARNING

- Check the electric wire, water and gas pipeline layout inside the wall, floor and ceiling before installation. Do not implement drilling unless confirm safety with the user, especially for the hidden power wire. An electroprobe can be used to test whether a wire is passing by at the drilling location, to prevent physical injury or death caused by insulation broken cords.
- Check the power supply before installation. Ensure that the power supply must be reliably grounded following local, state and National Electrical Codes. If not, for example, if the ground wire is detected charged, installation is prohibited before it is rectified. Otherwise, there is a risk of fire and electric shock, causing physical injury or death.



CAUTION

Do not dry out the air filter under direct sunshine or heat.

- Re-install the air filter
- Condenser coil
Unfiltered air circulates through the unit's condenser coil can cause the coil's surface to become clogged with dust, etc. Clean the coil, vertically (i.e., with the fins), and stroke the coil surface with a soft brush. Be sure to keep all vegetation away from the condenser coil area.
- Maintenance performed by serviceman.
To keep your unit operating safely and efficiently, the manufacturer recommends that a qualified serviceman check the entire system at least once each year and any other time that you feel one is needed. Your serviceman should examine these areas of your unit:
 - Filters
 - Motors and drive system components
 - Economizer gaskets (for possible replacement)
 - Safety controls (for mechanical cleaning)
 - Electrical components and wiring (for possible replacement and connection tightness)
 - Condensate drain (for cleaning)
 - Unit duct connections (to see that they are physically sound and sealed to the unit casing)
 - Unit mounting support (for structural integrity)
 - The unit (for obvious unit deterioration)



CAUTION

- Do not operate the unit without the evaporator fan access panel in place. Reinstall the access panel after performing any maintenance. Operating the unit without the access panel may result in severe personal injury or death.
- This unit is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the unit.
- Disconnect the power supply before cleaning and maintenance.
- The unit shall be installed in accordance with national wiring regulations.



DISPOSAL: Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.

- Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.
- Contact your local government for information regarding the collection systems available.
- If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

3. UNIT DIMENSIONS

Units: mm

■ 4、5 Tons C/O Units (Hor.)

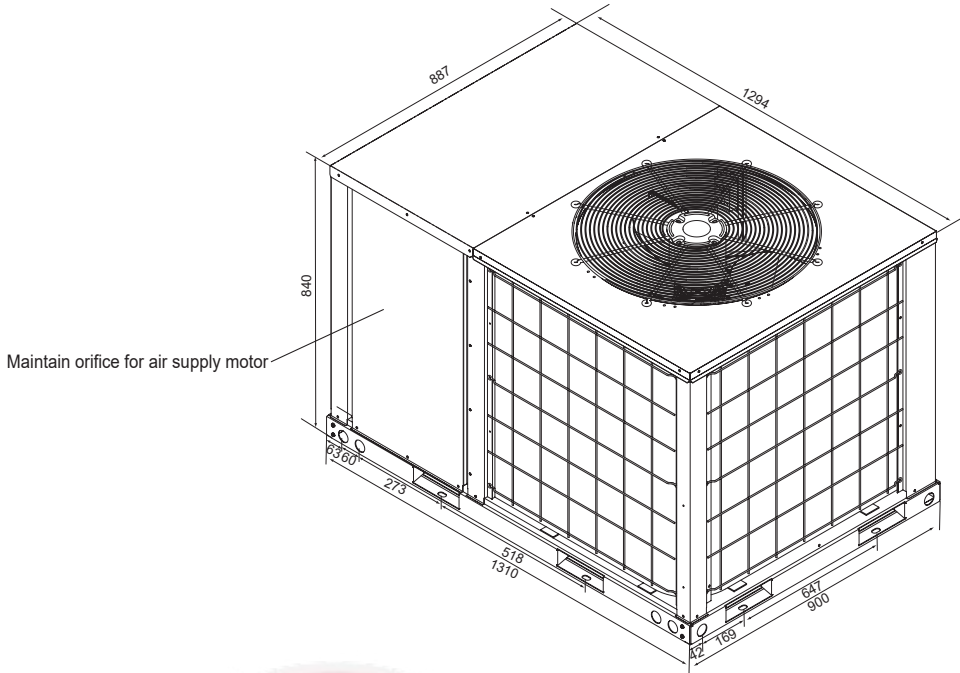


Fig.3-1

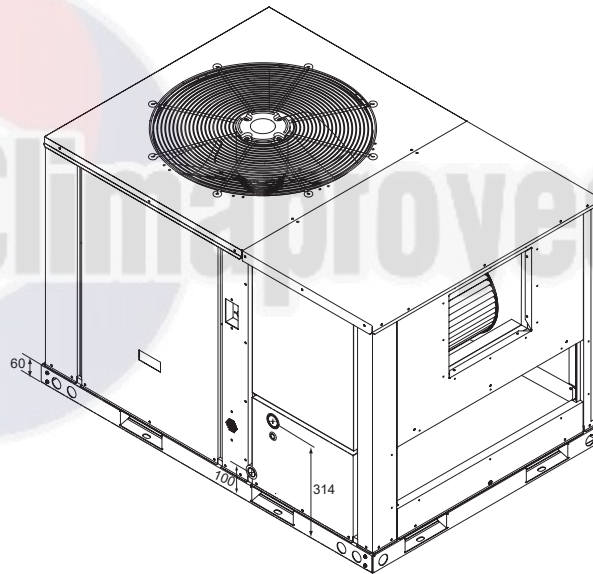


Fig.3-2

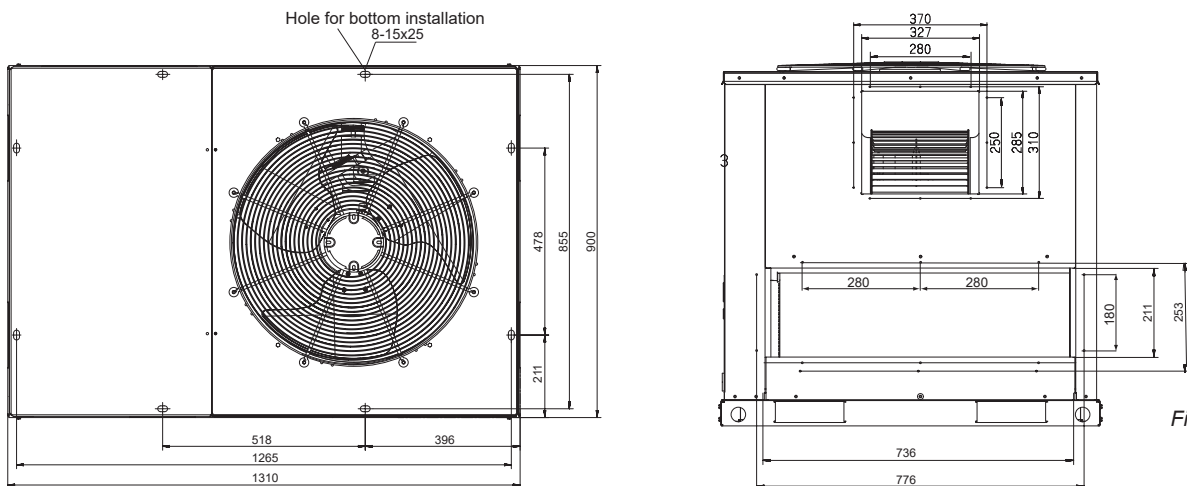


Fig.3-3

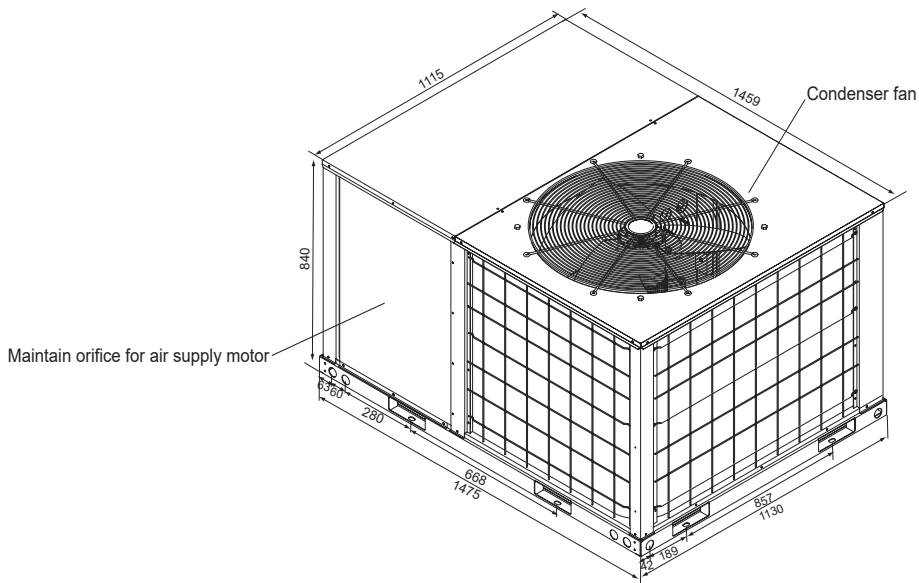


Fig.3-4

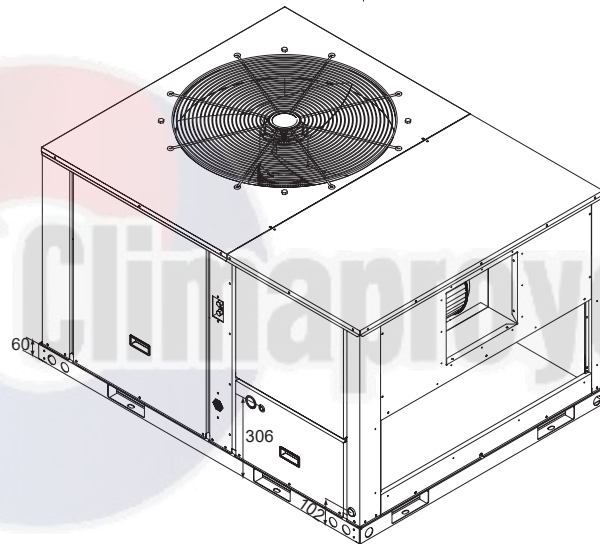


Fig.3-5

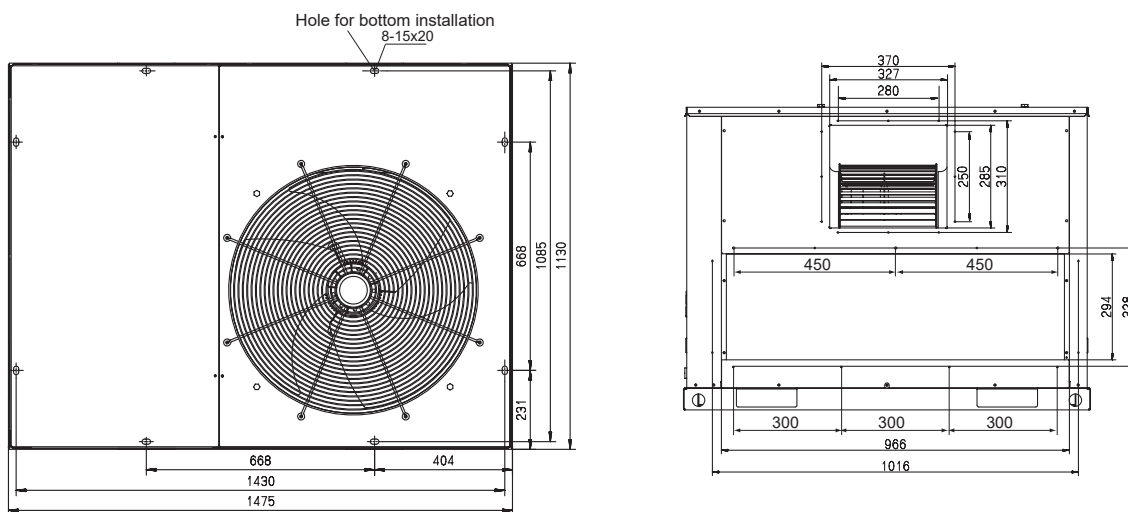


Fig.3-6

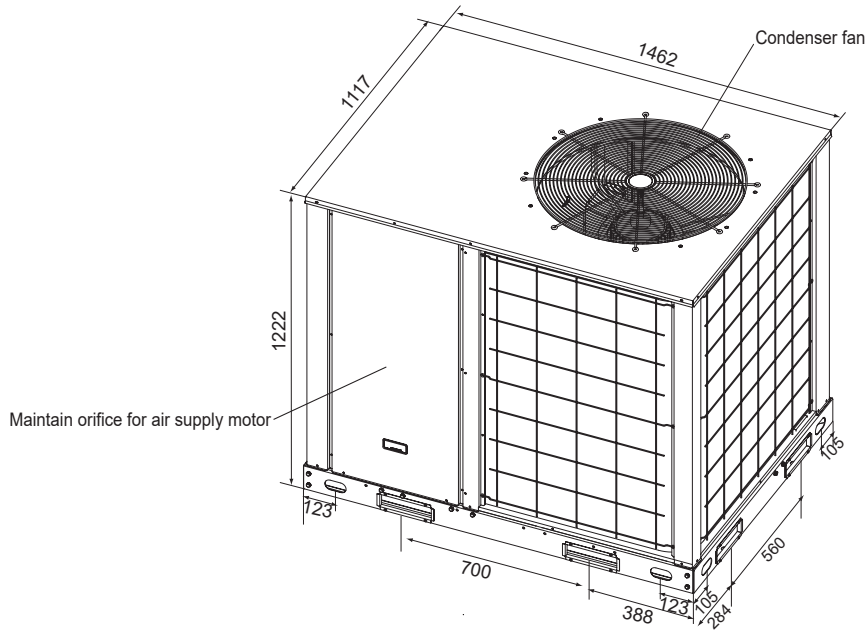
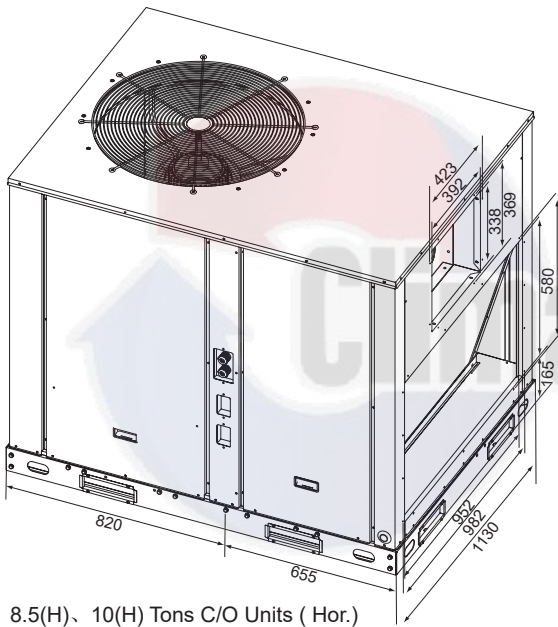
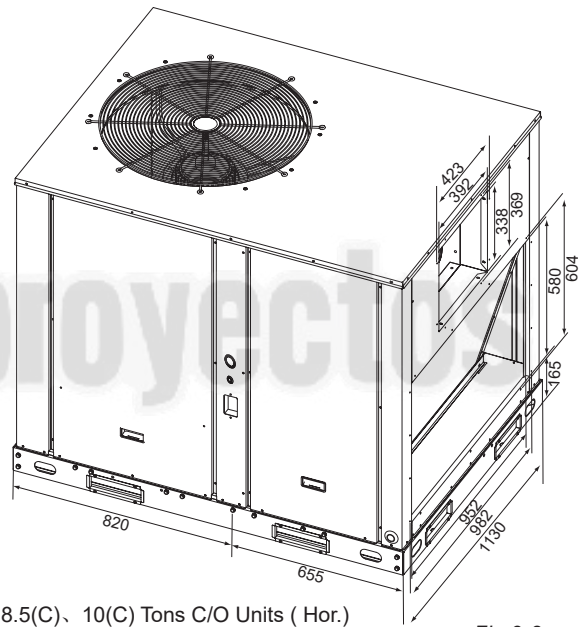


Fig.3-7



8.5(H)、10(H) Tons C/O Units (Hor.)



8.5(C)、10(C) Tons C/O Units (Hor.)

Fig.3-8

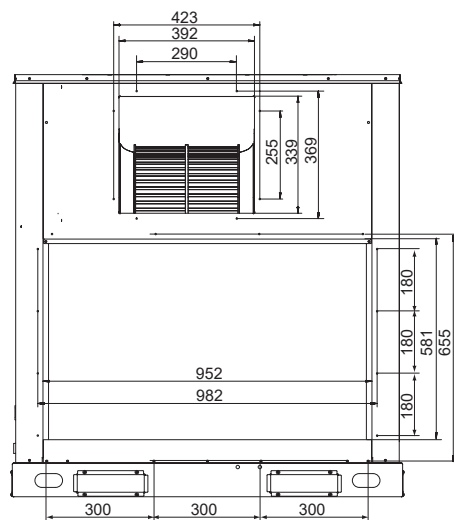
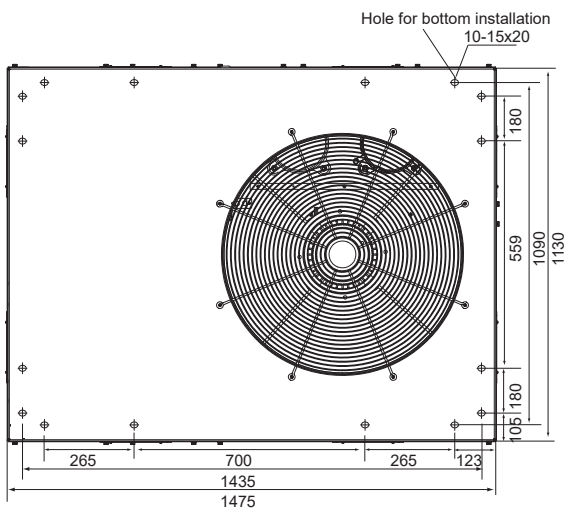


Fig.3-9

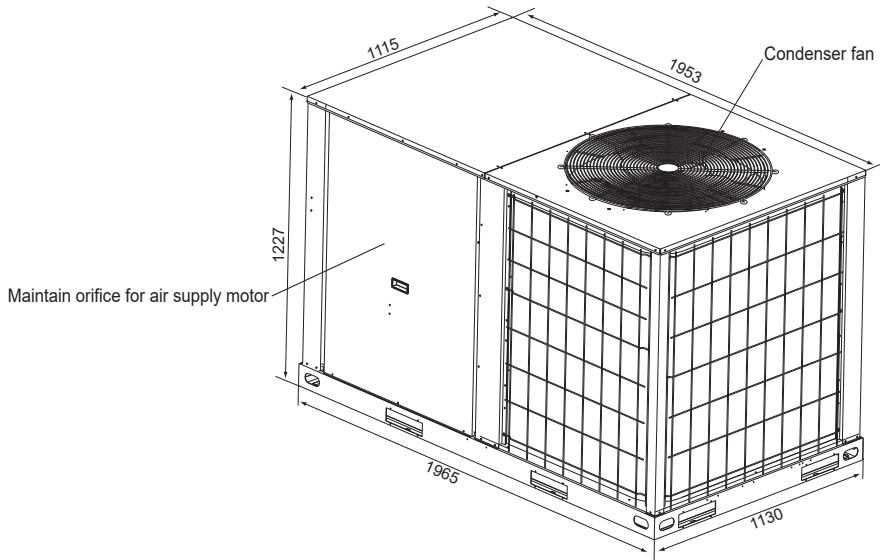


Fig.3-10

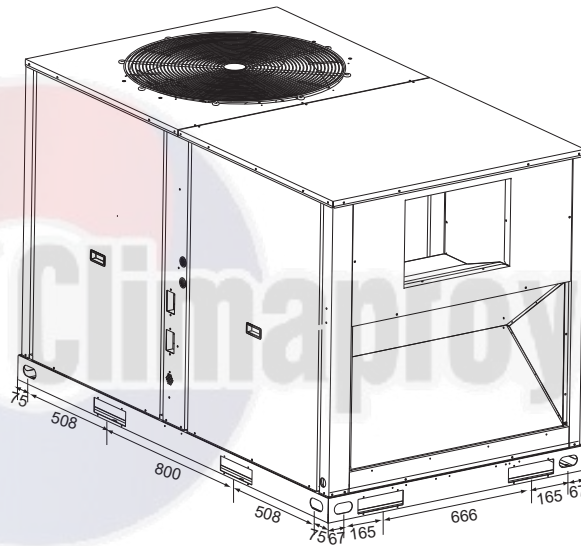


Fig.3-11

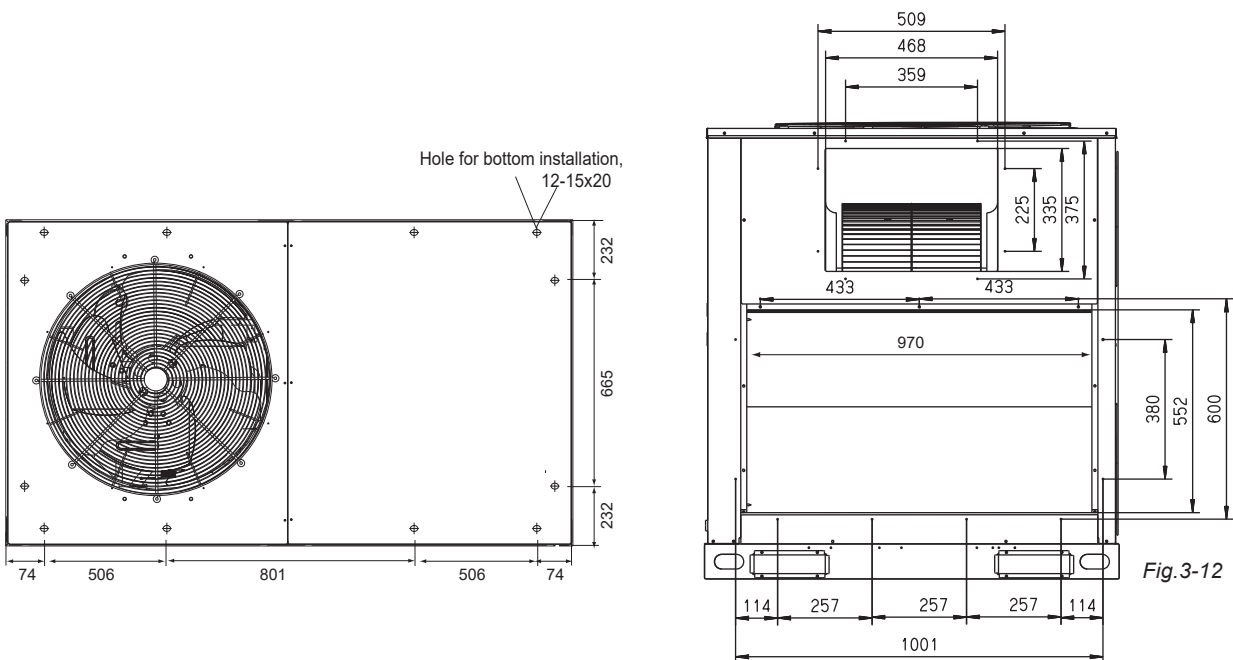


Fig.3-12

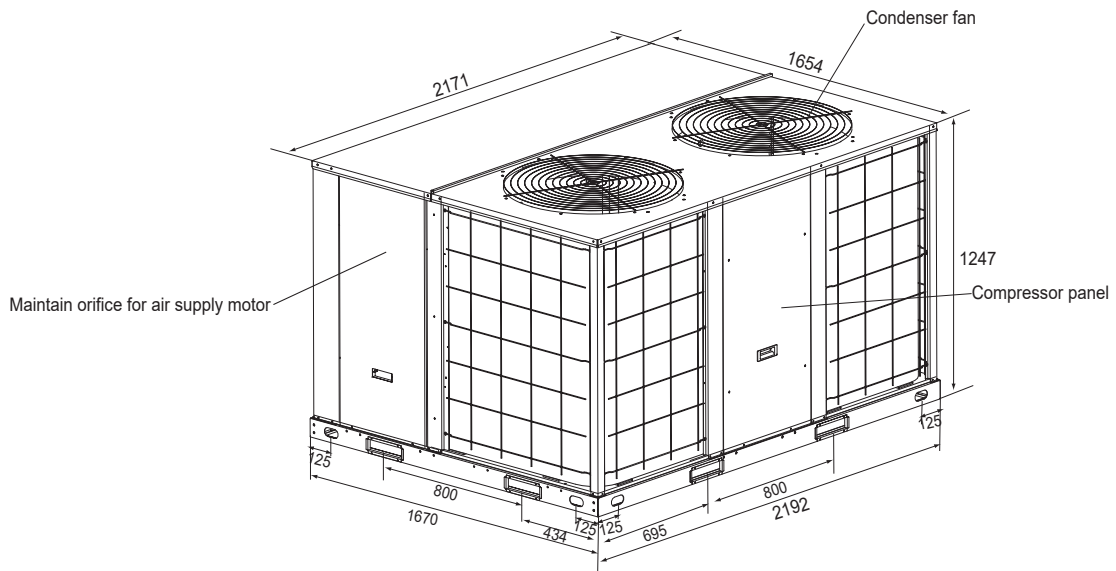


Fig.3-13

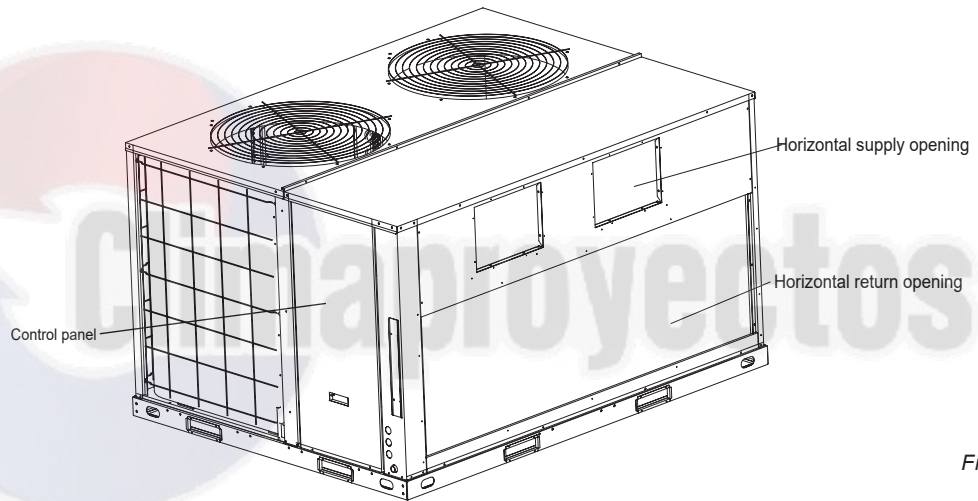


Fig.3-14

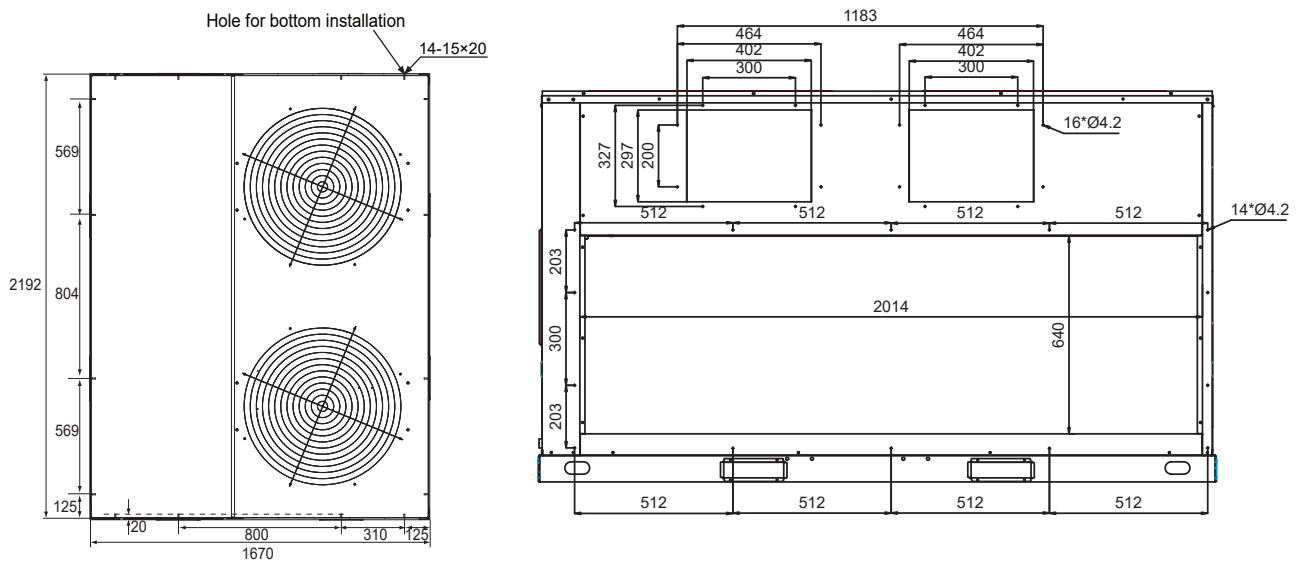


Fig.3-15

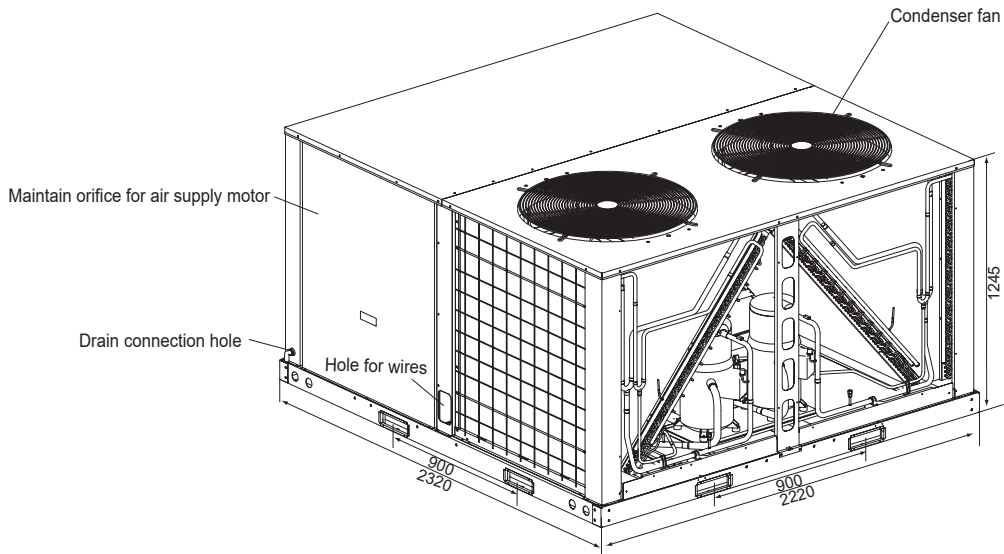


Fig.3-16

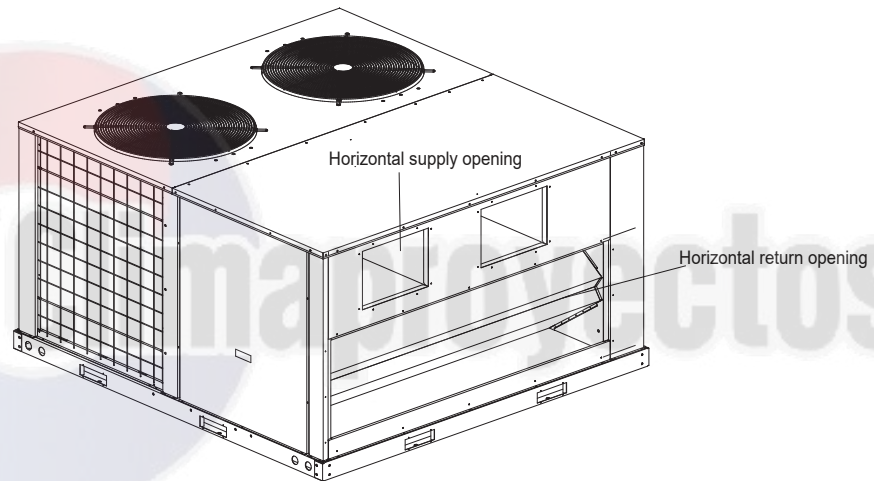


Fig.3-17

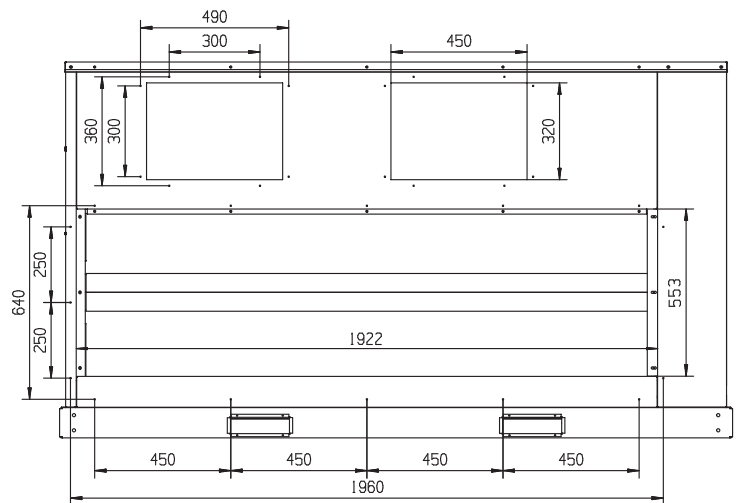
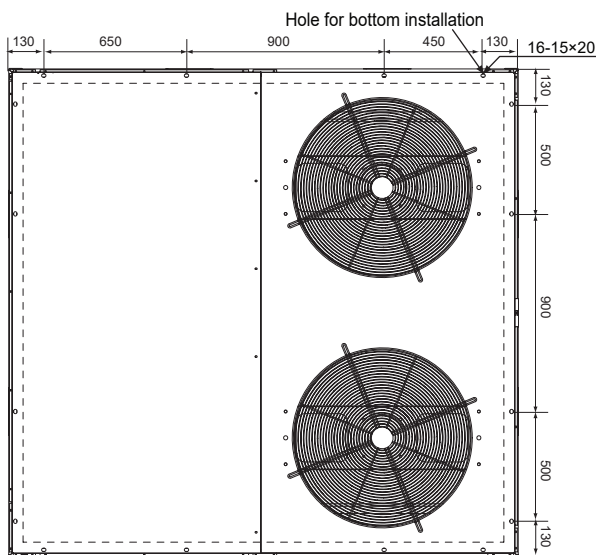


Fig.3-18

4. LOCATIONS AND RECOMMENDATIONS

4.1 Horizontal airflow application

- These units are designed and certified for outdoor installations. These units may be installed directly on wood flooring or on Class A, Class B, or Class C roof covering material.
- Location of the unit must allow service clearance around it. Clearance of the unit must be given careful consideration.
- Check the handling facilities to ensure the safety of personnel and the unit(s).
- Caution must be taken at all times to avoid Personal injuries and/or damage to equipment.
- The unit must be mounted level for proper drainage of water through the holes in the base pan.
- The unit must not be exposed to direct roof water runoff.
- Flexible duct connectors must be of a flame retardant material. All duct work outside of the structure must be insulated and weatherproofed in accordance with local codes.
- Holes through exterior walls must be sealed in accordance with local codes.
- All fabricated outdoor ducts should be as short as possible.

4.2 Clearances

- The recommended clearances for single-unit installations are illustrated in Fig. 4-1. These minimum requirements are not only an important consideration when determining unit placement, but they are also essential to ensure adequate serviceability, maximum capacity, and peak operating efficiency.
- Any reduction of the unit clearances indicated in these illustrations may result in condenser coil starvation or the recirculation of warm condenser air. Actual clearances which appear to be inadequate should be reviewed with a local engineer.
- See the unit's nameplate for the absolute minimum clearance between the unit and any combustible surface(s).

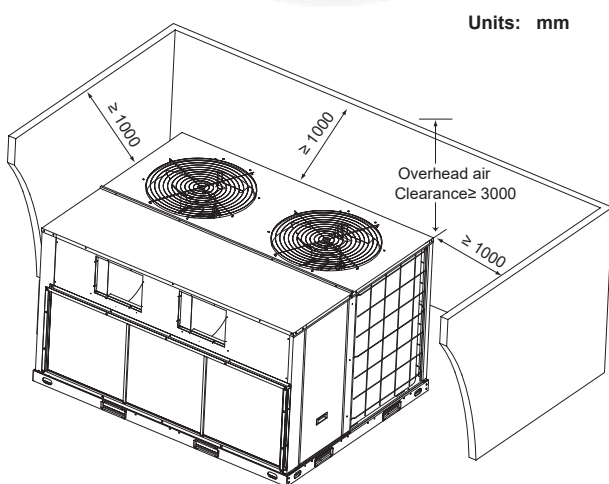


Fig.4-1

5. INSTALLATION

5.1 Lifting

- Rigging cables should have adequate capability to resist 3 times weight of unit. Before lift, please check and ensure that hooks are holding tightly to unit and lifting angles are no less than 60°. (See Fig. 5-1)
- Cloth material or hard-paper should be padded in the contact place between unit and rigging cable. Rigging cable should be entwined a round at the hook for prevent danger by cable slip because of weight unbalance.
- During lifting, anyone forbidden lingering under the lifting unit.

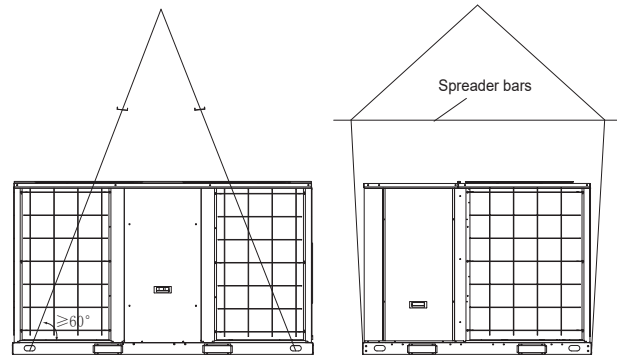


Fig.5-1

5.2 Rooftop-units

- **For roof top applications using a field fabricated frame and ducts, use the following procedure:**
- The frame must be located and secured by bolting or welding to the roof. Flashing is required.
- The hole in the roof must be prepared in advance of installing the unit.
- Secure the ducts to the roof.
- Place the unit on the frame or roof curb.
- Secure the unit to the frame or roof curb.
- Insulate any ductwork outside of the structure with at least 2 inches of insulation and then weatherproof. There must be a weatherproof seal where the duct enters the structure.
- Complete the installation according to the instructions in the following sections of this manual.
- Typical rooftop application with frame. (See Fig. 5-2)

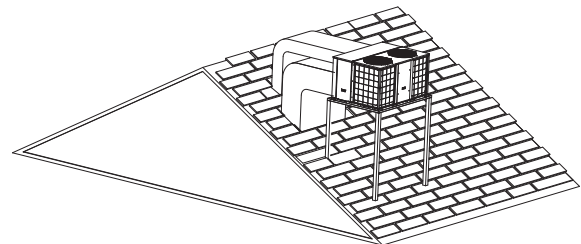


Fig.5-2

5.3 Ground level-horizontal units

- For ground level installations, the unit should be positioned on a pad in the size of the unit or larger. The unit must be level on the pad. The pad must not come in contact with the structure. Be sure the outdoor portion of the supply and return air ducts are as short as possible.
- Proceed with the installation as follows:
 - Place the unit on the pad.
 - Attach the supply and return air ducts to the unit.
 - Insulate any ductwork outside of the structure with at least 2 inches of insulation and weatherproof. There must be a weatherproof seal where the duct enters the structure.
 - Complete the installation according to the instructions in the following sections of this manual.
- Typical ground level application

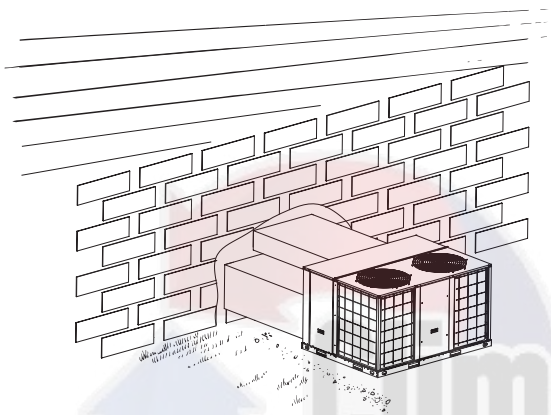


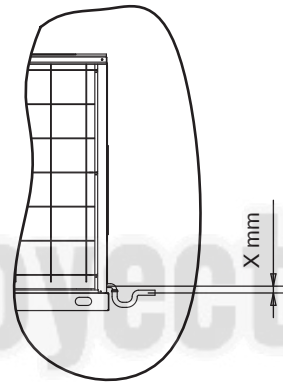
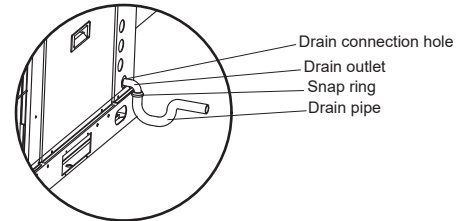
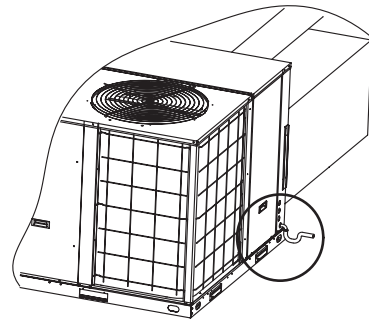
Fig.5-3

- Only use this unit in well-ventilated spaces and ensure that there are no obstructions that could impede the airflow into and out of the unit.

Do not use this unit in the following locations:

- Locations with mineral oil.
- Locations with saline atmospheres, such as seaside locations.
- Locations with sulphurous atmospheres, such as near natural hot springs.
- Where high voltage electricity is present, such as in certain industrial locations.
- On vehicles or vessels, such as trucks or ferry boats.
- Where exposure to oily or very humid air may occur, such as kitchens.
- In proximity to sources of electromagnetic radiation, such as high-frequency transmitters or other high strength radiation devices.

5.4 Condensate drain piping



30tons 0<X≤20
Others 20≤X≤40

Fig.5-4

5.5 Ductwork

- Attaching horizontal ductwork to unit

All conditioned air ductwork should be insulated to minimize heating and cooling duct losses. Use a minimum of 2 inches of insulation with a vapor barrier. The outside ductwork must be weatherproofed between the unit and the building.

When attaching ductwork to a horizontal unit, provide a flexible watertight connection to prevent noise transmission from the unit to the ducts. The flexible connection must be indoors and made out of heavy canvas.



NOTE

Do not draw the canvas taut between the solid ducts.

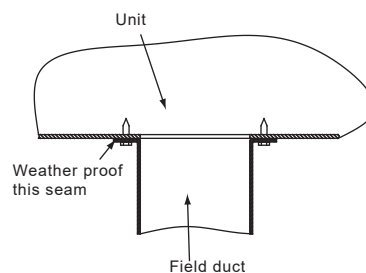


Fig.5-5

6. ELECTRICAL WIRING



WARNING

- An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.
- The appliance shall be installed in accordance with national wiring regulations.
- An all-pole disconnection device which has at least 3mm separation distance in all pole and a residual current device(RCD)with the rating of above 10mA shall be incorporated in the fixed wiring according to the national rule.
- The appliance shall be installed in accordance with national wiring regulations.

6.1 Protections and safety control

- **Minutes delay for the compressor start-up**
At the beginning of energizing, 3-minutes delay should be taken to start the compressor. while after the stop of the compressor, 7-minutes delay should be taken to re-start the compressor.
- **Compressor discharge temperature protection**
When discharge temperature >257 °F, the compressor will stop.
- **Reverse phase protection relay**
 - The reverse phase protection relay will make the unit not start, when the power source is incorrectly connected.
 - The checking of phase order is just carried out at the first time of electrifying. If malfunction happens then the checking will be going on until the order of phase is right, and the E0 will be displayed on the board. If there is no problem in the first checking, then it will be omitted.
- **High pressure and low pressure protection**
When high pressure ≥ 638 Psi, and lower pressure ≤ 21 Psi, the unit will stop.



6.2 Electrical data

Tab.6-1

●380-415V 3N~ 50Hz

Nominal ton	Model type	Type of flow	Compressor				Evaporator fan motor			Condenser fan motor		
			STC	RNC	IPT	Qty	RNC	IPT	Qty	RNC (each)	IPT (each)	Qty
4	C/O	Hor.	51.5	6.8	4.04	1	4.10	0.91	1	1.50	0.35	1
5	C/O	Hor.	64	8.3	4.75	1	4.65	1.05	1	1.50	0.35	1
6.25	C/O	Hor.	75	9.7	5.65	1	7.22	1.62	1	3.65	0.83	1
7.5	C/O	Hor.	121.2	14.3	8.08	1	7.18	1.61	1	3.93	0.88	1
8.5(H)	C/O	Hor.	62	8.8	5.13	2	2.90	1.39	1	3.93	0.88	1
8.5(C)	C/O	Hor.	139	16.6	9.16	1	2.90	1.39	1	3.93	0.88	1
10(H)	C/O	Hor.	66	9.6	5.7	2	3.50	1.84	1	2.51	0.98	1
10(C)	C/O	Hor.	144	18.7	10.8	1	3.50	1.84	1	2.51	0.98	1
12.5	C/O	Hor.	64+139	8.3+16.6	4.75+9.16	1+1	4.84	2.03	1	3.66	0.83	1
15	C/O	Hor.	64+144	8.3+18.7	4.75+10.8	1+1	7.50	3.97	1	2.80	1.27	1
17.5	C/O	Hor.	139	16.6	9.16	2	6.60	3.03	1	3.53	0.80	2
20	C/O	Hor.	144	18.7	10.8	2	8.90	4.35	1	2.84	1.29	2
25	C/O	Hor.	158	20.66	12.1	2	9.70	4.40	1	3.71	2.07	2
30	C/O	Hor.	197	24.52	13.7	2	13.60	7.40	1	3.71	2.07	2

●220V 3N~ 60Hz

Nominal ton	Model type	Type of flow	Compressor				Evaporator fan motor			Condenser fan motor		
			STC	RNC	IPT	Qty	RNC	IPT	Qty	RNC (each)	IPT (each)	Qty
7.5	C/O	Hor.	191	24.8	8.23	1	5.04	1.09	1	5.45	1.65	1
10	C/O	Hor.	240	30.9	11	1	7.30	2.07	1	5.16	1.58	1
15	C/O	Hor.	240+155	30.9+16.3	11+5.5	1+1	11.40	3.37	1	5.28	1.64	1
20	C/O	Hor.	240	30.9	11	2	15.10	4.11	1	6.99	1.87	2
25	C/O	Hor.	245	38	12.4	2	19.68	5.93	1	8.80	2.60	2



NOTES

- STC: Starting Current (A) RNC: Running Current (A) IPT: Input Power (kW) Qty: Quantity
- These data are based on the following conditions. Evaporator Air Input Temperature 89.6°F DB, 73.4°F WB. Condenser Air Input Temperature 125.6°F DB.

6.3 Wiring provision

- **Field wiring**
The units are internally wired at the factory according to generally accepted electrical technology.
- **Required field wiring**
Main power wiring to the unit control wiring between the control center and the unit, and earth wiring are required in the field.
- **Required components**
The following components are required: main power fuses, conduit coupling, and field supplied room thermostat.
- **Wire and fuse size selection for main power source**
Wire and fuse sizes should be selected in accordance with national and standard, taking the designed maximum current shall be the total of the compressor maximum current, condenser fan motor current and evaporator fan motor current(refer to “electrical data”).
- **Wire size between room thermostat and unit**
The wire size between the room thermostat and the unit should be determined according to the following table, because the 24V power source is applied to the control circuit.

Tab.6-2

	Wiring length between room thermostat and unit(one way)				
	10m	15m	20m	30m	40m
Minimum wire size(mm ²)	0.5	0.5	0.75	0.75	1.0



NOTE

- Before connecting the device to the public low-voltage supply systems the permission of the electricity supplier is forcefully necessary.

6.4 Operating conditions

For proper performance, run the unit under the following temperature conditions:

Tab.6-3

Cooling operation	Outdoor temperature: 50°F to 125.6°F
	Room temperature: 62°F to 88°F
	Caution Room relative humidity less than 80%. If the unit operates in excess of this figure, the surface of the unit may attract condensation.

6.5 Main power supply

Tab.6-4

Model type		Unit main power	Main power switch	Fuse	Wires for Power supplies	Type of wires
4Tons	C/O	380-415V 3N~ 50Hz	25A	20A	3x6mm ² +2x3mm ²	3xUL1015 9AWG 2xUL1015 12AWG
5Tons	C/O	380-415V 3N~ 50Hz	30A	25A	3x6mm ² +2x3mm ²	3xUL1015 9AWG 2xUL1015 12AWG
6.25Tons	C/O	380-415V 3N~ 50Hz	35A	25A	3x6mm ² +2x3mm ²	3xUL1015 9AWG 2xUL1015 12AWG
7.5Tons	C/O	380-415V 3N~ 50Hz	40A	30A	3x10mm ² +2x6mm ²	3xUL1015 7AWG 2xUL1015 9AWG
8.5Tons	C/O	380-415V 3N~ 50Hz	45A	35A	3x10mm ² +2x6mm ²	3xUL1015 7AWG 2xUL1015 9AWG
10Tons	C/O	380-415V 3N~ 50Hz	50A	40A	3x10mm ² +2x6mm ²	3xUL1015 7AWG 2xUL1015 9AWG
12.5Tons	C/O	380-415V 3N~ 50Hz	63A	50A	3x16mm ² +2x10mm ²	3xUL1015 5AWG 2xUL1015 7AWG
15Tons	C/O	380-415V 3N~ 50Hz	75A	63A	3x16mm ² +2x10mm ²	3xUL1015 5AWG 2xUL1015 7AWG
17.5Tons	C/O	380-415V 3N~ 50Hz	90A	80A	3x25mm ² +2x10mm ²	3xUL1015 3AWG 2xUL1015 7AWG
20Tons	C/O	380-415V 3N~ 50Hz	100A	90A	3x25mm ² +2x10mm ²	3xUL1015 3AWG 2xUL1015 5AWG
25Tons	C/O	380-415V 3N~ 50Hz	120A	100A	3x35mm ² +2x16mm ²	3xUL1015 2AWG 2xUL1015 5AWG
30Tons	C/O	380-415V 3N~ 50Hz	120A	100A	3x35mm ² +2x16mm ²	3xUL1015 2AWG 2xUL1015 7AWG

Model type		Unit main power	Main power switch	Fuse	Wires for Power supplies	Type of wires
7.5Tons	C/O	220V 3N~ 60Hz	63A	50A	3x16mm ² +2x10mm ²	3xUL1015 5AWG 2xUL1015 7AWG
10Tons	C/O	220V 3N~ 60Hz	75A	63A	3x16mm ² +2x10mm ²	3xUL1015 5AWG 2xUL1015 7AWG
15Tons	C/O	220V 3N~ 60Hz	100A	90A	3x25mm ² +2x10mm ²	3xUL1015 3AWG 2xUL1015 7AWG
20Tons	C/O	220V 3N~ 60Hz	125A	110A	3x35mm ² +2x16mm ²	3xUL1015 2AWG 2xUL1015 5AWG
25Tons	C/O	220V 3N~ 60Hz	150A	125A	3x50mm ² +2x25mm ²	3xUL1015 1/0AWG 2xUL1015 3AWG



NOTE

- The power supply designation is H07RN-F.

6.6 Control wiring

■ Power supply

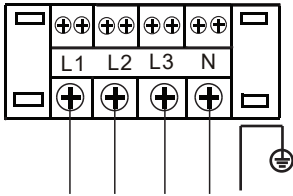


Fig.6-1

Next wire joint also available

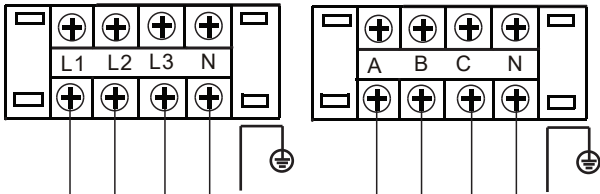
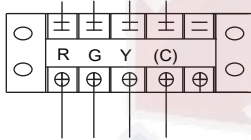


Fig.6-2

■ To connect with wire controller

For C/O Units
4, 5, 8.5(H), 10(H), 12.5-30Tons



For E/Heater+C Units

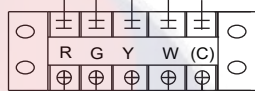
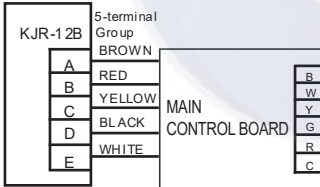


Fig.6-3

For C/O Units
6.25, 7.5, 8.5(C), 10(C)Tons



4(C), 5(C) Tons

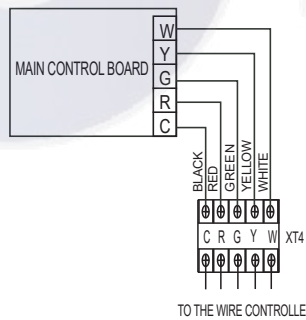


Fig.6-4

■ Dial code settings

Set the dial code SW3 of PCB in unit's wire control box. After settings, please shut off the power supply and then repower, otherwise, the new settings function couldn't work.

- When SW3 has been set in "ON", please select KJR-12B wire controller;
- When SW3 has been set in "1", please select KJR-23B/KJR-25B wire controller, KJR-23B/KJR-25B is optional.

For C/O Units
4, 5, 8.5(H), 10(H), 12.5-30Tons

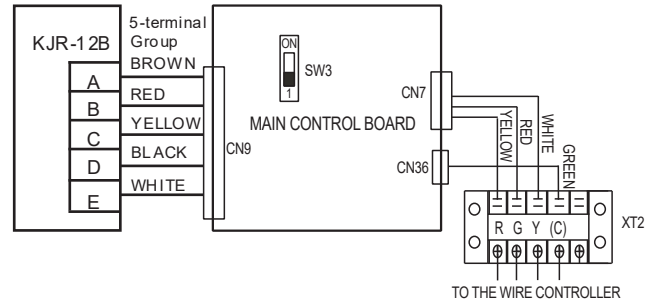


Fig.6-5

For E/Heater+C Units

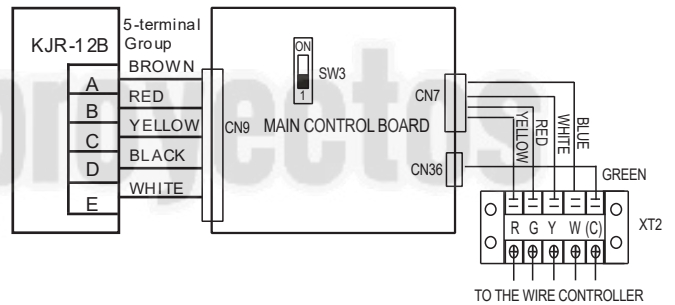


Fig.6-6

6.7 Error code

Tab.6-5

Type	Content	Code	Remarks
Normal	Standby	—	
Normal	Constraint cool	on	
Normal	Run	10.	
Error	Compressor phase sequence error or phase default	E0	
Error	Outdoor coil sensor in sys. A error	E1	
Error	Outdoor coil sensor in sys. B error	E2	
Error	Overcurrent protection of system A are active 3 times within one hour	E3	Unit shall be power off to recovery
Error	Overcurrent protection of system B are active 3 times within one hour	E4	Unit shall be power off to recovery
Error	Indoor coil sensor in sys. A error	E5	
Error	Indoor coil sensor in sys. B error	E6	
Error	High、 low pressure protection or discharge temperature protection of system A reached 3 times	E7	Unit shall be power off to recovery
Error	High、 low pressure protection or discharge temperature protection of system B reached 3 times	E8	Unit shall be power off to recovery
Error	Indoor sensor error	E9	
Error	Outdoor ambient sensor error	EA	
Error	Wire controller output error	Eb	for KJR-25B or Honeywell
Error	Wire controller connection error	Ed	two or more thermostat connection
Error	EEPROM error	EE	
Protection	Overcurrent protection in sys.A	P0	
Protection	Overcurrent protection in sys.B	P1	
Protection	Overcurrent protection for indoor fan	P2	
Protection	Comprehensive protection for outdoor fan	P3	
Protection	Protection for Hi./Lo. pressure or exhaust temp. in sys.A	P4	Comprehensive protection in sys.A
Protection	Protection for Hi./Lo. pressure or exhaust temp. in sys.B	P5	Comprehensive protection in sys.B
Protection	Hi-pressure protection initiated in T2 evaporator stops the outdoor unit fan	P6	
Protection	Hi-pressure protection initiated in T2 evaporator stops the outdoor unit fan and compressor	P7	
Protection	Protection for condenser Hi-temp. in sys.A	P8	
Protection	Protection for condenser Hi-temp. in sys.B	P9	
Protection	Anti-freezing protection for evaporator in sys. A	Pc	
Protection	Anti-freezing protection for evaporator in sys. B	Pd	
Protection	Defrosting	dF	
Protection	Protection for outdoor temp in T4	PE	

7. SPECIFICATION

7.1 Physical Data

Tab.7-1

380-415V 3N~ 50Hz

Nominal ton		4Tons	5Tons		
Model type		C/O	C/O		
Type of flow		Hor.	Hor.		
Capacity	Cooling capacity(net) (Btu/h) ^(I)	48000	58000		
	Heating capacity (Btu/h)	---	---		
Performance	EER	11.7	11.6		
Dimensions	Length(mm)	1310	1310		
	Width(mm)	900	900		
	Height(mm)	840	840		
Net weight(kg)		167	180		
Refrigerant type		R410A	R410A		
Flow control		Piston	Piston		
Compressor	Quantity/Type	1/Scroll	1/Scroll		
Outdoor coil	Rows	2	3		
	Fins per inch	17	17		
	Tube diameter(in.)	9/32	9/32		
Indoor coil	Rows	3	4		
	Fins per inch	19	19		
	Tube diameter(in.)	9/32	9/32		
Outdoor fan	Quantity used/diameter(mm)	1/600	1/600		
	Type	Propeller	Propeller		
	Drive type	Direct	Direct		
	Quantity speeds	1	1		
	Quantity motors/power(kW)	1/0.23	1/0.23		
	Motor RPM ^(III)	915	915		
	Nominal total CFM	5300	5800		
Indoor fan	Quantity used/model	1/10×10	1/10×10		
	Type	FC Centrifugal	FC Centrifugal		
	Drive type	Direct	Direct		
	Quantity speeds	3	3		
	Quantity motors/power(kW)	1/0.69(75Pa)	1/0.89(75Pa)		
	Motor RPM ^(III)	960	960		
	Nominal total CFM ^(II)	1750(75Pa)	2000(75Pa)		



NOTES

- ^(I) Cooling capacities are rated at 95 °F ambient DB, 80 °F entering DB, 67 °F entering WB.
- ^(II) Units are suitable for operation to ±20% of nominal CFM.
- ^(III) Motor RPM is based on actual work conditions, datas on nameplate are for reference only.

Tab.7-1 (con'd)

380-415V 3N~ 50Hz

Nominal ton		6.25Tons	7.5Tons	8.5(H)Tons	8.5(C)Tons
Model type		C/O	C/O	C/O	C/O
Type of flow		Hor.	Hor.	Hor.	Hor.
Capacity	Cooling capacity(net) (Btu/h) ⁽¹⁾	75000	89000	102000	102000
	Heating capacity (Btu/h)	---	---	---	---
Performance	EER	11.4	11.3	11.1	11.1
Dimensions	Length(mm)	1475	1475	1483	1483
	Width(mm)	1130	1130	1138	1138
	Height(mm)	840	840	1231	1231
Net weight(kg)		223	231	331	302
Refrigerant type		R410A	R410A	R410A	R410A
Flow control		Piston	Piston	Piston	Piston
Compressor	Quantity/Type	1/Scroll	1/Scroll	2/Scroll	1/Scroll
Outdoor coil	Rows	2.5	3	2.5	2.5
	Fins per inch	19	19	17	17
	Tube diameter(in.)	9/32	9/32	9/32	9/32
Indoor coil	Rows	4	3	4	4
	Fins per inch	19	19	19	19
	Tube diameter(in.)	9/32	9/32	9/32	9/32
Outdoor fan	Quantity used/diameter(mm)	1/700	1/700	1/700	1/700
	Type	Propeller	Propeller	Propeller	Propeller
	Drive type	Direct	Direct	Direct	Direct
	Quantity speeds	2(high speed)	2	1	1
	Quantity motors/power(kW)	1/0.83	1/0.98	1/0.88	1/0.88
	Motor RPM ^(III)	831	878	844	844
	Nominal total CFM	5278	5686	6167	6167
Indoor fan	Quantity used/model	1/10×10	1/10×10	1/12×12	1/12×12
	Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
	Drive type	Direct	Direct	Belt	Belt
	Quantity speeds	3(high speed)	3	Variable sheave	Variable sheave
	Quantity motors/power(kW)	1/1.62(80Pa)	1/1.61(80Pa)	1/1.39(80Pa)	1/1.39(80Pa)
	Motor RPM ^(III)	1098	1110	1430	1430
	Nominal total CFM ^(II)	2800(80Pa)	2830(80Pa)	3500(80Pa)	3500(80Pa)



NOTES

- ⁽¹⁾ Cooling capacities are rated at 95 ℉ ambient DB, 80 ℉ entering DB, 67 ℉ entering WB.
- ^(II) Units are suitable for operation to ±20% of nominal CFM.
- ^(III) Motor RPM is based on actual work conditions, datas on nameplate are for reference only.

Tab.7-1 (con'd)

380-415V 3N~ 50Hz

Nominal ton		10(H)Tons	10(C)Tons	12.5Tons	15Tons
Model type		C/O	C/O	C/O	C/O
Type of flow		Hor.	Hor.	Hor.	Hor.
Capacity	Cooling capacity(net) (Btu/h) ⁽¹⁾	120000	120000	150000	180000
	Heating capacity (Btu/h)	---	---	---	---
Performance	EER	11.2	11.2	11.3	10.8
Dimensions	Length(mm)	1483	1483	1965	1965
	Width(mm)	1138	1138	1130	1130
	Height(mm)	1231	1231	1230	1230
Net weight(kg)		335	323	433	470
Refrigerant type		R410A	R410A	R410A	R410A
Flow control		Piston	Capillary	Piston	Piston
Compressor	Quantity/Type	2/Scroll	1/Scroll	2/Scroll	2/Scroll
Outdoor coil	Rows	2.5	2.5	3	3.5
	Fins per inch	17	17	17	16
	Tube diameter(in.)	9/32	9/32	9/32	5/16
Indoor coil	Rows	4	4	4	4
	Fins per inch	19	19	19	19
	Tube diameter(in.)	9/32	9/32	9/32	9/32
Outdoor fan	Quantity used/diameter(mm)	1/700	1/700	1/750	1/750
	Type	Propeller	Propeller	Propeller	Propeller
	Drive type	Direct	Direct	Direct	Direct
	Quantity speeds	1	1	1	1
	Quantity motors/power(kW)	1/1.31	1/1.31	1/0.83	1/1.26
	Motor RPM ^(III)	967	967	875	955
	Nominal total CFM	7733	7733	7307	7857
Indoor fan	Quantity used/model	1/12×12	1/12×12	1/15×15	1/15×15
	Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
	Drive type	Belt	Belt	Belt	Belt
	Quantity speeds	Variable sheave	Variable sheave	Variable sheave	Variable sheave
	Quantity motors/power(kW)	1/1.84(90Pa)	1/1.84(90Pa)	1/2.22(110Pa)	1/3.97(110Pa)
	Motor RPM ^(III)	1430	1430	1430	1430
	Nominal total CFM ^(II)	4100(90Pa)	4100(90Pa)	5500(110Pa)	7000(110Pa)



NOTES

- ⁽¹⁾ Cooling capacities are rated at 95 °F ambient DB, 80 °F entering DB, 67 °F entering WB.
- ^(II) Units are suitable for operation to ±20% of nominal CFM.
- ^(III) Motor RPM is based on actual work conditions, data on nameplate are for reference only.

Tab.7-1 (con'd)

380-415V 3N~50Hz

Nominal ton		17.5Tons	20Tons	25Tons	30Tons
Model type		C/O	C/O	C/O	C/O
Type of flow		Hor.	Hor.	Hor.	Hor.
Capacity	Cooling capacity(net) (Btu/h) ⁽¹⁾	208000	240000	300000	360000
	Heating capacity (Btu/h)	---	---	---	---
Performance	EER	10.9	10.6	10.7	10.5
Dimensions	Length(mm)	1670	1670	2320	2320
	Width(mm)	2192	2192	2220	2220
	Height(mm)	1247	1247	1245	1245
Net weight(kg)		590	670	895	910
Refrigerant type		R410A	R410A	R410A	R410A
Flow control		Piston	Piston	Capillary	Capillary
Compressor	Quantity/Type	2/Scroll	2/Scroll	2/Scroll	2/Scroll
Outdoor coil	Rows	2.5	3	3+2	3+3
	Fins per inch	17	17	17	17
	Tube diameter(in.)	9/32	9/32	9/32	9/32
Indoor coil	Rows	3	4	4	4
	Fins per inch	19	19	16	16
	Tube diameter(in.)	9/32	9/32	5/16	5/16
Outdoor fan	Quantity used/diameter(mm)	2/750	2/750	2/800	2/800
	Type	Propeller	Propeller	Propeller	Propeller
	Drive type	Direct	Direct	Direct	Direct
	Quantity speeds	1	1	1	1
	Quantity motors/power(kW)	2/1.60	2/2.6	2/2.07	2/2.07
	Motor RPM ^(III)	884	955	887	887
	Nominal total CFM	14168	16400	23486	23486
Indoor fan	Quantity used/model	1/SYD315R2-L	1/SYD315R2-L	1/SYD355R2-L	1/SYD355R2-L
	Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
	Drive type	Belt	Belt	Belt	Belt
	Quantity speeds	Variable sheave	Variable sheave	Variable sheave	Variable sheave
	Quantity motors/power(kW)	1/3.06(110Pa)	1/4.57(120Pa)	1/4.8(130Pa)	1/ 5.5(270Pa)
	Motor RPM ^(III)	1430	1440	1440	1440
	Nominal total CFM ^(II)	7600(110Pa)	8800(120Pa)	10000(130Pa)	12000(270Pa)



NOTES

- ⁽¹⁾ Cooling capacities are rated at 95 °F ambient DB, 80 °F entering DB, 67 °F entering WB.
- ^(II) Units are suitable for operation to ±20% of nominal CFM.
- ^(III) Motor RPM is based on actual work conditions, datas on nameplate are for reference only.

Tab.7-2

220V 3N~ 60Hz

Nominal ton		7.5Tons	10Tons	15Tons	20ons
Model type		C/O	C/O	C/O	C/O
Type of flow		Hor.	Hor.	Hor.	Hor.
Capacity	Cooling capacity(net) (Btu/h) ⁽¹⁾	89000	120000	180000	240000
	Heating capacity (Btu/h)	---	---	---	---
Performance	EER	11.4	11.2	11.1	11.0
Dimensions	Length(mm)	1475	1483	1965	2192
	Width(mm)	1130	1138	1130	1670
	Heigth(mm)	840	1231	1230	1247
Net weight(kg)		235	325	470	670
Refrigerant type		R410A	R410A	R410A	R410A
Flow control		Piston	Piston	Piston	Piston
Compressor	Quantity/Type	1/Scroll	1/Scroll	2/Scroll	2/Scroll
Outdoor coil	Rows	3	2.5	3.5	3
	Fins per inch	17	17	16	17
	Tube diameter(in.)	9/32	9/32	5/16	9/32
Indoor coil	Rows	3	4	4	4
	Fins per inch	19	19	19	19
	Tube diameter(in.)	9/32	9/32	9/32	9/32
Outdoor fan	Quantity used/diameter(mm)	1/700	1/700	1/750	2/750
	Type	Propeller	Propeller	Propeller	Propeller
	Drive type	Direct	Direct	Direct	Direct
	Quantity speeds	1	1	1	1
	Quantity motors/power(kW)	1/1.65	1/1.58	1/1.64	2/1.865*2
	Motor RPM ^(III)	1090	1100	1080	1150
	Nominal total CFM	7380	8815	8970	19600
Indoor fan	Quantity used/model	1/10×10	1/12×12	1/15×15	1/SYD315R2-L
	Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
	Drive type	Direct	Belt	Belt	Belt
	Quantity speeds	3	Variable sheave	Variable sheave	Variable sheave
	Quantity motors/power(kW)	1/1.09(80Pa)	1/2.07(90Pa)	1/3.37(110Pa)	1/4.11(120Pa)
	Motor RPM ^(III)	1080/1000/920	1700	1730	1730
	Nominal total CFM ^(II)	2700	4120	6450	8580



NOTES

- ⁽¹⁾ Cooling capacities are rated at 95 °F ambient DB, 80 °F entering DB, 67 °F entering WB.
- ^(II) Units are suitable for operation to ±20% of nominal CFM.
- ^(III) Motor RPM is based on actual work conditions, datas on nameplate are for reference only.

Tab.7-2(con'd)
220V 3N~ 60Hz

Nominal ton		25Tons		
Model type		C/O		
Type of flow		Hor.		
Capacity	Cooling capacity(net) (Btu/h) ^(I)	300000		
	Heating capacity (Btu/h)	---		
Performance	EER	10.8		
Dimensions	Length(mm)	2320		
	Width(mm)	2220		
	Height(mm)	1245		
Net weight(kg)		895		
Refrigerant type		R410A		
Flow control		Capillary		
Compressor	Quantity/Type	2/Scroll		
Outdoor coil	Rows	3+2		
	Fins per inch	17		
	Tube diameter(in.)	9/32		
Indoor coil	Rows	4		
	Fins per inch	16		
	Tube diameter(in.)	5/16		
Outdoor fan	Quantity used/diameter(mm)	2/800		
	Type	Propeller		
	Drive type	Direct		
	Quantity speeds	1		
	Quantity motors/power(kW)	2/2.60*2		
	Motor RPM ^(III)	1130		
	Nominal total CFM	25040		
Indoor fan	Quantity used/model	1/SYD355R2-L		
	Type	FC Centrifugal		
	Drive type	Belt		
	Quantity speeds	Variable sheave		
	Quantity motors/power(kW)	1/5.94(250Pa)		
	Motor RPM ^(III)	1730		
	Nominal total CFM ^(II)	11138		



NOTES

- ^(I) Cooling capacities are rated at 95 °F ambient DB, 80 °F entering DB, 67 °F entering WB.
- ^(II) Units are suitable for operation to ±20% of nominal CFM.
- ^(III) Motor RPM is based on actual work conditions, datas on nameplate are for reference only.

7.2 Parameter For Air Volume

■ Parameter table for indoor unit air volume (380-415V 3N~ 50Hz)

Tab.7-3

4Tons (380-415V 3N~ 50Hz)					5Tons (380-415V 3N~ 50Hz)				
Static pressure (Pa)		High speed	Middle speed	Low speed	Static pressure (Pa)		High speed	Middle speed	Low speed
0	Fan speed(RPM)	1045	978	921	0	Fan speed(RPM)	1062	1001	940
	Power input(W)	961	838	733		Power input(W)	944	830	734
	Air flow (CFM)	2252	2082	1931		Air flow (CFM)	2172	2022	1876
50	Fan speed(RPM)	1102	1038	992	50	Fan speed(RPM)	1115	1060	1008
	Power input(W)	919	805	707		Power input(W)	910	790	698
	Air flow (CFM)	2140	1979	1832		Air flow (CFM)	2064	1911	1774
75	Fan speed(RPM)	1128	1068	1021	75	Fan speed(RPM)	1139	1088	1039
	Power input(W)	903	791	696		Power input(W)	889	775	684
	Air flow (CFM)	2088	1926	1780		Air flow (CFM)	2010	1859	1722
100	Fan speed(RPM)	1150	1096	1050	100	Fan speed(RPM)	1166	1117	1069
	Power input(W)	883	774	681		Power input(W)	859	758	670
	Air flow (CFM)	2028	1871	1727		Air flow (CFM)	1943	1804	1671
150	Fan speed(RPM)	1190	1144	1096	150	Fan speed(RPM)	1210	1166	1121
	Power input(W)	845	740	654		Power input(W)	823	721	640
	Air flow (CFM)	1904	1710	1608		Air flow (CFM)	1819	1687	1556
200	Fan speed(RPM)	1231	1184	1156	200	Fan speed(RPM)	1246	1205	1187
	Power input(W)	806	708	621		Power input(W)	780	687	596
	Air flow (CFM)	1756	1593	1462		Air flow (CFM)	1677	1558	1362

Tab.7-4

6.25Tons (380-415V 3N~ 50Hz)					7.5Tons (380-415V 3N~ 50Hz)				
Static pressure (Pa)		High speed	Middle speed	Low speed	Static pressure (Pa)		High speed	Middle speed	Low speed
0	Fan speed(RPM)	1001	901	810	0	Fan speed(RPM)	1035	936	844
	Power input(W)	1665	1386	1164		Power input(W)	1716	1432	1197
	Air flow (CFM)	3001	2647	2356		Air flow (CFM)	3074	2697	2403
50	Fan speed(RPM)	1063	972	899	50	Fan speed(RPM)	1081	991	909
	Power input(W)	1607	1341	1133		Power input(W)	1652	1409	1160
	Air flow (CFM)	2909	2564	2270		Air flow (CFM)	2981	2596	2284
80	Fan speed(RPM)	1098	1016	946	80	Fan speed(RPM)	1110	1026	954
	Power input(W)	1582	1317	1120		Power input(W)	1650	1360	1137
	Air flow (CFM)	2825	2503	2190		Air flow (CFM)	2951	2574	2223
100	Fan speed(RPM)	1122	1047	977	100	Fan speed(RPM)	1127	1051	984
	Power input(W)	1526	1280	1079		Power input(W)	1591	1377	1126
	Air flow (CFM)	2759	2401	2105		Air flow (CFM)	2825	2438	2146
150	Fan speed(RPM)	1173	1106	/	150	Fan speed(RPM)	1173	1110	/
	Power input(W)	1452	1230	/		Power input(W)	1525	1338	/
	Air flow (CFM)	2560	2250	/		Air flow (CFM)	2657	2313	/
200	Fan speed(RPM)	1219	1162	/	200	Fan speed(RPM)	1217	1165	/
	Power input(W)	1375	1182	/		Power input(W)	1449	1281	/
	Air flow (CFM)	2367	2109	/		Air flow (CFM)	2483	2187	/
250	Fan speed(RPM)	1265	/	/	250	Fan speed(RPM)	1263	/	/
	Power input(W)	1305	/	/		Power input(W)	1420	/	/
	Air flow (CFM)	2182	/	/		Air flow (CFM)	2331	/	/

Tab.7-5

BLOWER DRIVE OPTIONS							
UNIT MAIN POWER	MODEL TYPE	MOTOR			BLOWER		
		HP	RPM	PULLEY PITCH DIA. (INCH)	SPEED RANGE (RPM)		PULLEY PITCH DIA. (INCH)
					MINIMUM	MAXIMUM	
380-415V 3N~ 50Hz	8.5 Tons	2	1400	4.53~5.25	821	918	8.35
	10 Tons	2	1400	4.53~5.25	931	1016	7.48
	12.5 Tons	4	1420	4.53~5.25	769	871	8.82
	15 Tons	5.3	1440	4.53~5.25	949	1112	7.48
	17.5 Tons	5.3	1440	4.53~5.25	927	1045	9.84
	20 Tons	5.3	1440	4.53~5.25	1081	1284	5.91
	25Tons	7.3	1440	4.53~5.25	925	1088	7.09
	30 Tons	7.3	1440	4.53~5.25	1022	1195	6.30

Example for selection process:

The following data are the rated design points for model 8.5 Ton rooftop:

Air flow(CFM)=3520cfm

External static pressure(ESP)=0.3in.w.g

Fan speed(RPM)=862

Power input(W)=1405

The no. of turns (N) =1

To increase the ESP to 0.4in.w.g, but maintain the airflow rate at 3500cfm, please follow the steps below:

Step 1: Selection of new desired point.

From the table data, select the point that can meet both of the requirements (ESP = 0.4in.w.g and airflow rate(near or equal to) = 3500cfm).

Step 2: Read Fan speed(RPM), Power input(W):

Air flow(CFM)=3483cfm

Fan speed(RPM)=896

Power input(W)=1400

Step 3: Read number of turns for variable pitch pulley.

Similarly, use this RPM value to read the no. of turns (N) by referring to the table of 'Motor Variable Pitch Pulley Data'. The variable pitch pulley for motor shall be adjusted to this 'N' in order to achieve the desired point (ESP = 0.4in.w.g and airflow rate =3483cfm). For instance, from the table, no. of turns (N) =0.25 in order to get 3483cfm. First, adjust the motor pulley to 0 turns. Then, makes 0.25 turns on the pulley. Cross check the dimension 'X', which stands for regulation space of motor pulley. In this case, X =1mm.

PULLEY PITCH Factory set point:The table, no. of turns (N) =1.5

8.5 Tons (380-415V 3N~ 50Hz)

External static pressure(ESP)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5
0	Fan speed(RPM)	896	887	876	866	855	847	839	830	821
	Power input(W)	1790	1720	1710	1665	1620	1560	1500	1445	1390
	Air flow (CFM)	4320	4213	4166	4130	4094	4041	3988	3946	3905
0.1	Fan speed(RPM)	899	890	878	867	857	849	842	849	823
	Power input(W)	1710	1640	1630	1590	1550	1490	1430	1378	1325
	Air flow (CFM)	4134	4035	3987	3943	3899	3855	3810	3761	3713
0.2	Fan speed(RPM)	902	893	880	869	858	851	844	851	825
	Power input(W)	1630	1560	1550	1515	1480	1420	1360	1310	1260
	Air flow (CFM)	3947	3858	3808	3756	3705	3669	3632	3577	3521
0.3	Fan speed(RPM)	904	896	880	871	862	854	847	854	827
	Power input(W)	1555	1485	1467	1436	1405	1345	1285	1235	1185
	Air flow (CFM)	3770	3675	3620	3570	3520	3470	3420	3364	3307
0.4	Fan speed(RPM)	907	896	885	876	866	858	849	858	828
	Power input(W)	1470	1400	1390	1360	1330	1265	1200	1150	1100
	Air flow (CFM)	3582	3483	3428	3321	3215	3215	3215	3154	3092
0.5	Fan speed(RPM)	910	900	886	877	869	860	852	860	830
	Power input(W)	1375	1310	1295	1265	1235	1175	1115	1065	1015
	Air flow (CFM)	3362	3266	3206	3122	3039	3005	2971	2901	2831
0.6	Fan speed(RPM)	913	903	887	879	871	863	854	863	832
	Power input(W)	1280	1220	1200	1170	1140	1085	1030	980	930
	Air flow (CFM)	3141	3048	2984	2924	2864	2795	2727	2649	2570
0.7	Fan speed(RPM)	915	906	892	883	874	865	857	/	/
	Power input(W)	1170	1115	1095	1068	1040	945	850	/	/
	Air flow (CFM)	2851	2761	2683	2619	2555	2325	2094	/	/
0.8	Fan speed(RPM)	918	909	897	887	876	868	859	/	/
	Power input(W)	1060	1010	990	965	940	805	670	/	/
	Air flow (CFM)	2560	2473	2383	2315	2246	1854	1462	/	/

Legend: X: Regulation Space of Motor Pulley (mm); N: Number of Turns; ESP: External Static Pressure (in.w.g)

10 Tons (380-415V 3N~ 50Hz)

External static pressure(ESP)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5
0	Fan speed(RPM)	/	/	/	/	/	/	962	946	931
	Power input(W)	/	/	/	/	/	/	2020	1945	1870
	Air flow (CFM)	/	/	/	/	/	/	4571	4500	4428
0.1	Fan speed(RPM)	/	/	/	/	/	969	964	969	933
	Power input(W)	/	/	/	/	/	2010	1930	1855	1780
	Air flow (CFM)	/	/	/	/	/	4442	4398	4323	4248
0.2	Fan speed(RPM)	/	/	/	/	977	972	967	972	935
	Power input(W)	/	/	/	/	1990	1915	1840	1765	1690
	Air flow (CFM)	/	/	/	/	4320	4272	4224	4146	4067
0.3	Fan speed(RPM)	/	/	/	981	980	975	970	975	937
	Power input(W)	/	/	/	1998	1915	1843	1770	1695	1620
	Air flow (CFM)	/	/	/	4214	4183	4127	4072	3997	3922
0.4	Fan speed(RPM)	/	/	986	984	982	977	972	977	938
	Power input(W)	/	/	2000	1900	1800	1730	1660	1590	1520
	Air flow (CFM)	/	/	4129	4052	3974	3905	3835	3771	3707
0.5	Fan speed(RPM)	/	989	989	987	985	980	975	980	940
	Power input(W)	/	1980	1960	1833	1705	1635	1565	1495	1425
	Air flow (CFM)	/	3953	4065	3927	3789	3719	3648	3579	3509
0.6	Fan speed(RPM)	1009	991	991	990	988	983	978	983	942
	Power input(W)	2050	1880	1865	1738	1610	1540	1470	1400	1330
	Air flow (CFM)	3830	3778	3891	3748	3605	3532	3460	3386	3312
0.7	Fan speed(RPM)	1011	993	994	992	990	/	/	/	/
	Power input(W)	1945	1775	1770	1638	1505	/	/	/	/
	Air flow (CFM)	3656	3586	3718	3549	3381	/	/	/	/
0.8	Fan speed(RPM)	1012	995	997	995	993	/	/	/	/
	Power input(W)	1840	1670	1660	1530	1400	/	/	/	/
	Air flow (CFM)	3481	3394	3517	3337	3157	/	/	/	/
0.9	Fan speed(RPM)	1014	996	1000	/	/	/	/	/	/
	Power input(W)	1725	1545	1550	/	/	/	/	/	/
	Air flow (CFM)	3292	3148	3316	/	/	/	/	/	/
1.0	Fan speed(RPM)	1016	998	1002	/	/	/	/	/	/
	Power input(W)	1610	1420	1425	/	/	/	/	/	/
	Air flow (CFM)	3104	2902	3048	/	/	/	/	/	/

Legend: X: Regulation Space of Motor Pulley (mm) ; N: Number of Turns ; ESP: External Static Pressure (in.w.g)

Bold data is the performance testing set point, Shading data are rated airflow.

25 Tons (380-415V 3N~ 50Hz)

External static pressure(ESP)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
		X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
0	Fan speed(RPM)	1075	1059	1044	1034	1026	1009	1002	985	973	963	934	939	925
0	Power input(W)	6962	6840	6589	6382	6068	5930	5651	5544	5232	5085	4765	4893	4734
0	Air flow (CFM)	12304	12345	12115	12068	11907	11717	11587	11472	11269	11177	10868	10894	10757
0.1	Fan speed(RPM)	1075	1060	1041	1035	1027	1010	1003	986	974	964	935	939	926
0.1	Power input(W)	6750	6663	6363	6203	5914	5736	5487	5374	5065	4905	4632	4740	4597
0.1	Air flow (CFM)	12052	12092	11849	11797	11645	11431	11322	11191	10982	10879	10572	10610	10471
0.2	Fan speed(RPM)	1074	1061	1038	1036	1028	1011	1004	987	975	965	936	940	927
0.2	Power input(W)	6538	6485	6137	6023	5759	5541	5323	5203	4898	4724	4498	4587	4459
0.2	Air flow (CFM)	11801	11838	11583	11527	11383	11144	11058	10909	10695	10581	10276	10326	10185
0.3	Fan speed(RPM)	1075	1062	1040	1036	1029	1011	1004	987	976	966	937	941	928
0.3	Power input(W)	6391	6301	5903	5842	5573	5329	5152	5019	4698	4524	4304	4410	4282
0.3	Air flow (CFM)	11575	11558	11249	11218	11055	10820	10745	10585	10345	10217	9914	9964	9825
0.4	Fan speed(RPM)	1075	1063	1041	1036	1030	1012	1005	988	977	967	937	942	928
0.4	Power input(W)	6243	6117	5668	5660	5387	5116	4980	4834	4498	4324	4110	4233	4104
0.4	Air flow (CFM)	11350	11278	10915	10910	10728	10496	10432	10260	9995	9853	9552	9602	9465
0.5	Fan speed(RPM)	1076	1063	1044	1037	1030	1013	1005	989	979	968	938	943	929
0.5	Power input(W)	6089	5904	5425	5441	5178	4900	4790	4626	4292	4114	3928	4040	3911
0.5	Air flow (CFM)	11019	10945	10566	10567	10361	10123	10054	9870	9598	9432	9155	9168	9021
0.6	Fan speed(RPM)	1077	1063	1047	1037	1031	1015	1005	990	980	969	939	944	930
0.6	Power input(W)	5934	5690	5181	5222	4969	4683	4600	4418	4085	3904	3746	3846	3717
0.6	Air flow (CFM)	10688	10612	10217	10224	9994	9749	9677	9480	9201	9010	8758	8735	8577
0.7	Fan speed(RPM)	1077	1064	1047	1038	1032	1015	1006	991	981	969	939	944	931
0.7	Power input(W)	5613	5449	4984	4995	4746	4455	4382	4203	3862	3683	3548	3645	3512
0.7	Air flow (CFM)	10300	10229	9839	9828	9590	9294	9245	9031	8703	8496	8259	8225	8064
0.8	Fan speed(RPM)	1078	1065	1048	1039	1033	1016	1006	992	982	969	940	945	932
0.8	Power input(W)	5292	5207	4786	4768	4522	4226	4163	3987	3638	3462	3349	3443	3307
0.8	Air flow (CFM)	9913	9847	9462	9432	9186	8838	8812	8581	8206	7983	7760	7715	7551
0.9	Fan speed(RPM)	1079	1066	1051	1040	1034	1017	1007	993	983	970	941	946	932
0.9	Power input(W)	5294	4968	4527	4522	4299	3990	3958	3758	3408	3240	3135	3203	3078
0.9	Air flow (CFM)	9875	9378	8936	8922	8670	8306	8296	8037	7615	7383	7169	7025	6863
1	Fan speed(RPM)	1080	1067	1053	1042	1034	1018	1008	994	984	970	942	947	933
1	Power input(W)	5295	4728	4267	4275	4076	3753	3753	3528	3177	3018	2921	2962	2849
1	Air flow (CFM)	9837	8910	8410	8412	8154	7775	7780	7492	7024	6784	6578	6335	6175
1.1	Fan speed(RPM)	1082	1068	1050	1042	1035	1019	1009	995	985	971	942	948	934
1.1	Power input(W)	4879	4488	4013	4034	3825	3496	3486	3341	2975	2803	2717	2792	2530
1.1	Air flow (CFM)	8972	8391	7852	7864	7575	7096	7053	6824	6335	5996	5844	5744	5204
1.2	Fan speed(RPM)	1084	1070	1047	1043	1035	1021	1010	995	986	973	943	949	935
1.2	Power input(W)	4463	4248	3759	3793	3574	3239	3219	3153	2773	2587	2512	2621	2210
1.2	Air flow (CFM)	8107	7871	7293	7316	6996	6418	6325	6156	5647	5209	5110	5152	4234
1.3	Fan speed(RPM)	1084	1072	1054	1046	1036	1023	1010	997	986	/	/	/	/
1.3	Power input(W)	4219	3996	3636	3538	3313	3089	3219	2818	2773	/	/	/	/
1.3	Air flow (CFM)	7663	7324	6813	6603	6221	5896	6325	5316	5647	/	/	/	/
1.4	Fan speed(RPM)	1085	1073	1061	1050	1038	1025	1011	/	/	/	/	/	/
1.4	Power input(W)	3975	3744	3513	3282	3051	2940	3024	/	/	/	/	/	/
1.4	Air flow (CFM)	7219	6776	6332	5889	5445	5375	5815	/	/	/	/	/	/
1.5	Fan speed(RPM)	1087	1074	1062	/	/	/	/	/	/	/	/	/	/
1.5	Power input(W)	3708	3474	3241	/	/	/	/	/	/	/	/	/	/
1.5	Air flow (CFM)	6428	5990	5551	/	/	/	/	/	/	/	/	/	/
1.6	Fan speed(RPM)	1088	/	/	/	/	/	/	/	/	/	/	/	/
1.6	Power input(W)	3440	/	/	/	/	/	/	/	/	/	/	/	/
1.6	Air flow (CFM)	5637	/	/	/	/	/	/	/	/	/	/	/	/

Legend: X: Regulation Space of Motor Pulley (mm); N: Number of Turns; ESP: External Static Pressure (in.w.g)

Bold data is the performance testing set point, Shading data are rated airflow.

30 Tons (380-415V 3N~ 50Hz)

External static pressure(ESP)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
0	Fan speed(RPM)	/	/	/	/	/	/	/	1106	1090	1074	1053	1032	1022
0	Power input(W)	/	/	/	/	/	/	/	8203	7899	7595	7256	6917	6872
0	Air flow (CFM)	/	/	/	/	/	/	/	13393	13210	13026	12794	12563	12434
0.1	Fan speed(RPM)	/	/	/	/	1133	1133	1106	1090	1074	1053	1032	1027	1022
0.1	Power input(W)	/	/	/	/	9142	9142	8010	7702	7394	7078	6761	6736	6710
0.1	Air flow (CFM)	/	/	/	/	13735	13735	13243	13044	12845	12605	12366	12307	12248
0.2	Fan speed(RPM)	/	/	/	/	1135	1135	1108	1092	1076	1055	1034	1029	1023
0.2	Power input(W)	/	/	/	/	8664	8664	7736	7427	7118	6828	6537	6509	6480
0.2	Air flow (CFM)	/	/	/	/	13304	13304	12902	12690	12479	12234	11990	11937	11884
0.3	Fan speed(RPM)	/	/	/	/	1137	1137	1109	1094	1078	1056	1035	1030	1025
0.3	Power input(W)	/	/	/	/	8425	8425	7490	7160	6831	6544	6258	6241	6225
0.3	Air flow (CFM)	/	/	/	/	13089	13089	12619	12384	12149	11897	11644	11591	11539
0.4	Fan speed(RPM)	/	/	1153	1146	1138	1138	1110	1095	1080	1058	1036	1031	1026
0.4	Power input(W)	/	/	9127	8545	8186	8186	7244	6893	6543	6261	5978	5974	5970
0.4	Air flow (CFM)	/	/	13410	12993	12873	12873	12336	12078	11820	11558	11296	11245	11193
0.5	Fan speed(RPM)	/	/	1155	1148	1140	1140	1112	1097	1083	1060	1038	1033	1028
0.5	Power input(W)	/	/	8920	8330	7963	7963	7007	6642	6278	6012	5746	5733	5720
0.5	Air flow (CFM)	/	/	13149	12713	12576	12576	12002	11730	11457	11193	10929	10849	10769
0.6	Fan speed(RPM)	1172	1165	1157	1150	1142	1142	1113	1099	1085	1062	1039	1035	1030
0.6	Power input(W)	9645	9015	8712	8069	7741	7080	6770	6391	6012	5763	5513	5492	5470
0.6	Air flow (CFM)	13274	12898	12887	12386	12278	11362	11669	11381	11094	10827	10560	10451	10342
0.7	Fan speed(RPM)	1172	1166	1158	1152	1144	1144	1114	1100	1087	1064	1041	1036	1032
0.7	Power input(W)	9364	8711	8385	7748	7426	7426	6467	6083	5699	5468	5236	5210	5184
0.7	Air flow (CFM)	12944	12550	12522	12006	11884	11884	11246	10916	10587	10317	10047	9928	9809
0.8	Fan speed(RPM)	1173	1167	1159	1153	1145	1145	1116	1102	1088	1065	1042	1038	1033
0.8	Power input(W)	9083	8407	8058	7415	7111	7111	6164	5775	5387	5173	4959	4928	4897
0.8	Air flow (CFM)	12615	12175	12156	11586	11489	11489	10822	10450	10078	9804	9530	9402	9273
0.9	Fan speed(RPM)	1174	1168	1161	1155	1147	1147	1117	1104	1091	1067	1044	1039	1035
0.9	Power input(W)	8884	8145	7732	7083	6772	6772	5812	5408	5004	4804	4603	4562	4520
0.9	Air flow (CFM)	12356	11835	11735	11139	11016	11016	10298	9875	9452	9175	8898	8708	8518
1.0	Fan speed(RPM)	1176	1172	1162	1156	1148	1148	1119	1106	1093	1069	1046	1041	1036
1.0	Power input(W)	8686	7877	7406	6744	6433	6433	5460	5041	4622	4436	4250	4197	4145
1.0	Air flow (CFM)	12097	11466	11313	10604	10543	10543	9773	9298	8823	8542	8262	8009	7756
1.1	Fan speed(RPM)	1187	1176	1168	1159	1149	1149	1121	1108	1095	1071	1047	1042	1038
1.1	Power input(W)	8462	7587	7067	6394	6081	6081	5095	4722	4348	4159	3970	3834	3697
1.1	Air flow (CFM)	11693	10973	10835	10015	9895	9895	8955	8500	8044	7732	7420	7014	6608
1.2	Fan speed(RPM)	1182	1175	1166	1159	1150	1150	1123	1109	1096	1072	1048	1044	1039
1.2	Power input(W)	8114	7246	6711	6082	5721	5721	4730	4402	4075	3883	3691	3469	3247
1.2	Air flow (CFM)	11270	10508	10253	9488	9195	9195	8138	7701	7265	6919	6574	6010	5447
1.3	Fan speed(RPM)	1185	1178	1169	1161	1152	1138	1124	/	/	/	/	/	/
1.3	Power input(W)	7721	6884	6379	5782	5453	4990	4527	/	/	/	/	/	/
1.3	Air flow (CFM)	10729	9983	9745	8998	8723	8211	7700	/	/	/	/	/	/
1.4	Fan speed(RPM)	1188	1182	1171	1164	1154	1139	1125	/	/	/	/	/	/
1.4	Power input(W)	7328	6237	6046	5347	5185	4755	4324	/	/	/	/	/	/
1.4	Air flow (CFM)	10187	8913	9238	8209	8250	7756	7262	/	/	/	/	/	/
1.5	Fan speed(RPM)	1191	1183	1173	1165	1155	1140	1126	/	/	/	/	/	/
1.5	Power input(W)	7114	6130	5596	5121	4916	4576	4236	/	/	/	/	/	/
1.5	Air flow (CFM)	9916	8778	8439	7810	7715	7353	6991	/	/	/	/	/	/
1.6	Fan speed(RPM)	1195	1185	1175	1166	1156	1141	1127	/	/	/	/	/	/
1.6	Power input(W)	6899	6022	5146	4896	4647	4397	4148	/	/	/	/	/	/
1.6	Air flow (CFM)	9645	8643	7640	7410	7180	6951	6721	/	/	/	/	/	/

Legend: X: Regulation Space of Motor Pulley (mm); N: Number of Turns; ESP: External Static Pressure (in.w.g)

Bold data is the performance testing set point, Shading data are rated airflow.

■ Parameter table for indoor unit air volume (220V 3N~ 60Hz)

7.5 Tons (220V 3N~ 60Hz)

Static pressure (Pa)		High speed	Middle speed	Low speed
0	Fan speed(RPM)	1035	936	844
	Power input(W)	1359	1242	1032
	Air flow (CFM)	3161	2685	2104
50	Fan speed(RPM)	1081	991	909
	Power input(W)	1258	1139	954
	Air flow (CFM)	2935	2601	2076
80	Fan speed(RPM)	1110	1026	954
	Power input(W)	1202	1082	919
	Air flow (CFM)	2706	2520	2065
100	Fan speed(RPM)	1127	1051	984
	Power input(W)	1159	1042	896
	Air flow (CFM)	2608	2452	2046
150	Fan speed(RPM)	1173	1110	1053
	Power input(W)	1050	944	818
	Air flow (CFM)	2422	2249	1938
200	Fan speed(RPM)	1217	1165	/
	Power input(W)	910	819	/
	Air flow (CFM)	2284	1930	/
250	Fan speed(RPM)	1263	1220	/
	Power input(W)	769	691	/
	Air flow (CFM)	2121	1815	/

Tab.7-6

BLOWER DRIVE OPTIONS							
UNIT MAIN POWER	MODEL TYPE	MOTOR			BLOWER		
		HP	RPM	PULLEY PITCH DIA. (INCH)	SPEED RANGE (RPM)		PULLEY PITCH DIA. (INCH)
					MINIMUM	MAXIMUM	
220V 3N~ 60Hz	10 Tons	2.9	1700	4.53~5.25	931	1016	8.82
	15 Tons	5.3	1730	4.53~5.25	941	1112	8.82
	20 Tons	7.3	1730	4.53~5.25	1081	1284	7.09
	25 Tons	10	1730	4.53~5.25	925	1088	7.87

Example for selection process:

The following data are the rated design points for model 10 Ton rooftop:

Air flow(CFM)=4183cfm

External static pressure(ESP)=0.3in.w.g

Fan speed(RPM)=980

Power input(W)=1915

The no. of turns (N) =1.0

To increase the ESP to 0.4in.w.g, but maintain the airflow rate at 4183cfm, please follow the steps below:

Step 1: Selection of new desired point.

From the table data, select the point that can meet both of the requirements (ESP = 0.4in.w.g and airflow rate(near or equal to) = 4183cfm).

Step 2: Read Fan speed(RPM), Power input(W):

Air flow(CFM)=4129cfm

Fan speed(RPM)=986

Power input(W)=2000

Step 3: Read number of turns for variable pitch pulley.

Similarly, use this RPM value to read the no. of turns (N) by referring to the table of 'Motor Variable Pitch Pulley Data'. The variable pitch pulley for motor shall be adjusted to this 'N' in order to achieve the desired point (ESP = 0.4in.w.g and airflow rate =4183cfm). For instance, from the table, no. of turns (N) =0.5 in order to get 4129cfm. First, adjust the motor pulley to 0 turns. Then, makes 0.5 turns on the pulley. Cross check the dimension 'X', which stands for regulation space of motor pulley. In this case, X =1.5mm.

10tons (220V 3N~ 60Hz)

External static pressure(ESP)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5
0	Fan speed(RPM)	/	/	/	/	972	967	962	946	931
	Power input(W)	/	/	/	/	2759	2390	2020	1945	1870
	Air flow (CFM)	/	/	/	/	4836	4704	4571	4500	4428
0.1	Fan speed(RPM)	/	/	/	/	974	969	964	969	933
	Power input(W)	/	/	/	/	2090	2010	1930	1855	1780
	Air flow (CFM)	/	/	/	/	4487	4442	4398	4323	4248
0.2	Fan speed(RPM)	/	/	980	978	977	972	967	972	935
	Power input(W)	/	/	2718	2354	1990	1915	1840	1765	1690
	Air flow (CFM)	/	/	4631	4476	4320	4272	4224	4146	4067
0.3	Fan speed(RPM)	/	/	983	981	980	975	970	975	937
	Power input(W)	/	/	2359	1998	1915	1843	1770	1695	1620
	Air flow (CFM)	/	/	4380	4214	4183	4127	4072	3997	3922
0.4	Fan speed(RPM)	989	987	986	984	982	977	972	977	938
	Power input(W)	2774	2387	2000	1900	1800	1730	1660	1590	1520
	Air flow (CFM)	4480	4305	4129	4052	3974	3905	3835	3771	3707
0.5	Fan speed(RPM)	999	989	989	987	985	980	975	980	940
	Power input(W)	2412	1980	1960	1833	1705	1635	1565	1495	1425
	Air flow (CFM)	4155	4065	3953	3927	3789	3719	3648	3579	3509
0.6	Fan speed(RPM)	1009	991	991	990	988	983	978	983	942
	Power input(W)	2050	1880	1865	1738	1610	1540	1470	1400	1330
	Air flow (CFM)	3891	3830	3778	3748	3605	3532	3460	3386	3312
0.7	Fan speed(RPM)	1011	993	994	992	990	/	/	/	/
	Power input(W)	1945	1775	1770	1638	1505	/	/	/	/
	Air flow (CFM)	3718	3656	3586	3549	3381	/	/	/	/
0.8	Fan speed(RPM)	1012	995	997	995	993	/	/	/	/
	Power input(W)	1840	1670	1660	1530	1400	/	/	/	/
	Air flow (CFM)	3517	3481	3394	3337	3157	/	/	/	/
0.9	Fan speed(RPM)	1014	996	1000	/	/	/	/	/	/
	Power input(W)	1725	1545	1550	/	/	/	/	/	/
	Air flow (CFM)	3316	3292	3148	/	/	/	/	/	/
1.0	Fan speed(RPM)	1016	998	1002	/	/	/	/	/	/
	Power input(W)	1610	1420	1425	/	/	/	/	/	/
	Air flow (CFM)	3104	3048	2902	/	/	/	/	/	/
1.1	Fan speed(RPM)									
	Power input(W)									
	Air flow (CFM)									

Legend: X: Regulation Space of Motor Pulley (mm); N: Number of Turns; ESP: External Static Pressure (in.w.g)

15tons (220V 3N~ 60Hz)

External static pressure(ESP)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5
0	Fan speed(RPM)	/	/	1008	999	989	979	969	959	949
	Power input(W)	/	/	5146	4968	4790	4575	4360	4155	3950
	Air flow (CFM)	/	/	7928	7867	7805	7686	7566	7452	7338
0.1	Fan speed(RPM)	/	/	1014	1003	991	983	974	964	953
	Power input(W)	/	/	5043	4824	4605	4418	4230	4025	3820
	Air flow (CFM)	/	/	7791	7691	7592	7473	7353	7239	7124
0.2	Fan speed(RPM)	/	1022	1020	1006	993	986	979	968	957
	Power input(W)	/	4954	4940	4680	4420	4260	4100	3895	3690
	Air flow (CFM)	/	7700	7653	7516	7379	7259	7139	7025	6910
0.3	Fan speed(RPM)	1031	1026	1022	1009	995	989	982	971	960
	Power input(W)	4870	4810	4750	4495	4240	4088	3935	3745	3555
	Air flow (CFM)	7622	7529	7436	7313	7191	7048	6904	6790	6675
0.4	Fan speed(RPM)	1035	1028	1021	1008	995	988	982	971	959
	Power input(W)	4770	4665	4560	4310	4060	3915	3770	3595	3420
	Air flow (CFM)	7475	7347	7219	7111	7002	6836	6669	6554	6439
0.5	Fan speed(RPM)	1050	1044	1039	1026	1013	1006	998	990	981
	Power input(W)	4510	4440	4370	4123	3875	3760	3645	3465	3285
	Air flow (CFM)	7113	7046	6979	6844	6708	6571	6434	6297	6159
0.6	Fan speed(RPM)	1060	1056	1052	1039	1026	1021	1015	1005	995
	Power input(W)	4350	4290	4230	4005	3780	3695	3610	3410	3210
	Air flow (CFM)	6899	6863	6828	6679	6531	6411	6291	6134	5976
0.7	Fan speed(RPM)	1070	1065	1060	1049	1039	1032	1025	1017	1008
	Power input(W)	4170	4078	3985	3808	3630	3518	3405	3248	3090
	Air flow (CFM)	6658	6609	6559	6419	6279	6161	6043	5859	5675
0.8	Fan speed(RPM)	1082	1074	1067	1059	1051	1044	1036	1028	1020
	Power input(W)	3990	3865	3740	3610	3480	3340	3200	3085	2970
	Air flow (CFM)	6418	6354	6291	6159	6027	5911	5794	5584	5375
0.9	Fan speed(RPM)	1089	1082	1074	1065	1056	1048	1040	1033	1027
	Power input(W)	3855	3728	3600	3455	3310	3180	3050	2928	2805
	Air flow (CFM)	6194	6108	6022	5879	5736	5600	5464	5269	5075
1.0	Fan speed(RPM)	1097	1089	1082	1072	1061	1053	1044	1038	1033
	Power input(W)	3720	3590	3460	3300	3140	3020	2900	2770	2640
	Air flow (CFM)	5971	5862	5754	5600	5446	5289	5133	4954	4776
1.1	Fan speed(RPM)	1104	1095	1086	1076	1065	/	/	/	/
	Power input(W)	3595	3438	3280	3115	2950	/	/	/	/
	Air flow (CFM)	5705	5585	5464	5308	5151	/	/	/	/
1.2	Fan speed(RPM)	1112	/	/	/	/	/	/	/	/
	Power input(W)	3470	/	/	/	/	/	/	/	/
	Air flow (CFM)	5439	/	/	/	/	/	/	/	/
1.3	Fan speed(RPM)	1112	/	/	/	/	/	/	/	/
	Power input(W)	3470	/	/	/	/	/	/	/	/
	Air flow (CFM)	5439	/	/	/	/	/	/	/	/

Legend: X: Regulation Space of Motor Pulley (mm); N: Number of Turns; ESP: External Static Pressure (in.w.g)

20tons (220V 3N~ 60Hz)

External static pressure(ESP)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
		X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6
0	Fan speed(RPM)	/	/	/	/	1194	1181	1168	1154	1140	1127	1113	1098	1081
	Power input(W)	/	/	/	/	6951	6710	6468	6266	6063	5831	5599	5422	5188
	Air flow (CFM)	/	/	/	/	11210	11104	10997	10872	10746	10623	10499	10306	10078
0.1	Fan speed(RPM)	/	/	/	/	1195	1182	1169	1155	1141	1128	1114	1100	1083
	Power input(W)	/	/	/	/	6756	6531	6306	6103	5901	5671	5442	5255	5057
	Air flow (CFM)	/	/	/	/	10982	10890	10798	10668	10539	10398	10258	10068	9892
0.2	Fan speed(RPM)	/	/	/	1214	1196	1183	1170	1156	1142	1129	1115	1101	1084
	Power input(W)	/	/	/	6944	6561	6352	6143	5941	5738	5512	5285	5088	4926
	Air flow (CFM)	/	/	/	10877	10754	10676	10599	10465	10332	10174	10016	9829	9705
0.3	Fan speed(RPM)	/	/	/	1214	1197	1184	1171	1157	1143	1130	1116	1102	1085
	Power input(W)	/	/	/	6738	6390	6180	5970	5754	5539	5328	5118	5069	4748
	Air flow (CFM)	/	/	/	10628	10540	10453	10367	10207	10047	9898	9749	9807	9403
0.4	Fan speed(RPM)	/	1240	1228	1215	1198	1185	1172	1158	1145	1131	1117	1103	1087
	Power input(W)	/	6941	6765	6532	6218	6008	5797	5568	5339	5145	4950	5049	4570
	Air flow (CFM)	/	10582	10491	10378	10326	10230	10135	9948	9761	9622	9483	9785	9102
0.5	Fan speed(RPM)	/	1241	1230	1215	1199	1186	1173	1159	1146	1131	1117	1105	1091
	Power input(W)	/	6753	6659	6367	6068	5866	5663	5441	5218	5013	4808	4570	4351
	Air flow (CFM)	/	10357	10349	10170	10113	10017	9922	9753	9584	9435	9285	9024	8815
0.6	Fan speed(RPM)	1258	1242	1230	1216	1202	1189	1175	1162	1149	1134	1120	1105	1091
	Power input(W)	6736	6565	6360	6158	5820	5611	5401	5180	4958	4769	4579	4327	4141
	Air flow (CFM)	10287	10132	10049	9952	9818	9692	9566	9395	9224	9069	8915	8599	8418
0.7	Fan speed(RPM)	1261	1244	1232	1218	1204	1190	1177	1163	1149	1135	1121	1106	1093
	Power input(W)	6511	6332	6169	5929	5607	5391	5175	4953	4731	4545	4358	4107	3925
	Air flow (CFM)	10042	9864	9794	9650	9524	9377	9231	9046	8861	8699	8537	8243	8045
0.8	Fan speed(RPM)	1263	1245	1233	1221	1205	1192	1179	1164	1150	1136	1123	1106	1094
	Power input(W)	6285	6099	5977	5700	5394	5172	4949	4727	4504	4321	4137	3887	3709
	Air flow (CFM)	9798	9597	9540	9347	9230	9063	8896	8697	8497	8328	8158	7887	7672
0.9	Fan speed(RPM)	1264	1248	1235	1222	1207	1194	1181	1166	1152	1138	1124	1110	1096
	Power input(W)	6046	5871	5696	5451	5160	4923	4686	4461	4237	4049	3861	3624	3433
	Air flow (CFM)	9505	9301	9183	9019	8877	8693	8508	8291	8074	7871	7669	7387	7138
1.0	Fan speed(RPM)	1265	1251	1237	1224	1209	1196	1183	1169	1154	1140	1126	1113	1099
	Power input(W)	5807	5643	5415	5201	4925	4674	4422	4196	3969	3777	3585	3361	3157
	Air flow (CFM)	9212	9004	8826	8691	8524	8322	8120	7885	7650	7415	7180	6887	6605
1.1	Fan speed(RPM)	1267	1253	1239	1226	1211	1198	1185	1171	1157	1144	1130	1117	1094
	Power input(W)	5523	5350	5120	4872	4585	4322	4059	3812	3564	3331	3098	2800	2662
	Air flow (CFM)	8831	8594	8380	8204	8010	7740	7470	7173	6876	6487	6099	5562	5395
1.2	Fan speed(RPM)	1269	1254	1242	1228	1213	1201	1188	1174	1160	1147			
	Power input(W)	5238	5056	4825	4542	4245	3971	3696	3428	3159	2885			
	Air flow (CFM)	8450	8184	7933	7717	7495	7157	6819	6460	6102	5560			
1.3	Fan speed(RPM)	1272	1258	1245	1233	1218	1206		/	/	/	/	/	/
	Power input(W)	4892	4650	4334	3987	3707	3334		/	/	/	/	/	/
	Air flow (CFM)	7955	7559	7136	6775	6406	5820		/	/	/	/	/	/
1.4	Fan speed(RPM)	1276	1262	1248	1235		/	/	/	/	/	/	/	/
	Power input(W)	4546	4243	3842	3731		/	/	/	/	/	/	/	/
	Air flow (CFM)	7459	6935	6339	6285		/	/	/	/	/	/	/	/
1.5	Fan speed(RPM)	1280	1267		/	/	/	/	/	/	/	/	/	/
	Power input(W)	3982	3457		/	/	/	/	/	/	/	/	/	/
	Air flow (CFM)	6465	5433		/	/	/	/	/	/	/	/	/	/
1.6	Fan speed(RPM)	1284	/	/	/	/	/	/	/	/	/	/	/	/
	Power input(W)	3417	/	/	/	/	/	/	/	/	/	/	/	/
	Air flow (CFM)	5471	/	/	/	/	/	/	/	/	/	/	/	/

Legend: X: Regulation Space of Motor Pulley (mm); N: Number of Turns; ESP: External Static Pressure (in.w.g)

25tons (220V 3N~ 60Hz)

External static pressure(ESP)	N	0	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3
	X	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5
0.5	Fan speed(RPM)	/	/	/	/	/	/	/	/	/	1215	1185	1181	1176
	Power input(W)	/	/	/	/	/	/	/	/	/	7350	7164	7155	7146
	Air flow (CFM)	/	/	/	/	/	/	/	/	/	12552	12275	12208	12141
0.6	Fan speed(RPM)	/	/	/	/	/	/	/	/	1225	1216	1186	1181	1177
	Power input(W)	/	/	/	/	/	/	/	/	8405	7032	6874	6860	6845
	Air flow (CFM)	/	/	/	/	/	/	/	/	12706	12210	11958	11867	11777
0.7	Fan speed(RPM)	/	/	/	/	/	/	/	1230	1220	1216	1187	1183	1178
	Power input(W)	/	/	/	/	/	/	/	6950	6846	6742	6607	6589	6571
	Air flow (CFM)	/	/	/	/	/	/	/	12704	12377	11835	11597	11500	11402
0.8	Fan speed(RPM)	/	/	/	/	/	/	1230	1225	1220	1217	1188	1184	1180
	Power input(W)	/	/	/	/	/	/	8379	8203	7854	6452	6339	6318	6297
	Air flow (CFM)	/	/	/	/	/	/	12654	12423	12048	11460	11237	11132	11028
0.9	Fan speed(RPM)	/	/	/	/	/	1215	1210	1200	1200	1189	1185	1183	1181
	Power input(W)	/	/	/	/	/	8155	8124	7923	7573	6195	6090	6062	6033
	Air flow (CFM)	/	/	/	/	/	12362	12352	12092	11671	11140	10926	10773	10620
1	Fan speed(RPM)	/	/	/	1220	1215	1214	1209	1200	1200	1189	1185	1182	1182
	Power input(W)	/	/	/	8696	8497	7868	7868	7643	7292	5938	5841	5805	5769
	Air flow (CFM)	/	/	/	12321	12063	12045	12050	11762	11294	10821	10615	10413	10212
1.1	Fan speed(RPM)	/	/	1220	1218	1213	1210	1207	1199	1199	1188	1182	1181	/
	Power input(W)	/	/	8383	8404	8195	6473	6463	6317	5952	5779	5693	5768	/
	Air flow (CFM)	/	/	11957	11970	11681	11553	11509	11280	10792	10452	10300	10200	/
1.2	Fan speed(RPM)	/	1220	1218	1215	1210	1208	1205	1197	1197	1188	1181	/	/
	Power input(W)	/	8566	8077	8111	7892	6495	6475	6409	6029	5843	5768	/	/
	Air flow (CFM)	/	12174	11596	11619	11299	11308	11215	11045	10536	10098	9999	/	/
1.3	Fan speed(RPM)	/	1218	1215	1212	1208	1206	1203	1195	1191	1186	/	/	/
	Power input(W)	/	8576	8216	8117	7892	6186	6316	5915	5870	5939	/	/	/
	Air flow (CFM)	/	12402	11891	11681	11299	10418	10847	9838	10168	9105	/	/	/
1.4	Fan speed(RPM)	1220	1215	1213	1210	1206	1201	1200	1188	1178	/	/	/	/
	Power input(W)	8629	7946	7715	7484	7253	6250	6380	5979	5934	/	/	/	/
	Air flow (CFM)	11462	11818	11374	10931	10487	10034	9605	9356	9025	/	/	/	/
1.5	Fan speed(RPM)	1215	1211	1210	1209	1205	1201	1200	1189	/	/	/	/	/
	Power input(W)	8342	8575	8809	7967	7126	6123	6253	5852	/	/	/	/	/
	Air flow (CFM)	11076	11514	11952	11069	10187	9733	9304	9055	/	/	/	/	/
1.6	Fan speed(RPM)	1206	1204	1201	1201	1200	1196	1189	/	/	/	/	/	/
	Power input(W)	8055	8011	7967	7791	6999	5996	6126	/	/	/	/	/	/
	Air flow (CFM)	10689	10656	10622	10489	9886	9433	9004	/	/	/	/	/	/
1.7	Fan speed(RPM)	1200	1200	1196	1196	1189	1186	/	/	/	/	/	/	/
	Power input(W)	5571	5615	5659	5835	6627	5624	/	/	/	/	/	/	/
	Air flow (CFM)	8441	8474	8508	8642	9244	8791	/	/	/	/	/	/	/
1.8	Fan speed(RPM)	1186	1184	1184	1184	1180	1180	/	/	/	/	/	/	/
	Power input(W)	7310	7266	7222	7046	6254	5251	/	/	/	/	/	/	/
	Air flow (CFM)	9406	9373	9339	9205	8603	8150	/	/	/	/	/	/	/

Legend: X: Regulation Space of Motor Pulley (mm); N: Number of Turns; ESP: External Static Pressure (in.w.g)
 PULLEY PITCH Factory set point:The table, no. of turns (N) =1.5
 Bold data is the performance testing set point
 Gray bottom data are rated airflow

7.3 Capacity Data (380-415V 3N~ 50Hz)

■ Cooling capacity — 4 Tons (380-415V 3N~ 50Hz)

Air Flow (CFM)			1263				1800				2252				
Ent (DB)	(°F)		75	80	85	90	75	80	85	90	75	80	85	90	
Ambient Temperature	85	61	TC	40.6	41.8	42.9	44.2	44.0	45.2	46.5	47.8	45.4	46.7	48.0	49.4
			SC	35.2	39.5	42.4	43.8	38.4	41.8	44.8	46.6	41.2	42.8	44.9	47.6
			PI	3238.4	3358.8	3570.2	3810.9	3480.3	3600.6	3822.2	4067.9	3581.0	3706.4	3928.0	4178.8
		67	TC	48.9	50.3	51.6	53.0	49.7	51.1	52.5	53.9	50.3	51.6	53.0	54.5
			SC	27.8	35.2	42.7	50.0	29.2	37.1	44.9	51.2	30.1	38.2	46.5	53.5
			PI	3703.0	3849.3	4215.2	4507.8	3758.5	3904.8	4275.6	4568.2	3798.8	3945.1	4315.9	4608.5
		73	TC	51.6	53.0	54.5	55.9	52.1	53.5	54.9	56.3	52.2	53.6	55.0	56.5
			SC	17.6	25.7	32.0	38.1	17.9	27.0	32.2	39.7	18.2	27.9	32.8	39.9
			PI	4864.8	5032.0	5324.6	5654.0	4895.0	5062.2	5354.8	5684.2	4905.1	5072.3	5364.9	5699.3
	95	61	TC	37.5	38.6	39.8	40.9	39.2	40.3	41.5	42.7	40.8	42.0	43.2	44.4
			SC	33.2	36.6	38.1	40.2	35.0	38.2	40.2	42.7	36.9	39.3	41.9	43.9
			PI	3254.3	3556.0	3727.2	3952.8	3496.2	3797.8	3979.2	4209.8	3536.5	3838.2	4019.5	4250.1
		67	TC	42.4	43.6	44.9	46.1	43.5	48.0	50.2	51.2	46.5	50.0	51.3	52.5
			SC	25.9	33.5	41.2	44.0	27.4	37.2	45.0	47.9	29.1	38.6	47.6	48.6
			PI	3719.0	4046.6	4372.2	4649.7	3774.4	4102.0	4432.6	4710.1	3784.5	4112.1	4442.7	4725.2
		73	TC	51.1	52.5	53.9	55.3	51.4	52.8	54.2	55.7	51.7	53.1	54.5	55.9
			SC	17.0	25.2	32.1	39.2	17.3	25.7	33.2	40.8	17.6	26.2	34.1	42.0
			PI	4880.7	5229.2	5481.6	5795.8	4910.9	5259.4	5511.8	5826.1	4951.3	5299.8	5552.1	5866.4
	105	61	TC	32.9	33.9	35.0	36.0	34.5	35.6	36.7	37.8	36.0	37.1	38.2	39.3
			SC	30.4	31.6	33.4	34.6	33.2	34.2	36.4	37.8	35.7	36.6	37.6	39.2
			PI	3864.4	4117.2	4296.4	4532.1	4033.2	4286.0	4472.8	4711.0	4118.8	4374.2	4561.0	4801.7
		67	TC	41.6	42.8	44.0	45.3	42.9	44.1	45.4	46.7	44.0	45.3	46.5	47.8
			SC	24.3	31.9	39.7	43.9	25.9	34.4	43.2	46.4	27.4	36.8	46.5	47.7
			PI	4067.4	4382.1	4707.7	4985.2	4109.9	4437.5	4768.1	5045.6	4120.0	4447.6	4778.2	5060.7
73		TC	49.3	50.6	52.1	53.4	49.2	50.6	51.9	53.3	50.3	51.6	53.0	54.5	
		SC	16.0	24.3	32.9	40.2	15.9	24.9	33.7	41.3	16.7	26.2	34.8	42.7	
		PI	5229.2	5564.7	5817.1	6131.3	5246.4	5594.9	5847.3	6161.6	5286.8	5635.3	5887.6	6201.9	
115	61	TC	26.4	27.3	28.3	29.3	27.8	28.7	29.7	30.7	29.6	30.6	31.6	32.6	
		SC	25.7	26.6	27.8	29.2	25.2	28.0	28.8	29.9	28.7	29.8	31.1	32.5	
		PI	4474.4	4678.4	4865.6	5111.4	4570.2	4774.1	4966.4	5212.2	4701.2	4910.2	5102.4	5353.2	
	67	TC	36.4	37.5	38.7	39.9	37.8	39.0	40.1	41.3	39.0	40.1	41.3	42.6	
		SC	20.2	27.7	34.7	37.5	21.8	30.1	36.6	38.9	23.4	32.4	35.8	40.5	
		PI	4513.6	4717.6	5043.2	5320.7	4545.4	4773.0	5103.6	5381.1	4455.5	4783.1	5113.7	5396.2	
	73	TC	44.4	45.7	47.1	48.4	41.1	42.3	43.5	44.8	45.9	47.3	48.6	50.0	
		SC	13.4	21.0	29.3	37.8	13.4	20.2	30.0	38.1	14.2	23.4	32.5	41.4	
		PI	5577.7	5900.2	6152.6	6466.8	5581.9	5930.4	6182.8	6497.1	5622.3	5970.8	6223.1	6537.4	
118.4	61	TC	24.9	25.8	26.8	27.8	26.3	27.2	28.2	29.2	28.1	29.1	30.1	31.1	
		SC	24.2	25.1	26.3	27.7	23.7	26.5	27.3	28.4	27.2	28.3	29.6	31.0	
		PI	4032.3	4334.0	4505.2	4730.8	4274.2	4575.8	4757.2	4987.8	4314.5	4616.2	4797.5	5028.1	
	67	TC	34.8	35.9	37.0	38.2	36.1	36.9	38.4	39.6	37.3	38.4	39.6	40.8	
		SC	19.9	27.4	34.4	37.2	21.5	29.4	36.2	38.5	23.0	32.1	36.4	40.1	
		PI	4497.0	4824.6	5150.2	5427.7	4552.4	4880.0	5210.6	5488.1	4562.5	4890.1	5220.7	5503.2	
	73	TC	42.9	44.2	45.6	46.9	39.6	40.8	42.0	43.3	44.4	45.8	47.1	48.5	
		SC	12.1	19.7	27.9	36.4	12.2	18.9	28.6	36.6	12.9	22.1	31.1	39.9	
		PI	5658.7	6007.2	6259.6	6573.8	5688.9	6037.4	6289.8	6604.1	5729.3	6077.8	6330.1	6644.4	
125	61	TC	22.6	23.5	24.3	25.2	23.9	24.7	25.6	26.5	25.5	26.4	27.3	28.3	
		SC	22.0	22.9	23.9	25.1	21.6	24.1	24.8	25.8	24.7	25.8	26.9	28.2	
		PI	4498.0	4747.1	5110.6	5322.2	4859.1	5098.5	5493.6	5709.4	4997.6	5256.4	5643.5	5858.7	
	67	TC	30.0	31.0	32.0	33.1	31.2	32.2	33.2	34.3	32.2	33.3	34.3	35.4	
		SC	17.5	24.1	30.3	32.8	18.9	26.2	32.0	34.0	20.3	28.3	34.0	35.5	
		PI	4962.6	5237.7	5755.5	6019.0	5137.3	5402.6	5947.0	6209.7	5245.6	5530.3	6066.7	6333.8	
	73	TC	39.1	40.3	41.6	42.8	40.4	41.6	42.8	44.0	42.0	43.3	44.6	45.9	
		SC	11.5	18.4	25.7	33.4	11.6	19.3	26.3	33.5	12.3	20.5	28.6	36.5	
		PI	6124.4	6420.3	6864.9	7165.2	6273.8	6560.1	7026.2	7325.7	6412.3	6718.0	7176.1	7474.9	

Notes:

1. All capacities are net and have considered indoor fan heat.
2. TC=Total Capacity. (Unit:1000Btu/h)
3. SC=SensibleCapacity. (Unit:1000Btu/h)
4. PI=Power input (unit:W)
5. Different air volume in the above table, need to adjust in the field

■ Cooling capacity — 5 Tons (380-415V 3N~ 50Hz)

Air Flow (CFM)			1362				2000				2172				
	Ent (DB)	(°F)	75	80	85	90	75	80	85	90	75	80	85	90	
Ambient Temperature	85	61	TC	48.2	49.6	51.0	52.4	52.3	53.7	55.2	56.8	54.0	55.5	57.0	58.6
			SC	42.1	47.3	50.7	52.4	46.0	49.9	53.6	55.8	49.3	51.2	53.8	57.0
			PI	3873.7	4017.7	4270.6	4558.6	4163.0	4307.0	4572.0	4865.9	4283.5	4433.5	4698.5	4998.5
		67	TC	58.6	60.2	61.8	63.5	59.5	61.2	62.8	64.5	60.2	61.8	63.5	65.2
			SC	33.0	41.9	50.7	59.3	34.7	44.0	53.3	60.9	35.7	45.4	55.3	63.5
			PI	4429.5	4604.5	5042.1	5392.1	4495.8	4670.8	5114.4	5464.4	4544.0	4719.0	5162.6	5512.6
		73	TC	61.8	63.5	65.2	66.9	62.3	64.0	65.7	67.4	62.5	64.2	65.9	67.7
			SC	20.9	30.5	38.0	45.2	21.3	32.0	38.3	47.1	21.6	33.1	39.0	47.4
			PI	5819.1	6019.1	6369.1	6763.1	5855.3	6055.3	6405.3	6799.3	5867.3	6067.3	6417.3	6817.3
	95	61	TC	44.9	46.3	47.6	49.0	46.9	48.3	49.7	51.2	48.9	50.3	51.8	53.2
			SC	39.4	43.4	45.3	47.7	41.6	45.4	47.8	50.7	43.8	46.7	49.7	52.1
			PI	4600.5	4756.5	5115.5	5409.5	4657.5	4766.1	5266.2	5566.2	4960.8	5145.8	5410.8	5710.8
		67	TC	50.8	52.3	53.8	55.2	52.1	58.0	60.1	61.3	55.7	59.9	61.4	62.8
			SC	30.8	39.8	49.0	52.3	32.5	44.4	53.5	56.9	34.6	45.9	56.6	57.7
			PI	4784.3	4955.3	5320.3	5664.3	4836.7	4986.2	5445.4	5786.2	4902.9	5134.0	5538.2	5897.7
		73	TC	61.2	62.8	64.5	66.2	61.6	63.3	65.0	66.7	61.9	63.6	65.3	67.0
			SC	20.1	29.9	38.1	46.5	20.5	30.6	39.4	48.5	20.9	31.2	40.5	49.8
			PI	6229.3	6479.3	6987.0	7387.0	6259.4	6509.4	7017.1	7417.1	6283.5	6533.5	7041.3	7441.3
	105	61	TC	39.4	40.6	41.9	43.1	41.4	42.6	43.9	45.2	43.1	44.4	45.8	47.1
			SC	36.1	37.5	39.6	41.1	39.4	40.6	43.2	44.9	42.4	43.5	44.7	46.6
			PI	4765.2	4994.2	5371.8	5665.7	4903.8	5138.8	5516.4	5816.4	5030.4	5265.4	5649.0	5949.0
		67	TC	49.8	51.3	52.7	54.2	51.4	52.9	54.4	55.9	52.7	54.2	55.7	57.3
			SC	28.8	37.9	47.2	52.1	30.8	40.9	51.3	55.1	32.6	43.7	55.2	56.7
			PI	4949.0	5193.0	5576.6	5920.6	5063.5	5307.5	5697.1	6041.1	5153.9	5403.9	5787.5	6137.5
73		TC	59.0	60.6	62.3	63.9	59.0	60.6	62.2	63.9	60.2	61.8	63.5	65.2	
		SC	19.0	28.8	39.1	47.7	18.9	29.6	40.0	49.1	19.9	31.1	41.3	50.7	
		PI	6856.9	7136.9	7744.7	8138.6	6850.9	7130.9	7732.6	8132.6	6941.3	7221.3	7829.0	8229.0	
115	61	TC	35.3	36.4	37.5	38.7	37.0	38.1	39.2	40.4	39.2	40.3	41.5	42.8	
		SC	30.5	31.6	33.0	34.6	29.9	33.2	34.2	35.5	34.0	35.4	36.9	38.6	
		PI	5194.9	5438.9	5662.8	5956.8	5309.4	5553.4	5783.4	6077.3	5466.1	5716.1	5946.1	6246.1	
	67	TC	45.0	46.3	47.6	49.0	46.5	47.9	49.2	50.6	47.9	49.2	50.6	52.0	
		SC	24.0	32.9	41.2	44.5	25.9	35.7	43.4	46.1	27.7	38.5	42.5	48.1	
		PI	5482.6	5751.5	6135.2	6479.1	5591.1	5866.1	6249.7	6593.6	5687.5	5962.5	6346.1	6696.1	
	73	TC	56.9	58.4	60.1	61.7	52.9	54.3	55.8	57.3	58.7	60.3	61.9	63.5	
		SC	15.9	24.9	34.8	44.9	15.9	24.1	35.6	45.2	16.8	27.8	38.6	49.1	
		PI	6942.5	7236.5	7844.2	8244.2	6653.2	6941.2	7542.9	7936.9	7069.1	7369.1	7976.8	8376.8	
118.4	61	TC	32.2	33.3	34.4	35.5	33.8	34.9	36.0	37.2	36.0	37.1	38.3	39.6	
		SC	28.7	29.9	31.2	32.8	28.2	31.4	32.5	33.7	32.3	33.7	35.1	36.8	
		PI	5642.2	5886.2	6230.1	6524.1	5756.7	6000.7	6350.7	6644.6	5913.4	6163.4	6513.4	6813.4	
	67	TC	43.2	44.5	45.8	47.2	44.7	45.6	47.4	48.8	46.1	47.4	48.8	50.2	
		SC	23.7	32.5	40.9	44.1	25.6	35.0	43.0	45.7	27.4	38.1	43.2	47.7	
		PI	5635.5	5904.5	6297.0	6642.0	5744.0	6019.0	6411.5	6756.6	5840.4	6115.4	6509.0	6859.0	
	73	TC	53.7	55.3	56.9	58.5	49.7	51.1	52.6	54.2	55.5	57.1	58.7	60.3	
		SC	14.4	23.4	33.1	43.2	14.5	22.5	33.9	43.5	15.4	26.2	36.9	47.4	
		PI	7615.0	7959.0	8566.7	8966.7	7325.7	7663.7	8265.4	8659.4	7741.6	8091.6	8699.3	9099.3	
125	61	TC	27.1	28.1	29.1	30.2	28.6	29.6	30.6	31.7	30.6	31.7	32.8	33.9	
		SC	26.1	27.2	28.4	29.8	25.6	28.6	29.5	30.6	29.3	30.6	31.9	33.5	
		PI	4845.3	5081.1	5365.5	5626.4	5015.4	5246.7	5535.9	5796.4	5226.9	5471.4	5766.3	6035.6	
	67	TC	36.0	37.2	38.3	39.6	37.3	38.6	39.8	41.0	38.6	39.9	41.1	42.4	
		SC	20.8	28.6	36.0	39.0	22.4	31.1	37.9	40.4	24.1	33.6	40.4	42.2	
		PI	5266.5	5522.3	5878.9	6181.9	5395.1	5643.9	6017.1	6320.4	5514.2	5778.4	6145.4	6449.2	
	73	TC	46.9	48.3	49.8	51.2	48.4	49.8	51.3	52.7	50.4	51.9	53.4	54.9	
		SC	13.7	21.8	30.5	39.6	13.8	22.9	31.2	39.8	14.6	24.3	34.0	43.4	
		PI	7325.8	7679.8	8211.7	8570.8	7504.6	7848.9	8404.6	8762.8	7670.3	8035.9	8583.9	8941.3	

- Notes:
1. All capacities are net and have considered indoor fan heat.
 2. TC=Total Capacity. (Unit:1000Btu/h)
 3. SC=Sensible Capacity. (Unit:1000Btu/h)
 4. PI=Power input (unit:W)
 5. Different air volume in the above table, need to adjust in the field

■ Cooling capacity — 6.25 Tons (380-415V 3N~ 50Hz)

Air Flow (CFM)		2000				2800				3600					
		Ent (DB)	(°F)	75	80	85	90	75	80	85	90	75	80	85	90
Ambient Temperature	85	61	TC	65.4	66.8	68.2	69.6	69.5	70.9	72.4	74.0	71.2	72.7	74.2	75.8
			SC	57.1	63.6	67.8	69.6	61.1	66.9	70.2	72.7	65.0	67.1	70.0	73.7
			PI	5614.7	5758.7	6011.6	6299.6	5904.0	6048.0	6313.0	6606.9	6024.5	6174.5	6439.5	6739.5
		67	TC	75.8	77.4	79.0	80.7	76.7	78.4	80.0	81.7	77.4	79.0	80.7	82.4
			SC	42.6	53.8	64.8	75.4	44.7	57.0	67.9	77.1	45.9	58.0	70.2	80.3
			PI	6170.5	6345.5	6783.1	7133.1	6236.8	6411.8	6855.4	7205.4	6285.0	6460.0	6903.6	7253.6
		73	TC	79.0	80.7	82.4	84.1	79.5	81.2	82.9	84.6	79.7	81.4	83.1	84.9
			SC	26.7	38.8	48.1	56.9	27.2	38.5	48.3	59.1	27.6	42.0	49.2	59.4
			PI	7560.1	7760.1	8110.1	8504.1	7596.3	7796.3	8146.3	8540.3	7608.3	7808.3	8158.3	8558.3
	95	61	TC	62.1	63.5	64.8	66.2	64.1	65.5	66.9	68.4	66.1	67.5	69.0	70.4
			SC	54.5	59.6	61.6	64.5	56.8	62.1	64.3	67.8	59.2	62.7	66.3	69.0
			PI	5930.5	6274.9	6705.8	6999.8	6219.8	6564.2	7007.2	7307.2	6340.3	6690.8	7133.7	7439.8
		67	TC	68.0	69.5	71.0	72.4	69.3	75.0	77.3	78.5	72.9	77.1	78.6	80.0
			SC	41.2	52.9	64.6	68.5	43.2	56.1	68.8	72.9	45.3	59.1	72.4	73.4
			PI	6189.5	6534.0	6970.9	7302.8	6255.8	6600.3	7043.2	7375.1	6515.0	6740.0	7133.6	7483.6
		73	TC	78.4	80.0	81.7	83.4	78.8	80.5	82.2	83.9	79.1	80.8	82.5	84.2
			SC	25.8	38.1	48.3	58.6	26.2	38.9	49.8	61.0	26.7	39.6	51.1	62.6
			PI	7970.3	8220.3	8728.0	9128.0	8000.4	8250.4	8758.1	9158.1	8024.5	8274.5	8782.3	9182.3
	105	61	TC	56.6	57.8	59.1	60.3	58.6	59.8	61.1	62.4	60.3	61.6	63.0	64.3
			SC	51.8	53.4	55.9	57.5	55.8	56.9	60.2	61.9	59.3	60.3	61.5	63.6
			PI	6506.2	6735.2	7112.8	7406.7	6644.8	6879.8	7257.4	7557.4	6771.4	7006.4	7390.0	7690.0
		67	TC	67.0	68.5	69.9	71.4	68.6	70.1	71.6	73.1	69.9	71.4	72.9	74.5
			SC	38.8	50.6	62.6	68.6	41.0	51.6	67.5	72.0	43.2	57.6	72.3	73.7
			PI	6690.0	6934.0	7317.6	7661.6	6804.5	7048.5	7438.1	7782.1	6894.9	7144.9	7528.5	7878.5
		73	TC	76.2	77.8	79.5	81.1	76.2	77.8	79.4	81.1	77.4	79.0	80.7	82.4
			SC	24.5	37.0	49.9	60.6	24.5	38.2	51.1	62.3	25.6	39.8	52.5	64.1
			PI	8597.9	8877.9	9485.7	9879.6	8591.9	8871.9	9473.6	9873.6	8682.3	8962.3	9570.0	9970.0
	115	61	TC	48.9	50.0	51.1	52.2	50.5	51.6	52.7	53.9	52.7	53.8	55.0	56.3
			SC	47.1	48.3	49.8	51.6	45.4	48.0	50.8	52.1	50.5	52.1	53.7	55.5
			PI	7093.2	7337.2	7561.1	7855.1	7207.7	7451.7	7681.7	7975.6	7364.4	7614.4	7844.4	8144.4
		67	TC	58.5	59.8	61.1	62.5	60.0	61.4	62.7	64.1	61.4	62.7	64.1	65.5
			SC	34.0	46.1	57.4	61.5	36.3	49.4	59.9	63.1	38.5	53.0	58.1	65.2
			PI	7380.9	7649.8	8033.5	8377.4	7489.4	7764.4	8148.0	8491.9	7585.8	7860.8	8244.4	8594.4
		73	TC	70.4	72.0	73.6	75.2	66.4	67.8	69.3	70.9	72.2	73.8	75.4	77.0
			SC	21.0	32.8	45.4	58.2	21.5	34.6	47.3	59.7	22.1	36.2	50.0	63.2
			PI	8840.8	9134.8	9742.5	10142.5	8551.5	8839.5	9441.2	9835.2	8967.4	9267.4	9875.1	10275.1
	118	61	TC	47.1	48.2	49.3	50.4	48.7	49.8	50.9	52.1	50.9	52.0	53.2	54.5
			SC	45.3	46.5	48.0	49.8	43.6	46.2	49.0	50.3	48.7	50.3	51.9	53.7
			PI	7423.2	7667.2	8011.1	8305.1	7537.7	7781.7	8131.7	8425.6	7694.4	7944.4	8294.4	8594.4
		67	TC	58.1	59.4	60.7	62.1	59.6	60.5	62.3	63.7	61.0	62.3	63.7	65.1
			SC	33.6	45.7	57.0	61.1	35.9	48.9	59.5	62.7	38.1	52.6	59.2	64.8
			PI	7416.5	7685.5	8078.0	8423.0	7525.0	7800.0	8192.5	8537.6	7621.4	7896.4	8290.0	8640.0
		73	TC	68.6	70.2	71.8	73.4	64.6	66.0	67.5	69.1	70.4	72.0	73.6	75.2
			SC	19.2	31.0	43.6	56.4	19.7	32.8	45.5	57.9	20.3	34.4	48.2	61.4
			PI	9396.0	9740.0	10347.7	10747.7	9106.7	9444.7	10046.4	10440.4	9522.6	9872.6	10480.3	10880.3
	125	61	TC	44.3	45.3	46.3	47.4	45.8	46.8	47.8	48.9	47.8	48.9	50.0	51.1
			SC	42.7	43.8	45.1	46.8	41.1	43.5	46.1	47.2	45.8	47.2	48.7	50.5
			PI	7922.3	8191.3	8535.2	8829.2	8030.8	8299.8	8643.7	8937.7	8169.4	8444.4	8794.4	9094.4
67		TC	53.2	54.4	55.5	56.8	54.5	55.8	57.0	58.2	55.8	57.1	58.3	59.6	
		SC	30.7	41.8	52.2	55.9	32.8	44.9	54.4	57.3	34.8	48.1	57.3	59.3	
		PI	7784.9	8078.9	8516.4	8866.4	7881.3	8181.3	8618.9	8968.9	7971.7	8271.7	8715.3	9065.3	
73		TC	64.1	65.5	67.0	68.4	60.4	61.7	63.1	64.4	65.7	67.1	68.7	70.1	
		SC	18.7	29.6	41.1	52.9	19.2	31.2	42.9	54.3	19.7	32.7	45.3	57.5	
		PI	10013.3	10413.3	11050.0	11450.0	9748.1	10142.1	10772.8	11166.7	10127.8	10527.8	11170.5	11570.5	

Notes:
 1.All capacities are net and have considered indoor fan heat.
 2.TC=Total Capacity. (Unit:1000Btu/h)
 3.SC=SensibleCapacity. (Unit:1000Btu/h)
 4.PI=Power input (unit:W)
 5.Different air volume in the above table,need to adjust in the field

7.4 Capacity Data (220V 3N~ 60Hz)

■ Cooling capacity — 7.5 Tons (220V 3N~ 60Hz)

Air Flow(CFM)		2100.0													
		75.0	80.0	85.0	90.0	2950.0	75.0	80.0	85.0	90.0	3200.0	75.0	80.0	85.0	90.0
Ent (DB)		(°F)													
Ambient Temperature	85	61	TC	77.6	79.4	81.1	82.9	82.4	84.2	86.1	88.0	84.4	86.3	88.2	90.2
			SC	67.8	75.6	80.6	81.5	72.5	79.5	83.5	86.5	77.1	79.7	83.2	87.7
			PI	7112.8	7257.9	7513.1	7803.3	7350.1	7495.2	7760.3	8055.5	7448.9	7599.0	7864.1	8164.2
		67	TC	89.9	91.9	93.9	96.0	91.0	93.0	95.1	97.2	91.8	93.8	95.9	98.0
			SC	50.7	64.0	77.1	89.7	53.1	67.8	80.7	91.7	54.6	69.0	83.5	95.5
			PI	7560.0	7735.1	8145.9	8496.0	7614.3	7789.4	8205.3	8555.4	7653.9	7829.0	8244.8	8594.9
		73	TC	93.7	95.8	97.9	100.0	94.3	96.4	98.5	100.6	94.5	96.6	98.7	100.9
			SC	31.9	46.2	57.3	67.8	32.4	45.9	57.6	70.5	32.9	50.0	58.6	70.8
			PI	8594.4	8794.5	9144.6	9539.8	8624.1	8824.2	9174.3	9569.4	8634.0	8834.1	9184.2	9584.3
	95	61	TC	73.7	75.4	77.1	78.8	76.1	77.8	79.6	81.4	78.4	80.2	82.0	83.8
			SC	64.7	70.8	73.3	76.8	67.4	73.8	76.5	80.7	70.3	74.5	78.8	82.1
			PI	7676.0	7856.1	8116.3	8411.4	7794.6	7974.8	8239.9	8540.0	7908.3	8093.4	8358.5	8658.6
		67	TC	80.7	82.5	84.4	86.2	82.2	89.0	91.9	93.4	86.5	91.4	93.4	95.2
			SC	49.0	62.9	76.9	81.6	51.4	66.6	81.8	86.7	53.8	70.2	86.1	87.4
			PI	7397.2	7594.3	7829.9	8180.0	7471.3	7800.2	8200.7	8535.9	7683.9	7909.0	8274.8	8624.9
		73	TC	92.9	95.0	97.1	99.2	93.4	95.5	97.6	99.7	93.8	95.9	98.0	100.1
			SC	30.8	45.4	57.6	69.9	31.3	46.4	59.4	72.7	31.9	47.2	60.9	74.6
			PI	9030.9	9281.0	9756.6	10156.7	9055.7	9305.8	9781.4	10181.5	9075.4	9325.5	9801.1	10201.2
	105	61	TC	67.2	68.7	70.3	71.9	69.5	71.1	72.7	74.4	71.6	73.2	74.9	76.6
			SC	61.5	63.5	66.6	68.6	66.3	67.6	71.6	73.8	70.4	71.7	73.2	75.8
			PI	7850.7	8080.8	8431.7	8726.8	7964.4	8199.5	8550.3	8850.4	8068.2	8303.3	8659.1	8959.2
		67	TC	79.5	81.3	83.1	85.0	81.4	83.2	85.1	87.0	82.9	84.8	86.6	88.6
			SC	46.1	60.2	74.5	81.7	48.8	61.4	80.3	85.7	51.4	68.5	85.9	87.7
			PI	8017.1	8262.3	8618.1	8963.2	8111.0	8356.2	8717.0	9062.1	8185.2	8435.3	8791.1	9141.2
		73	TC	90.4	92.4	94.5	96.5	90.3	92.3	94.3	96.4	91.8	93.8	95.9	98.0
			SC	29.3	44.1	59.5	72.2	29.2	45.6	60.9	74.2	30.5	47.4	62.5	76.3
			PI	9750.3	10030.4	10606.0	11001.1	9745.3	10025.4	10596.1	10996.2	9819.5	10099.6	10675.2	11075.3
	115	61	TC	54.7	56.1	57.5	59.0	56.6	58.0	59.5	61.0	59.2	60.7	62.2	63.8
			SC	52.6	54.1	56.0	58.3	50.6	53.8	57.2	58.8	56.7	58.6	60.6	62.9
			PI	8407.4	8652.6	8877.7	9172.9	8501.4	8746.5	8976.6	9271.8	8629.9	8880.0	9110.1	9410.2
		67	TC	66.1	67.7	69.4	71.1	67.9	69.6	71.3	73.0	69.5	71.2	72.9	74.7
			SC	37.2	51.6	65.0	69.9	39.9	55.5	67.9	71.8	42.5	59.7	71.7	74.3
			PI	8336.1	8606.2	8962.1	9307.2	8425.1	8600.2	9056.0	9401.2	8504.2	8779.3	9135.1	9485.2
		73	TC	80.2	82.1	84.1	86.1	75.4	77.2	79.1	81.0	82.3	84.3	86.3	88.3
			SC	21.8	35.8	50.8	66.1	22.4	37.9	53.1	67.8	23.1	39.9	56.2	72.0
			PI	9721.5	10016.7	10592.2	10992.3	9484.2	9774.4	10345.1	10740.2	9825.3	10125.4	10701.0	11101.1
	118.4	61	TC	53.7	55.1	56.5	58.0	55.6	57.0	58.5	60.0	58.2	59.7	61.2	62.8
			SC	51.6	53.1	55.0	57.3	49.6	52.8	56.2	57.8	55.7	57.6	59.6	61.9
			PI	8637.4	8882.6	9227.7	9522.9	8731.4	8976.5	9326.6	9621.8	8859.9	9110.0	9460.1	9760.2
		67	TC	65.6	67.1	68.7	70.3	67.4	69.1	70.6	72.2	69.0	70.6	72.2	73.9
			SC	36.7	51.0	64.3	69.1	39.4	54.7	67.2	71.0	42.0	59.1	70.5	73.5
			PI	8635.8	8906.0	9269.6	9613.0	8724.8	8700.0	9363.6	9707.0	8803.9	9079.0	9440.9	9791.0
		73	TC	79.2	81.1	83.1	85.1	74.4	76.2	78.1	80.0	81.3	83.3	85.3	87.3
			SC	20.8	34.8	49.8	65.1	21.4	36.9	52.1	66.8	22.1	38.9	55.2	71.0
			PI	10369.3	10714.4	11290.0	11690.1	10131.9	10472.2	11042.8	11438.0	10473.1	10823.2	11398.8	11798.9
	125	61	TC	49.3	50.6	51.9	53.3	51.1	52.4	53.7	55.1	53.4	54.8	56.2	57.7
			SC	47.4	48.8	50.5	52.6	45.5	48.5	51.6	53.1	51.1	52.9	54.7	56.9
			PI	9132.2	9402.4	9747.5	10042.7	9221.2	9491.3	9836.5	10131.7	9334.9	9610.0	9960.1	10260.2
67		TC	59.8	61.3	62.8	64.4	61.4	63.0	64.5	66.1	62.9	64.5	66.1	67.7	
		SC	33.3	46.5	58.8	63.3	35.7	50.1	61.4	65.0	38.1	53.9	64.9	67.3	
		PI	8986.5	9281.7	9688.7	10038.8	9065.6	9365.7	9772.7	10122.8	9139.8	9439.9	9851.8	10201.9	
73		TC	72.7	74.5	76.3	78.1	68.3	70.0	71.7	73.4	74.6	76.4	78.3	80.1	
		SC	19.1	32.0	45.7	59.8	19.7	33.9	47.9	61.4	20.3	35.7	50.7	65.2	
		PI	11076.9	11477.0	12082.6	12482.7	10859.4	11254.5	11855.2	12250.4	11170.8	11570.9	12181.5	12581.6	

Notes:

1. All capacities are net and have considered indoor fan heat.
2. TC=Total Capacity . (Unit:1000Btu/h)
3. SC=SensibleCapacity . (Unit:1000Btu/h)
4. different air volume in the above table, need to adjust in the field

■ Cooling capacity — 10 Tons (220V 3N~ 60Hz)

		Air Flow(CFM)		2900				4200				4800			
		Ent (DB)	(°F)	75	80	85	90	75	80	85	90	75	80	85	90
Ambient Temperature	85	61	TC	106.6	109.0	111.4	113.7	109.6	112.0	114.4	116.7	112.5	115.0	117.4	119.8
			SC	92.5	94.6	96.7	98.7	95.5	97.6	99.7	101.7	101.9	104.2	106.4	108.5
			PI	9374.6	9686.2	10043.3	10557.7	9633.5	9945.0	10302.2	10816.6	9883.7	10203.9	10561.0	11084.0
		67	TC	119.1	121.8	124.4	127.0	122.1	124.8	127.4	130.0	123.3	126.0	128.6	131.2
			SC	68.9	87.9	104.3	120.8	71.9	90.9	107.3	123.8	74.3	93.2	111.8	127.5
			PI	10455.4	10790.6	11165.0	11698.0	10714.3	11049.5	11423.9	11956.9	10817.8	11153.0	11527.4	12060.4
		73	TC	123.6	126.4	129.1	131.7	126.6	129.4	132.1	134.7	127.0	129.8	132.5	135.2
			SC	43.4	60.8	75.6	91.3	46.4	63.8	78.6	94.3	47.0	64.7	80.2	95.7
			PI	10837.3	11187.5	11570.6	12111.9	11096.2	11446.4	11829.4	12370.8	11130.7	11480.9	11863.9	12413.9
	95	61	TC	98.5	100.8	103.0	105.1	101.5	103.8	106.0	108.1	104.6	106.9	109.2	111.4
			SC	88.4	90.5	92.4	94.4	91.4	93.5	95.4	97.4	97.9	100.1	102.2	104.3
			PI	8753.4	9073.6	9499.7	10014.1	9012.2	9332.4	9758.6	10273.0	9279.7	9599.9	10034.7	10557.7
		67	TC	114.4	117.0	119.5	122.0	117.4	120.0	122.5	125.0	121.2	125.9	127.5	129.1
			SC	66.5	85.7	104.6	119.4	69.5	88.7	107.6	122.4	73.0	93.7	113.0	123.3
			PI	10107.4	10261.4	10713.4	11324.1	10366.2	10700.2	10972.3	11582.9	10694.1	11029.3	11403.7	11936.7
		73	TC	122.5	125.2	127.9	130.6	125.5	128.2	130.9	133.6	125.8	128.5	131.2	133.9
			SC	42.0	61.3	77.5	93.8	45.0	64.3	80.5	96.8	45.9	65.6	83.3	100.9
			PI	10828.7	11178.9	11648.2	12198.2	11087.6	11437.8	11907.1	12457.1	11113.4	11463.6	11933.0	12483.0
	105	61	TC	90.2	92.3	94.3	96.3	93.2	95.3	97.3	99.3	96.5	98.7	100.8	102.8
			SC	84.3	86.3	88.2	90.0	87.3	89.3	91.2	93.0	93.9	96.0	98.0	100.0
			PI	10064.9	10376.5	10716.4	11239.4	10323.7	10635.3	10975.2	11498.2	10608.5	10928.7	11277.2	11800.2
		67	TC	106.0	108.4	110.8	113.1	109.0	111.4	113.8	116.1	111.6	114.1	116.5	118.8
			SC	63.3	82.3	101.9	111.6	66.3	85.3	104.9	114.6	70.0	91.0	112.7	116.9
			PI	11439.1	11765.6	12140.0	12673.0	11697.9	12024.5	12398.9	12931.9	11922.3	12257.5	12631.9	13164.9
		73	TC	119.5	122.2	124.8	127.4	122.5	125.2	127.8	130.4	123.3	126.0	128.6	131.2
			SC	40.0	59.1	77.0	94.3	43.0	62.1	80.0	97.3	43.9	64.5	84.3	102.7
			PI	12606.2	12956.4	13348.0	13898.0	12865.0	13215.2	13606.9	14156.9	12934.0	13284.2	13675.9	14225.9
	115	61	TC	80.0	81.9	83.8	85.6	83.0	84.9	86.8	88.6	85.9	87.9	89.8	91.7
			SC	78.3	80.2	82.0	83.8	81.3	83.2	85.0	86.8	82.9	84.8	86.7	88.5
			PI	10694.2	11005.7	11500.9	12015.3	10953.0	11264.6	11759.8	12274.2	11203.2	11523.4	12018.6	12541.6
		67	TC	95.0	97.2	99.4	101.5	98.0	100.2	102.4	104.5	99.9	103.9	104.4	106.5
			SC	57.2	77.1	96.1	98.1	60.2	80.1	99.1	101.1	64.0	85.1	102.3	104.4
			PI	12061.3	12241.2	12762.3	13295.3	12320.1	12500.0	13021.1	13554.1	12484.1	12819.3	13193.7	13726.7
		73	TC	112.9	115.5	118.0	120.5	115.9	118.5	121.0	123.5	116.8	119.4	122.0	124.5
			SC	35.9	55.2	74.1	92.7	38.9	58.2	77.1	95.7	39.6	61.0	81.3	101.1
			PI	13554.7	13904.9	14451.9	15001.9	13813.5	14163.7	14710.7	15260.7	13891.2	14241.4	14797.0	15347.0
118.4	61	TC	77.8	79.7	81.6	83.4	80.8	82.7	84.6	86.4	83.7	85.7	87.6	89.5	
		SC	76.1	78.0	79.8	81.6	79.1	81.0	82.8	84.6	80.7	82.6	84.5	86.3	
		PI	10815.0	11126.5	11622.5	12136.9	11073.8	11385.4	11881.4	12395.7	11324.0	11644.2	12140.2	12663.2	
	67	TC	93.2	95.4	97.6	99.7	96.2	98.0	100.6	102.7	98.1	102.1	102.6	104.7	
		SC	55.4	75.3	94.3	96.3	58.4	78.3	97.3	99.3	62.2	83.3	97.7	102.6	
		PI	12301.3	12481.2	13003.1	13535.3	12560.2	12700.0	13261.9	13794.1	12724.1	13059.3	13433.7	13966.7	
	73	TC	110.7	113.3	115.8	118.3	113.7	116.3	118.8	121.3	114.6	117.2	119.8	122.3	
		SC	33.7	53.0	71.9	90.5	36.7	56.0	74.9	93.5	37.4	58.8	79.1	98.9	
		PI	13675.5	14025.7	14573.4	15123.4	13934.3	14284.5	14832.3	15382.3	14012.0	14362.2	14918.6	15468.6	
125	61	TC	72.2	73.9	75.6	77.3	75.2	76.9	78.6	80.3	77.8	79.6	81.4	83.1	
		SC	70.6	72.3	74.0	75.6	73.6	75.3	77.0	78.6	75.1	76.8	78.5	80.2	
		PI	11720.9	12032.5	12519.1	13042.1	11979.8	12291.4	12778.0	13301.0	12204.1	12524.3	13019.5	13542.5	
	67	TC	85.8	87.8	89.8	91.7	88.8	90.8	92.8	94.7	90.5	94.8	95.2	96.6	
		SC	51.4	69.5	86.8	88.7	54.4	72.5	89.8	91.7	57.9	77.1	92.7	94.6	
		PI	13095.1	13231.9	13744.3	14320.5	13354.0	13490.7	14003.2	14579.3	13500.7	13835.9	14210.3	14743.3	
	73	TC	102.1	104.4	106.7	109.0	105.1	107.4	109.7	112.0	105.9	108.3	110.6	112.9	
		SC	32.1	49.6	66.8	83.7	35.1	52.6	69.8	86.7	35.7	55.2	73.6	91.6	
		PI	14322.6	14664.2	15202.5	15752.5	14581.5	14923.0	15461.4	16011.4	14650.5	15000.7	15539.1	16089.1	

Notes:
 1.All capacities are net and have considered indoor fan heat.
 2.TC=Total Capacity . (Unit:1000Btu/h)
 3.SC=SensibleCapacity . (Unit:1000Btu/h)
 4.different air volume in the above table,need to adjust in the field

8. START-UP

■ Before starting unit

- Is the unit properly located and level with the proper clearance?
- Is the duct work correctly sized, run, taped, insulated, and weatherproofed with proper unit arrangement? See Ductwork Installation section.
- Is the wiring properly sized and run according to the unit wiring diagram?
- Are all the wiring connections, including those in the unit, tight?
- Has the unit been properly grounded and fused with the recommended fuse size? See Wiring Data.
- Have the air conditioning systems been checked at the service ports for charge and leak tested if necessary?
- Does the condenser fan and indoor blower fan free without rubbing, and are they tight on the shafts?
- Are all covers and access panels in place to prevent air loss and safety hazards?

■ Starting the unit in the cooling mode

■ Voltage

With the unit operating, check the line voltage of the unit. The voltage should be within the range shown on the unit nameplate.

If low voltage is encountered, check the size and length of the supply line from the main disconnect to the unit. The line may be undersized for the length of the run.

■ Cooling shut down

Place the system selector in the OFF position or reset thermostat at a setting above room temperature.

Do not de-energize the main power disconnect except when unit is to be serviced.

9. MAINTENANCE

■ Regular maintenance

Some regular maintenance have been carry on by user, includes: change the one-time dust filter, clean casing, wash condenser and replace a new belt, as well as do some test for the equipment.

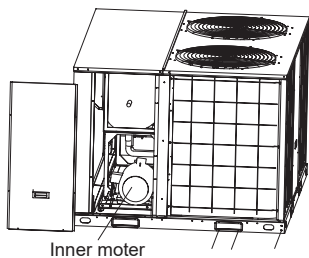
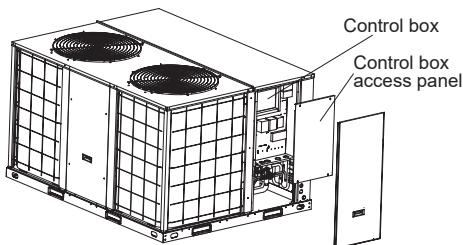


Fig.9-1

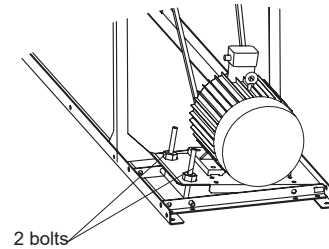


WARNING

At least 1m flame resistant layer must be laid at the end of the air duct internal surface.

■ Regulating belt of tension

Refer to Fig.9-2, loose 2 bolts, and move the electric motor to adjust belt tension.



The two bolts are used for precision adjustment .

Fig.9-2

■ Belt tension is measured by belt tension indicator

- Calculate the deflection, $\text{deflection} = A/64$.
- Measure the belt deflection force, the force should be between the values shown in Tab.9-2

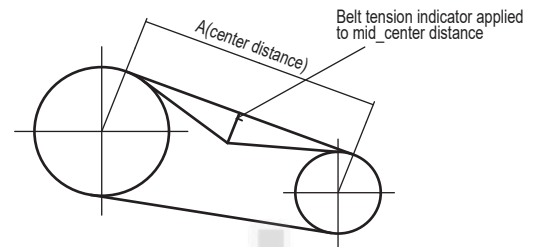


Fig.9-3

Tab.9-1

Nominal ton	A (mm)
8.5	380
10	380
12.5	560
15	560
17.5	580
20	580
25	480
30	480

Tab.9-2

Belt section	For required to deflection		
	Small pulley diameter (mm)	Newton(N)	Kilogram-force(kgf)
SPA	80 to132	25 to 35	2.5 to 3.6



NOTE

The belt which is too tight or too loose may generate noise and be harmful to the unit.

- If you use air filter accessories provided by the manufacturer, please dismantle the air filter as the following steps.
 - Twist of screws and get out the plate.
 - Pull out the filter along the supporting slot.

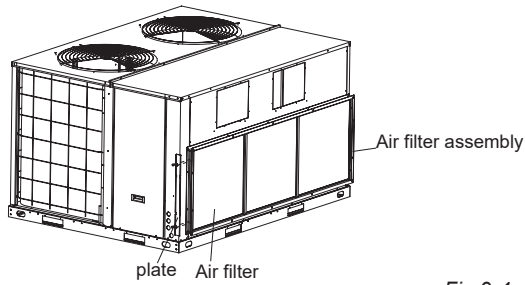


Fig. 9-4

- Clean the air filter (Vacuum cleaner or fresh water may be used to clean the air filter. If the dust accumulated too much, please use soft brush and mild detergent to clean and dry out in cool place).

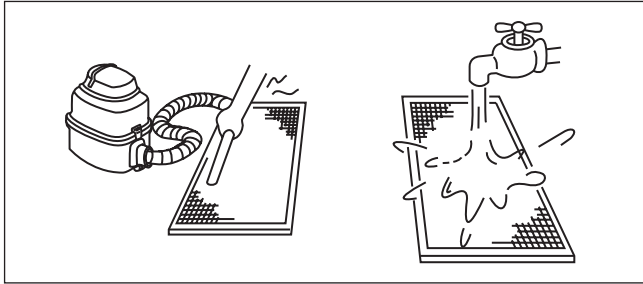


Fig. 9-5

- The air-in side should face up when using vacuum cleaner.
- The air-in side should face down when using water.

■ Instructions for refrigerant charging location

- 4-10 Ton

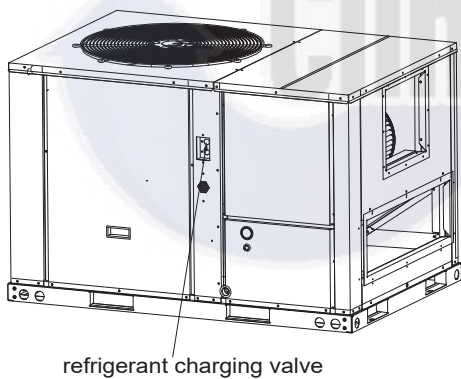


Fig. 9-6

- 12.5-15 Ton

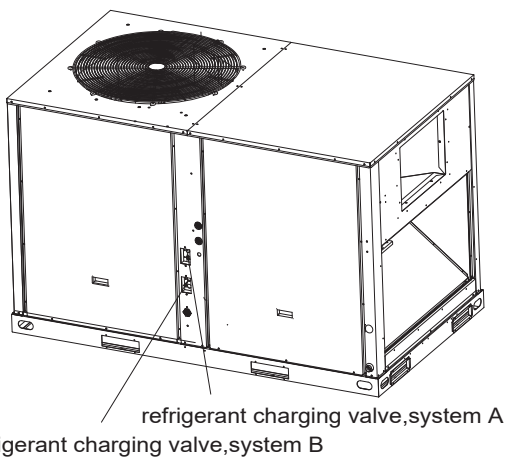
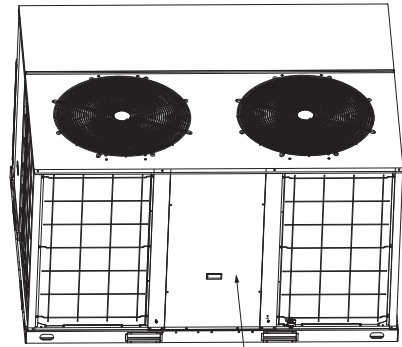
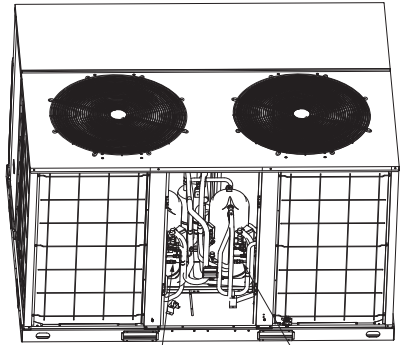


Fig. 9-7

- 17.5-20 Ton



remove this panel

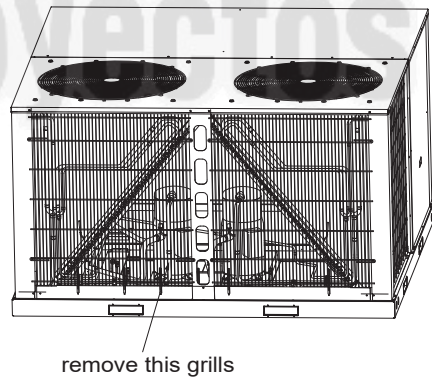


refrigerant charging valve, system A

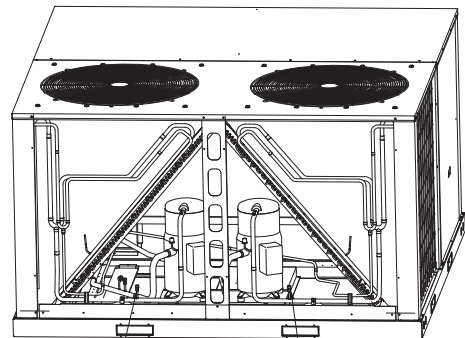
refrigerant charging valve, system B

Fig. 9-8

- 25-30 Ton



remove this grills



refrigerant charging valve, system A

refrigerant charging valve, system B

Fig. 9-9



