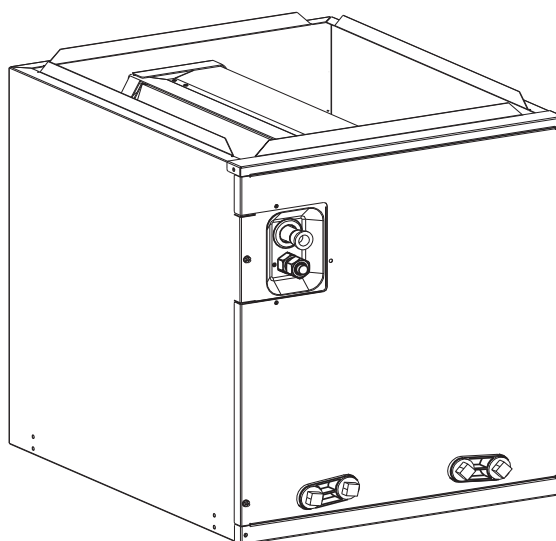




# INSTALLER'S GUIDE

## CONDENSING UNITS

Upflow/Downflow Cased Coils  
Cooling and Heat Pump Compatible  
Factory Installed R410a Metering Device



Thank you very much for purchasing our product.

Before using your unit, please read this manual carefully and keep it for future reference.

The figure shown in this manual is for reference only and may be slightly different from the actual product.





RECOGNIZE THIS SYMBOL AS AN INDICATION OF IMPORTANT SAFETY INFORMATION

#### **WARNING**

These instructions are intended as an aid to qualified licensed service personnel for proper installation, adjustment and operation of this unit. Read these instructions thoroughly before attempting installation or operation. Failure to follow these instructions may result in improper installation, adjustment, service or maintenance possibly resulting in fire, electrical shock, property damage, personal injury or death.

#### **WARNING**

This appliance 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 appliance.

#### **WARNING**

Proposition 65: This appliance contains fiberglass insulation. Respirable particles of fiberglass are known to the state of California to cause cancer. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)."

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## 1 SAFETY

### ⚠ WARNING

Disconnect all power to the unit before starting any service and maintenance. Failure to do so could cause severe electrical shock resulting in personal injury or death.

Installation or servicing of this unit can be hazardous due to parts, components and system pressure.

Qualified and proper trained service personnel should perform installation and repair. Failure to do so could cause severe electrical shock resulting in personal injury or death.

This is a safety alert symbol indicating a potential hazardous situation, which could result in personal injury, property and/or product damage or death.

### ⚠ CAUTION

This is a safety alert symbol indicating a potential hazardous situation, which could result in moderate personal injury, and/or property and product damage.

## 2 GENERAL

The coil can be positioned for bottom return air in the upflow and horizontal right applications. It must be positioned for top return when in downflow and horizontal left applications. See Figure 2-1. For furnace applications, the coil must be installed downstream (in the air outlet) of the furnace

### 💡 NOTE

This coil comes with a factory-installed heat shield on the drain pan.

### 2.1 Unit Dimensions

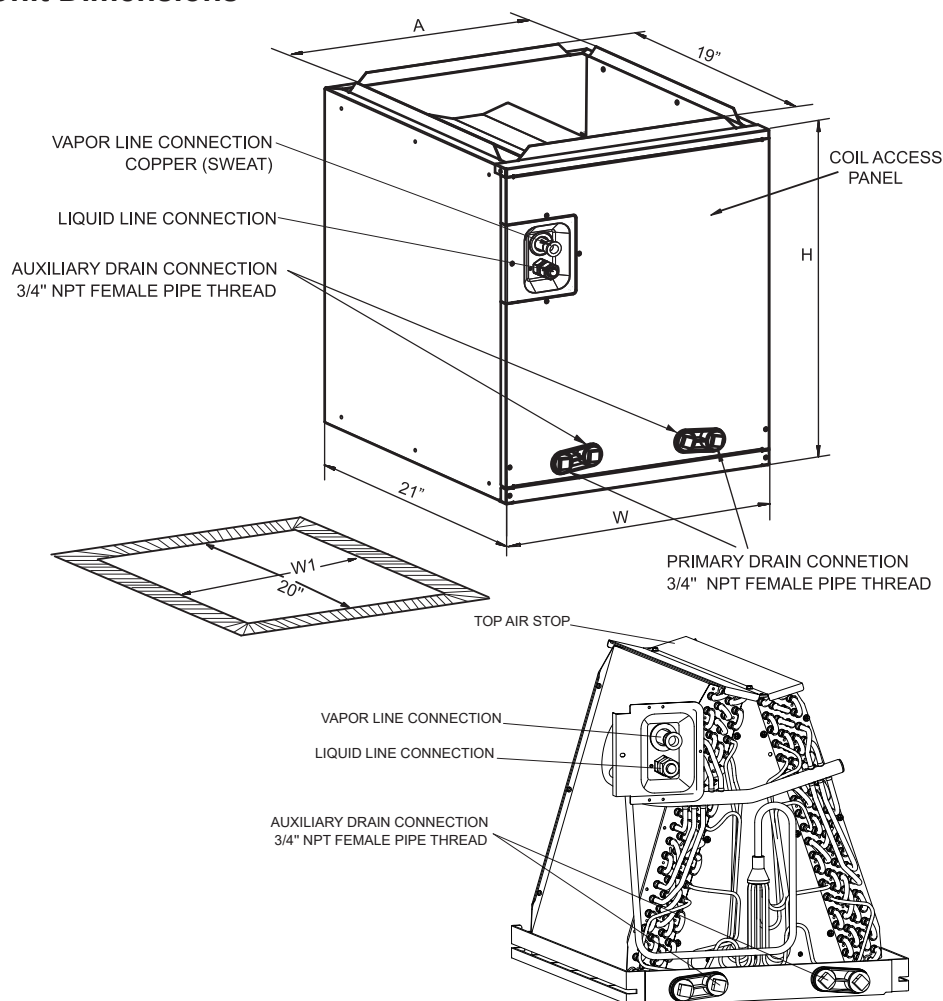


Fig.2-1 CASED DIMENSIONS AND COMPONENT LOCATION

## DIMENSIONAL DATA

MODELS	Unit Dimensions					WEIGHT (LBS.[kg])
	UNIT HEIGHT "H" IN. [mm]	UNIT WIDTH "W" IN. [mm]	SUPPLY DUCT "A" IN. [mm]	"W1" IN. [mm]	LIQUID LINE/ VAPOR LINE	
J4GXCA003EC6HUA	20"[508]	14-1/2"[368]	13"[330]	13-1/2"[343]	3/8" / 3/4"	42[19]
J4GXC004EC6HUA	20"[508]	17-1/2"[445]	16"[407]	16-1/2"[419]	3/8" / 3/4"	44[20]
J4GXCC005EC6HUA	20"[508]	21"[533]	19-1/2"[495]	20"[508]	3/8" / 3/4"	46[21]
J4GXC006EC6HUA	26"[660]	17-1/2"[445]	16"[407]	16-1/2"[419]	3/8" / 7/8"	55[25]
J4GXCC007EC6HUA	26"[660]	21"[533]	19-1/2"[495]	20"[508]	3/8" / 7/8"	57[26]
J4GXCD008EC6HUA	26"[660]	24-1/2"[622]	23"[584]	23-1/2"[597]	3/8" / 7/8"	62[28]
J4GXC016EC6HUA	30"[762]	17-1/2"[445]	16"[407]	16-1/2"[419]	3/8" / 7/8"	66[30]
J4GXCC017EC6HUA	30"[762]	21"[533]	19-1/2"[495]	20"[508]	3/8" / 7/8"	66[30]
J4GXCD018EC6HUA	30"[762]	24-1/2"[622]	23"[584]	23-1/2"[597]	3/8" / 7/8"	71[32]
J4GXCC009EC6HUA	30"[762]	21"[533]	19-1/2"[495]	20"[508]	3/8" / 7/8"	75[34]
J4GXCD010EC6HUA	30"[762]	24-1/2"[622]	23"[584]	23-1/2"[597]	3/8" / 7/8"	79[36]

## 2.2 Codes & Regulations

This product is designed and manufactured to comply with national codes.

Installation in accordance with such codes and/or prevailing local codes/regulations is the responsibility of the installer. The manufacturer assumes no responsibility for equipment installed in violation of any codes or regulations.

The United States Environmental Protection Agency (EPA) has issued various regulations regarding the introduction and disposal of refrigerants. Failure to follow these regulations may harm the environment and can lead to the imposition of substantial fines. Should you have any questions please contact the local office of the EPA.

## 2.3 Inspection Upon Unit Arrival

As soon as unit is received, it should be inspected and noted for possible shipping damage during transportation. It is carrier's responsibility to cover the cost of shipping damage. Manufacturer or distributor will not accept a claim from contractors for any transportation damage.

## 2.4 Clearances

Following clearances should be provided during installation

- Maintenance and service access, including coil cleaning and coil assembly removal
- Refrigerant piping and connections
- Condensate drain line

Ensure the proper installation, Select a solid and level site.

Ensure enough space required for installation and maintenance.

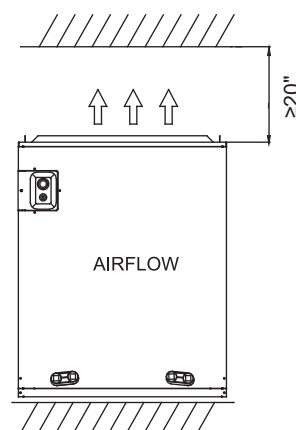


Fig. 2-2 Front view of the indoor unit clearance (including air duct)

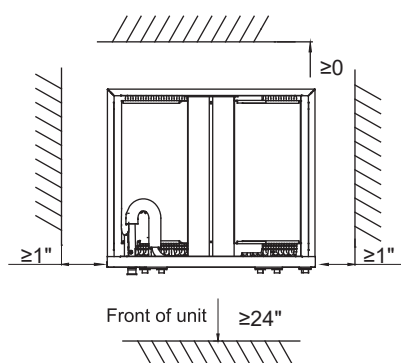


Fig. 2-3 Top View of the indoor unit clearance (including air duct)

## 3 INSTALLATION INSTRUCTIONS

### 3.1 Replacement Parts

Contact your distributor for authorized replacement parts.

### 3.2 Pre-installation Instruction

Carefully read all instructions for installation prior to installing the product. Make sure each step or procedure is understood and any special considerations are taken into account before starting installation. Assemble all tools, hardware and supplies needed to complete the installation. Some items may need to be purchased locally.

Make sure everything needed to install the product is on hand before starting.

### 3.3 Installation And Trap Connection

1. See Fig. 3-1 for coil installation and drain connection.
2. Installation steps for cased coil:
  - A. Shut off or disconnect gas furnace's power and remove gas pipe if necessary;
  - B. Disconnect and remove a sufficient portion of the supply ductwork to provide clearance for the cased coil.
  - C. Ensure that the coil is leveled and seal the gap between coil and furnace.See Fig. 3-1. In case that coil and the furnace sizes are not matched, use proper size of sheet metal or other material to fill the gap and seal the gap to prevent air leak;
  - D. Reconnect the ductwork to the coil case, and seal any leakage;
  - E. Reconnect Power line on gas furnace, turn on the

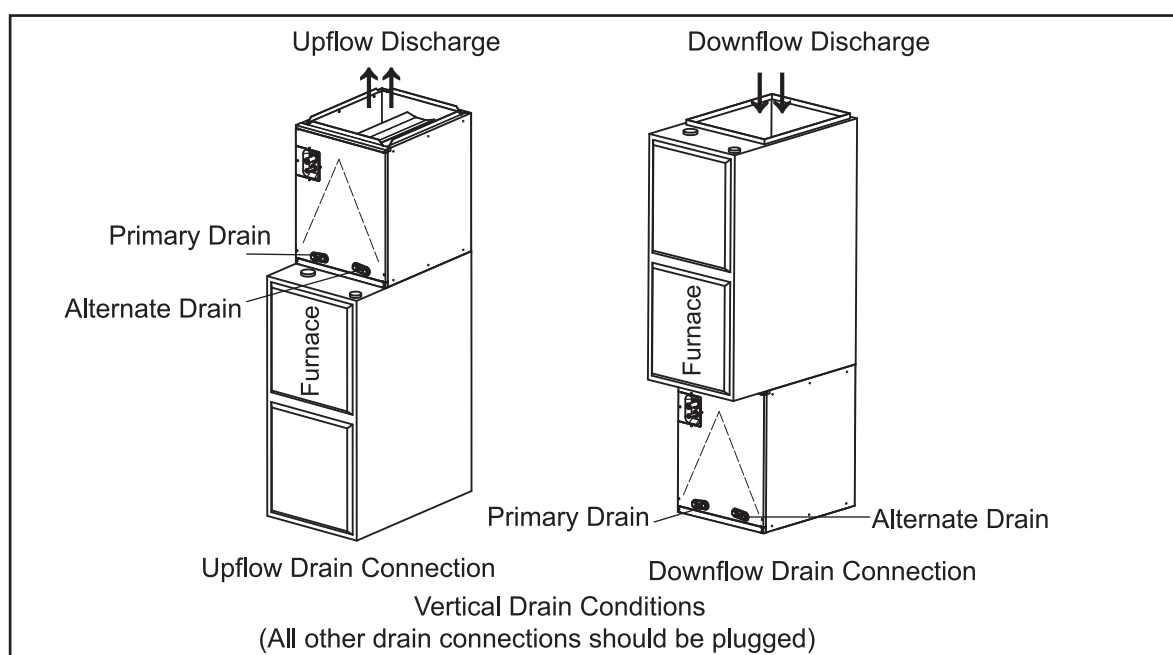


Fig. 3-1 INSTALLATION OF CASED COIL

## 4 DRAIN APPLICATION

### 4.1 Condensate Drain Piping

Consult local codes for special requirements.

To provide extra protection from water damage, it is always recommended to install an additional drain pan, provided by installer under the entire unit with a separate drain line. Manufacturer will not be responsible for any damages due to the failure to follow these recommendations.

### 4.2 Plastic Drain Pan Installation

#### ⚠ WARNING

Do not use the coil pan shipped with the unit on oil furnaces or any application where the temperature of the drain pan may exceed 275°F. A field fabricated metal drain pan can also be used for these type of applications.

Failure to follow this warning may result in property damage and/or personal injury.

#### 💡 NOTE

Use Teflon tape on the drain line connections. Do not use pipe joint compound or PVC/CPVC cement on drain nipple.

The coil drain pan has a primary and an optional secondary drain with 3/4" NPT female connections; use either PVC or copper pipe and hand tighten to a torque of approximately 37 in-lbs. to prevent damage to the drain pan connection. An insertion depth between 0.355 to 0.485 inches (3-5 turns) should be expected at this torque setting.

Use male 3/4" NPT threaded fitting for outside connection and make sure the drain holes are not blocked.

Insulation may be needed for drain line to prevent sweating.

Drain pan has two drain connections on each side to provide flexibility of connection and drainage. Make sure pan has proper pitch and plugged if second connection is not used.

If the secondary drain line is required, run the line separately from the primary drain and terminate it where it can be easily seen.

#### 💡 NOTE

Water coming from this line means the coil primary drain is plugged and needs clearing.

Install a trap in the drain line below the bottom of the drain pan. If using a copper drain line, solder a short piece of pipe to the connector before installing a drain fitting. DO NOT over torque the 3/4" copper connector to the plastic drain connection. Use a wet rag or heatsink material on the short piece to protect plastic drain pan, complete the rag or heatsink material on the short piece to protect plastic drain pan, complete the drain line installation (Fig. 4-1). Use (Fig. 4-2) as a template for typical drain pipe routing.

This figure shows how to avoid interference with vent piping.

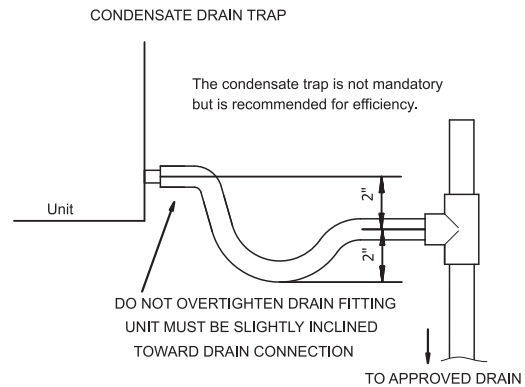


Fig. 4-1 DRAIN LINE INSTALLATION

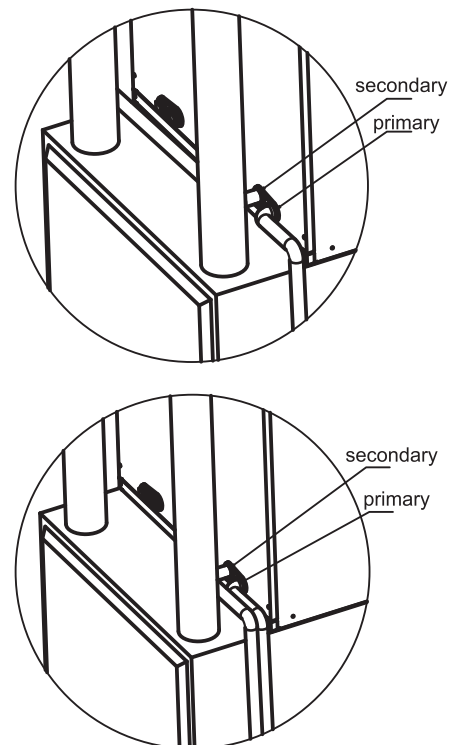


Fig. 4-2 DRAIN PIPE ROUTING

## 5 REFRIGERANT CONNECTIONS

### ⚠ CAUTION

Gently remove the sealing plug of vapor line, use one wrench to fix valve base, loose the nut with another wrench, take out the flange pad and sealing ring.

To prevent refrigerant leak, use proper tools to ensure clean, burr-free cut.

### ⚠ CAUTION

TXV bulb **MUST** be protected (wrapped with wet rag) or removed, while brazing the tubing. Overheating of the sensing bulb will affect the functional characteristics and performance of the comfort coil.

Use brazing shield when brazing close to the cabinet surface and wet rag to protect rubber grommet.

Brazing alloy should be at least 5% silver content.

## 6 PISTON/TXV INSTALLATION

### 💡 NOTE

A piston does come pre-installed. The piston must be removed before installing a TXV.

### 6.1 Piston Installation

1. Using a wrench to loosen the nut. Remove the nut and sealing flange.
2. Check the piston sizes for each outdoor/coil combination in Table 6-1 and choose the correct piston size for your combination.
3. If a different size piston is needed for your system combination, remove the pre-installed piston.

### 💡 NOTE

Avoid pulling the piston sleeve out when removing the pre-installed piston.

4. Choose correct size piston from the doc pack and insert it with correct orientation.
5. Replace outer O-ring with the O-ring provided in the doc pack.
6. Attach the connection pipe with nut and tighten to 1/6th turn past hand-tighten.

### 💡 NOTE

**MUST** wrap the nut with a wet rag before brazing.

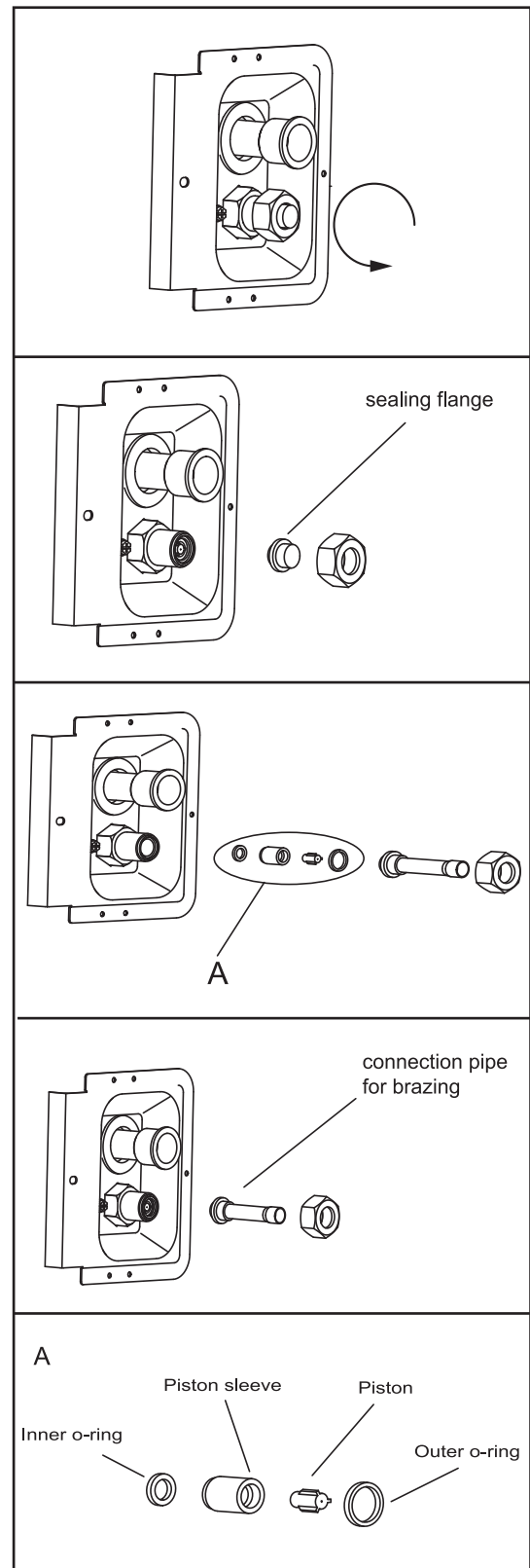


Fig 6-1

This coil comes with a factory installed piston metering device. See Table 6-1 for factory installed piston size. Some system combinations will require a different sized piston to be field installed.

\* Use the piston size recommended by the outdoor unit if available.

\* Reference Table 6-2 If the outdoor unit dose not list a piston size.

\* The ship-with literature bag will contain additional R-410A pistons for most applications.

\* Contact your local parts center to order the appropriate piston if it is not included with the literature.

## 6.2 Optional TXV Kit Installation

Reference TXV kit literature for installation instructions.

1. Use a wrench to loosen the nut and remove the sealing flange and sealing gasket.
2. Take out the connecting pipe from accessory package and braze the connecting pipe onto the refrigeration-out pipe.
3. Install the sealing washers, TXV and flange connection tube.
4. Use a wrench fasten nut and connecting pipe. (18±2N·m).
5. Connect TXV equalizer pipe to the port on the connecting pipe.
6. Fix bulbs on the connecting pipe using use accessory in TXV kit.

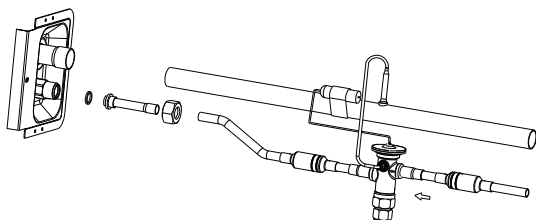


Fig 6-2

A TXV may be required to achieve minimum efficiency ratings or for long refrigerant line set applications. Reference AHRI for system combination ratings.

Reference Table 6-2 to charge the system by superheat when using piston.

Reference the outdoor unit installation guide to charge the system when using a TXV.

Table 6-1 Factory installed piston size for each coil model. Additional piston sizes are provided in the ship-with literature bag as necessary.

J4MX	Piston/orifice sizes												
Model	50	52	56	58	60	64	68	70	73	75	80	83	90
CA003E		X		X	X	X*		X					
CB004E		X		X	X	X*		X		X			
CC005E		X		X	X	X*		X		X			
CB006E		X			X	X		X		X*			
CC007E					X	X		X		X*			
CD008E					X	X		X		X*			
CB016E				X		X		X		X		X*	
CC017E						X		X		X		X*	
CD018E								X		X		X*	
CC009E										X	X	X	X*
CD010E										X	X	X	X*

\* means that this piston is pre-installed

Table 6.2. Use chart below when matching coil with outdoor unit. Addition piston sizes are provided in the ship-with literature bag as necessary.

Outdoor Unit Capacity (Tons)	Piston Size* (R410a)	Piston Kit
1.5	52	MAYORIACHP0052B
2	58	MAYORIACHP0058B
2.5	63	MAYORIACHP0063B
3	70	MAYORIACHP0070B
3.5	75	MAYORIACHP0075B
4	83	MAYORIACHP0083B
5	90	MAYORIACHP0090B

Outdoor Unit Capacity (Tons)	Piston Size* (R22)	Piston Kit
1.5	52	MAYORIACHP0052B
2	58	MAYORIACHP0058B
2.5	65	MAYORIACHP0065A
3	72	MAYORIACHP0072B
3.5	78	MAYORIACHP0078B
4	88	MAYORIACHP0088B
5	96	MAYORIACHP0096B

\*Piston size needed for system combination may not be pre-installed.

See Table 6.1 for pre-installed size.

### ⚠ WARNING

Failure to install the proper piston can lead to poor system performance and possible compressor damage.

### ⚠ CAUTION

An improperly charged system will likely cause loss in system performance and may damage the compressor.

Table 6-3 Piston superheat charging chart

Outdoor temp(°F)	Indoor Temperature(°F) Dry Bulb/Wet Bulb					
	95/79	90/75	85/71	80/67	75/63	70/58
	Superheat					
115	23	16	7	5	5	5
110	24	17	9	5	5	5
105	26	19	11	5	5	5
100	27	21	13	7	5	5
95	29	23	16	9	5	5
90	30	25	18	12	5	5
85	35	26	20	14	8	5
80	34	28	22	17	11	5
75	35	30	24	19	13	6
70	37	32	26	21	16	10
65	38	34	29	24	19	13
60	40	36	31	27	22	17
55	41	37	33	29	25	21

### 💡 NOTE

Chart is based on 400CFM/Ton indoor airflow and 50% relative humidity. If indoor relative humidity is above 70% or below 20%, use indoor wet bulb temperature only.  
Airflow range is 375 to 425 CFM/Ton



## 7 AIR FLOW PERFORMANCE

Airflow performance [CFM VS Pressure drop]

Pressure drop characteristics for cooling and heat pump coils								
Pressure drop (Inches of water)								
Model	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4*
J4GXCA003EC6HUA	307	485	618	729	823	911	991	1063
J4GXCB004EC6HUA	327	527	682	810	925	1024	1122	1217
J4GXCC005EC6HUA	360	585	748	893	1019	1132	1238	1348
J4GXCB006EC6HUA	401	600	773	916	1045	1160	1256	1357
J4GXCC007EC6HUA	457	663	856	1019	1156	1277	1394	1502
J4GXCD008EC6HUA	496	718	924	1102	1259	1398	1530	1651
J4GXCB016EC6HUA	456	638	810	953	1077	1191	1284	1390
J4GXCC017EC6HUA	505	726	932	1098	1244	1375	1494	1604
J4GXCD018EC6HUA	533	857	1105	1319	1509	1675	1824	1956
J4GXCC009EC6HUA	439	699	906	1071	1224	1362	1487	1589
J4GXCD010EC6HUA	466	764	978	1157	1313	1466	1590	1695

Data based on wet coil with entering air at 80 degF DB / 67 degF WB without air filter.

The maximum allowable pressure drop is 0.4 IWG.

The maximum CFM is the data at 0.4 IWG pressure.

Maximum airflow setting

### NOTE

Water blow-off could occur in certain installation positions if the airflow setting exceeds the maximum values listed.

Maximum airflow setting (CFM)		
Model	Upflow	Downflow
J4GXCA003EC6HUA	1200	1050
J4GXCB004EC6HUA	1250	1050
J4GXCC005EC6HUA	1250	1050
J4GXCB006EC6HUA	1575	1400
J4GXCC007EC6HUA	1575	1400
J4GXCD008EC6HUA	1575	1450
J4GXCB016EC6HUA	1800	1700
J4GXCC017EC6HUA	1800	1700
J4GXCD018EC6HUA	1800	1700
J4GXCC009EC6HUA	1850	1750
J4GXCD010EC6HUA	2000	1850

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Since the manufacturer has a policy of continuous product and product data improvement, it reserves the right to change the design and specification without notice.

For more information contact  
your local dealer (distributor)

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## This image shows a full page of primary-ruled paper. It features multiple sets of horizontal lines designed to guide handwriting. Each set consists of a solid top line, a dashed midline, and a solid bottom line. These sets are repeated vertically across the entire page, providing a template for letter formation and alignment. The paper is otherwise blank, with no text or other markings.