# INSTALLATION INSTRUCTIONS

## PACKAGE HEAT PUMPS

### RJNL-C 13 SEER SERIES (3-5 TON)
### RJNL-C 11.0 EER SERIES (6 TON)
### RJPL-C 14 SEER SERIES (3-5 TON)
### FEATURING INDUSTRY STANDARD R-410A REFRIGERANT



**RECOGNIZE THIS SYMBOL AS AN INDICATION OF IMPORTANT SAFETY INFORMATION!**

**⚠ WARNING**

**THESE INSTRUCTIONS ARE INTENDED AS 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, PROPER DAMAGE, PERSONAL INJURY OR DEATH.**

c UL us LISTED

ENERGY STAR (14 SEER MODELS ONLY)

AHRI CERTIFIED® www.ahridirectory.org Unitary Small HP AHRI Standard 210/240 Certification applies only when the complete system is listed with AHRI.

Accredited by the RvA

ABS Quality Evaluations, Inc. Management System Certification

ANAB ACCREDITED

ISO 9001:2008
Certificate Number: 30164

**DO NOT DESTROY THIS MANUAL**

**PLEASE READ CAREFULLY AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE BY A SERVICEMAN**

**92-23577-101-05**
SUPERSEDES 92-23577-101-04

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# II. SAFETY INFORMATION

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## ⚠ WARNING

**IMPORTANT: ALL MANUFACTURER PRODUCTS MEET CURRENT FEDERAL OSHA GUIDELINES FOR SAFETY. CALIFORNIA PROPOSITION 65 WARNINGS ARE REQUIRED FOR CERTAIN PRODUCTS, WHICH ARE NOT COVERED BY THE OSHA STANDARDS.**

**CALIFORNIA'S PROPOSITION 65 REQUIRES WARNINGS FOR PRODUCTS SOLD IN CALIFORNIA THAT CONTAIN, OR PRODUCE, ANY OF OVER 600 LISTED CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER OR BIRTH DEFECTS SUCH AS FIBERGLASS INSULATION, LEAD IN BRASS, AND COMBUSTION PRODUCTS FROM NATURAL GAS.**

**ALL "NEW EQUIPMENT" SHIPPED FOR SALE IN CALIFORNIA WILL HAVE LABELS STATING THAT THE PRODUCT CONTAINS AND/OR PRODUCES PROPOSITION 65 CHEMICALS. ALTHOUGH WE HAVE NOT CHANGED OUR PROCESSES, HAVING THE SAME LABEL ON ALL OUR PRODUCTS FACILITATES MANUFACTURING AND SHIPPING. WE CANNOT ALWAYS KNOW "WHEN, OR IF" PRODUCTS WILL BE SOLD IN THE CALIFORNIA MARKET.**

**YOU MAY RECEIVE INQUIRIES FROM CUSTOMERS ABOUT CHEMICALS FOUND IN, OR PRODUCED BY, SOME OF OUR HEATING AND AIR-CONDITIONING EQUIPMENT, OR FOUND IN NATURAL GAS USED WITH SOME OF OUR PRODUCTS. LISTED BELOW ARE THOSE CHEMICALS AND SUBSTANCES COMMONLY ASSOCIATED WITH SIMILAR EQUIPMENT IN OUR INDUSTRY AND OTHER MANUFACTURERS.**

- **GLASS WOOL (FIBERGLASS) INSULATION**
- **CARBON MONOXIDE (CO)**
- **FORMALDEHYDE**
- **BENZENE**

**MORE DETAILS ARE AVAILABLE AT THE WEBSITES FOR OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION), AT WWW.OSHA.GOV AND THE STATE OF CALIFORNIA'S OEHHA (OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT), AT WWW.OEHHA.ORG. CONSUMER EDUCATION IS IMPORTANT SINCE THE CHEMICALS AND SUBSTANCES ON THE LIST ARE FOUND IN OUR DAILY LIVES. MOST CONSUMERS ARE AWARE THAT PRODUCTS PRESENT SAFETY AND HEALTH RISKS, WHEN IMPROPERLY USED, HANDLED AND MAINTAINED.**

## ⚠ WARNING

**THE MANUFACTURER'S WARRANTY DOES NOT COVER ANY DAMAGE OR DEFECT TO THE AIR CONDITIONER CAUSED BY THE ATTACHMENT OR USE OF ANY COMPONENTS, ACCESSORIES OR DEVICES (OTHER THAN THOSE AUTHORIZED BY THE MANUFACTURER) INTO, ONTO OR IN CONJUNCTION WITH THE AIR CONDITIONER. YOU SHOULD BE AWARE THAT THE USE OF UNAUTHORIZED COMPONENTS, ACCESSORIES OR DEVICES MAY ADVERSELY AFFECT THE OPERATION OF THE AIR CONDITIONER AND MAY ALSO ENDANGER LIFE AND PROPERTY. THE MANUFACTURER DISCLAIMS ANY RESPONSIBILITY FOR SUCH LOSS OR INJURY RESULTING FROM THE USE OF SUCH UNAUTHORIZED COMPONENTS, ACCESSORIES OR DEVICES.**

## ⚠ WARNING

**DISCONNECT ALL POWER TO THE UNIT BEFORE STARTING MAINTENANCE. FAILURE TO DO SO CAN RESULT IN SEVERE ELECTRICAL SHOCK OR DEATH.**

## ⚠ WARNING

**DO NOT, UNDER ANY CIRCUMSTANCES, CONNECT RETURN DUCTWORK TO ANY OTHER HEAT PRODUCING DEVICE SUCH AS A FIREPLACE INSERT, STOVE, ETC. UNAUTHORIZED USE OF SUCH DEVICES MAY RESULT IN FIRE, CARBON MONOXIDE POISONING, EXPLOSION, PROPERTY DAMAGE, SEVERE PERSONAL INJURY OR DEATH.**

## ⚠ WARNING

**THE UNIT MUST BE PERMANENTLY GROUNDED. A GROUNDING LUG IS PROVIDED IN THE ELECTRIC HEAT KIT FOR A GROUND WIRE. (SEE FIGURES 16 AND 17.) FAILURE TO GROUND THIS UNIT CAN RESULT IN FIRE OR ELECTRICAL SHOCK CAUSING PROPERTY DAMAGE, SEVERE PERSONAL INJURY OR DEATH.**

## ⚠ WARNING

**ONLY ELECTRIC HEATER KITS SUPPLIED BY THIS MANUFACTURER AS DESCRIBED IN THIS PUBLICATION HAVE BEEN DESIGNED, TESTED, AND EVALUATED BY A NATIONALLY RECOGNIZED SAFETY TESTING AGENCY FOR USE WITH THIS UNIT. USE OF ANY OTHER MANUFACTURED ELECTRIC HEATERS INSTALLED WITHIN THIS UNIT MAY CAUSE HAZARDOUS CONDITIONS RESULTING IN PROPERTY DAMAGE, FIRE, BODILY INJURY OR DEATH.**

## ⚠ WARNING

**PROPOSITION 65: THIS APPLIANCE CONTAINS FIBERGLASS INSULATION. RESPIRABLE PARTICLES OF FIBERGLASS ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.**

## ⚠ CAUTION

R-410A systems operate at higher pressures than R-22 systems. Do not use R-22 service equipment or components on R-410A equipment.

⚠ Recognize this symbol as an indication of Important Safety Information!

## ⚠ WARNING

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# III. INTRODUCTION

This booklet contains the installation and operating instructions for your package heat pump. There are a few precautions that should be taken to derive maximum satisfaction from it. Improper installation can result in unsatisfactory operation or dangerous conditions.

Read this booklet and any instructions packaged with separate equipment required to make up the system prior to installation. Give this booklet to the owner and explain its provisions. The owner should retain this booklet for future reference.

**NOTE:** A load calculation must be performed to properly determine the required heating and cooling for the structure. Also, the duct must be properly designed and installed for proper airflow. Existing dutwork must be inspected for proper size and sealed system. Proper airflow is necessary for both user comfort and equipment performance.

**IMPORTANT:** Proper application, installation and maintenance of this equipment is a must if consumers are to receiver the full benefit for which they have paid.

## A. R-410A REFRIGERANT

All units are factory charged with R-410A refrigerant.

### 1. Specification of R-410A:

**Application: R-410A is not a drop-in replacement for R-22;** equipment designs must accommodate its higher pressures. It cannot be retrofitted into R-22 units.

**Pressure: The pressure of R-410A is approximately 60% (1.6 times) greater than R-22.** Recovery and recycle equipment, pumps, hoses and the like need to have design pressure ratings appropriate for R-410A. *Manifold sets need to range up to 800 psig high-side and 250 psig low-side with a 550 psig low-side retard. Hoses need to have a service pressure rating of 800 psig. Recovery cylinders need to have a 400 psig service pressure rating.* DOT 4BA400 or DOT BW400.

**Combustibility:** At pressures above 1 atmosphere, mixture of R-410A and air can become combustible. **R-410A and air should never be mixed in tanks or supply lines, or be allowed to accumulate in storage tanks. Leak checking should never be done with a mixture of R-410A and air.** Leak checking can be performed safely with nitrogen or a mixture of R-410A and nitrogen.

### 2. Quick Reference Guide For R-410A

- R-410A refrigerant operates at approximately 60% higher pressure (1.6 times) than R-22. Ensure that servicing equipment is designed to operate with R-410A.
- R-410A refrigerant cylinders are pink.
- R-410A, as with other HFC's is only compatible with POE oils.
- Vacuum pumps will not remove moisture from POE oil.
- R-410A systems are to be charged with liquid refrigerants. Prior to March 1999, R-410A refrigerant cylinders had a dip tube. These cylinders should be kept upright for equipment charging. Post March 1999 cylinders do not have a dip tube and should be inverted to ensure liquid charging of the equipment.
- Do not install a suction line filter drier in the liquid line.
- A liquid line filter drier is standard on every unit.
- Desiccant (drying agent) must be compatible for POE oils and R-410A.

### 3. Evaporator Coil / TXV

The thermostatic expansion valve is specifically designed to operate with R-410A. **DO NOT use an R-22 TXV. The existing evaporator must be replaced with the factory specified TXV evaporator specifically designed for R-410A.**

### 4. Tools Required For Installing & Servicing R-410A Models

Manifold Sets:

-Up to 800 PSIG High side
-Up to 250 PSIG Low Side
-550 PSIG Low Side Retard

Manifold Hoses:

-Service Pressure Rating of 800 PSIG

Recovery Cylinders:

-400 PSIG Pressure Rating

-Dept. of Transportation 4BA400 or BW400

**⚠ CAUTION**

R-410A systems operate at higher pressures than R-22 systems. Do not use R-22 service equipment or components on R-410A equipment.

# IV. CHECKING PRODUCT RECEIVED

Upon receiving the unit, inspect it for any damage from shipment. Claims for damage, either shipping or concealed, should be filed immediately with the shipping company. Check the unit model number, heating size, electrical characteristics, and accessories to determine if they are correct.

# V. EQUIPMENT PROTECTION FROM THE ENVIRONMENT

The metal parts of this unit may be subject to rust or deterioration in adverse environmental conditions. This oxidation could shorten the equipment's useful life. Salt spray, fog or mist in seacoast areas, sulphur or chlorine from lawn watering systems, and various chemical contaminants from industries such as paper mills and petroleum refineries are especially corrosive.

**If the unit is to be installed in an area where contaminants are likely to be a problem, special attention should be given to the equipment location and exposure.**

1. Avoid having lawn sprinkler heads spray direction on the unit cabinet.
2. In coastal areas, locate the unit on the side of the building away from the waterfront.
3. Shielding provided by a fence or shrubs may give some protection.

**Regular maintenance will reduce the buildup of contaminents and help to protect the unit's finish.**

**⚠ WARNING**

**DISCONNECT ALL POWER TO THE UNIT BEFORE STARTING MAINTENANCE. FAILURE TO DO SO CAN RESULT IN SEVERE ELECTRICAL SHOCK OR DEATH.**

1. Frequent washing of the cabinet, fan blade and coil with fresh water will remove most of the salt or other contaminants that build up on the unit.
2. Regular cleaning and waxing of the cabinet with a good automobile polish will provide some protection.
3. A good liquid cleaner may be used several times a year to remove matter that will not wash off with water.

Several different types of protective coatings are offered in some areas. These coatings may provide some benefit, but the effectiveness of such coating materials cannot be verified by the equipment manufacturer.

**The best protection is frequent cleaning, maintenance and minimal exposure to contaminants.**

# VI. INSTALLATION

## A. GENERAL

1. PRE-INSTALLATION CHECK-POINTS

   Before attempting any installation, the following points should be carefully considered:

   a. Structural strength of supporting members. (rooftop installation)
   b. Clearances and provision for servicing.
   c. Power supply and wiring.
   d. Air duct connections.

**FIGURE 1**
**RJNL-C/RJPL-C 3-5 TON**

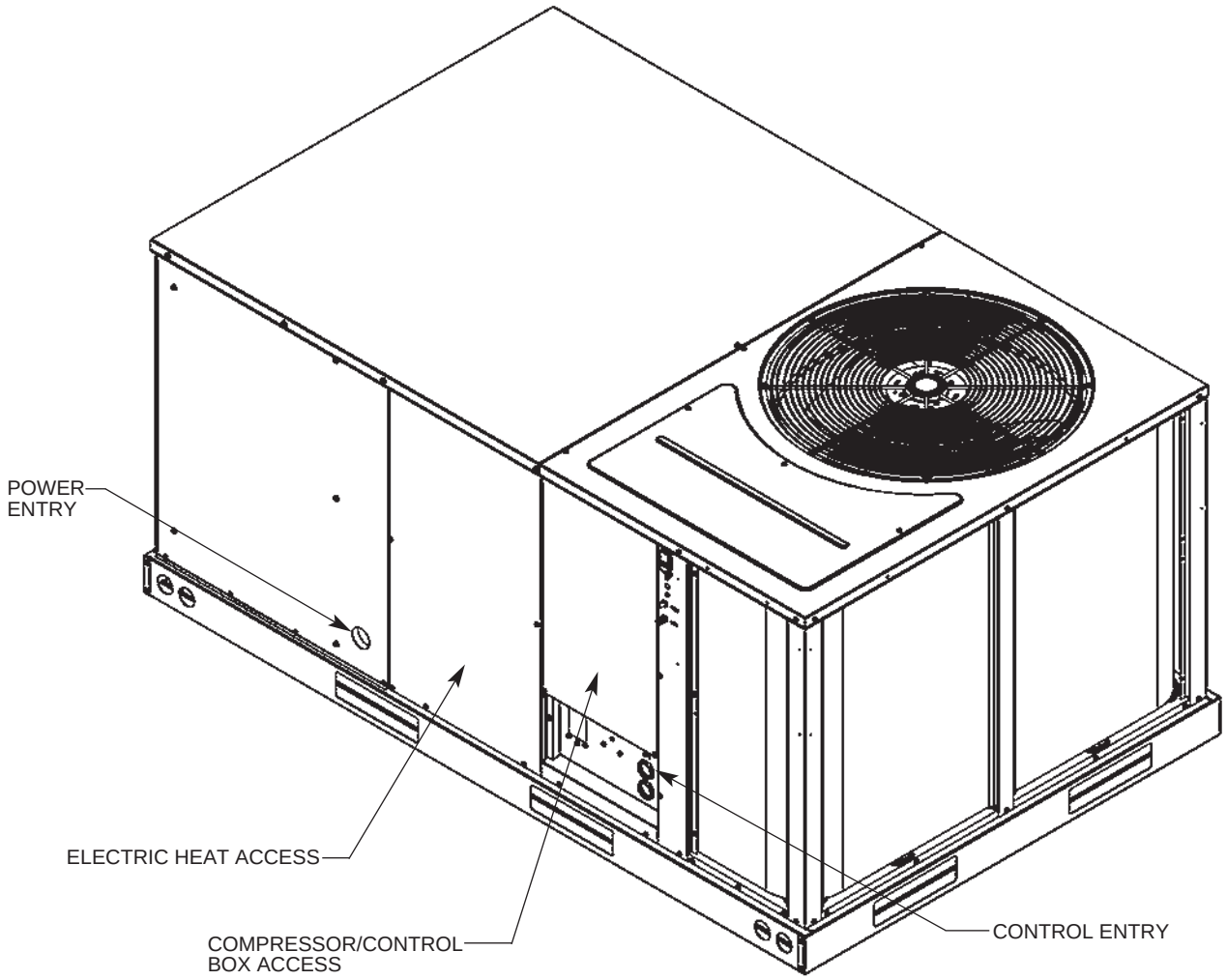


**FIGURE 2**
**UNIT DIMENSIONS – 3-5 TONS**

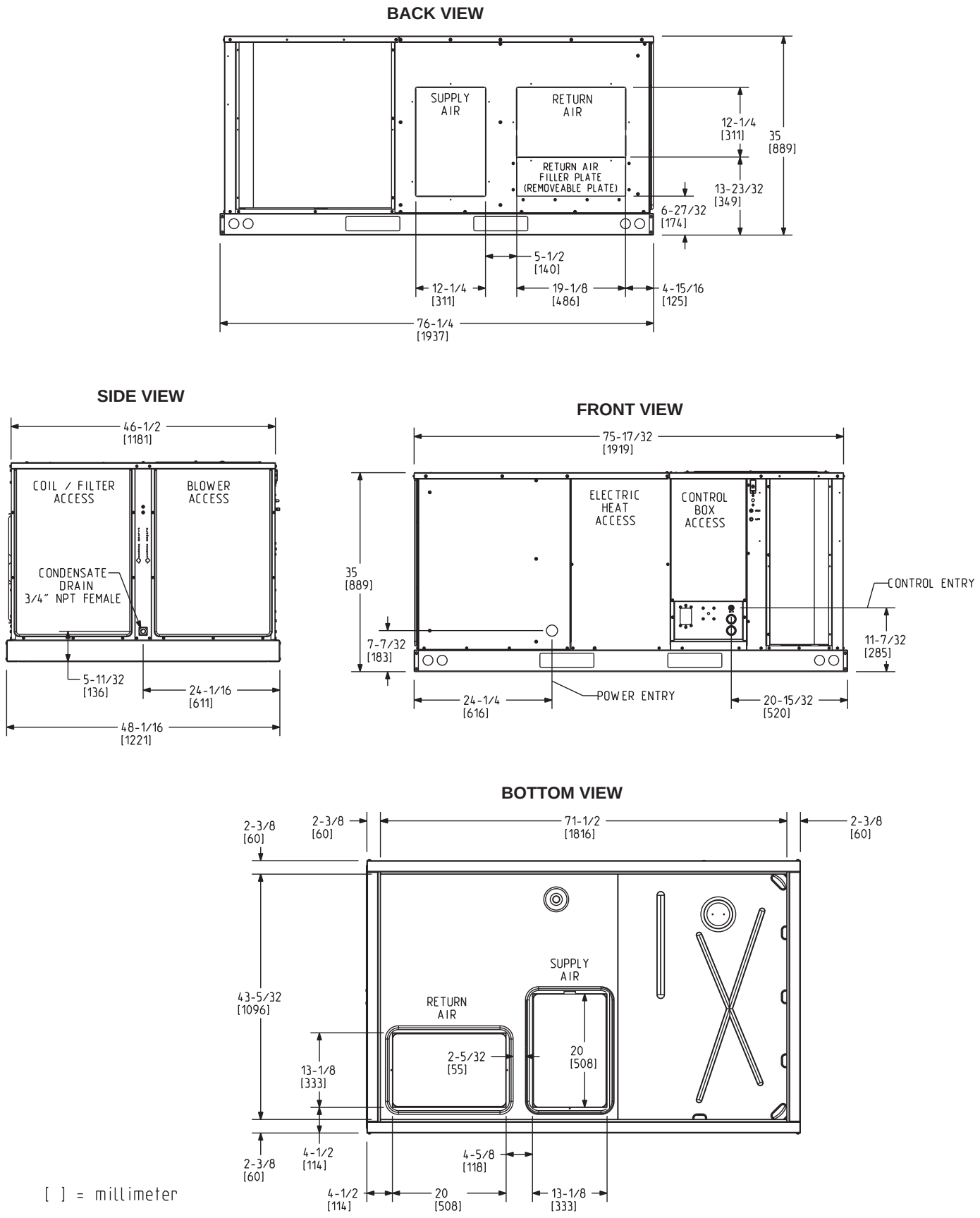
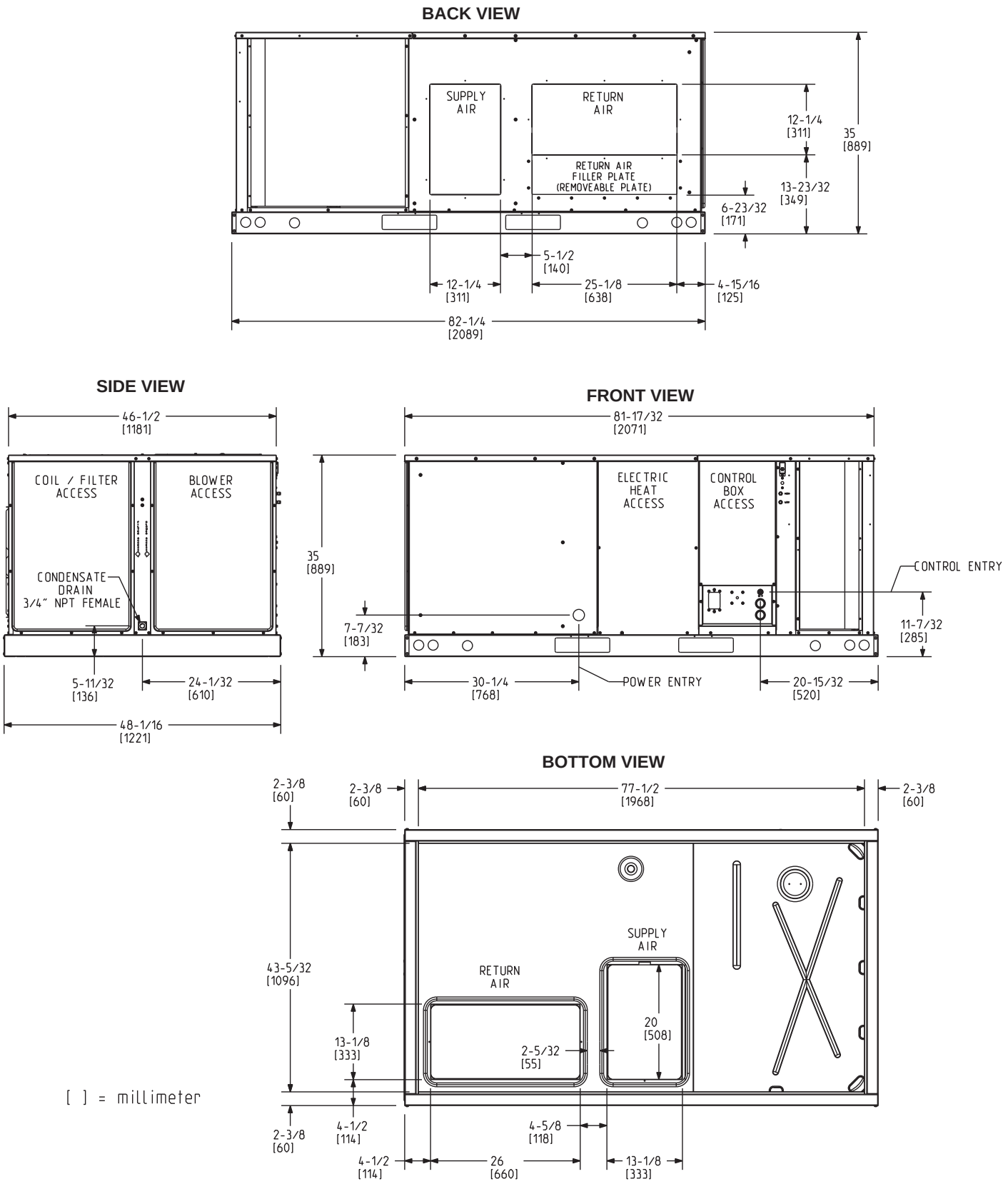
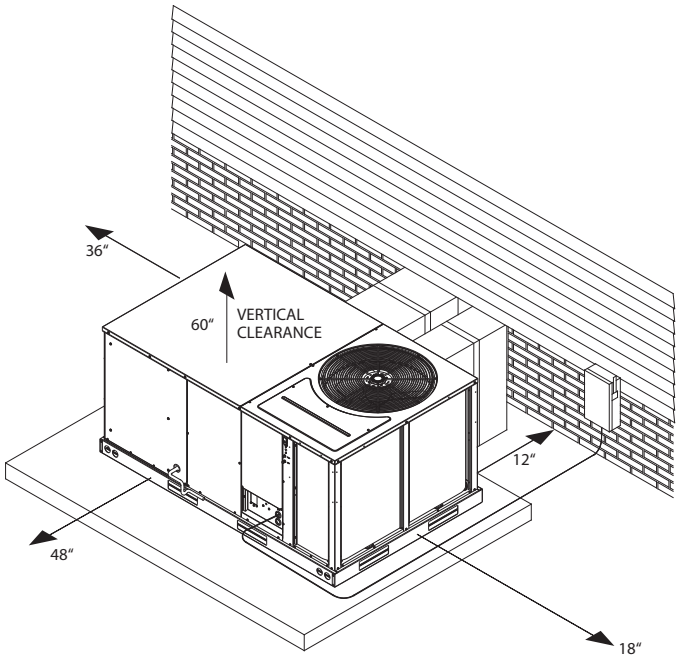


**FIGURE 3**
**UNIT DIMENSIONS – 6 TON**

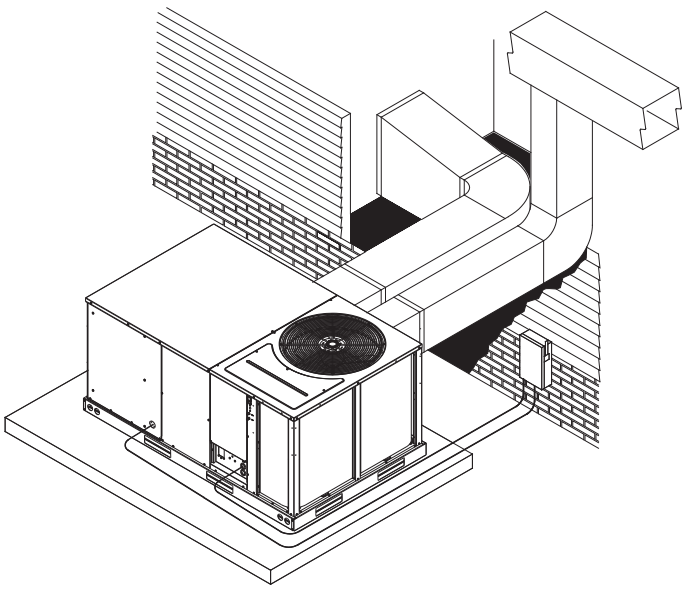


## FIGURE 4
**PACKAGED HEAT PUMP**
**OUTSIDE SLAB INSTALLATION, BASEMENT OR CRAWL SPACE DISTRIBUTION SYSTEM**




*****Allow 57" for economizer on duct side.

## FIGURE 5
**PACKAGED HEAT PUMP**
**OUTSIDE SLAB INSTALLATION, CLOSET DISTRIBUTION SYSTEM. SLAB FLOOR CONSTRUCTION**



## FIGURE 6
**PACKAGED HEAT PUMP**
**RIGGING FOR LIFTING**

| Capacity Tons [kW] | A in. [mm] | B in. [mm] |
|---|---|---|
| 3.5 [10.6-17.6] | 38¼ [972] | 25¾ [654] |
| 6 [21.1] | 39 [991] | 26⅛ [664] |

| Capacity Tons [kW] | Corner Weights by Percentage | | | |
|---|---|---|---|---|
| | A | B | C | D |
| 3.5 [10.6-17.6] | 22% | 27% | 23% | 28% |
| 6 [21.1] | 23% | 29% | 21% | 27% |

**LIFTING DETAIL**

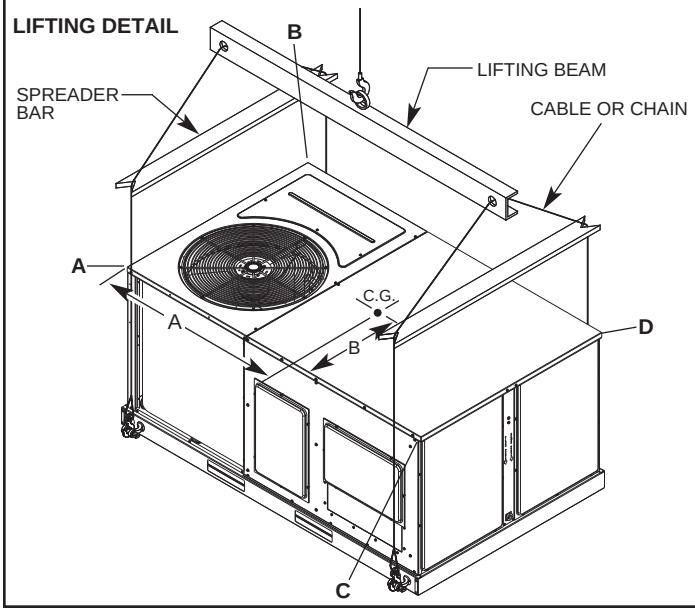
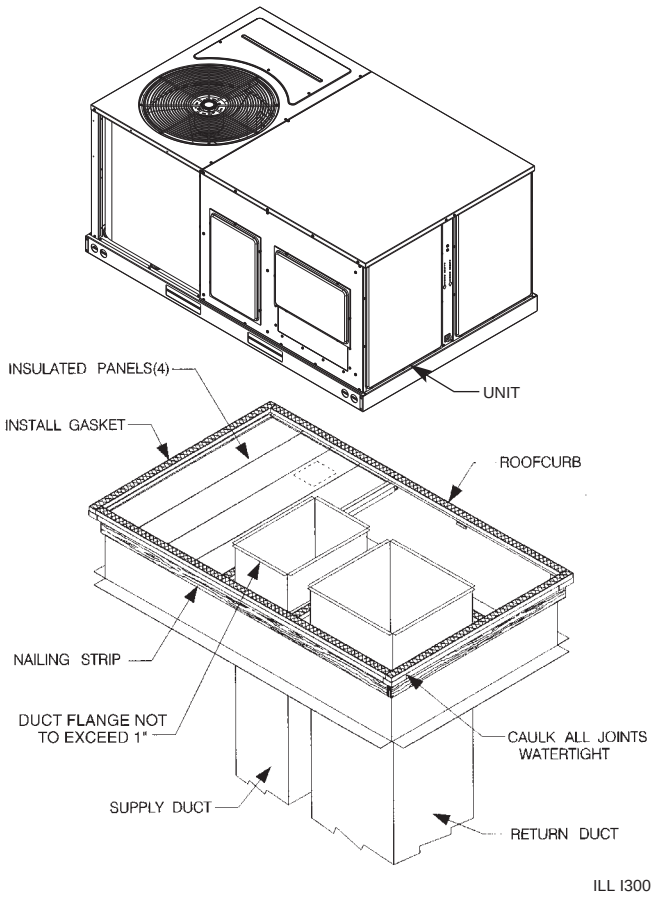
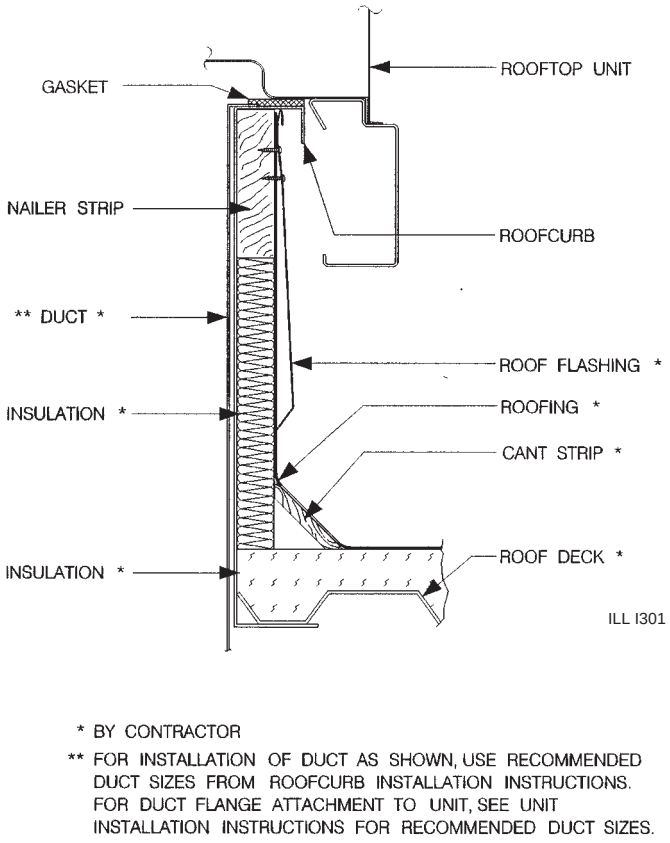


**FIGURE 7**
**PACKAGED HEAT PUMP**
**ROOFCURB INSTALLATION**




* BY CONTRACTOR

** FOR INSTALLATION OF DUCT AS SHOWN, USE RECOMMENDED DUCT SIZES FROM ROOFCURB INSTALLATION INSTRUCTIONS. FOR DUCT FLANGE ATTACHMENT TO UNIT, SEE UNIT INSTALLATION INSTRUCTIONS FOR RECOMMENDED DUCT SIZES.

e. Drain facilities and connections.
f. Location for minimum noise.

2. LOCATION

These units are designed for outdoor installations. They can be mounted on a slab or rooftop. They are not to be installed within any part of a structure such as an attic, crawl space, closet, or any other place where condenser air flow is restricted or other than outdoor ambient conditions prevail. Since the application of the units is of the outdoor type, it is important to consult your local code authorities at the time the first installation is made.

## B. OUTSIDE SLAB INSTALLATION (Typical outdoor slab installations are shown in Figures 4 and 5.)

1. Select a location where external water drainage cannot collect around the unit.
2. Provide a level concrete slab extending 3" beyond all four sides of the unit. The slab should be sufficient above grade to prevent ground water from entering the unit. ***IMPORTANT:*** *To prevent transmission of noise or vibration, slab should not be connected to building structure.*
3. The location of the unit should be such as to provide proper access for inspection and servicing.
4. Locate unit where operating sounds will not disturb owner or neighbors.
5. Locate unit so roof runoff water does not pour directly on the unit. Provide gutter or other shielding at roof level. Do not locate unit in an area where excessive snow drifting may occur or accumulate.
6. It is essential that the unit be elevated above the base pad to allow for condensate drainage and possible refreezing of condensation. Provide a base pad which is slightly pitched away from the structure. Route condensate off base pad to an area which will not become slippery and result in personal injury.
7. Where snowfall is anticipated, the height of the unit above the ground level must be considered. Mount unit high enough to be above average area snowfall and to allow for proper condensate drainage.

**FIGURE 8**
**PACKAGED HEAT PUMP**
**FLAT ROOFTOP INSTALLATION, ATTIC OR DROP CEILING DISTRIBUTION SYSTEM. MOUNTED ON ROOFCURB. CURB MUST BE LEVEL**

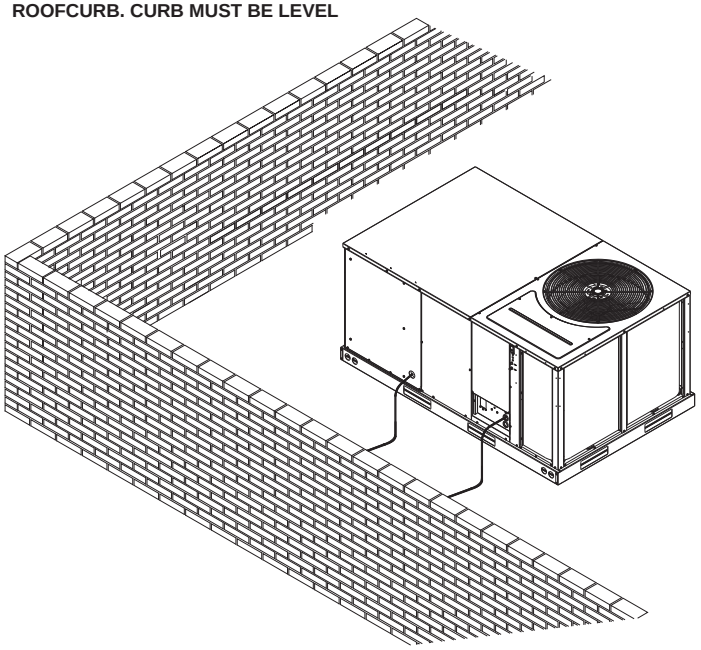
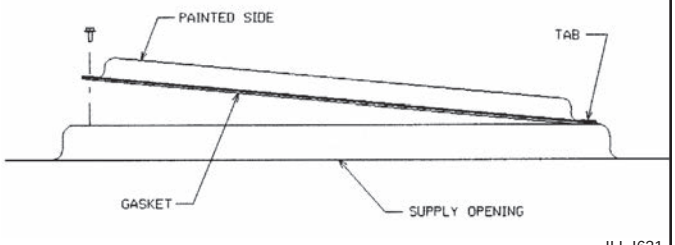


**FIGURE 9**
**COVER GASKET DETAIL**




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## C. CLEARANCES

The following minimum clearances must be observed for proper unit performance and serviceability.

1. Provide 48" minimum clearance at the front of the unit. Provide 36" minimum clearance at the left and right side of the unit for service access.
2. Provide 60" minimum clearance between top of unit and maximum 3 foot overhang.
3. Unit is design certified for application on combustible flooring with 0" minimum clearance.
4. See Figure 4 for illustration of minimum installation-service clearances.

## D. ROOFTOP INSTALLATION

1. Before locating the unit on the roof, make sure that the strength of the roof and beams is adequate at that point to support the weight involved. (See specification sheet for weight of unit.) This is very important and user's responsibility.
2. For rigging and roofcurb details, see Figures 6 and 7. Use field-furnished spreaders.
3. For roofcurb assembly, see Roofcurb Installation Instructions.
4. If the roofcurb is not used, provisions for disposing of condensate water runoff during defrosting must be provided.
5. The unit should be placed on a solid and level roofcurb or platform of adequate strength. See Figure 8.
6. The location of the unit on the roof should be such as to provide proper access for inspection and servicing.

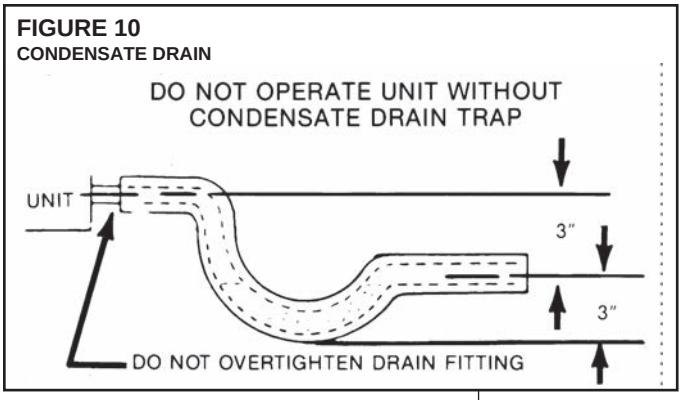
***IMPORTANT:*** *If unit will not be put into service immediately, cover supply and return openings to prevent excessive condensation.*

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# VII. DUCTWORK

Ductwork should be fabricated by the installing contractor in accordance with local codes and NFPA90A. Industry manuals may be used as a guide when sizing and designing the duct system - contact Air Conditioning Contractors of America, 1513 16th St. N.W., Washington, D.C. 20036.

**FIGURE 10**
**CONDENSATE DRAIN**




## ⚠ WARNING

**DO NOT, UNDER ANY CIRCUMSTANCES, CONNECT RETURN DUCTWORK TO ANY OTHER HEAT PRODUCING DEVICE SUCH AS A FIREPLACE INSERT, STOVE, ETC. UNAUTHORIZED USE OF SUCH DEVICES MAY RESULT IN FIRE, CARBON MONOXIDE POISONING, EXPLOSION, PROPERTY DAMAGE, SEVERE PERSONAL INJURY OR DEATH.**

The unit should be placed as close to the space to be air conditioned as possible allowing clearance dimensions as indicated. Ducts should be run as directly as possible to supply and return outlets. Use of non-flammable waterproof flexible connectors on both supply and return connections at the unit to reduce noise transmission is recommended.

It is preferable to install the unit on the roof of the structure if the registers or diffusers are located on the wall or in the ceiling. A slab installation could be considered when the registers are low on a wall or in the floor.

On ductwork exposed to outside air conditions of temperature and humidity, use a minimum of 2" of insulation and a vapor barrier. Distribution system in attic, furred space or crawl space should be insulated with at least 2" of insulation with vapor barrier. One-half to 1" thickness of insulation is usually sufficient for ductwork inside the air conditioned space.

Balancing dampers should be provided for each branch duct in the supply system. Ductwork should be properly supported from the structure.

When installing ductwork, consider the following items:

1. Noncombustible flexible connectors should be used between ductwork and unit to reduce noise and vibration transmission into the ductwork.
2. When auxiliary heaters are installed, use noncombustible flexible connectors and clearance to combustible material of 0" for the first 3 feet of discharge duct. Clearance to unit top and side is 0".

# VIII. FILTERS

This unit is provided with 2 - 25" x 16" x 1" (3-5 ton) 4 - 16" x 16" x 1" (6 ton) disposable filters. When replacing filters, ensure they are inserted fully to the back to prevent bypass.

# IX. CONVERSION PROCEDURE

## DOWNFLOW TO HORIZONTAL

1. Remove the screws and covers from the outside of the supply and return sections.
2. Install the covers in the bottom supply and return openings with the painted side up. See Figure 9. Use the existing gasket to seal the covers.
3. Secure the supply cover to the base of the unit with 1 screw, engaging prepunched tab in unit base.
4. Secure the return cover to the base of the unit with screws, engaging prepunched holes in the unit base.

**FIGURE 11**
**BRANCH CIRCUIT DISCONNECT LOCATION**

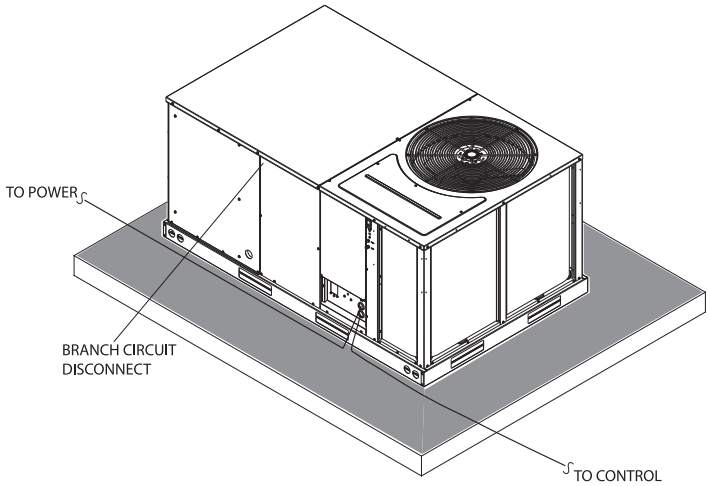



**TABLE A**
**WIRE SIZES**

| AWG Copper Wire Size | AWG Aluminum Wire Size | Connector Type and Size (or equivalent) | |
|---|---|---|---|
| #12 | #10 | T&B Wire Nut | PT2 |
| #10 | #8 | T&B Wire Nut | PT3 |
| #8 | #6 | Ilsco Split Bolt | AK-6 |
| #6 | #4 | Ilsco Split Bolt | AK-4 |
| #4 | #2 | Ilsco Split Bolt | AK-2 |
| #3 | #1 | Ilsco Split Bolt | AK-1/0 |
| #2 | #0 | Ilsco Split Bolt | AK-1/0 |
| #1 | #00 | Ilsco Split Bolt | AK-2/0 |
| #0 | #000 | Ilsco Split Bolt | AK-4/0 |

# X. CONDENSATE DRAIN

The condensate drain connection of the evaporator is 3/4" nominal female pipe thread. **IMPORTANT:** Install a condensate trap to ensure proper condensate drainage. See Figure 10.

# XI. CONDENSATE DRAIN, OUTDOOR COIL

The outdoor coil during heating operation will sweat or run water off. The outdoor coil will also run water off during the defrost cycle. See Section V, Installation, for mounting precautions.

# XII. ELECTRICAL WIRING

Field wiring must comply with the National Electrical Code* and local ordinances that may apply.

*C.E.C. in Canada

## A. POWER WIRING

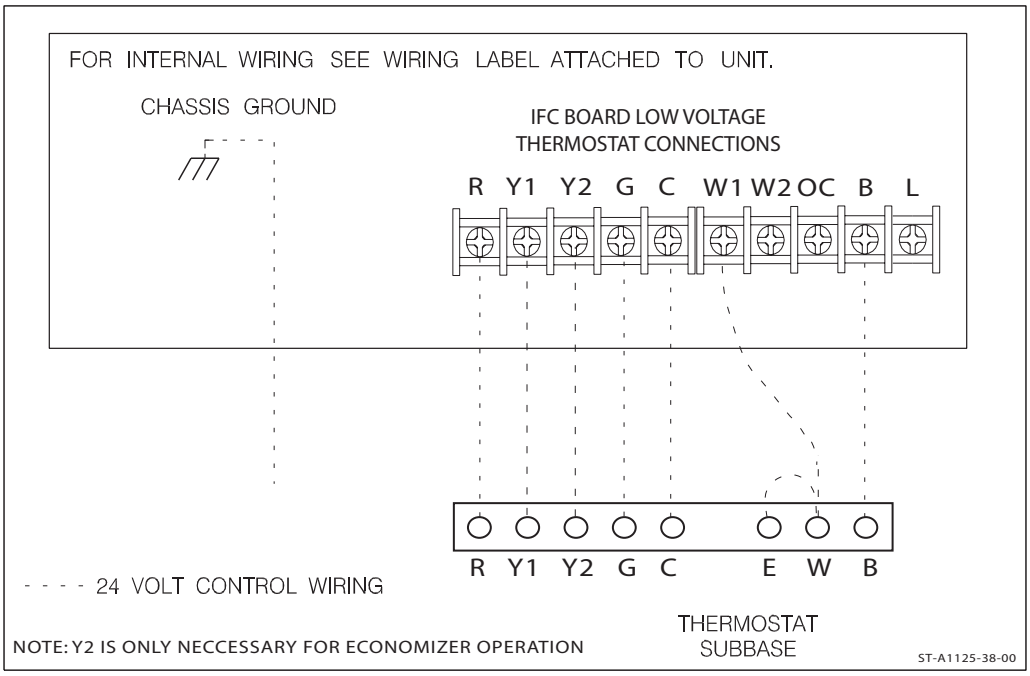
1. It is important that proper electrical power is available at the unit. Voltage should not vary more than 10% from that stamped on the unit rating plate. On three phase units, phases must be balanced within 3%.
2. ➤ Install a branch circuit disconnect within sight of the unit and of adequate size to handle the starting current. Refer to Figure 11 for proper location.
3. For branch circuit wiring (main power supply to unit disconnect), the minimum wire size can be determined from Table C using the circuit ampacity found on the unit nameplate or from the Electrical Data.
4. This unit incorporates single point electrical connection for unit and electric heat accessory.
5. Power wiring must be run in grounded rain-tight conduit. Connect the power field wiring as follows:
   a. NO ELECTRIC HEAT - Connect the field wires directly to the contactor pigtails in the electric heat access area. Connect ground wire to ground lug.
   b. WITH ELECTRIC HEAT - Connect the field wires to the terminal block on the electric heater kit in the electric heat access area. Connect the ground wire to the ground lug on the heater kit.

NOTE: For field installation of a heater kit, follow the instructions provided with the heater kit.

**FIGURE 12**
**HEATER KIT INSTALLATION**



**FIGURE 13**
**VOLTAGE CONNECTIONS DIAGRAM**




6. The pigtail wires in the electric heat access area are factory wired to the contactor in the control box.
7. DO NOT connect aluminum field wires to electric heat kit power input terminals.

## B. SPECIAL INSTRUCTIONS FOR POWER WIRING WITH ALUMINUM CONDUCTORS.

1. Select the equivalent aluminum wire size from the tabulation below:
2. Attach a length (6" or more) of recommended size copper wire to the unit terminals L1 and L3 for single phase, L1, L2, L3 for three phase.
3. Splice copper wire pigtails to aluminum wire with U.L. recognized connectors for copper-aluminum splices. Follow these instructions very carefully to make a positive and lasting connection;
   a. Strip insulation from aluminum conductor.
   b. Coat the stripped end of the aluminum wire with the recommended inhibitor and wire brush aluminum surface through inhibitor. Inhibitors: Brundy, Pentex “A”; Alcoa, No. 2EJC; T&B KPOR Shield.

**TABLE C**

**COPPER WIRE SIZE – AWG (1% VOLTAGE DROP)**

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 300 | 4 | 3 | 2 | 2 | 1 | 1/0 | 1/0 | 2/0 | 2/0 | 3/0 | 3/0 | 3/0 | 4/0 | 4/0 | 4/0 | 250 | 250 | 250 | 250 | 300 | 300 | 300 | 300 | 300 | 350 | 350 | 350 | 350 |
| Supply | 250 | 4 | 4 | 3 | 3 | 2 | 1 | 1 | 1/0 | 1/0 | 2/0 | 2/0 | 2/0 | 3/0 | 3/0 | 3/0 | 4/0 | 4/0 | 4/0 | 4/0 | 250 | 250 | 250 | 250 | 250 | 350 | 350 | 350 | 350 |
| Wire | 200 | 6 | 4 | 4 | 4 | 3 | 2 | 2 | 1 | 1 | 1/0 | 1/0 | 1/0 | 2/0 | 2/0 | 2/0 | 3/0 | 3/0 | 3/0 | 3/0 | 3/0 | 4/0 | 4/0 | 4/0 | 4/0 | 4/0 | 300 | 300 | 300 | 300 |
| Length | 150 | 8 | 6 | 6 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 1 | 1/0 | 1/0 | 1/0 | 1/0 | 2/0 | 2/0 | 2/0 | 2/0 | 2/0 | 3/0 | 3/0 | 3/0 | 3/0 | 4/0 | 4/0 | 4/0 | 4/0 |
| Feet | 100 | 10 | 8 | 8 | 6 | 6 | 6 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1/0 | 1/0 | 1/0 | 1/0 | 1/0 | 1/0 | 1/0 | 2/0 | 2/0 | 2/0 |
| | 50 | 14 | 12 | 10 | 10 | 8 | 8 | 6 | 6 | 6 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1/0 | 1/0 | 1/0 | 1/0 | 2/0 |
| | | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 | 105 | 110 | 115 | 120 | 125 | 130 | 135 | 140 | 145 | 150 | 155 |
| | | Circuit Ampacity | | | | | | | | | | | | | | | | | | | | | | | | | | | |

NOTE:

1. Wire size based on 60ºC type copper conductors below 100 ampacity. 2. Wire size based on 75ºC type copper conductors for 100 ampacity and above.

c. Clean and recoat aluminum conductor with inhibitor.

d. Make the splice using the above listed wire nuts or split bolt connectors.

e. Coat the entire connection with inhibitor and wrap with electrical insulating tape.

WARRANTY MAY NOT APPLY IF CONNECTIONS ARE NOT MADE PER INSTRUCTIONS

## C. CONTROL WIRING (Class II)

1. Low voltage wiring should not be run in conduit with power wiring.
2. Control wiring is routed through the 7/8" hole adjacent to the compressor access panel. Use a minimum #18 AWG thermostat wire. For wire lengths exceeding 50', use #16 AWG thermostat wire. The low voltage wires are connected to the unit pigtails which are supplied with the unit below the unit control box.
3. It is necessary that only heat pump thermostats be used.
4. Figure 13 shows representative low voltage connection diagrams. Read your thermostat installation instructions for any special requirements for your specific thermostat.

   NOTE — Units installed in Canada require that an outdoor thermostat (30,000 min. cycles of endurance) be installed and be wired with C.E.C. Class I wiring.

## D. INTERNAL WIRING

1. A diagram of the internal wiring of this unit is located on the inside of the compressor access panel. If any of the original wire as supplied with the appliance must be replaced, the wire gauge and insulation must be the same as original wiring.

**IMPORTANT:** Some single phase units are equipped with a single pole contactor. Caution must be exercised when servicing as only one leg of the power supply is broken with the contactor. Some models are equipped with electrically commutated blower motors which are constantly energized unless the main unit disconnect is in the off position.

## E. GROUNDING

**⚠ WARNING**

**THE UNIT MUST BE PERMANENTLY GROUNDED. A GROUNDING LUG IS PROVIDED IN THE ELECTRIC HEAT ACCESS AREA FOR A GROUND WIRE. FAILURE TO GROUND THIS UNIT CAN RESULT IN FIRE OR ELECTRICAL SHOCK CAUSING PROPERTY DAMAGE, SEVERE PERSONAL INJURY OR DEATH.**

## F. THERMOSTAT

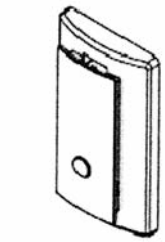
The thermostat should be mounted on an inside wall about five feet above the floor in a location where it will not be affected by unconditioned air, sun, or drafts from open doors or other sources. READ installation instructions in heat pump thermostat package CAREFULLY because each has some different wiring requirements.

# XIII. INDOOR AIR FLOW DATA

Direct-drive blower models are shipped factory wired for the proper speed at a typical external static. Belt-drive blower models have motor sheaves set for proper CFM at a typical external static.

# XIV. ROOM TEMPERATURE SENSORS

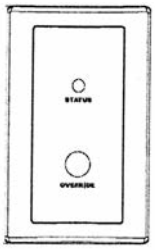
**FIGURE 14**
**FLUSH MOUNT ROOM TEMPERATURE SENSOR FOR NETWORKED DDC APPLICATIONS (REPLACES THERMOSTAT)**



**ROOM TEMPERATURE SENSOR WITH TIMED OVERRIDE BUTTON**

**ZNS1**

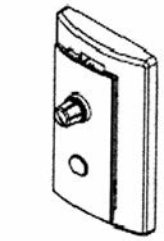
←10kΩ room temperature sensor transmits room temperature to DDC system. Times override buttons allows tenant to change from unoccupied temperature setpoint to occupied temperature setpoint for a preset time.




**ROOM TEMPERATURE SENSOR WITH TIMED OVERRIDE BUTTON AND STATUS INDICATOR**

**ZNS2**

←10kΩ room temperature sensor transmits room temperature to DDC system. Times override button allows tenant to change from unoccupied temperature setpoint to occupied temperature setpoint for a preset time. Status Indicator Light transmits ALARM flash code to occupied space.



**ROOM TEMPERATURE SENSOR WITH SETPOINT ADJUSTMENT AND TIMED OVERRIDE BUTTON**

**ZNS3**

←10kΩ room temperature sensor with setpoint adjustment transmits room temperature to DDC system along with desired occupied room temperature setpoint. Timed override button allows tenant to change from unoccupied temperature setpoint to occupied temperature setpoint for a preset time.

# XV. CRANKCASE HEAT (OPTIONAL)

Crankcase heat is not required on scroll type compressors, but may be necessary for difficult starting situations.

# XVI. PRE-START CHECK

1. Is unit properly located and slightly slanted toward indoor condensate drain?
2. Is ductwork insulated, weatherproofed, with proper spacing to combustible materials?
3. Is air free to travel to and from outdoor coil? (See Figure 4.)
4. Is the wiring correct, tight, and according to unit wiring diagram?
5. Is unit grounded?
6. Are field supplied air filters in place and clean?
7. Do the outdoor fan and indoor blower turn freely without rubbing, and are they tight on the motor shafts?
8. Is unit elevated to allow for outdoor coil condensate drainage during heating operation and defrost?

# XVII. STARTUP

1. Turn thermostat to “OFF,” turn “on” power supply at disconnect switch.
2. Turn temperature setting as high as it will go.
3. Turn fan switch to “ON.”
4. Indoor blower should run. Be sure it is running in the right direction.
5. Turn fan switch to “AUTO.” Turn system switch to “COOL” and turn temperature setting below room temperature. Unit should run in cooling mode.
6. Is outdoor fan operating correctly in the right direction?
7. Is compressor running correctly.
8. Turn thermostat system switch to “HEAT.” Unit should stop. Wait 5 minutes, then raise temperature setting to above room temperature. Unit should run in heating mode and after about 30 to 50 seconds auxiliary heaters, if installed, should come on.
9. Check the refrigerant charge using the instructions located on compressor access panel cover. Replace service port caps. Service port cores are for system access only and will leak if not tightly capped.
10. Turn thermostat system switch to proper mode “HEAT” or “COOL” and set thermostat to proper temperature setting. Record the following after the unit has run some time.
    A. Operating Mode _____
    B. Discharge Pressure (High) _____PSIG
    C. Vapor Pressure at Compressor (Low) _____PSIG

D. Vapor Line Temperature at Compressor _____°F.
E. Indoor Dry Bulb_____°F.
F. Indoor Wet Bulb _____°F.
G. Outdoor Dry Bulb _____°F.
H. Outdoor Wet Bulb _____°F.
I. Voltage at Contactor _____Volts
J. Current at Contactor _____Amps
K. Model Number_____
L. Serial Number _____
M. Location_____
N. Owner _____
O. Date_____

11. Adjust discharge air grilles and balance system.
12. Check ducts for condensation and air leaks.
13. Check unit for tubing and sheet metal rattles.
14. Instruct the owner on operation and maintenance.
15. Leave “INSTALLATION” and ”USE AND CARE“ instructions with owner

# XVIII. OPERATION

Most single phase units are operated PSC (no start relay or start capacitor). It is important that such systems be off for a minimum of 5 minutes before restarting to allow equalization of pressures. The thermostat should not be moved to cycle unit without waiting five minutes. To do so may cause the compressor to stop on an automatic open overload device or blow a fuse. Poor electrical service can cause nuisance tripping in overloads or blow fuses.

***IMPORTANT:*** *The compressor has an internal overload protector. Under some conditions, it can take up to 2 hours for this overload to reset. Make sure overload has had time to reset before condemning the compressor.*

Some units are equipped with a time delay control (TDC1). The control allows the blower to operate for up to 90 seconds after the thermostat is satisfied.

# XIX. AUXILIARY HEAT

The amount of auxiliary heat required depends on the heat loss of the structure to be heated and the capacity of the heat pump. It is good practice to install strip heat to maintain at least 60ºF indoor temperatures in case of compressor failure. The auxiliary heat is energized by the second stage of the thermostat. The amount of electric heat that is allowed to come on, as determined by the output of the heat pump, may be controlled by an outdoor thermostat.

## ⚠ WARNING

**ONLY ELECTRIC HEATER KITS SUPPLIED BY THIS MANUFACTURER AS DESCRIBED IN THIS PUBLICATION HAVE BEEN DESIGNED, TESTED, AND EVALUATED BY A NATIONALLY RECOGNIZED SAFETY TESTING AGENCY FOR USE WITH THIS UNIT. USE OF ANY OTHER MANUFACTURED ELECTRIC HEATERS INSTALLED WITHIN THIS UNIT MAY CAUSE HAZARDOUS CONDITIONS RESULTING IN PROPERTY DAMAGE, FIRE, BODILY INJURY OR DEATH.**

## A. CONTROL SYSTEM OPERATION

1. In the cooling mode, the thermostat will, on a call for cooling, energize the compressor contactor and the indoor blower relay. The indoor blower can be operated continuously by setting the thermostat fan switch at the “ON” position. The reversing valve coil is de-energized.
2. In the heating mode, the first heat stage of the thermostat will energize the compressor contactor and the indoor blower relay. The second heat stage will turn on one or more supplementary resistance heaters. The reversing valve is energized except in defrost. If required or considered desirable, the resistance heat may also be controlled by outdoor thermostats.

# XX. DEMAND DEFROST CONTROL AND HIGH/LOW PRESSURE CONTROLS

The demand defrost control monitors the outdoor ambient temperature, outdoor coil temperature and the compressor run time to determine when a defrost cycle is required.

**Enhanced Feature Demand Defrost Control:** This defrost control has high and low pressure control inputs with unique pressure switch logic built into the microprocessor to provide compressor and system protection without nuisance lockouts. The control cycles the compressor off for 30 seconds at the beginning and the end of the defrost cycle to eliminate the increased compressor noise caused by rapidly changing system pressures when the reversing valve switches. See next page for diagnostic flash codes and sensor resistance values at various temperatures.

## DEFROST INITIATION

A defrost will be initiated when the three conditions below are satisfied:

1. The outdoor coil temperature is below 35°F as measured by a good coil sensor,
2. The compressor has operated for at least 34 minutes with the outdoor coil temperature below 35°F and
3. The measured difference between the ambient temperature and the outdoor coil temperature is greater than the calculated difference determined by the defrost control microprocessor.

## DEFROST TERMINATION

Once a defrost is initiated, the defrost will continue until fourteen minutes has elapsed or the coil temperature has reached the selected termination temperature. The factory setting is 70°F but can be changed to 50°F, 60°F, or 80°F by relocating the jumper on the control board.

## TEMPERATURE SENSORS

The coil sensor is located on the outdoor coil near the point fed by the distribution tubes from the expansion device, on the top most cross-over tube. The ambient air sensor is located outside the control box so it can sense outdoor temperatures.

If the ambient sensor fails, the defrost control will initiate a defrost every 34 minutes of compressor run time with the coil temperature below 35°F.

If the coil sensor fails, the defrost control will not initiate a defrost.

## TEST MODE

The test mode is initiated by shorting the TEST pins. The unit must have an active heat pump heating call to enter the test mode. In this mode of operation, the enable temperature is ignored and all timers are sped up. To initiate a manual defrost, short and hold the TEST pins. Remove the short when the system switches to defrost mode after the compressor noise abatement delay. The defrost will terminate on time (14 minutes) or when the termination temperature has been reached.

Test Sequence of Operation:

1) Provide a heating call to the heat pump.
2) Short test pins to bypass anti-short cycle timer. (If unit is running, this step is not necessary.)
3) Short test pins and hold them shorted to enter defrost mode.
4) Release test pins once control exits noise abatement delay.
5) Monitor coil temperature when control exits defrost.
6) Unit should return to heating mode.

## TROUBLE SHOOTING DEMAND DEFROST

During the test mode the coil temperature should be monitored. If the system exits defrost at approximately the termination temperature, the control is operating normlly. If not, check the coil and ambient temperature sensor resistances, using the sensor temperature vs. resistance table at the end of this section.

Immerse the sensor in water and measure the resistance of the sensor. At 35°F the resistance of the sensor should be approximately 30,000 ohms.

Ensure that the coil sensor is properly installed that is not loose or touching the cabinet.

## HIGH/LOW PRESSURE CONTROL MONITORING - ENHANCED DEFROST CONTROL

Status of high and low pressure controls is monitored by the enhanced feature demand defrost control and the following actions are taken.

**High Pressure Control –** Provides active protection in both cooling and heating modes at all outdoor ambient temperatures. The high pressure control is an automatic reset type and opens at approximately 610 psig and closes at approximately 420 psig. The compressor and fan motor will stop when the high pressure control opens and will start again if the high side pressure drops to approximately 420 psig where the automatic reset high pressure control resets. If the high pressure control opens 3 times within a

particular call for heating or cooling operation, the defrost control will lock out compressor and outdoor fan operation.

**Low Pressure Control –** Provides active protection in both heating and cooling modes at all outdoor ambient temperatures. The low pressure control is an automatic reset type and opens at approximately 15 psig and closes at approximately 40 psig. Operation is slightly different between cooling and heating modes.

**Cooling Mode:** The compressor and fan motor will stop when the low pressure control opens and will start again when the low side pressure rises to approximately 40 psig after the low pressure control automatically resets. If the low pressure switch opens 3 times within a particular call for cooling operation, the defrost control will lock out compressor and outdoor fan operation.

**Heating Mode:** The compressor and outdoor fan motor will stop when the low pressure control opens and will start again when the low side pressure rises to approximately 40 psig when the low pressure control automatically resets. If the low pressure switch trips 3 times within 120 minutes of operation during a particular call for heating operation, the defrost control will lock out compressor and outdoor fan operation. If the lock-out due to low pressure occurs at an outdoor ambient temperature below 5°F, the defrost control will automatically exit the lock-out mode when the outdoor ambient temperature rises to 5°F. This feature is necessary since the low pressure control could possibly have opened due to the outdoor ambient being very low rather than an actual system fault.

**Exiting Lock-Out Mode:** To exit the lock-out mode, remove 24 volts to the defrost control by removing power to the unit or by shorting the two defrost control pins together.

### ENHANCED FEATURE DEFROST CONTROL DIAGNOSTIC CODES

| LED 1 | LED 2 | Control Board Status |
|---|---|---|
| OFF | OFF | No Power |
| ON | ON | Coil Sensor Failure |
| OFF | ON | Ambient Sensor Failure |
| FLASH | FLASH | Normal |
| OFF | FLASH | Low Pressure Lockout (short test pins to reset) |
| FLASH | OFF | High Pressure Lockout (short test pins to reset) |
| ON | FLASH | Low Pressure Control Open |
| FLASH | ON | High Pressure Control Open |
| Alternate Flashing | | 5 Minute Time Delay |

### SENSOR TEMPERATURE VS. RESISTANCE TABLE

| Degrees C | Degrees F | Ohms |
|---|---|---|
| -20 | -4 | 96,974 |
| -10 | 14 | 55,298 |
| 0 | 32 | 32,650 |
| 10 | 50 | 19,903 |
| 20 | 68 | 12,493 |
| 25 | 77 | 10,000 |
| 30 | 86 | 8,056 |
| 40 | 104 | 5,324 |

## XXI. REPLACEMENT PARTS

Contact your local distributor for a complete parts list.

## XXII. CHARGE INFORMATION

Refer to the appropriate charge chart included in this manual.

## XXIII. TROUBLESHOOTING

Refer to the troubleshooting chart included in this manual.

## XXIV. WIRING DIAGRAMS

Refer to the appropriate wiring diagram included in this manual.

# XXV. GENERAL DATA - RJNL-C MODELS
## NOMINAL SIZES 3-6 TONS [10.6-21.1 kW]

| Model RJNL - Series | C036CL | C036CM | C036DL | C036DM |
|---|---|---|---|---|
| **Cooling performance[1]** | | | | **Continued ->** |
| Gross Cooling Capacity Btu [kW] | 37,800 [11.08] | 37,800 [11.08] | 37,800 [11.08] | 37,800 [11.08] |
| EER, SEER[2] | 11.5/13 | 11.5/13 | 11.5/13 | 11.5/13 |
| Nominal CFM/AHRI Rated CFM [L/s] | 1200/1200 [566/566] | 1200/1200 [566/566] | 1200/1200 [566/566] | 1200/1200 [566/566] |
| AHRI Net Cooling Capacity Btu [kW] | 36,200 [10.61] | 36,200 [10.61] | 36,200 [10.61] | 36,200 [10.61] |
| Net Sensible Capacity Btu [kW] | 27,000 [7.91] | 27,000 [7.91] | 27,000 [7.91] | 27,000 [7.91] |
| Net Latent Capacity Btu [kW] | 9,200 [2.7] | 9,200 [2.7] | 9,200 [2.7] | 9,200 [2.7] |
| Net System Power kW | 3.1 | | 3.1 | 3.1 |
| **Heating Performance (Heat Pumps)** | | | | |
| High Temp. Btuh [kW] Rating | 34,400 [10.08] | 34,400 [10.08] | 34,400 [10.08] | 34,400 [10.08] |
| System Power KW / COP | 2.94/3.4 | 2.94/3.4 | 2.94/3.4 | 2.94/3.4 |
| Low Temp. Btuh [kW] Rating | 19,600 [5.74] | 19,600 [5.74] | 19,600 [5.74] | 19,600 [5.74] |
| System Power KW / COP | 2.72/2.1 | 2.72/2.1 | 2.72/2.1 | 2.72/2.1 |
| HSPF (Btu/Watts-hr) | 7.699999809 | 7.699999809 | 7.699999809 | 7.699999809 |
| **Compressor** | | | | |
| No./Type | 1/Scroll | 1/Scroll | 1/Scroll | 1/Scroll |
| **Outdoor Sound Rating (dB)[5]** | 83 | 83 | 83 | 83 |
| **Outdoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] OD | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 16.89 [1.57] | 16.89 [1.57] | 16.89 [1.57] | 16.89 [1.57] |
| Rows / FPI [FPcm] | 1 / 22 [9] | 1 / 22 [9] | 1 / 22 [9] | 1 / 22 [9] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| **Indoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] |
| Rows / FPI [FPcm] | 3 / 13 [5] | 3 / 13 [5] | 3 / 13 [5] | 3 / 13 [5] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| Drain Connection No./Size in. [mm] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] |
| **Outdoor Fan - Type** | Propeller | Propeller | Propeller | Propeller |
| No. Used/Diameter in. [mm] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] |
| Drive Type/No. Speeds | Direct/1 | Direct/1 | Direct/1 | Direct/1 |
| CFM [L/s] | 4000 [1888] | 4000 [1888] | 4000 [1888] | 4000 [1888] |
| No. Motors/HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP |
| Motor RPM | 1075 | 1075 | 1075 | 1075 |
| **Indoor Fan - Type** | FC Centrifugal | FC Centrifugal | FC Centrifugal | FC Centrifugal |
| No. Used/Diameter in. [mm] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] |
| Drive Type/No. Speeds | Belt/Variable | Belt/Variable | Belt/Variable | Belt/Variable |
| No. Motors | 1 | 1 | 1 | 1 |
| Motor HP | 1/2 | 3/4 | 1/2 | 3/4 |
| Motor RPM | 1725 | 1725 | 1725 | 1725 |
| Motor Frame Size | 56 | 56 | 56 | 56 |
| **Filter - Type** | Disposable | Disposable | Disposable | Disposable |
| Furnished | Yes | Yes | Yes | Yes |
| (NO.) Size Recommended in. [mm x mm x mm] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] |
| **Refrigerant Charge Oz. [g]** | 116 [3289] | 116 [3289] | 116 [3289] | 116 [3289] |
| **Weights** | | | | |
| Net Weight lbs. [kg] | 517 [235] | 517 [235] | 517 [235] | 517 [235] |
| Ship Weight lbs. [kg] | 532 [241] | 532 [241] | 532 [241] | 532 [241] |

**NOTES:**

1. Cooling Performance is rated at 95° F ambient, 80° F entering dry bulb, 67° F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 210/240 or 360.
2. EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
3. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJNL-C MODELS
## NOMINAL SIZES 3-6 TONS [10.6-21.1 kW]

| Model RJNL - Series | C042CL | C042CM | C042DL | C042DM |
|---|---|---|---|---|
| **Cooling performance[1]** | | | | **Continued ->** |
| Gross Cooling Capacity Btu [kW] | 44,000 [12.89] | 44,000 [12.89] | 44,000 [12.89] | 44,000 [12.89] |
| EER, SEER[2] | 11.2/13 | 11.213 | 11.2/13 | 11.2/13 |
| Nominal CFM/AHRI Rated CFM [L/s] | 1400/1400 [661/661] | 1400/1400 [661/661] | 1400/1400 [661/661] | 1400/1400 [661/661] |
| AHRI Net Cooling Capacity Btu [kW] | 42,000 [12.31] | 42,000 [12.31] | 42,000 [12.31] | 42,000 [12.31] |
| Net Sensible Capacity Btu [kW] | 31,200 [9.14] | 31,200 [9.14] | 31,200 [9.14] | 31,200 [9.14] |
| Net Latent Capacity Btu [kW] | 10,800 [3.16] | 10,800 [3.16] | 10,800 [3.16] | 10,800 [3.16] |
| Net System Power kW | 3.74 | 3.74 | 3.74 | 3.74 |
| **Heating Performance (Heat Pumps)** | | | | |
| High Temp. Btuh [kW] Rating | 41,000 [12.01] | 41,000 [12.01] | 41,000 [12.01] | 41,000 [12.01] |
| System Power KW / COP | 3.38/3.5 | 3.38/3.5 | 3.38/3.5 | 3.38/3.5 |
| Low Temp. Btuh [kW] Rating | 24,400 [7.15] | 24,400 [7.15] | 24,400 [7.15] | 24,400 [7.15] |
| System Power KW / COP | 3.12/2.3 | 3.12/2.3 | 3.12/2.3 | 3.12/2.3 |
| HSPF (Btu/Watts-hr) | 7.699999809 | 7.699999809 | 7.699999809 | 7.699999809 |
| **Compressor** | | | | |
| No./Type | 1/Scroll | 1/Scroll | 1/Scroll | 1/Scroll |
| **Outdoor Sound Rating (dB)[5]** | 83 | 83 | 83 | 83 |
| **Outdoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] OD | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 16.89 [1.57] | 16.89 [1.57] | 16.89 [1.57] | 16.89 [1.57] |
| Rows / FPI [FPcm] | 1 / 22 [9] | 1 / 22 [9] | 1 / 22 [9] | 1 / 22 [9] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| **Indoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] |
| Rows / FPI [FPcm] | 3 / 13 [5] | 3 / 13 [5] | 3 / 13 [5] | 3 / 13 [5] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| Drain Connection No./Size in. [mm] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] |
| **Outdoor Fan - Type** | Propeller | Propeller | Propeller | Propeller |
| No. Used/Diameter in. [mm] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] |
| Drive Type/No. Speeds | Direct/1 | Direct/1 | Direct/1 | Direct/1 |
| CFM [L/s] | 4000 [1888] | 4000 [1888] | 4000 [1888] | 4000 [1888] |
| No. Motors/HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP |
| Motor RPM | 1075 | 1075 | 1075 | 1075 |
| **Indoor Fan - Type** | FC Centrifugal | FC Centrifugal | FC Centrifugal | FC Centrifugal |
| No. Used/Diameter in. [mm] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] |
| Drive Type/No. Speeds | Belt/Variable | Belt/Variable | Belt/Variable | Belt/Variable |
| No. Motors | 1 | 1 | 1 | 1 |
| Motor HP | 1/2 | 3/4 | 1/2 | 3/4 |
| Motor RPM | 1725 | 1725 | 1725 | 1725 |
| Motor Frame Size | 56 | 56 | 56 | 56 |
| **Filter - Type** | Disposable | Disposable | Disposable | Disposable |
| Furnished | Yes | Yes | Yes | Yes |
| (NO.) Size Recommended in. [mm x mm x mm] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] |
| **Refrigerant Charge Oz. [g]** | 120 [3402] | 120 [3402] | 120 [3402] | 120 [3402] |
| **Weights** | | | | |
| Net Weight lbs. [kg] | 521 [236] | 521 [236] | 521 [236] | 521 [236] |
| Ship Weight lbs. [kg] | 536 [243] | 536 [243] | 536 [243] | 536 [243] |

**NOTES:**

1. Cooling Performance is rated at 95° F ambient, 80° F entering dry bulb, 67° F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 210/240 or 360.
2. EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
3. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJNL-C MODELS
## NOMINAL SIZES 3-6 TONS [10.6-21.1 kW]

| Model RJNL - Series | C048CL | C048CM | C048DL | C048DM |
|---|---|---|---|---|
| **Cooling performance[1]** | | | | **Continued ->** |
| Gross Cooling Capacity Btu [kW] | 50,000 [14.65] | 50,000 [14.65] | 50,000 [14.65] | 50,000 [14.65] |
| EER, SEER[2] | 11.2/13 | 11.213 | 11.2/13 | 11.2/13 |
| Nominal CFM/AHRI Rated CFM [L/s] | 1600/1600 [755/755] | 1600/1600 [755/755] | 1600/1600 [755/755] | 1600/1600 [755/755] |
| AHRI Net Cooling Capacity Btu [kW] | 47,500 [13.92] | 47,500 [13.92] | 47,500 [13.92] | 47,500 [13.92] |
| Net Sensible Capacity Btu [kW] | 35,700 [10.46] | 35,700 [10.46] | 35,700 [10.46] | 35,700 [10.46] |
| Net Latent Capacity Btu [kW] | 11,800 [3.46] | 11,800 [3.46] | 11,800 [3.46] | 11,800 [3.46] |
| Net System Power kW | 4.22 | 4.22 | 4.22 | 4.22 |
| **Heating Performance (Heat Pumps)** | | | | |
| High Temp. Btuh [kW] Rating | 49,000 [14.36] | 49,000 [14.36] | 49,000 [14.36] | 49,000 [14.36] |
| System Power KW / COP | 3.93/3.6 | 3.93/3.6 | 3.93/3.6 | 3.93/3.6 |
| Low Temp. Btuh [kW] Rating | 29,000 [8.5] | 29,000 [8.5] | 29,000 [8.5] | 29,000 [8.5] |
| System Power KW / COP | 3.63/2.3 | 3.63/2.3 | 3.63/2.3 | 3.63/2.3 |
| HSPF (Btu/Watts-hr) | 7.699999809 | 7.699999809 | 7.699999809 | 7.699999809 |
| **Compressor** | | | | |
| No./Type | 1/Scroll | 1/Scroll | 1/Scroll | 1/Scroll |
| **Outdoor Sound Rating (dB)[5]** | 83 | 83 | 83 | 83 |
| **Outdoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] OD | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 16.56 [1.54] | 16.56 [1.54] | 16.56 [1.54] | 16.56 [1.54] |
| Rows / FPI [FPcm] | 2 / 22 [9] | 2 / 22 [9] | 2 / 22 [9] | 2 / 22 [9] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| **Indoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] |
| Rows / FPI [FPcm] | 4 / 13 [5] | 4 / 13 [5] | 4 / 13 [5] | 4 / 13 [5] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| Drain Connection No./Size in. [mm] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] |
| **Outdoor Fan - Type** | Propeller | Propeller | Propeller | Propeller |
| No. Used/Diameter in. [mm] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] |
| Drive Type/No. Speeds | Direct/1 | Direct/1 | Direct/1 | Direct/1 |
| CFM [L/s] | 4000 [1888] | 4000 [1888] | 4000 [1888] | 4000 [1888] |
| No. Motors/HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP |
| Motor RPM | 1075 | 1075 | 1075 | 1075 |
| **Indoor Fan - Type** | FC Centrifugal | FC Centrifugal | FC Centrifugal | FC Centrifugal |
| No. Used/Diameter in. [mm] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] |
| Drive Type/No. Speeds | Belt/Variable | Belt/Variable | Belt/Variable | Belt/Variable |
| No. Motors | 1 | 1 | 1 | 1 |
| Motor HP | 1/2 | 3/4 | 1/2 | 3/4 |
| Motor RPM | 1725 | 1725 | 1725 | 1725 |
| Motor Frame Size | 56 | 56 | 56 | 56 |
| **Filter - Type** | Disposable | Disposable | Disposable | Disposable |
| Furnished | Yes | Yes | Yes | Yes |
| (NO.) Size Recommended in. [mm x mm x mm] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] |
| **Refrigerant Charge Oz. [g]** | 187 [5301] | 187 [5301] | 187 [5301] | 187 [5301] |
| **Weights** | | | | |
| Net Weight lbs. [kg] | 535 [243] | 535 [243] | 535 [243] | 535 [243] |
| Ship Weight lbs. [kg] | 550 [249] | 550 [249] | 550 [249] | 550 [249] |

**NOTES:**

1. Cooling Performance is rated at 95° F ambient, 80° F entering dry bulb, 67° F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 210/240 or 360.
2. EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
3. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJNL-C MODELS
## NOMINAL SIZES 3-6 TONS [10.6-21.1 kW]

| Model RJNL - Series | C060CL | C060CM | C060DL | C060DM |
|---|---|---|---|---|
| **Cooling performance[1]** | | | | **Continued ->** |
| Gross Cooling Capacity Btu [kW] | 61,500 [18.02] | 61,500 [18.02] | 61,500 [18.02] | 61,500 [18.02] |
| EER, SEER[2] | 11.5/13 | 11.5/13 | 11.5/13 | 11.5/13 |
| Nominal CFM/AHRI Rated CFM [L/s] | 2000/2000 [944/944] | 2000/2000 [944/944] | 2000/2000 [944/944] | 2000/2000 [944/944] |
| AHRI Net Cooling Capacity Btu [kW] | 59,000 [17.29] | 59,000 [17.29] | 59,000 [17.29] | 59,000 [17.29] |
| Net Sensible Capacity Btu [kW] | 44,050 [12.91] | 44,050 [12.91] | 44,050 [12.91] | 44,050 [12.91] |
| Net Latent Capacity Btu [kW] | 14,950 [4.38] | 14,950 [4.38] | 14,950 [4.38] | 14,950 [4.38] |
| Net System Power kW | 5.04 | 5.04 | 5.04 | 5.04 |
| **Heating Performance (Heat Pumps)** | | | | |
| High Temp. Btuh [kW] Rating | 60,000 [17.58] | 60,000 [17.58] | 60,000 [17.58] | 60,000 [17.58] |
| System Power KW / COP | 4.78/3.6 | 4.78/3.6 | 4.78/3.6 | 4.78/3.6 |
| Low Temp. Btuh [kW] Rating | 35,800 [10.49] | 35,800 [10.49] | 35,800 [10.49] | 35,800 [10.49] |
| System Power KW / COP | 4.31/2.4 | 4.31/2.4 | 4.31/2.4 | 4.31/2.4 |
| HSPF (Btu/Watts-hr) | 7.699999809 | 7.699999809 | 7.699999809 | 7.699999809 |
| **Compressor** | | | | |
| No./Type | 1/Scroll | 1/Scroll | 1/Scroll | 1/Scroll |
| **Outdoor Sound Rating (dB)[5]** | 83 | 83 | 83 | 83 |
| **Outdoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] OD | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 16.56 [1.54] | 16.56 [1.54] | 16.56 [1.54] | 16.56 [1.54] |
| Rows / FPI [FPcm] | 2 / 22 [9] | 2 / 22 [9] | 2 / 22 [9] | 2 / 22 [9] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| **Indoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] |
| Rows / FPI [FPcm] | 4 / 13 [5] | 4 / 13 [5] | 4 / 13 [5] | 4 / 13 [5] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| Drain Connection No./Size in. [mm] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] |
| **Outdoor Fan - Type** | Propeller | Propeller | Propeller | Propeller |
| No. Used/Diameter in. [mm] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] |
| Drive Type/No. Speeds | Direct/1 | Direct/1 | Direct/1 | Direct/1 |
| CFM [L/s] | 4000 [1888] | 4000 [1888] | 4000 [1888] | 4000 [1888] |
| No. Motors/HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP |
| Motor RPM | 1075 | 1075 | 1075 | 1075 |
| **Indoor Fan - Type** | FC Centrifugal | FC Centrifugal | FC Centrifugal | FC Centrifugal |
| No. Used/Diameter in. [mm] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] |
| Drive Type/No. Speeds | Belt/Variable | Belt/Variable | Belt/Variable | Belt/Variable |
| No. Motors | 1 | 1 | 1 | 1 |
| Motor HP | 3/4 | 1 | 3/4 | 1 |
| Motor RPM | 1725 | 1725 | 1725 | 1725 |
| Motor Frame Size | 56 | 56 | 56 | 56 |
| **Filter - Type** | Disposable | Disposable | Disposable | Disposable |
| Furnished | Yes | Yes | Yes | Yes |
| (NO.) Size Recommended in. [mm x mm x mm] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] |
| **Refrigerant Charge Oz. [g]** | 197 [5585] | 197 [5585] | 197 [5585] | 197 [5585] |
| **Weights** | | | | |
| Net Weight lbs. [kg] | 565 [256] | 565 [256] | 565 [256] | 565 [256] |
| Ship Weight lbs. [kg] | 580 [263] | 580 [263] | 580 [263] | 580 [263] |

**NOTES:**

1. Cooling Performance is rated at 95° F ambient, 80° F entering dry bulb, 67° F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 210/240 or 360.
2. EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
3. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJNL-C MODELS
## NOMINAL SIZES 3-6 TONS [10.6-21.1 kW]

| Model RJNL - Series | C072CL | C072CM | C072DL | C072DM |
|---|---|---|---|---|
| **Cooling performance[1]** | | | | **Continued ->** |
| Gross Cooling Capacity Btu [kW] | 73,000 [21.39] | 73,000 [21.39] | 73,000 [21.39] | 73,000 [21.39] |
| EER, SEER[2] | 11/NA | 11/NA | 11/NA | 11/NA |
| Nominal CFM/AHRI Rated CFM [L/s] | 2400/2125 [1133/1003] | 2400/2125 [1133/1003] | 2400/2125 [1133/1003] | 2400/2125 [1133/1003] |
| AHRI Net Cooling Capacity Btu [kW] | 70,000 [20.51] | 70,000 [20.51] | 70,000 [20.51] | 70,000 [20.51] |
| Net Sensible Capacity Btu [kW] | 50,700 [14.85] | 50,700 [14.85] | 50,700 [14.85] | 50,700 [14.85] |
| Integrated Part Load Value[3] | 19,300 [5.65] | 19,300 [5.65] | 19,300 [5.65] | 19,300 [5.65] |
| Net Latent Capacity Btu [kW] | N/A | N/A | N/A | N/A |
| Net System Power kW | 6.37 | 6.37 | 6.37 | 6.37 |
| **Heating Performance (Heat Pumps)** | | | | |
| High Temp. Btuh [kW] Rating | 68,000 [19.92] | 68,000 [19.92] | 68,000 [19.92] | 68,000 [19.92] |
| System Power KW / COP | 5.79/3.44 | 5.79/3.44 | 5.79/3.44 | 5.79/3.44 |
| Low Temp. Btuh [kW] Rating | 41,000 [12.01] | 41,000 [12.01] | 41,000 [12.01] | 41,000 [12.01] |
| System Power KW / COP | 5.22/2.3 | 5.22/2.3 | 5.22/2.3 | 5.22/2.3 |
| **Compressor** | | | | |
| No./Type | 1/Scroll | 1/Scroll | 1/Scroll | 1/Scroll |
| **Outdoor Sound Rating (dB)[5]** | 83 | 83 | 83 | 83 |
| **Outdoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] OD | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 16.56 [1.54] | 16.56 [1.54] | 16.56 [1.54] | 16.56 [1.54] |
| Rows / FPI [FPcm] | 2/22 [9] | 2/22 [9] | 2/22 [9] | 2/22 [9] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| **Indoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 6.5 [0.6] | 6.5 [0.6] | 6.5 [0.6] | 6.5 [0.6] |
| Rows / FPI [FPcm] | 4 / 13 [5] | 4 / 13 [5] | 4 / 13 [5] | 4 / 13 [5] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| Drain Connection No./Size in. [mm] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] |
| **Outdoor Fan - Type** | Propeller | Propeller | Propeller | Propeller |
| No. Used/Diameter in. [mm] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] |
| Drive Type/No. Speeds | Direct/1 | Direct/1 | Direct/1 | Direct/1 |
| CFM [L/s] | 4000 [1888] | 4000 [1888] | 4000 [1888] | 4000 [1888] |
| No. Motors/HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP |
| Motor RPM | 1075 | 1075 | 1075 | 1075 |
| **Indoor Fan - Type** | FC Centrifugal | FC Centrifugal | FC Centrifugal | FC Centrifugal |
| No. Used/Diameter in. [mm] | 1/11x11 [279x279] | 1/11x11 [279x279] | 1/11x11 [279x279] | 1/11x11 [279x279] |
| Drive Type/No. Speeds | Belt/Variable | Belt/Variable | Belt/Variable | Belt/Variable |
| No. Motors | 1 | 1 | 1 | 1 |
| Motor HP | 1 1/2 | 1 1/2 | 1 1/2 | 1 1/2 |
| Motor RPM | 1725 | 1725 | 1725 | 1725 |
| Motor Frame Size | 56 | 56 | 56 | 56 |
| **Filter - Type** | Disposable | Disposable | Disposable | Disposable |
| Furnished | Yes | Yes | Yes | Yes |
| (NO.) Size Recommended in. [mm x mm x mm] | (2)1x16x16 [25x406x406] | (2)1x16x16 [25x406x406] | (2)1x16x16 [25x406x406] | (2)1x16x16 [25x406x406] |
| **Refrigerant Charge Oz. [g]** | 221 [6265] | 221 [6265] | 221 [6265] | 221 [6265] |
| **Weights** | | | | |
| Net Weight lbs. [kg] | 620 [281] | 620 [281] | 620 [281] | 620 [281] |
| Ship Weight lbs. [kg] | 635 [288] | 635 [288] | 635 [288] | 635 [288] |

**NOTES:**

1. Cooling Performance is rated at 95° F ambient, 80° F entering dry bulb, 67° F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 210/240 or 360.
2. EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
3. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJPL-C MODELS
## NOMINAL SIZES 3-6 TONS [10.6-21.1 kW]

| Model RJPL - Series | C036CL | C036CM | C036DL | C036DM |
|---|---|---|---|---|
| **Cooling performance[1]** | | | | **Continued ->** |
| Gross Cooling Capacity Btu [kW] | 38,500 [11.28] | 38,500 [11.28] | 38,500 [11.28] | 38,500 [11.28] |
| EER, SEER[2] | 12/14 | 12/14 | 12/14 | 12/14 |
| Nominal CFM/AHRI Rated CFM [L/s] | 1200/1200 [566/566] | 1200/1200 [566/566] | 1200/1200 [566/566] | 1200/1200 [566/566] |
| AHRI Net Cooling Capacity Btu [kW] | 36,800 [10.78] | 36,800 [10.78] | 36,800 [10.78] | 36,800 [10.78] |
| Net Sensible Capacity Btu [kW] | 27,200 [7.97] | 27,200 [7.97] | 27,200 [7.97] | 27,200 [7.97] |
| Net Latent Capacity Btu [kW] | 9,600 [2.81] | 9,600 [2.81] | 9,600 [2.81] | 9,600 [2.81] |
| Net System Power kW | 2.99 | 2.99 | 2.99 | 2.99 |
| **Heating Performance (Heat Pumps)** | | | | |
| High Temp. Btuh [kW] Rating | 33,600 [9.84] | 33,600 [9.84] | 33,600 [9.84] | 33,600 [9.84] |
| System Power KW / COP | 2.79/3.48 | 2.79/3.48 | 2.79/3.48 | 2.79/3.48 |
| Low Temp. Btuh [kW] Rating | 19,400 [5.68] | 19,400 [5.68] | 19,400 [5.68] | 19,400 [5.68] |
| System Power KW / COP | 2.56/2.22 | 2.56/2.22 | 2.56/2.22 | 2.56/2.22 |
| HSPF (Btu/Watts-hr) | 8 | 8 | 8 | 8 |
| **Compressor** | | | | |
| No./Type | 1/Scroll | 1/Scroll | 1/Scroll | 1/Scroll |
| **Outdoor Sound Rating (dB)[5]** | 83 | 83 | 83 | 83 |
| **Outdoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] OD | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 16.89 [1.57] | 16.89 [1.57] | 16.89 [1.57] | 16.89 [1.57] |
| Rows / FPI [FPcm] | 1 / 22 [9] | 1 / 22 [9] | 1 / 22 [9] | 1 / 22 [9] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| **Indoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] |
| Rows / FPI [FPcm] | 3 / 13 [5] | 3 / 13 [5] | 3 / 13 [5] | 3 / 13 [5] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| Drain Connection No./Size in. [mm] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] |
| **Outdoor Fan - Type** | Propeller | Propeller | Propeller | Propeller |
| No. Used/Diameter in. [mm] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] |
| Drive Type/No. Speeds | Direct/1 | Direct/1 | Direct/1 | Direct/1 |
| CFM [L/s] | 4000 [1888] | 4000 [1888] | 4000 [1888] | 4000 [1888] |
| No. Motors/HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP |
| Motor RPM | 1075 | 1075 | 1075 | 1075 |
| **Indoor Fan - Type** | FC Centrifugal | FC Centrifugal | FC Centrifugal | FC Centrifugal |
| No. Used/Diameter in. [mm] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] |
| Drive Type/No. Speeds | Belt/Variable | Belt/Variable | Belt/Variable | Belt/Variable |
| No. Motors | 1 | 1 | 1 | 1 |
| Motor HP | 1/2 | 3/4 | 1/2 | 3/4 |
| Motor RPM | 1725 | 1725 | 1725 | 1725 |
| Motor Frame Size | 56 | 56 | 56 | 56 |
| **Filter - Type** | Disposable | Disposable | Disposable | Disposable |
| Furnished | Yes | Yes | Yes | Yes |
| (NO.) Size Recommended in. [mm x mm x mm] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] |
| **Refrigerant Charge Oz. [g]** | 116 [3289] | 116 [3289] | 116 [3289] | 116 [3289] |
| **Weights** | | | | |
| Net Weight lbs. [kg] | 517 [235] | 517 [235] | 517 [235] | 517 [235] |
| Ship Weight lbs. [kg] | 532 [241] | 532 [241] | 532 [241] | 532 [241] |

**NOTES:**

1. Cooling Performance is rated at 95° F ambient, 80° F entering dry bulb, 67° F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 210/240 or 360.
2. EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
3. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJPL-C MODELS
## NOMINAL SIZES 3-6 TONS [10.6-21.1 kW]

| Model RJPL - Series | C042CL | C042CM | C042DL | C042DM |
|---|---|---|---|---|
| **Cooling performance[1]** | | | | **Continued ->** |
| Gross Cooling Capacity Btu [kW] | 44,000 [12.89] | 44,000 [12.89] | 44,000 [12.89] | 44,000 [12.89] |
| EER, SEER[2] | 11.6/14 | 11.6/14 | 11.6/14 | 11.6/14 |
| Nominal CFM/AHRI Rated CFM [L/s] | 1400/1400 [661/661] | 1400/1400 [661/661] | 1400/1400 [661/661] | 1400/1400 [661/661] |
| AHRI Net Cooling Capacity Btu [kW] | 42,000 [12.31] | 42,000 [12.31] | 42,000 [12.31] | 42,000 [12.31] |
| Net Sensible Capacity Btu [kW] | 31,750 [9.3] | 31,750 [9.3] | 31,750 [9.3] | 31,750 [9.3] |
| Net Latent Capacity Btu [kW] | 10,250 [3] | 10,250 [3] | 10,250 [3] | 10,250 [3] |
| Net System Power kW | 3.64 | 3.64 | 3.64 | 3.64 |
| **Heating Performance (Heat Pumps)** | | | | |
| High Temp. Btuh [kW] Rating | 40,000 [11.72] | 40,000 [11.72] | 40,000 [11.72] | 40,000 [11.72] |
| System Power KW / COP | 3.23/3.6 | 3.23/3.6 | 3.23/3.6 | 3.23/3.6 |
| Low Temp. Btuh [kW] Rating | 24,200 [7.09] | 24,200 [7.09] | 24,200 [7.09] | 24,200 [7.09] |
| System Power KW / COP | 2.94/2.4 | 2.94/2.4 | 2.94/2.4 | 2.94/2.4 |
| HSPF (Btu/Watts-hr) | 8 | 8 | 8 | 8 |
| **Compressor** | | | | |
| No./Type | 1/Scroll | 1/Scroll | 1/Scroll | 1/Scroll |
| **Outdoor Sound Rating (dB)[5]** | 83 | 83 | 83 | 83 |
| **Outdoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] OD | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 16.89 [1.57] | 16.89 [1.57] | 16.89 [1.57] | 16.89 [1.57] |
| Rows / FPI [FPcm] | 1 / 22 [9] | 1 / 22 [9] | 1 / 22 [9] | 1 / 22 [9] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| **Indoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] |
| Rows / FPI [FPcm] | 3 / 13 [5] | 3 / 13 [5] | 3 / 13 [5] | 3 / 13 [5] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| Drain Connection No./Size in. [mm] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] |
| **Outdoor Fan - Type** | Propeller | Propeller | Propeller | Propeller |
| No. Used/Diameter in. [mm] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] |
| Drive Type/No. Speeds | Direct/1 | Direct/1 | Direct/1 | Direct/1 |
| CFM [L/s] | 4000 [1888] | 4000 [1888] | 4000 [1888] | 4000 [1888] |
| No. Motors/HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP |
| Motor RPM | 1075 | 1075 | 1075 | 1075 |
| **Indoor Fan - Type** | FC Centrifugal | FC Centrifugal | FC Centrifugal | FC Centrifugal |
| No. Used/Diameter in. [mm] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] |
| Drive Type/No. Speeds | Belt/Variable | Belt/Variable | Belt/Variable | Belt/Variable |
| No. Motors | 1 | 1 | 1 | 1 |
| Motor HP | 1/2 | 3/4 | 1/2 | 3/4 |
| Motor RPM | 1725 | 1725 | 1725 | 1725 |
| Motor Frame Size | 56 | 56 | 56 | 56 |
| **Filter - Type** | Disposable | Disposable | Disposable | Disposable |
| Furnished | Yes | Yes | Yes | Yes |
| (NO.) Size Recommended in. [mm x mm x mm] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] |
| **Refrigerant Charge Oz. [g]** | 120 [3402] | 120 [3402] | 120 [3402] | 120 [3402] |
| **Weights** | | | | |
| Net Weight lbs. [kg] | 521 [236] | 521 [236] | 521 [236] | 521 [236] |
| Ship Weight lbs. [kg] | 536 [243] | 536 [243] | 536 [243] | 536 [243] |

**NOTES:**

1. Cooling Performance is rated at 95° F ambient, 80° F entering dry bulb, 67° F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 210/240 or 360.
2. EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
3. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJPL-C MODELS
## NOMINAL SIZES 3-6 TONS [10.6-21.1 kW]

| Model RJPL - Series | C048CL | C048CM | C048DL | C048DM |
|---|---|---|---|---|
| **Cooling performance[1]** | | | | **Continued ->** |
| Gross Cooling Capacity Btu [kW] | 50,000 [14.65] | 50,000 [14.65] | 50,000 [14.65] | 50,000 [14.65] |
| EER, SEER[2] | 11.6/14 | 11.6/14 | 11.6/14 | 11.6/14 |
| Nominal CFM/AHRI Rated CFM [L/s] | 1600/1600 [755/755] | 1600/1600 [755/755] | 1600/1600 [755/755] | 1600/1600 [755/755] |
| AHRI Net Cooling Capacity Btu [kW] | 47,500 [13.92] | 47,500 [13.92] | 47,500 [13.92] | 47,500 [13.92] |
| Net Sensible Capacity Btu [kW] | 36,200 [10.61] | 36,200 [10.61] | 36,200 [10.61] | 36,200 [10.61] |
| Net Latent Capacity Btu [kW] | 11,300 [3.31] | 11,300 [3.31] | 11,300 [3.31] | 11,300 [3.31] |
| Net System Power kW | 4.09 | 4.09 | 4.09 | 4.09 |
| **Heating Performance (Heat Pumps)** | | | | |
| High Temp. Btuh [kW] Rating | 49,000 [14.36] | 49,000 [14.36] | 49,000 [14.36] | 49,000 [14.36] |
| System Power KW / COP | 3.76/3.8 | 3.76/3.8 | 3.76/3.8 | 3.76/3.8 |
| Low Temp. Btuh [kW] Rating | 29,800 [8.73] | 29,800 [8.73] | 29,800 [8.73] | 29,800 [8.73] |
| System Power KW / COP | 3.48/2.4 | 3.48/2.4 | 3.48/2.4 | 3.48/2.4 |
| HSPF (Btu/Watts-hr) | 8 | 8 | 8 | 8 |
| **Compressor** | | | | |
| No./Type | 1/Scroll | 1/Scroll | 1/Scroll | 1/Scroll |
| **Outdoor Sound Rating (dB)[5]** | 83 | 83 | 83 | 83 |
| **Outdoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] OD | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 16.56 [1.54] | 16.56 [1.54] | 16.56 [1.54] | 16.56 [1.54] |
| Rows / FPI [FPcm] | 2 / 22 [9] | 2 / 22 [9] | 2 / 22 [9] | 2 / 22 [9] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| **Indoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] |
| Rows / FPI [FPcm] | 4 / 13 [5] | 4 / 13 [5] | 4 / 13 [5] | 4 / 13 [5] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| Drain Connection No./Size in. [mm] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] |
| **Outdoor Fan - Type** | Propeller | Propeller | Propeller | Propeller |
| No. Used/Diameter in. [mm] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] |
| Drive Type/No. Speeds | Direct/1 | Direct/1 | Direct/1 | Direct/1 |
| CFM [L/s] | 4000 [1888] | 4000 [1888] | 4000 [1888] | 4000 [1888] |
| No. Motors/HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP |
| Motor RPM | 1075 | 1075 | 1075 | 1075 |
| **Indoor Fan - Type** | FC Centrifugal | FC Centrifugal | FC Centrifugal | FC Centrifugal |
| No. Used/Diameter in. [mm] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] |
| Drive Type/No. Speeds | Belt/Variable | Belt/Variable | Belt/Variable | Belt/Variable |
| No. Motors | 1 | 1 | 1 | 1 |
| Motor HP | 1/2 | 3/4 | 1/2 | 3/4 |
| Motor RPM | 1725 | 1725 | 1725 | 1725 |
| Motor Frame Size | 56 | 56 | 56 | 56 |
| **Filter - Type** | Disposable | Disposable | Disposable | Disposable |
| Furnished | Yes | Yes | Yes | Yes |
| (NO.) Size Recommended in. [mm x mm x mm] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] |
| **Refrigerant Charge Oz. [g]** | 187 [5301] | 187 [5301] | 187 [5301] | 187 [5301] |
| **Weights** | | | | |
| Net Weight lbs. [kg] | 535 [243] | 535 [243] | 535 [243] | 535 [243] |
| Ship Weight lbs. [kg] | 550 [249] | 550 [249] | 550 [249] | 550 [249] |

**NOTES:**

1. Cooling Performance is rated at 95° F ambient, 80° F entering dry bulb, 67° F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 210/240 or 360.
2. EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
3. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJPL-C MODELS
## NOMINAL SIZES 3-6 TONS [10.6-21.1 kW]

| Model RJPL - Series | C060CL | C060CM | C060DL | C060DM |
|---|---|---|---|---|
| **Cooling performance[1]** | | | | |
| Gross Cooling Capacity Btu [kW] | 61,000 [17.87] | 61,000 [17.87] | 61,000 [17.87] | 61,000 [17.87] |
| EER, SEER[2] | 11.7/14 | 11.7/14 | 11.7/14 | 11.7/14 |
| Nominal CFM/AHRI Rated CFM [L/s] | 2000/1850 [944/873] | 2000/1850 [944/873] | 2000/1850 [944/873] | 2000/1850 [944/873] |
| AHRI Net Cooling Capacity Btu [kW] | 59,500 [17.43] | 59,500 [17.43] | 59,500 [17.43] | 59,500 [17.43] |
| Net Sensible Capacity Btu [kW] | 43,600 [12.77] | 43,600 [12.77] | 43,600 [12.77] | 43,600 [12.77] |
| Net Latent Capacity Btu [kW] | 15,900 [4.66] | 15,900 [4.66] | 15,900 [4.66] | 15,900 [4.66] |
| Net System Power kW | 5.05 | 5.05 | 5.05 | 5.05 |
| **Heating Performance (Heat Pumps)** | | | | |
| High Temp. Btuh [kW] Rating | 59,500 [17.43] | 59,500 [17.43] | 59,500 [17.43] | 59,500 [17.43] |
| System Power KW / COP | 4.8/3.6 | 4.8/3.6 | 4.8/3.6 | 4.8/3.6 |
| Low Temp. Btuh [kW] Rating | 36,400 [10.67] | 36,400 [10.67] | 36,400 [10.67] | 36,400 [10.67] |
| System Power KW / COP | 4.47/2.2 | 4.47/2.2 | 4.47/2.2 | 4.47/2.2 |
| HSPF (Btu/Watts-hr) | 8 | 8 | 8 | 8 |
| **Compressor** | | | | |
| No./Type | 1/Scroll | 1/Scroll | 1/Scroll | 1/Scroll |
| **Outdoor Sound Rating (dB)[5]** | 83 | 83 | 83 | 83 |
| **Outdoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] OD | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 16.56 [1.54] | 16.56 [1.54] | 16.56 [1.54] | 16.56 [1.54] |
| Rows / FPI [FPcm] | 2 / 22 [9] | 2 / 22 [9] | 2 / 22 [9] | 2 / 22 [9] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| **Indoor Coil - Fin Type** | Louvered | Louvered | Louvered | Louvered |
| Tube Type | Rifled | Rifled | Rifled | Rifled |
| Tube Size in. [mm] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] | 0.375 [9.5] |
| Face Area sq. ft. [sq. m] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] | 5.16 [0.48] |
| Rows / FPI [FPcm] | 4 / 13 [5] | 4 / 13 [5] | 4 / 13 [5] | 4 / 13 [5] |
| Refrigerant Control | TX Valves | TX Valves | TX Valves | TX Valves |
| Drain Connection No./Size in. [mm] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] | 1/1 [25.4] |
| **Outdoor Fan - Type** | Propeller | Propeller | Propeller | Propeller |
| No. Used/Diameter in. [mm] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] | 1/24 [609.6] |
| Drive Type/No. Speeds | Direct/1 | Direct/1 | Direct/1 | Direct/1 |
| CFM [L/s] | 4000 [1888] | 4000 [1888] | 4000 [1888] | 4000 [1888] |
| No. Motors/HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP | 1 at 1/3 HP |
| Motor RPM | 1075 | 1075 | 1075 | 1075 |
| **Indoor Fan - Type** | FC Centrifugal | FC Centrifugal | FC Centrifugal | FC Centrifugal |
| No. Used/Diameter in. [mm] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] | 1/10x10 [254x254] |
| Drive Type/No. Speeds | Belt/Variable | Belt/Variable | Belt/Variable | Belt/Variable |
| No. Motors | 1 | 1 | 1 | 1 |
| Motor HP | 3/4 | 1 | 3/4 | 1 |
| Motor RPM | 1725 | 1725 | 1725 | 1725 |
| Motor Frame Size | 56 | 56 | 56 | 56 |
| **Filter - Type** | Disposable | Disposable | Disposable | Disposable |
| Furnished | Yes | Yes | Yes | Yes |
| (NO.) Size Recommended in. [mm x mm x mm] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] | (2)1x25x16 [25x635x406] |
| **Refrigerant Charge Oz. [g]** | 197 [5585] | 197 [5585] | 197 [5585] | 197 [5585] |
| **Weights** | | | | |
| Net Weight lbs. [kg] | 565 [256] | 565 [256] | 565 [256] | 565 [256] |
| Ship Weight lbs. [kg] | 580 [263] | 580 [263] | 580 [263] | 580 [263] |

**NOTES:**

1. Cooling Performance is rated at 95° F ambient, 80° F entering dry bulb, 67° F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to ±20% of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 210/240 or 360.
2. EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
3. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# XXVI. MISCELLANEOUS

| ELECTRICAL DATA – RJNL-C SERIES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | C036CL | C036CM | C036DL | C036DM | C042CL | C042CM | C042DL | C042DM |
| Unit Information | Unit Operating Voltage Range | 187-253 | 187-253 | 414-506 | 414-506 | 187-253 | 187-253 | 414-506 | 414-506 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Minimum Circuit Ampacity | 18/18 | 19/19 | 10 | 10 | 22/22 | 22/22 | 10 | 11 |
| | Minimum Overcurrent Protection Device Size | 20/20 | 25/25 | 15 | 15 | 25/25 | 30/30 | 15 | 15 |
| | Maximum Overcurrent Protection Device Size | 25/25 | 25/25 | 15 | 15 | 30/30 | 35/35 | 15 | 15 |
| Compressor Motor | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | RPM | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 |
| | HP, Compressor 1 | 2 1/2 | 2 1/2 | 2 1/2 | 2 1/2 | 3 | 3 | 3 | 3 |
| | Amps (RLA), Comp. 1 | 10.4/10.4 | 10.4/10.4 | 5.8 | 5.8 | 13.5/13.5 | 13.5/13.5 | 6 | 6 |
| | Amps (LRA), Comp. 1 | 88/88 | 88/88 | 38 | 38 | 88/88 | 88/88 | 44 | 44 |
| Condenser Motor | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | HP | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 |
| | Amps (FLA, each) | 1.5/1.5 | 1.5/1.5 | 1 | 1 | 1.5/1.5 | 1.5/1.5 | 1 | 1 |
| | Amps (LRA, each) | 3/3 | 3/3 | 1.9 | 1.9 | 3/3 | 3/3 | 1.9 | 1.9 |
| Evaporator Fan | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | HP | 1/2 | 3/4 | 1/2 | 3/4 | 1/2 | 3/4 | 1/2 | 3/4 |
| | Amps (FLA, each) | 2.2/2.2 | 3.2/3.2 | 1.1 | 1.6 | 2.2/2.2 | 3.2/3.2 | 1.1 | 1.6 |
| | Amps (LRA, each) | 10.6/10.6 | 16.8/16.8 | 5.3 | 8.4 | 10.6/10.6 | 16.8/16.8 | 5.3 | 8.4 |

| ELECTRICAL DATA – RJNL-C SERIES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | C048CL | C048CM | C048DL | C048DM | C060CL | C060CM | C060DL | C060DM |
| Unit Information | Unit Operating Voltage Range | 187-253 | 187-253 | 414-506 | 414-506 | 187-253 | 187-253 | 414-506 | 414-506 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Minimum Circuit Ampacity | 22/22 | 23/23 | 11 | 11 | 26/26 | 26/26 | 13 | 14 |
| | Minimum Overcurrent Protection Device Size | 25/25 | 30/30 | 15 | 15 | 30/30 | 30/30 | 15 | 20 |
| | Maximum Overcurrent Protection Device Size | 35/35 | 35/35 | 15 | 15 | 40/40 | 40/40 | 20 | 20 |
| Compressor Motor | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | RPM | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 |
| | HP, Compressor 1 | 3 1/2 | 3 1/2 | 3 1/2 | 3 1/2 | 5 | 5 | 5 | 5 |
| | Amps (RLA), Comp. 1 | 13.7/13.7 | 13.7/13.7 | 6.2 | 6.2 | 16/16 | 16/16 | 7.8 | 7.8 |
| | Amps (LRA), Comp. 1 | 83.1/83.1 | 83.1/83.1 | 41 | 41 | 110/110 | 110/110 | 52 | 52 |
| Condenser Motor | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | HP | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 |
| | Amps (FLA, each) | 1.5/1.5 | 1.5/1.5 | 1 | 1 | 1.5/1.5 | 1.5/1.5 | 1 | 1 |
| | Amps (LRA, each) | 3/3 | 3/3 | 1.9 | 1.9 | 4.7/4.7 | 4.7/4.7 | 2.4 | 2.4 |
| Evaporator Fan | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | HP | 1/2 | 3/4 | 1/2 | 3/4 | 3/4 | 1 | 3/4 | 1 |
| | Amps (FLA, each) | 2.2/2.2 | 3.2/3.2 | 1.1 | 1.6 | 3.2/3.2 | 3.8/3.8 | 1.6 | 1.9 |
| | Amps (LRA, each) | 10.6/10.6 | 16.8/16.8 | 5.3 | 8.4 | 16.8/16.8 | 24/24 | 8.4 | 12 |

| ELECTRICAL DATA – RJNL-C SERIES | | | | | |
|---|---|---|---|---|---|
| | | C072CL | C072CM | C072DL | C072DM |
| Unit Information | Unit Operating Voltage Range | 187-253 | 187-253 | 414-506 | 414-506 |
| | Volts | 208/230 | 208/230 | 460 | 460 |
| | Minimum Circuit Ampacity | 34/34 | 34/34 | 17 | 17 |
| | Minimum Overcurrent Protection Device Size | 40/40 | 40/40 | 20 | 20 |
| | Maximum Overcurrent Protection Device Size | 50/50 | 50/50 | 25 | 25 |
| Compressor Motor | No. | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 |
| | Phase | 3 | 3 | 3 | 3 |
| | RPM | 3450 | 3450 | 3450 | 3450 |
| | HP, Compressor 1 | 7 1/2 | 7 1/2 | 7 1/2 | 7 1/2 |
| | Amps (RLA), Comp. 1 | 19/19 | 19/19 | 9.7 | 9.7 |
| | Amps (LRA), Comp. 1 | 123/123 | 123/123 | 62 | 62 |
| Condenser Motor | No. | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 |
| | Phase | 1 | 1 | 1 | 1 |
| | HP | 1/3 | 1/3 | 1/3 | 1/3 |
| | Amps (FLA, each) | 1.8/1.8 | 1.8/1.8 | 1 | 1 |
| | Amps (LRA, each) | 3/3 | 3/3 | 2.2 | 2.2 |
| Evaporator Fan | No. | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 |
| | Phase | 3 | 3 | 3 | 3 |
| | HP | 1 1/2 | 1 1/2 | 1 1/2 | 1 1/2 |
| | Amps (FLA, each) | 5.8/5.8 | 5.8/5.8 | 2.8 | 2.8 |
| | Amps (LRA, each) | 34/34 | 34/34 | 17 | 17 |

| ELECTRICAL DATA – RJPL-C SERIES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | C036CL | C036CM | C036DL | C036DM | C042CL | C042CM | C042DL | C042DM |
| Unit Information | Unit Operating Voltage Range | 187-253 | 187-253 | 414-506 | 414-506 | 187-253 | 187-253 | 414-506 | 414-506 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Minimum Circuit Ampacity | 18/18 | 18/18 | 10 | 10 | 22/22 | 22/22 | 10 | 11 |
| | Minimum Overcurrent Protection Device Size | 20/20 | 25/25 | 15 | 15 | 25/25 | 30/30 | 15 | 15 |
| | Maximum Overcurrent Protection Device Size | 25/25 | 25/25 | 15 | 15 | 30/30 | 35/35 | 15 | 15 |
| Compressor Motor | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | RPM | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 |
| | HP, Compressor 1 | 2 1/2 | 2 1/2 | 2 1/2 | 2 1/2 | 3 | 3 | 3 | 3 |
| | Amps (RLA), Comp. 1 | 10.4/10.4 | 10.4/10.4 | 5.8 | 5.8 | 13.5/13.5 | 13.5/13.5 | 6 | 6 |
| | Amps (LRA), Comp. 1 | 88/88 | 88/88 | 38 | 38 | 88/88 | 88/88 | 44 | 44 |
| Condenser Motor | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | HP | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 |
| | Amps (FLA, each) | 1.5/1.5 | 1.5/1.5 | 1 | 1 | 1.5/1.5 | 1.5/1.5 | 1 | 1 |
| | Amps (LRA, each) | 3/3 | 3/3 | 1.9 | 1.9 | 3/3 | 3/3 | 1.9 | 1.9 |
| Evaporator Fan | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | HP | 1/2 | 3/4 | 1/2 | 3/4 | 1/2 | 3/4 | 1/2 | 3/4 |
| | Amps (FLA, each) | 2.8/2.8 | 3.4/3.4 | 1.4 | 1.6 | 2.8/2.8 | 3.4/3.4 | 1.4 | 1.6 |
| | Amps (LRA, each) | 10.6/10.6 | 16.8/16.8 | 5.3 | 8.4 | 10.6/10.6 | 16.8/16.8 | 5.3 | 8.4 |

| ELECTRICAL DATA – RJPL-C SERIES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | C048CL | C048CM | C048DL | C048DM | C060CL | C060CM | C060DL | C060DM |
| Unit Information | Unit Operating Voltage Range | 187-253 | 187-253 | 414-506 | 414-506 | 187-253 | 187-253 | 414-506 | 414-506 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Minimum Circuit Ampacity | 22/22 | 23/23 | 11 | 11 | 26/26 | 26/26 | 13 | 13 |
| | Minimum Overcurrent Protection Device Size | 25/25 | 30/30 | 15 | 15 | 30/30 | 30/30 | 15 | 15 |
| | Maximum Overcurrent Protection Device Size | 35/35 | 35/35 | 15 | 15 | 40/40 | 40/40 | 20 | 20 |
| Compressor Motor | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | RPM | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 |
| | HP, Compressor 1 | 3 1/2 | 3 1/2 | 3 1/2 | 3 1/2 | 5 | 5 | 5 | 5 |
| | Amps (RLA), Comp. 1 | 13.7/13.7 | 13.7/13.7 | 6.2 | 6.2 | 16/16 | 16/16 | 7.8 | 7.8 |
| | Amps (LRA), Comp. 1 | 83.1/83.1 | 83.1/83.1 | 41 | 41 | 110/110 | 110/110 | 52 | 52 |
| Condenser Motor | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | HP | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 |
| | Amps (FLA, each) | 1.5/1.5 | 1.5/1.5 | 1 | 1 | 2.2/2.2 | 2.2/2.2 | 1 | 1 |
| | Amps (LRA, each) | 3/3 | 3/3 | 1.9 | 1.9 | 4.7/4.7 | 4.7/4.7 | 2.4 | 2.4 |
| Evaporator Fan | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | HP | 1/2 | 3/4 | 1/2 | 3/4 | 3/4 | 1 | 3/4 | 1 |
| | Amps (FLA, each) | 2.8/2.8 | 3.4/3.4 | 1.4 | 1.6 | 3.4/3.4 | 3.8/3.8 | 1.6 | 1.9 |
| | Amps (LRA, each) | 10.6/10.6 | 16.8/16.8 | 5.3 | 8.4 | 16.8/16.8 | 24/24 | 8.4 | 12 |

| ELECTRICAL DATA – RJPL-C SERIES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | C048CL | C048CM | C048DL | C048DM | C060CL | C060CM | C060DL | C060DM |
| Unit Information | Unit Operating Voltage Range | 187-253 | 187-253 | 414-506 | 414-506 | 187-253 | 187-253 | 414-506 | 414-506 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Minimum Circuit Ampacity | 22/22 | 23/23 | 11 | 11 | 26/26 | 26/26 | 13 | 13 |
| | Minimum Overcurrent Protection Device Size | 25/25 | 30/30 | 15 | 15 | 30/30 | 30/30 | 15 | 15 |
| | Maximum Overcurrent Protection Device Size | 35/35 | 35/35 | 15 | 15 | 40/40 | 40/40 | 20 | 20 |
| Compressor Motor | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | RPM | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 | 3450 |
| | HP, Compressor 1 | 3 1/2 | 3 1/2 | 3 1/2 | 3 1/2 | 5 | 5 | 5 | 5 |
| | Amps (RLA), Comp. 1 | 13.7/13.7 | 13.7/13.7 | 6.2 | 6.2 | 16/16 | 16/16 | 7.8 | 7.8 |
| | Amps (LRA), Comp. 1 | 83.1/83.1 | 83.1/83.1 | 41 | 41 | 110/110 | 110/110 | 52 | 52 |
| Condenser Motor | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | HP | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 | 1/3 |
| | Amps (FLA, each) | 1.5/1.5 | 1.5/1.5 | 1 | 1 | 2.2/2.2 | 2.2/2.2 | 1 | 1 |
| | Amps (LRA, each) | 3/3 | 3/3 | 1.9 | 1.9 | 4.7/4.7 | 4.7/4.7 | 2.4 | 2.4 |
| Evaporator Fan | No. | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | Volts | 208/230 | 208/230 | 460 | 460 | 208/230 | 208/230 | 460 | 460 |
| | Phase | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | HP | 1/2 | 3/4 | 1/2 | 3/4 | 3/4 | 1 | 3/4 | 1 |
| | Amps (FLA, each) | 2.8/2.8 | 3.4/3.4 | 1.4 | 1.6 | 3.4/3.4 | 3.8/3.8 | 1.6 | 1.9 |
| | Amps (LRA, each) | 10.6/10.6 | 16.8/16.8 | 5.3 | 8.4 | 16.8/16.8 | 24/24 | 8.4 | 12 |

## 3-3.5 TON

| AIR FLOW CFM [L/s] | CAPACITY 3 & 3.5 TON HEAT PUMP (13 SEER) VOLTAGE 208-230, 460 - 3 PHASE — EXTERNAL STATIC PRESSURE - INCHES OF WATER | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0.1 [.02] | | 0.2 [.05] | | 0.3 [.07] | | 0.4 [.10] | | 0.5 [.12] | | 0.6 [.15] | | 0.7 [.17] | | 0.8 [.20] | | 0.9 [.22] | | 1.0 [.25] | | 1.1 [.27] | | 1.2 [.30] | | 1.3 [.32] | | 1.4 [.35] | | 1.5 [.37] | |
| | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS |
| 900 [425] | — | — | — | — | 665 | 290 | 730 | 300 | 780 | 315 | 830 | 330 | 875 | 360 | 920 | 375 | 960 | 390 | 990 | 410 | 1040 | 445 | 1080 | 470 | 1140 | 510 | 1190 | 540 | 1235 | 590 |
| 1000 [472] | — | — | 625 | 275 | 680 | 295 | 750 | 310 | 805 | 325 | 850 | 345 | 895 | 375 | 935 | 390 | 970 | 410 | 1015 | 435 | 1065 | 465 | 1100 | 500 | 1160 | 530 | 1210 | 560 | 1255 | 610 |
| 1100 [519] | — | — | 640 | 300 | 710 | 315 | 780 | 325 | 830 | 340 | 875 | 365 | 915 | 390 | 955 | 405 | 990 | 430 | 1040 | 450 | 1080 | 485 | 1115 | 540 | 1180 | 540 | 1230 | 600 | 1270 | 630 |
| 1200 [566] | — | — | 670 | 315 | 735 | 330 | 800 | 345 | 850 | 365 | 890 | 385 | 935 | 410 | 975 | 430 | 1010 | 450 | 1060 | 475 | 1100 | 520 | 1145 | 560 | 1200 | 600 | 1250 | 630 | 1285 | 660 |
| 1300 [614] | 625 | 315 | 700 | 330 | 770 | 350 | 830 | 370 | 875 | 400 | 915 | 415 | 955 | 440 | 990 | 450 | 1040 | 495 | 1085 | 530 | 1125 | 565 | 1165 | 590 | 1220 | 645 | 1260 | 675 | 1305 | 710 |
| 1400 [661] | 655 | 340 | 730 | 365 | 795 | 385 | 850 | 400 | 890 | 430 | 935 | 445 | 975 | 470 | 1010 | 500 | 1070 | 540 | 1110 | 575 | 1150 | 615 | 1195 | 645 | 1230 | 685 | 1280 | 725 | 1325 | 760 |
| 1500 [708] | 685 | 380 | 755 | 390 | 825 | 415 | 870 | 435 | 915 | 450 | 955 | 480 | 990 | 505 | 1040 | 545 | 1090 | 590 | 1135 | 630 | 1180 | 660 | 1220 | 720 | 1255 | 740 | 1295 | 785 | 1350 | 820 |
| 1600 [755] | 730 | 420 | 790 | 435 | 850 | 455 | 890 | 490 | 935 | 505 | 970 | 525 | 1005 | 550 | 1075 | 605 | 1110 | 640 | 1160 | 680 | 1200 | 730 | 1245 | 780 | 1280 | 800 | 1325 | 840 | 1365 | 885 |
| 1700 [802] | 755 | 465 | 825 | 475 | 875 | 505 | 915 | 535 | 955 | 550 | 985 | 570 | 1040 | 630 | 1100 | 685 | 1135 | 710 | 1185 | 750 | 1225 | 800 | 1265 | 830 | 1295 | 875 | 1350 | 910 | — | — |
| 1800 [850] | 790 | 500 | 850 | 530 | 890 | 550 | 935 | 570 | 975 | 600 | 1020 | 650 | 1080 | 690 | 1125 | 940 | 1165 | 770 | 1210 | 830 | 1245 | 870 | 1290 | 910 | 1310 | 930 | — | — | — | — |

**NOTE:** Bold lines separate L, M and N drives respectively.

| DRIVE PACKAGE | L | | | | | | | M | | | | | | | N (FIELD-SUPPLIED) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MOTOR H.P. | 1/2 (3/4 - 575V) | | | | | | | 3/4 | | | | | | | 3/4 |
| BLOWER SHEAVE | 6.9 PITCH DIAMETER | | | | | | | 6.4 PITCH DIAMETER | | | | | | | 6.4 PITCH DIAMETER |
| MOTOR SHEAVE | ADJUSTABLE 2.4 - 3.4 PITCH DIAMETER | | | | | | | ADJUSTABLE 3.4 - 4.4 PITCH DIAMETER | | | | | | | ADJUSTABLE 4.0 - 5.0 PITCH DIAMETER |
| TURNS OPEN | 0 | 1 | **2** | 3 | 4 | 5 | 6 | 0 | 1 | 2 | 3 | **4** | 5 | 6 | |
| RPM | 935 | 875 | **830** | 780 | 730 | 680 | 625 | 1295 | 1230 | 1185 | 1135 | **1085** | 1000 | 955 | RPM RANGE 1090 - 1365 |

Factory sheave settngs are shown in bold print.

## 4 TON

| AIR FLOW CFM [L/s] | CAPACITY 4 TON HEAT PUMP (13 SEER) VOLTAGE 208-230, 460 - 3 PHASE — EXTERNAL STATIC PRESSURE - INCHES OF WATER | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0.1 [.02] | | 0.2 [.05] | | 0.3 [.07] | | 0.4 [.10] | | 0.5 [.12] | | 0.6 [.15] | | 0.7 [.17] | | 0.8 [.20] | | 0.9 [.22] | | 1.0 [.25] | | 1.1 [.27] | | 1.2 [.30] | | 1.3 [.32] | | 1.4 [.35] | | 1.5 [.37] | |
| | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS |
| 1200 [566] | — | — | — | — | 745 | 340 | 810 | 375 | 865 | 390 | 900 | 400 | 945 | 420 | 1000 | 440 | 1040 | 460 | 1075 | 490 | 1115 | 540 | 1170 | 580 | 1215 | 620 | 1260 | 650 | 1300 | 685 |
| 1300 [614] | — | — | 695 | 330 | 770 | 365 | 835 | 395 | 880 | 415 | 920 | 435 | 975 | 455 | 1010 | 470 | 1060 | 490 | 1100 | 530 | 1140 | 570 | 1190 | 600 | 1235 | 640 | 1270 | 685 | 1315 | 740 |
| 1400 [661] | — | — | 725 | 350 | 795 | 395 | 855 | 420 | 895 | 435 | 945 | 455 | 995 | 470 | 1030 | 500 | 1070 | 520 | 1115 | 560 | 1160 | 600 | 1205 | 640 | 1250 | 685 | 1290 | 745 | 1335 | 810 |
| 1500 [708] | 690 | 360 | 750 | 390 | 820 | 425 | 875 | 450 | 920 | 465 | 970 | 480 | 1010 | 500 | 1055 | 560 | 1100 | 580 | 1140 | 630 | 1180 | 660 | 1230 | 700 | 1270 | 760 | 1315 | 815 | 1350 | 865 |
| 1600 [755] | 720 | 390 | 780 | 430 | 850 | 460 | 895 | 480 | 945 | 500 | 990 | 530 | 1035 | 565 | 1075 | 590 | 1115 | 635 | 1160 | 680 | 1205 | 725 | 1250 | 770 | 1290 | 830 | 1335 | 890 | 1365 | 935 |
| 1700 [802] | 750 | 430 | 810 | 465 | 870 | 485 | 920 | 500 | 970 | 530 | 1015 | 570 | 1055 | 600 | 1090 | 645 | 1140 | 695 | 1180 | 735 | 1225 | 790 | 1270 | 845 | 1315 | 910 | 1350 | 960 | — | — |
| 1800 [850] | 780 | 475 | 840 | 515 | 895 | 540 | 945 | 555 | 990 | 600 | 1035 | 625 | 1080 | 660 | 1115 | 710 | 1155 | 740 | 1205 | 800 | 1250 | 860 | 1295 | 930 | 1340 | 995 | 1365 | 1030 | — | — |
| 1900 [897] | 820 | 520 | 870 | 560 | 925 | 580 | 970 | 600 | 1015 | 640 | 1060 | 690 | 1115 | 750 | 1145 | 790 | 1185 | 835 | 1225 | 880 | 1275 | 900 | 1315 | 1010 | 1355 | 1060 | — | — | — | — |
| 2000 [944] | 850 | 585 | 900 | 610 | 950 | 630 | 1000 | 665 | 1045 | 715 | 1090 | 760 | 1130 | 810 | 1170 | 865 | 1205 | 900 | 1255 | 965 | 1300 | 1050 | 1340 | 1100 | 1365 | 1140 | — | — | — | — |

**NOTE:** Bold lines separate L, M and N drives respectively.

| DRIVE PACKAGE | L | | | | | | | M | | | | | | | N (FIELD-SUPPLIED) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MOTOR H.P. | 1/2 (3/4 - 575V) | | | | | | | 3/4 | | | | | | | 3/4 |
| BLOWER SHEAVE | 6.9 PITCH DIAMETER | | | | | | | 6.4 PITCH DIAMETER | | | | | | | 6.4 PITCH DIAMETER |
| MOTOR SHEAVE | ADJUSTABLE 2.8 - 3.8 PITCH DIAMETER | | | | | | | ADJUSTABLE 3.4 - 4.4 PITCH DIAMETER | | | | | | | ADJUSTABLE 4.0 - 5.0 PITCH DIAMETER |
| TURNS OPEN | 0 | **1** | 2 | 3 | 4 | 5 | 6 | 0 | 1 | **2** | 3 | 4 | 5 | 6 | |
| RPM | 990 | **945** | 895 | 850 | 800 | 750 | 695 | 1270 | 1225 | **1170** | 1115 | 1065 | 1015 | 965 | RPM RANGE 1090 - 1365 |

Factory sheave settngs are shown in bold print.

# 5 TON

| AIR FLOW CFM [L/s] | CAPACITY5 TON - 13 SEER<br>VOLTAGE 208-230, 460 - 3 PHASE<br>EXTERNAL STATIC PRESSURE–INCHES OF WATER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0.1 [.02] | | 0.2 [.05] | | 0.3 [.07] | | 0.4 [.10] | | 0.5 [.12] | | 0.6 [.15] | | 0.7 [.17] | | 0.8 [.20] | | 0.9 [.22] | | 1.0 [.25] | | 1.10 [.27] | | 1.20 [.30] | | 1.30 [.32] | | 1.40 [.35] | | 1.50 [.37] | |
| | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS | RPM | WATTS |
| 1400 [661] | — | — | — | — | 780 | 370 | 815 | 385 | 875 | 425 | 930 | 460 | 970 | 490 | 1030 | 540 | 1065 | 570 | 1105 | 595 | 1150 | 615 | 1195 | 645 | 1235 | 660 | 1300 | 705 | 1340 | 745 |
| 1500 [708] | — | — | — | — | 795 | 405 | 840 | 415 | 895 | 440 | 945 | 500 | 995 | 540 | 1045 | 595 | 1080 | 615 | 1135 | 650 | 1165 | 675 | 1215 | 700 | 1255 | 735 | 1320 | 775 | 1355 | 805 |
| 1600 [755] | — | — | 780 | 390 | 805 | 425 | 870 | 470 | 915 | 510 | 965 | 560 | 1015 | 600 | 1060 | 640 | 1105 | 680 | 1145 | 705 | 1180 | 730 | 1225 | 750 | 1275 | 790 | 1340 | 840 | 1365 | 880 |
| 1700 [802] | — | — | 795 | 450 | 840 | 490 | 895 | 530 | 940 | 570 | 990 | 605 | 1035 | 640 | 1075 | 680 | 1120 | 725 | 1160 | 755 | 1200 | 790 | 1245 | 815 | 1300 | 855 | 1355 | 905 | 1375 | 940 |
| 1800 [850] | 780 | 455 | 815 | 470 | 870 | 540 | 915 | 540 | 965 | 675 | 1010 | 660 | 1055 | 710 | 1100 | 760 | 1140 | 785 | 1175 | 810 | 1225 | 850 | 1260 | 880 | 1320 | 930 | 1365 | 985 | 1390 | 1020 |
| 1900 [897] | 800 | 485 | 850 | 530 | 895 | 590 | 945 | 640 | 995 | 675 | 1035 | 720 | 1070 | 775 | 1120 | 810 | 1160 | 850 | 1200 | 890 | 1245 | 915 | 1290 | 960 | 1335 | 1000 | 1375 | 1050 | 1405 | 1100 |
| 2000 [944] | 830 | 550 | 880 | 605 | 930 | 655 | 970 | 700 | 1015 | 730 | 1055 | 790 | 1105 | 830 | 1145 | 875 | 1180 | 910 | 1225 | 950 | 1260 | 980 | 1320 | 1035 | 1350 | 1075 | 1385 | 1120 | — | — |
| 2100 [991] | 860 | 615 | 915 | 655 | 955 | 705 | 1005 | 760 | 1040 | 820 | 1090 | 870 | 1130 | 910 | 1170 | 950 | 1210 | 995 | 1250 | 1020 | 1290 | 1060 | 1335 | 1100 | 1370 | 1150 | 1400 | 1200 | — | — |
| 2200 [1038] | 895 | 680 | 945 | 735 | 995 | 780 | 1030 | 830 | 1060 | 880 | 1120 | 940 | 1155 | 980 | 1195 | 1020 | 1240 | 1055 | 1275 | 1100 | 1320 | 1140 | 1360 | 1180 | 1385 | 1225 | — | — | — | — |
| 2300 [1085] | 940 | 755 | 975 | 795 | 1015 | 830 | 1065 | 910 | 1100 | 965 | 1150 | 1025 | 1180 | 1050 | 1225 | 1095 | 1265 | 1125 | 1310 | 1175 | 1350 | 1230 | 1375 | 1260 | 1405 | 1320 | — | — | — | — |
| 2400 [1133] | 970 | 825 | 1015 | 880 | 1040 | 925 | 1100 | 1005 | 1145 | 1055 | 1175 | 1085 | 1225 | 1140 | 1260 | 1175 | 1300 | 1210 | 1340 | 1255 | 1370 | 1315 | 1400 | 1375 | — | — | — | — | — | — |

**NOTE:** L-Drive left of bold line, M-Drive right of bold line.

| DRIVE PACKAGE | "L" | | | | | | | "M" | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MOTOR H.P. | 3/4 | | | | | | | 1 | | | | | | |
| BLOWER SHEAVE | 6.4 PITCH DIAMETER | | | | | | | 6.4 PITCH DIAMETER | | | | | | |
| MOTOR SHEAVE | 2.8-3.8 PITCH DIAMETER - ADJ. | | | | | | | 3.4-4.4 PITCH DIAMETER - ADJ. | | | | | | |
| TURNS OPEN | 0 | 1 | **2** | 3 | 4 | 5 | 6 | 0 | 1 | 2 | **3** | 4 | 5 | 6 |
| RPM | 1095 | 1040 | **995** | 940 | 890 | 835 | 780 | 1405 | 1360 | 1305 | **1250** | 1195 | 1145 | 1095 |

Factory sheave settings are shown in bold.

# AIRFLOW PERFORMANCE — 6 TON [21.1kW] — SIDEFLOW

| Air Flow CFM [L/s] | Model RJNL-A072<br>Voltage 208/230, 460, 575 — 3 Phase<br>External Static Pressure — Inches of Water [kPa] | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0.1 [.02] | | 0.2 [.05] | | 0.3 [.07] | | 0.4 [.10] | | 0.5 [.12] | | 0.6 [.15] | | 0.7 [.17] | | 0.8 [.20] | | 0.9 [.22] | | 1.0 [.25] | | 1.1 [.27] | | 1.2 [.30] | | 1.3 [.32] | | 1.4 [.35] | | 1.5 [.37] | |
| | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W |
| 1900 [897] | — | — | — | — | 847 | 656 | 886 | 687 | 924 | 720 | 962 | 755 | 999 | 793 | 1036 | 834 | 1073 | 877 | 1110 | 923 | 1146 | 971 | 1181 | 1021 | 1217 | 1074 | 1252 | 1130 | 1287 | 1188 |
| 2000 [944] | — | — | — | — | 872 | 706 | 910 | 740 | 947 | 776 | 984 | 815 | 1020 | 856 | 1057 | 900 | 1092 | 947 | 1128 | 995 | 1163 | 1047 | 1198 | 1101 | 1232 | 1157 | 1266 | 1216 | 1300 | 1277 |
| 2100 [991] | — | — | 862 | 731 | 899 | 766 | 935 | 803 | 971 | 842 | 1007 | 885 | 1043 | 929 | 1078 | 976 | 1113 | 1026 | 1147 | 1078 | 1181 | 1133 | 1215 | 1190 | 1249 | 1250 | 1282 | 1312 | 1315 | 1377 |
| 2200 [1038] | 854 | 762 | 890 | 797 | 926 | 835 | 962 | 876 | 997 | 919 | 1032 | 964 | 1066 | 1012 | 1101 | 1062 | 1135 | 1115 | 1168 | 1171 | 1201 | 1229 | 1234 | 1289 | 1267 | 1352 | 1299 | 1418 | 1331 | 1486 |
| 2300 [1085] | 885 | 834 | 920 | 873 | 955 | 914 | 990 | 958 | 1024 | 1004 | 1058 | 1053 | 1091 | 1104 | 1125 | 1158 | 1158 | 1214 | 1190 | 1273 | 1222 | 1334 | 1254 | 1398 | 1286 | 1465 | 1317 | 1533 | 1348 | 1605 |
| 2400 [1133] | 917 | 917 | 951 | 959 | 985 | 1004 | 1019 | 1051 | 1052 | 1100 | 1085 | 1152 | 1118 | 1207 | 1150 | 1264 | 1182 | 1323 | 1213 | 1385 | 1245 | 1450 | 1276 | 1517 | 1306 | 1587 | 1336 | 1659 | 1366 | 1733 |
| 2500 [1180] | 950 | 1009 | 983 | 1055 | 1016 | 1103 | 1049 | 1153 | 1081 | 1206 | 1113 | 1261 | 1145 | 1319 | 1176 | 1379 | 1207 | 1442 | 1238 | 1508 | 1268 | 1575 | 1298 | 1646 | 1328 | 1719 | 1357 | 1794 | 1386 | 1872 |
| 2600 [1227] | 985 | 1112 | 1017 | 1160 | 1049 | 1211 | 1081 | 1265 | 1112 | 1321 | 1143 | 1380 | 1174 | 1441 | 1204 | 1505 | 1234 | 1571 | 1264 | 1639 | 1293 | 1711 | 1322 | 1784 | 1351 | 1861 | 1379 | 1939 | 1407 | 2020 |
| 2700 [1274] | 1020 | 1224 | 1052 | 1276 | 1083 | 1330 | 1114 | 1387 | 1144 | 1446 | 1174 | 1508 | 1204 | 1573 | 1233 | 1640 | 1262 | 1709 | 1291 | 1781 | 1319 | 1856 | 1347 | 1933 | 1375 | 2012 | — | — | — | — |
| 2800 [1321] | 1057 | 1345 | 1088 | 1401 | 1118 | 1458 | 1148 | 1519 | 1177 | 1582 | 1206 | 1647 | 1235 | 1715 | 1263 | 1785 | 1291 | 1858 | 1319 | 1933 | 1346 | 2011 | — | — | — | — | — | — | — | — |
| 2900 [1368] | 1096 | 1477 | 1125 | 1536 | 1154 | 1597 | 1183 | 1660 | 1211 | 1726 | 1240 | 1795 | 1267 | 1866 | 1295 | 1940 | 1322 | 2016 | — | — | — | — | — | — | — | — | — | — | — | — |

NOTE: L-Drive left of bold line, M-Drive right of bold line.

| Drive Package | L | | | | | | | M | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Motor H.P. [W] | 1.5 [1118.5] | | | | | | | 1.5 [1118.5] | | | | | | |
| Blower Sheave | AK66 | | | | | | | AK66 | | | | | | |
| Motor Sheave | 1VP-44 | | | | | | | 1VP-50 | | | | | | |
| Turns Open | 0 | 1 | **2** | 3 | 4 | 5 | 6 | 0 | 1 | 2 | **3** | 4 | 5 | 6 |
| RPM | 1103 | 1052 | **1002** | 956 | 900 | 849 | 1 | 1381 | 1326 | 1272 | **1220** | 1163 | 1108 | 1 |

NOTES: 1. Factory sheave settings are shown in bold type.
2. Do not set motor sheave below minimum or above maximum turns open shown.
3. Re-adjustment of sheave required to achieve rated airflow at ARI minimum External Static Pressure
4. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

## COMPONENT AIRFLOW RESISTANCE — 6 TON [21.1kW]

| CFM [L/s] | 1900 [897] | 2000 [944] | 2100 [991] | 2200 [1038] | 2300 [1085] | 2400 [1133] | 2500 [1180] | 2600 [1227] | 2700 [1274] | 2800 [1321] | 2900 1368] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Resistance — Inches of Water [kPa] | | | | | | | | | | |
| **Wet Coil** | 0.05 [.01] | 0.06 [.01] | 0.07 [.02] | 0.08 [.02] | 0.08 [.02] | 0.09 [.02] | 0.10 [.02] | 0.10 [.02] | 0.11 [.03] | 0.11 [.03] | 0.12 [.03] |
| **Downflow** | 0.03 [.01] | 0.04 [.01] | 0.05 [.01] | 0.06 [.01] | 0.07 [.02] | 0.08 [.02] | 0.08 [.02] | 0.09 [.02] | 0.09 [.02] | 0.10 [.02] | 0.10 [.02] |
| **Downflow Economizer RA Damper Open** | 0.08 [.02] | 0.08 [.02] | 0.09 [.02] | 0.09 [.02] | 0.10 [.02] | 0.10 [.02] | 0.10 [.02] | 0.11 [.03] | 0.11 [.03] | 0.12 [.03] | 0.12 [.03] |
| **Horizontal Economizer RA Damper Open** | 0.08 [.02] | 0.08 [.02] | 0.09 [.02] | 0.09 [.02] | 0.10 [.02] | 0.10 [.02] | 0.10 [.02] | 0.11 [.03] | 0.11 [.03] | 0.12 [.03] | 0.12 [.03] |
| **Concentric Grill RXRN-FA65 or RXRN-FA75 & Transition RXMC-CC04** | 0.07 [.02] | 0.08 [.02] | 0.09 [.02] | 0.10 [.02] | 0.12 [.03] | 0.13 [.03] | 0.15 [.04] | 0.17 [.04] | 0.19 [.05] | 0.21 [.05] | 0.23 [.06] |

[ ] Designates Metric Conversions

## 208-240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

| Unit Model Number | Single Power Supply For Both Unit And Heater Kit | | | | | | | | Separate Power Supply For Both Unit And Heater Kit | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Heater Kit | | | | | Heat Pump | | | Heater Kit | | Heat Pump | | |
| | RXJJ-Heater Kit Nominal kW | No. of Sequence Steps | Rated Heater kW @ 208/240 V | Heater KBTU/Hr @ 208/240 V | Heater Amp. @ 208/240 V | Unit Min. Ckt Ampacity @ 208-240V | Over Current Protective Device Size | | Min. Ckt. Ampacity 208/240V | Max. Fuse Size 208/240V | Min. Circuit Ampacity 208/240V | Over Current Protective Device Size | |
| | | | | | | | Min/Max @ 208 V | Min/Max @240 V | | | | Min/Max @ 208 V | Min/Max @ 240 V |
| RJNL-C036CL | No Heat | — | — | — | — | 18/18 | 20/25 | 20/25 | — | — | 18/18 | 20/25 | 20/25 |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 33/35 | 35/35 | 35/40 | 15/17 | 15/20 | 18/18 | 20/25 | 20/25 |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 43/47 | 45/45 | 50/50 | 25/29 | 25/30 | 18/18 | 20/25 | 20/25 |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 48/52 | 50/50 | 60/60 | 30/34 | 30/35 | 18/18 | 20/25 | 20/25 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 56/62 | 60/60 | 70/70 | 38/44 | 40/45 | 18/18 | 20/25 | 20/25 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 68/76 | 70/70 | 80/80 | 50/58 | 50/60 | 18/18 | 20/25 | 20/25 |
| RJNL-C042CL | No Heat | — | — | — | — | 22/22 | 25/30 | 25/30 | — | — | 22/22 | 25/30 | 25/30 |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 37/39 | 40/45 | 40/45 | 15/17 | 15/20 | 22/22 | 25/30 | 25/30 |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 47/51 | 50/50 | 60/60 | 25/29 | 25/30 | 22/22 | 25/30 | 25/30 |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 52/56 | 60/60 | 60/60 | 30/34 | 30/35 | 22/22 | 25/30 | 25/30 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 60/66 | 60/60 | 70/70 | 38/44 | 40/45 | 22/22 | 25/30 | 25/30 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 72/80 | 80/80 | 80/80 | 50/58 | 50/60 | 22/22 | 25/30 | 25/30 |
| RJNL-C048CL | No Heat | — | — | — | — | 22/22 | 25/35 | 25/35 | — | — | 22/22 | 25/35 | 25/35 |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 37/39 | 40/45 | 40/45 | 15/17 | 15/20 | 22/22 | 25/35 | 25/35 |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 47/51 | 50/50 | 60/60 | 25/29 | 25/30 | 22/22 | 25/35 | 25/35 |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 52/56 | 60/60 | 60/60 | 30/34 | 30/35 | 22/22 | 25/35 | 25/35 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 60/66 | 60/60 | 70/70 | 38/44 | 40/45 | 22/22 | 25/35 | 25/35 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 72/80 | 80/80 | 80/80 | 50/58 | 50/60 | 22/22 | 25/35 | 25/35 |
| RJNL-C060CL | No Heat | — | — | — | — | 26/26 | 30/40 | 30/40 | — | — | 26/26 | 30/40 | 30/40 |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 41/43 | 45/50 | 45/50 | 15/17 | 15/20 | 26/26 | 30/40 | 30/40 |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 51/55 | 60/60 | 60/60 | 25/29 | 25/30 | 26/26 | 30/40 | 30/40 |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 56/60 | 60/50 | 70/70 | 30/34 | 30/35 | 26/26 | 30/40 | 30/40 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 64/70 | 70/70 | 80/80 | 38/44 | 40/45 | 26/26 | 30/40 | 30/40 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 76/84 | 80/80 | 90/90 | 50/58 | 50/60 | 26/26 | 30/40 | 30/40 |
| RJNL-C072CL | No Heat | — | — | — | — | 34/34 | 40/50 | 40/50 | — | — | 34/34 | 40/50 | 40/50 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 72/78 | 80/80 | 80/80 | 38/44 | 40/45 | 34/34 | 40/50 | 40/5 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 84/92 | 90/90 | 100/100 | 50/58 | 50/60 | 34/34 | 40/50 | 40/5 |
| | A24C | 1 | 18/24 | 61.41/81.88 | 50/57.7 | 97/107 | 100/100 | 110/110 | 63/73 | 70/80 | 34/34 | 40/50 | 40/5 |

## 208-240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

| Unit Model Number | Single Power Supply For Both Unit And Heater Kit | | | | | | | | Separate Power Supply For Both Unit And Heater Kit | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Heater Kit | | | | | Heat Pump | | | Heater Kit | | Heat Pump | | |
| | RXJJ-Heater Kit Nominal kW | No. of Sequence Steps | Rated Heater kW @ 208/240 V | Heater KBTU/Hr @ 208/240 V | Heater Amp. @ 208/240 V | Unit Min. Ckt Ampacity @ 208-240V | Over Current Protective Device Size | | Min. Ckt. Ampacity 208/240V | Max. Fuse Size 208/240V | Min. Circuit Ampacity 208/240V | Over Current Protective Device Size | |
| | | | | | | | Min/Max @ 208 V | Min/Max @240 V | | | | Min/Max @ 208 V | Min/Max @ 240 V |
| RJNL-C036CM | No Heat | — | — | — | — | 19/19 | 25/25 | 25/25 | — | — | 19/19 | 25/25 | 25/25 |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 34/36 | 35/35 | 40/40 | 15/17 | 15/20 | 19/19 | 25/25 | 25/25 |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 44/48 | 45/45 | 50/50 | 25/29 | 25/30 | 19/19 | 25/25 | 25/25 |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 49/53 | 50/50 | 60/60 | 30/34 | 30/35 | 19/19 | 25/25 | 25/25 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 57/63 | 60/60 | 70/70 | 38/44 | 40/45 | 19/19 | 25/25 | 25/25 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 69/77 | 70/70 | 80/80 | 50/58 | 50/60 | 19/19 | 25/25 | 25/25 |
| RJNL-C042CM | No Heat | — | — | — | — | 22/22 | 30/35 | 30/35 | — | — | 22/22 | 30/35 | 30/35 |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 37/39 | 40/45 | 40/45 | 15/17 | 15/20 | 22/22 | 30/35 | 30/35 |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 47/51 | 50/50 | 60/60 | 25/29 | 25/30 | 22/22 | 30/35 | 30/35 |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 52/56 | 60/60 | 60/60 | 30/34 | 30/35 | 22/22 | 30/35 | 30/35 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 60/66 | 70/70 | 70/70 | 38/44 | 40/45 | 22/22 | 30/35 | 30/35 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 72/80 | 80/80 | 90/90 | 50/58 | 50/60 | 22/22 | 30/35 | 30/35 |
| RJNL-C048CM | No Heat | — | — | — | — | 23/23 | 30/35 | 30/35 | — | — | 23/23 | 30/35 | 30/35 |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 38/40 | 40/45 | 40/45 | 15/17 | 15/20 | 23/23 | 30/35 | 30/35 |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 48/52 | 50/50 | 60/60 | 25/29 | 25/30 | 23/23 | 30/35 | 30/35 |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 53/57 | 60/60 | 60/60 | 30/34 | 30/35 | 23/23 | 30/35 | 30/35 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 61/67 | 70/70 | 70/70 | 38/44 | 40/45 | 23/23 | 30/35 | 30/35 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 73/81 | 80/80 | 90/90 | 50/58 | 50/60 | 23/23 | 30/35 | 30/35 |
| RJNL-C060CM | No Heat | — | — | — | — | 26/26 | 30/40 | 30/40 | — | — | 26/26 | 30/40 | 30/40 |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 41/43 | 45/50 | 45/50 | 15/17 | 15/20 | 26/26 | 30/40 | 30/40 |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 51/55 | 60/60 | 60/60 | 25/29 | 25/30 | 26/26 | 30/40 | 30/40 |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 56/60 | 60/50 | 70/70 | 30/34 | 30/35 | 26/26 | 30/40 | 30/40 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 64/70 | 70/70 | 80/80 | 38/44 | 40/45 | 26/26 | 30/40 | 30/40 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 76/84 | 80/80 | 90/90 | 50/58 | 50/60 | 26/26 | 30/40 | 30/40 |
| RJNL-C072CM | No Heat | — | — | — | — | 34/34 | 40/50 | 40/50 | — | — | 34/34 | 40/50 | 40/50 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 72/78 | 80/80 | 80/80 | 38/44 | 40/45 | 34/34 | 40/50 | 40/50 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 84/92 | 90/90 | 100/100 | 50/58 | 50/60 | 34/34 | 40/50 | 40/50 |
| | A24C | 1 | 18/24 | 61.41/81.88 | 50/57.7 | 97/107 | 100/100 | 110/110 | 63/73 | 70/80 | 34/34 | 40/50 | 40/50 |

## 480 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

| Single Power Supply For Both Unit And Heater Kit | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unit Model Number | Heater Kit | | | | | Heat Pump | | | Heater Kit | | Heat Pump | | |
| | RXJJ-Heater Kit Nominal kW | No. of Sequence Steps | Rated Heater kW @ 480 V | Heater KBTU/Hr @ 480 V | Heater Amp. @ 480 V | Unit Min. Ckt Ampacity @ 480V | Over Current Protective Device Size | | Min. Ckt. Ampacity 480V | Max. Fuse Size 480V | Min. Circuit Ampacity 480V | Over Current Protective Device Size | |
| | | | | | | | Min/Max @ 480 V | Min/Max @ 480 V | | | | Min/Max @ 480 V | Min/Max @ 480 V |
| RJNL-C036DL | No Heat | — | — | — | — | 10 | 15/15 | — | — | — | 10 | 15/15 | — |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 19 | 20/20 | — | 9 | 15 | 10/0 | 15/15 | 0/0 |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 25 | 25/25 | — | 15 | 15 | 10/0 | 15/15 | 0/0 |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 27 | 30/30 | — | 17 | 20 | 10/0 | 15/15 | 0/0 |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 32 | 35/35 | — | 22 | 25 | 10/0 | 15/15 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 40 | 40/40 | — | 30 | 30 | 10/0 | 15/15 | 0/0 |
| RJNL-C042DL | No Heat | — | — | — | — | 10 | 15/15 | — | — | — | 10 | 15/15 | — |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 19 | 20/20 | — | 9 | 15 | 10/0 | 15/15 | 0/0 |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 25 | 25/25 | — | 15 | 15 | 10/0 | 15/15 | 0/0 |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 27 | 30/30 | — | 17 | 20 | 10/0 | 15/15 | 0/0 |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 32 | 35/35 | — | 22 | 25 | 10/0 | 15/15 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 40 | 40/40 | — | 30 | 30 | 10/0 | 15/15 | 0/0 |
| RJNL-C048DL | No Heat | — | — | — | — | 11 | 15/15 | — | — | — | 11 | 15/15 | — |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 20 | 20/20 | — | 9 | 15 | 11/0 | 15/15 | 0/0 |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 26 | 25/25 | — | 15 | 15 | 11/0 | 15/15 | 0/0 |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 28 | 30/30 | — | 17 | 20 | 11/0 | 15/15 | 0/0 |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 33 | 35/35 | — | 22 | 25 | 11/0 | 15/15 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 41 | 40/40 | — | 30 | 30 | 11/0 | 15/15 | 0/0 |
| RJNL-C060DL | No Heat | — | — | — | — | 13 | 15/20 | — | — | — | 13 | 15/20 | — |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 22 | 25/25 | — | 9 | 15 | 13/0 | 15/20 | 0/0 |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 28 | 30/30 | — | 15 | 15 | 13/0 | 15/20 | 0/0 |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 30 | 30/30 | — | 17 | 20 | 13/0 | 15/20 | 0/0 |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 35 | 35/35 | — | 22 | 25 | 13/0 | 15/20 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 43 | 45/45 | — | 30 | 30 | 13/0 | 15/20 | 0/0 |
| C072DL | No Heat | — | — | — | — | 17 | 20/25 | — | — | — | 17 | 20/25 | — |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 39 | 40/40 | — | 22 | 25 | 17/0 | 20/25 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 47 | 50/50 | — | 30 | 30 | 17/0 | 20/25 | 0/0 |
| | A24D | 1 | 24 | 81.88 | 28.9 | 54 | 60/60 | — | 37 | 40 | 17/0 | 20/25 | 0/0 |

## 480 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

| Single Power Supply For Both Unit And Heater Kit | | | | | | | | | Separate Power Supply For Both Unit And Heater Kit | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unit Model Number | Heater Kit | | | | | Heat Pump | | | Heater Kit | | Heat Pump | | |
| | RXJJ- Heater Kit Nominal kW | No. of Sequence Steps | Rated Heater kW @ 480 V | Heater KBTU/Hr @ 480 V | Heater Amp. @ 480 V | Unit Min. Ckt Ampacity @ 480V | Over Current Protective Device Size | | Min. Ckt. Ampacity 480V | Max. Fuse Size 480V | Min. Circuit Ampacity 480V | Over Current Protective Device Size | |
| | | | | | | | Min/Max @ 480 V | Min/Max @ 480 V | | | | Min/Max @ 480 V | Min/Max @ 480 V |
| RJNL-C036DM | No Heat | — | — | — | — | 10 | 15/15 | — | — | — | 10 | 15/15 | — |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 19 | 20/20 | — | 9 | 15 | 10/0 | 15/15 | 0/0 |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 25 | 25/25 | — | 15 | 15 | 10/0 | 15/15 | 0/0 |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 27 | 30/30 | — | 17 | 20 | 10/0 | 15/15 | 0/0 |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 32 | 35/35 | — | 22 | 25 | 10/0 | 15/15 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 40 | 40/40 | — | 30 | 30 | 10/0 | 15/15 | 0/0 |
| RJNL-C042DM | No Heat | — | — | — | — | 11 | 15/15 | — | — | — | 11 | 15/15 | — |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 20 | 20/20 | — | 9 | 15 | 11/0 | 15/15 | 0/0 |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 26 | 30/30 | — | 15 | 15 | 11/0 | 15/15 | 0/0 |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 28 | 30/30 | — | 17 | 20 | 11/0 | 15/15 | 0/0 |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 33 | 35/35 | — | 22 | 25 | 11/0 | 15/15 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 41 | 40/40 | — | 30 | 30 | 11/0 | 15/15 | 0/0 |
| RJNL-C048DM | No Heat | — | — | — | — | 11 | 15/15 | — | — | — | 11 | 15/15 | — |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 20 | 20/20 | — | 9 | 15 | 11/0 | 15/15 | 0/0 |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 26 | 30/30 | — | 15 | 15 | 11/0 | 15/15 | 0/0 |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 28 | 30/30 | — | 17 | 20 | 11/0 | 15/15 | 0/0 |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 33 | 35/35 | — | 22 | 25 | 11/0 | 15/15 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 41 | 45/45 | — | 30 | 30 | 11/0 | 15/15 | 0/0 |
| RJNL-C060DM | No Heat | — | — | — | — | 14 | 20/20 | — | — | — | 14 | 20/20 | — |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 23 | 25/25 | — | 9 | 15 | 14/0 | 20/20 | 0/0 |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 29 | 30/30 | — | 15 | 15 | 14/0 | 20/20 | 0/0 |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 31 | 35/35 | — | 17 | 20 | 14/0 | 20/20 | 0/0 |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 36 | 40/40 | — | 22 | 25 | 14/0 | 20/20 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 44 | 45/45 | — | 30 | 30 | 14/0 | 20/20 | 0/0 |
| RJNL-C072DM | No Heat | — | — | — | — | 17 | 20/25 | — | — | — | 17 | 20/25 | — |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 39 | 40/40 | — | 22 | 25 | 17/0 | 20/25 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 47 | 50/50 | — | 30 | 30 | 17/0 | 20/25 | 0/0 |
| | A24D | 1 | 24 | 81.88 | 28.9 | 54 | 60/60 | — | 37 | 40 | 17/0 | 20/25 | 0/0 |

## 208/240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

| Single Power Supply For Both Unit And Heater Kit | | | | | | | | | Separate Power Supply For Both Unit And Heater Kit | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unit Model Number | Heater Kit | | | | | Heat Pump | | | Heater Kit | | Heat Pump | | |
| | RXJJ-Heater Kit Nominal kW | No. of Sequence Steps | Rated Heater kW @ 208/240 V | Heater KBTU/Hr @ 208/240 V | Heater Amp. @ 208/240 V | Unit Min. Ckt Ampacity @ 208/240V | Over Current Protective Device Size | | Min. Ckt. Ampacity 208/240V | Max. Fuse Size 208/240V | Min. Circuit Ampacity 208/240V | Over Current Protective Device Size | |
| | | | | | | | Min/Max @ 208 V | Min/Max @ 240 V | | | | Min/Max @280 V | Min/Max @ 240 V |
| RJPL-C036CL | No Heat | — | — | — | — | 18/18 | 20/25 | 20/25 | — | — | 18/18 | 20/25 | 20/25 |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 33/35 | 35/35 | 40/40 | 15/17 | 15/20 | 18/18 | 20/25 | 20/25 |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 43/47 | 45/45 | 50/50 | 25/29 | 25/30 | 18/18 | 20/25 | 20/25 |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 48/52 | 50/50 | 60/60 | 30/34 | 30/35 | 18/18 | 20/25 | 20/25 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 56/62 | 60/60 | 70/70 | 38/44 | 40/45 | 18/18 | 20/25 | 20/25 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 68/76 | 70/70 | 80/80 | 50/58 | 50/60 | 18/18 | 20/25 | 20/25 |
| RJPL-C042CL | No Heat | — | — | — | — | 22/22 | 25/30 | 25/30 | — | — | 22/22 | 25/30 | 25/30 |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 37/39 | 40/45 | 40/45 | 15/17 | 15/20 | 22/22 | 25/30 | 25/30 |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 47/51 | 50/50 | 60/60 | 25/29 | 25/30 | 22/22 | 25/30 | 25/30 |
| | A12C | 1 | 8.4/11.2 | 28.66/.38.21 | 23.4/27 | 52/56 | 60/60 | 60/60 | 30/34 | 30/35 | 22/22 | 25/30 | 25/30 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 60/66 | 60/60 | 70/70 | 38/44 | 40/45 | 22/22 | 25/30 | 25/30 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 72/80 | 80/80 | 90/90 | 50/58 | 50/60 | 22/22 | 25/30 | 25/30 |
| RJPL-C048CL | No Heat | — | — | — | — | 22/22 | 25/35 | 25/35 | — | — | 22/22 | 25/35 | 25/35 |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 37/39 | 40/45 | 40/45 | 15/17 | 15/20 | 22/22 | 25/35 | 25/35 |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 47/51 | 50/50 | 60/60 | 25/29 | 25/30 | 22/22 | 25/35 | 25/35 |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 52/56 | 60/60 | 60/60 | 30/34 | 30/35 | 22/22 | 25/35 | 25/35 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 60/66 | 70/70 | 70/70 | 38/44 | 40/45 | 22/22 | 25/35 | 25/35 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 72/80 | 80/80 | 90/90 | 50/58 | 50/60 | 22/22 | 25/35 | 25/35 |
| RJPL-C060CL | No Heat | — | — | — | — | 26/26 | 30/40 | 30/40 | — | — | 26/26 | 30/40 | 30/40 |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 41/43 | 45/50 | 45/50 | 15/17 | 15/20 | 26/26 | 30/40 | 30/40 |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 51/55 | 60/60 | 60/60 | 25/29 | 25/30 | 26/26 | 30/40 | 30/40 |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 56/60 | 60/60 | 70/70 | 30/34 | 30/35 | 26/26 | 30/40 | 30/40 |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 64/70 | 70/70 | 80/80 | 38/44 | 40/45 | 26/26 | 30/40 | 30/40 |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 76/84 | 80/80 | 90/90 | 50/58 | 50/60 | 26/26 | 30/40 | 30/40 |

## 208/240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

| Single Power Supply For Both Unit And Heater Kit | | | | | | | | | | | | | Separate Power Supply For Both Unit And Heater Kit | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unit Model Number | Heater Kit | | | | | Heat Pump | | | Heater Kit | | Heat Pump | | | | | | |
| | RXJJ-Heater Kit Nominal kW | No. of Sequence Steps | Rated Heater kW @ 208/240 V | Heater KBTU/Hr @ 208/240 V | Heater Amp. @ 208/240 V | Unit Min. Ckt Ampacity @ 208/240V | Over Current Protective Device Size | | Min. Ckt. Ampacity 208/240V | Max. Fuse Size 208/240V | Min. Circuit Ampacity 208/240V | Over Current Protective Device Size | | | | | |
| | | | | | | | Min/Max @ 208 V | Min/Max @ 240 V | | | | Min/Max @280 V | Min/Max @ 240 V | | | | |
| RJPL-C036CM | No Heat | — | — | — | — | 18/18 | 25/25 | 25/25 | — | — | 18/18 | 25/25 | 25/25 | | | | |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 33/35 | 35/35 | 40/40 | 15/17 | 15/20 | 18/18 | 25/25 | 25/25 | | | | |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 43/47 | 45/45 | 50/50 | 25/29 | 25/30 | 18/18 | 25/25 | 25/25 | | | | |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 48/52 | 50/50 | 60/60 | 30/34 | 30/35 | 18/18 | 25/25 | 25/25 | | | | |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 56/62 | 60/60 | 70/70 | 38/44 | 40/45 | 18/18 | 25/25 | 25/25 | | | | |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 68/76 | 70/70 | 80/80 | 50/58 | 50/60 | 18/18 | 25/25 | 25/25 | | | | |
| RJPL-C042CM | No Heat | — | — | — | — | 22/22 | 30/35 | 30/35 | — | — | 22/22 | 30/35 | 30/35 | | | | |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 37/39 | 40/45 | 40/45 | 15/17 | 15/20 | 22/22 | 30/35 | 30/35 | | | | |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 47/51 | 50/50 | 60/60 | 25/29 | 25/30 | 22/22 | 30/35 | 30/35 | | | | |
| | A12C | 1 | 8.4/11.2 | 28.66/.38.21 | 23.4/27 | 52/56 | 60/60 | 60/60 | 30/34 | 30/35 | 22/22 | 30/35 | 30/35 | | | | |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 60/66 | 60/60 | 70/70 | 38/44 | 40/45 | 22/22 | 30/35 | 30/35 | | | | |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 72/80 | 80/80 | 90/90 | 50/58 | 50/60 | 22/22 | 30/35 | 30/35 | | | | |
| RJPL-C048CM | No Heat | — | — | — | — | 23/23 | 30/35 | 30/35 | — | — | 23/23 | 30/35 | 30/35 | | | | |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 38/40 | 40/45 | 45/45 | 15/17 | 15/20 | 23/23 | 30/35 | 30/35 | | | | |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 48/52 | 50/50 | 60/60 | 25/29 | 25/30 | 23/23 | 30/35 | 30/35 | | | | |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 53/57 | 60/60 | 60/60 | 30/34 | 30/35 | 23/23 | 30/35 | 30/35 | | | | |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 61/67 | 70/70 | 70/70 | 38/44 | 40/45 | 23/23 | 30/35 | 30/35 | | | | |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 73/81 | 80/80 | 90/90 | 50/58 | 50/60 | 23/23 | 30/35 | 30/35 | | | | |
| RJPL-C060CM | No Heat | — | — | — | — | 26/26 | 30/40 | 30/40 | — | — | 26/26 | 30/40 | 30/40 | | | | |
| | A06C | 1 | 4.2/5.6 | 14.33/19.1 | 11.7/13.5 | 41/43 | 45/50 | 45/50 | 15/17 | 15/20 | 26/26 | 30/40 | 30/40 | | | | |
| | A10C | 1 | 7.2/9.6 | 24.56/32.75 | 20/23.1 | 51/55 | 60/60 | 60/60 | 25/29 | 25/30 | 26/26 | 30/40 | 30/40 | | | | |
| | A12C | 1 | 8.4/11.2 | 28.66/38.21 | 23.4/27 | 56/60 | 60/60 | 70/70 | 30/34 | 30/35 | 26/26 | 30/40 | 30/40 | | | | |
| | A15C | 1 | 10.8/14.4 | 36.84/49.13 | 30.1/34.7 | 64/70 | 70/70 | 80/80 | 38/44 | 40/45 | 26/26 | 30/40 | 30/40 | | | | |
| | A20C | 1 | 14.4/19.2 | 49.13/65.5 | 40/46.3 | 76/84 | 80/80 | 90/90 | 50/58 | 50/60 | 26/26 | 30/40 | 30/40 | | | | |

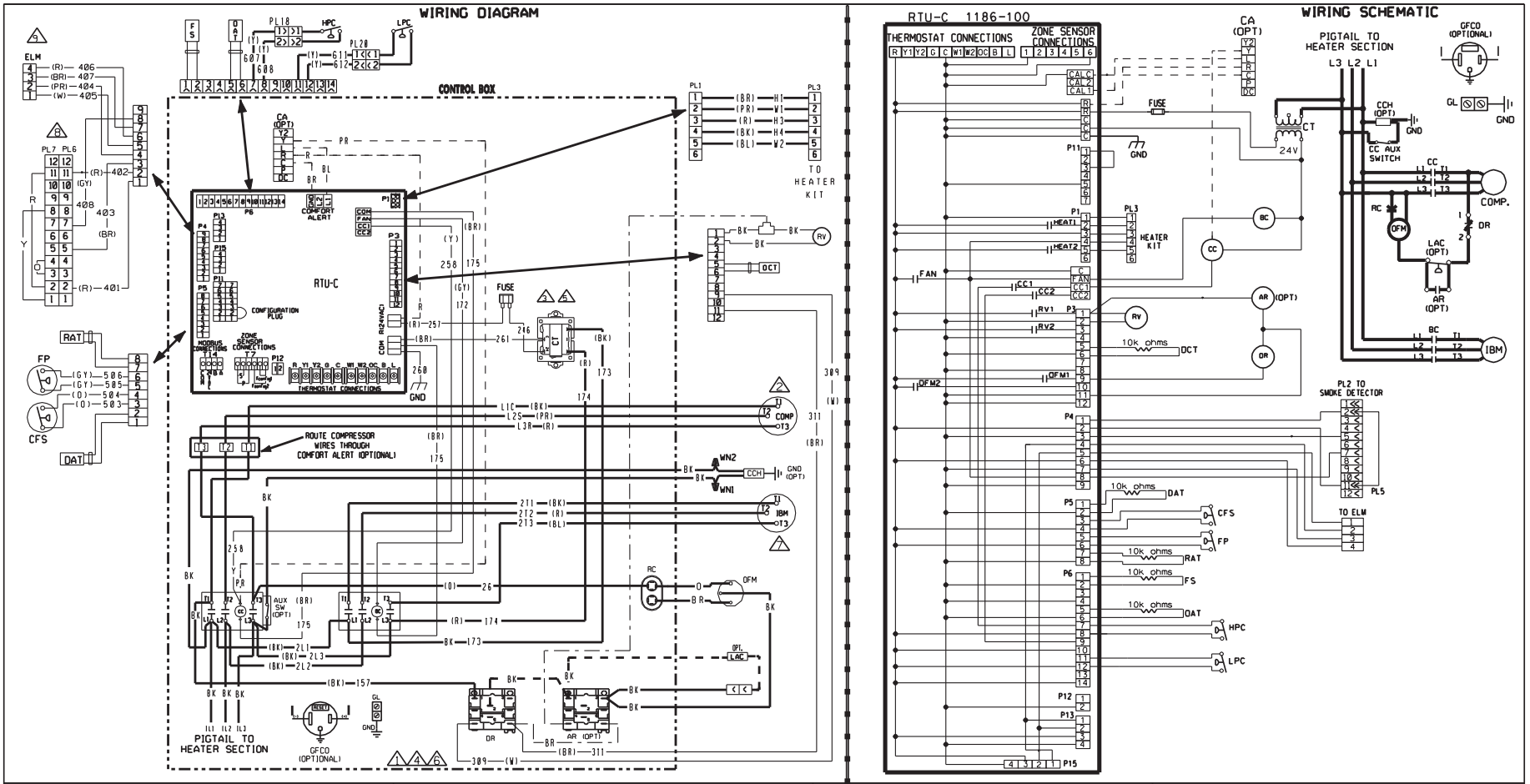
## 480 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

| Single Power Supply For Both Unit And Heater Kit | | | | | | | | | | | | | Separate Power Supply For Both Unit And Heater Kit | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unit Model Number | Heater Kit | | | | | Heat Pump | | | Heater Kit | | Heat Pump | | | | | | |
| | RXJJ-Heater Kit Nominal kW | No. of Sequence Steps | Rated Heater kW @ 480 V | Heater KBTU/Hr @ 480 V | Heater Amp. @ 480 V | Unit Min. Ckt Ampacity @ 480V | Over Current Protective Device Size | | Min. Ckt. Ampacity 480V | Max. Fuse Size 480V | Min. Circuit Ampacity 480V | Over Current Protective Device Size | | | | | |
| | | | | | | | Min/Max @ 480 V | Min/Max @ 480 V | | | | Min/Max @480 V | Min/Max @ 480 V | | | | |
| RJPL-C036DL | No Heat | — | — | — | — | 10 | 15/15 | — | — | — | 10 | 15/15 | — | | | | |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 19 | 20/20 | — | 9 | 15 | 10/0 | 15/15 | 0/0 | | | | |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 25 | 25/25 | — | 15 | 15 | 10/0 | 15/15 | 0/0 | | | | |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 27 | 30/30 | — | 17 | 20 | 10/0 | 15/15 | 0/0 | | | | |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 32 | 35/35 | — | 22 | 25 | 10/0 | 15/15 | 0/0 | | | | |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 40 | 40/40 | — | 30 | 30 | 10/0 | 15/15 | 0/0 | | | | |
| RJPL-C042DL | No Heat | — | — | — | — | 10 | 15/15 | — | — | — | 10 | 15/15 | — | | | | |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 19 | 20/20 | — | 9 | 15 | 10/0 | 15/15 | 0/0 | | | | |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 25 | 25/25 | — | 15 | 15 | 10/0 | 15/15 | 0/0 | | | | |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 27 | 30/30 | — | 17 | 20 | 10/0 | 15/15 | 0/0 | | | | |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 32 | 35/35 | — | 22 | 25 | 10/0 | 15/15 | 0/0 | | | | |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 40 | 40/40 | — | 30 | 30 | 10/0 | 15/15 | 0/0 | | | | |
| RJPL-C048DL | No Heat | — | — | — | — | 11 | 15/15 | — | — | — | 11 | 15/15 | — | | | | |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 20 | 20/20 | — | 9 | 15 | 11/0 | 15/15 | 0/0 | | | | |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 26 | 30/30 | — | 15 | 15 | 11/0 | 15/15 | 0/0 | | | | |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 28 | 30/30 | — | 17 | 20 | 11/0 | 15/15 | 0/0 | | | | |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 33 | 35/35 | — | 22 | 25 | 11/0 | 15/15 | 0/0 | | | | |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 41 | 40/40 | — | 30 | 30 | 11/0 | 15/15 | 0/0 | | | | |
| RJPL-C060DL | No Heat | — | — | — | — | 13 | 15/20 | — | — | — | 13 | 15/20 | — | | | | |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 22 | 25/25 | — | 9 | 15 | 13/0 | 15/20 | 0/0 | | | | |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 28 | 30/30 | — | 15 | 15 | 13/0 | 15/20 | 0/0 | | | | |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 30 | 30/30 | — | 17 | 20 | 13/0 | 15/20 | 0/0 | | | | |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 35 | 35/35 | — | 22 | 25 | 13/0 | 15/20 | 0/0 | | | | |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 43 | 45/45 | — | 30 | 30 | 13/0 | 15/20 | 0/0 | | | | |

## 480 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

| Single Power Supply For Both Unit And Heater Kit | | | | | | | | Separate Power Supply For Both Unit And Heater Kit | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unit Model Number | Heater Kit | | | | | Heat Pump | | Heater Kit | | Heat Pump | | |
| | RXJJ-Heater Kit Nominal kW | No. of Sequence Steps | Rated Heater kW @ 480 V | Heater KBTU/Hr @ 480 V | Heater Amp. @ 480 V | Unit Min. Ckt Ampacity @ 480V | Over Current Protective Device Size | Min. Ckt. Ampacity 480V | Max. Fuse Size 480V | Min. Circuit Ampacity 480V | Over Current Protective Device Size | |
| | | | | | | | Min/Max @ 480 V | Min/Max @ 480 V | | | | Min/Max @480 V | Min/Max @ 480 V |
| RJPL-C036DM | No Heat | — | — | — | — | 10 | 15/15 | — | — | — | 10 | 15/15 | — |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 19 | 20/20 | — | 9 | 15 | 10/0 | 15/15 | 0/0 |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 25 | 25/25 | — | 15 | 15 | 10/0 | 15/15 | 0/0 |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 27 | 30/30 | — | 17 | 20 | 10/0 | 15/15 | 0/0 |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 32 | 35/35 | — | 22 | 25 | 10/0 | 15/15 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 40 | 40/40 | — | 30 | 30 | 10/0 | 15/15 | 0/0 |
| RJPL-C042DM | No Heat | — | — | — | — | 11 | 15/15 | — | — | — | 11 | 15/15 | — |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 20 | 20/20 | — | 9 | 15 | 11/0 | 15/15 | 0/0 |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 26 | 30/30 | — | 15 | 15 | 11/0 | 15/15 | 0/0 |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 28 | 30/30 | — | 17 | 20 | 11/0 | 15/15 | 0/0 |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 33 | 35/35 | — | 22 | 25 | 11/0 | 15/15 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 41 | 40/40 | — | 30 | 30 | 11/0 | 15/15 | 0/0 |
| RJPL-C048DM | No Heat | — | — | — | — | 11 | 15/15 | — | — | — | 11 | 15/15 | — |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 20 | 20/20 | — | 9 | 15 | 11/0 | 15/15 | 0/0 |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 26 | 30/30 | — | 15 | 15 | 11/0 | 15/15 | 0/0 |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 28 | 30/30 | — | 17 | 20 | 11/0 | 15/15 | 0/0 |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 33 | 35/35 | — | 22 | 25 | 11/0 | 15/15 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 41 | 45/45 | — | 30 | 30 | 11/0 | 15/15 | 0/0 |
| RJPL-C060DM | No Heat | — | — | — | — | 13 | 15/20 | — | — | — | 13 | 15/20 | — |
| | A06D | 1 | 5.6 | 19.1 | 6.8 | 22 | 25/25 | — | 9 | 15 | 13/0 | 15/20 | 0/0 |
| | A10D | 1 | 9.6 | 32.75 | 11.6 | 28 | 30/30 | — | 15 | 15 | 13/0 | 15/20 | 0/0 |
| | A12D | 1 | 11.2 | 38.21 | 13.5 | 30 | 35/35 | — | 17 | 20 | 13/0 | 15/20 | 0/0 |
| | A15D | 1 | 14.4 | 49.13 | 17.4 | 35 | 40/40 | — | 22 | 25 | 13/0 | 15/20 | 0/0 |
| | A20D | 1 | 19.2 | 65.5 | 23.3 | 43 | 45/45 | — | 30 | 30 | 13/0 | 15/20 | 0/0 |

**FIGURE 15**
**WIRING DIAGRAM**




## COMPONENT CODE

| | | | |
|---|---|---|---|
| AR | ACCESSORY RELAY | GND | GROUND |
| BC | BLOWER CONTACTOR | HPC | HIGH PRESSURE CONTROL |
| CA | COMFORT ALERT MODULE | IBM | INDOOR BLOWER MOTOR BELT DRIVE |
| CC | COMPRESSOR CONTACTOR | LAC | LOW AMBIENT COOLING CONTROL |
| CCH | CRANKCASE HEATER | LPC | LOW PRESSURE CONTROL |
| CFS | CLOGGED FILTER SWITCH | OAT | OUTSIDE AIR SENSOR |
| COMP | COMPRESSOR | OCT | OUTSIDE COIL TEMP SENSOR |
| CT | CONTROL TRANSFORMER | OFM | OUTDOOR FAN MOTOR |
| DAT | DISCHARGE AIR SENSOR | PL | PLUG |
| DR | DEFROST RELAY | RAT | RETURN AIR SENSOR |
| FP | FAN PROVING | RC | RUN CAPACITOR |
| FS | FREEZE SENSOR | RTU-C | ROOFTOP UNIT CONTROL |
| GFCO | GROUND FAULT CONVENIENCE OUTLET | RV | REVERSING VALVE |
| GL | GROUND LUG | ▲ | WIRE NUT |

## NOTES:

1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
2. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
3. TRANSFORMER FACTORY WIRED FOR CORRECT VOLTAGE - 230 VOLT SHOWN. FOR 208 VOLT OPERATION MOVE BLACK FROM 240 VOLT TAP TO 208 VOLT TAP.
4. CONNECT FIELD WIRE TO FACTORY SUPPLIED POWER BLOCK IN ELECTRIC HEAT SECTION.
5. LOW VOLTAGE CIRCUIT IS N.E.C CLASS 2 WITH A CLASS 2 TRANSFORMER, 24V, 50/60 HZ SUPPLIED.
6. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.
7. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
8. REMOVE PL7 FOR SMOKE DETECTOR ACCESSORY. PL 6 & PL7 LOCATED IN RETURN AIR SECTION.
9. ECONOMIZER LOGIC MODULE (ELM)

## WIRING INFORMATION

LINE VOLTAGE
- -FACTORY STANDARD
- -FACTORY OPTION
- -FIELD INSTALLED

LOW VOLTAGE
- -FACTORY STANDARD
- -FACTORY OPTION
- -FIELD INSTALLED

REPLACEMENT WIRE
- -MUST BE THE SAME SIZE AND TYPE OF INSULATION AS ORIGINAL (105 C°MIN.)

WARNING
- -CABINET MUST BE PERMANENTLY GROUNDED AND CONFORM TO I.E.C., N.E.C., C.E.C. AND LOCAL CODES AS APPLICABLE.

## WIRE COLOR CODE

| | | | | | |
|---|---|---|---|---|---|
| BK | BLACK | GY | GRAY | R | RED |
| BR | BROWN | O | ORANGE | W | WHITE |
| BL | BLUE | PK | PINK | Y | YELLOW |
| G | GREEN | PR | PURPLE | | |

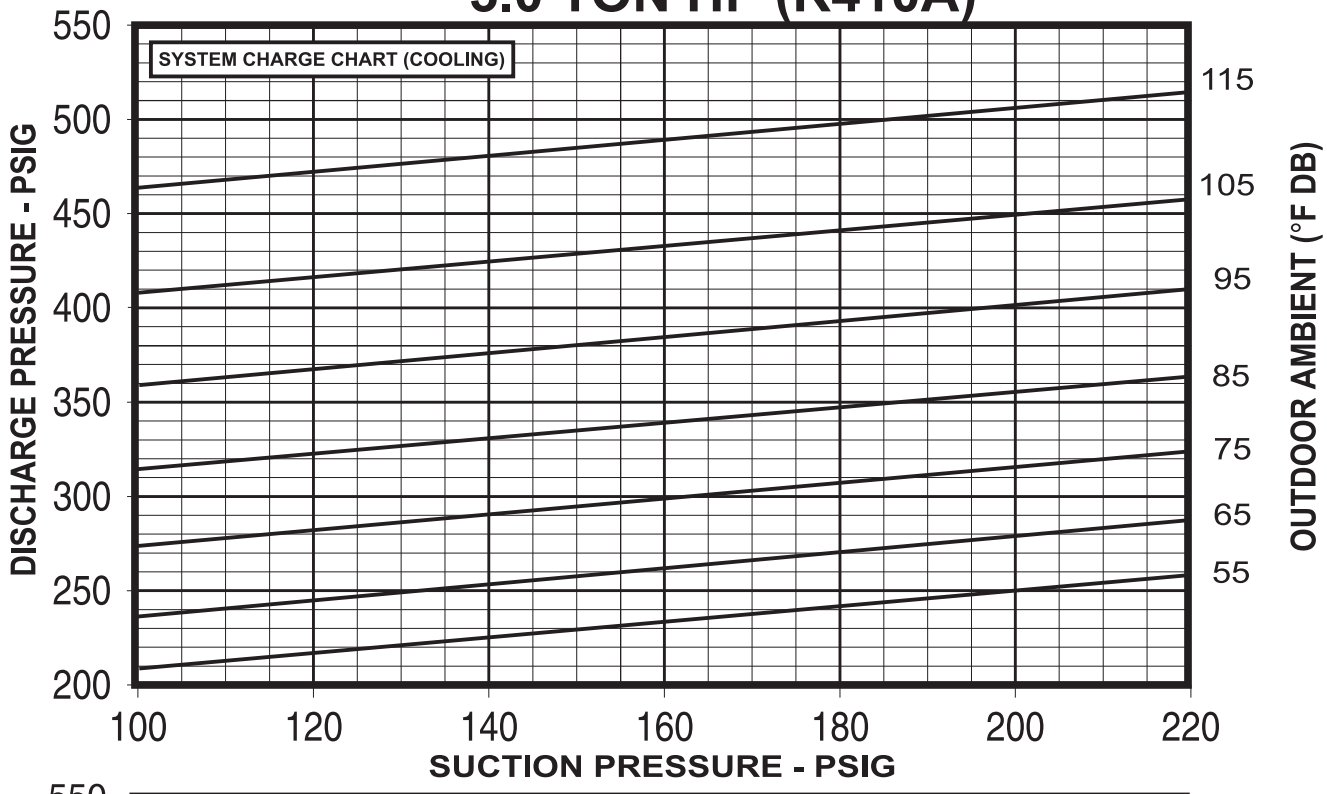
## ELECTRICAL WIRING DIAGRAM

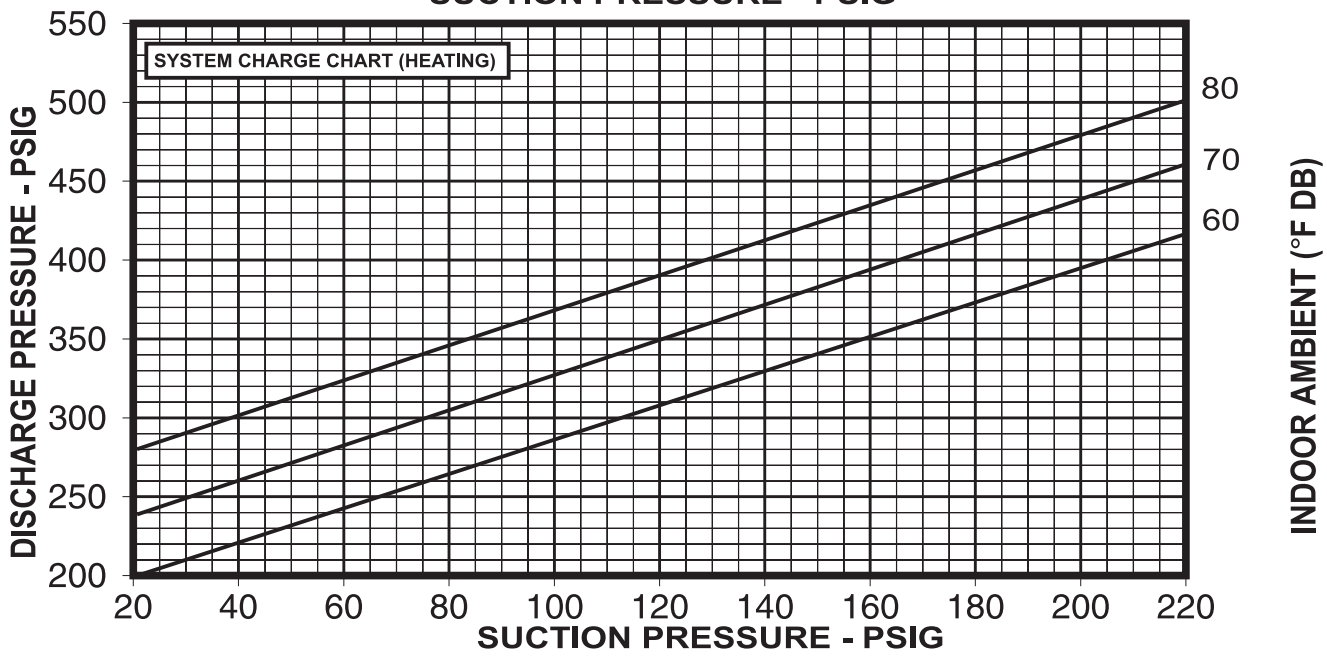
208-230/460V 3 PH, 60 HZ.
HEAT PUMP W/RTU-C
3 - 6 TON

| DR. BY | APP. BY | DATE | DWG. NO. | REV |
|---|---|---|---|---|
| MGR | | 7-27-09 | 90-103232-02 | 02 |

## (13 & 14 SEER)

# 3.0 TON HP (R410A)




**CAUTION:** BEFORE FINAL REFRIGERANT CHECK, INDOOR RETURN AIR TEMPERATURE MUST BE BETWEEN 72°F & 76°F DB AT 50% R.H. (HEATING AND COOLING), AND NO ICE ON OUTDOOR COILS (HEATING).

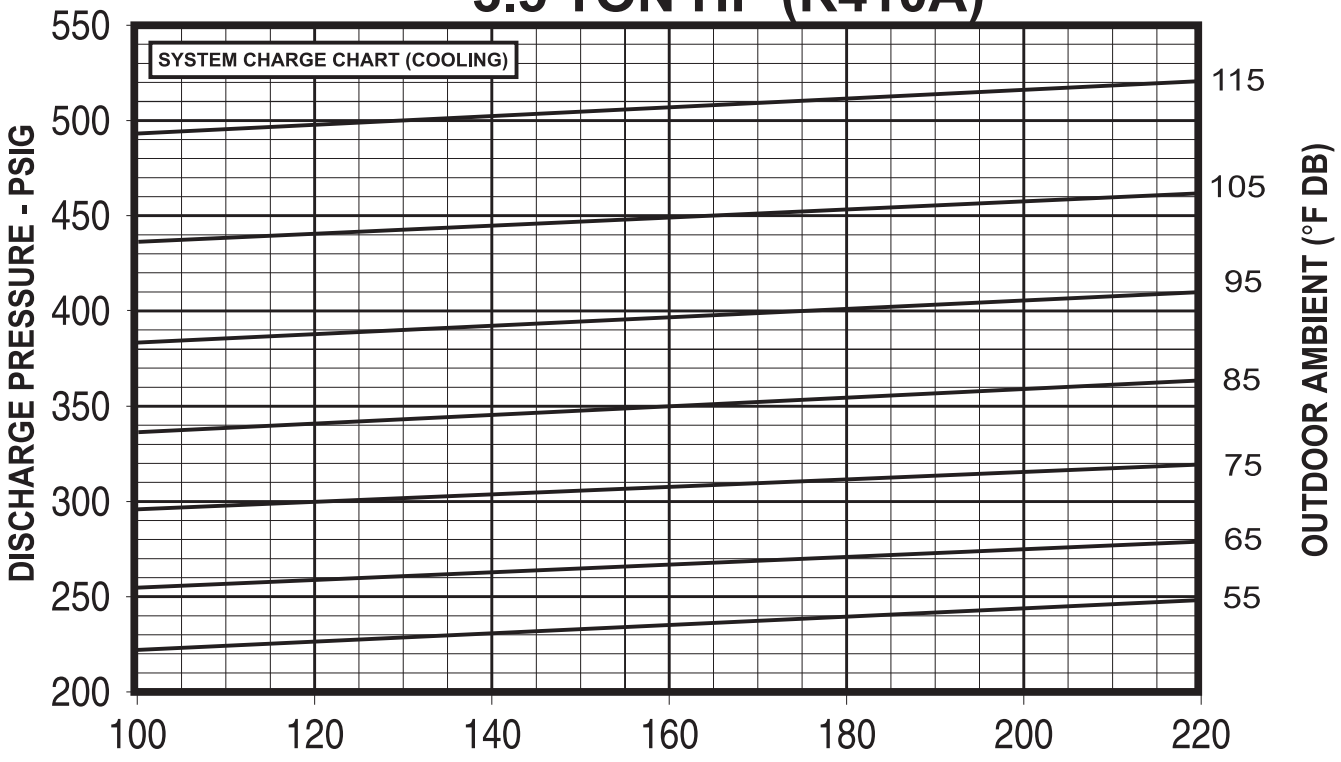
INSTRUCTIONS:

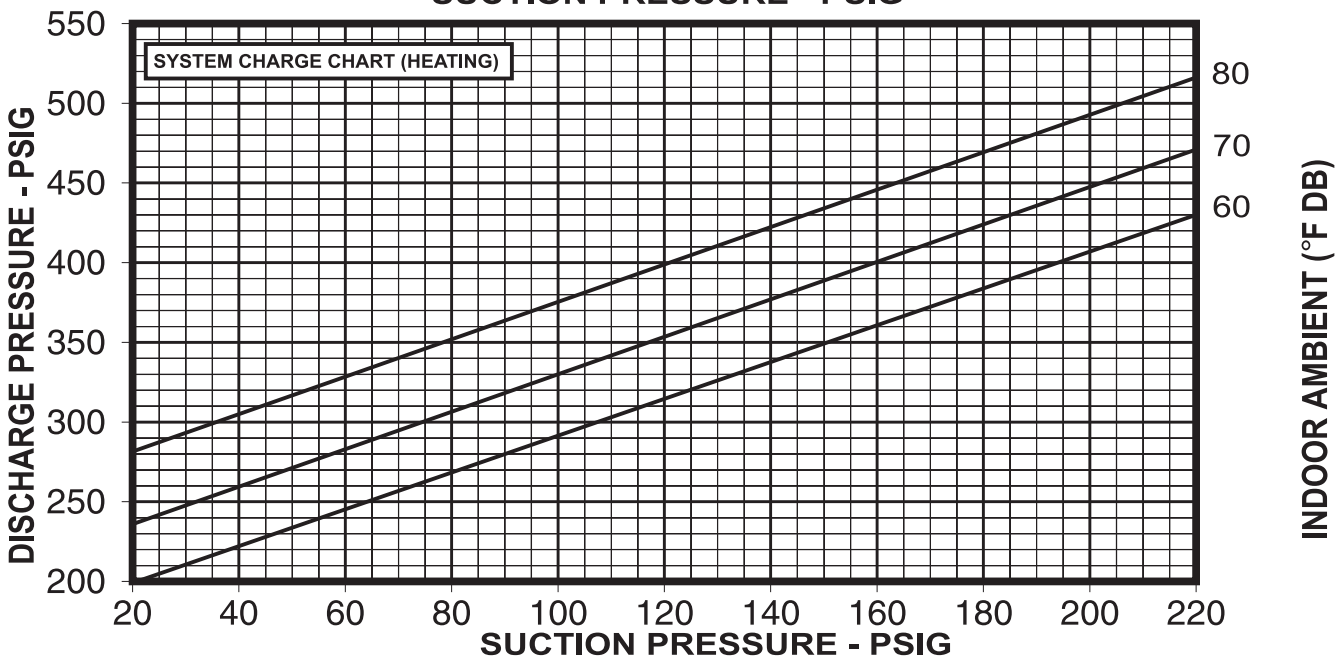
1. CONNECT PRESSURE GAUGES TO SUCTION AND DISCHARGE PORTS ON UNIT.
2. MEASURE AIR TEMPERATURE TO: (a) OUTDOOR COIL FOR COOLING, (b) INDOOR COIL FOR HEATING.
3. PLACE AN "X" ON THE APPROPRIATE CHART WHERE THE SUCTION AND DISCHARGE PRESSURES CROSS.
4. IF "X" IS BELOW AMBIENT TEMPERATURE LINE, ADD CHARGE AND REPEAT STEP 3.
5. IF "X" IS ABOVE AMBIENT TEMPERATURE LINE, RECOVER EXCESS CHARGE AND REPEAT STEP 3.

92-102380-01-00

## (13 & 14 SEER)

# 3.5 TON HP (R410A)



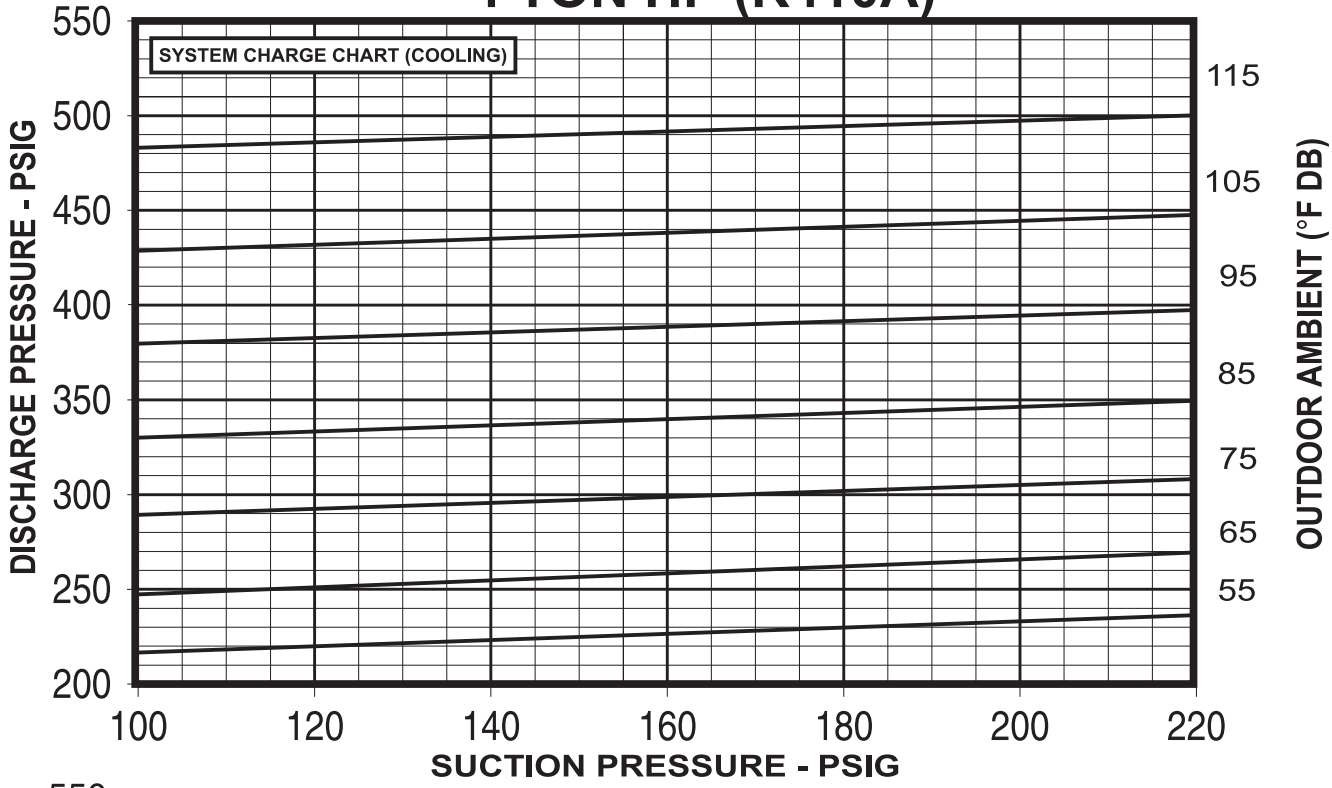

**CAUTION:** BEFORE FINAL REFRIGERANT CHECK, INDOOR RETURN AIR TEMPERATURE MUST BE BETWEEN 72°F & 76°F DB AT 50% R.H. (HEATING AND COOLING), AND NO ICE ON OUTDOOR COILS (HEATING).

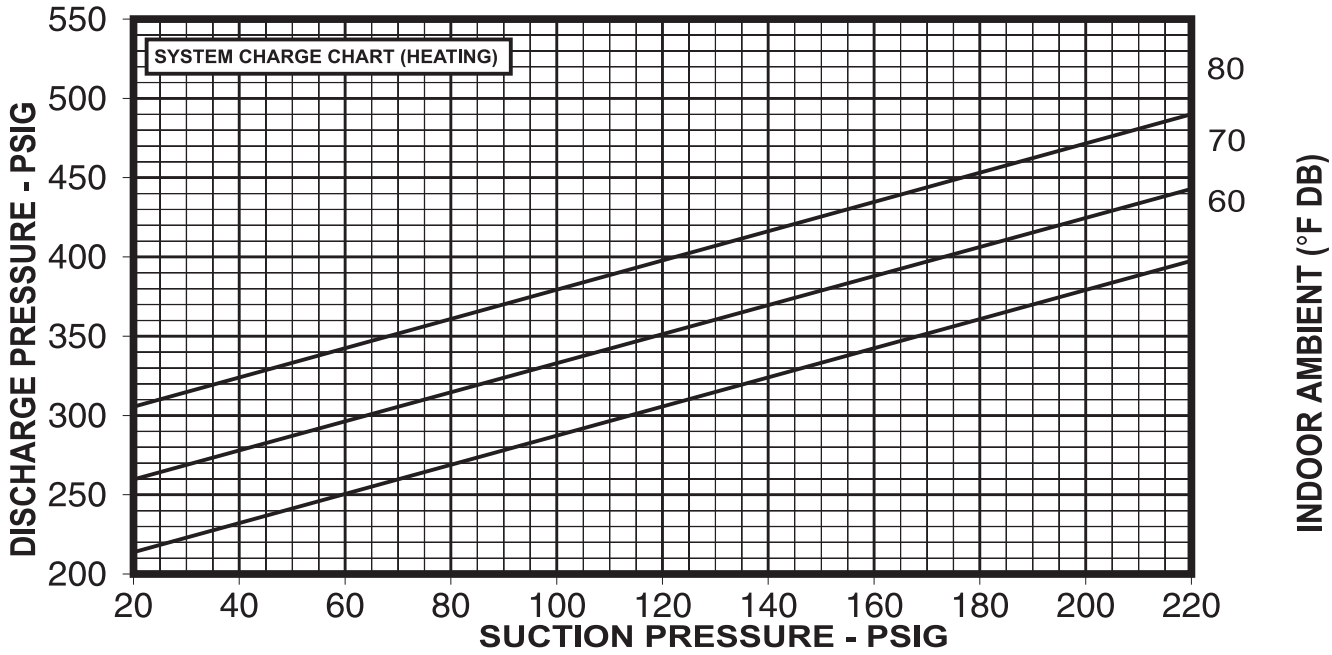
INSTRUCTIONS:

1. CONNECT PRESSURE GAUGES TO SUCTION AND DISCHARGE PORTS ON UNIT.
2. MEASURE AIR TEMPERATURE TO: (a) OUTDOOR COIL FOR COOLING, (b) INDOOR COIL FOR HEATING.
3. PLACE AN "X" ON THE APPROPRIATE CHART WHERE THE SUCTION AND DISCHARGE PRESSURES CROSS.
4. IF "X" IS BELOW AMBIENT TEMPERATURE LINE, ADD CHARGE AND REPEAT STEP 3.
5. IF "X" IS ABOVE AMBIENT TEMPERATURE LINE, RECOVER EXCESS CHARGE AND REPEAT STEP 3.

92-102380-02-00

# 4 TON HP (R410A)




**CAUTION:** BEFORE FINAL REFRIGERANT CHECK, INDOOR RETURN AIR TEMPERATURE MUST BE BETWEEN 72°F & 76°F DB AT 50% R.H. (HEATING AND COOLING), AND NO ICE ON OUTDOOR COILS (HEATING).

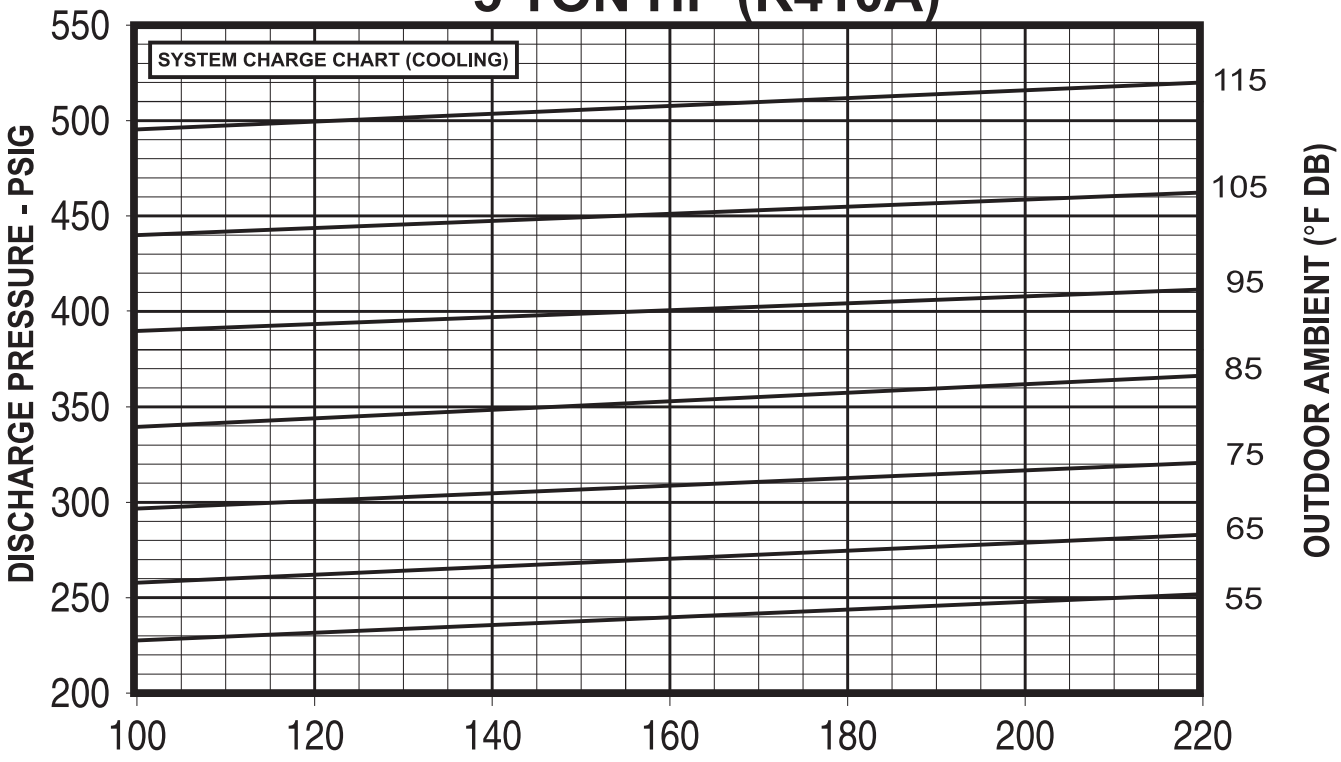
INSTRUCTIONS:

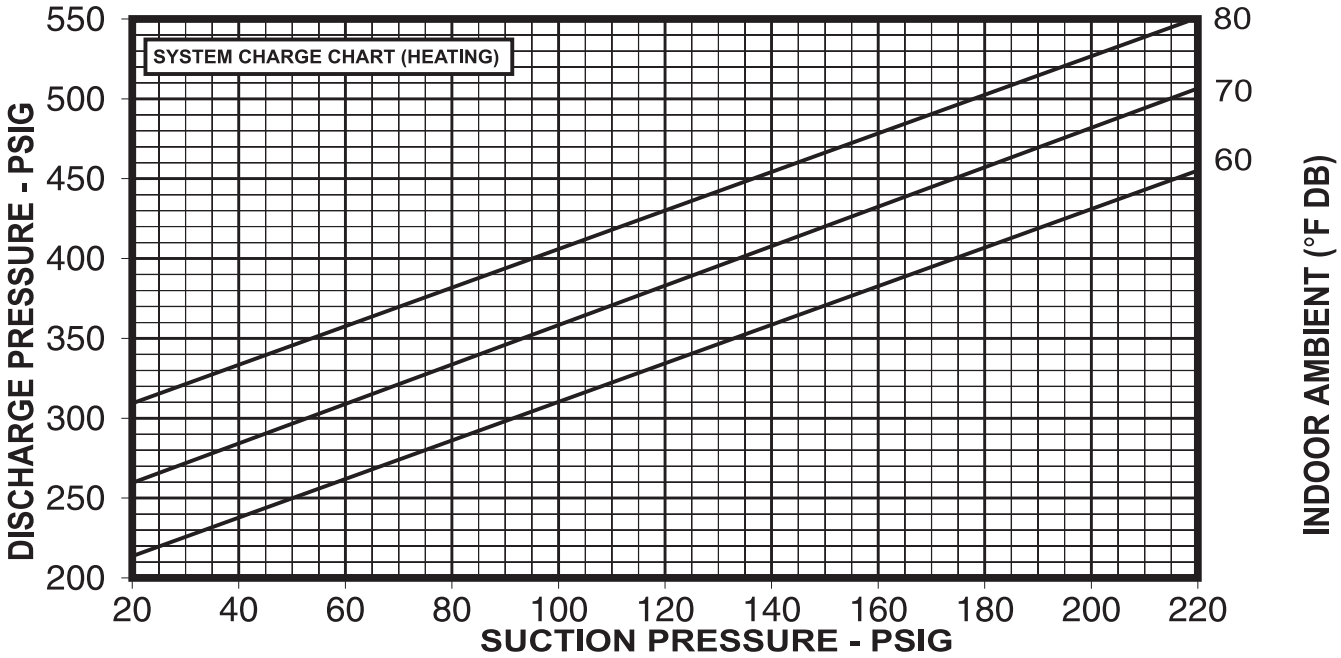
1. CONNECT PRESSURE GAUGES TO SUCTION AND DISCHARGE PORTS ON UNIT.
2. MEASURE AIR TEMPERATURE TO: (a) OUTDOOR COIL FOR COOLING, (b) INDOOR COIL FOR HEATING.
3. PLACE AN "X" ON THE APPROPRIATE CHART WHERE THE SUCTION AND DISCHARGE PRESSURES CROSS.
4. IF "X" IS BELOW AMBIENT TEMPERATURE LINE, ADD CHARGE AND REPEAT STEP 3.
5. IF "X" IS ABOVE AMBIENT TEMPERATURE LINE, RECOVER EXCESS CHARGE AND REPEAT STEP 3.

92-102380-03-00

# 5 TON – 13 SEER

## 5 TON HP (R410A)




**CAUTION:** BEFORE FINAL REFRIGERANT CHECK, INDOOR RETURN AIR TEMPERATURE MUST BE BETWEEN 72°F & 76°F DB AT 50% R.H. (HEATING AND COOLING), AND NO ICE ON OUTDOOR COILS (HEATING).

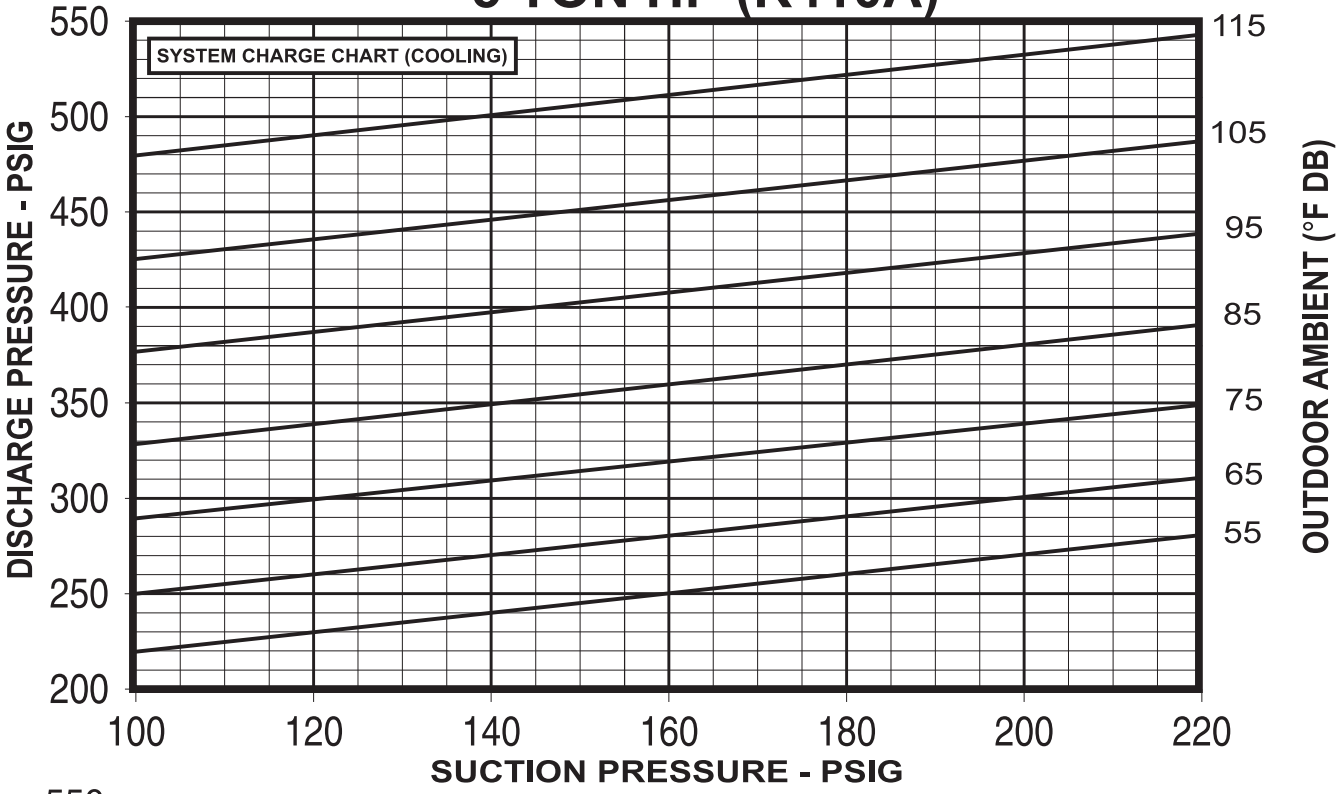
INSTRUCTIONS:

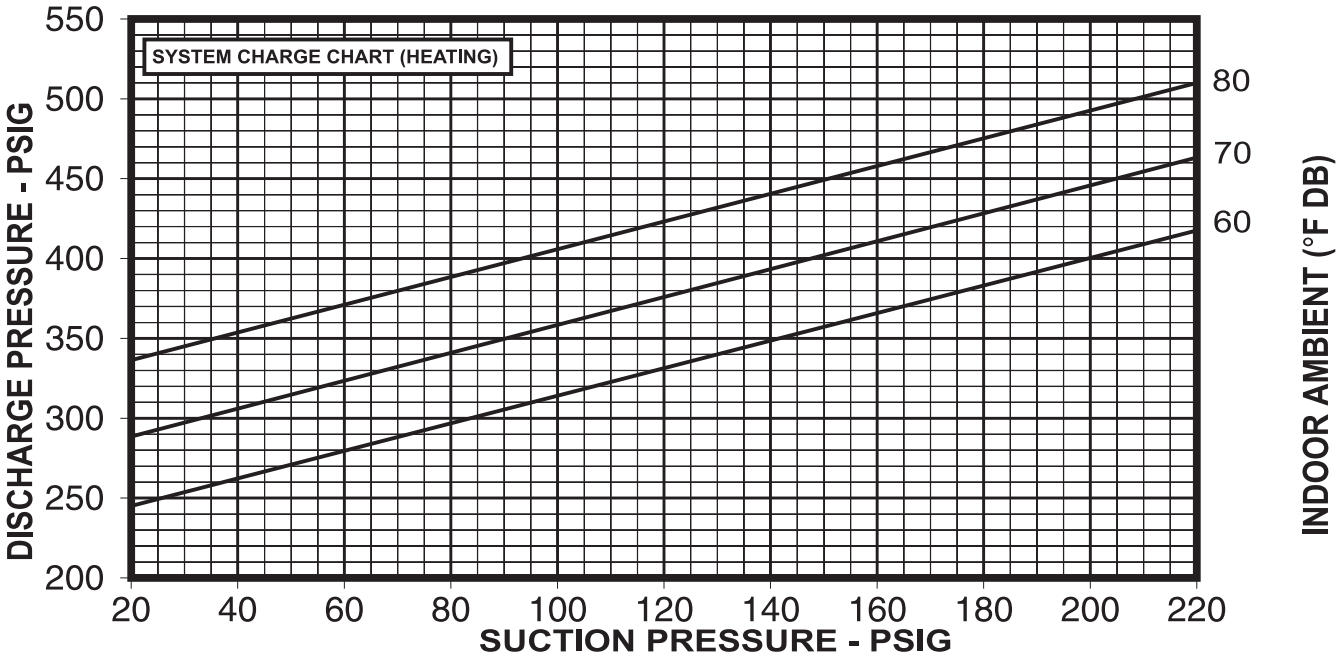
1. CONNECT PRESSURE GAUGES TO SUCTION AND DISCHARGE PORTS ON UNIT.
2. MEASURE AIR TEMPERATURE TO: (a) OUTDOOR COIL FOR COOLING, (b) INDOOR COIL FOR HEATING.
3. PLACE AN "X" ON THE APPROPRIATE CHART WHERE THE SUCTION AND DISCHARGE PRESSURES CROSS.
4. IF "X" IS BELOW AMBIENT TEMPERATURE LINE, ADD CHARGE AND REPEAT STEP 3.
5. IF "X" IS ABOVE AMBIENT TEMPERATURE LINE, RECOVER EXCESS CHARGE AND REPEAT STEP 3.

92-102380-04-00

# 5 TON – 14 SEER

## 5 TON HP (R410A)



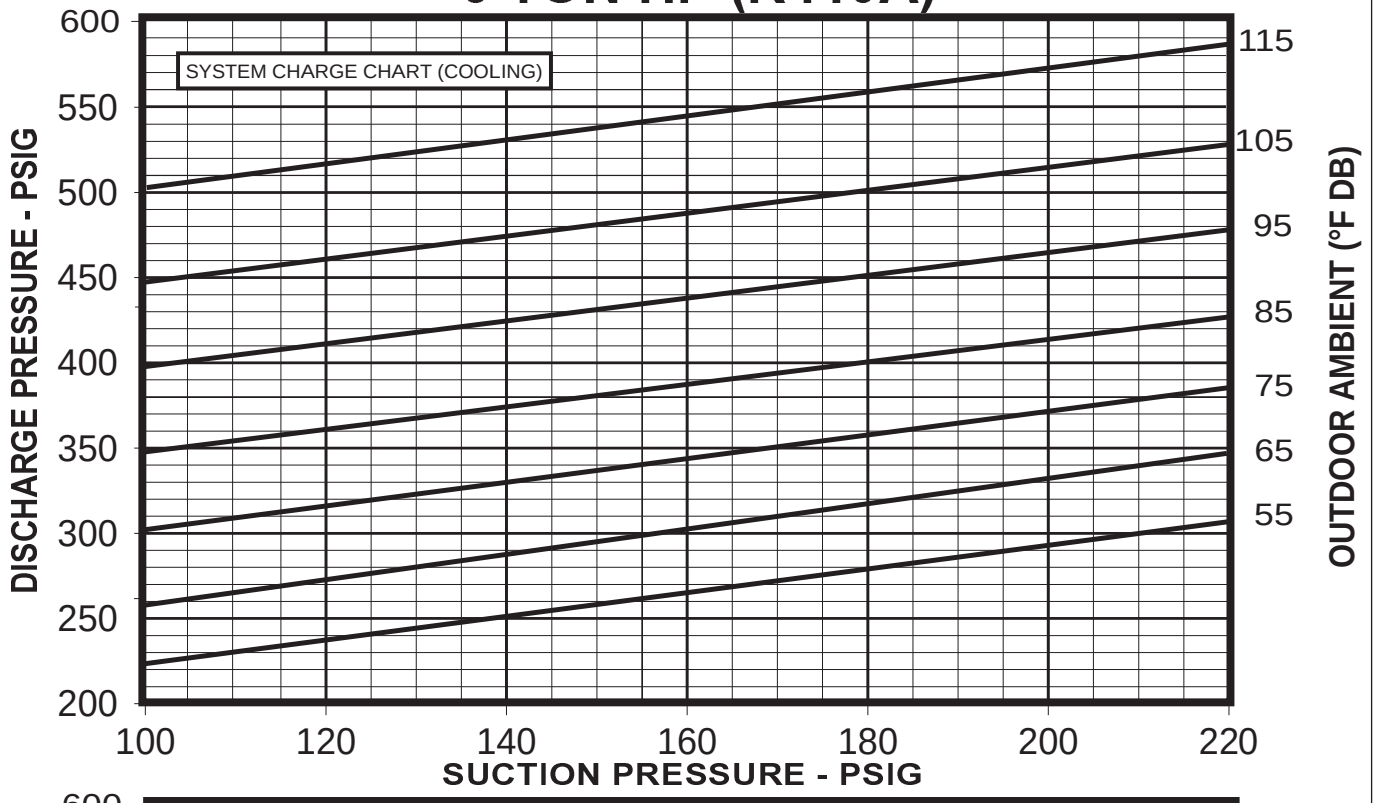

**CAUTION:** BEFORE FINAL REFRIGERANT CHECK, INDOOR RETURN AIR TEMPERATURE MUST BE BETWEEN 72°F & 76°F DB AT 50% R.H. (HEATING AND COOLING), AND NO ICE ON OUTDOOR COILS (HEATING).

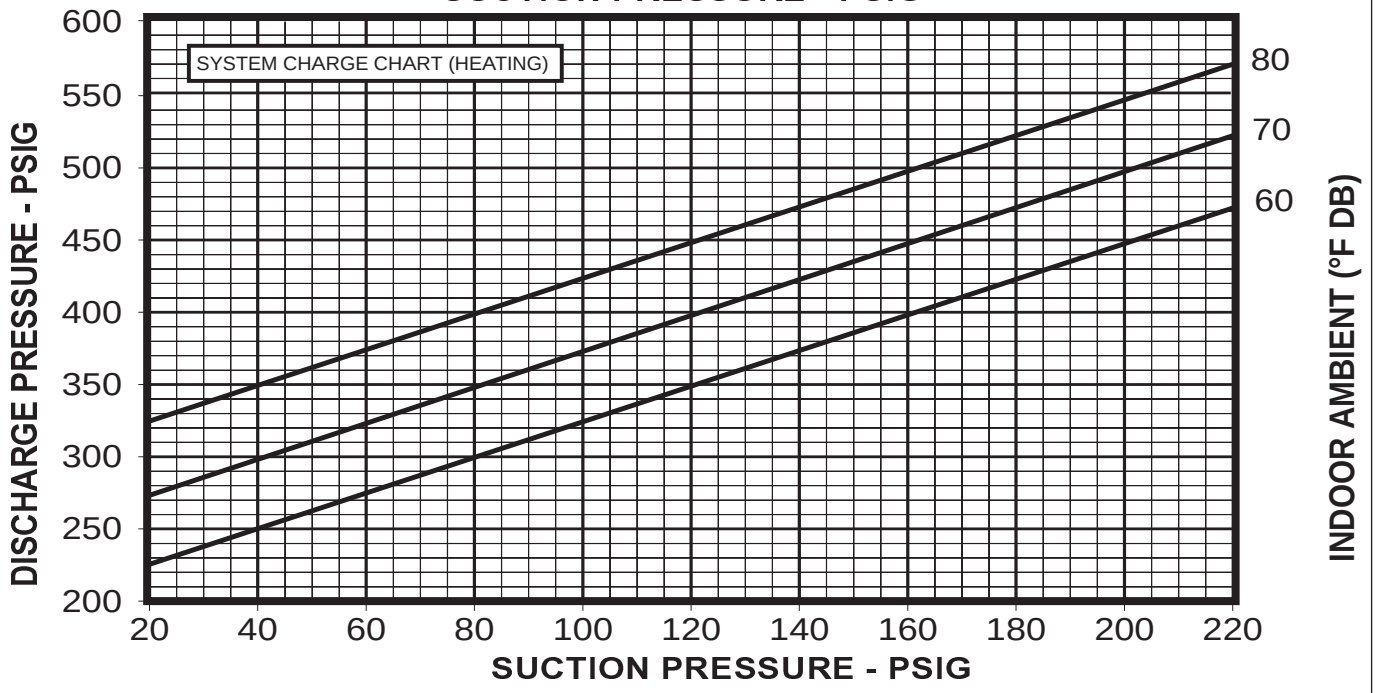
INSTRUCTIONS:

1. CONNECT PRESSURE GAUGES TO SUCTION AND DISCHARGE PORTS ON UNIT.
2. MEASURE AIR TEMPERATURE TO: (a) OUTDOOR COIL FOR COOLING, (b) INDOOR COIL FOR HEATING.
3. PLACE AN "X" ON THE APPROPRIATE CHART WHERE THE SUCTION AND DISCHARGE PRESSURES CROSS.
4. IF "X" IS BELOW AMBIENT TEMPERATURE LINE, ADD CHARGE AND REPEAT STEP 3.
5. IF "X" IS ABOVE AMBIENT TEMPERATURE LINE, RECOVER EXCESS CHARGE AND REPEAT STEP 3.

92-102380-05-00

# 6 TON HP (R410A)




**CAUTION:** BEFORE FINAL REFRIGERANT CHECK, INDOOR RETURN AIR TEMPERATURE MUST BE BETWEEN 72°F & 76°F DB AT 50% R.H. (HEATING AND COOLING), AND NO ICE ON OUTDOOR COILS (HEATING).

INSTRUCTIONS:

1. CONNECT PRESSURE GAUGES TO SUCTION AND DISCHARGE PORTS ON UNIT.
2. MEASURE AIR TEMPERATURE TO: (a) OUTDOOR COIL FOR COOLING, (b) INDOOR COIL FOR HEATING.
3. PLACE AN "X" ON THE APPROPRIATE CHART WHERE THE SUCTION AND DISCHARGE PRESSURES CROSS.
4. IF "X" IS BELOW AMBIENT TEMPERATURE LINE, ADD CHARGE AND REPEAT STEP 3.
5. IF "X" IS ABOVE AMBIENT TEMPERATURE LINE, RECOVER EXCESS CHARGE AND REPEAT STEP 3.

92-102380-06-00

# TROUBLE SHOOTING CHART

**⚠ WARNING**

**DISCONNECT ALL POWER TO UNIT BEFORE SERVICING. CONTACTOR MAY BREAK ONLY ONE SIDE. FAILURE TO SHUT OFF POWER CAN CAUSE ELECTRICAL SHOCK RESULTING IN PERSONAL INJURY OR DEATH.**

| SYMPTOM | POSSIBLE CAUSE | REMEDY |
|---|---|---|
| Unit will not run | • Power off or loose electrical connection<br>• Thermostat out of calibration-set too high<br>• Defective contactor<br>• Blown fuses<br>• Transformer defective<br>• High pressure control open (if provided)<br>• Interconnecting low voltage wiring damaged | • Check for correct voltage at compressor contactor in control box<br>• Reset<br>• Check for 24 volts at contactor coil - replace if contacts are open<br>• Replace fuses<br>• Check wiring-replace transformer<br>• Reset-also see high head pressure remedy-<br>• Replace thermostat wiring |
| Condenser fan runs, compressor doesn't | • Run capacitor defective (single phase only)<br>• Loose connection<br>• Compressor stuck, grounded or open motor winding, open internal overload.<br>• Low voltage condition<br>• Low voltage condition | • Replace<br>• Check for correct voltage at compressor - check & tighten all connections<br>• Wait at least 2 hours for overload to reset. If still open, replace the compressor. At compressor terminals, voltage must be within 10% of rating<br>• Add start kit components |
| Insufficient cooling | • Improperly sized unit<br>• Improper airflow<br>• Incorrect refrigerant charge<br>• Air, non-condensibles or moisture in system<br>• Incorrect voltage | • Recalculate load<br>• Check - should be approximately 400 CFM per ton.<br>• Charge per procedure attached to unit service panel<br>• Recover refrigerant, evacuate & recharge, add filter drier<br>• At compressor terminals, voltage must be within 10% of rating plate volts when unit is operating. |
| Compressor short cycles | • Incorrect voltage<br>• Defective overload protector<br>• Refrigerant undercharge | • At compressor terminals, voltage must be ±10% of nameplate marking when unit is operating.<br>• Replace - check for correct voltage<br>• Add refrigerant |
| Registers sweat | • Low evaporator airflow | • Increase speed of blower or reduce restriction - replace air filter |
| High head-low vapor pressures | • Restriction in liquid line, expansion device or filter drier<br>• Flow check piston size too small<br>• Incorrect capillary tubes<br>• TXV does not open | • Remove or replace defective component<br>• Change to correct size piston<br>• Change coil assembly<br>• Replace TXV |
| High head-high or normal vapor pressure - Cooling mode | • Dirty condenser coil<br>• Refrigerant overcharge<br>• Condenser fan not running<br>• Air or non-condensibles in system | • Clean coil<br>• Correct system charge<br>• Repair or replace<br>• Recover refrigerant, evacuate & recharge |
| High head-high or normal vapor pressure - Heating mode | • Low air flow - condenser coil<br>• Refrigerant overcharge<br>• Air or non-condensibles in system<br>• Dirty condenser coil | • Check filters - correct to speed<br>• Correct system charge<br>• Recover refrigerant, evacuate & recharge<br>• Check filter - clean coil |
| Low head-high vapor pressures | • Defective Compressor valves | • Replace compressor |
| Low vapor - cool compressor - iced evaporator coil | • Low evaporator airflow<br>• Operating below 65°F outdoors<br>• Moisture in system<br>• TXV limiting refrigerant flow | • Increase speed of blower or reduce restriction - replace air filter<br>• Add Low Ambient Kit<br>• Recover refrigerant - evacuate & recharge - add filter drier<br>• Replace TXV |
| High vapor pressure | • Excessive load<br>• Defective compressor | • Recheck load calculation<br>• Replace |
| Fluctuating head & vapor pressures | • TXV hunting<br>• Air or non-condensate in system | • Check TXV bulb clamp - check air distribution on coil - replace TXV<br>• Recover refrigerant, evacuate & recharge |
| Gurgle or pulsing noise at expansion device or liquid line | • Air or non-condensibles in system | • Recover refrigerant, evacuate & recharge |