

# INSTALLATION INSTRUCTIONS

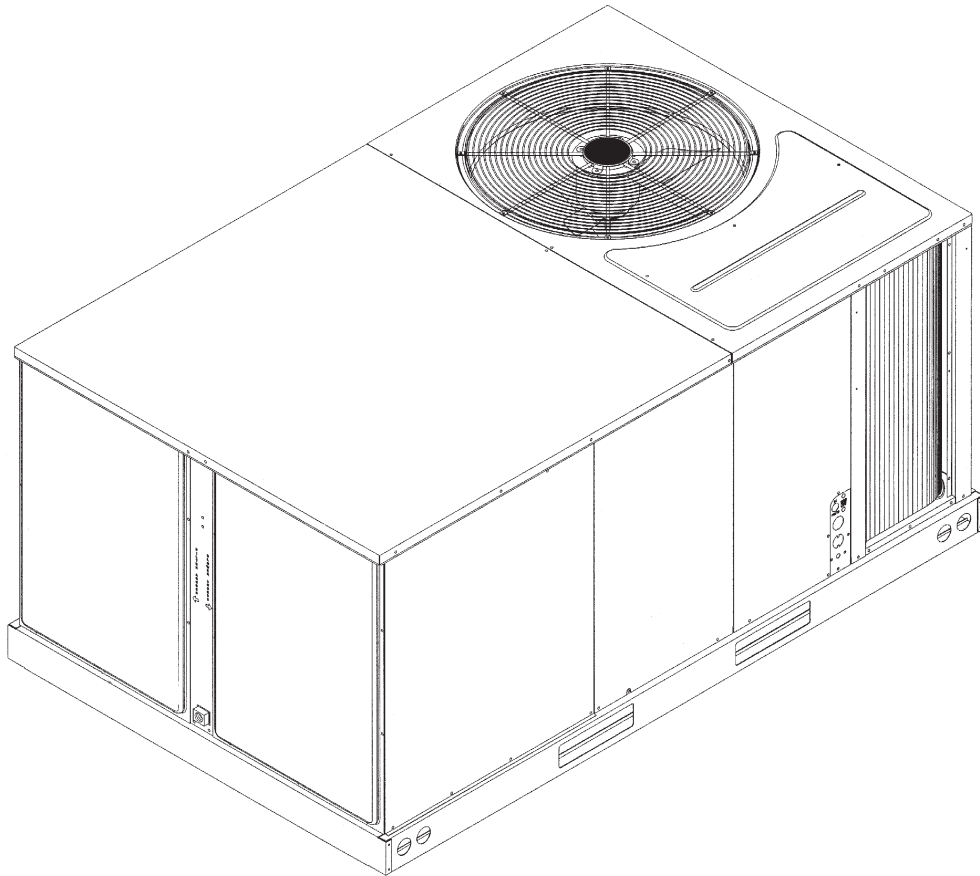
## PACKAGE HEAT PUMPS

RJNL 13 SEER SERIES (3-5 TON)

RJNL 11.0 EER SERIES (6 TON)

RJPL 14 SEER SERIES (3-5 TON)

FEATURING INDUSTRY STANDARD R-410A REFRIGERANT **R-410A**



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, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



**DO NOT DESTROY THIS MANUAL**  
PLEASE READ CAREFULLY AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE BY A SERVICEMAN

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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](http://WWW.OSHA.GOV) AND THE STATE OF CALIFORNIA'S OEHHA (OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT), AT [WWW.OEHHA.ORG](http://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

**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.**

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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 ductwork 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 receive 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 contaminants 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

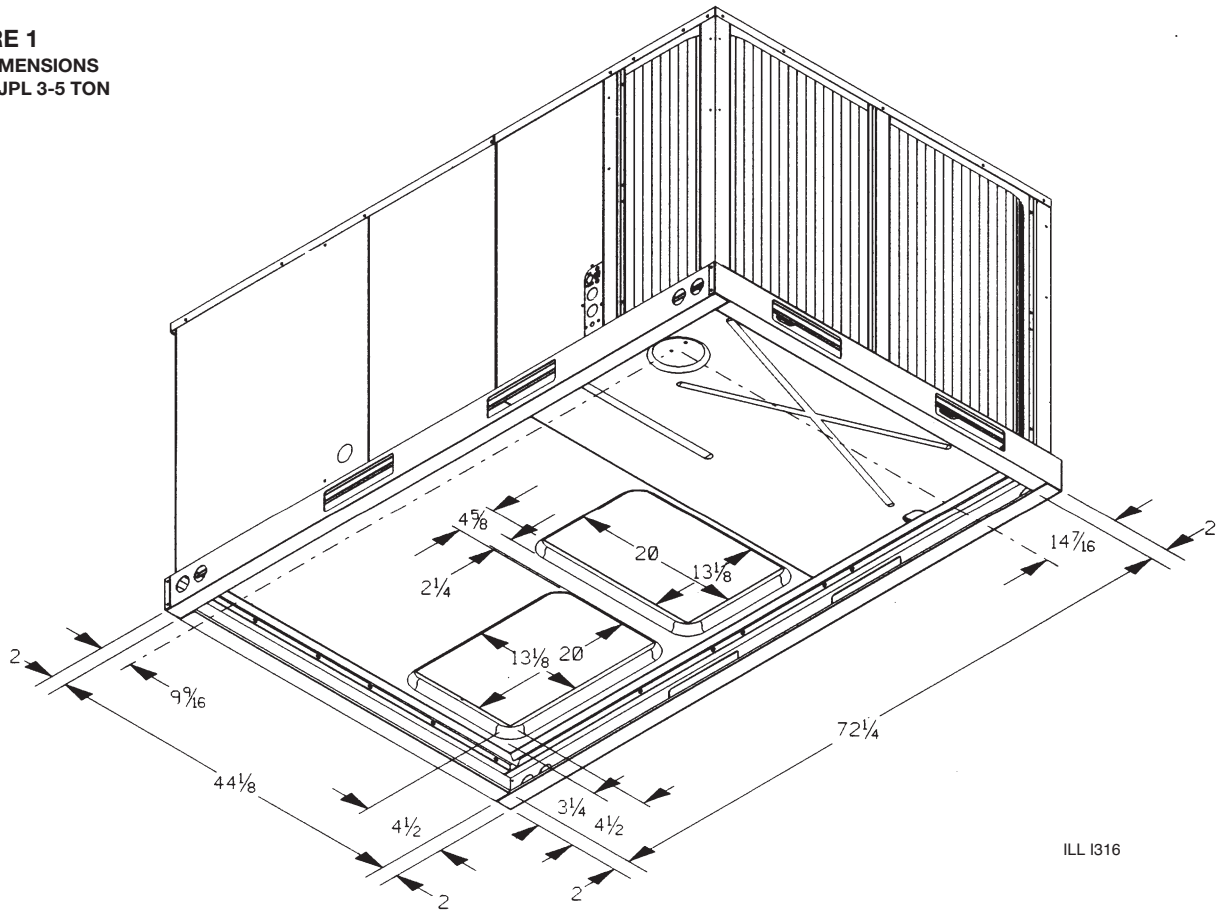
#### 1. PRE-INSTALLATION CHECK-POINTS

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.

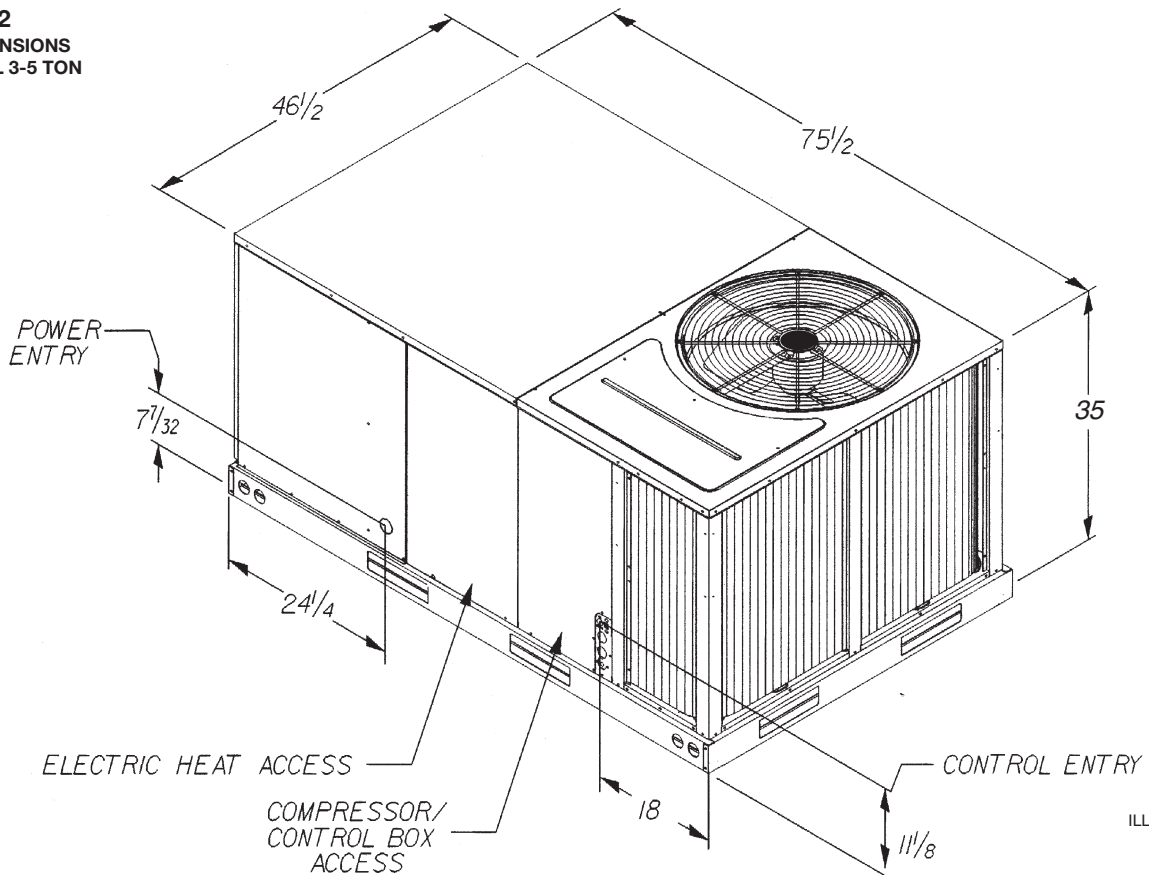


**FIGURE 1**  
**UNIT DIMENSIONS**  
**RJNL/RJPL 3-5 TON**



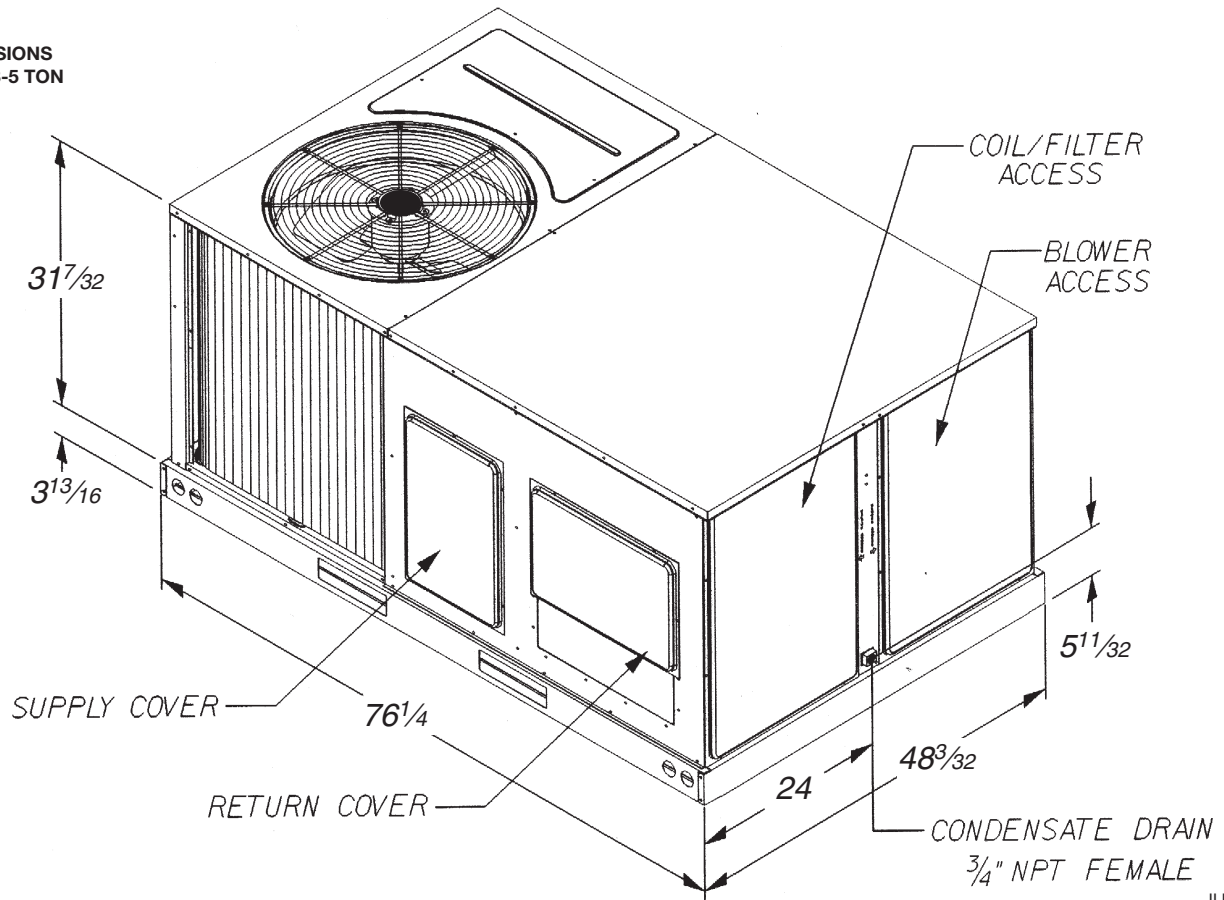
ILL 1316

**FIGURE 2**  
**UNIT DIMENSIONS**  
**RJNL/RJPL 3-5 TON**



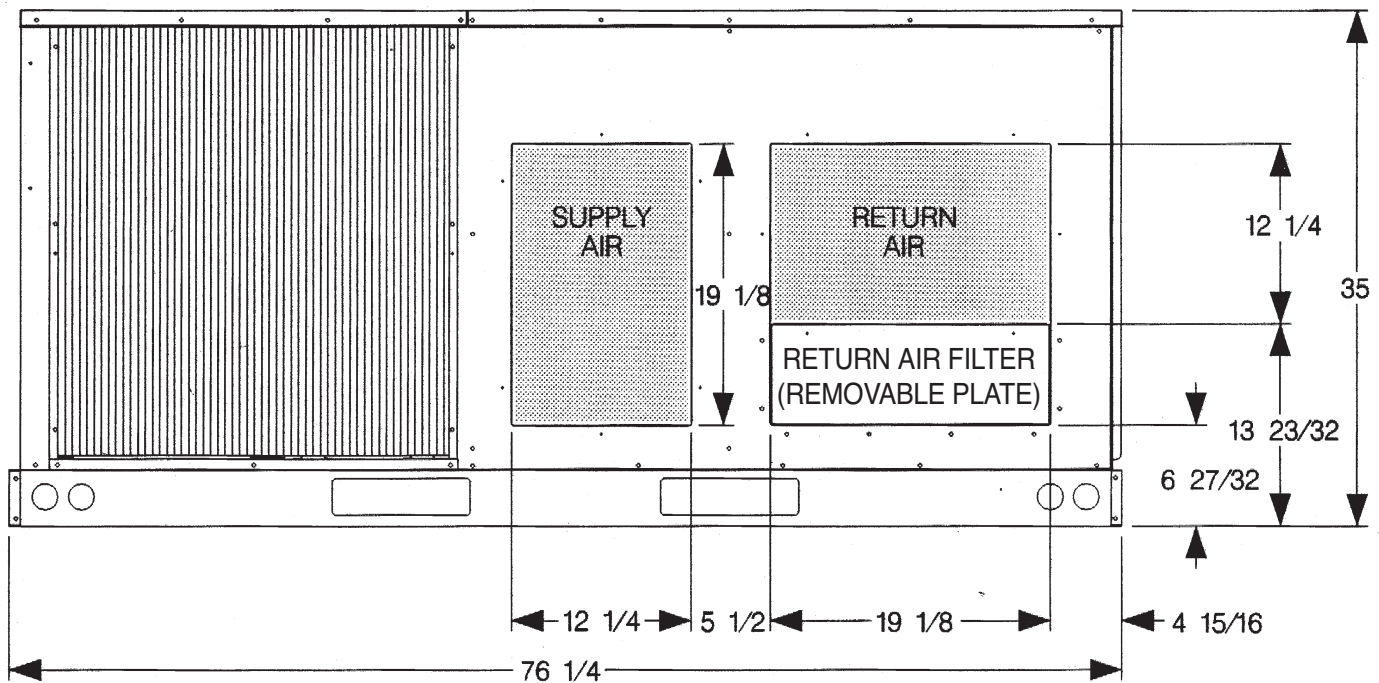
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**FIGURE 3**  
**UNIT DIMENSIONS**  
 RJNL/RJPL 3-5 TON



ILL 1304

**FIGURE 4**  
**UNIT DIMENSIONS**  
 RJNL/RJPL 3 TO 5 TON

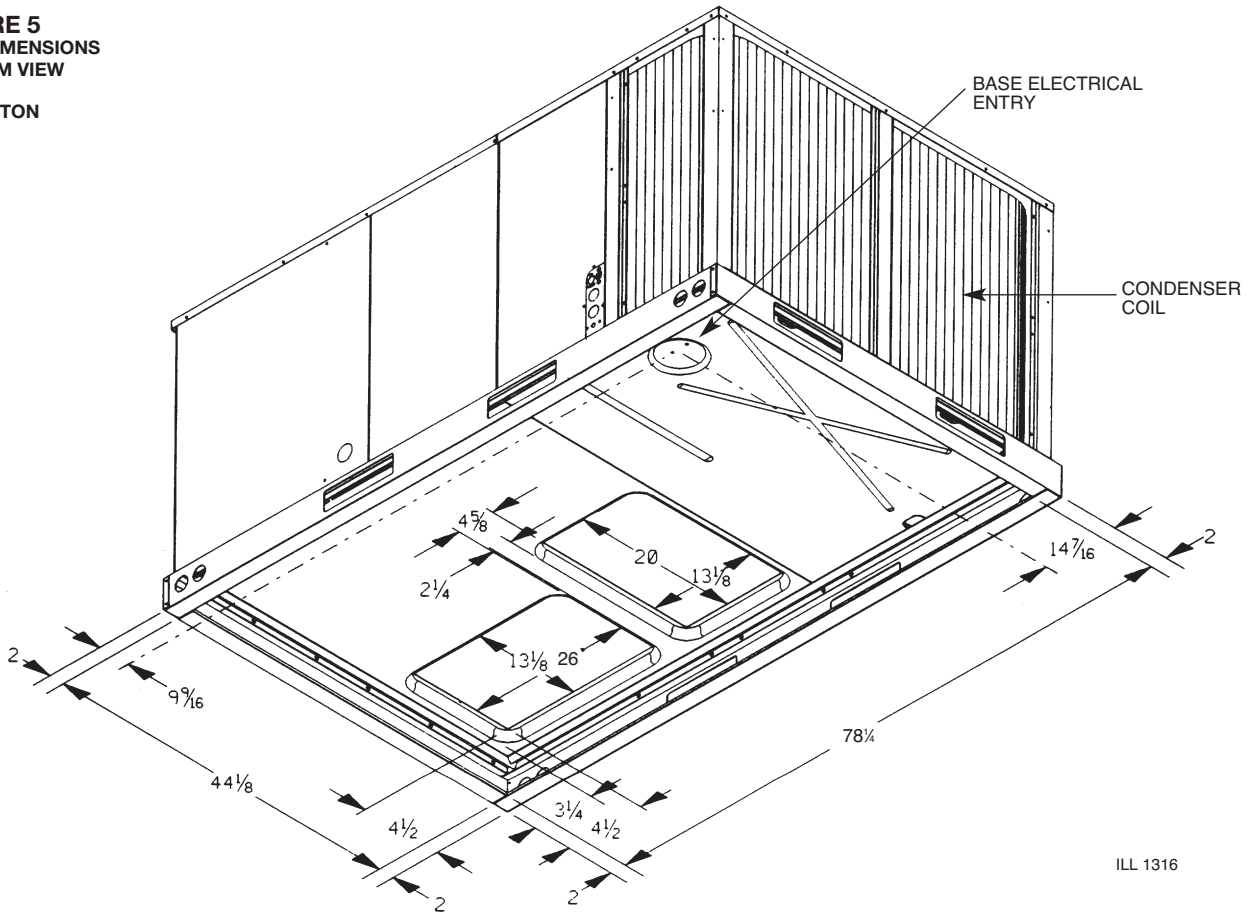


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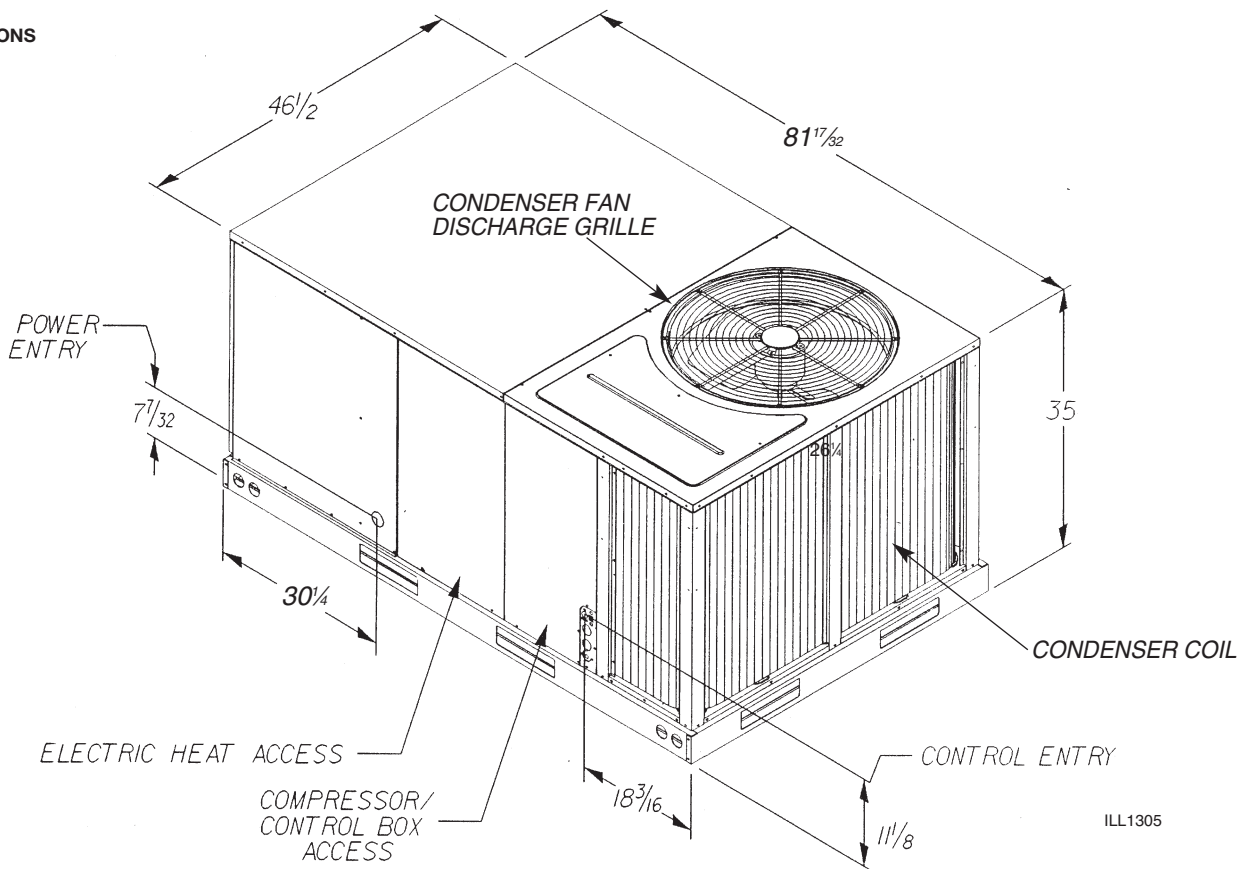
**FIGURE 5**  
UNIT DIMENSIONS  
BOTTOM VIEW

RJNL 6 TON



ILL 1316

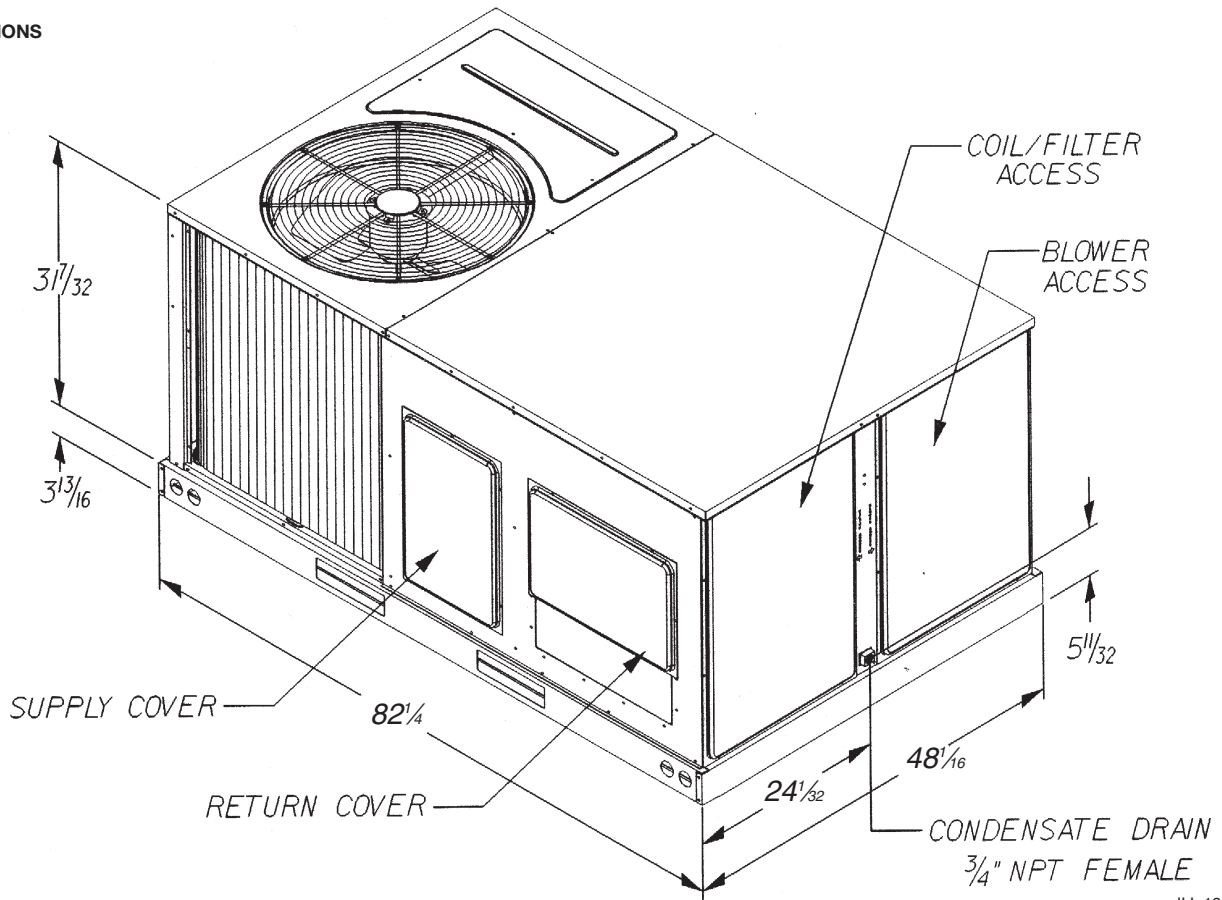
**FIGURE 6**  
UNIT DIMENSIONS  
RJNL 6 TON



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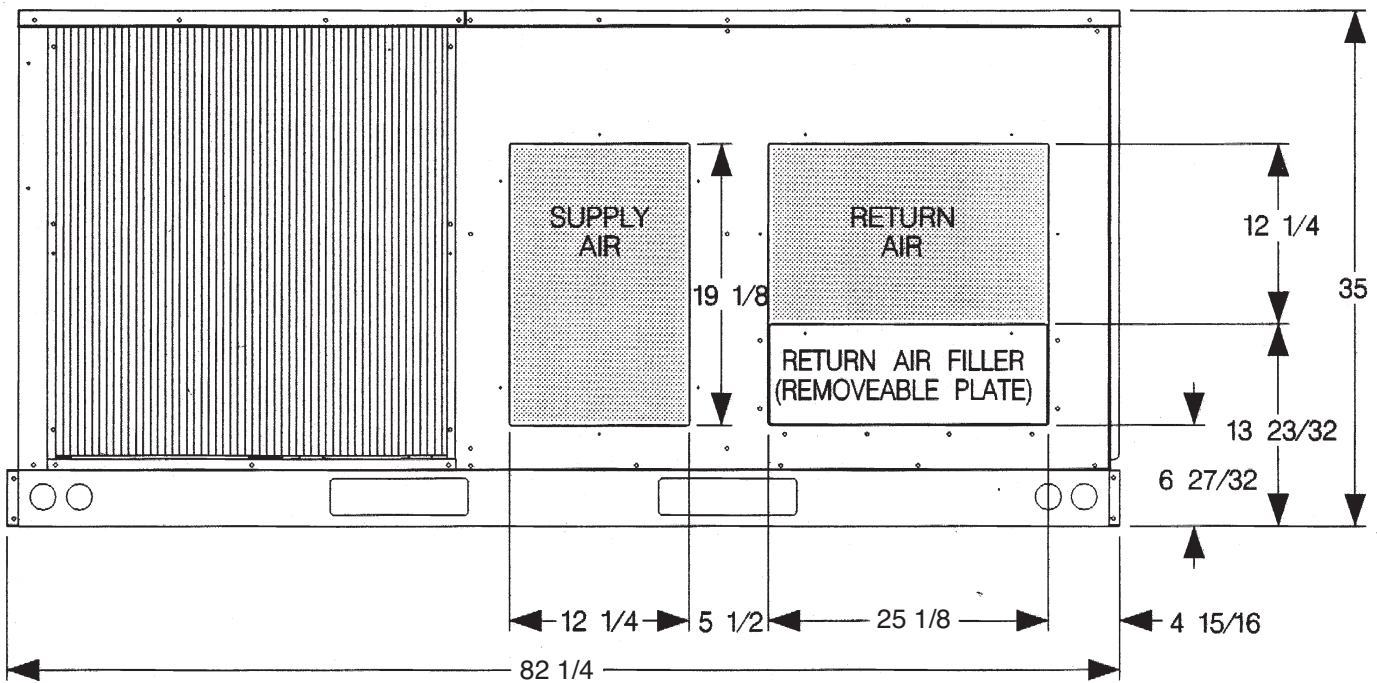
**FIGURE 7**  
UNIT DIMENSIONS

RJNL 6 TON



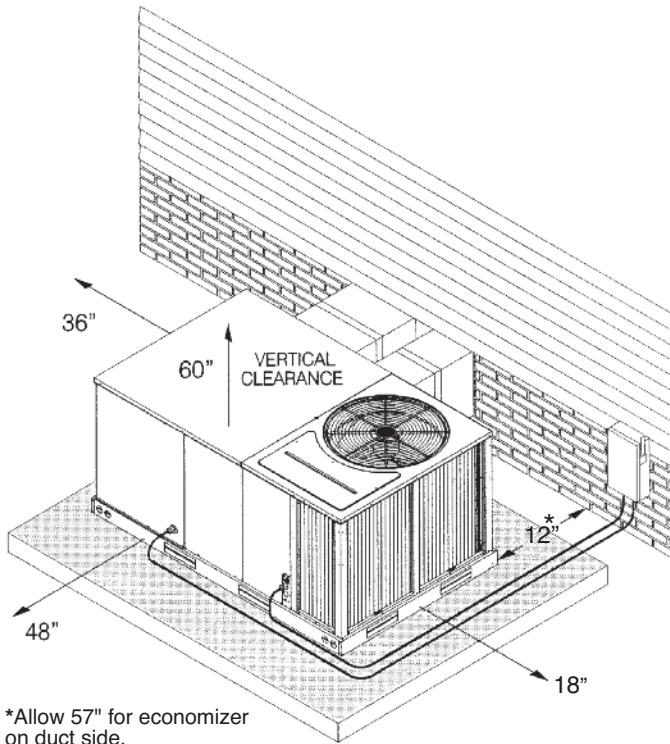
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**FIGURE 8**  
UNIT DIMENSIONS  
RJNL 6 TON



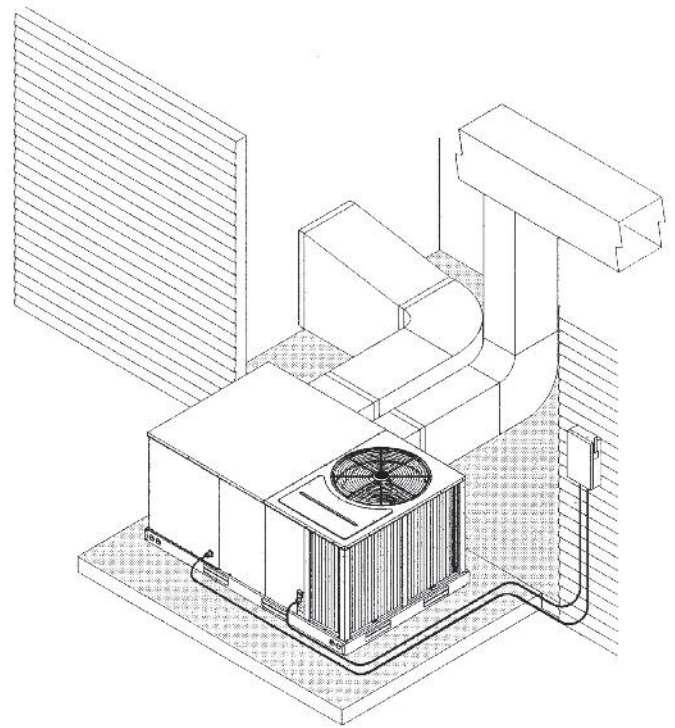
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**FIGURE 9**  
**PACKAGED HEAT PUMP**  
**OUTSIDE SLAB INSTALLATION, BASEMENT OR**  
**CRAWL SPACE DISTRIBUTION SYSTEM**



ILL 1308

**FIGURE 10**  
**PACKAGED HEAT PUMP**  
**OUTSIDE SLAB INSTALLATION, CLOSET DISTRIBUTION**  
**SYSTEM. SLAB FLOOR CONSTRUCTION**



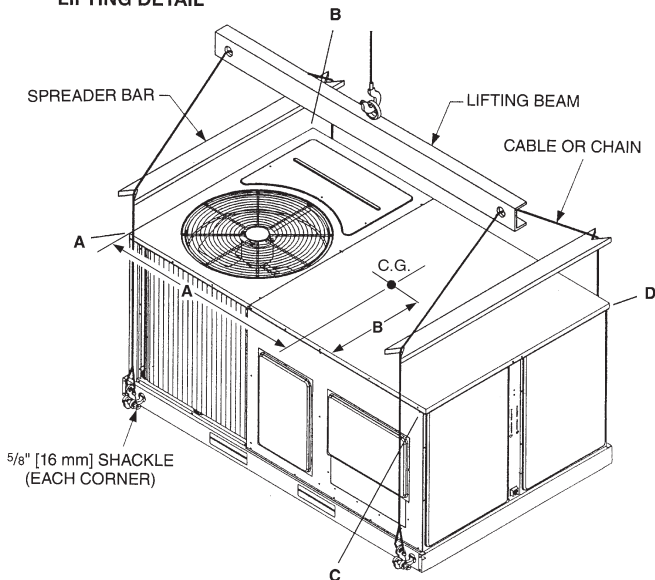
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**FIGURE 11**  
**PACKAGED HEAT PUMP**  
**RIGGING FOR LIFTING**

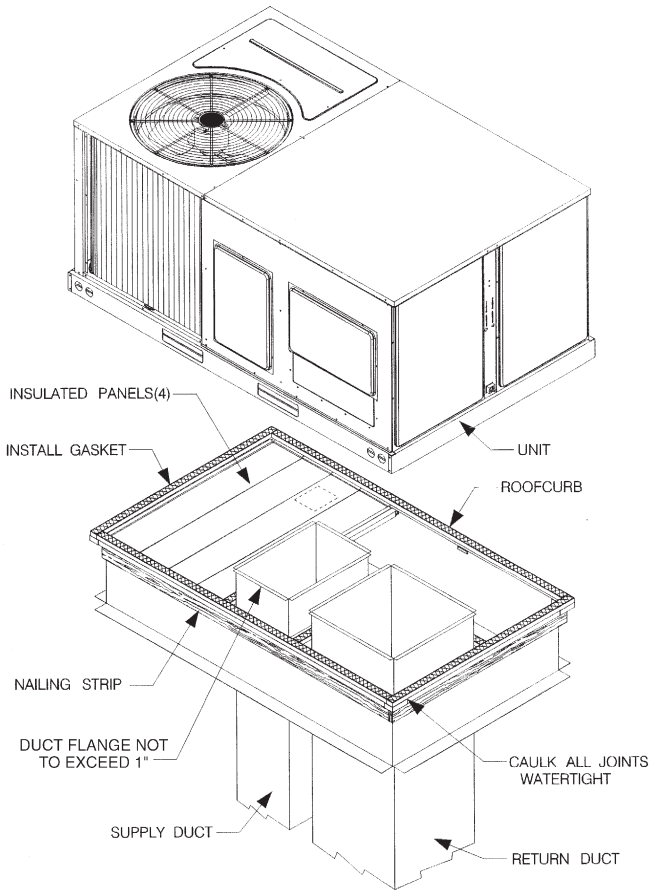
Capacity Tons [kW]	A in. [mm]	B in. [mm]
3.5 [10.6-17.6]	38 1/4 [972]	25 3/4 [654]
6 [21.1]	39 [991]	26 1/8 [664]

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%

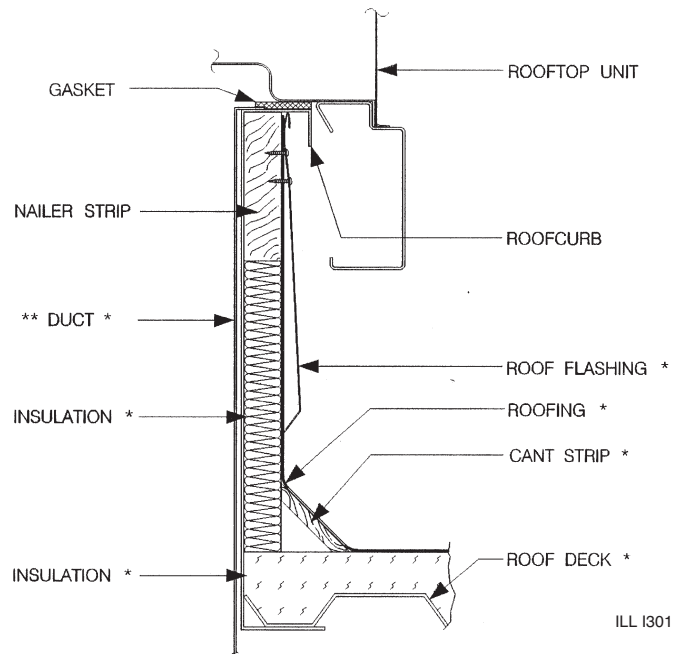
**LIFTING DETAIL**



**FIGURE 12**  
**PACKAGED HEAT PUMP**  
**ROOFCURB INSTALLATION**



ILL I300



\* 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.

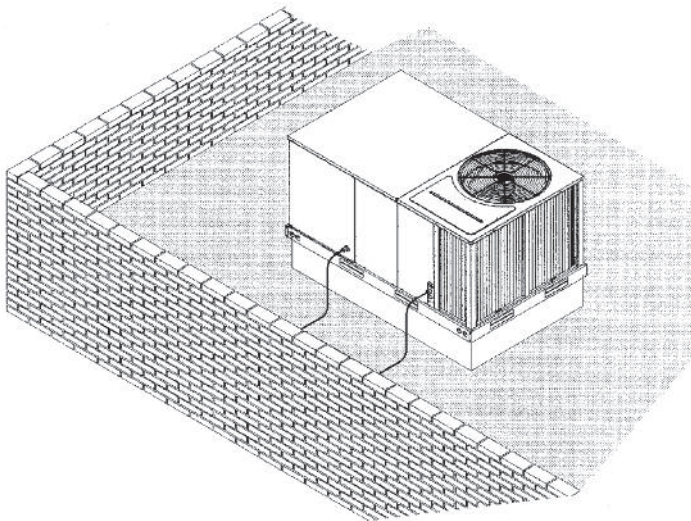
## B. OUTSIDE SLAB INSTALLATION

(Typical outdoor slab installations are shown in Figures 9 and 10.)

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.

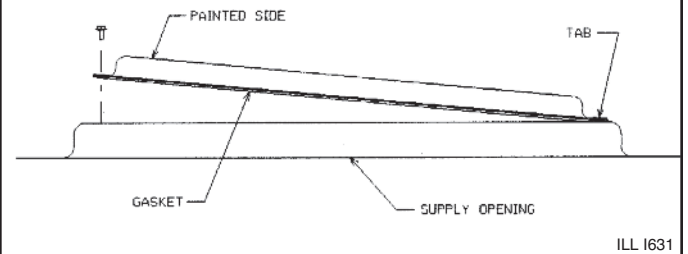


**FIGURE 13**  
**PACKAGED HEAT PUMP**  
**FLAT ROOFTOP INSTALLATION, ATTIC OR DROP CEILING**  
**DISTRIBUTION SYSTEM. MOUNTED ON**  
**ROOFCURB. CURB MUST BE LEVEL**



ILL I310

**FIGURE 14**  
**COVER GASKET DETAIL**



ILL I631

### 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 9 for illustration of minimum installation-service clearances.

### D. ROOFTOP INSTALLATION

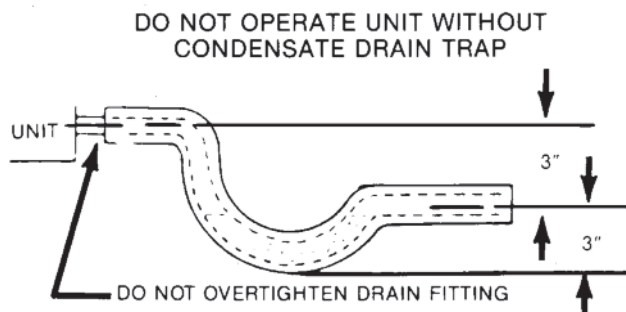
1. Before locating the unit on the roof, make sure that the strength of the roof and beams is adequate at that point to support the weight involved. (See specification sheet for weight of unit.) This is very important and user's responsibility.
2. For rigging and roofcurb details, see Figures 11 and 12. 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 13.
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.*

## 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 15**  
**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**

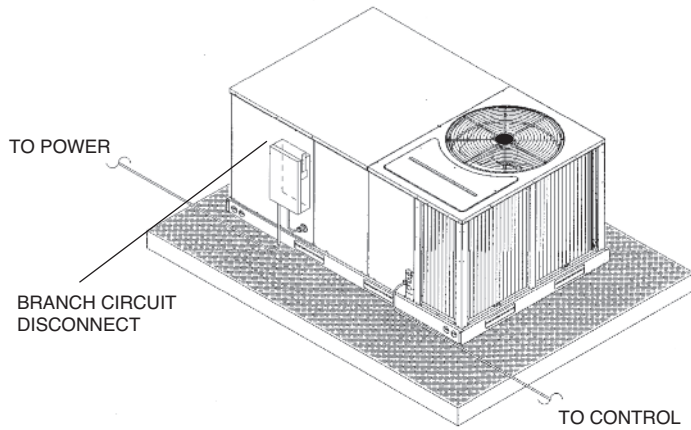
This unit is provided with 2 - 25" x 16" x 1" (3-5 ton) 4 - 16" x 16" x 1" (6 ton) disposable filters. When replacing filters, ensure they are inserted fully to the back to prevent bypass.

## **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 15. 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 16**  
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 15.

## 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.

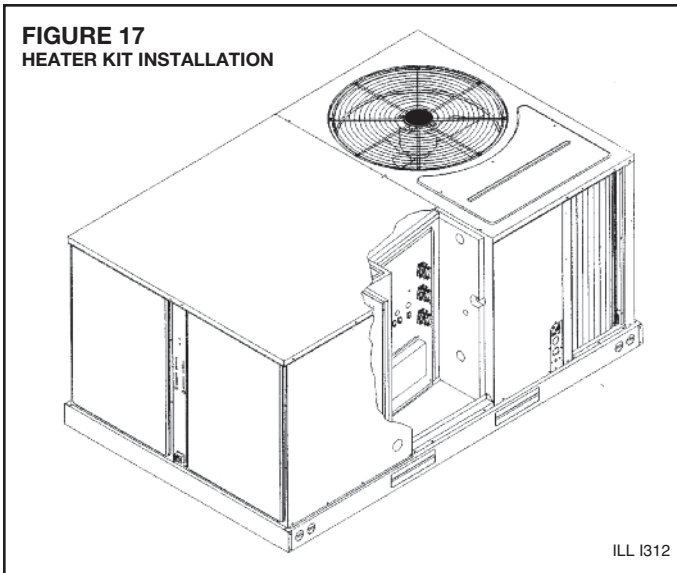
\*C.E.C. in Canada

### 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. A bracket is supplied with the unit for mounting a disconnect to the unit. Refer to Figure 16 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 pigtailed 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.

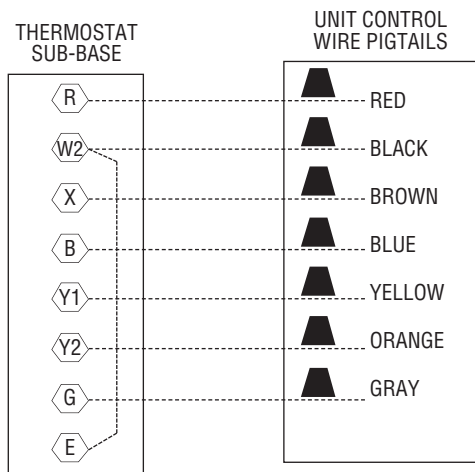
**NOTE:** For field installation of a heater kit, follow the instructions provided with the heater kit.

**FIGURE 17**  
HEATER KIT INSTALLATION

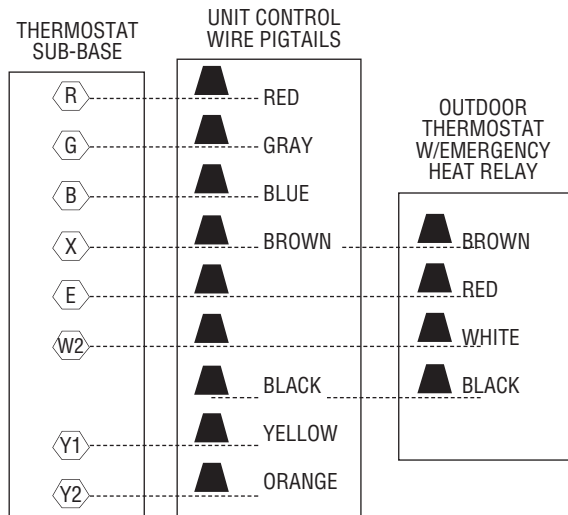


**FIGURE 18**  
VOLTAGE CONNECTIONS DIAGRAMS

**STANDARD**



**WITH ONE OUTDOOR THERMOSTAT  
W/EMERGENCY HEAT RELAY**



NOTES: IF EMERGENCY HEAT RELAY AND OUTDOOR THERMOSTATS ARE NOT USED, A JUMPER BETWEEN "W2" AND "E" CAN BE INSTALLED TO TRANSFER CONTROL OF HEATING TO THE FIRST STAGE WHEN THE SYSTEM SWITCH IS IN THE EMERGENCY HEAT POSITION.

Y2 IS ONLY USED WITH OPTIONAL ECONOMIZER.

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	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	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	3	3	2	2	1	1	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	
		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 60°C type copper conductors below 100 ampacity.
2. Wire size based on 75°C 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. See Figure 2. 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 18 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. CRANKCASE HEAT (OPTIONAL)

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

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## XV. 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 9.)
  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?
- 

## XVI. 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
- 

## XVII. 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.

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## XVIII. 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 60°F 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.

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

The demand defrost control is a printed circuit board assembly consisting of solid state control devices with electro-mechanical outputs. 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:** Has high and low pressure control inputs with unique pressure switch logic built into the microprocessor to provide compressor and system protection without nuisance lock-outs. Cycles the compressor off for 30 seconds at the beginning and end of the defrost cycle to eliminate the increased compressor noise caused by rapidly changing system pressures when the reversing valve switches. See the end of this section for diagnostic flash codes for the two diagnostic LED's provided on the control.

### DEFROST INITIATION

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

- 1) The outdoor coil temperature is below 35°F.
- 2) The compressor has operated for at least 34 minutes with the outdoor coil temperature below 35°F.
- 3) The measured difference between the ambient temperature and the outdoor coil temperature is greater than the calculated delta T.

Additionally, a defrost will be initiated if six hours of accumulated compressor run-time has elapsed without a defrost with the outdoor coil temperature below 35°F.

## DEFROST TERMINATION

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

## TEMPERATURE SENSORS

The coil sensor is clipped to the outdoor coil. The air sensor is located in the outdoor coil compartment.

If the ambient sensor fails the defrost control will initiate a defrost every 34 minutes 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. In this mode of operation, the enable temperature is ignored and all timers are sped up by a factor of 240. To initiate a manual defrost, short the TEST pins. Remove the short when the system switches to defrost mode. The defrost will terminate on time (14 minutes) or when the termination temperature has been achieved. Short TEST pins again to terminate the defrost immediately.

## TROUBLE SHOOTING DEMAND DEFROST

Set the indoor thermostat select switch to heat and initiate a call for heat.

Jumper the “test pins” to put the unit into defrost. If the unit goes into defrost and comes back out of defrost, the indication is that the control is working properly.

If the unit did not go into defrost using the test pins, check to ensure that 24V is being supplied to the control board. If 24V is present then replace the control.

## 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 when 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 when 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 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 indoor air-handler/furnace or by shorting the two defrost control test 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

## REPLACEMENT PARTS

Contact your local distributor for a complete parts list.

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## CHARGE INFORMATION

Refer to the appropriate charge chart included in this manual.

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## TROUBLESHOOTING

Refer to the troubleshooting chart included in this manual.

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## WIRING DIAGRAMS

Refer to the appropriate wiring diagram included in this manual.

# XX. GENERAL DATA - RJNL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJNL- Series	A036CK	A036CL	A036CM	A036DK
<b>Cooling Performance<sup>1</sup></b>				Continued ->
Gross Cooling Capacity Btu [kW]	37,800 [11.08]	37,800 [11.08]	37,800 [11.08]	37,800 [11.08]
EER/SEER <sup>2</sup>	11.5/13	11.5/13	11.5/13	11.5/13
Nominal CFM/ARI Rated CFM [L/s]	1200/1200 [566/566]	1200/1200 [566/566]	1200/1200 [566/566]	1200/1200 [566/566]
ARI 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	3.1
<b>Heating Performance (Heat Pumps)</b>				
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)	7.7	7.7	7.7	7.7
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>3</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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
<b>Indoor Coil - Fin Type</b>	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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	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	Direct/3	Belt/Variable	Belt/Variable	Direct/3
No. Motors	1	1	1	1
Motor HP	1/2	1/2	3/4	1/2
Motor RPM	1075	1725	1725	1075
Motor Frame Size	48	56	56	48
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	116 [3289]	116 [3289]	116 [3289]	116 [3289]
<b>Weights</b>				
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:

- 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. ARI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to  $\pm 20\%$  of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on ARI Standard 210/240 or 360.
- EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with ARI Standard 270.

# GENERAL DATA - RJNL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJNL- Series	A036DL	A036DM	A036JK	A042CK
<b>Cooling Performance<sup>1</sup></b>				Continued ->
Gross Cooling Capacity Btu [kW]	37,800 [11.08]	37,800 [11.08]	37,800 [11.08]	44,000 [12.89]
EER/SEER <sup>2</sup>	11.5/13	11.5/13	11.5/13	11.2/13
Nominal CFM/ARI Rated CFM [L/s]	1200/1200 [566/566]	1200/1200 [566/566]	1200/1200 [566/566]	1400/1400 [661/661]
ARI Net Cooling Capacity Btu [kW]	36,200 [10.61]	36,200 [10.61]	36,200 [10.61]	42,000 [12.31]
Net Sensible Capacity Btu [kW]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]	31,200 [9.14]
Net Latent Capacity Btu [kW]	9,200 [2.7]	9,200 [2.7]	9,200 [2.7]	10,800 [3.16]
Net System Power kW	3.1	3.1	3.1	3.74
<b>Heating Performance (Heat Pumps)</b>				
High Temp. Btuh [kW] Rating	34,400 [10.08]	34,400 [10.08]	34,400 [10.08]	41,000 [12.01]
System Power KW / COP	2.94/3.4	2.94/3.4	2.94/3.4	3.38/3.5
Low Temp. Btuh [kW] Rating	19,600 [5.74]	19,600 [5.74]	19,600 [5.74]	24,400 [7.15]
System Power KW / COP	2.72/2.1	2.72/2.1	2.72/2.1	3.12/2.3
HSPF (Btu/Watts-hr)	7.7	7.7	7.7	7.7
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>3</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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
<b>Indoor Coil - Fin Type</b>	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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	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	Direct/3	Direct/3
No. Motors	1	1	1	1
Motor HP	1/2	3/4	1/2	1/2
Motor RPM	1725	1725	1075	1075
Motor Frame Size	56	56	48	48
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	116 [3289]	116 [3289]	116 [3289]	120 [3402]
<b>Weights</b>				
Net Weight lbs. [kg]	517 [235]	517 [235]	517 [235]	521 [236]
Ship Weight lbs. [kg]	532 [241]	532 [241]	532 [241]	536 [243]

### NOTES:

- 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. ARI 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 ARI Standard 210/240 or 360.
- EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with ARI Standard 270.

# GENERAL DATA - RJNL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJNL- Series	A042CL	A042CM	A042DK	A042DL
<b>Cooling Performance<sup>1</sup></b>				Continued ->
Gross Cooling Capacity Btu [kW]	44,000 [12.89]	44,000 [12.89]	44,000 [12.89]	44,000 [12.89]
EER/SEER <sup>2</sup>	11.2/13	11.2/13	11.2/13	11.2/13
Nominal CFM/ARI Rated CFM [L/s]	1400/1400 [661/661]	1400/1400 [661/661]	1400/1400 [661/661]	1400/1400 [661/661]
ARI 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
<b>Heating Performance (Heat Pumps)</b>				
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]	24,000 [7.03]
System Power KW / COP	3.12/2.3	3.12/2.3	3.12/2.3	3.12/2.3
HSPF (Btu/Watts-hr)	7.7	7.7	7.7	7.7
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>3</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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
<b>Indoor Coil - Fin Type</b>	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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	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	Direct/3	Belt/Variable
No. Motors	1	1	1	1
Motor HP	1/2	3/4	1/2	1/2
Motor RPM	1725	1725	1075	1725
Motor Frame Size	56	56	48	56
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	120 [3402]	120 [3402]	120 [3402]	120 [3402]
<b>Weights</b>				
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:

- 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. ARI 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 ARI Standard 210/240 or 360.
- EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with ARI Standard 270.

# GENERAL DATA - RJNL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJNL- Series	A042DM	A042JK	A048CK	A048CL
<b>Cooling Performance<sup>1</sup></b>				Continued ->
Gross Cooling Capacity Btu [kW]	44,000 [12.89]	44,000 [12.89]	50,000 [14.65]	50,000 [14.65]
EER/SEER <sup>2</sup>	11.2/13	11.2/13	11.2/13	11.2/13
Nominal CFM/ARI Rated CFM [L/s]	1400/1400 [661/661]	1400/1400 [661/661]	1600/1600 [755/755]	1600/1600 [755/755]
ARI Net Cooling Capacity Btu [kW]	42,000 [12.31]	42,000 [12.31]	47,500 [13.92]	47,500 [13.92]
Net Sensible Capacity Btu [kW]	31,200 [9.14]	31,200 [9.14]	35,700 [10.46]	35,700 [10.46]
Net Latent Capacity Btu [kW]	10,800 [3.16]	10,800 [3.16]	11,800 [3.46]	11,800 [3.46]
Net System Power kW	3.74	3.74	4.22	4.22
<b>Heating Performance (Heat Pumps)</b>				
High Temp. Btuh [kW] Rating	41,000 [12.01]	41,000 [12.01]	49,000 [14.36]	49,000 [14.36]
System Power KW / COP	3.38/3.5	3.38/3.5	3.93/3.6	3.93/3.6
Low Temp. Btuh [kW] Rating	24,400 [7.15]	24,400 [7.15]	29,000 [8.5]	29,000 [8.5]
System Power KW / COP	3.12/2.3	3.12/2.3	3.63/2.3	3.63/2.3
HSPF (Btu/Watts-hr)	7.7	7.7	7.7	7.7
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>3</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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]	16.56 [1.54]	16.56 [1.54]
Rows / FPI [FPcm]	1 / 22 [9]	1 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
<b>Indoor Coil - Fin Type</b>	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]	4 / 13 [5]	4 / 13 [5]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	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	Direct/3	Direct/3	Belt/Variable
No. Motors	1	1	1	1
Motor HP	3/4	1/2	1/2	1/2
Motor RPM	1725	1075	1075	1725
Motor Frame Size	56	48	48	56
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	120 [3402]	120 [3402]	187 [5301]	187 [5301]
<b>Weights</b>				
Net Weight lbs. [kg]	521 [236]	521 [236]	535 [243]	535 [243]
Ship Weight lbs. [kg]	536 [243]	536 [243]	550 [249]	550 [249]

### NOTES:

- 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. ARI 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 ARI Standard 210/240 or 360.
- EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
- Standard 3/4" P-Trap provided.

# GENERAL DATA - RJNL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJNL- Series	A048CM	A048DK	A048DL	A048DM
<b>Cooling Performance<sup>1</sup></b>				Continued ->
Gross Cooling Capacity Btu [kW]	50,000 [14.65]	50,000 [14.65]	50,000 [14.65]	50,000 [14.65]
EER/SEER <sup>2</sup>	11.2/13	11.2/13	11.2/13	11.2/13
Nominal CFM/ARI Rated CFM [L/s]	1600/1600 [755/755]	1600/1600 [755/755]	1600/1600 [755/755]	1600/1600 [755/755]
ARI 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
<b>Heating Performance (Heat Pumps)</b>				
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)	7.7	7.7	7.7	7.7
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>3</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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
<b>Indoor Coil - Fin Type</b>	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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	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	Direct/3	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	3/4	1/2	1/2	3/4
Motor RPM	1725	1075	1725	1725
Motor Frame Size	56	48	56	56
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	187 [5301]	187 [5301]	187 [5301]	187 [5301]
<b>Weights</b>				
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:

- 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. ARI 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 ARI Standard 210/240 or 360.
- EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with ARI Standard 270.



# GENERAL DATA - RJNL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJNL- Series	A048JK	A060CK	A060CL	A060CM
<b>Cooling Performance<sup>1</sup></b>				Continued ->
Gross Cooling Capacity Btu [kW]	50,000 [14.65]	61,000 [17.87]	61,500 [18.02]	61,500 [18.02]
EER/SEER <sup>2</sup>	11.2/13	11.5/13	11.5/13	11.5/13
Nominal CFM/ARI Rated CFM [L/s]	1600/1600 [755/755]	2000/2000 [944/944]	2000/2000 [944/944]	2000/2000 [944/944]
ARI Net Cooling Capacity Btu [kW]	47,500 [13.92]	59,000 [17.29]	59,000 [17.29]	59,000 [17.29]
Net Sensible Capacity Btu [kW]	35,700 [10.46]	44,050 [12.91]	44,050 [12.91]	44,050 [12.91]
Net Latent Capacity Btu [kW]	11,800 [3.46]	14,950 [4.38]	14,950 [4.38]	14,950 [4.38]
Net System Power kW	4.22	5.04	5.04	5.04
<b>Heating Performance (Heat Pumps)</b>				
High Temp. Btuh [kW] Rating	49,000 [14.36]	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]
System Power KW / COP	3.93/3.6	4.78/3.6	4.78/3.6	4.78/3.6
Low Temp. Btuh [kW] Rating	29,000 [8.5]	35,800 [10.49]	35,800 [10.49]	35,800 [10.49]
System Power KW / COP	3.63/2.3	4.31/2.4	4.31/2.4	4.31/2.4
HSPF (Btu/Watts-hr)	7.7	7.7	7.7	7.7
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>3</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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
<b>Indoor Coil - Fin Type</b>	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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/10x10 [254x254]	1/11x9 [279x229]	1/10x10 [254x254]	1/10x10 [254x254]
Drive Type/No. Speeds	Direct/3	Direct/2	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	1/2	1	3/4	1
Motor RPM	1075	1100	1725	1725
Motor Frame Size	48	48	56	56
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	187 [5301]	195 [5528]	195 [5528]	195 [5528]
<b>Weights</b>				
Net Weight lbs. [kg]	535 [243]	565 [256]	565 [256]	565 [256]
Ship Weight lbs. [kg]	550 [249]	580 [263]	580 [263]	580 [263]

### NOTES:

- 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. ARI 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 ARI Standard 210/240 or 360.
- EER and/or SEER are rated at ARI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with ARI Standard 270.

# GENERAL DATA - RJNL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJNL - Series	A060DK	A060DL	A060DM	A060JK
<b>Cooling performance<sup>1</sup></b>				<b>Continued -&gt;</b>
Gross Cooling Capacity Btu [kW]	61,000 [17.87]	61,500 [18.02]	61,500 [18.02]	61,000 [17.87]
EER, SEER <sup>2</sup>	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
<b>Heating Performance (Heat Pumps)</b>				
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)	7.7	7.7	7.7	7.7
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>5</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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
<b>Indoor Coil - Fin Type</b>	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	5.16	5.16	5.16
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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/10x10 [254x254]	1/10x10 [254x254]	1/11x9 [279x229]	1/11x9 [279x229]
Drive Type/No. Speeds	Belt/Variable	Belt/Variable	Direct/2	Direct/2
No. Motors	1	1	1	1
Motor HP	3/4	1	1	1
Motor RPM	1725	1725	1100	1100
Motor Frame Size	56	56	48	48
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	195 [5528]	195 [5528]	195 [5528]	195 [5528]
<b>Weights</b>				
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:

- 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.
- EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJNL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJNL - Series	A072CL	A072CM	A072DL	A072DM
<b>Cooling performance<sup>1</sup></b>				<b>Continued -&gt;</b>
Gross Cooling Capacity Btu [kW]	73,000 [21.39]	73,000 [21.39]	73,000 [21.39]	73,000 [21.39]
EER, SEER <sup>2</sup>	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]
Net Latent Capacity Btu [kW]	19,300 [5.65]	19,300 [5.65]	19,300 [5.65]	19,300 [5.65]
Net System Power kW	6.37	6.37	6.37	6.37
<b>Heating Performance (Heat Pumps)</b>				
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
<b>Compressor</b>				
No/Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
<b>Outdoor Sound Rating (dB)<sup>5</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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
<b>Indoor Coil - Fin Type</b>	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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	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
<b>Filter - Type</b>	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)1x16x16 [25x406x406]	(4)1x16x16 [25x406x406]	(4)1x16x16 [25x406x406]	(4)1x16x16 [25x406x406]
<b>Refrigerant Charge Oz. [g]</b>	221 [6265]	221 [6265]	221 [6265]	221 [6265]
<b>Weights</b>				
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:

- 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.
- EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJNL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJNL - Series	A072YL
<b>Cooling performance<sup>1</sup></b>	
Gross Cooling Capacity Btu [kW]	73,000 [21.39]
EER, SEER <sup>2</sup>	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	2400/2125 [1133/1003]
AHRI Net Cooling Capacity Btu [kW]	70,000 [20.51]
Net Sensible Capacity Btu [kW]	50,700 [14.85]
Net Latent Capacity Btu [kW]	19,300 [5.65]
Net System Power kW	6.37
<b>Heating Performance (Heat Pumps)</b>	
High Temp. Btuh [kW] Rating	68,000 [19.92]
System Power KW / COP	5.79/3.44
Low Temp. Btuh [kW] Rating	41,000 [12.01]
System Power KW / COP	5.22/2.3
<b>Compressor</b>	
No./Type	1/Scroll
<b>Outdoor Sound Rating (dB)<sup>5</sup></b>	
	83
<b>Outdoor Coil - Fin Type</b>	
Tube Type	Louvered
Tube Size in. [mm] OD	Rifled
Face Area sq. ft. [sq. m]	0.375 [9.5]
Rows / FPI [FPcm]	16.56 [1.54]
Refrigerant Control	2 / 22 [9]
	TX Valves
<b>Indoor Coil - Fin Type</b>	
Tube Type	Louvered
Tube Size in. [mm]	Rifled
Face Area sq. ft. [sq. m]	0.375 [9.5]
Rows / FPI [FPcm]	6.5 [0.6]
Refrigerant Control	4 / 13 [5]
Drain Connection No./Size in. [mm]	TX Valves
	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	
No. Used/Diameter in. [mm]	Propeller
Drive Type/No. Speeds	1/24 [609.6]
CFM [L/s]	Direct/1
No. Motors/HP	4000 [1888]
Motor RPM	1 at 1/3 HP
	1075
<b>Indoor Fan - Type</b>	
No. Used/Diameter in. [mm]	FC Centrifugal
Drive Type/No. Speeds	1/11x11 [279x279]
No. Motors	Belt/Variable
Motor HP	1
Motor RPM	1 1/2
Motor Frame Size	1725
	56
<b>Filter - Type</b>	
Furnished	Disposable
(NO.) Size Recommended in. [mm x mm x mm]	Yes
	(4)1x16x16 [25x406x406]
<b>Refrigerant Charge Oz. [g]</b>	
	221 [6265]
<b>Weights</b>	
Net Weight lbs. [kg]	620 [281]
Ship Weight lbs. [kg]	635 [288]

### NOTES:

- 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  $\pm 20\%$  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.
- EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJPL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJPL - Series	A036CK	A036CL	A036CM	A036DK
<b>Cooling performance<sup>1</sup></b>				<b>Continued -&gt;</b>
Gross Cooling Capacity Btu [kW]	37,800 [11.08]	37,800 [11.08]	37,800 [11.08]	37,800 [11.08]
EER, SEER <sup>2</sup>	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
<b>Heating Performance (Heat Pumps)</b>				
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
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>5</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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
<b>Indoor Coil - Fin Type</b>	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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	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	Direct/3	Direct/3	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	1/2	1/2	3/4	1/2
Motor RPM	1075	1725	1725	1075
Motor Frame Size	48	56	56	48
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	116 [3289]	116 [3289]	116 [3289]	116 [3289]
<b>Weights</b>				
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:

- 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.
- EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJPL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJPL - Series	A036DL	A036DM	A036JK	A042CK
<b>Cooling performance<sup>1</sup></b>				<b>Continued -&gt;</b>
Gross Cooling Capacity Btu [kW]	38,500 [11.28]	38,500 [11.28]	37,800 [11.08]	43,500 [12.75]
EER, SEER <sup>2</sup>	12/14	12/14	12/14	11.6/14
Nominal CFM/AHRI Rated CFM [L/s]	1200/1200 [566/566]	1200/1200 [566/566]	1200/1200 [566/566]	1400/1400 [661/661]
AHRI Net Cooling Capacity Btu [kW]	36,800 [10.78]	36,800 [10.78]	36,800 [10.78]	42,000 [12.31]
Net Sensible Capacity Btu [kW]	27,200 [7.97]	27,200 [7.97]	27,200 [7.97]	31,750 [9.3]
Net Latent Capacity Btu [kW]	9,600 [2.81]	9,600 [2.81]	9,600 [2.81]	10,250 [3]
Net System Power kW	2.99	2.99	2.99	3.64
<b>Heating Performance (Heat Pumps)</b>				
High Temp. Btuh [kW] Rating	33,600 [9.84]	33,600 [9.84]	33,600 [9.84]	40,000 [11.72]
System Power KW / COP	2.79/3.48	2.79/3.48	2.79/3.48	3.23/3.6
Low Temp. Btuh [kW] Rating	19,400 [5.68]	19,400 [5.68]	19,400 [5.68]	24,200 [7.09]
System Power KW / COP	2.56/2.22	2.56/2.22	2.56/2.22	2.94/2.4
HSPF (Btu/Watts-hr)	8	8	8	8 8
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>5</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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
<b>Indoor Coil - Fin Type</b>	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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	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/VariableBelt/Variable	Belt/Variable	Direct/3
No. Motors	1	1	1	1
Motor HP	1/2	1/2	1/2	1/2
Motor RPM	1725	1725	1075	1075
Motor Frame Size	56	56	48	48
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	116 [3289]	116 [3289]	116 [3289]	120 [3402]
<b>Weights</b>				
Net Weight lbs. [kg]	517 [235]	517 [235]	517 [235]	521 [236]
Ship Weight lbs. [kg]	532 [241]	532 [241]	532 [241]	536 [243]

### NOTES:

- 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.
- EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.



# GENERAL DATA - RJPL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJPL - Series	A042CL	A042CM	A042DK	A042DL
<b>Cooling performance<sup>1</sup></b>				<b>Continued -&gt;</b>
Gross Cooling Capacity Btu [kW]	44,000 [12.89]	44,000 [12.89]	43,500 [12.75]	44,000 [12.89]
EER, SEER <sup>2</sup>	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
<b>Heating Performance (Heat Pumps)</b>				
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
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>5</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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
<b>Indoor Coil - Fin Type</b>	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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	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	Direct/3	Belt/Variable
No. Motors	1	1	1	1
Motor HP	1/2	3/4	1/2	1/2
Motor RPM	1725	1725	1075	1725
Motor Frame Size	56	56	48	56
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	120 [3402]	120 [3402]	120 [3402]	120 [3402]
<b>Weights</b>				
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:

- 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.
- EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJPL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJPL - Series	A042DM	A042JK	A048CK	A048CL
<b>Cooling performance<sup>1</sup></b>				<b>Continued -&gt;</b>
Gross Cooling Capacity Btu [kW]	44,000 [12.89]	43,500 [12.75]	49,000 [14.36]	50,000 [14.65]
EER, SEER <sup>2</sup>	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]	1600/1600 [755/755]	1600/1600 [755/755]
AHRI Net Cooling Capacity Btu [kW]	42,000 [12.31]	42,000 [12.31]	47,500 [13.92]	47,500 [13.92]
Net Sensible Capacity Btu [kW]	31,750 [9.3]	31,750 [9.3]	36,200 [10.61]	36,200 [10.61]
Net Latent Capacity Btu [kW]	10,250 [3]	10,250 [3]	11,300 [3.31]	11,300 [3.31]
Net System Power kW	3.64	3.64	4.09	4.09
<b>Heating Performance (Heat Pumps)</b>				
High Temp. Btuh [kW] Rating	40,000 [11.72]	40,000 [11.72]	49,000 [14.36]	49,000 [14.36]
System Power KW / COP	3.23/3.6	3.23/3.6	3.76/3.8	3.76/3.8
Low Temp. Btuh [kW] Rating	24,200 [7.09]	24,200 [7.09]	29,800 [8.73]	29,800 [8.73]
System Power KW / COP	2.94/2.4	2.94/2.4	3.48/2.4	3.48/2.4
HSPF (Btu/Watts-hr)	8	8	8	8
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>5</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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]	16.56 [1.54]	16.56 [1.54]
Rows / FPI [FPcm]	1 / 22 [9]	1 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
<b>Indoor Coil - Fin Type</b>	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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	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	Direct/3	Direct/3	Belt/Variable
No. Motors	1	1	1	1
Motor HP	3/4	1/2	1/2	1/2
Motor RPM	1725	1075	1075	1725
Motor Frame Size	56	48	48	56
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	120 [3402]	120 [3402]	187 [5301]	187 [5301]
<b>Weights</b>				
Net Weight lbs. [kg]	521 [236]	521 [236]	535 [243]	535 [243]
Ship Weight lbs. [kg]	536 [243]	536 [243]	550 [249]	550 [249]

### NOTES:

- 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.
- EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJPL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJPL - Series	A048CM	A048DK	A048DL	A048DM
<b>Cooling performance<sup>1</sup></b>				<b>Continued -&gt;</b>
Gross Cooling Capacity Btu [kW]	50,000 [14.65]	49,000 [14.36]	50,000 [14.65]	50,000 [14.65]
EER, SEER <sup>2</sup>	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
<b>Heating Performance (Heat Pumps)</b>				
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
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>5</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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
<b>Indoor Coil - Fin Type</b>	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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	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	Direct/3	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	3/4	1/2	1/2	3/4
Motor RPM	1725	1075	1725	1725
Motor Frame Size	56	48	56	56
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	187 [5301]	187 [5301]	187 [5301]	187 [5301]
<b>Weights</b>				
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:

- 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.
- EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJPL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJPL - Series	A048JK	A060CK	A060CL	A060CM
<b>Cooling performance<sup>1</sup></b>				<b>Continued -&gt;</b>
Gross Cooling Capacity Btu [kW]	49,000 [14.36]	61,000 [17.87]	61,000 [17.87]	61,000 [17.87]
EER, SEER <sup>2</sup>	11.6/14	11.7/14	11.7/14	11.7/14
Nominal CFM/AHRI Rated CFM [L/s]	1600/1600 [755/755]	2000/1850 [944/873]	2000/1850 [944/873]	2000/1850 [944/873]
AHRI Net Cooling Capacity Btu [kW]	47,500 [13.92]	59,500 [17.43]	59,500 [17.43]	59,500 [17.43]
Net Sensible Capacity Btu [kW]	36,200 [10.61]	43,600 [12.77]	43,600 [12.77]	43,600 [12.77]
Net Latent Capacity Btu [kW]	11,300 [3.31]	15,900 [4.66]	15,900 [4.66]	15,900 [4.66]
Net System Power kW	4.09	5.05	5.05	5.05
<b>Heating Performance (Heat Pumps)</b>				
High Temp. Btuh [kW] Rating	49,000 [14.36]	59,500 [17.43]	59,500 [17.43]	59,500 [17.43]
System Power KW / COP	3.76/3.8	4.8/3.6	4.8/3.6	4.8/3.6
Low Temp. Btuh [kW] Rating	29,800 [8.73]	36,400 [10.67]	36,400 [10.67]	36,400 [10.67]
System Power KW / COP	3.48/2.4	4.47/2.2	4.47/2.2	4.47/2.2
HSPF (Btu/Watts-hr)	8	8	8	8
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>5</sup></b>	83	83	83	83
<b>Outdoor Coil - Fin Type</b>	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
<b>Indoor Coil - Fin Type</b>	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]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>	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
<b>Indoor Fan - Type</b>	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/10x10 [254x254]	1/11x9 [279x229]	1/10x10 [254x254]	1/10x10 [254x254]
Drive Type/No. Speeds	Direct/3	Direct/2	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	1/2	1	3/4	1
Motor RPM	1075	1100	1725	1725
Motor Frame Size	48	48	56	56
<b>Filter - Type</b>	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]
<b>Refrigerant Charge Oz. [g]</b>	187 [5301]	195 [5528]	195 [5528]	195 [5528]
<b>Weights</b>				
Net Weight lbs. [kg]	535 [243]	565 [256]	565 [256]	565 [256]
Ship Weight lbs. [kg]	550 [249]	580 [263]	580 [263]	580 [263]

### NOTES:

- 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.
- EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# GENERAL DATA - RJPL MODELS

## NOMINAL SIZES 3-5 TONS [10.6-17.6 kW]

Model RJPL - Series	A060DK	A060DL	A060DM	A060JK
<b>Cooling performance<sup>1</sup></b>				
Gross Cooling Capacity Btu [kW]	61,000 [17.87]	61,000 [17.87]	61,000 [17.87]	61,000 [17.87]
EER, SEER <sup>2</sup>	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
<b>Heating Performance (Heat Pumps)</b>				
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
<b>Compressor</b>				
No./Type	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll	1/Copeland Scroll
<b>Outdoor Sound Rating (dB)<sup>5</sup></b>				
	83	83	83	83
<b>Outdoor Coil - Fin Type</b>				
Tube Type	Louvered	Louvered	Louvered	Louvered
Tube Size in. [mm] OD	Rifled	Rifled	Rifled	Rifled
Face Area sq. ft. [sq. m]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Rows / FPI [FPcm]	16.56 [1.54]	16.56 [1.54]	16.56 [1.54]	16.56 [1.54]
Refrigerant Control	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
	TX Valves	TX Valves	TX Valves	TX Valves
<b>Indoor Coil - Fin Type</b>				
Tube Type	Louvered	Louvered	Louvered	Louvered
Tube Size in. [mm]	Rifled	Rifled	Rifled	Rifled
Face Area sq. ft. [sq. m]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Rows / FPI [FPcm]	5.16 [0.48]	5.16 [0.48]	5.16 [0.48]	5.16 [0.48]
Refrigerant Control	4 / 13 [5]	4 / 13 [5]	4 / 13 [5]	4 / 13 [5]
	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]	1/0.75 [19.5]
<b>Outdoor Fan - Type</b>				
No. Used/Diameter in. [mm]	Propeller	Propeller	Propeller	Propeller
Drive Type/No. Speeds	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]
CFM [L/s]	Direct/1	Direct/1	Direct/1	Direct/1
No. Motors/HP	4000 [1888]	4000 [1888]	4000 [1888]	4000 [1888]
Motor RPM	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP
	1075	1075	1075	1075
<b>Indoor Fan - Type</b>				
No. Used/Diameter in. [mm]	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
Drive Type/No. Speeds	1/11x9 [279x229]	1/10x10 [254x254]	1/10x10 [254x254]	1/11x9 [279x229]
No. Motors	Direct/2	Belt/Variable	Belt/Variable	Direct/2
Motor HP	1	1	1	1
Motor RPM	1	3/4	1	1
Motor Frame Size	1100	1725	1725	1100
	48	48	56	48
<b>Filter - Type</b>				
Furnished	Disposable	Disposable	Disposable	Disposable
(NO.) Size Recommended in. [mm x mm x mm]	Yes	Yes	Yes	Yes
	(2)1x25x16 [25x635x406]	(2)1x25x16 [25x635x406]	(2)1x25x16 [25x635x406]	(2)1x25x16 [25x635x406]
<b>Refrigerant Charge Oz. [g]</b>				
	195 [5528]	195 [5528]	195 [5528]	195 [5528]
<b>Weights</b>				
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:

- 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.
- EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# XXI. MISCELLANEOUS

ELECTRICAL DATA – RJNL- SERIES							
		A036CK	A036CL	A036CM	A036DK	A036DL	A036DM
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506
	Volts	208/230	208/230	208/230	460	460	460
	Minimum Circuit Ampacity	19/19	18/18	19/19	11	10	10
	Minimum Overcurrent Protection Device Size	25/25	20/20	25/25	15	15	15
	Maximum Overcurrent Protection Device Size	25/25	25/25	25/25	15	15	15
Compressor Motor	No.	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460
	Phase	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
	Amps (RLA), Comp. 1	10.4/10.4	10.4/10.4	10.4/10.4	5.8	5.8	5.8
	Amps (LRA), Comp. 1	88/88	88/88	88/88	38	38	38
Condenser Motor	No.	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460
	Phase	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA, each)	1.5/1.5	1.5/1.5	1.5/1.5	1	1	1
	Amps (LRA, each)	3/3	3/3	3/3	1.9	1.9	1.9
Evaporator Fan	No.	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460
	Phase	1	3	3	1	3	3
	HP	1/2	1/2	3/4	1/2	1/2	3/4
	Amps (FLA, each)	2.7/2.7	2.2/2.2	3.2/3.2	1.5	1.1	1.6
	Amps (LRA, each)	6.5/6.5	10.6/10.6	16.8/16.8	3.6	5.3	8.4

ELECTRICAL DATA – RJNL- SERIES							
		A036JK	A042CK	A042CL	A042CM	A042DK	A042DL
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	187-253	414-506	414-506
	Volts	208/230	208/230	208/230	208/230	460	460
	Minimum Circuit Ampacity	27/27	23/23	22/22	22/22	11	10
	Minimum Overcurrent Protection Device Size	35/35	30/30	25/25	30/30	15	15
	Maximum Overcurrent Protection Device Size	40/40	35/35	30/30	35/35	15	15
Compressor Motor	No.	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	460	460
	Phase	1	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	2 1/2	3	3	3	3	3
	Amps (RLA), Comp. 1	16.7/16.7	13.5/13.5	13.5/13.5	13.5/13.5	6	6
	Amps (LRA), Comp. 1	79/79	88/88	88/88	88/88	44	44
Condenser Motor	No.	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	460	460
	Phase	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA, each)	1.5/1.5	1.5/1.5	1.5/1.5	1.5/1.5	1	1
	Amps (LRA, each)	3/3	3/3	3/3	3/3	1.9	1.9
Evaporator Fan	No.	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	460	460
	Phase	1	1	3	3	1	3
	HP	1/2	1/2	1/2	3/4	1/2	1/2
	Amps (FLA, each)	2.7/2.7	2.7/2.7	2.2/2.2	3.2/3.2	1.5	1.1
	Amps (LRA, each)	6.5/6.5	6.5/6.5	10.6/10.6	16.8/16.8	3.6	5.3

ELECTRICAL DATA – RJNL- SERIES							
		A042DM	A042JK	A048CK	A048CL	A048CM	A048DK
Unit Information	Unit Operating Voltage Range	414-506	187-253	187-253	187-253	187-253	414-506
	Volts	460	208/230	208/230	208/230	208/230	460
	Minimum Circuit Ampacity	11	28/28	23/23	22/22	23/23	11
	Minimum Overcurrent Protection Device Size	15	35/35	30/30	25/25	30/30	15
	Maximum Overcurrent Protection Device Size	15	45/45	35/35	35/35	35/35	15
Compressor Motor	No.	1	1	1	1	1	1
	Volts	460	208/230	208/230	208/230	208/230	460
	Phase	3	1	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	3	3	3 1/2	3 1/2	3 1/2	3 1/2
	Amps (RLA), Comp. 1	6	17.9/17.9	13.7/13.7	13.7/13.7	13.7/13.7	6.2
	Amps (LRA), Comp. 1	44	112/112	83.1/83.1	83.1/83.1	83.1/83.1	41
Condenser Motor	No.	1	1	1	1	1	1
	Volts	460	208/230	208/230	208/230	208/230	460
	Phase	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA, each)	1	1.5/1.5	1.5/1.5	1.5/1.5	1.5/1.5	1
	Amps (LRA, each)	1.9	3/3	3/3	3/3	3/3	1.9
Evaporator Fan	No.	1	1	1	1	1	1
	Volts	460	208/230	208/230	208/230	208/230	460
	Phase	3	1	1	3	3	1
	HP	3/4	1/2	1/2	1/2	3/4	1/2
	Amps (FLA, each)	1.6	2.7/2.7	2.7/2.7	2.2/2.2	3.2/3.2	1.5
	Amps (LRA, each)	8.4	6.5/6.5	6.5/6.5	10.6/10.6	16.8/16.8	3.6



ELECTRICAL DATA – RJNL- SERIES							
		A048DL	A048DM	A048JK	A060CK	A060CL	A060CM
Unit Information	Unit Operating Voltage Range	414-506	414-506	187-253	187-253	187-253	187-253
	Volts	460	460	208/230	208/230	208/230	208/230
	Minimum Circuit Ampacity	11	11	33/33	25/25	26/26	26/26
	Minimum Overcurrent Protection Device Size	15	15	40/40	30/30	30/30	30/30
	Maximum Overcurrent Protection Device Size	15	15	50/50	40/40	40/40	40/40
Compressor Motor	No.	1	1	1	1	1	1
	Volts	460	460	208/230	208/230	208/230	208/230
	Phase	3	3	1	3	3	3
	RPM	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	3 1/2	3 1/2	3 1/2	5	5	5
	Amps (RLA), Comp. 1	6.2	6.2	21.8/21.8	16/16	16/16	16/16
	Amps (LRA), Comp. 1	41	41	117/117	110/110	110/110	110/110
Condenser Motor	No.	1	1	1	1	1	1
	Volts	460	460	208/230	208/230	208/230	208/230
	Phase	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA, each)	1	1	1.5/1.5	2.2/2.2	2.2/2.2	2.2/2.2
	Amps (LRA, each)	1.9	1.9	3/3	4.7/4.7	4.7/4.7	4.7/4.7
Evaporator Fan	No.	1	1	1	1	1	1
	Volts	460	460	208/230	208/230	208/230	208/230
	Phase	3	3	1	1	3	3
	HP	1/2	3/4	1/2	1	3/4	1
	Amps (FLA, each)	1.1	1.6	2.7/2.7	7.6/7.6	3.2/3.2	3.8/3.8
	Amps (LRA, each)	5.3	8.4	6.5/6.5	0/0	16.8/16.8	24/24

ELECTRICAL DATA – RJNL- SERIES								
		A060DK	A060DL	A060DM	A060JK	A072CL	A072CM	A072DL
Unit Information	Unit Operating Voltage Range	414-506	414-506	414-506	187-253	187-253	187-253	414-506
	Volts	460	460	460	208/230	208/230	208/230	460
	Minimum Circuit Ampacity	13	13	14	39/39	34/34	34/34	17
	Minimum Overcurrent Protection Device Size	15	15	20	45/45	40/40	40/40	20
	Maximum Overcurrent Protection Device Size	20	20	20	60/60	50/50	50/50	25
Compressor Motor	No.	1	1	1	1	1	1	1
	Volts	460	460	460	208/230	208/230	208/230	460
	Phase	3	3	3	1	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	5	5	5	5	7 1/2	7 1/2	7 1/2
	Amps (RLA), Comp. 1	7.8	7.8	7.8	26.4/26.4	21.2/21.2	21.2/21.2	10.9
	Amps (LRA), Comp. 1	52	52	52	134/134	123/123	123/123	62
Condenser Motor	No.	1	1	1	1	1	1	1
	Volts	460	460	460	208/230	208/230	208/230	460
	Phase	1	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA, each)	1	1	1	2.2/2.2	1.8/1.8	1.8/1.8	1
	Amps (LRA, each)	2.4	2.4	2.4	4.7/4.7	3.3/3.3	3.3/3.3	2.2
Evaporator Fan	No.	1	1	1	1	1	1	1
	Volts	460	460	460	208/230	208/230	208/230	460
	Phase	1	3	3	1	3	3	3
	HP	1	3/4	1	1	1 1/2	1 1/2	1 1/2
	Amps (FLA, each)	1.7	1.6	1.9	2.8/2.8	5.8/5.8	5.8/5.8	2.8
	Amps (LRA, each)	0	8.4	12	0/0	34/34	34/34	17

ELECTRICAL DATA – RJNL- SERIES							
		A072DM	A072YL				
Unit Information	Unit Operating Voltage Range	414-506	518-633				
	Volts	460	575				
	Minimum Circuit Ampacity	17	14				
	Minimum Overcurrent Protection Device Size	20	15				
	Maximum Overcurrent Protection Device Size	25	20				
Compressor Motor	No.	1	1				
	Volts	460	575				
	Phase	3	3				
	RPM	3450	3450				
	HP, Compressor 1	7 1/2	7 1/2				
	Amps (RLA), Comp. 1	10.9	8.3				
	Amps (LRA), Comp. 1	62	50				
Condenser Motor	No.	1	1				
	Volts	460	575				
	Phase	1	1				
	HP	1/3	1/3				
	Amps (FLA, each)	1	0.8				
	Amps (LRA, each)	2.2	1.6				
Evaporator Fan	No.	1	1				
	Volts	460	575				
	Phase	3	3				
	HP	1 1/2	1 1/2				
	Amps (FLA, each)	2.8	2.3				
	Amps (LRA, each)	17	13				

ELECTRICAL DATA – RJPL- SERIES								
		-A036CK	-A036CL	-A036CM	-A036DK	-A036DL	-A036DM	-A036JK
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506	187-253
	Minimum Circuit Ampacity	17/17	18/18	18/18	10	10	10	24/24
	Minimum Overcurrent Protection Device Size	20/20	20/20	25/25	15	15	15	30/30
	Maximum Overcurrent Protection Device Size	25/25	25/25	25/25	15	15	15	40/40
Compressor Motor	No.	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230
	Phase	3	3	3	3	3	3	1
	HP	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	RPM	3450	3450	3450	3450	3450	3450	3450
	Amps (RLA)	10.4/10.4	10.4/10.4	10.4/10.4	5.8	5.8	5.8	16.7/16.7
	Amps (LRA)	88/88	88/88	88/88	38	38	38	79/79
Condenser Motor	No.	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230
	Phase	1	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA)	1.5	1.5	1.5	1	1	1	1.5
	Amps (LRA)	3	3	3	1.9	1.9	1.9	3
Evaporator Fan	No.	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230
	Phase	1	3	3	1	3	3	1
	HP	1/2	1/2	3/4	1/2	1/2	3/4	1/2
	Amps (FLA)	1.6	2.8	3.4	1.0	1.4	1.6	1.6
	Amps (LRA)	0	10.6	16.8	0	5.3	8.4	0

ELECTRICAL DATA – RJPL- SERIES								
		-A042CK	-A042CL	-A042CM	-A042DK	-A042DL	-A042DM	-A042JK
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506	187-253
	Minimum Circuit Ampacity	21/21	22/22	22/22	10	10	11	26/26
	Minimum Overcurrent Protection Device Size	25/25	25/25	30/30	15	15	15	35/35
	Maximum Overcurrent Protection Device Size	30/30	30/30	35/35	15	15	15	40/40
Compressor Motor	No.	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230
	Phase	3	3	3	3	3	3	1
	HP	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450
	Amps (RLA)	13.5/13.5	13.5/13.5	13.5/13.5	6	6	6	17.9/17.9
	Amps (LRA)	88/88	88/88	88/88	44	44	44	112/112
Condenser Motor	No.	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230
	Phase	1	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA)	1.5	1.5	1.5	1	1	1	1.5
	Amps (LRA)	3	3	3	1.9	1.9	1.9	3
Evaporator Fan	No.	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230
	Phase	1	3	3	1	3	3	1
	HP	1/2	1/2	3/4	3/4	1/2	3/4	1/2
	Amps (FLA)	1.9	2.8	3.4	1.2	1.4	1.6	1.9
	Amps (LRA)	0	10.6	16.8	0	5.3	8.4	0

ELECTRICAL DATA – RJPL- SERIES								
		-A048CK	-A048CL	-A048CM	-A048DK	-A048DL	-A048DM	-A048JK
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506	187-253
	Minimum Circuit Ampacity	21/21	22/22	23/23	10	11	11	31/31
	Minimum Overcurrent Protection Device Size	25/25	25/25	30/30	15	15	15	40/40
	Maximum Overcurrent Protection Device Size	30/30	35/35	35/35	15	15	15	50/50
Compressor Motor	No.	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230
	Phase	3	3	3	3	3	3	1
	HP	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	RPM	3450	3450	3450	3450	3450	3450	3450
	Amps (RLA)	13.7/13.7	13.7/13.7	13.7/13.7	6.2	6.2	6.2	21.8/21.8
	Amps (LRA)	83.1/83.1	83.1/83.1	83.1/83.1	41	41	41	117/117
Condenser Motor	No.	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230
	Phase	1	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA)	1.5	1.5	1.5	1	1	1	1.5
	Amps (LRA)	3	3	3	1.9	1.9	1.9	3
Evaporator Fan	No.	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230
	Phase	1	3	3	1	3	3	1
	HP	1/2	1/2	3/4	3/4	1/2	3/4	1/2
	Amps (FLA)	1.9	2.8	3.4	1.2	1.4	1.6	1.9
	Amps (LRA)	0	10.6	16.8	0	5.3	8.4	0

ELECTRICAL DATA – RJPL- SERIES								
		-A060CK	-A060CL	-A060CM	-A060DK	-A060DL	-A060DM	-A060JK
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506	187-253
	Minimum Circuit Ampacity	25/25	26/26	26/26	13	13	13	39/39
	Minimum Overcurrent Protection Device Size	30/30	30/30	30/30	15	15	15	45/45
	Maximum Overcurrent Protection Device Size	40/40	40/40	40/40	20	20	20	60/60
Compressor Motor	No.	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230
	Phase	3	3	3	3	3	3	1
	HP	5	5	5	5	5	5	5
	RPM	3450	3450	3450	3450	3450	3450	3450
	Amps (RLA)	16/16	16/16	16/16	7.8	7.8	7.8	26.4/26.4
	Amps (LRA)	110/110	110/110	110/110	52	52	52	134/134
Condenser Motor	No.	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230
	Phase	1	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA)	2.2	2.2	2.2	1	1	1	2.2
	Amps (LRA)	4.7	4.7	4.7	2.4	2.4	2.4	4.7
Evaporator Fan	No.	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	208/230
	Phase	1	3	3	1	3	3	1
	HP	1	3/4	1	1	3/4	1	1
	Amps (FLA)	2.8	3.4	3.8	1.7	1.6	1.9	2.8
	Amps (LRA)	0	16.8	24	0	8.4	12	0

# INDOOR AIRFLOW PERFORMANCE FOR 3-5 TON PACKAGE HEAT PUMPS – RJNL DIRECT DRIVE

## DIRECT-DRIVE BLOWER 208 AIRFLOW PERFORMANCE

Nominal Cooling Capacity Tons	Motor Speed From Factory	Manufacturer Recommended Airflow Range (Min / Max) CFM	Blower Size/ Motor HP # of Speeds	Motor Speed	CFM [L/s] Air Delivery/Watts-208 VOLTS																
					External Static Pressure-Inches W.C.																
					0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00							
3.0	Low	1050 / 1350	10x10 1/2 3 Speed	Low	CFM	1275	1235	1210	1181	1132	1045										
					Watts	[602]	[583]	[571]	[557]	[534]	[493]										
						493	481	468	452	431	402										
3.5	Low	1225 / 1575	10x10 1/2 3 Speed	Med	CFM	1397	1344	1319	1297	1249	1147										
					Watts	[659]	[634]	[622]	[612]	[589]	[541]										
						561	537	522	508	488	454										
4.0	Low	1400 / 1800	10x10 1/2 3 Speed	High	CFM	1766	1719	1671	1617	1550	1465										
					Watts	[833]	[811]	[789]	[763]	[732]	[691]										
						735	719	697	671	639	603										
5.0	Low	1750 / 2250	11x9 1 2 Speed	Low	CFM	1974	1935	1897	1860	1823	1788	1753	1719	1686							
					Watts	[932]	[913]	[895]	[878]	[860]	[844]	[827]	[811]	[796]							
						490	505	510	545	555	575	600	605	625							
	High																				
					CFM	2185	2148	2112	2076	2040	2005	1970	1935	1900							
					Watts	[1031]	[1014]	[997]	[980]	[963]	[946]	[930]	[913]	[897]							
						675	685	700	720	735	750	770	780	805							

## DIRECT-DRIVE BLOWER 230/460 AIRFLOW PERFORMANCE

Nominal Cooling Capacity Tons	Motor Speed From Factory	Manufacturer Recommended Airflow Range (Min / Max) CFM	Blower Size/ Motor HP # of Speeds	Motor Speed	CFM [L/s] Air Delivery/Watts-230/460 VOLTS																
					External Static Pressure-Inches W.C.																
					0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00							
3.0	Low	1050 / 1350	10x10 1/2 3 Speed	Low	CFM	1455	1423	1388	1345	1289	1214										
					Watts	[687]	[627]	[655]	[635]	[608]	[573]										
						578	565	549	528	502	472										
3.5	Med	1225 / 1575	10x10 1/2 3 Speed	Med	CFM	1601	1561	1517	1466	1401	1317										
					Watts	[756]	[737]	[716]	[692]	[661]	[622]										
						659	636	613	589	562	529										
4.0	High	1400 / 1800	10x10 1/2 3 Speed	High	CFM	1964	1902	1839	1771	1693	1602										
					Watts	[927]	[898]	[868]	[836]	[799]	[756]										
						847	811	780	751	721	688										
5.0	Low	1750 / 2250	11x9 1 2 Speed	Low	CFM	1974	1935	1897	1860	1823	1788	1753	1719	1686							
					Watts	[932]	[913]	[895]	[878]	[860]	[844]	[827]	[811]	[796]							
						490	505	510	545	555	575	600	605	625							
	High																				
					CFM	2185	2148	2112	2076	2040	2005	1970	1935	1900							
					Watts	[1031]	[1014]	[997]	[980]	[963]	[946]	[930]	[913]	[897]							
						675	685	700	720	735	750	770	780	805							



# INDOOR AIRFLOW PERFORMANCE FOR 3-5 TON PACKAGE HEAT PUMPS – RJPL DIRECT DRIVE

## DIRECT-DRIVE BLOWER 208/230/460 AIRFLOW PERFORMANCE

Nominal Cooling Capacity Tons	Motor Speed From Factory	Manufacturer Recommended Air-Flow Range (Min / Max) CFM	Blower Size/ Motor HP # of Speeds	Motor Speed	CFM Air Delivery/RPM/Watts-208/230/460 Volts										
					External Static Pressure-Inches W.C.										
					0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	
3.0	Low (Tap 2)	1050 / 1350	10x10 1/2 HP [373] 2 Speed (X-13 Motor)	Low	CFM	1448	1413	1367	1325	1285	1242	1196	1106	1006	
					RPM	674	720	771	818	862	907	953	1019	1091	
					Watts	230	245	260	274	288	301	314	330	350	
3.5	Low (Tap 2)	1225 / 1575	10x10 3/4 HP [559] 2 Speed (X-13 Motor)	Low	CFM	1618	1577	1516	1482	1443	1395	1359	1312	1261	1042
					RPM	712	755	807	851	894	941	978	1019	1061	1137
					Watts	299	315	332	350	364	380	391	402	414	392
4.0	Low (Tap 2)	1400 / 1800	10x10 3/4 HP [559] 2 Speed (X-13 Motor)	Low	CFM	1641	1603	1570	1534	1504	1468	1410	1359	1316	1252
					RPM	724	764	806	852	895	933	985	1032	1076	1132
					Watts	292	307	323	343	363	377	396	412	430	446
5.0	Low (Tap 2)	1750 / 2250	10x10 1 HP [746] 2 Speed (X-13 Motor)	High	CFM	1735	1704	1674	1631	1598	1560	1527	1481	1437	1336
					RPM	755	796	835	879	917	956	995	1044	1084	1133
					Watts	340	360	378	396	411	427	443	464	479	482
4.0	Low (Tap 2)	1400 / 1800	10x10 3/4 HP [559] 2 Speed (X-13 Motor)	Low	CFM	1771	1739	1708	1670	1642	1607	1568	1511	1236	
					RPM	848	890	925	963	996	1032	1076	1121	1161	
					Watts	422	445	462	478	493	509	529	544	460	
5.0	Low (Tap 2)	1750 / 2250	10x10 1 HP [746] 2 Speed (X-13 Motor)	High	CFM	1954	1908	1878	1840	1797	1771	1692	1603	1457	
					RPM	914	949	984	1016	1055	1083	1114	1133	1154	
					Watts	547	565	585	601	619	634	634	605	550	
5.0	Low (Tap 2)	1750 / 2250	10x10 1 HP [746] 2 Speed (X-13 Motor)	Low	CFM	1914	1882	1851	1817	1783	1753	1703	1688		
					RPM	778	805	835	861	894	926	959	988		
					Watts	496	514	533	544	565	584	604	618		
5.0	Low (Tap 2)	1750 / 2250	10x10 1 HP [746] 2 Speed (X-13 Motor)	High	CFM	2185	2148	2112	2076	2040	2005	1970	1935	1900	
					RPM	846	871	895	920	950	984	1008	1042	1061	
					Watts	675	685	700	720	735	750	770	780	805	

# INDOOR AIRFLOW PERFORMANCE – RJNL

## 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 [0.02]	0.2 [0.05]	0.3 [0.07]	0.4 [0.10]	0.5 [0.12]	0.6 [0.15]	0.7 [0.17]	0.8 [0.20]	0.9 [0.22]	1.0 [0.25]	1.1 [0.27]	1.2 [0.30]	1.3 [0.32]	1.4 [0.35]	1.5 [0.37]														
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	1080	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	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 settings 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 [0.02]	0.2 [0.05]	0.3 [0.07]	0.4 [0.10]	0.5 [0.12]	0.6 [0.15]	0.7 [0.17]	0.8 [0.20]	0.9 [0.22]	1.0 [0.25]	1.1 [0.27]	1.2 [0.30]	1.3 [0.32]	1.4 [0.35]	1.5 [0.37]														
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	880	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	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 settings are shown in bold print.

# INDOOR AIRFLOW PERFORMANCE – RJNL

## 5 TON

AIR FLOW CFM [L/s]	CAPACITY 5 TON - 13 SEER																																	
	208-230, 460 - 3 PHASE																																	
	EXTERNAL STATIC PRESSURE-INCHES OF WATER																																	
	0.1 [0.2]		0.2 [0.5]		0.3 [0.7]		0.4 [1.0]		0.5 [1.2]		0.6 [1.5]		0.7 [1.7]		0.8 [2.0]		0.9 [2.2]		1.0 [2.5]		1.1 [2.7]		1.2 [3.0]		1.3 [3.2]		1.4 [3.5]		1.5 [3.7]					
	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	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	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	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	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	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	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	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	1080	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																				
BLOWER SHEAVE	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	0	1	2	3	4	5	6
RPM	1095	1040	995	940	890	835	780	1405	1360	1305	1250	1195	1145	1095	1405	1360	1305	1250	1195	1145	1095

Factory sheave settings are shown in bold.

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

# INDOOR AIRFLOW PERFORMANCE – RJNL

Air Flow CFM [L/s]		External Static Pressure — Inches of Water [kPa]																												
		0.1 [0.02]		0.2 [0.05]		0.3 [0.07]		0.4 [0.10]		0.5 [0.12]		0.6 [0.15]		0.7 [0.17]		0.8 [0.20]		0.9 [0.22]		1.0 [0.25]		1.1 [0.27]		1.2 [0.30]		1.3 [0.32]		1.4 [0.35]		1.5 [0.37]
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	783	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	889	766	842	803	871	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	835	962	876	997	919	1032	964	1066	1012	1101	1062	1135	1115	1168	1171	1201	1229	1234	1289	1267	1352	1299	1418	1331	1466	
2300 [1065]	865	834	920	873	955	914	990	1024	1004	1058	1053	1091	1104	1125	1158	1214	1190	1273	1334	1222	1334	1254	1398	1286	1465	1317	1533	1348	1605	
2400 [1133]	917	917	951	959	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]	965	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	1063	1330	1114	1387	1144	1446	1174	1508	1204	1573	1233	1640	1262	1709	1291	1781	1319	1866	1947	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						AK59							
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]	Resistance — Inches of Water [kPa]													
	1900 [897]	2000 [944]	2100 [991]	2200 [1038]	2300 [1085]	2400 [1133]	2500 [1180]	2600 [1227]	2700 [1274]	2800 [1321]	2900 [1368]			
Wet Coil	0.05 [0.01]	0.06 [0.01]	0.07 [0.02]	0.08 [0.02]	0.08 [0.02]	0.09 [0.02]	0.10 [0.02]	0.10 [0.02]	0.11 [0.03]	0.11 [0.03]	0.12 [0.03]			
Downflow	0.03 [0.01]	0.04 [0.01]	0.05 [0.01]	0.06 [0.01]	0.07 [0.02]	0.08 [0.02]	0.08 [0.02]	0.09 [0.02]	0.09 [0.02]	0.10 [0.02]	0.10 [0.02]			
Downflow Economizer RA Damper Open	0.08 [0.02]	0.08 [0.02]	0.09 [0.02]	0.09 [0.02]	0.10 [0.02]	0.10 [0.02]	0.10 [0.02]	0.11 [0.03]	0.11 [0.03]	0.12 [0.03]	0.12 [0.03]			
Horizontal Economizer RA Damper Open	0.08 [0.02]	0.08 [0.02]	0.09 [0.02]	0.09 [0.02]	0.10 [0.02]	0.10 [0.02]	0.10 [0.02]	0.11 [0.03]	0.11 [0.03]	0.12 [0.03]	0.12 [0.03]			
Concentric Grill RXRN-FA65 or RXRN-FA75 & Transition RXMC-CC04	0.07 [0.02]	0.08 [0.02]	0.09 [0.02]	0.10 [0.02]	0.10 [0.02]	0.13 [0.03]	0.15 [0.04]	0.17 [0.04]	0.19 [0.05]	0.21 [0.05]	0.23 [0.06]			

[ ] Designates Metric Conversions

# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJNL

<b>208-240 VOLT, SINGLE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>												
Model No. RJNL-	Single Power Supply For Both Unit And Heater Kit						Separate Power Supply For Both Unit And Heater Kit					
	RXJJ-Heater Kit Nominal kW	Rated Heater kW @ 208-240 V	Heater KBTU/Hr @ 208-240 V	Heater Amp. @ 208 V	Unit Min. Ckt Ampacity @ 208-240 V	Over Current Protective Device Size Min/Max @ 208 V   Min/Max @ 240 V	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 208	Heat Pump Over Current Protective Device Size Min/Max @ 208 V   Min/Max @ 240 V		
A036JK	No Heat	-	-	-	27/27	35/40	-	-	27/27	-	-	35/40
	A06J+	4.2/5.6	14.33/19.10	20.2/23.3	52/56	60/60	26/30	30/30	-	-	-	-
	A10J+	7.2/9.6	24.56/32.75	34.7/40.0	70/77	70/70	44/50	45/50	-	-	-	-
	*A11J+	7.2/9.6	24.56/32.75	34.7/40.0	70/77	70/70	44/50	45/50	-	-	-	-
	A12J+	8.4/11.2	28.66/38.21	40.4/46.7	77/85	80/80	51/59	60/60	-	-	-	-
	A15J+	10.8/14.4	36.84/49.13	52.0/60.0	92/102	100/100	65/75	70/80	-	-	-	-
	A20J+	14.4/19.2	49.13/65.51	69.3/80.0	113/127	125/125	87/100	90/100	-	-	-	-
A042JK	*A21J+	14.4/19.2	49.13/65.51	69.3/80.0	113/127	125/125	87/100	90/100	-	-	-	-
	No Heat	-	-	-	28/28	35/45	-	-	28/28	-	-	35/45
	A06J+	4.2/5.6	14.33/19.10	20.2/23.3	54/58	60/60	26/30	30/30	-	-	-	-
	A10J	7.2/9.6	24.56/32.75	34.7/40.0	72/78	80/80	44/50	45/50	-	-	-	-
	*A11J+	7.2/9.6	24.56/32.75	34.7/40.0	72/78	80/80	44/50	45/50	-	-	-	-
	A12J+	8.4/11.2	28.66/38.21	40.4/46.7	79/87	80/80	51/59	60/60	-	-	-	-
	A15J	10.8/14.4	36.84/49.13	52.0/60.0	93/103	100/100	65/75	70/80	-	-	-	-
A048JK	A20J+	14.4/19.2	49.13/65.51	69.3/80.0	115/128	125/125	87/100	90/100	-	-	-	-
	*A21J+	14.4/19.2	49.13/65.51	69.3/80.0	115/128	125/125	87/100	90/100	-	-	-	-
	No Heat	-	-	-	33/33	40/50	-	-	33/33	-	-	40/50
	A06J+	4.2/5.6	14.33/19.10	20.2/23.3	58/62	60/70	26/30	30/30	-	-	-	-
	A10J+	7.2/9.6	24.56/32.75	34.7/40.0	77/83	80/80	44/50	45/50	-	-	-	-
	*A11J+	7.2/9.6	24.56/32.75	34.7/40.0	77/83	80/80	44/50	45/50	-	-	-	-
	A12J+	8.4/11.2	28.66/38.21	40.4/46.7	84/92	90/90	51/59	60/60	-	-	-	-
A060JK	A15J	10.8/14.4	36.84/49.13	52.0/60.0	98/108	100/100	65/75	70/80	-	-	-	-
	A20J	14.4/19.2	49.13/65.51	69.3/80.0	120/133	125/125	87/100	90/100	-	-	-	-
	*A21J+	14.4/19.2	49.13/65.51	69.3/80.0	120/133	125/125	87/100	90/100	-	-	-	-
	No Heat	-	-	-	39/39	45/60	-	-	39/39	-	-	45/60
	A06J+	4.2/5.6	14.33/19.10	20.2/23.3	64/68	70/80	26/30	30/30	-	-	-	-
	A10J+	7.2/9.6	24.56/32.75	34.7/40.0	82/89	90/90	44/50	45/50	-	-	-	-
	*A11J+	7.2/9.6	24.56/32.75	34.7/40.0	82/89	90/90	44/50	45/50	-	-	-	-
A060JK	A12J+	8.4/11.2	28.66/38.21	40.4/46.7	89/97	90/100	51/59	60/60	-	-	-	-
	A15J	10.8/14.4	36.84/49.13	52.0/60.0	104/114	110/110	65/75	70/80	-	-	-	-
	A20J	14.4/19.2	49.13/65.51	69.3/80.0	125/139	125/125	87/100	90/100	-	-	-	-
	*A21J+	14.4/19.2	49.13/65.51	69.3/80.0	125/139	125/125	87/100	90/100	-	-	-	-

+ = Field Installed Only  
 \* = For Canadian Use Only. Uses "P" Fused for Inductive Circuit

# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJNL

<b>208-240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>												
<b>Single Power Supply For Both Unit And Heater Kit</b>						<b>Separate Power Supply For Both Unit And Heater Kit</b>						
Model No. RJNL-	RXJJ-Heater Kit Nominal kW	Rated Heater kW @ 208-240 V	Heater KBTU/Hr @ 208-240 V	Heater Amp. @ 208-240 V	Unit Min. Ckt Ampacity @ 208-240 V	Over Current Protective Device Size		Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 208-240	Heat Pump Over Current Protective Device Size	
						Min/Max @ 208 V	Min/Max @ 240 V				Min/Max @ 208 V	Min/Max @ 240 V
A036CK	No Heat	-	-	-	19/19	25/25	25/25	-	-	19/19	25/25	25/25
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	34/36	35/40	40/40	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	44/48	45/45	50/50	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	44/48	45/45	50/50	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	48/53	50/50	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	57/62	60/60	70/70	38/44	40/45	-	-	-
A042CK	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	69/77	70/70	80/80	50/58	50/60	-	-	-
	*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	69/77	70/70	80/80	50/58	50/60	-	-	-
	No Heat	-	-	-	23/23	30/35	30/35	-	-	23/23	30/35	30/35
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	38/40	40/45	40/45	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	48/52	50/50	60/60	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	48/52	50/50	60/60	25/29	25/30	-	-	-
A048CK	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	52/57	60/60	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	61/66	70/70	70/70	38/44	40/45	-	-	-
	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	73/81	80/80	90/90	50/58	50/60	-	-	-
	*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	73/81	80/80	90/90	50/58	50/60	-	-	-
	No Heat	-	-	-	23/23	30/35	30/35	-	-	23/23	30/35	30/35
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	38/40	40/45	40/45	15/17	15/20	-	-	-
A060CK	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	48/52	50/50	60/60	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	48/52	50/50	60/60	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	55/59	60/60	60/60	30/34	30/35	-	-	-
	A15C	10.8/14.4	36.84/49.13	30.1/34.7	63/69	70/70	70/70	38/44	40/45	-	-	-
	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	76/83	80/80	90/90	50/58	50/60	-	-	-
	*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	76/83	80/80	90/90	50/58	50/60	-	-	-

+ = Field Installed Only

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# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJNL

<b>208-240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>														
Model No. RJNL-	Single Power Supply For Both Unit And Heater Kit							Separate Power Supply For Both Unit And Heater Kit						
	RXJJ-Heater Kit Nominal kW	Rated Heater kW @ 208-240 V	Heater KBTU/Hr @ 208-240 V	Heater Amp. @ 208 V	Unit Min. Ckt Ampacity @ 208-240 V	Over Current Protective Device Size		Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 208-240	Heat Pump Over Current Protective Device Size	Min/Max @		
						208 V	240 V					208 V	240 V	208 V
A036CL	No Heat	-	-	-	18/18	20/25	20/25	-	-	18/18	20/25	20/25	20/25	
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	32/35	35/35	35/40	15/17	15/20	-	-	-	-	
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	43/47	45/45	50/50	25/29	25/30	-	-	-	-	
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	43/47	45/45	50/50	25/29	25/30	-	-	-	-	
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	47/52	50/50	60/60	30/34	30/35	-	-	-	-	
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	55/61	60/60	70/70	38/44	40/45	-	-	-	-	
	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	68/76	70/70	80/80	50/58	50/60	-	-	-	-	
*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	68/76	70/70	80/80	50/58	50/60	-	-	-	-		
A042CL	No Heat	-	-	-	22/22	25/30	25/30	-	-	22/22	25/30	25/30	25/30	
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	36/39	40/45	40/45	15/17	15/20	-	-	-	-	
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	47/51	50/50	60/60	25/29	25/30	-	-	-	-	
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	47/51	50/50	60/60	25/29	25/30	-	-	-	-	
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	51/55	60/60	60/60	30/34	30/35	-	-	-	-	
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	59/65	60/60	70/70	38/44	40/45	-	-	-	-	
	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	72/79	80/80	80/80	50/58	50/60	-	-	-	-	
*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	72/79	80/80	80/80	50/58	50/60	-	-	-	-		
A048CL	No Heat	-	-	-	22/22	25/35	25/35	-	-	22/22	25/35	25/35	25/35	
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	37/39	40/45	40/45	15/17	15/20	-	-	-	-	
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	47/51	50/50	60/60	25/29	25/30	-	-	-	-	
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	47/51	50/50	60/60	25/29	25/30	-	-	-	-	
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	51/56	60/60	60/60	30/34	30/35	-	-	-	-	
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	60/65	60/60	70/70	38/44	40/45	-	-	-	-	
	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	72/80	80/80	80/80	50/58	50/60	-	-	-	-	
*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	72/80	80/80	80/80	50/58	50/60	-	-	-	-		
A060CL	No Heat	-	-	-	26/26	30/40	30/40	-	-	26/26	30/40	30/40	30/40	
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	41/43	45/50	45/50	15/17	15/20	-	-	-	-	
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	51/55	60/60	60/60	25/29	25/30	-	-	-	-	
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	51/55	60/60	60/60	25/29	25/30	-	-	-	-	
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	55/60	60/60	60/60	30/34	30/35	-	-	-	-	
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	64/69	70/70	70/70	38/44	40/45	-	-	-	-	
	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	76/84	80/80	90/90	50/58	50/60	-	-	-	-	
*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	76/84	80/80	90/90	50/58	50/60	-	-	-	-		

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# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJNL

<b>208-240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>												
Model No. RJNL-	Single Power Supply For Both Unit And Heater Kit						Separate Power Supply For Both Unit And Heater Kit					
	RXJJ-Heater Kit Nominal kW	Rated Heater kW @ 208-240 V	Heater KBTU/Hr @ 208-240 V	Heater Amp. @ 208-240 V	Unit Min. Ckt Ampacity @ 208-240 V	Over Current Protective Device Size Min/Max @ 208 V   Min/Max @ 240 V	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 208-240	Heat Pump Over Current Protective Device Size Min/Max @ 208 V   Min/Max @ 240 V		
A036CM	No Heat	-	-	-	18/18	25/25   25/25	-	-	18/18	25/25   25/25		
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	33/35	35/40   40/40	15/17	15/20	-	-		
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	43/47	45/45   50/50	25/29	25/30	-	-		
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	43/47	45/45   50/50	25/29	25/30	-	-		
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	48/52	50/50   60/60	30/34	30/35	-	-		
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	56/62	60/60   70/70	38/44	40/45	-	-		
	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	69/76	70/70   80/80	50/58	50/60	-	-		
*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	69/76	70/70   80/80	50/58	50/60	-	-			
A042CM	No Heat	-	-	-	22/22	30/35   30/35	-	-	22/22	30/35   30/35		
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	37/39	40/45   40/45	15/17	15/20	-	-		
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	47/51	50/50   60/60	25/29	25/30	-	-		
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	47/51	50/50   60/60	25/29	25/30	-	-		
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	52/56	60/60   60/60	30/34	30/35	-	-		
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	60/66	60/60   70/70	38/44	40/45	-	-		
	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	72/80	80/80   80/80	50/58	50/60	-	-		
*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	72/80	80/80   80/80	50/58	50/60	-	-			
A048CM	No Heat	-	-	-	23/23	30/35   30/35	-	-	23/23	30/35   30/35		
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	37/39	40/45   40/45	15/17	15/20	-	-		
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	48/51	50/50   60/60	25/29	25/30	-	-		
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	48/51	50/50   60/60	25/29	25/30	-	-		
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	52/56	60/60   60/60	30/34	30/35	-	-		
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	60/66	60/60   70/70	38/44	40/45	-	-		
	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	73/80	80/80   80/80	50/58	50/60	-	-		
*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	73/80	80/80   80/80	50/58	50/60	-	-			
A060CM	No Heat	-	-	-	26/26	30/40   30/40	-	-	26/26	30/40   30/40		
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	41/43	45/50   45/50	15/17	15/20	-	-		
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	51/55	60/60   60/60	25/29	25/30	-	-		
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	51/55	60/60   60/60	25/29	25/30	-	-		
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	56/60	60/60   60/60	30/34	30/35	-	-		
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	64/70	70/70   70/70	38/44	40/45	-	-		
	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	77/84	80/80   90/90	50/58	50/60	-	-		
*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	77/84	80/80   90/90	50/58	50/60	-	-			

+ = Field Installed Only

\* = For Canadian Use Only. Uses "P" Fused for Inductive Circuit

# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJNL

<b>480 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>												
Model No. RJNL-	RXJJ Heater Kit Nominal kW	Rated Heater kW @ 480 V	Heater KBTU/Hr @ 480 V	Heater Amp. @ 480 V	Unit Min. Ckt Ampacity @ 480V	Over Current Protective Device Size		Separate Power Supply For Unit And Heater Kit				
						Min/Max @ 480 V	Min/Max @ 480 V	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 480	Heat Pump Over Current Protective Device Size Min/Max @ 480 V	
A036DK	No Heat	-	-	-	11	15	15	-	-	11	15	15
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-
	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-
	A12D+	11.2	38.21	13.5	28	30	30	17	20	-	-	-
	A15D+	14.4	49.13	17.3	32	35	35	22	25	-	-	-
A042DK	A20D+	19.2	65.51	23.1	40	40	40	30	30	-	-	-
	*A21D+	19.2	65.51	23.1	40	40	40	30	30	-	-	-
	No Heat	-	-	-	11	15	15	-	-	11	15	15
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-
	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-
A048DK	A12D+	11.2	38.21	13.5	28	30	30	17	20	-	-	-
	A15D+	14.4	49.13	17.3	33	35	35	22	25	-	-	-
	A20D+	19.2	65.51	23.1	40	40	40	30	30	-	-	-
	*A21D+	19.2	65.51	23.1	40	40	40	30	30	-	-	-
	No Heat	-	-	-	11	15	15	-	-	11	15	15
	A06D+	5.6	19.10	6.7	20	20	20	9	15	-	-	-
A060DK	A10D+	9.6	32.75	11.6	25	30	30	15	15	-	-	-
	*A11D+	9.6	32.75	11.6	25	30	30	15	15	-	-	-
	A12D+	11.2	38.21	13.5	28	30	30	17	20	-	-	-
	A15D+	14.4	49.13	17.3	33	35	35	22	25	-	-	-
	A20D+	19.2	65.51	23.1	40	40	40	30	30	-	-	-
	*A21D+	19.2	65.51	23.1	40	40	40	30	30	-	-	-
A066DK	No Heat	-	-	-	13	15	20	-	-	13	15	20
	A06D+	5.6	19.10	6.7	22	25	25	9	15	-	-	-
	A10D+	9.6	32.75	11.6	28	30	30	15	15	-	-	-
	*A11D+	9.6	32.75	11.6	28	30	30	15	15	-	-	-
	A12D+	11.2	38.21	13.5	30	30	30	17	20	-	-	-
	A15D+	14.4	49.13	17.4	35	35	35	22	25	-	-	-
A072DK	A20D+	19.2	65.51	23.3	43	45	45	30	30	-	-	-
	*A21D+	19.2	65.51	23.3	43	45	45	30	30	-	-	-
	No Heat	-	-	-	13	15	20	-	-	13	15	20
	A06D+	5.6	19.10	6.7	22	25	25	9	15	-	-	-
	A10D+	9.6	32.75	11.6	28	30	30	15	15	-	-	-
	*A11D+	9.6	32.75	11.6	28	30	30	15	15	-	-	-

\* = For Canadian use only. Uses "P" fuses for inductive circuit  
 + = Field Installed Only

# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJNL

480 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION													
Model No. RJNL-	RXJJ-Heater Kit Nominal kW	Rated Heater kW @ 480 V	Heater KBTU/Hr @ 480 V	Heater Amp. @ 480 V	Unit Min. Ckt Ampacity @ 480 V	Over Current Protective Device Size		Separate Power Supply For Both Unit And Heater Kit					
						Min @ 480 V	Max @ 480 V	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 480	Heat Pump Over Current Protective Device Size Min @ 480 V	Heat Pump Over Current Protective Device Size Max @ 480 V	
A036DL	No Heat	-	-	-	10	15	15	-	-	-	10	15	15
	A06D+	5.6	19.10	6.7	18	20	20	9	15	-	-	-	-
	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	-
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	-
	A12D+	11.2	38.21	13.5	27	30	30	17	20	-	-	-	-
	A15D+	14.4	49.13	17.3	32	35	35	22	25	-	-	-	-
	A20D+	19.2	65.51	23.1	39	40	40	30	30	-	-	-	-
*A21D+	19.2	65.51	23.1	39	40	40	30	30	-	-	-	-	
A042DL	No Heat	-	-	-	10	15	15	-	-	10	15	15	15
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-	-
	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	-
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	-
	A12D+	11.2	38.21	13.5	27	30	30	17	20	-	-	-	-
	A15D+	14.4	49.13	17.3	32	35	35	22	25	-	-	-	-
	A20D+	19.2	65.51	23.1	39	40	40	30	30	-	-	-	-
*A21D+	19.2	65.51	23.1	39	40	40	30	30	-	-	-	-	
A048DL	No Heat	-	-	-	11	15	15	-	-	11	15	15	15
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-	-
	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	-
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	-
	A12D+	11.2	38.21	13.5	28	30	30	17	20	-	-	-	-
	A15D+	14.4	49.13	17.3	32	35	35	22	25	-	-	-	-
	A20D+	19.2	65.51	23.1	40	40	40	30	30	-	-	-	-
*A21D+	19.2	65.51	23.1	40	40	40	30	30	-	-	-	-	
A060DL	No Heat	-	-	-	13	15	20	-	-	13	15	15	20
	A06D+	5.6	19.10	6.7	21	25	25	9	15	-	-	-	-
	A10D+	9.6	32.75	11.6	27	30	30	15	15	-	-	-	-
	*A11D+	9.6	32.75	11.6	27	30	30	15	15	-	-	-	-
	A12D+	11.2	38.21	13.5	30	30	30	17	20	-	-	-	-
	A15D+	14.4	49.13	17.3	34	35	35	22	25	-	-	-	-
	A20D+	19.2	65.51	23.1	42	45	45	30	30	-	-	-	-
*A21D+	19.2	65.51	23.1	42	45	45	30	30	-	-	-	-	

+ = Field Installed Only  
 \* = For Canadian Use Only. Uses "IP" Fused for Inductive Circuit

# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJNL

<b>480 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>													
Model No. RJNL-	Single Power Supply For Both Unit And Heater Kit										Separate Power Supply For Both Unit And Heater Kit		
	RXJJ-Heater Kit Nominal kW	Rated Heater kW @ 480 V	Heater KBTU/Hr @ 480 V	Heater Amp. @ 480 V	Unit Min. Ckt Ampacity @ 480 V	Over Current Protective Device Size		Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 480	Heat Pump Over Current Protective Device Size		
						Min @ 480 V	Max @ 480 V				Min @ 480 V	Max @ 480 V	
A036DM	No Heat	-	-	-	10	15	15	-	-	10	15	15	
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-	
	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	
	A12D+	11.2	38.21	13.5	27	30	30	17	20	-	-	-	
	A15D+	14.4	49.13	17.3	32	35	35	22	25	-	-	-	
A042DM	A20D+	19.2	65.51	23.1	39	40	40	30	30	-	-	-	
	*A21D+	19.2	65.51	23.1	39	40	40	30	30	-	-	-	
	No Heat	-	-	-	11	15	15	-	-	11	15	15	
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-	
	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	
A048DM	A12D+	11.2	38.21	13.5	27	30	30	17	20	-	-	-	
	A15D+	14.4	49.13	17.3	32	35	35	22	25	-	-	-	
	A20D+	19.2	65.51	23.1	39	40	40	30	30	-	-	-	
	*A21D+	19.2	65.51	23.1	39	40	40	30	30	-	-	-	
	No Heat	-	-	-	11	15	15	-	-	11	15	15	
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-	
A060DM	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	
	A12D+	11.2	38.21	13.5	28	30	30	17	20	-	-	-	
	A15D+	14.4	49.13	17.3	32	35	35	22	25	-	-	-	
	A20D+	19.2	65.51	23.1	40	40	40	30	30	-	-	-	
	*A21D+	19.2	65.51	23.1	40	40	40	30	30	-	-	-	
A060DM	No Heat	-	-	-	13	15	20	-	-	13	15	20	
	A06D+	5.6	19.10	6.7	21	25	25	9	15	-	-	-	
	A10D+	9.6	32.75	11.6	28	30	30	15	15	-	-	-	
	*A11D+	9.6	32.75	11.6	28	30	30	15	15	-	-	-	
	A12D+	11.2	38.21	13.5	30	30	30	17	20	-	-	-	
	A15D+	14.4	49.13	17.3	35	35	35	22	25	-	-	-	
A20D+	19.2	65.51	23.1	42	45	45	30	30	-	-	-		
*A21D+	19.2	65.51	23.1	42	45	45	30	30	-	-	-		

+ = Field Installed Only  
 \* = For Canadian Use Only. Uses "P" Fused for Inductive Circuit

# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION

<b>208-240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>															
Single Power Supply For Both Unit And Heater Kit						Separate Power Supply For Both Unit And Heater Kit									
Unit Model Number RJNL-	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	Heat Pump			Heater Kit			Heat Pump		
							Min/Max @ 208 V	Min/Max @ 240 V	Over Current Protective Device Size	Min. Ckt. Ampacity 208/240V	Max. Fuse Size 208/240V	Min. Circuit Ampacity 208/240V	Min/Max @ 208 V	Min/Max @ 240 V	Over Current Protective Device Size
A072CL	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	—	—	—	—	—
	A20C	1	14.4/19.2	49.13/65.5	40.1/46.2	85/92	90/90	100/100	51/58	60/60	—	—	—	—	—
	A24C	1	18/24	61.41/81.88	50.1/57.8	97/107	100/100	110/110	63/73	70/80	—	—	—	—	—
A072CM	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	—	—	—	—	—
	A20C	1	14.4/19.2	49.13/65.5	40.1/46.2	85/92	90/90	100/100	51/58	60/60	—	—	—	—	—
	A24C	1	18/24	61.41/81.88	50.1/57.8	97/107	100/100	110/110	63/73	70/80	—	—	—	—	—
<b>480 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>															
A072DL	No Heat	—	—	—	—	17	20/25	—	—	—	17	20/25	20/25	—	—
	A15D	1	14.4	49.13	17.4	39	45/45	—	22	25	—	—	—	—	—
	A20D	1	19.2	65.5	23.3	47	50/50	—	30	30	—	—	—	—	—
	A24D	1	24	81.88	28.9	54	60/60	—	37	40	—	—	—	—	—
A072DM	No Heat	—	—	—	—	17	20/25	—	—	—	17	20/25	20/25	—	—
	A15D	1	14.4	49.13	17.4	39	45/45	—	22	25	—	—	—	—	—
	A20D	1	19.2	65.5	23.3	47	50/50	—	30	30	—	—	—	—	—
	A24D	1	24	81.88	28.9	54	60/60	—	37	40	—	—	—	—	—
<b>600 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>															
A072YL	No Heat	—	—	—	—	14	15/20	—	—	—	14	15/20	15/20	—	—
	A15Y	1	14.4	49.13	13.9	32	35/35	—	18	20	—	—	—	—	—
	A20Y	1	19.2	65.5	18.8	38	40/40	—	24	25	—	—	—	—	—
	A24Y	1	24	81.88	23.1	43	45/45	—	29	30	—	—	—	—	—

\*For Canadian use only. Uses "P" fuses for inductive circuit.  
+Field Installed Only

# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJPL

<b>208-240 VOLT, SINGLE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>												
Model No. RJPL-	Single Power Supply For Both Unit And Heater Kit						Separate Power Supply For Both Unit And Heater Kit					
	RXJJ-Heater Kit Nominal kW	Rated Heater kW @ 208-240 V	Heater KBTU/Hr @ 208-240 V	Heater Amp. @ 208-240 V	Unit Min. Ckt Ampacity @ 208-240 V	Over Current Protective Device Size Min/Max @ 208 V / Min/Max @ 240 V	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 208-240	Heat Pump Over Current Protective Device Size Min/Max @ 208 V / Min/Max @ 240 V		
A036JK	No Heat	-	-	-	24/24	30/40	-	-	24/24	30/40	-	30/40
	A06J+	4.2/5.6	14.33/19.10	20.2/23.3	50/54	50/60	26/30	30/30	-	-	-	-
	A10J+	7.2/9.6	24.56/32.75	34.7/40.0	68/74	70/70	44/50	45/50	-	-	-	-
	*A11J+	7.2/9.6	24.56/32.75	34.7/40.0	68/74	70/70	44/50	45/50	-	-	-	-
	A12J+	8.4/11.2	28.66/38.21	40.4/46.7	75/83	80/80	51/59	60/60	-	-	-	-
	A15J+	10.8/14.4	36.84/49.13	52.0/60.0	89/99	90/90	65/75	70/80	-	-	-	-
A042JK	A20J+	14.4/19.2	49.13/65.51	69.3/80.0	111/124	125/125	87/100	90/100	-	-	-	-
	*A21J+	14.4/19.2	49.13/65.51	69.3/80.0	111/124	125/125	87/100	90/100	-	-	-	-
	No Heat	-	-	-	26/26	35/40	-	-	26/26	35/40	-	35/40
	A06J+	4.2/5.6	14.33/19.10	20.2/23.3	52/55	60/60	26/30	30/30	-	-	-	-
	A10J	7.2/9.6	24.56/32.75	34.7/40.0	70/76	80/80	44/50	45/50	-	-	-	-
	*A11J+	7.2/9.6	24.56/32.75	34.7/40.0	70/76	80/80	44/50	45/50	-	-	-	-
A048JK	A12J+	8.4/11.2	28.66/38.21	40.4/46.7	77/85	80/80	51/59	60/60	-	-	-	-
	A15J	10.8/14.4	36.84/49.13	52.0/60.0	91/101	100/100	65/75	70/80	-	-	-	-
	A20J+	14.4/19.2	49.13/65.51	69.3/80.0	113/126	125/125	87/100	90/100	-	-	-	-
	*A21J+	14.4/19.2	49.13/65.51	69.3/80.0	113/126	125/125	87/100	90/100	-	-	-	-
	No Heat	-	-	-	31/31	40/50	-	-	31/31	40/50	-	40/50
	A06J+	4.2/5.6	14.33/19.10	20.2/23.3	56/60	60/70	26/30	30/30	-	-	-	-
A060JK	A10J+	7.2/9.6	24.56/32.75	34.7/40.0	75/81	80/80	44/50	45/50	-	-	-	-
	*A11J+	7.2/9.6	24.56/32.75	34.7/40.0	75/81	80/80	44/50	45/50	-	-	-	-
	A12J+	8.4/11.2	28.66/38.21	40.4/46.7	82/90	90/90	51/59	60/60	-	-	-	-
	A15J	10.8/14.4	36.84/49.13	52.0/60.0	96/106	100/100	65/75	70/80	-	-	-	-
	A20J	14.4/19.2	49.13/65.51	69.3/80.0	118/131	125/125	87/100	90/100	-	-	-	-
	*A21J+	14.4/19.2	49.13/65.51	69.3/80.0	118/131	125/125	87/100	90/100	-	-	-	-
A066JK	No Heat	-	-	-	39/39	45/60	-	-	39/39	45/60	-	45/60
	A06J+	4.2/5.6	14.33/19.10	20.2/23.3	64/68	70/80	26/30	30/30	-	-	-	-
	A10J+	7.2/9.6	24.56/32.75	34.7/40.0	82/89	90/90	44/50	45/50	-	-	-	-
	*A11J+	7.2/9.6	24.56/32.75	34.7/40.0	82/89	90/90	44/50	45/50	-	-	-	-
	A12J+	8.4/11.2	28.66/38.21	40.4/46.7	89/97	90/100	51/59	60/60	-	-	-	-
	A15J	10.8/14.4	36.84/49.13	52.0/60.0	104/114	110/110	65/75	70/80	-	-	-	-
A072JK	A20J	14.4/19.2	49.13/65.51	69.3/80.0	125/139	125/125	87/100	90/100	-	-	-	-
	*A21J+	14.4/19.2	49.13/65.51	69.3/80.0	125/139	125/125	87/100	90/100	-	-	-	-

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# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJPL

<b>208-240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>												
Model No. RJPL-	Single Power Supply For Both Unit And Heater Kit						Separate Power Supply For Both Unit And Heater Kit					
	RXJJ-Heater Kit Nominal kW	Rated Heater kW @ 208-240 V	Heater KBTU/Hr @ 208-240 V	Heater Amp. @ 208 240 V	Unit Min. Ckt Ampacity @ 208-240 V	Over Current Protective Device Size		Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 208 240	Heat Pump Over Current Protective Device Size	
						Min/Max @ 208 V	Min/Max @ 240 V				Min/Max @ 208 V	Min/Max @ 240 V
A036CK	No Heat	-	-	-	17/17	20/25	20/25	-	-	17/17	20/25	20/25
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	31/34	35/35	35/40	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	42/46	45/45	50/50	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	42/46	45/45	50/50	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	46/50	50/50	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	54/60	60/60	80/80	38/44	40/45	-	-	-
	*A20C+	14.4/19.2	49.13/65.51	40.1/46.2	67/74	70/70	80/80	50/58	50/60	-	-	-
*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	67/74	70/70	80/80	50/58	50/60	-	-	-	
A042CK	No Heat	-	-	-	21/21	25/30	25/30	-	-	21/21	25/30	25/30
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	35/38	40/45	40/45	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	46/50	50/50	50/50	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	46/50	50/50	50/50	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	50/55	50/50	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	58/64	60/60	70/70	38/44	40/45	-	-	-
	*A20C+	14.4/19.2	49.13/65.51	40.1/46.2	71/79	80/80	80/80	50/58	50/60	-	-	-
*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	71/79	80/80	80/80	50/58	50/60	-	-	-	
A048CK	No Heat	-	-	-	21/21	25/30	25/30	-	-	21/21	25/30	25/30
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	36/38	40/45	40/45	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	46/50	50/50	50/50	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	46/50	50/50	50/50	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	50/55	50/50	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	59/64	60/60	70/70	38/44	40/45	-	-	-
	*A20C+	14.4/19.2	49.13/65.51	40.1/46.2	71/79	80/80	80/80	50/58	50/60	-	-	-
*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	71/79	80/80	80/80	50/58	50/60	-	-	-	
A060CK	No Heat	-	-	-	25/25	30/40	30/40	-	-	25/25	30/40	30/40
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	40/42	50/50	45/50	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	50/54	50/60	60/60	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	50/54	50/60	60/60	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	55/59	60/60	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	63/69	70/70	70/70	38/44	40/45	-	-	-
	*A20C+	14.4/19.2	49.13/65.51	40.1/46.2	76/83	80/80	80/80	50/58	50/60	-	-	-
*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	76/83	80/80	80/80	50/58	50/60	-	-	-	

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# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJPL

<b>208-240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>												
<b>Single Power Supply For Both Unit And Heater Kit</b>						<b>Separate Power Supply For Both Unit And Heater Kit</b>						
Model No. RJPL-	RXJJ-Heater Kit Nominal kW	Rated Heater kW @ 208-240 V	Heater KBTU/Hr @ 208-240 V	Heater Amp. @ 208 240 V	Unit Min. Ckt Ampacity @ 208-240 V	Over Current Protective Device Size		Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 208 240	Heat Pump Over Current Protective Device Size	
						Min/Max @ 208 V	Min/Max @ 240 V				Min/Max @ 208 V	Min/Max @ 240 V
A036CL	No Heat	-	-	-	18/18	20/25	20/25	-	-	18/18	20/25	20/25
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	32/35	35/35	35/40	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	43/47	45/45	50/50	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	43/47	45/45	50/50	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	47/52	50/50	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	55/61	60/60	70/70	38/44	40/45	-	-	-
A042CL	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	68/76	70/70	80/80	50/58	50/60	-	-	-
	*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	68/76	70/70	80/80	50/58	50/60	-	-	-
	No Heat	-	-	-	22/22	25/30	25/30	-	-	22/22	25/30	25/30
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	36/39	40/45	40/45	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	47/51	50/50	60/60	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	47/51	50/50	60/60	25/29	25/30	-	-	-
A048CL	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	51/55	60/60	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	59/65	60/60	70/70	38/44	40/45	-	-	-
	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	72/79	80/80	80/80	50/58	50/60	-	-	-
	*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	72/79	80/80	80/80	50/58	50/60	-	-	-
	No Heat	-	-	-	22/22	25/35	25/35	-	-	22/22	25/35	25/35
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	37/39	40/45	40/45	15/17	15/20	-	-	-
A060CL	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	47/51	50/50	60/60	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	47/51	50/50	60/60	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	51/56	60/60	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	60/65	60/60	70/70	38/44	40/45	-	-	-
	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	72/80	80/80	80/80	50/58	50/60	-	-	-
	*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	72/80	80/80	80/80	50/58	50/60	-	-	-
A060CL	No Heat	-	-	-	26/26	30/40	30/40	-	-	26/26	30/40	30/40
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	41/43	45/50	45/50	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	51/55	60/60	60/60	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	51/55	60/60	60/60	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	55/60	60/60	60/60	30/34	30/35	-	-	-
	A15C	10.8/14.4	36.84/49.13	30.1/34.7	64/69	70/70	70/70	38/44	40/45	-	-	-
A060CL	A20C+	14.4/19.2	49.13/65.51	40.1/46.2	76/84	80/80	80/80	50/58	50/60	-	-	-
	*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	76/84	80/80	80/80	50/58	50/60	-	-	-

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# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJPL

<b>208-240 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>												
<b>Single Power Supply For Both Unit And Heater Kit</b>						<b>Separate Power Supply For Both Unit And Heater Kit</b>						
Model No. RJPL-	RXJJ-Heater Kit Nominal kW	Rated Heater kW @ 208-240 V	Heater KBTU/Hr @ 208-240 V	Heater Amp. @ 208 V	Unit Min. Ckt Ampacity @ 208-240 V	Over Current Protective Device Size		Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 208/240	Heat Pump Over Current Protective Device Size Min/Max @ 208 V / Min/Max @ 240 V	
						Min/Max @ 208 V	Min/Max @ 240 V					
A036CM	No Heat	-	-	-	18/18	25/25	25/25	-	-	18/18	25/25	25/25
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	33/35	35/40	35/40	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	43/47	45/45	50/50	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	43/47	45/45	50/50	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	48/52	50/50	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	56/62	60/60	70/70	38/44	40/45	-	-	-
	*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	69/76	70/70	80/80	50/58	50/60	-	-	-
A042CM	No Heat	-	-	-	22/22	30/35	30/35	-	-	22/22	30/35	30/35
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	37/39	40/45	40/45	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	47/51	50/50	60/60	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	47/51	50/50	60/60	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	52/56	60/60	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	60/66	60/60	70/70	38/44	40/45	-	-	-
	*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	72/80	80/80	80/80	50/58	50/60	-	-	-
A048CM	No Heat	-	-	-	23/23	30/35	30/35	-	-	23/23	30/35	30/35
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	37/39	40/45	40/45	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	48/51	50/50	60/60	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	48/51	50/50	60/60	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	52/56	60/60	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	60/66	60/60	70/70	38/44	40/45	-	-	-
	*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	73/80	80/80	80/80	50/58	50/60	-	-	-
A060CM	No Heat	-	-	-	26/26	30/40	30/40	-	-	26/26	30/40	30/40
	A06C+	4.2/5.6	14.33/19.10	11.7/13.5	41/43	45/50	45/50	15/17	15/20	-	-	-
	A10C+	7.2/9.6	24.56/32.75	20.0/23.1	51/55	60/60	60/60	25/29	25/30	-	-	-
	*A11C+	7.2/9.6	24.56/32.75	20.0/23.1	51/55	60/60	60/60	25/29	25/30	-	-	-
	A12C+	8.4/11.2	28.66/38.21	23.4/27.0	56/60	60/60	60/60	30/34	30/35	-	-	-
	A15C+	10.8/14.4	36.84/49.13	30.1/34.7	64/70	70/70	70/70	38/44	40/45	-	-	-
	*A21C+	14.4/19.2	49.13/65.51	40.1/46.2	77/84	80/80	90/90	50/58	50/60	-	-	-

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# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJPL

<b>480 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>												
Model No. RJPL-	RXJJ Heater Kit Nominal kW	Single Power Supply For Both Unit And Heater Kit						Separate Power Supply For Unit And Heater Kit				
		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/Max @ 480 V	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 480	Heat Pump Over Current Protective Device Size Min/Max @ 480 V		
A036DK	No Heat	-	-	-	10	15	15	-	-	10	15	15
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-
	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-
	A12D+	11.2	38.21	13.5	27	30	30	17	20	-	-	-
	A15D+	14.4	49.13	17.4	32	35	35	22	25	-	-	-
A042DK	A20D+	19.2	65.51	23.3	40	40	40	30	30	-	-	-
	*A21D+	19.2	65.51	23.3	40	40	40	30	30	-	-	-
	No Heat	-	-	-	10	15	15	-	-	10	15	15
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-
	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-
A048DK	A12D+	11.2	38.21	13.5	27	30	30	17	20	-	-	-
	A15D+	14.4	49.13	17.4	32	35	35	22	25	-	-	-
	A20D+	19.2	65.51	23.3	40	40	40	30	30	-	-	-
	*A21D+	19.2	65.51	23.3	40	40	40	30	30	-	-	-
	No Heat	-	-	-	10	15	15	-	-	10	15	15
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-
A060DK	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-
	A12D+	11.2	38.21	13.5	30	30	30	17	20	-	-	-
	A15D+	14.4	49.13	17.4	35	35	35	22	25	-	-	-
	A20D+	19.2	65.51	23.3	43	45	45	30	30	-	-	-
	*A21D+	19.2	65.51	23.3	43	45	45	30	30	-	-	-

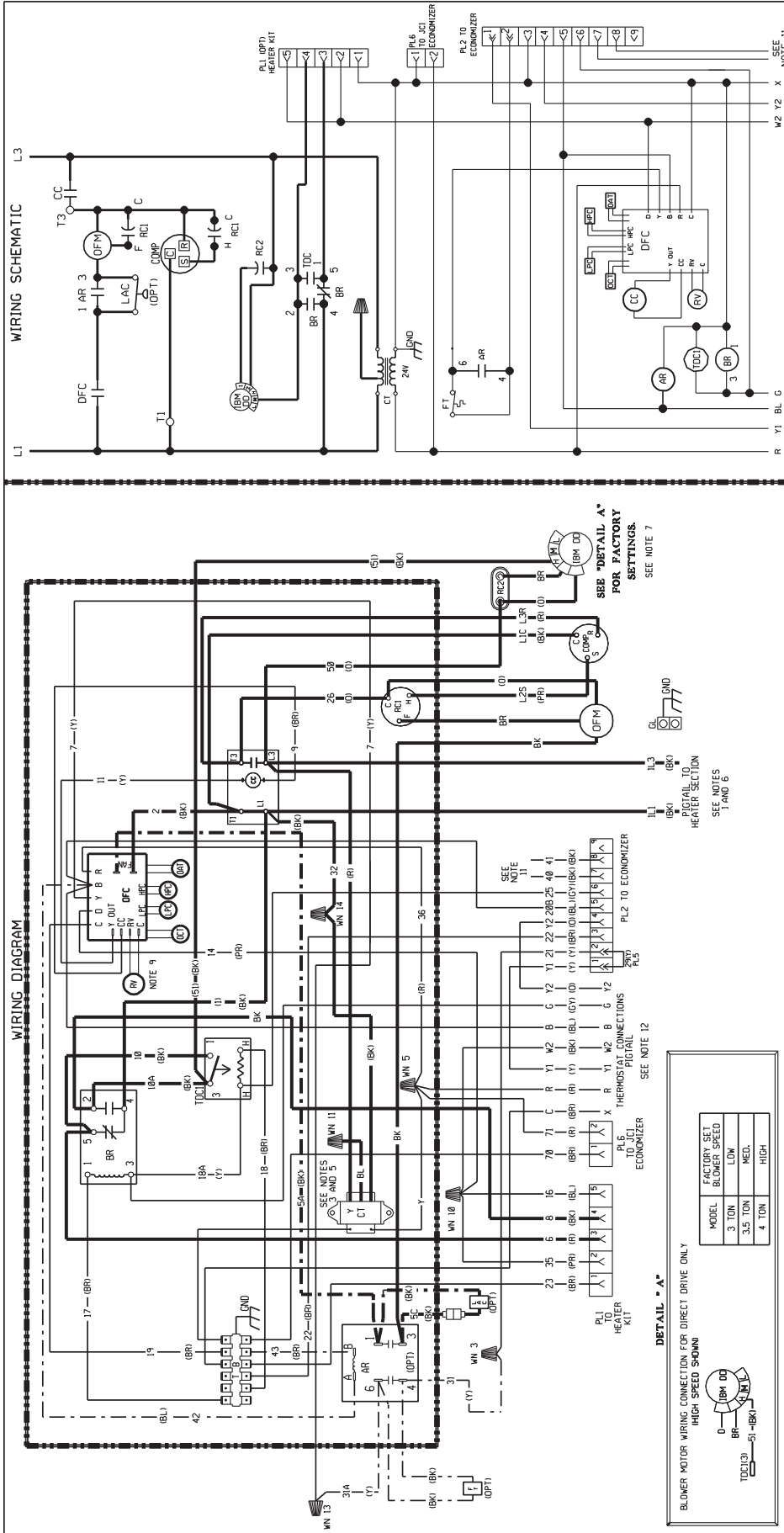
\* = Field Installed Only  
 + = For Canadian Use Only. Uses "P" Fuses for Inductive Circuit

# AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION – RJPL

<b>480 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION</b>													
Model No. RJPL-	RXJJ-Heater Kit Nominal kW	Rated Heater kW @ 480 V	Heater KBTU/Hr @ 480 V	Heater Amp. @ 480 V	Unit Min. Ckt Ampacity @ 480 V	Over Current Protective Device Size		Separate Power Supply For Both Unit And Heater Kit				Heat Pump Over Current Protective Device Size	
						Min @ 480 V	Max @ 480 V	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse Size	Heat Pump Min. Ckt. Ampacity 480	Heat Pump Over Current Protective Device Size	Min @ 480 V	Max @ 480 V
A036DM	No Heat	-	-	-	10	15	15	-	-	-	10	15	15
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-	-
	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	-
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	-
	A12D+	11.2	38.21	13.5	27	30	30	17	20	-	-	-	-
	A15D+	14.4	49.13	17.3	32	35	35	22	25	-	-	-	-
	A20D+	19.2	65.51	23.1	39	40	40	30	30	-	-	-	-
*A21D+	19.2	65.51	23.1	39	40	40	29	30	-	-	-	-	
A042DM	No Heat	-	-	-	11	15	15	-	-	-	11	15	15
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-	-
	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	-
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	-
	A12D+	11.2	38.21	13.5	27	30	30	17	20	-	-	-	-
	A15D+	14.4	49.13	17.3	32	35	35	22	25	-	-	-	-
	A20D+	19.2	65.51	23.1	39	40	40	30	30	-	-	-	-
*A21D+	19.2	65.51	23.1	39	40	40	29	30	-	-	-	-	
A048DM	No Heat	-	-	-	11	15	15	-	-	-	11	15	15
	A06D+	5.6	19.10	6.7	19	20	20	9	15	-	-	-	-
	A10D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	-
	*A11D+	9.6	32.75	11.6	25	25	25	15	15	-	-	-	-
	A12D+	11.2	38.21	13.5	28	30	30	17	20	-	-	-	-
	A15D+	14.4	49.13	17.3	32	35	35	22	25	-	-	-	-
	A20D+	19.2	65.51	23.1	40	40	40	30	30	-	-	-	-
*A21D+	19.2	65.51	23.1	40	40	40	29	30	-	-	-	-	
A060DM	No Heat	-	-	-	13	15	20	-	-	-	13	15	20
	A06D+	5.6	19.10	6.7	21	25	25	9	15	-	-	-	-
	A10D+	9.6	32.75	11.6	28	30	30	15	15	-	-	-	-
	*A11D+	9.6	32.75	11.6	28	30	30	15	15	-	-	-	-
	A12D+	11.2	38.21	13.5	30	30	30	17	20	-	-	-	-
	A15D+	14.4	49.13	17.3	35	35	35	22	25	-	-	-	-
	A20D+	19.2	65.51	23.1	42	45	45	30	30	-	-	-	-
*A21D+	19.2	65.51	23.1	42	45	45	29	30	-	-	-	-	

+ = Field Installed Only  
 \* = For Canadian Use Only. Uses "P" Fused for Inductive Circuit

**FIGURE 19**  
**WIRING DIAGRAM**



**WIRING SCHEMATIC**

L1 L3

DFC 1 AR 3 T3 CC C F RCI (OPT) COMP STI H RCI C

2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

PL1 (OPT) HEATER KIT

PL2 TO ECONOMIZER

SEE NOTE 11

W2 Y2 X

R Y1 BL G

**WIRE COLOR CODE**

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

**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.

**NOTES:**

- CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
- COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS CONTROL TRANSFORMER PRIMARY LEADS RED, COM. BLUE, 208V. BLACK-230V. TRANSFORMER FACTORY WIRE FOR 230 VOLTS ON 3 PHASE MODELS. INTERCHANGE BLACK & BLUE LEADS FOR 208 VOLT CONNECTIONS.
- CONNECTOR FACTORY WIRE TO FACTORY SUPPLIED CONTACTOR WIRE IN ELECTRICAL BOX.
- LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 FUSED DISCONNECT.
- CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO 60 CLASSIFICATION.
- SEE FUSE LABEL ON UNIT FUSE BOX FOR FUSE SIZING AND CLASSIFICATION.
- REVERSING VALVE ENERGIZED IN HEATING.
- WIRE FROM PL 7, 8, 9, 10 TO THE MIXED AIR SENSOR ON THE OPTIONAL ECONOMIZER.
- Y2 IS USED ONLY FOR THE OPTIONAL ECONOMIZER.

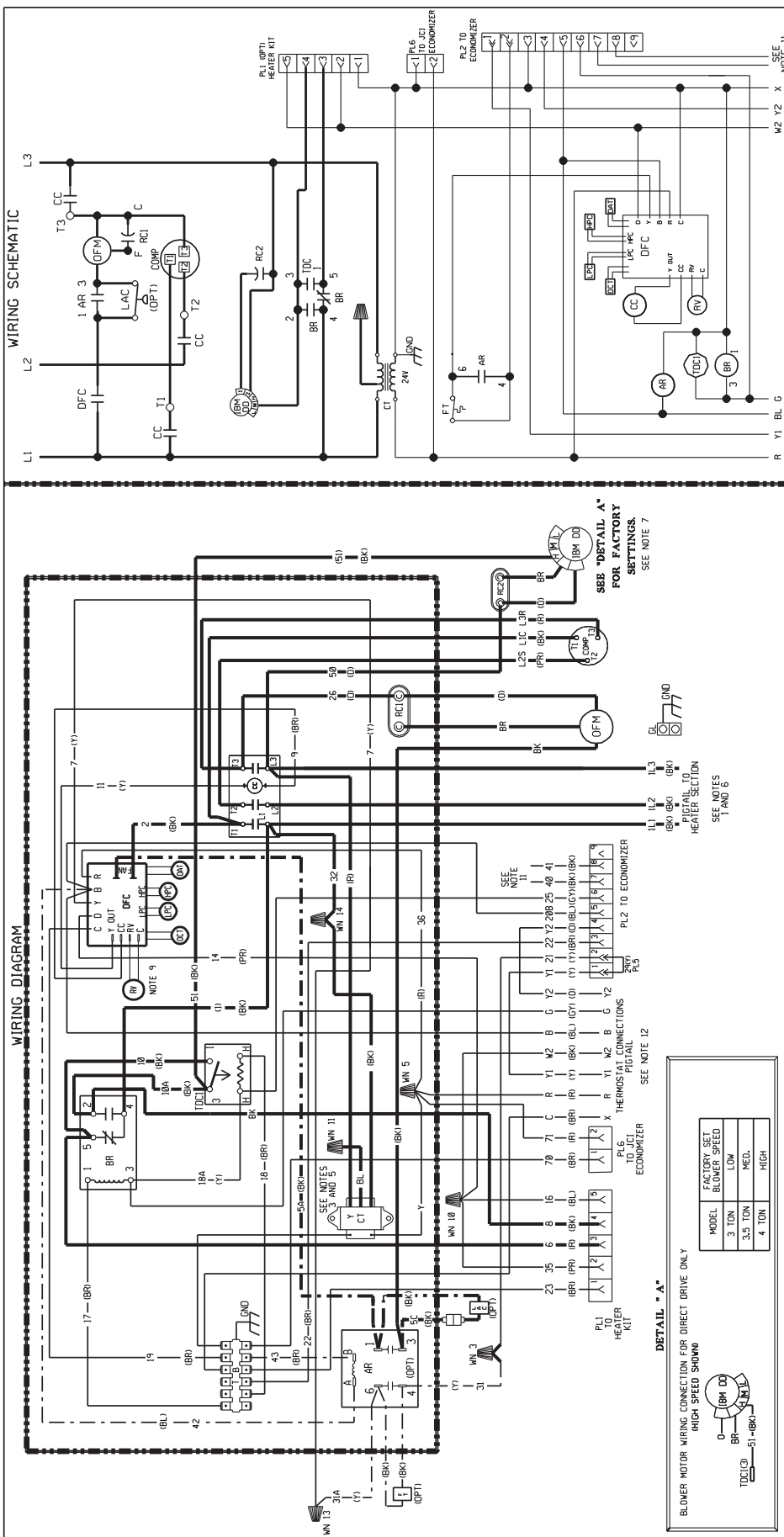
**COMPONENT CODE**

AR	ACCESSORY RELAY
BR	BLOWER RELAY
CC	COMPRESSOR CONTACTOR
COMP	COMPRESSOR
CT	CONTROL TRANSFORMER
DFC	DEFROST CONTROL
DR	DEFROST RELAY
FT	FREESTAT
GL	GROUND LUG
HPC	HIGH PRESSURE CONTROL
IBA	INDOOR BLOWER MOTOR
LAC	LOW AMBIENT CONTROL
LPC	LOW PRESSURE CONTROL
LPT	LOW PRESSURE THERMISTOR
OAT	OUTDOOR AMBIENT TEMP
OCT	OUTDOOR COIL TEMP
OFM	OUTDOOR FAN MOTOR
OPT	OPTIONAL
PL	PLUG
RV	REVERSING VALVE
TB	TERMINAL BLOCK
TDC	TIME DELAY CONTROL
WN	WIRE NUT

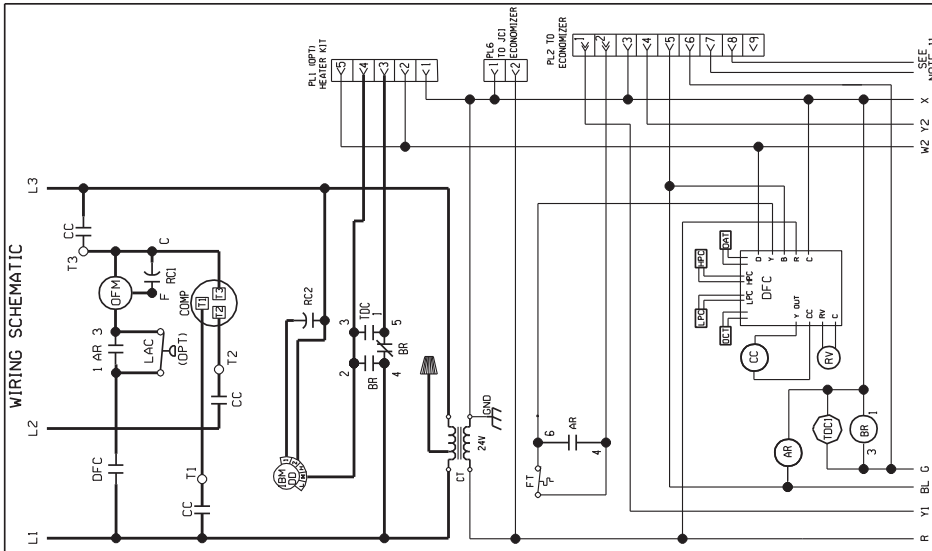
**ELECTRICAL WIRING DIAGRAM**  
**208 / 230V, 1 PHASE**  
**DIRECT DRIVE**  
**HEAT PUMP**

DR. BY: MGR  
APP. BY: MGR  
DATE: 7-19-10  
DWG. NO.: 90-23595-30  
REV: 00

**FIGURE 20**  
**WIRING DIAGRAM**



**WIRING SCHEMATIC**



**WIRE COLOR CODE**

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

**ELECTRICAL WIRING DIAGRAM**  
**208 / 230, 3 PHASE**  
**DIRECT DRIVE**  
**HEAT PUMP**

DR. BY: \_\_\_\_\_ APP. BY: \_\_\_\_\_ DATE: 7-19-10 DWG. NO. 90-23595-31  
MGR: \_\_\_\_\_

REV 00

**WIRING INFORMATION**

LINE VOLTAGE: \_\_\_\_\_  
 -FACTORY STANDARD  
 -FACTORY OPTION  
 -FIELD INSTALLED

LOW VOLTAGE: \_\_\_\_\_  
 -FACTORY STANDARD  
 -FACTORY OPTION  
 -FIELD INSTALLED

REPLACEMENT WIRE: \_\_\_\_\_  
 -INSULATION AS ORIGINAL (105 C MIN.)  
 -WARNING: INSULATION MUST BE PERMANENTLY GROUNDED AND CONFORM TO I.E.C., N.E.C., C.E.C. AND LOCAL CODES AS APPLICABLE.

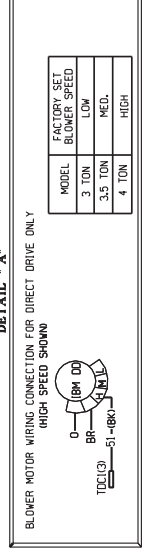
- NOTES:**
- CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
  - COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS.
  - CONTROL TRANSFORMER PRIMARY LEADS: RED, COM. BLUE-208V, BLACK-230V. TRANSFORMER FACTORY WIRE FOR 230 VOLTS ON 208V C-MODELS. INTERCHANGE BLACK & BLUE LEADS FOR 208 VOLT OPERATION.
  - CONTRACTOR FACTORY WIRE. CONNECT FIELD WIRE TO FACTORY SUPPLIED CONTACTOR WIRES IN ELECTRICAL BOX.
  - TERMINAL BLOCK CIRCUIT BREAKER IS NOT SUPPLIED.
  - CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO 60 HZ FUSED DISCONNECT.
  - SEE FUSE LABEL ON UNIT FUSE BOX FOR FUSE SIZING AND CLASSIFICATION.
  - REVERSING VALVE ENERGIZED IN HEATING.
  - WIRING FROM P.L.2 TO THE MIXED AIR SENSOR ON THE OPTIONAL ECONOMIZER.
  - Y2 IS USED ONLY FOR THE OPTIONAL ECONOMIZER.

**COMPONENT CODE**

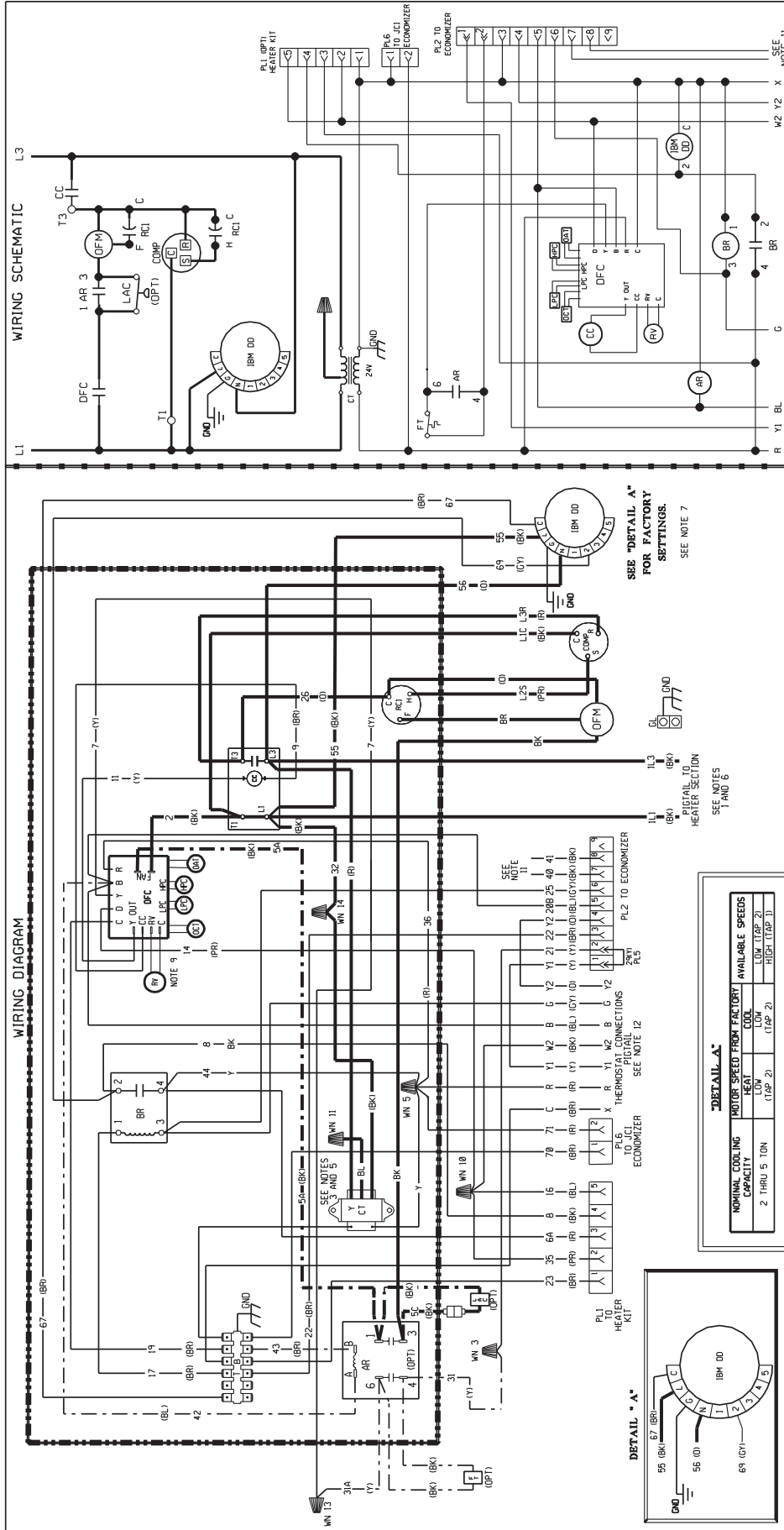
AR	ACCESSORY RELAY
BR	BLOWER RELAY
CC	COMPRESSOR CAPACITOR
CDMP	COMPRESSOR CONTROL
CT	CONTROL TRANSFORMER
DFC	DEFROST RELAY
DR	FREEZE STAT
FT	FREESTART
GL	GROUND LUG
HL	HIGH PRESSURE CONTROL
IMC	INDOOR BLOWER MOTOR
IBM	INDOOR BLOWER MOTOR
LAC	LOW AMBIENT CONTROL
LPC	LOW AMBIENT CONTROL
OAT	OUTDOOR AMBIENT TEMP
OCT	OUTDOOR COIL TEMP
OPM	OUTDOOR FAN MOTOR
OPT	OPTIONAL
PL	PLUG
RC	RUN CAPACITOR
RV	REVERSING VALVE
TB	TERMINAL BLOCK
TD	TIME DELAY CONTROL
WN	WIRE NUT

**FACTORY SET BLOWER SPEED**

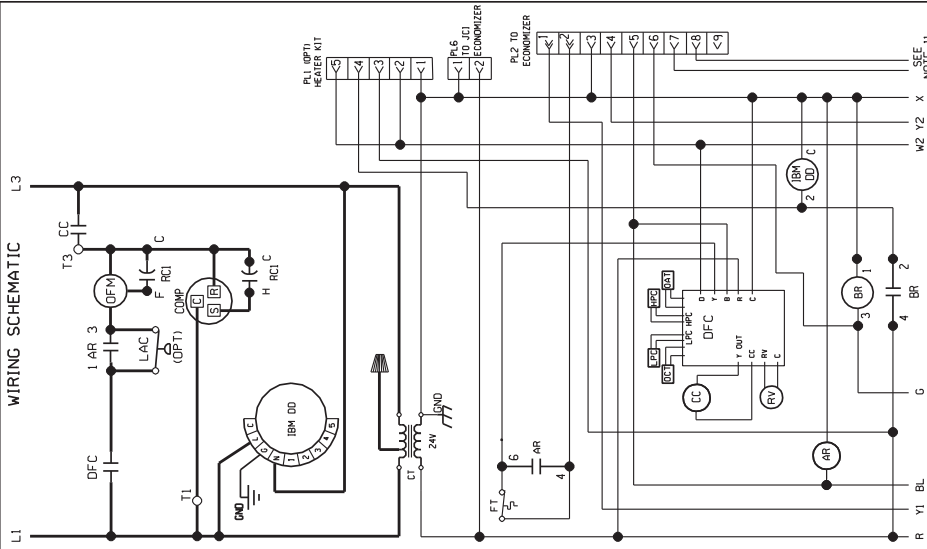
MODEL	3 TON	4 TON
LOW	MED.	HIGH



**FIGURE 21**  
**WIRING DIAGRAM**



**WIRING SCHEMATIC**



**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.)  
 -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  
 BR---BROWN  
 BL---BLUE  
 G---GREEN  
 CY---GRAY  
 O---ORANGE  
 PR---PURPLE  
 R---RED  
 W---WHITE  
 Y---YELLOW

**ELECTRICAL WIRING DIAGRAM**  
 208 / 230, 1 PHASE  
 DIRECT DRIVE / X-MOTOR  
 HEAT PUMP

**COMPONENT CODE**

AR BLOWER RELAY  
 BR BLOWER MOTOR  
 CC COMPRESSOR  
 CTR CONTROL TRANSFORMER  
 DFC DEFROST CONTROL  
 DR DEFROST START  
 GL GROUND LUG  
 HPC HIGH PRESSURE CONTROL  
 IBM INDOOR BLOWER MOTOR  
 LAM LOW AMBIENT CONTROL  
 LPC LOW PRESSURE CONTROL  
 OAT OUTDOOR AMBIENT TEMP  
 OCT OUTDOOR COIL TEMP  
 OFM OUTDOOR FAN MOTOR

**NOTES:**

- CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
- COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS CONTROL TRANSFORMER PRIMARY LEADS: RED-COM, BLUE-208V, BLACK-230V. TRANSFORMER FACTORY WIRE FOR 230 VOLTS ON 208V C-MODELS. INTERCHANGE BLACK & BLUE LEADS FOR 208 VOLT OPERATION.
- SUPPLIED CONTACTOR WIRE. CONNECT FIELD WIRE TO FACTORY ELECTRICAL BOX.
- TON DRAINAGE CIRCUIT IS IN CLASS 2 WITH A CLASS 2 FUSED DISCONNECT.
- CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO 60 HZ FUSED DISCONNECT.
- SEE FUSE LABEL ON UNIT FUSE BOX FOR FUSE SIZING AND CLASSIFICATION.
- REVERSING VALVE ENERGIZED IN HEATING.
- WIRING FROM P.L. 7, 8, 81 TO THE MIXED AIR SENSOR ON THE OPTIONAL ECONOMIZER.
- Y2 IS USED ONLY FOR THE OPTIONAL ECONOMIZER.

**DETAIL A\***

NOMINAL COOLING CAPACITY	MOTOR SPEED FROM FACTORY		AVAILABLE SPEEDS	
	LOW (TAP 2)	COOL (TAP 2)	LOW (TAP 2)	HIGH (TAP 1)
2 THRU 5 TON				

**DETAIL A\***

PL1 TO HEATER KIT  
 PL2 TO ECONOMIZER

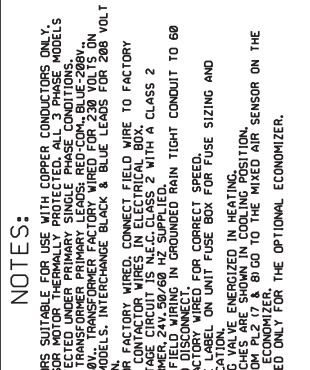
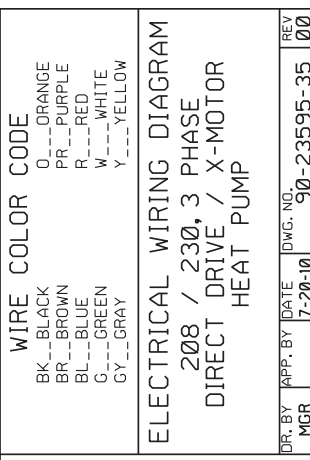
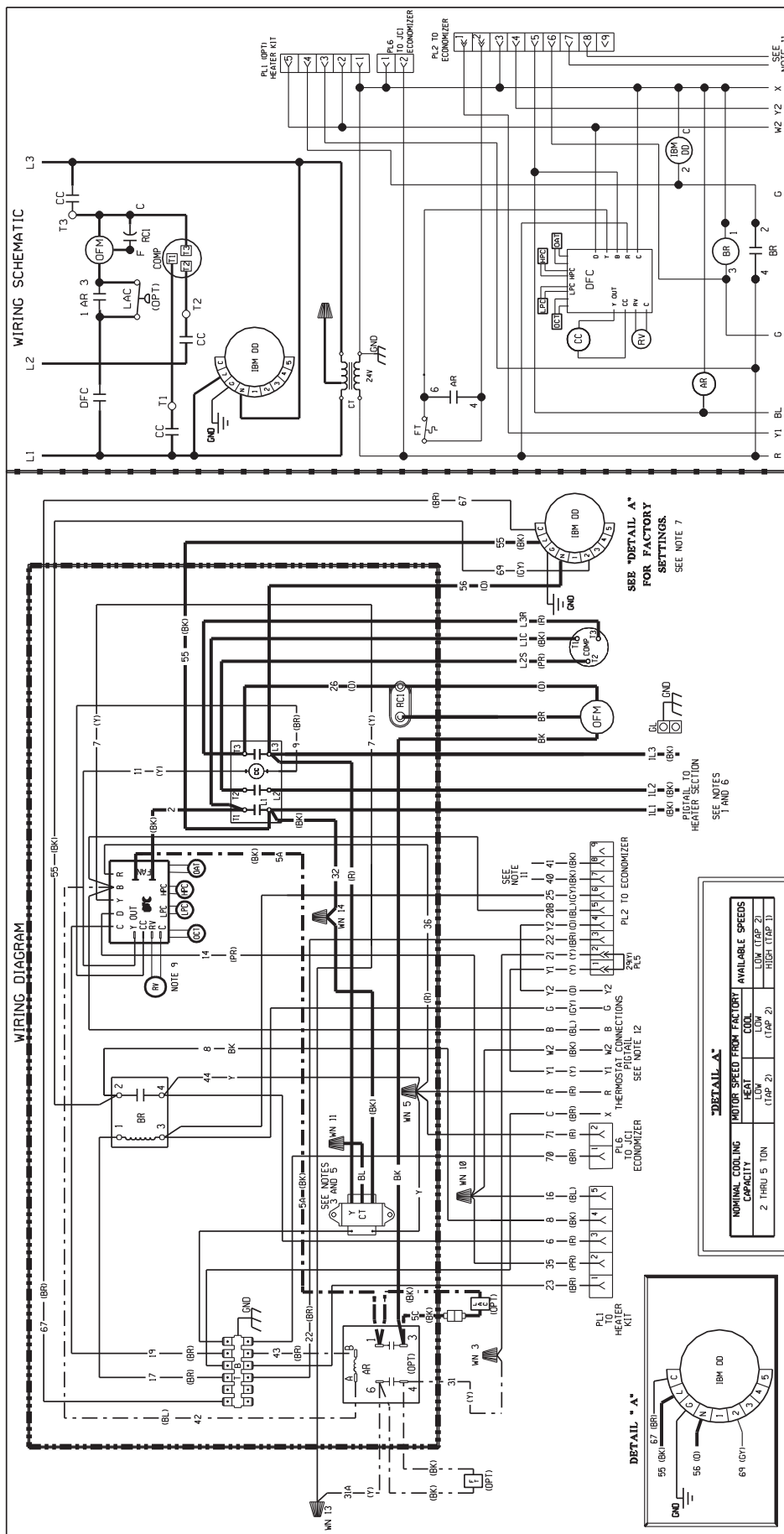
**DETAIL A\* SETTINGS.**  
 SEE NOTE 7

**DETAIL A\***

PL1 TO HEATER KIT  
 PL2 TO ECONOMIZER

**DR. BY** APP. BY DATE DWG. NO. REV  
 MGR 7-20-10 90-23595-34 04

**FIGURE 22**  
**WIRING DIAGRAM**



**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  
 BR---BROWN  
 BL---BLUE  
 G---GREEN  
 CY---GRAY  
 O---ORANGE  
 PR---PURPLE  
 R---RED  
 W---WHITE  
 Y---YELLOW

**ELECTRICAL WIRING DIAGRAM**  
 208 / 230, 3 PHASE  
 DIRECT DRIVE / X-MOTOR  
 HEAT PUMP

DR. BY: MGR    APP. BY: DATE 7-20-10    DWG. NO. 90-23595-35    REV 00

**NOTES:**

- CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
- COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS.
- CONTROL TRANSFORMER PRIMARY LEADS: RED-COM, BLUE-208V, BLACK-230V. TRANSFORMER FACTORY WIRED FOR 208 VOLTS ON 208V C-MODELS. INTERCHANGE BLACK & BLUE LEADS FOR 208 VOLT OPERATION.
- CONNECTOR FACTORY WIRED. CONNECT FIELD WIRE TO FACTORY SUPPLIED CONTACTOR WIRES IN ELECTRICAL BOX.
- TERMINAL BLOCK IS CLASS 2 WITH A CLASS 2 TERMINAL BLOCK. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO 60 HZ FUSED DISCONNECT.
- SEE FUSE LABEL ON UNIT FUSE BOX FOR CORRECT SPEED CLASSIFICATION.
- SEE FUSE LABEL ON UNIT FUSE BOX FOR FUSE SIZING AND REVERSING VALVE ENERGIZED IN HEATING.
- REVERSING VALVE ENERGIZED IN HEATING.
- WIRING FROM PL 2 (7 & 8) TO THE MIXED AIR SENSOR ON THE OPTIONAL ECONOMIZER.
- Y2 IS USED ONLY FOR THE OPTIONAL ECONOMIZER.

**DETAIL 'A'**  
 MOTOR SPEED FROM FACTORY AVAILABLE SPEEDS

NOMINAL COOLING CAPACITY	HEAT	COOL	AVAILABLE SPEEDS
2 THRU 5 TON	LOW (TAP 2)	LOW	LOW (TAP 2)
	HIGH (TAP 1)	HIGH	HIGH (TAP 1)

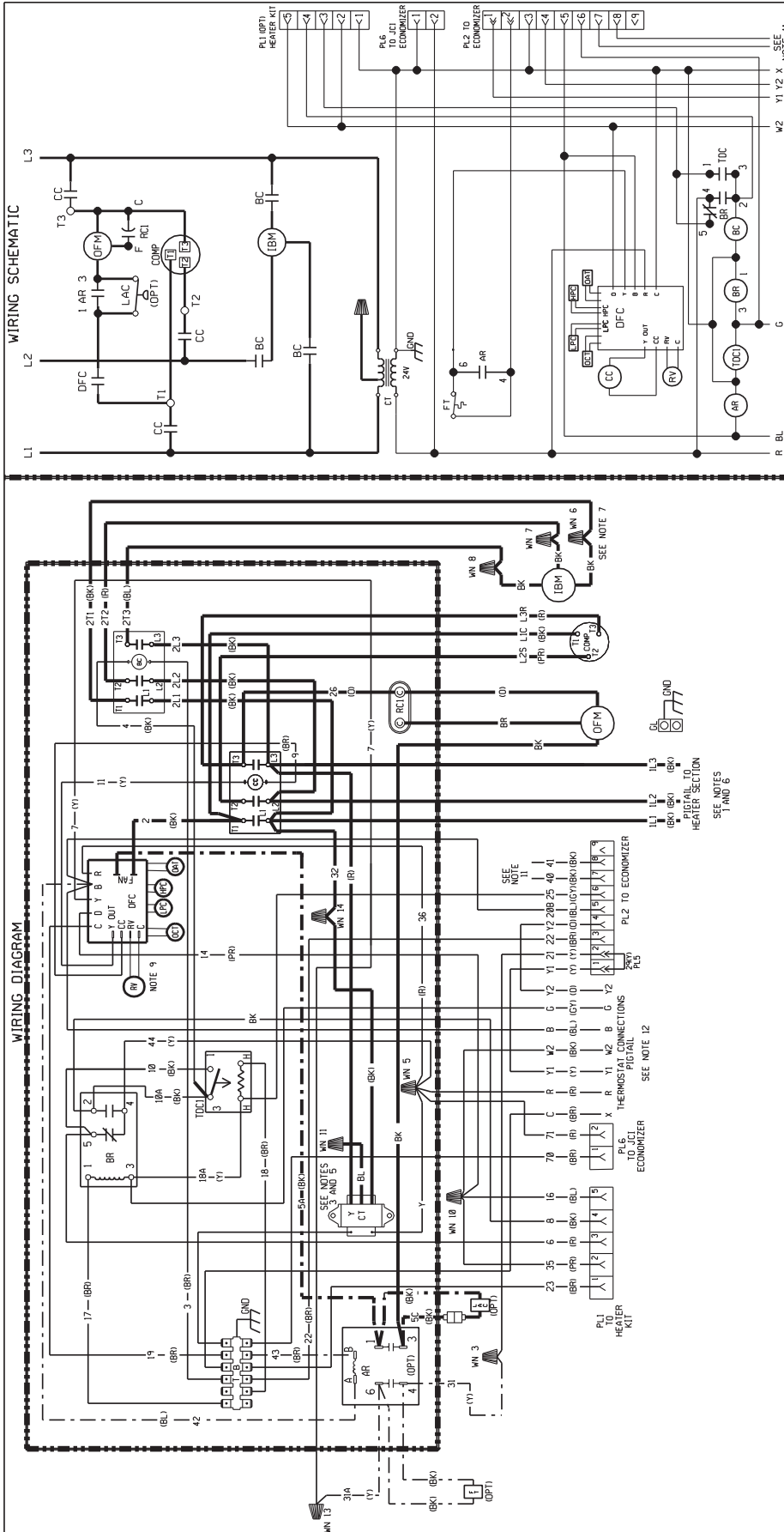
**COMPONENT CODE**

OPT OPTIONAL  
 PL PLUG  
 RC RUN CAPACITOR  
 RV REVERSING VALVE  
 TB TERMINAL BLOCK  
 TDC TIME DELAY CONTROL  
 WN WIRE NUT

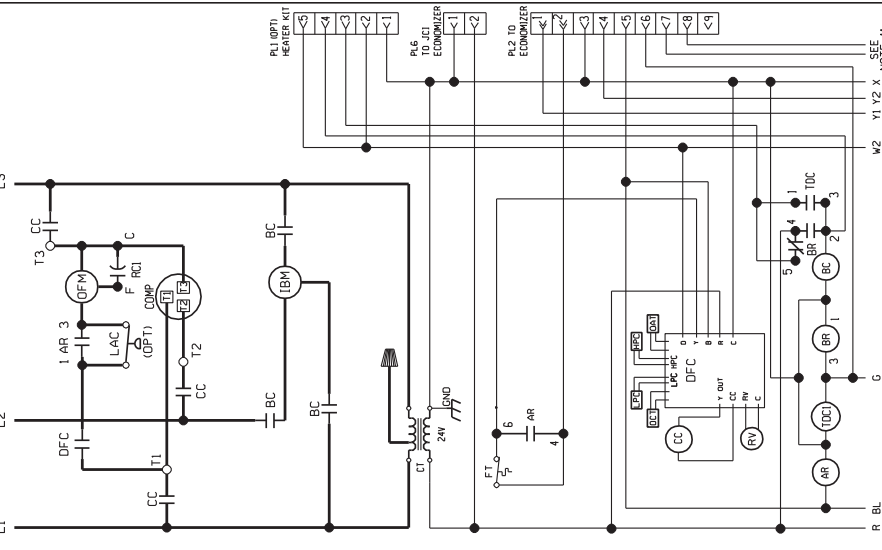
AR ACCESSORY RELAY  
 BR BLOWER RELAY  
 CC CAPACITOR  
 CDMP COMPRESSOR MOTOR  
 CT CONTROL TRANSFORMER  
 DFC DEFROST CONTROL  
 DR DEFROST RELAY  
 FT FREEZE START  
 GND GROUND LUG  
 IBM INDOOR BLOWER MOTOR  
 IBK INDOOR BLOWER MOTOR  
 LAC LOW AMBIENT CONTROL  
 LPC LOW PRESSURE CONTROL  
 OCT OUTDOOR AMBIENT TEMP  
 ODT OUTDOOR COIL TEMP  
 OFM OUTDOOR FAN MOTOR



**FIGURE 23**  
**WIRING DIAGRAM**



**WIRING SCHEMATIC**



**WIRE COLOR CODE**

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

**ELECTRICAL WIRING DIAGRAM**  
208 / 230, 3 PHASE  
BELT DRIVE  
HEAT PUMP  
3 - 5 TON

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

**NOTES:**

- CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
- COMPRESSOR MOTOR TERMINAL PROTECTED AGAINST PHASE MODELS ARE PROTECTED UNDER PRIMARY LEADS. RED-COM, BLUE-208V, Y & C MODELS. INTERCHANGE BLACK & BLUE LEADS FOR 208 VOLT OPERATION.
- CONNECT FAN MOTOR WIRE TO FACTORY WIRE TO FACTORY TRANSFORMER, 24V, 50/60 HZ SUPPLIED.
- CONNECT FUSE IN GROUNDED RAIN TIGHT CONDUIT TO 60 HZ FUSED DISCONNECT FOR CORRECT SPEED.
- SEE INSTRUCTIONS LABEL ON UNIT FUSE BOX FOR FUSE SIZING AND REVERSING VALVE ENERGIZED IN HEATING.
- ALL SWITCHES ARE SHOWN IN COOLING POSITION.
- OPTIONAL ECONOMIZER & 80 GO TO THE MIXED AIR SENSOR ON THE OPTIONAL ECONOMIZER.
- 12, 12 IS USED ONLY FOR THE OPTIONAL ECONOMIZER.

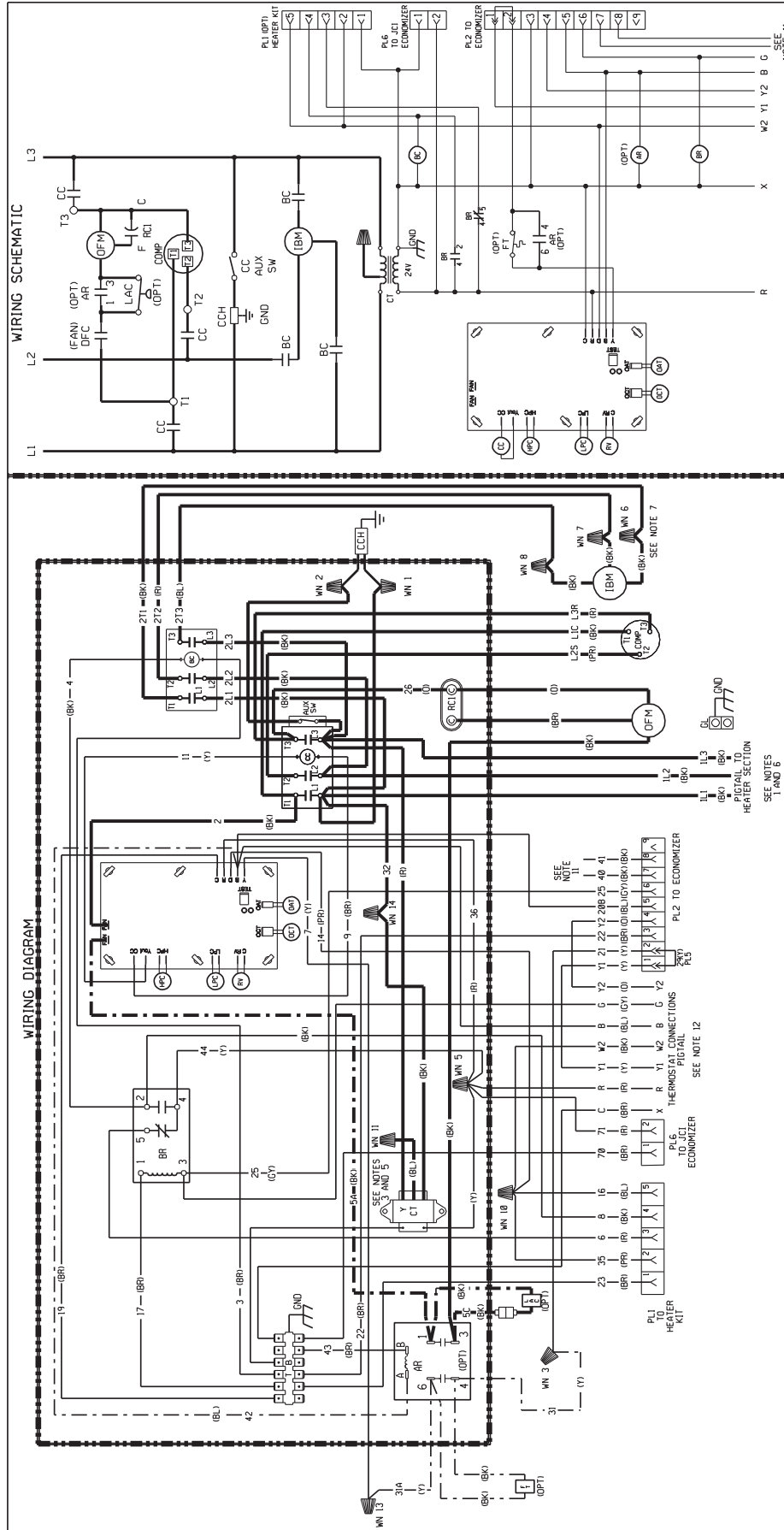
**COMPONENT CODE**

AR	ACCESSORY RELAY
BR	BLOWER RELAY
CC	CONTACTOR
COMP	COMPRESSOR
CT	CONTROL TRANSFORMER
DFC	DEFROST CONTROL
DR	DEFROST RELAY
GL	FREESTAT
GND	GROUND LUG
HPC	GROUND
IBM	HIGH PRESSURE CONTROL
LAC	INDOOR BLOWER MOTOR
LAC	LOW AMBIENT CONTROL
DAT	LOW AMBIENT CONTROL
DCT	OUTDOOR AMBIENT TEMP
DCT	OUTDOOR COIL TEMP
OPM	OUTDOOR FAN MOTOR
OPT	OPTIONAL
PL	PLUG
PC	PROCESSING VALVE
TB	TERMINAL BLOCK
TOC	TIME DELAY CONTROL
WN	WIRE NUT

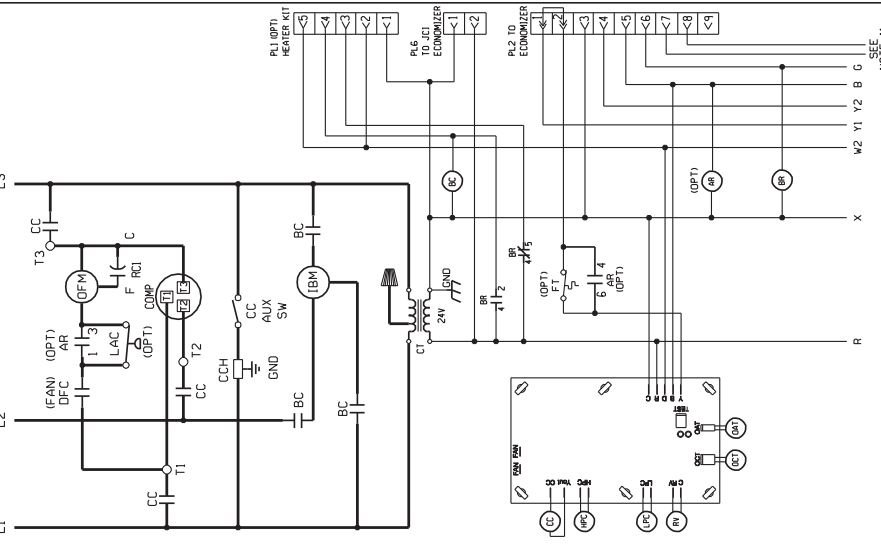
DR. BY: MGR  
APP. BY: DATE  
DWG. NO: 90-23595-32

REV: 00  
DATE: 7-20-10

**FIGURE 24**  
**WIRING DIAGRAM**

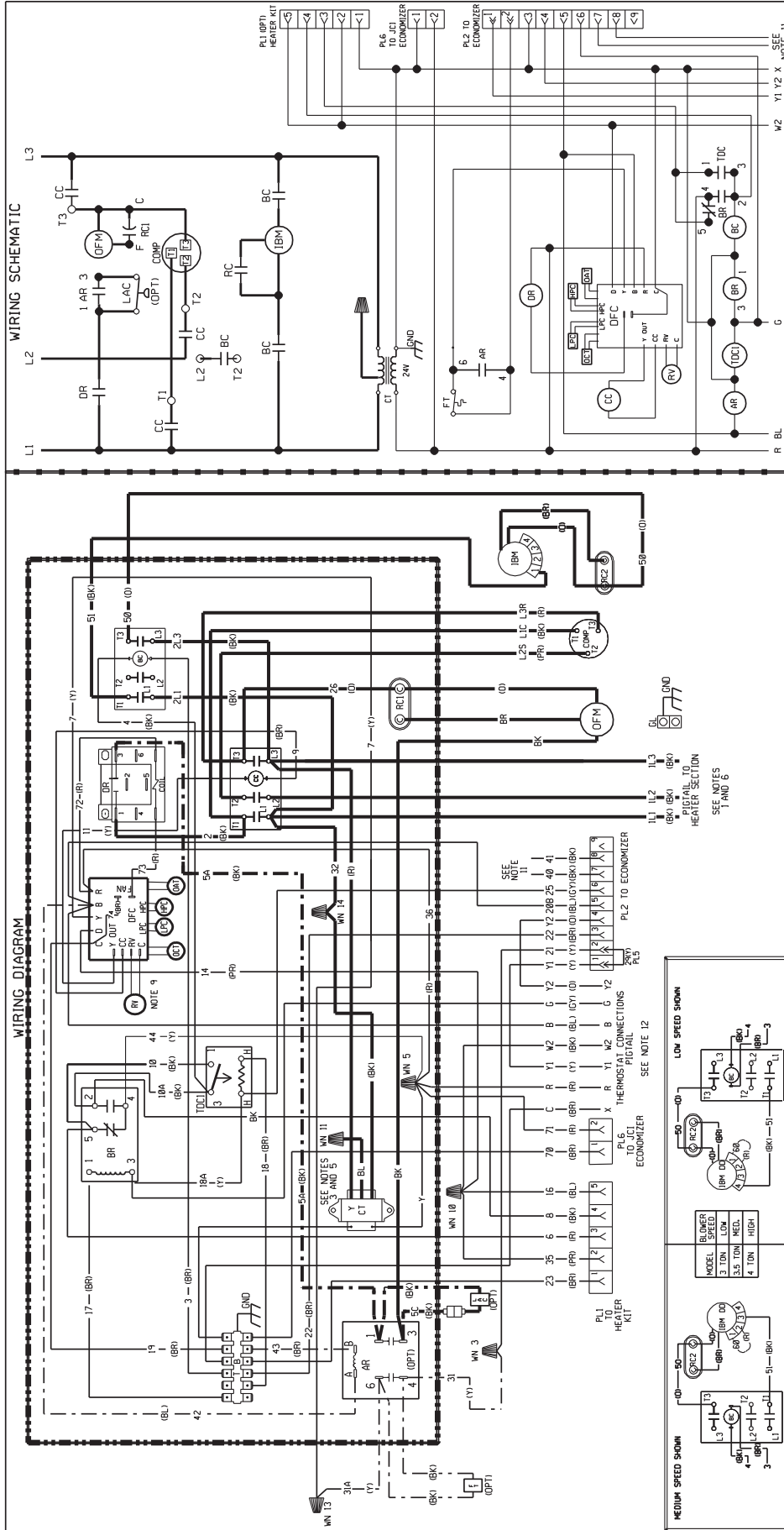


**WIRING SCHEMATIC**

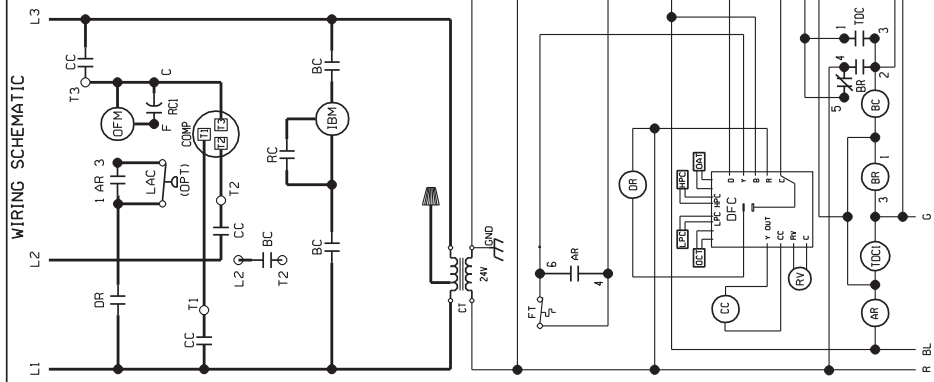


COMPONENT CODE	WIRE COLOR CODE	ELECTRICAL WIRING DIAGRAM	WIRING INFORMATION	NOTES:	DR. BY	DATE	DWG. NO.
<p>AR ACCESSORY RELAY</p> <p>AUX SW AUXILIARY SWITCH</p> <p>BC CAPACITOR</p> <p>CC CONTACTOR</p> <p>CCH CRANK CASE HEATER</p> <p>COMP COMPRESSOR</p> <p>CT CONTROL TRANSFORMER</p> <p>DF DEFROST RELAY</p> <p>DR FREEZE STAT</p> <p>GL GROUND LUG</p> <p>GND GROUND</p> <p>HPC HIGH PRESSURE CONTROL</p> <p>IBM INDOOR AMBIENT TEMP CONTROL</p> <p>LAC LOW AMBIENT CONTROL</p> <p>OAT OUTDOOR AMBIENT TEMP</p> <p>OCT OUTDOOR COIL TEMP</p> <p>OFM OUTDOOR FAN MOTOR</p>	<p>BK_BLACK</p> <p>BR_BROWN</p> <p>BL_BLUE</p> <p>G_GREEN</p> <p>GY_GRAY</p> <p>O_ORANGE</p> <p>PK_PINK</p> <p>PR_PURPLE</p> <p>R_RED</p> <p>W_WHITE</p> <p>Y_YELLOW</p>	<p><b>ELECTRICAL WIRING DIAGRAM</b></p> <p>208 / 230, 3 PHASE, 60HZ</p> <p>200-220V, 3 PHASE, 50HZ</p> <p>BELT DRIVE</p> <p>HEAT PUMP</p>	<p><b>WIRING INFORMATION</b></p> <p>LINE VOLTAGE</p> <p>-FACTORY STANDARD</p> <p>-FACTORY OPTION</p> <p>-FIELD INSTALLED</p> <p>LOW VOLTAGE</p> <p>-FACTORY STANDARD</p> <p>-FACTORY OPTION</p> <p>-FIELD INSTALLED</p> <p>REPLACEMENT WIRE</p> <p>-MUST BE THE SAME SIZE AND TYPE OF INSULATION AS ORIGINAL (105 C MIN.)</p> <p>WARNING</p> <p>-CABINET MUST BE PERMANENTLY GROUNDED AND CONFORM TO I.E.C., N.E.C., C.E.C. AND LOCAL CODES AS APPLICABLE.</p>	<p>1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY. COMPRESSOR MOTOR TERMINAL PROTECTED UNDER PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.</p> <p>2. CONTROL TRANSFORMER PRIMARY LEADS: RED-COM, BLUE-288V, INTERCHANGE BLACK &amp; BLUE LEADS FOR 208 VOLT OPERATION.</p> <p>3. CONTRACTOR FACTORY WIRE: CONNECT FIELD WIRE TO FACTORY SUPPLY. USE CIRCUIT WIRE IN ELECTRICAL BOX.</p> <p>4. SUPPLY USE CIRCUIT WIRE WITH A CLASS 2 TRANSFORMER 24V, 50/60 HZ SUPPLIED.</p> <p>5. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO MOTOR FACTORY WIRING FOR CORRECT SPEED.</p> <p>6. SEE FUSE LABEL ON UNIT FUSE BOX FOR FUSE SIZING AND LOCATION.</p> <p>7. CLAPNETS ARE ENERGIZED IN HEATING.</p> <p>8. ALL SWITCHES ARE SHOWN IN COOLING POSITION.</p> <p>9. WIRES FROM P.L.2, 7 &amp; 9 GO TO THE MIXED AIR SENSOR ON THE ECONOMIZER.</p> <p>10. WIRE FROM P.L.2, 7 &amp; 9 GO TO THE MIXED AIR SENSOR ON THE ECONOMIZER.</p> <p>11. W2 IS USED ONLY FOR THE OPTIONAL ECONOMIZER.</p>	<p>DR. BY</p> <p>APP. BY</p> <p>JRJ</p>	<p>2-18-09</p>	<p>90-23595-18</p> <p>02</p>

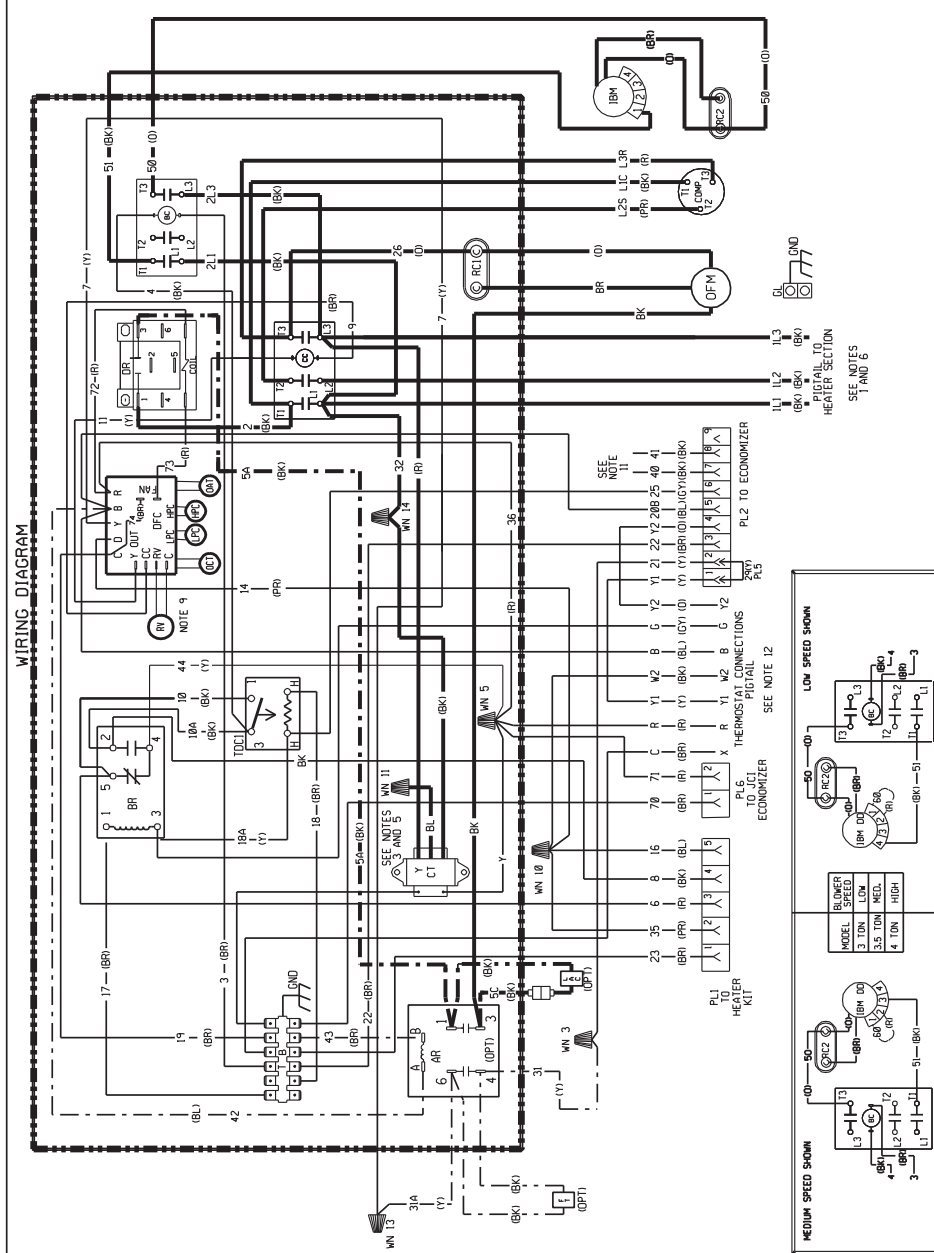
**FIGURE 25**  
**WIRING DIAGRAM**



**WIRING SCHEMATIC**



**WIRING DIAGRAM**



**WIRE COLOR CODE**

BK	BLACK
BR	BROWN
BL	BLUE
G	GREEN
CY	GRAY
O	ORANGE
PR	PURPLE
R	RED
W	WHITE
Y	YELLOW

**ELECTRICAL WIRING DIAGRAM**  
 460, 3 PHASE  
 DIRECT DRIVE  
 HEAT PUMP

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

**NOTES**

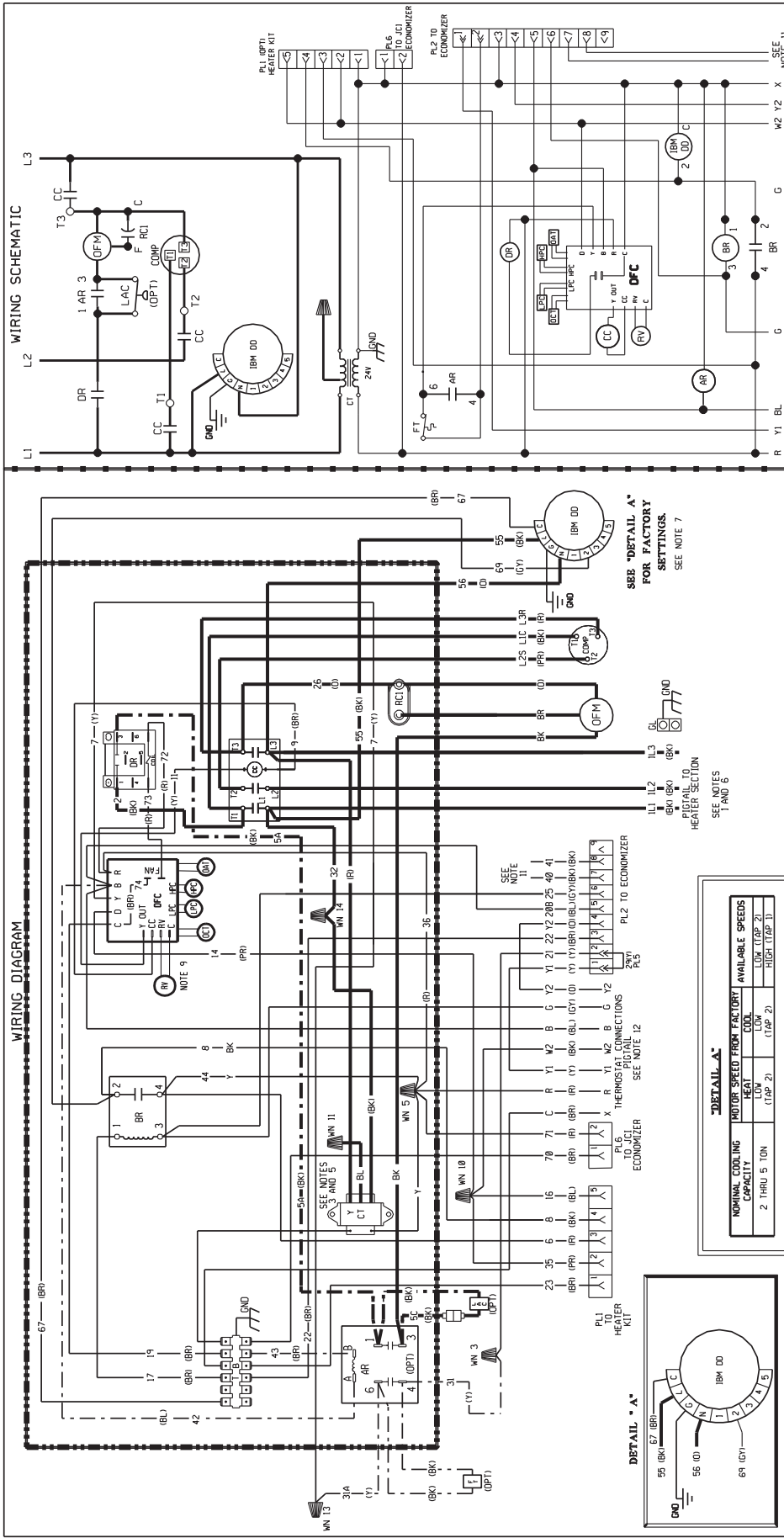
- CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS CONTROL TRANSFORMER PRIMARY LEADS.
- 60 HZ, BLUE 300V, BLACK 230V, BLACK-RED-460V.
- BLACK-BLUE-575V, TRANSFORMER FACTORY WIRED FOR 230 VOLTS ON J & C MODELS, INTERCHANGE BLACK & BLUE LEADS WIRED FOR CORRECT VOLTAGE.
- 50 SIZE COMMON, BLUE-300V, BLACK-460V.
- CONTACTOR FACTORY WIRED, CONNECT FIELD WIRE TO FACTORY SUPPLIED CONTACTOR WIRES IN ELECTRICAL BOX.
- LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TERMINAL BLOCK.
- CONNECT FIELD WIRING IN GROUND RAIN TIGHT CONDUIT TO 60 HZ FUSED DISCONNECT.
- SEE FUSE LABEL ON UNIT FUSE BOX FOR FUSE SIZING AND CLASSIFICATION.
- REVERSING VALVE ENERGIZED IN HEATING.
- OPTIONAL WIRING INFORMATION.
- WIRES FROM P.L. 1 & 2 TO THE MIXED AIR SENSOR ON THE OPTIONAL ECONOMIZER.
- Y2 IS USED ONLY FOR THE OPTIONAL ECONOMIZER.

**COMPONENT CODE**

AR	ACCESSORY RELAY
BR	BLOWER RELAY
CC	COMPRESSOR CONTACTOR
CCMP	COMPRESSOR
CT	CONTROL TRANSFORMER
DFC	DEFROST CONTROL
DR	DEFROST RELAY
FR	FREEST STAT
GND	GROUND LUG
IBM	INDOOR FAN MOTOR
IBC	INDOOR BLOWER MOTOR
LPC	LOW AMBIENT CONTROL
LPP	LOW PRESSURE CONTROL
OAT	OUTDOOR AMBIENT TEMP
OCT	OUTDOOR COIL TEMP
OFM	OUTDOOR FAN MOTOR

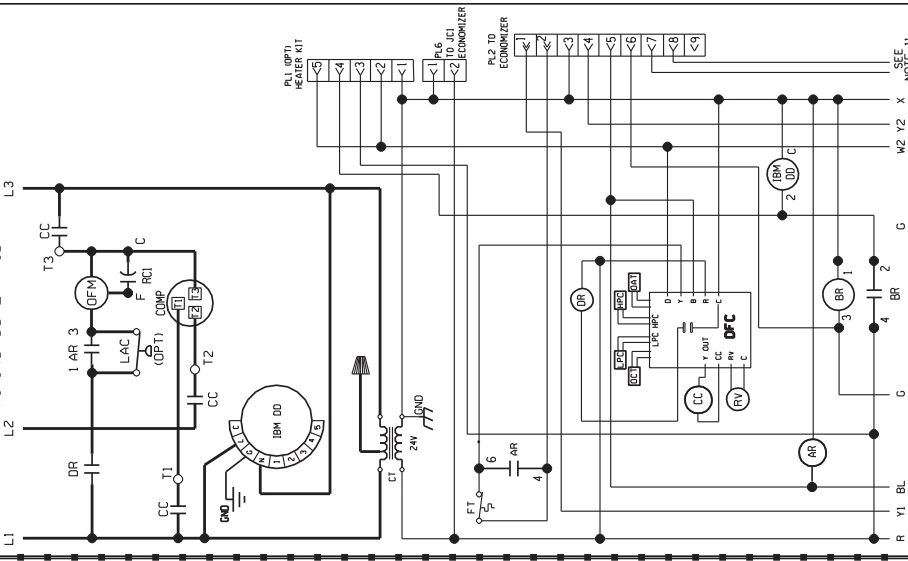
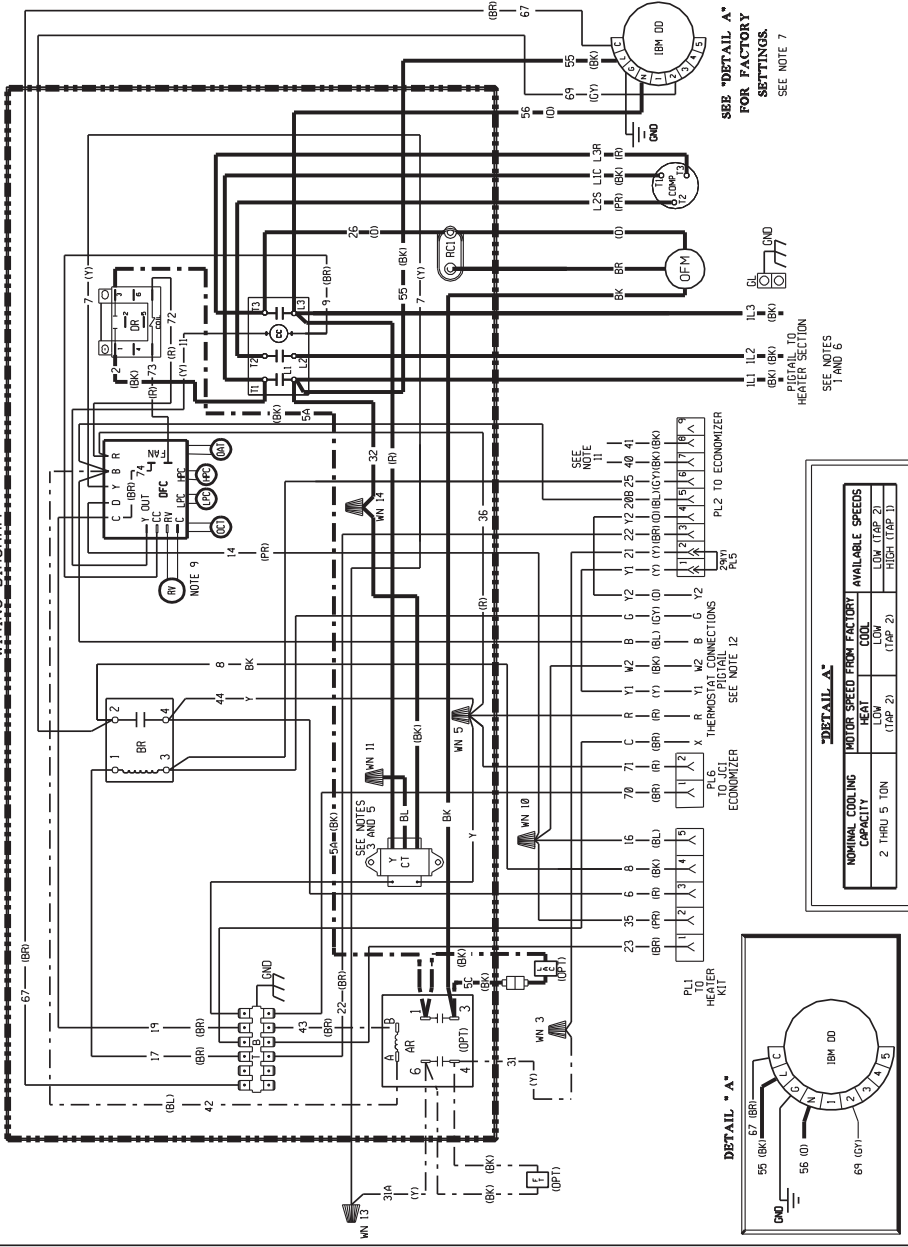
REV 00  
 DWG. NO. 90-23595-33  
 DATE 7-20-10  
 APP. BY MGR

**FIGURE 26**  
**WIRING DIAGRAM**



**WIRING DIAGRAM**

**WIRING SCHEMATIC**



**WIRE COLOR CODE**

BK	BLACK
BR	BROWN
BL	BLUE
G	GREEN
Y	YELLOW
W	WHITE
R	RED
OR	ORANGE
PR	PURPLE

**ELECTRICAL WIRING DIAGRAM**  
460V, 3 PHASE  
DIRECT DRIVE / X-MOTOR  
HEAT PUMP

DR. BY: MGR  
APP. BY: DATE 7-21-10  
DWG. NO. 90-23595-37  
REV 00

**WIRING INFORMATION**

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

**NOTES:**

- CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
- 50 HZ. TRANSFORMER PRIMARY LEADS
- RED-COMMON, BLUE-208V, BLACK-230V, BLACK/RED-460V, 50/60 VOLTS ON U.S. MODELS. INTERCHANGE BLACK & BLUE LEADS FOR 208 VOLT OPERATION. 460 & 575 VOLTS MODELS FACTORY CLASSIFICATION.
- ORANGE-COMMON, BLUE-380V, BLACK-415V. CONTACTOR FACTORY WIRE. CONNECT FACTORY WIRE TO FACTORY TRANSFORMER. 24V, 50/60 HZ SUPPLIED.
- LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TRANSFORMER.
- FUSED DISCONNECT IN GROUNDING RAIN TIGHT CONDUIT TO 60 HZ.
- MOTOR FACTORY WIRE FOR CORRECT SPEED.
- CLASSIFICATION ON UNIT FUSE BOX FOR FUSE SIZING AND REVERSING VALVE ENERGIZED IN HEATING.
- ALL SWITCHES ARE SHOWN IN COOLING POSITION.
- OPTIONAL ECONOMIZER. 81 GO TO THE MIXED AIR SENSOR ON THE ECONOMIZER.
- Y2 IS USED ONLY FOR THE OPTIONAL ECONOMIZER.

**COMPONENT CODE**

AR	ACCESSORY RELAY
BR	BLOWER RELAY
CC	COMPRESSOR CONTACTOR
COMP	COMPRESSOR
CT	CONTROL TRANSFORMER
DFC	DEFROST CONTROL
DR	FREEZE STAT
FT	GROUND LUG
GL	GROUND
IBM	INDOOR BLOWER MOTOR
IBM 00	INDOOR BLOWER MOTOR
LPC	LOW PRESSURE CONTROL
LSC	LOW AMBIENT CONTROL
DAT	OUTDOOR AMBIENT TEMP
OCT	OUTDOOR COIL TEMP
OPM	OUTDOOR FAN MOTOR
OPT	OPTIONAL
PL	PLUG
RC	RUN CAPACITOR
RV	REVERSING VALVE
TB	TERMINAL BLOCK
TD	TIME DELAY CONTROL
WN	WIRE NUT

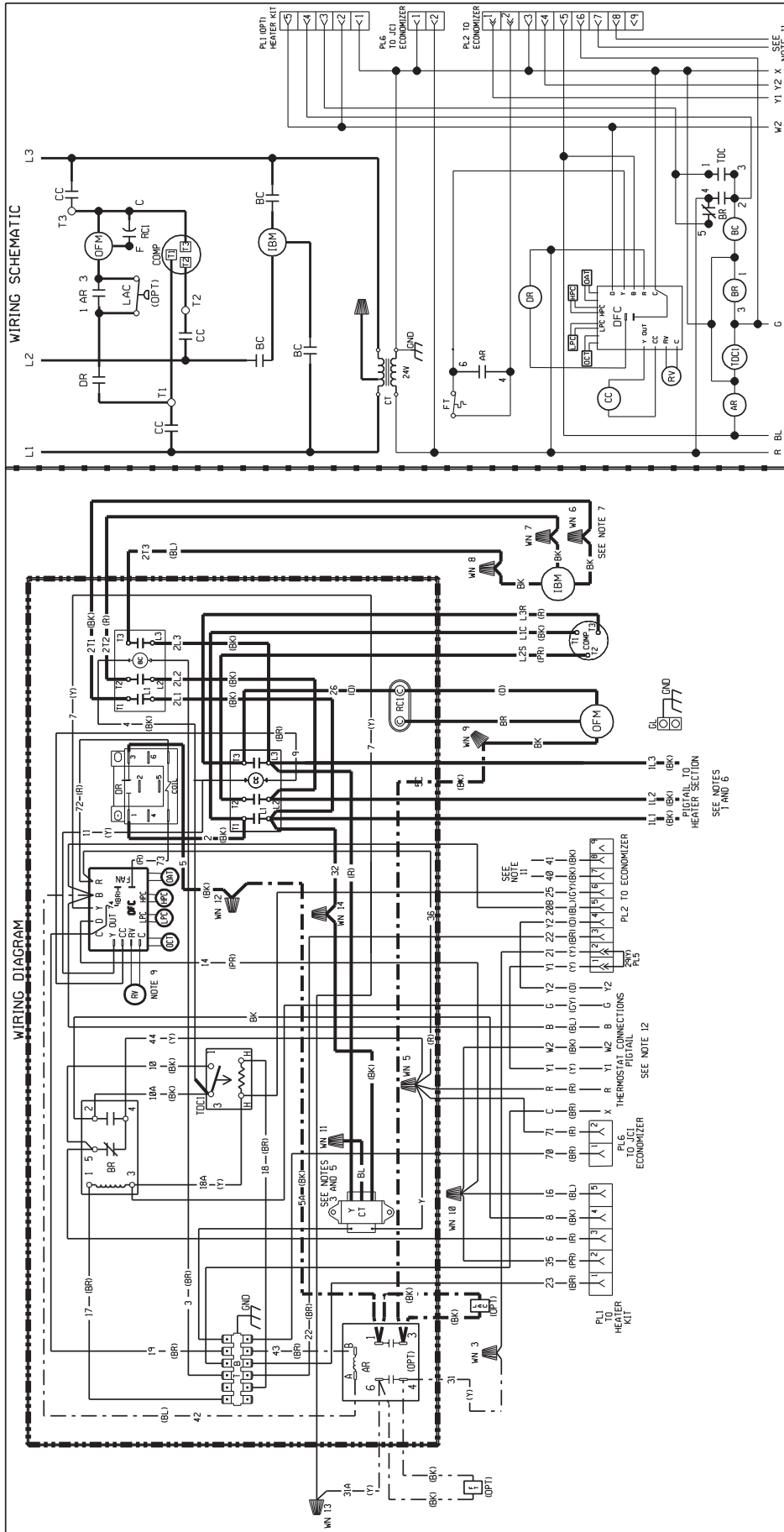
**DETAIL A\* MOTOR SPEED FROM FACTORY AVAILABLE SPEEDS**

NOMINAL COOLING CAPACITY	LOW (TAP 2)	COOL (TAP 2)	HIGH (TAP 1)
2 THRU 5 TON			

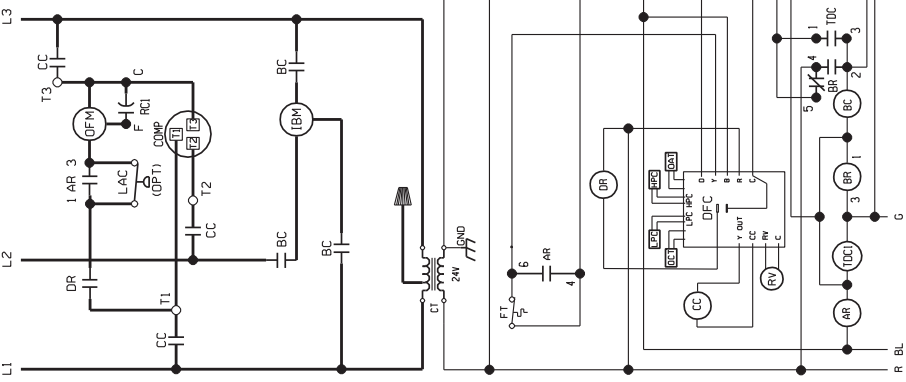
**DETAIL A\* HEATER SECTION**

MOTOR SPEED FROM FACTORY AVAILABLE SPEEDS	LOW (TAP 2)	COOL (TAP 2)	HIGH (TAP 1)
2 THRU 5 TON			

**FIGURE 27**  
**WIRING DIAGRAM**



**WIRING SCHEMATIC**



**COMPONENT CODE**

AR	ACCESSORY RELAY
BR	BLOWER RELAY
CC	COMPRESSOR CAPACITOR
CCOMP	COMPRESSOR
CT	CONTROL TRANSFORMER
DFC	DEFROST CONTROL
DR	DEFROST STAT
FT	FREEST STAT
GRD	GROUND LUG
IBM	INDOOR PRESSURE CONTROL
IBL	INDOOR BLOWER MOTOR
LAC	LOW AMBIENT CONTROL
LPC	LOW PRESSURE CONTROL
OAT	OUTDOOR AMBIENT TEMP
OCT	OUTDOOR COIL TEMP
OFM	OUTDOOR FAN MOTOR
OPT	OPTIONAL
PL	PLUG
RC	RUN CAPACITOR
RV	REVERSING VALVE
TB	TERMINAL BLOCK
TDC	TIME DELAY CONTROL
WN	WIRE NUT

**NOTES**

- CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS CONTROL TRANSFORMER PRIMARY LEADS.
- 60 HZ, BLUE 200V, BLACK 208V, BLACK PER-468V, BLACK BLUE 575V, TRANSFORMER FACTORY WIRE FOR 230 VOLTS ON J & C MODELS. INTERCHANGE BLACK & BLUE LEADS WIRE FOR CORRECT VOLTAGE.
- 50 SIZE COMMON, BLUE 200V, BLACK 415V.
- CONTACTOR FACTORY WIRE TO CONNECT FIELD WIRE TO FACTORY SUPPLIED CONTACTOR WIRES IN ELECTRICAL BOX.
- LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 REVERSING VALVE.
- CONNECT FIELD WIRING IN GROUNDING RAIN TIGHT CONDUIT TO 60 HZ FUSED DISCONNECT.
- SEE FUSE LABEL FOR CORRECT SPEED CLASSIFICATION.
- REVERSING VALVE ENERGIZED IN HEATING.
- WIRE FROM P.L. 7 & 8 TO THE MIXED AIR SENSOR ON THE OPTIONAL ECONOMIZER.
- WIRE FROM P.L. 7 & 8 TO THE MIXED AIR SENSOR ON THE ECONOMIZER.
- WIRE FROM P.L. 7 & 8 TO THE MIXED AIR SENSOR ON THE ECONOMIZER.
- WIRE FROM P.L. 7 & 8 TO THE MIXED AIR SENSOR ON THE ECONOMIZER.

**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.)
- 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**

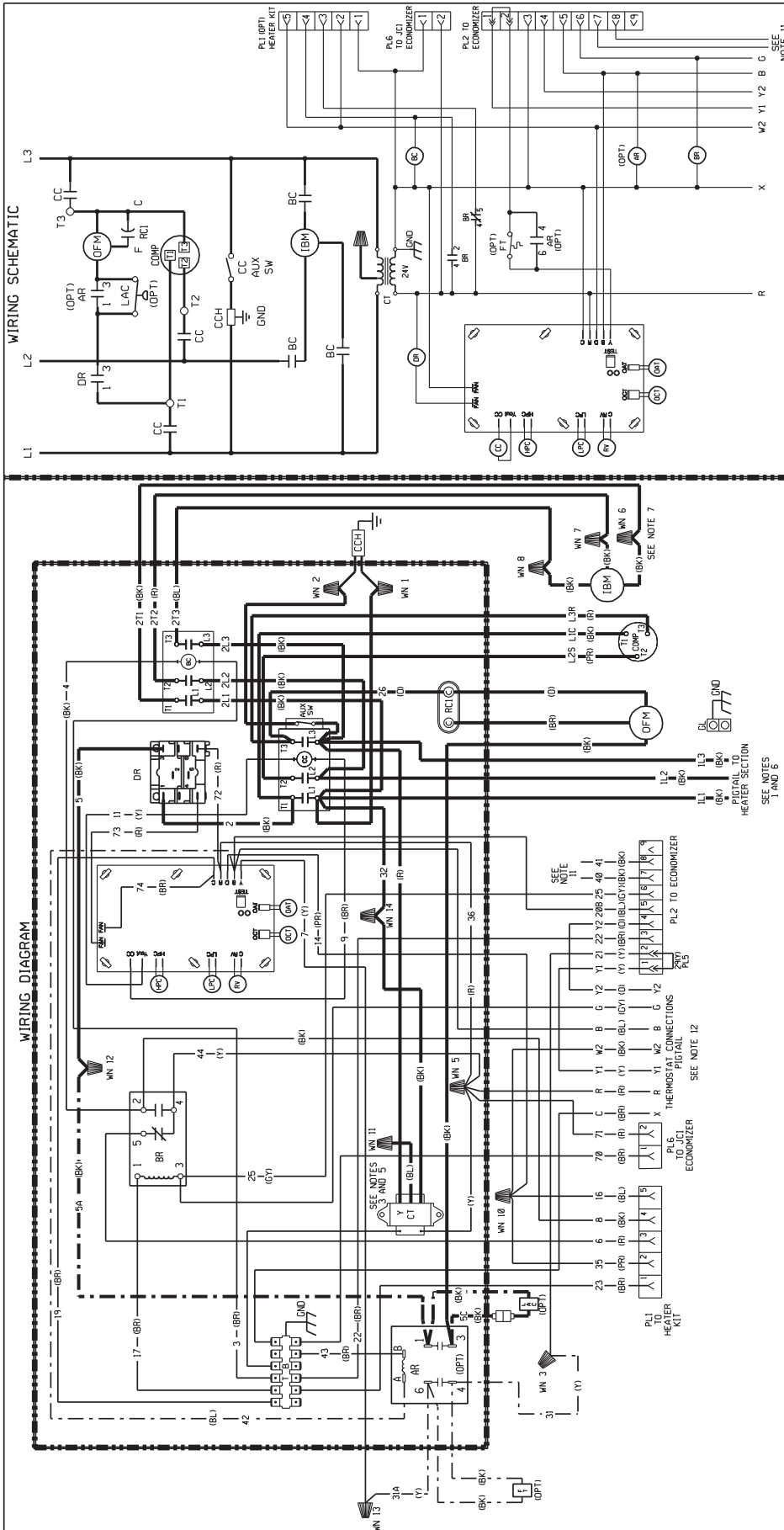
BK	BLACK	O	ORANGE
BR	BROWN	PR	PURPLE
BL	BLUE	R	RED
G	GREEN	Y	WHITE
GY	GRAY	W	YELLOW

**ELECTRICAL WIRING DIAGRAM**

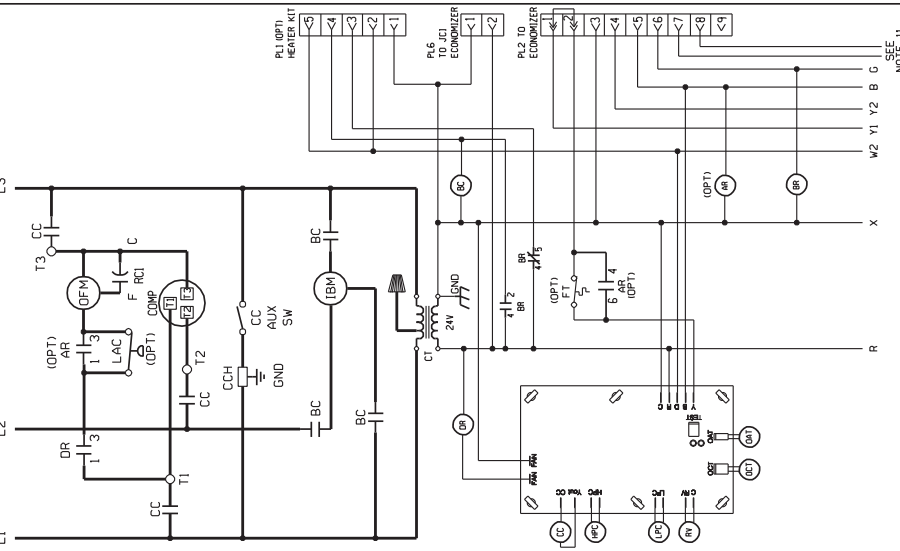
460, 3 PHASE  
BELT DRIVE  
HEAT PUMP  
3 - 5 TON

DR. BY	APP. BY	DATE	DWG. NO.	REV
MGR		7-20-10	90-23595-36	00

**FIGURE 28**  
**WIRING DIAGRAM**

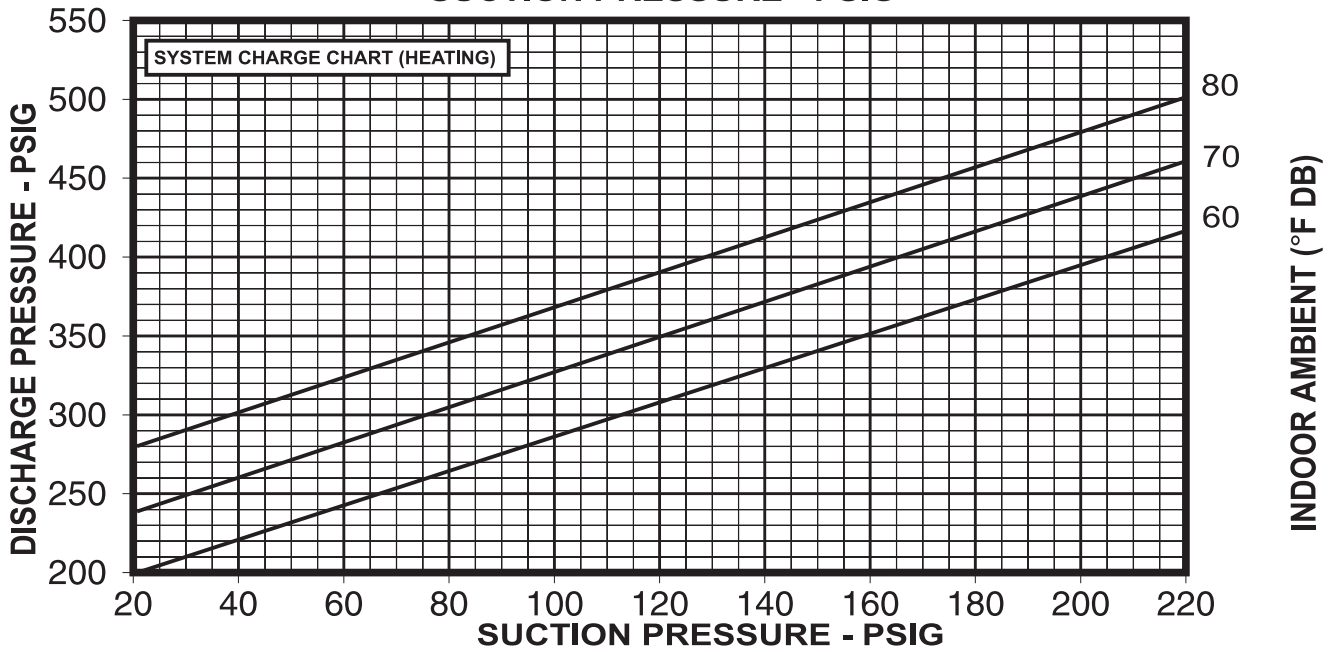
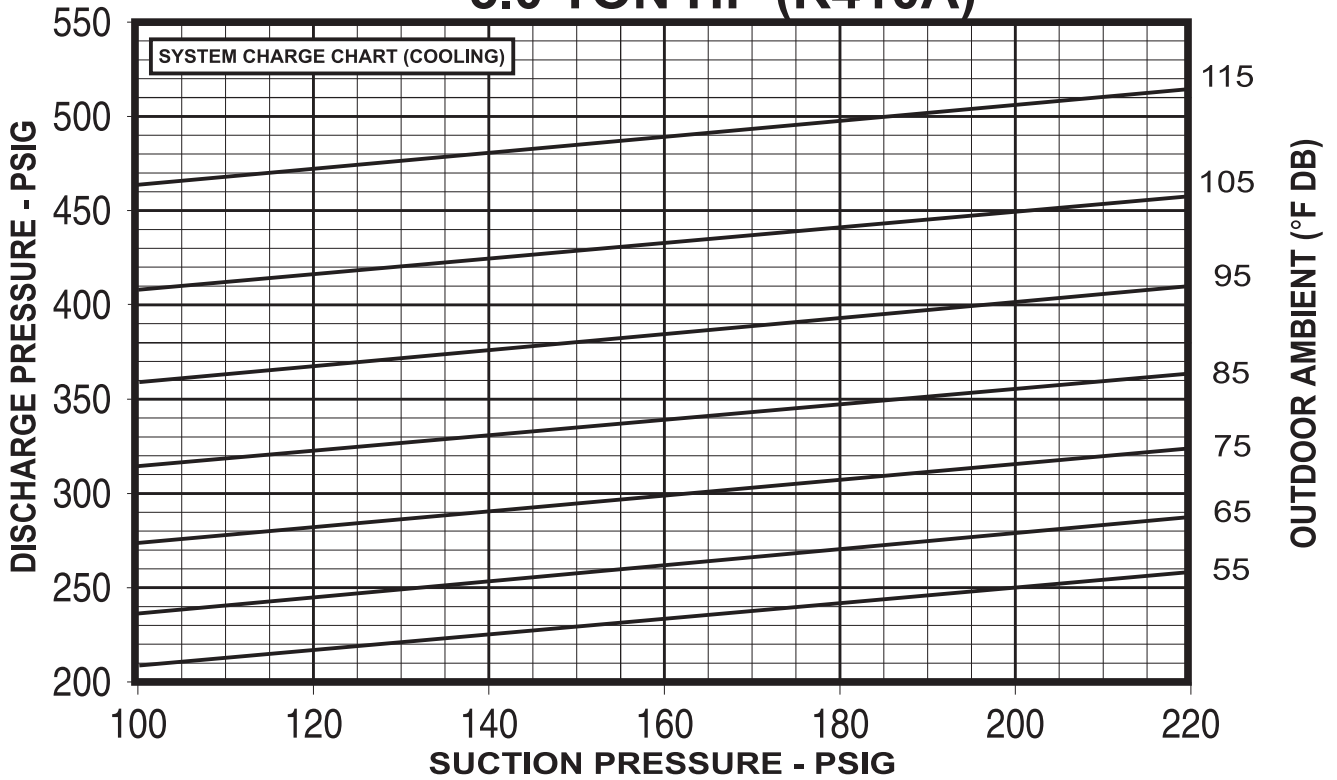


**WIRING SCHEMATIC**



<p><b>COMPONENT CODE</b></p> <p>AR SW AUX SW BR BLOWER RELAY CC COMPRESSOR CONTACTOR CCH CRANK CASE HEATER CDP COMPRESSOR CONTROL TRANSFORMER DFC DEFROST CONTROL DR PRESSURE SWITCH GND GROUND HPC HIGH PRESSURE CONTROL IBM INDOOR BLOWER MOTOR LAC LOW AMBIENT CONTROL OAT OUTDOOR AMBIENT TEMP OCT OUTDOOR COIL TEMP OPM OUTDOOR FAN MOTOR</p>	<p><b>OPTIONAL</b></p> <p>PL PLUG RC RUN CAPACITOR RV REVERSING VALVE TB TERMINAL BLOCK TDC TIME DELAY CONTROL WN WIRE NUT</p>	<p><b>WIRING INFORMATION</b></p> <p>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.) -CABINET MUST BE PERMANENTLY GROUNDED AND CONFORM TO I.E.C., N.E.C., C.E.C. AND LOCAL CODES AS APPLICABLE.</p>	<p><b>WIRE COLOR CODE</b></p> <p>BK BLACK BR BROWN BL BLUE G GREEN GY GRAY O ORANGE PK PINK PR PURPLE R RED W WHITE Y YELLOW</p>	<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.</li> <li>COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS.</li> <li>CONTROL TRANSFORMER PRIMARY LEADS: RED-COM, BLACK-RED - 460V, BLACK/BLUE - 575V. TRANSFORMER FACTORY WIRING TO MATCH UNIT VOLTAGE.</li> <li>SUPPLIED FACTORY WIRING. CONNECT FIELD WIRE TO FACTORY SUPPLIED CONTACTOR WIRING IN ELECTRICAL BOX.</li> <li>LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TRANSFORMER. WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.</li> <li>MOTOR FACTORY WIRING FOR CORRECT SPEED.</li> <li>MOTOR FACTORY WIRING ON UNIT FUSE BOX FOR FUSE SIZING AND CLASSIFICATION.</li> <li>REVERSING VALVE ENERGIZED IN HEATING.</li> <li>ALL SWITCHES ARE SHOWN IN COILING POSITION.</li> <li>OPTIONAL ECONOMIZER. 8 GO TO THE WIRED AIR SENSOR ON THE UNIT. Y2 IS USED ONLY FOR THE OPTIONAL ECONOMIZER.</li> </ol>	<p><b>WIRING INFORMATION</b></p> <p>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.) -CABINET MUST BE PERMANENTLY GROUNDED AND CONFORM TO I.E.C., N.E.C., C.E.C. AND LOCAL CODES AS APPLICABLE.</p>	<p><b>WIRE COLOR CODE</b></p> <p>BK BLACK BR BROWN BL BLUE G GREEN GY GRAY O ORANGE PK PINK PR PURPLE R RED W WHITE Y YELLOW</p>	<p><b>ELECTRICAL WIRING DIAGRAM</b></p> <p>460 / 575, 3 PHASE - 60 Hz 380 - 415, 3 PHASE - 50 Hz. BELT DRIVE - HEAT PUMP</p> <p>DR. BY APP. BY DATE JRJ 2-18-09 DWG. NO. 90-23595-19 REV 02</p>
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# 3.0 TON HP (R410A)



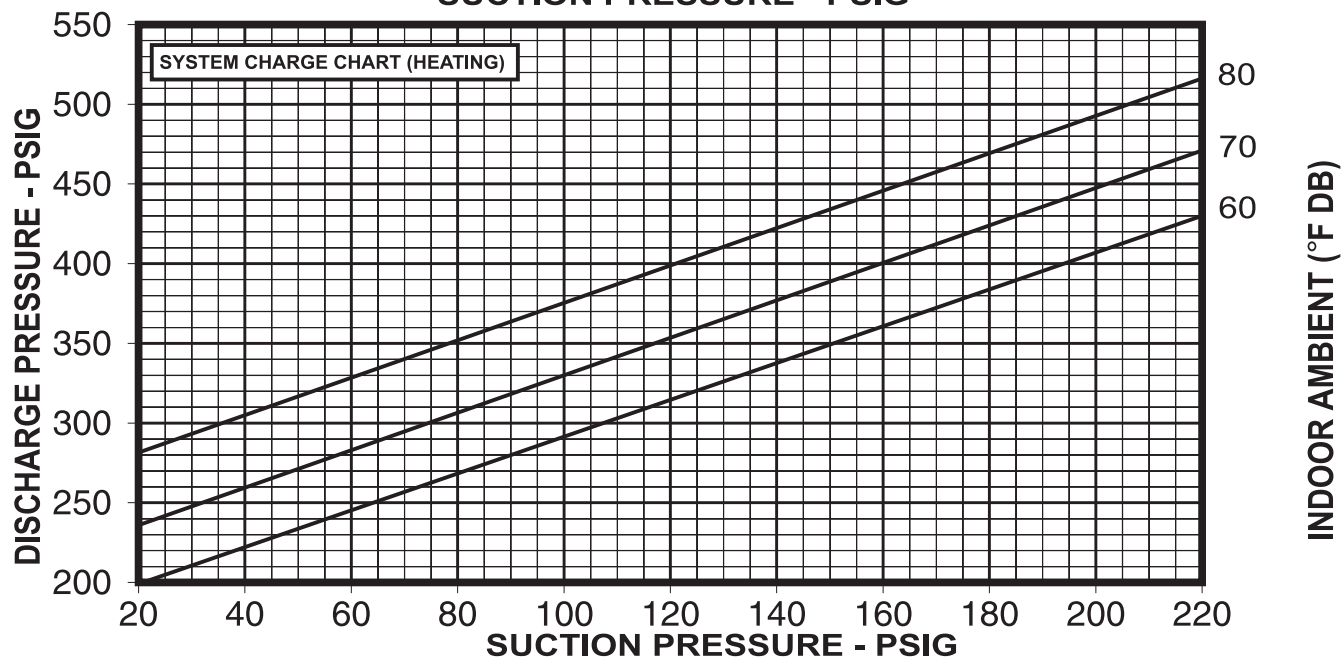
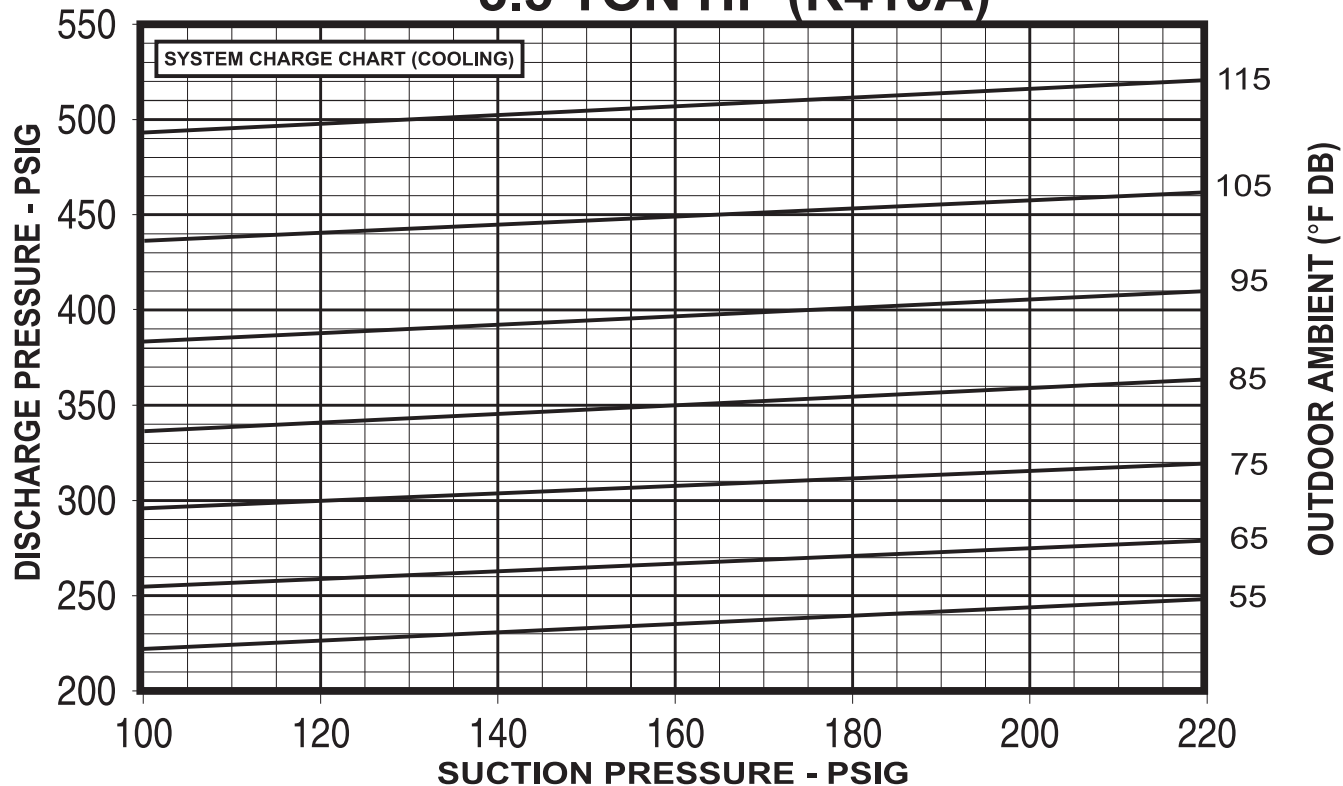
**CAUTION:** BEFORE FINAL REFRIGERANT CHECK, INDOOR RETURN AIR TEMPERATURE MUST BE BETWEEN 72°F & 76°F DB AT 50% R.H. (HEATING AND COOLING), AND NO ICE ON OUTDOOR COILS (HEATING).

**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



# 3.5 TON HP (R410A)



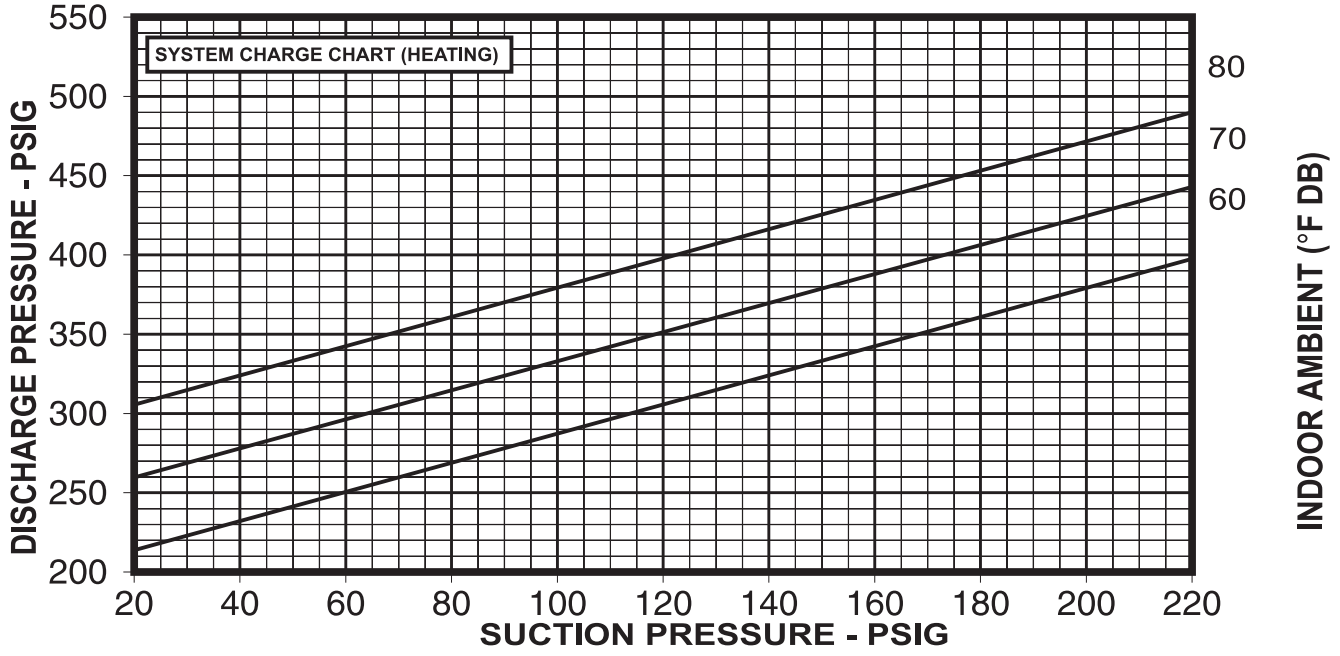
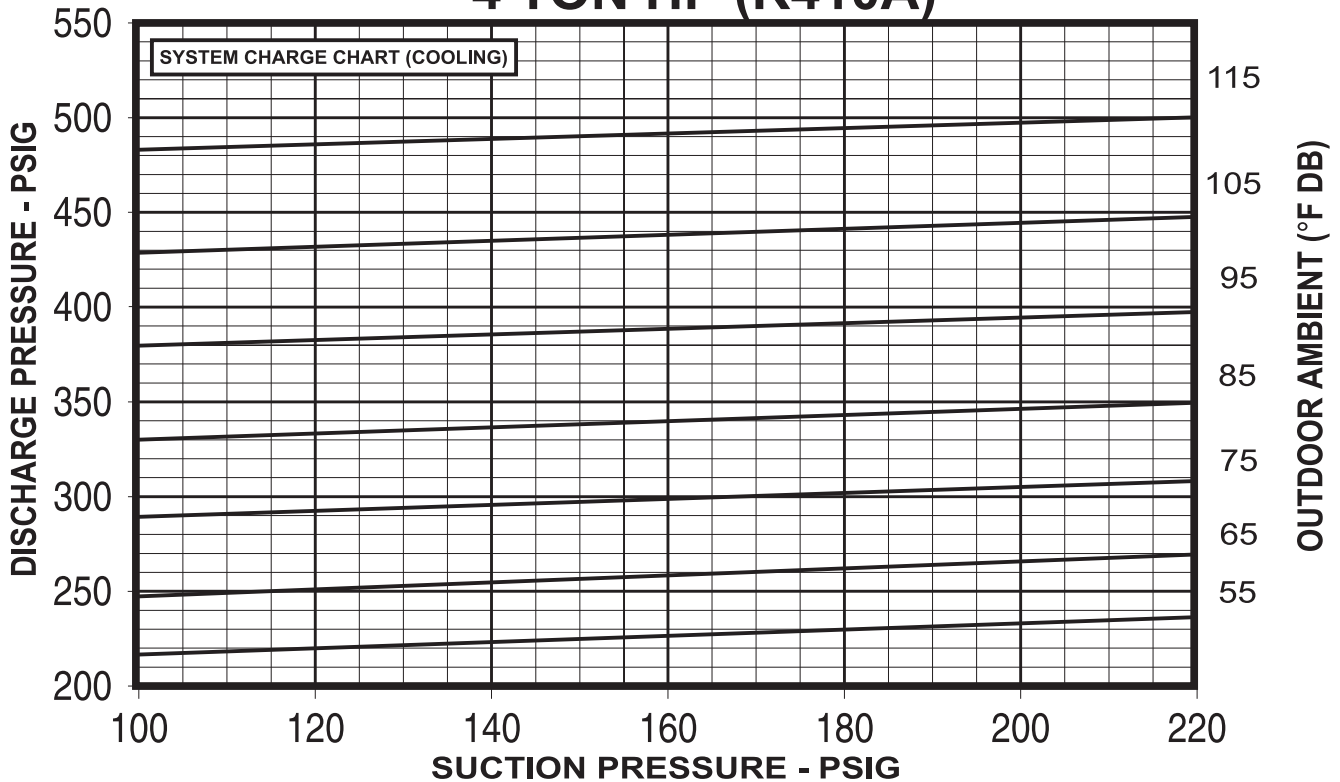
**CAUTION:** BEFORE FINAL REFRIGERANT CHECK, INDOOR RETURN AIR TEMPERATURE MUST BE BETWEEN 72°F & 76°F DB AT 50% R.H. (HEATING AND COOLING), AND NO ICE ON OUTDOOR COILS (HEATING).

**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)



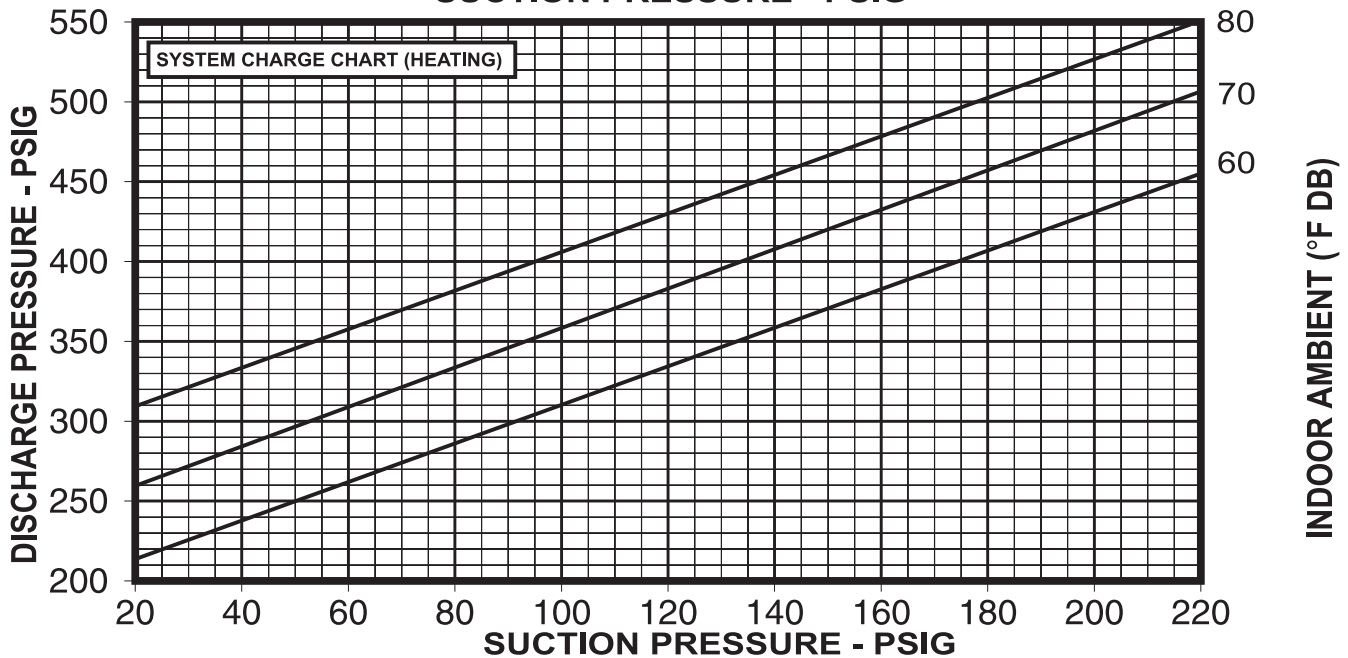
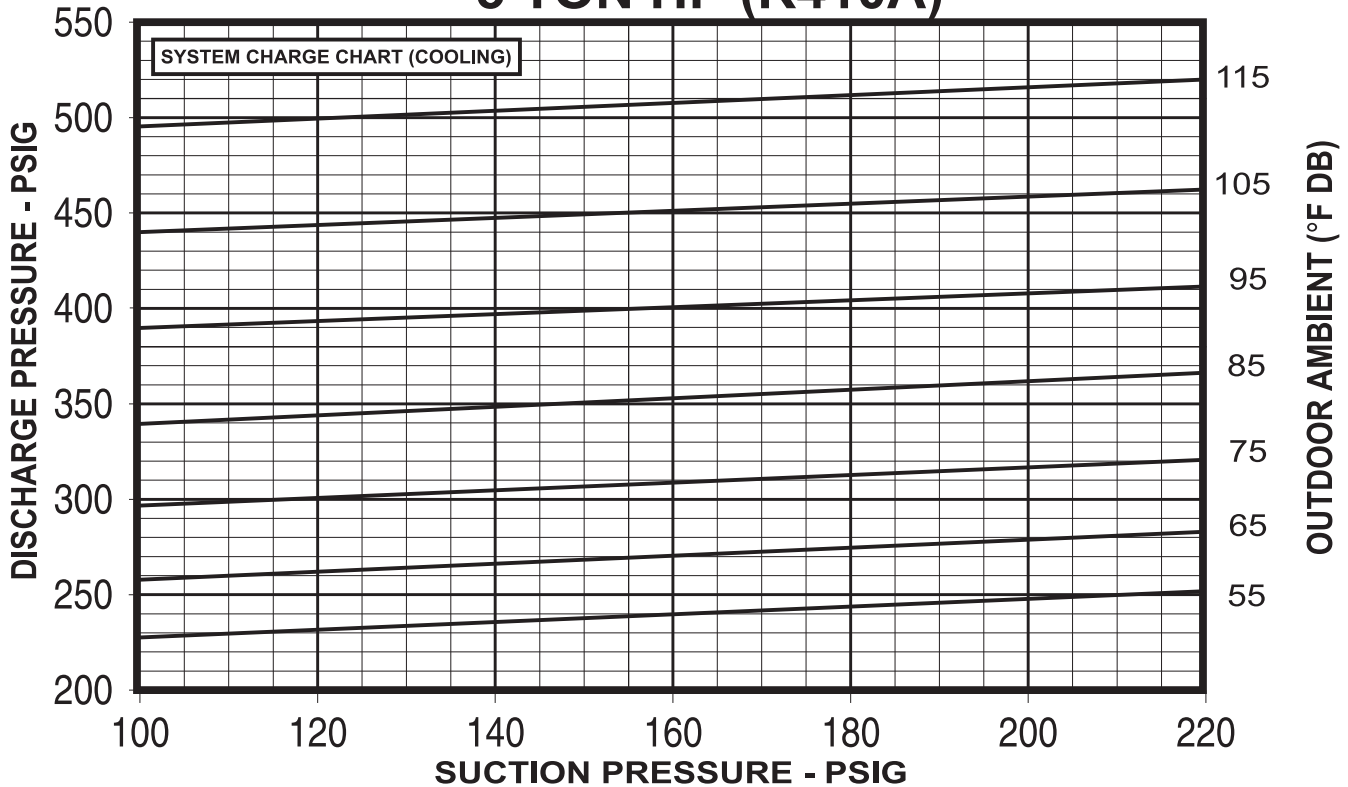
**CAUTION:** BEFORE FINAL REFRIGERANT CHECK, INDOOR RETURN AIR TEMPERATURE MUST BE BETWEEN 72°F & 76°F DB AT 50% R.H. (HEATING AND COOLING), AND NO ICE ON OUTDOOR COILS (HEATING).

**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)



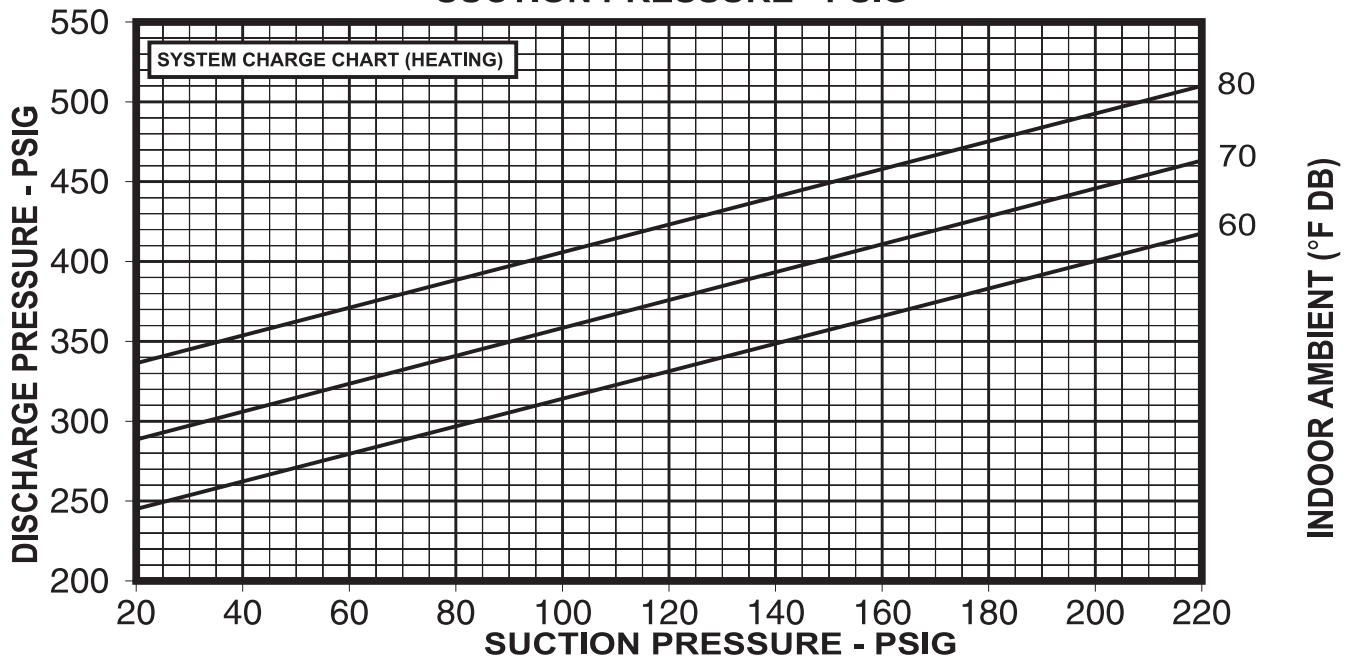
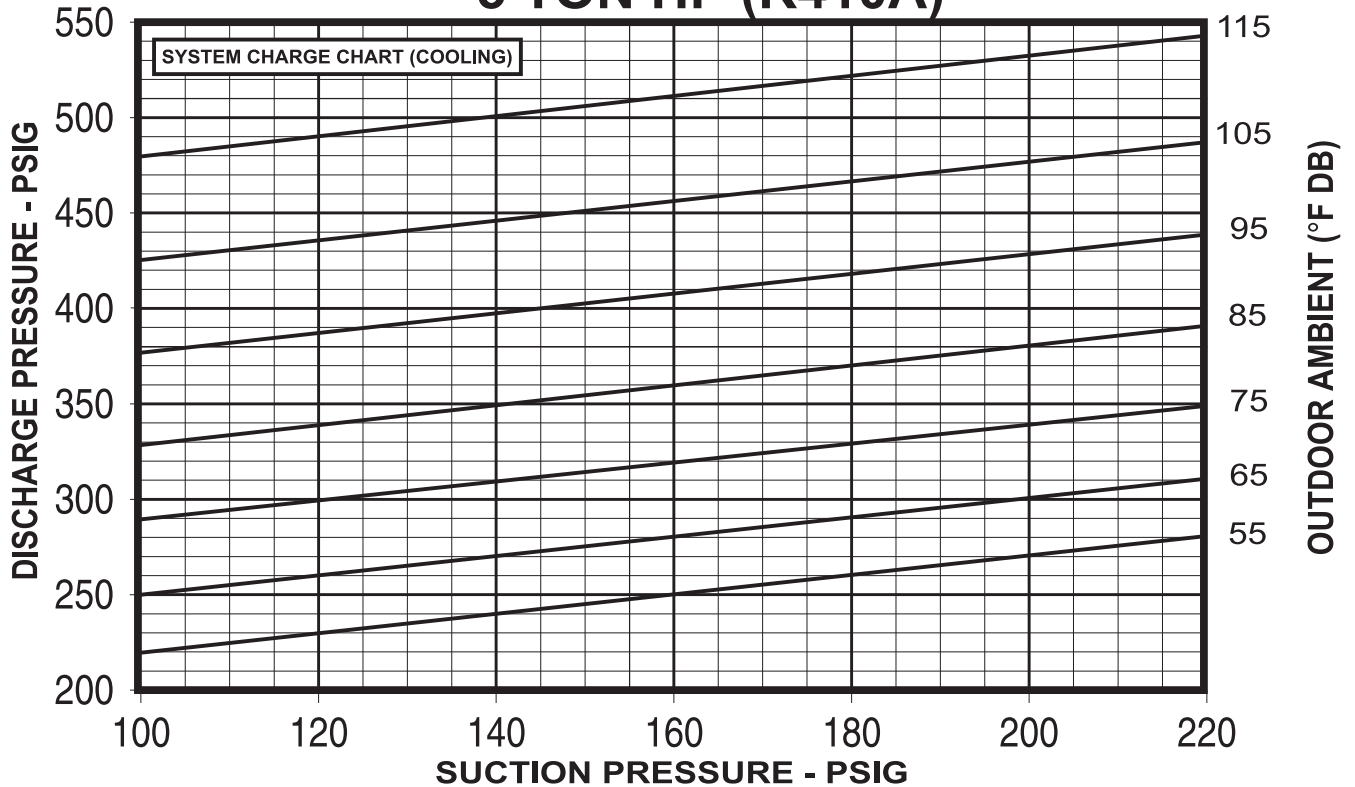
**CAUTION:** BEFORE FINAL REFRIGERANT CHECK, INDOOR RETURN AIR TEMPERATURE MUST BE BETWEEN 72°F & 76°F DB AT 50% R.H. (HEATING AND COOLING), AND NO ICE ON OUTDOOR COILS (HEATING).

**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)



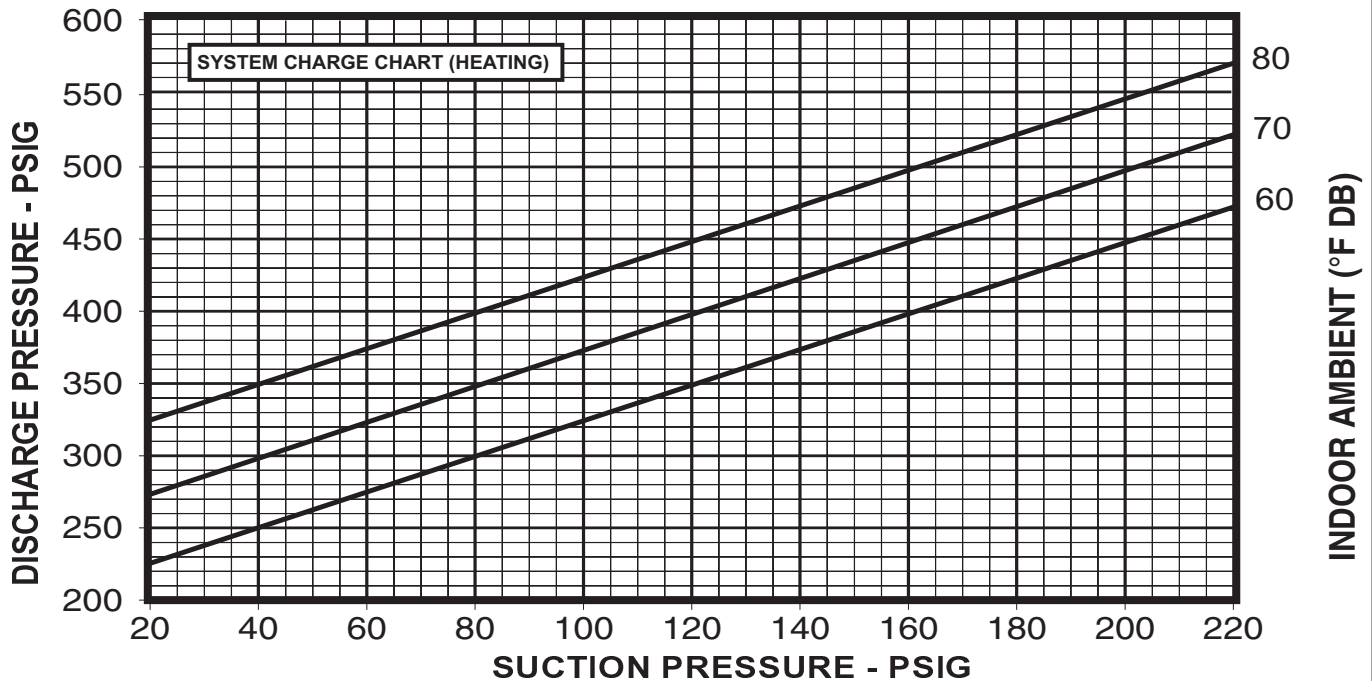
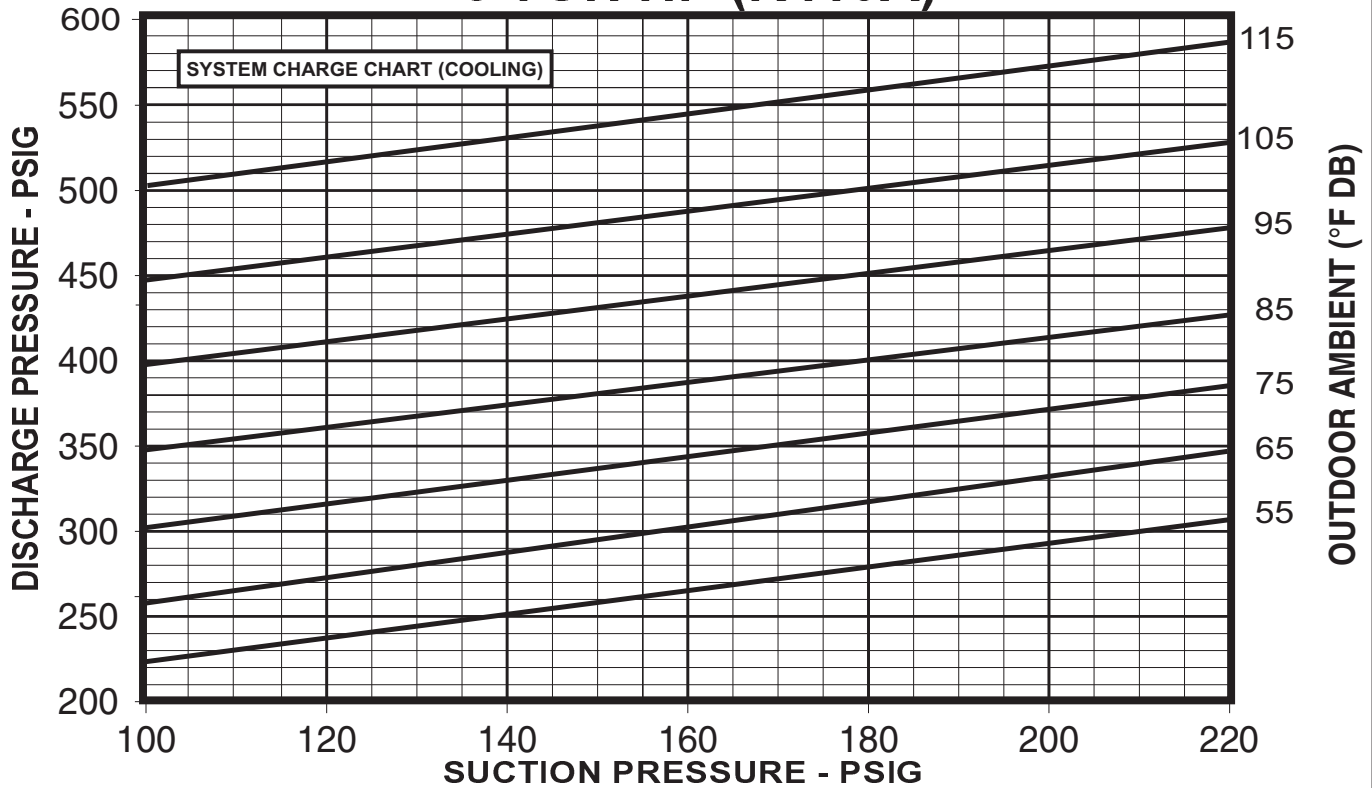
**CAUTION:** BEFORE FINAL REFRIGERANT CHECK, INDOOR RETURN AIR TEMPERATURE MUST BE BETWEEN 72°F & 76°F DB AT 50% R.H. (HEATING AND COOLING), AND NO ICE ON OUTDOOR COILS (HEATING).

**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.

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# 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	<ul style="list-style-type: none"> <li>• Power off or loose electrical connection</li> <li>• Thermostat out of calibration-set too high</li> <li>• Defective contactor</li> <li>• Blown fuses</li> <li>• Transformer defective</li> <li>• High pressure control open (if provided)</li> <li>• Interconnecting low voltage wiring damaged</li> </ul>	<ul style="list-style-type: none"> <li>• Check for correct voltage at compressor contactor in control box</li> <li>• Reset</li> <li>• Check for 24 volts at contactor coil - replace if contacts are open</li> <li>• Replace fuses</li> <li>• Check wiring-replace transformer</li> <li>• Reset-also see high head pressure remedy-</li> <li>• Replace thermostat wiring</li> </ul>
Condenser fan runs, compressor doesn't	<ul style="list-style-type: none"> <li>• Run capacitor defective (single phase only)</li> <li>• Loose connection</li> <li>• Compressor stuck, grounded or open motor winding, open internal overload.</li> <li>• Low voltage condition</li> <li>• Low voltage condition</li> </ul>	<ul style="list-style-type: none"> <li>• Replace</li> <li>• Check for correct voltage at compressor - check &amp; tighten all connections</li> <li>• Wait at least 2 hours for overload to reset. If still open, replace the compressor.</li> <li>• At compressor terminals, voltage must be within 10% of rating</li> <li>• Add start kit components</li> </ul>
Insufficient cooling	<ul style="list-style-type: none"> <li>• Improperly sized unit</li> <li>• Improper airflow</li> <li>• Incorrect refrigerant charge</li> <li>• Air, non-condensibles or moisture in system</li> <li>• Incorrect voltage</li> </ul>	<ul style="list-style-type: none"> <li>• Recalculate load</li> <li>• Check - should be approximately 400 CFM per ton.</li> <li>• Charge per procedure attached to unit service panel</li> <li>• Recover refrigerant, evacuate &amp; recharge, add filter drier</li> <li>• At compressor terminals, voltage must be within 10% of rating plate volts when unit is operating.</li> </ul>
Compressor short cycles	<ul style="list-style-type: none"> <li>• Incorrect voltage</li> <li>• Defective overload protector</li> <li>• Refrigerant undercharge</li> </ul>	<ul style="list-style-type: none"> <li>• At compressor terminals, voltage must be <math>\pm 10\%</math> of nameplate marking when unit is operating.</li> <li>• Replace - check for correct voltage</li> <li>• Add refrigerant</li> </ul>
Registers sweat	<ul style="list-style-type: none"> <li>• Low evaporator airflow</li> </ul>	<ul style="list-style-type: none"> <li>• Increase speed of blower or reduce restriction - replace air filter</li> </ul>
High head-low vapor pressures	<ul style="list-style-type: none"> <li>• Restriction in liquid line, expansion device or filter drier</li> <li>• Flow check piston size too small</li> <li>• Incorrect capillary tubes</li> <li>• TXV does not open</li> </ul>	<ul style="list-style-type: none"> <li>• Remove or replace defective component</li> <li>• Change to correct size piston</li> <li>• Change coil assembly</li> <li>• Replace TXV</li> </ul>
High head-high or normal vapor pressure - Cooling mode	<ul style="list-style-type: none"> <li>• Dirty condenser coil</li> <li>• Refrigerant overcharge</li> <li>• Condenser fan not running</li> <li>• Air or non-condensibles in system</li> </ul>	<ul style="list-style-type: none"> <li>• Clean coil</li> <li>• Correct system charge</li> <li>• Repair or replace</li> <li>• Recover refrigerant, evacuate &amp; recharge</li> </ul>
High head-high or normal vapor pressure - Heating mode	<ul style="list-style-type: none"> <li>• Low air flow - condenser coil</li> <li>• Refrigerant overcharge</li> <li>• Air or non-condensibles in system</li> <li>• Dirty condenser coil</li> </ul>	<ul style="list-style-type: none"> <li>• Check filters - correct to speed</li> <li>• Correct system charge</li> <li>• Recover refrigerant, evacuate &amp; recharge</li> <li>• Check filter - clean coil</li> </ul>
Low head-high vapor pressures	<ul style="list-style-type: none"> <li>• Defective Compressor valves</li> </ul>	<ul style="list-style-type: none"> <li>• Replace compressor</li> </ul>
Low vapor - cool compressor - iced evaporator coil	<ul style="list-style-type: none"> <li>• Low evaporator airflow</li> <li>• Operating below 65°F outdoors</li> <li>• Moisture in system</li> <li>• TXV limiting refrigerant flow</li> </ul>	<ul style="list-style-type: none"> <li>• Increase speed of blower or reduce restriction - replace air filter</li> <li>• Add Low Ambient Kit</li> <li>• Recover refrigerant - evacuate &amp; recharge - add filter drier</li> <li>• Replace TXV</li> </ul>
High vapor pressure	<ul style="list-style-type: none"> <li>• Excessive load</li> <li>• Defective compressor</li> </ul>	<ul style="list-style-type: none"> <li>• Recheck load calculation</li> <li>• Replace</li> </ul>
Fluctuating head & vapor pressures	<ul style="list-style-type: none"> <li>• TXV hunting</li> <li>• Air or non-condensate in system</li> </ul>	<ul style="list-style-type: none"> <li>• Check TXV bulb clamp - check air distribution on coil - replace TXV</li> <li>• Recover refrigerant, evacuate &amp; recharge</li> </ul>
Gurgle or pulsing noise at expansion device or liquid line	<ul style="list-style-type: none"> <li>• Air or non-condensibles in system</li> </ul>	<ul style="list-style-type: none"> <li>• Recover refrigerant, evacuate &amp; recharge</li> </ul>

**SEE DEMAND DEFROST CONTROL SECTION FOR DEFROST BOARD FLASH CODES (6 TON UNIT ONLY).**

