NORDYNE

Platinum™ Series

AIR CONDITIONING AND HEAT PUMP PRODUCT

249B-0202
Product Guide

Platinum Series Product Guide

Table of Contents

Abbreviations: MI, Owners Manual & Instructions;
DG, Design Guide;
RPL, Replacement Parts List;
TS, Technical Specifications;

INTRODUCTION

New Platinum Series

NORDYNE has developed the Platinum Series of HVAC products that replaces traditional methods of heating, cooling, and ventilating a manufactured home.

The Platinum Series provides savings to Manufactured Home Builders and Retailers, improving the performance, quality, service and value offered by NORDYNE and its distributors.

INTERTHERM®

MILLER

Traditional AC and HP Concerns

- Uneven air distribution (air doesn't supply all rooms)
- Uneven temperature distribution
- Furnace location restricted to being placed over the ductwork
    - Compromise comfort and floor plan
    - Currently build home around furnace
- Constant threat of condensate from coil spilling on floor (dirty filter, Poor installation, clogged drain, mis-leveled home)
- Mis-applied equipment (size, design, mismatched components)
- Inconsistent warranties
- Poor unpredictable appearance outside home
- Installers damaging underside of homes (holes, cut vapor barrier, Exposed pipes, etc.)

Platinum Series Outdoor View

Platinum Series
Benefits & Advantages

- Improves ducted air distribution and home comfort
- Provides flexibility in home design (furnace can go anywhere)
- Reduces in-house noise and offers quieter operation
- Eliminates any chance of A/C condensate wetting the floor
- Matched systems designed specifically for Manufactured Housing
- Meets HUD standards
- Strongest warranty in Manufactured Housing Industry
- Maintains “residential” look- aesthetically appealing
- Eliminates installers damaging underside of home

Additional Benefits

- Best in industry warranty
- 2 year parts, labor and mileage
- Quality Pledge - If there is a major component failure to the compressor, evaporator coil, condensing coil or heat exchanger, in the first five years, NORDYNE will replace the entire unit. (See Warranty Statement for details).
- E-commerce, On-line ordering of Platinum Series equipment

Platinum™ Series

Product Design

Platinum Series
Product Design Attributes

- Furnace may be located anywhere in the home
- Electric furnace filtration with 16” x 20” standard filters
- Grille and frame not needed on electric furnace. Return air grilles may be located on the wall for optimal air distribution and noise reduction
- Standard heat/cool thermostat and 4-wire cable is all that is required for AC or HP
- No condensate ever enters the home from the AC or HP system, eliminating liability for water damage
- Applicable with floor or overhead duct system
- Simple duct design with better distribution, improved comfort
- Manufacturer provided power receptacle and thermostat connection could eliminate the following:
- Electrician for HVAC installation

  Entering home at time of installation

  On-site permits for HVAC work. HVAC treated as a component of the home
- Retail sales center models can have a Platinum Series AC or HP connected on the sales lot, then relocated to a new owner’s site without reclaim, recharge, or duplicate installation labor
- No direct noise transmission to manufactured home from line-set and evaporator coil
- Platinum Series unit “J” rail allows skirting to easily form around unit for a clean, professional residential look
- Sealed refrigerant system provides highest reliability and lowest overall application related warranty calls

Platinum Home Design Checklist

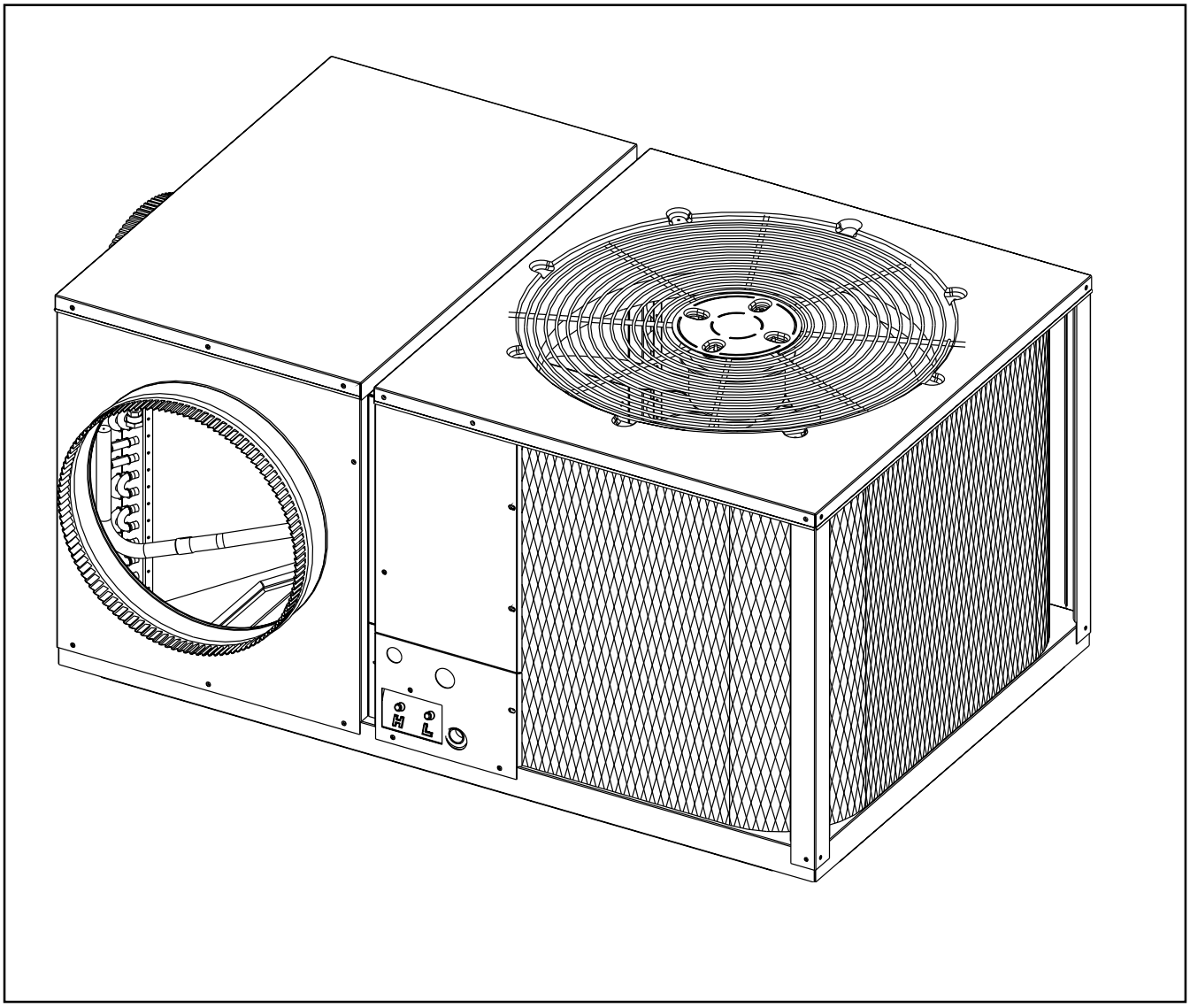
Use this checklist along with the Platinum Series Design Guide to insure successful Platinum-ready home

✓	Platinum Design Consideration	Page and Section	
☐	Select appropriate furnace model	2	Model Selection
☐	Optimize return air configuration	2	Return Air Options
☐	Optimize furnace location	3	Location
☐	Use the 14" round plenum connector	3	Plenum Connector
☐	Select a 4-wire "A/C" thermostat	3	Thermostat
☐	Make special provisions for thermostat pre-wiring	3	Thermostat
☐	Do not locate furnace on a main trunk duct	5	Floor Ducts
☐	Use 12" 'drop-outs' in trunk ducts for Platinum connections	5	Floor Ducts
☐	Optimize location of 12" drop-outs	5	Floor Ducts
☐	Locate risers for overhead ducts if applicable	6	Over-head Ducts
☐	Include intended location of Platinum unit in set-up instructions	6	Design Considerations
☐	Define location of power supply receptacle	7	Platinum Power Supply
☐	Use 40 amp circuit with #8 wire for Platinum power supply	7	Platinum Power Supply
☐	Define location of power supply receptacle	7	Platinum Power Supply
☐	Verify needed clearance at the intended location of the Platinum unit	7	Design Considerations
☐	Verify piers or supports called out in set-up instructions do not interfere with intended location of Platinum unit.	7	Clearance Requirements

DESIGN GUIDE

Platinum™ Series

Design consideration for homes intended for field application of Platinum Series air conditioners or heat pumps



Scope

The purpose of this brochure is to describe the NORDYNE Platinum series concept and how it can affect the way manufactured housing manufacturers design and build homes. This brochure will define the characteristics of a 'Platinum-ready' home along with recommendations for leveraging all of the advantages of the Platinum Series air conditioners and heat pumps.

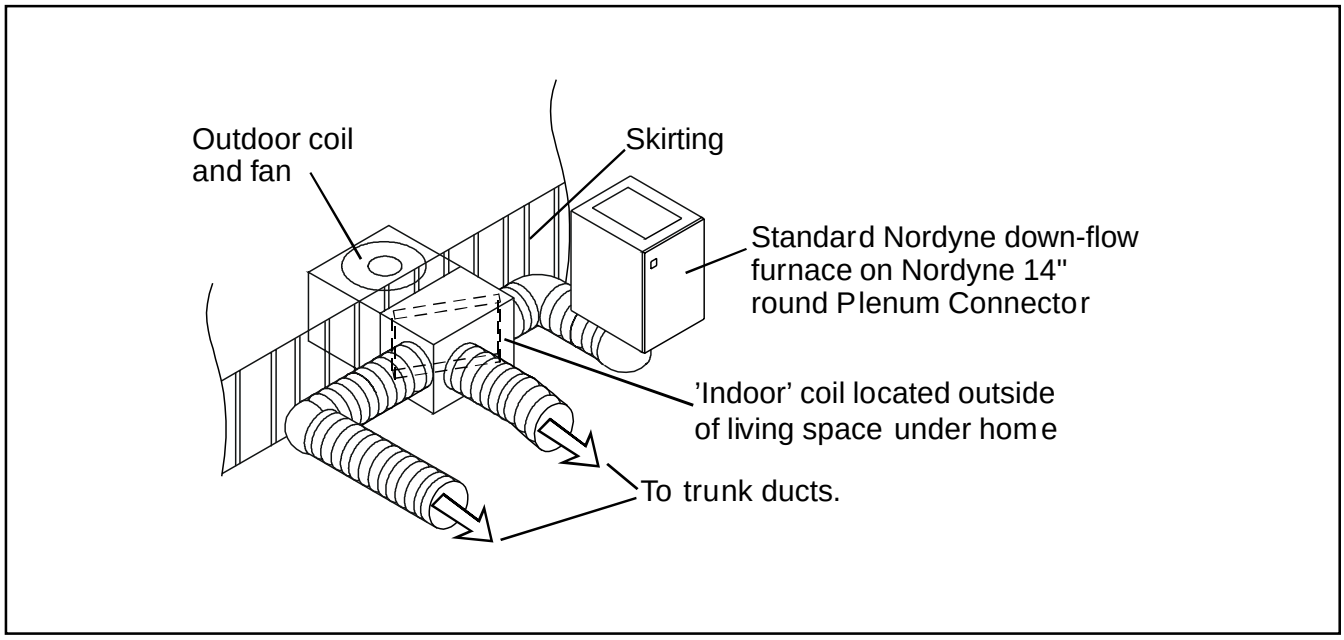


Figure 1. Platinum Overview

Platinum Overview

The Platinum concept is an approach to manufactured housing HVAC that is different than what has been traditionally available. A Platinum Series air conditioner (AC) or heat pump (HP) is similar to a split system AC or HP except that the indoor coil is in the Platinum unit instead of being field installed in the furnace. See Figure 1.

With the indoor coil located in the Platinum Series unit placed outdoors, there is no chance of condensate leakage in the home. Also, installation is simplified since there are no refrigerant lines to connect and no coil to install into the furnace. The vapor barrier as supplied by the home manufacturer is not compromised in the installation of the Platinum AC or HP.

Further simplifying the installation of a Platinum Series unit is the fact that it is designed to be cord-connected, eliminating the need for an electrician in most cases.

Using the Platinum Series concept also creates flexibility to improve HVAC design and lower the manufactured cost of the home.

DESIGN CONSIDERATIONS – Furnace

Model Selection

For a Platinum ready home, use an AC-ready 4-ton furnace. If a blower change-out or relay kit is field installed the AC or HP installation is more expensive and the installer will have to have access to the inside of the home.

Alternately, if the size of the AC or HP is known by the home manufacturer, the furnace blower selection could be optimized. For example, if a gas home is known to be applied with a 3-ton AC, it is not necessary to use a furnace with a 4-ton blower. In this case, a furnace with a 3-ton blower is more economical. In all cases, the furnace must be 'AC ready' and include a blower relay.

NOTE: For 5-ton applications, blower change-out may still be needed if a furnace with 4-ton blower is installed by the home manufacturer. If it is known that a 5-ton AC or HP will be used, a furnace equipped with a 5-ton blower may be used. NORDYNE offers several models factory equipped with 5-ton blowers.

For gas and oil furnaces, it is no longer necessary to use furnaces with integral coil cavities. NORDYNE gas and oil furnaces are available without the coil cavity.

Return Air Options

For gas and oil furnaces (except M2-series) the return air options are the same.

For electric furnaces and M2-series gas furnaces, there are new options since there is no need to install a coil on the unit. The return air can now be located

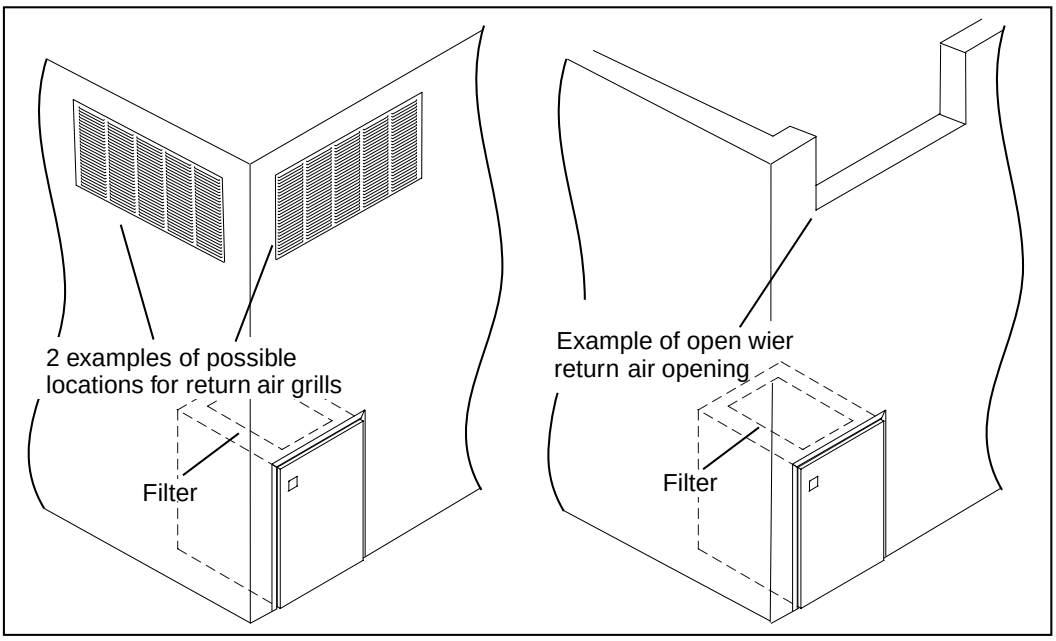


Figure 2. Return Air Options for Electric Furnaces

high in the wall, which will improve air distribution and reduce the furnace sound that could be transmitted through the return air grill. Also an open return air weir can be considered and would eliminate the return air grill all together. See Figure 2.

Location

The following factors should be considered to optimize furnace location:

1) If the unit can be located on an outside wall, the simpler, more cost effective through-the-wall Ventilaire can be used.
2) For gas and oil furnaces, the flue length may be minimized if the furnace is located on the outside wall.
3) Keeping the furnace close to the panel, (distribution box) can reduce cost, especially on electric furnaces.
4) Keeping the furnace location close to the intended location of the Platinum-Series AC or HP will reduce the requirement for flex duct and thermostat wire when installed.
5) The furnace does not need to be directly over a trunk duct. With the flexibility the Platinum Series brings, you may locate the furnace where it makes sense for the floor plan.

Plenum Connector

Use the 14" round plenum connector to simplify connection to the Platinum Series AC or HP. Installation of the 14" plenum connector is the same as for the traditional square connector except there is no connection to the duct system at the time of plenum installation.

Thermostat

All Platinum Series AC *and* HP models are designed to work with a standard 4-wire AC thermostat.

In a Platinum-ready home, all thermostat cable is run by the home manufacturer - from the thermostat to the furnace and from the furnace to the Platinum unit location. The thermostat cable wired from the furnace to the Platinum unit location also includes an additional 6 feet of extra cable coiled and attached to the bottom of the home near the receptacle for use during Platinum unit installation.

Reference Figure 3 for thermostat wiring. Since the installer of the Platinum unit might not enter the structure during installation, it is important to follow the color scheme shown in Figure 3.

IMPORTANT! Notice that the red and white wires are joined with a wire nut at the end intended for the Platinum unit. This is required to allow for heat operation when a Platinum AC is used or if no AC or HP unit is used at all.

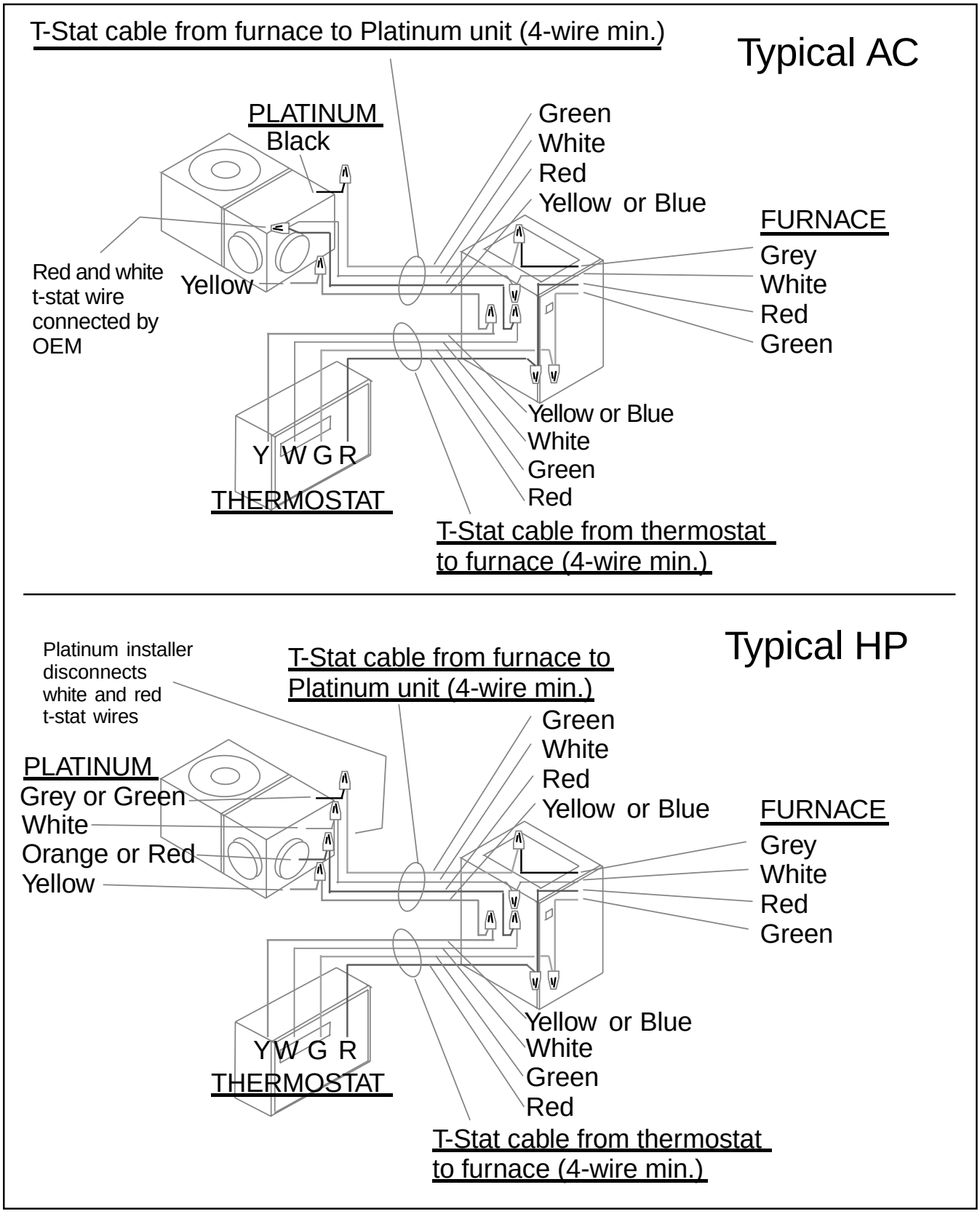


Figure 3. Typical Low Voltage Wiring

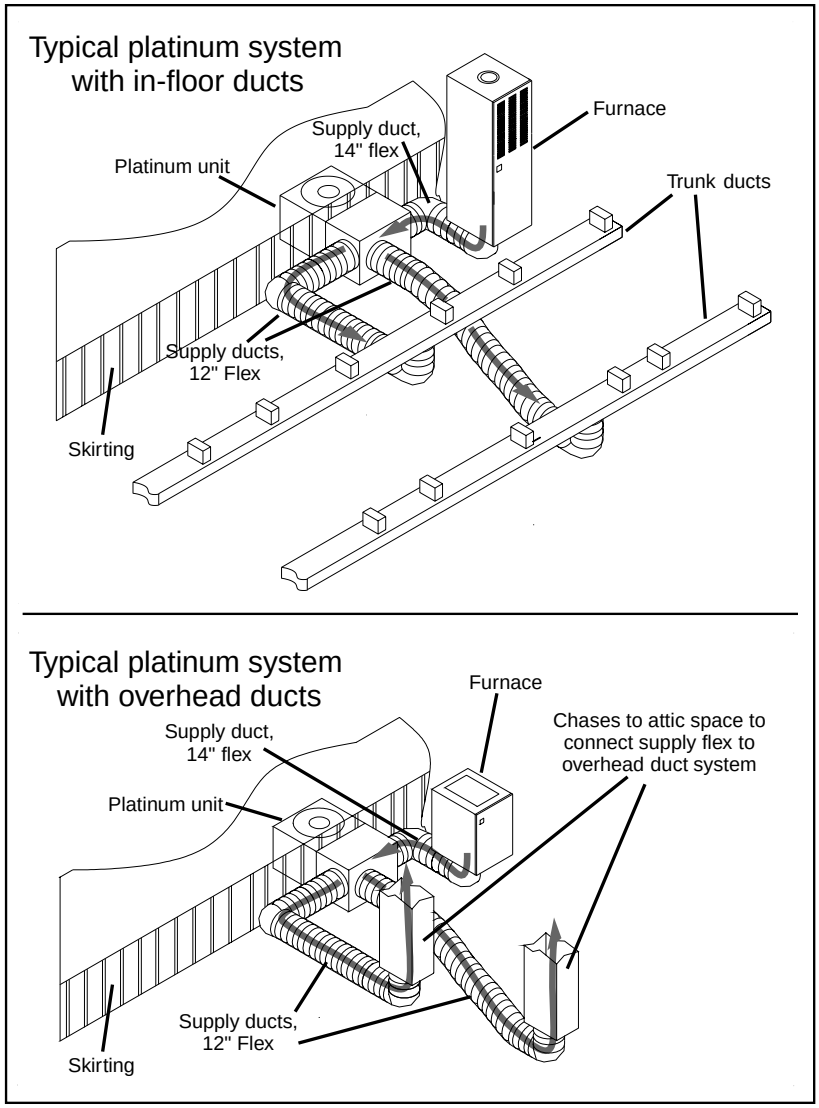


Figure 4. Typical Platinum Systems

DESIGN CONSIDERATIONS – Duct

GENERAL

Beyond these specific points described below, the duct is designed using standard design principles. Use NORDYNE's Certiduct duct certification program to aide in the design and certification of the duct design.

Floor Ducts

In a Platinum-ready home design, the furnace is not directly on a duct trunk. See Figure 4. All trunks are equipped with 12" drop-outs (duct connectors) located where performance is maximized. Locating the drop-outs at the center of a trunk generally provides the best performance, however, this must be balanced with the desire to minimize the length of flex duct required to connect to the Platinum at its intended location. Generally, it is a good idea to keep the drop-outs in the center 1/3 of the trunks, and, keep the length of flex duct required to no more that 25 feet for any single run.

Platinum air conditioners and heat pumps have 2-12" supply connections for 12" flex duct. For homes with more than 2 main trunks, crossovers and/or 'wye' connections are required to feed the smaller trunk(s). For homes with only one trunk, 2-12" drop-outs may be used or, in the case of homes where a small cooling and/or heating load is anticipated, the trunk may be

designed with only 1-12” drop-out. In this case, the installer of the Platinum AC or HP will be required to seal one of the supply connections at the unit using a kit available from NORDYNE.

Over-head Ducts

Overhead duct system design for a Platinum-ready home is the same as a traditional system except there are no attic cross-overs (in 2-section homes) and a standard down-flow furnace is used. See Figure 4.

The overhead duct system connects to Platinum AC or HP through 12” flex duct that is routed from the attic to below the home through chases in each section of the home. For 3 or more section homes, the additional sections may be supplied with attic cross-overs or by splitting the 12” supply lines with “wye” connectors below the home.

It is recommended that the length of flex duct required to reach the intended location of the Platinum AC or HP be included and compressed into the chase for shipment. The Platinum installer can then simply pull the flex down to make the connection to the Platinum unit.

Alternately, fixed round or rectangular ducts can be used to connect the attic duct system to the bottom of the home. In this case, any suitable method may be used as long as the bottom of the duct terminates in a 12” round duct connection which can then be used to connect the Platinum unit.

DESIGN CONSIDERATIONS – Platinum Unit

Although the manufacturer of the home does not install the Platinum air conditioner or heat pump, it is critical that the manufacturer carefully plans for and makes certain arrangements for installation. In the design of a Platinum-ready home, the **intended location** of the Platinum unit is predetermined and communicated to the retailer. The retailer is not required to install the Platinum unit in the intended location, but it will be much easier than installing it in another location.

It is recommended that the home manufacturer include an outline of the Platinum unit on floor plans to insure that all involved are aware of the intended location.

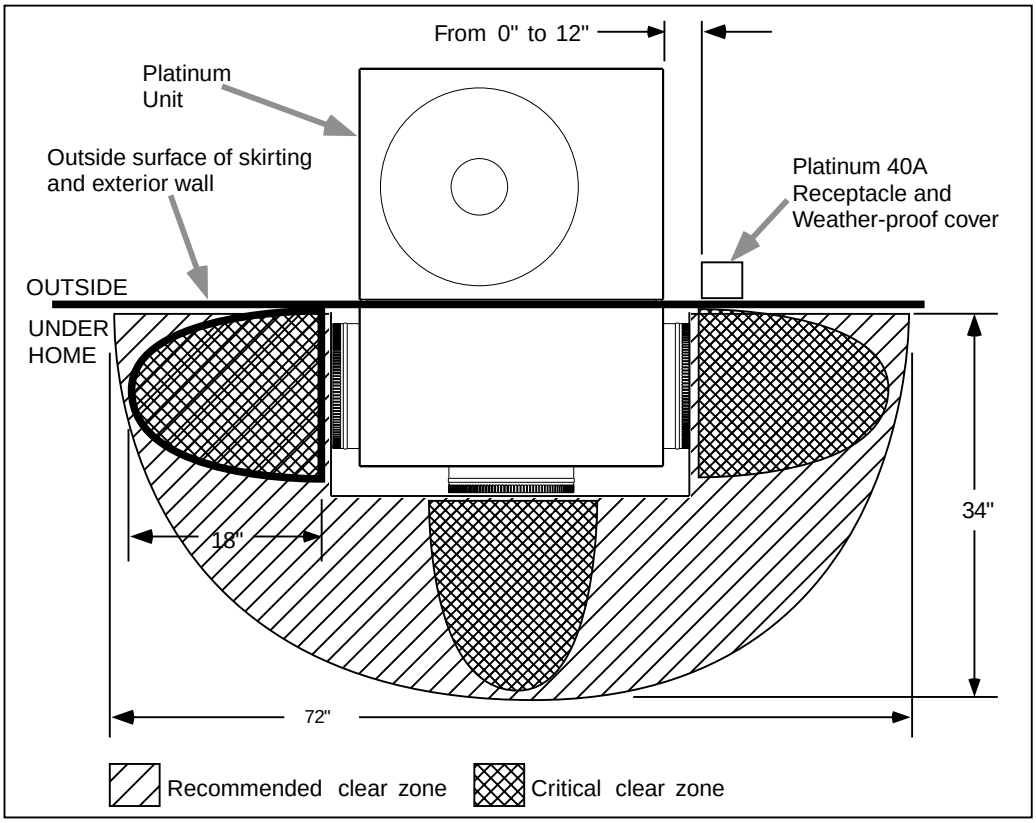


Figure 5. Platinum Location Considerations

Platinum Power Supply

A Platinum-ready home includes a specially designed approved receptacle and weather-proof cover located within 12" of the left edge of the intended location of the Platinum unit. This receptacle is to be located as low as practical. If the receptacle is mounted as low as possible – even below floor level – small location adjustments can be made during Platinum installation if required.

All Platinum units (all sizes and efficiencies) are approved for installation on a branch circuit using 8-gauge wire protected by a 40-amp circuit breaker. In a Platinum-ready home, this circuit is supplied by the home manufacturer.

Power to the Platinum unit is supplied through this circuit and connected with a cord set supplied with the Platinum unit.

Clearance Requirements

The Platinum unit is installed partially under the home and therefore requires that area to be clear of supports, pipes, drains, traps, service connections, etc. Figure 5 shows the areas required to be clear at the intended location of the Platinum unit. Figure 6 shows the side view of a typical Platinum unit installation. Note that the I-beam is not a problem since the duct can be routed below the I-beam if needed.

It is recommended that the home manufacturer mark the intended location of the Platinum unit on the home and in the set-up instruction to instruct the set-up personnel not to place supports or create other obstructions in that area.

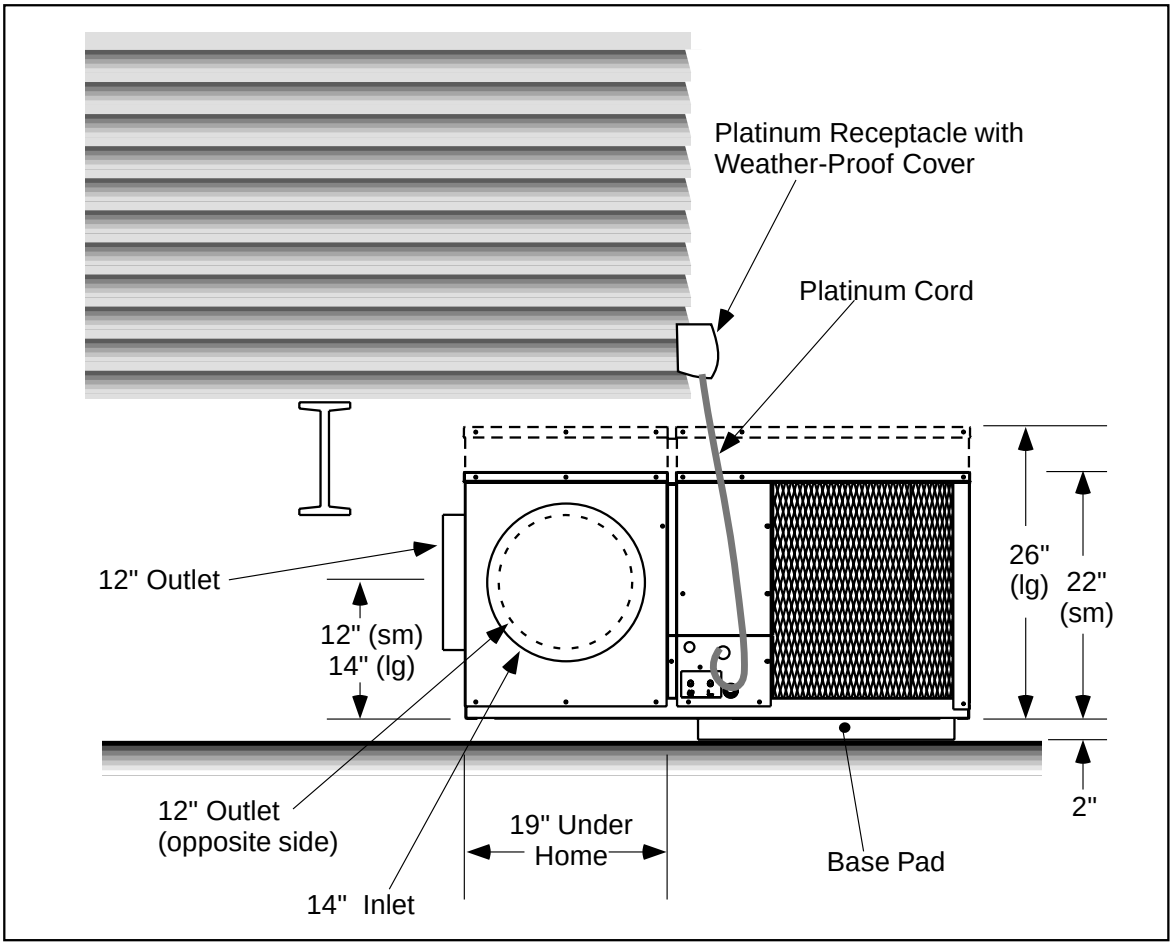


Figure 6. Platinum Location Considerations, Side View

Platinum™ Series

149B-0801

O'Fallon, MO | NORDYNE

TECHNICAL SPECIFICATIONS

P3B (A,C) Series

Single Packaged Air Conditioner, Single Phase

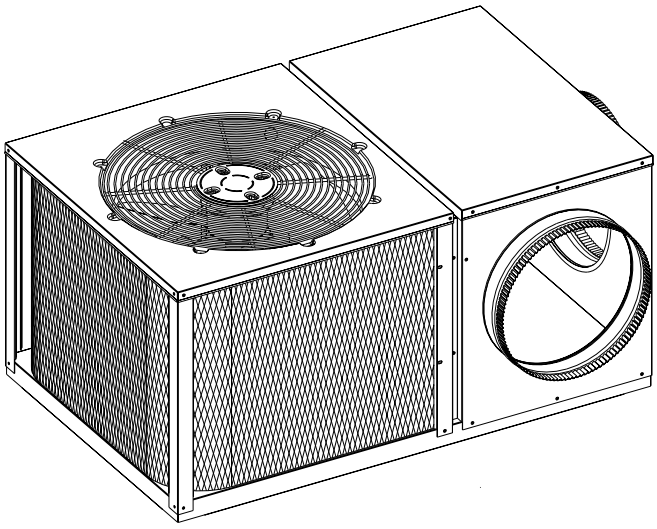
Q3B(A,C) Series

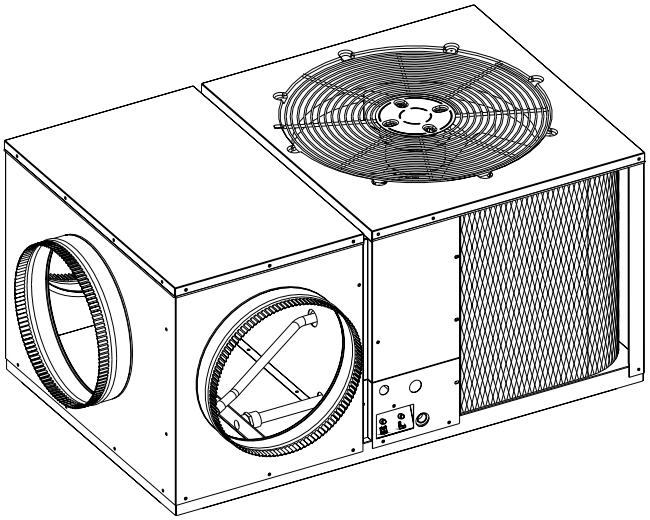
Single Packaged Heat Pump, Single Phase

P3BA/Q3BA-10 SEER
2 thru 5 Ton Units
Cooling: 24,000 to 56,000 Btuh
Heating: 24,000 to 57,000 Btuh (Q3BA only)

P3BC/Q3BC-12 SEER
2 Ton thru 4 Ton Units
Cooling: 24,000 to 46,500 Btuh
Heating: 22,800 to 45,600 Btuh (Q3BC only)

The P3B/Q3B Series single packaged air conditioner/heat pumps are high efficiency self contained cooling and heating units that use the existing furnace to provide airflow and can be installed on a slab. Units are ETL and ETLc listed. The unit is truly designed with the contractor and the consumer in mind.

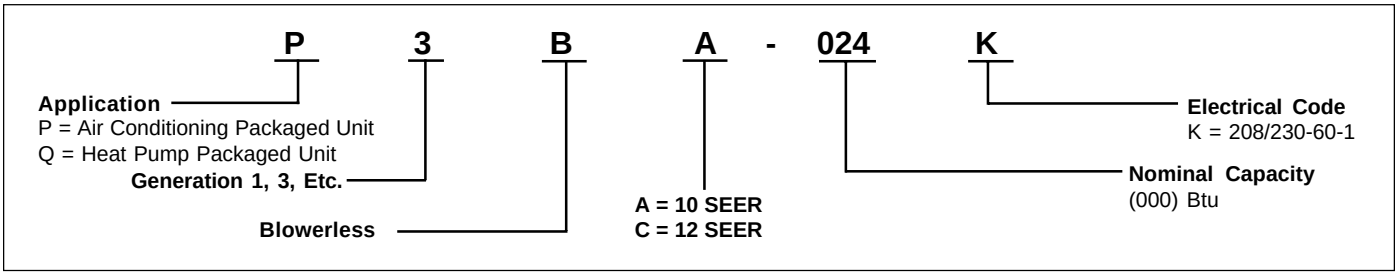




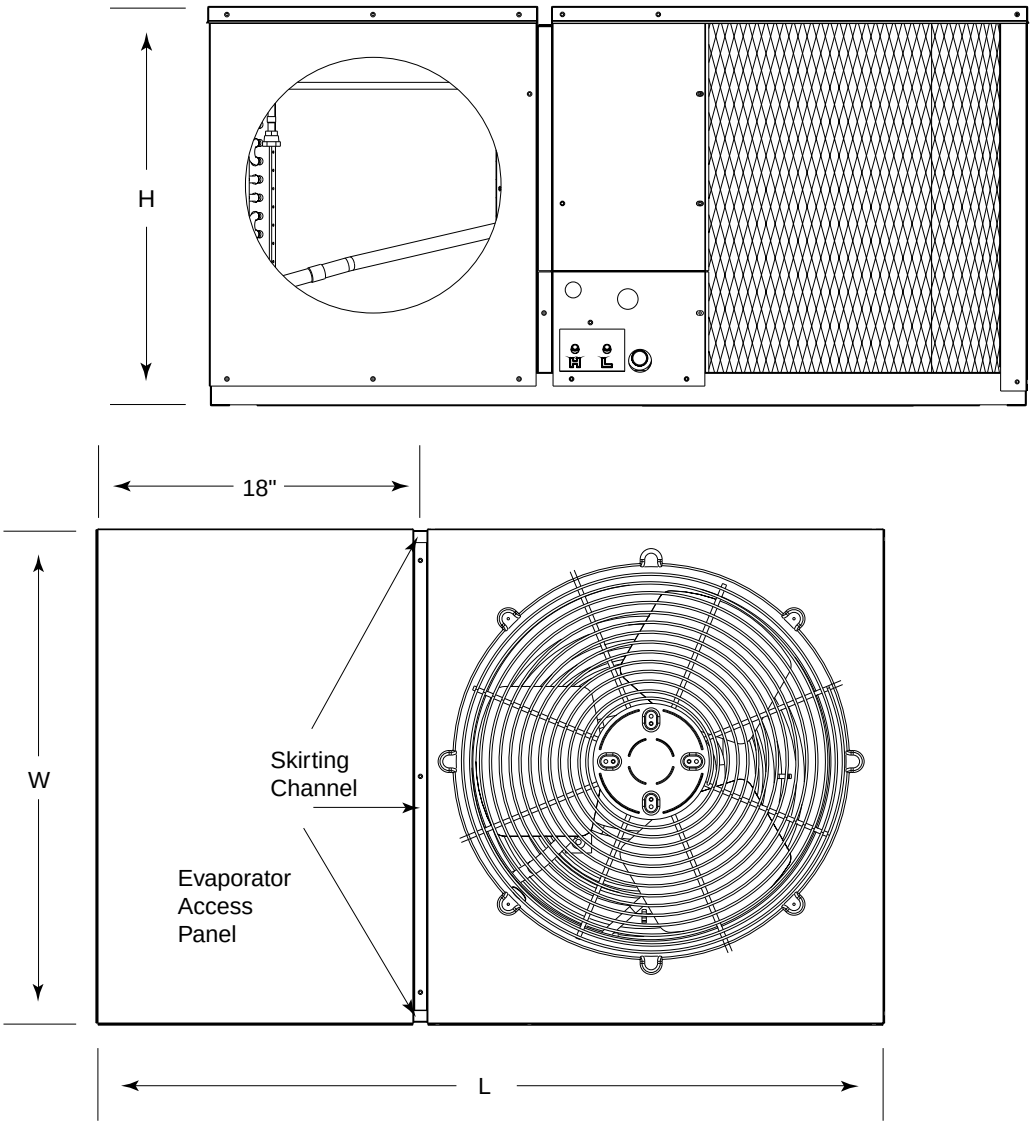
FEATURES AND BENEFITS

- **State-of-the-art compressor** is standard equipment.
- **Designed using galvanized steel** with a polyester urethane coat finish. The 950 hour salt spray finish resists corrosion 50% better than comparable units.
- **Both indoor and outdoor coils** are designed to optimize heat transfer, minimize size and cost, and increase durability and reliability.
- **A heavy duty PSC motor** for long lasting reliability and operation. Requires no maintenance and is completely protected from rain and snow.
- **The service valves are easily accessible** and simplify servicing of the refrigeration system.
- **A mesh hail guard that will never rust** protects the coil from being damaged by balls, lawnmowers, hail, etc.
- **Designed to make servicing easier** for the contractor, access panels are provided to all major components and the compressor.
- **Zero clearance** to combustibles on duct side of the unit allows for installations in tight areas.
- **Easy access** to evaporator for cleaning and general maintenance.
- **Plastic drain pan** will never rust and condensate is outside of home.
- **Compact footprint and profile** make the P3B/Q3B Series easy to install and transport.
- **Parts warranty** has proven to be a major benefit to the consumer.

MODEL IDENTIFICATION CODE



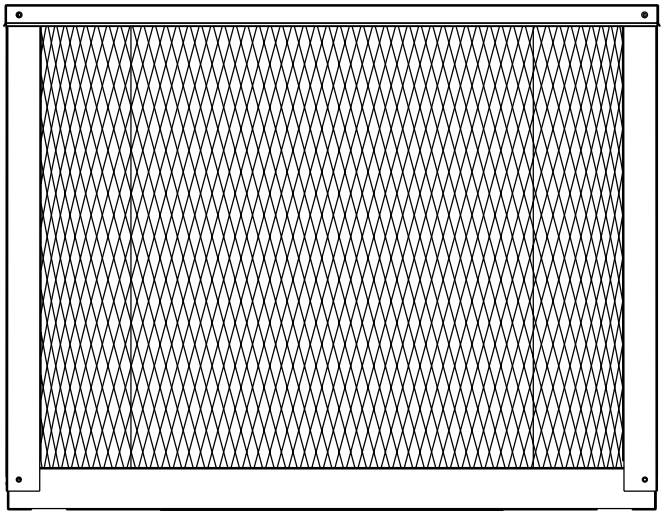
DIMENSIONS



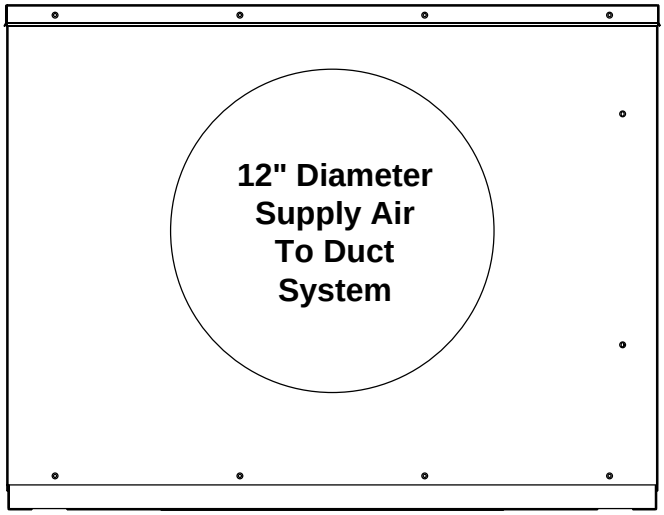
Model No. P3B/Q3B- 10 Seer	(L) Length	(W) Width	(H) Height
024K	45	28	22
030K	45	28	22
036K	45	28	22
042K	45	34	26
048K	45	34	26
060K	45	34	26

Model No. P3B/Q3B- 12 Seer	(L) Length	(W) Width	(H) Height
024K	45	34	26
030K	45	34	26
036K	45	34	26
042K	45	34	26
048K	45	34	26

DIMENSIONS Continued

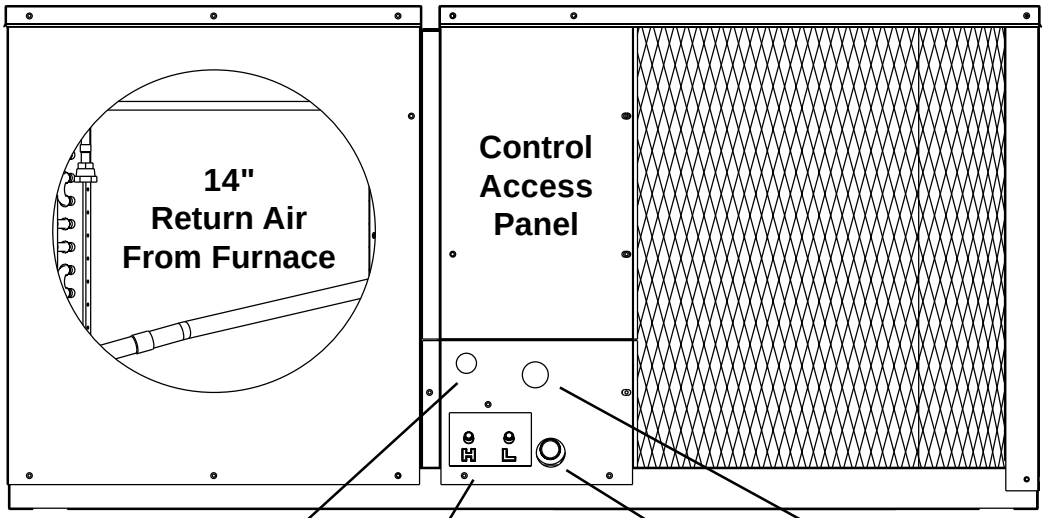


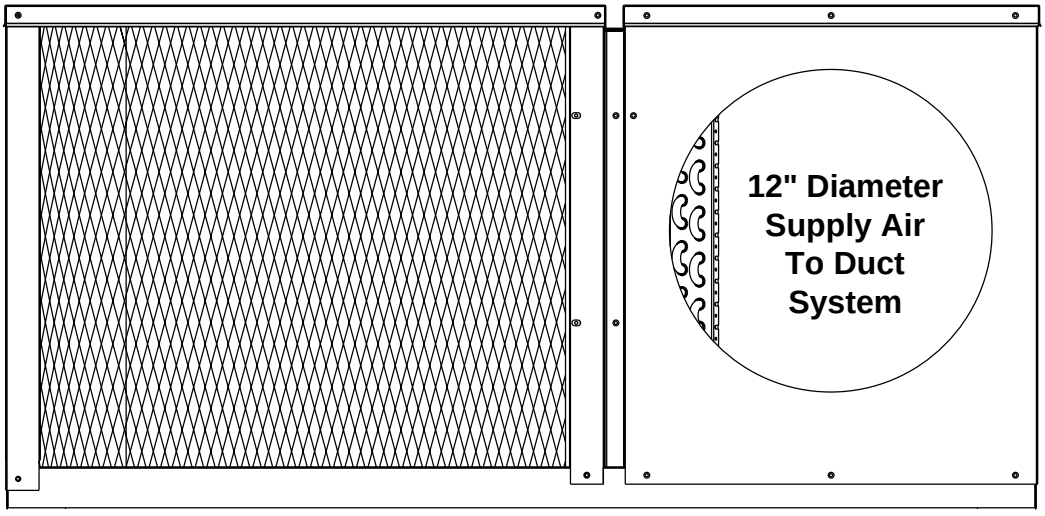
Front View



Back View

Left
Side View





Right Side View

PHYSICAL SPECIFICATIONS

P3BA Models - 10 S.E.E.R. Air Conditioners

Model No. P3BA-	024K	030K	036K	042K	048K	060K
Electric Rating — 60 Hz (a)						
Operating Voltage Range	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253
Min. Circuit Ampacity (a)	14.7	20.2	21.9	25.0	26.7	37.0
Field Wire Size -AWG (a,c)	12	10	10	10	10	8
Delay Fuse — Max. (b,c)	25 (c)	35 (c)	35 (c)	40	45	60
Total Unit — Amps (FLA)	12.0	16.4	17.7	20.2	21.6	29.8
Compressor	CR20KF-PFV-230	CR28KF-PFV-230	CR34KF-PFV-230	CR38K6-PFV-220	CR42K6-PFV-220	ZR57KC-PFV-250
Volts	208 - 230	208 - 230	208 - 230	208 - 230	208 - 230	208 - 230
Rated Load Amps (RLA)	10.9	15.3	16.6	19.0	20.4	28.6
Lock Rotor Amps (LRA)	56.0	75.0	96.0	105.0	102.0	150.0
Fan Motor and Condenser						
Fan Motor — HP - RPM	1/8 - 1075	1/8 - 1075	1/8 - 1075	1/4 - 1100	1/4 - 1100	1/4 - 1100
Fan Motor — Amps	1.1	1.1	1.1	1.2	1.2	1.2
Fan Dia. — CFM	20" - 2800	20" - 2800	20" - 2800	20" - 3000	20" - 3000	20" - 3000
CFM @ E.S.P. — in. W.C.	900 @ .15	1125 @ .27	1200 @ .26	1300 @ .30	1350 @ .30	1450 @ .30
Refrigerant — Oz.	43	41	43	71	64	105
Shipping Weight -- Lbs.	199	211	211	240	240	266

P3BC Models - 12 S.E.E.R. Air Conditioners

Model No. P3BC-	024K	030K	036K	042K	048K
Electric Rating — 60 Hz (a)					
Operating Voltage Range	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253
Min. Circuit Ampacity (a)	14.7	14.7	21.6	24.2	26.7
Field Wire Size — AWG (a,c)	12	12	10	10	10
Delay Fuse — Max. (b,c)	25	25	35	40	45
Total Unit — AMPS	12.0	12.0	17.5	19.6	21.6
Compressor	CR20K6-PFV-220	CR22KF-PFV-230	ZR32K3-PFV-230	ZR36K3-PFV-230	ZR42K3-PFV-230
Volts	208 - 230	208 - 230	208 - 230	208 - 230	208 - 230
Rated Load Amps	10.9	10.9	16.4	18.4	20.4
Lock Rotor Amps	56.0	56.0	83.0	95.0	109.0
Fan Motor and Condenser					
Fan Motor — HP - RPM	1/8 - 1075	1/8 - 1075	1/8 - 1075	1/4 - 1100	1/4 - 1100
Fan Motor — Amps	1.1	1.1	1.1	1.2	1.2
Fan Dia. — CFM	20" - 2800	20" - 2800	20" - 2800	20" - 3000	20" - 3000
CFM @ E.S.P. — in. W.C.	800 @ .12	1000 @ .17	1150 @ .25	1300 @ .30	1450 @ .30
Refrigerant — Oz.	70	57	76	137	111
Shipping Weight -- Lbs.	199	211	211	240	240

(a) Refer to National Electric Code for additional derating factors for field installed conductors.
(b) Use time delay fuse or "HACR" type circuit breaker.
(c) Approved for use with 40 Amp overcurrent protection when supply wiring is #8 copper, 60°c min.

PHYSICAL SPECIFICATIONS

Q3BA Models - 10 S.E.E.R. Heat Pumps

Model No. Q3BA-	024K	030K	036K	042K	048K	060K
Electric Rating — 60 Hz (a)						
Operating Voltage Range	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253
Min. Circuit Ampacity (a)	14.7	20.2	21.9	25.0	31.6	38.8
Field Wire Size — AWG (a,c)	12	10	10	10	8	8
Delay Fuse — Max. (b)	25 (c)	35 (c)	35 (c)	40	50	60
Total Unit — Amps (FLA)	12.0	16.4	17.7	20.2	25.5	31.3
Compressor	CR22KF-PFV-270	CR28KF-PFV-270	CR34KF-PFV-270	CR38K6-PFV-260	ZR47KC-PFV-235	ZR61KC-PFV-250
Volts	208 - 230	208 - 230	208 - 230	208 - 230	208 - 230	208 - 230
Rated Load Amps (RLA)	10.9	15.3	16.6	19.0	24.3	30.1
Lock Rotor Amps (LRA)	56.0	75.0	96.0	105.0	131.0	144.0
Fan Motor and Condenser						
Fan Motor — HP - RPM	1/8 - 1075	1/8 - 1075	1/8 - 1075	1/4 - 1100	1/4 - 1100	1/4 - 1100
Fan Motor — Amps	1.1	1.1	1.1	1.2	1.2	1.2
Fan Dia. — CFM	20" - 2800	20" - 2800	20" - 2800	20" - 3000	20" - 3000	20" - 3000
CFM @ E.S.P. — in. W.C.	800 @ .15	1000 @ .27	1125 @ .26	1300 @ .30	1400 @ .30	1450 @ .30
Refrigerant — Oz.	59	58	64	100	83	109
Shipping Weight -- Lbs.	199	211	211	240	240	266

Q3BC Models - 12 S.E.E.R. Heat Pumps

Model No. Q3BC-	024K	030K	036K	042K	048K
Electric Rating — 60 Hz (a)					
Operating Voltage Range	187 - 253	187 - 253	187 - 253	187 - 253	187 - 253
Min. Circuit Ampacity (a)	15.3	18.1	21.7	26.2	26.7
Field Wire Size — AWG (a,c)	12	12	10	10	10
Delay Fuse — Max. (b)	25 (c)	25 (c)	35 (c)	45	45
Total Unit — AMPS	12.5	14.8	17.6	21.2	21.6
Compressor	ZR22K3-PFV-230	ZR26K3-PFV-230	ZR32K3-PFV-230	ZR40K3-PFV-230	ZR42K3-PFV-230
Volts	208 - 230	208 - 230	208 - 230	208 - 230	208 - 230
Rated Load Amps	11.4	13.6	16.4	20.0	20.4
Lock Rotor Amps	56.0	67.0	83.0	104.0	109.0
Fan Motor and Condenser					
Fan Motor — HP - RPM	1/8 - 1075	1/4 - 1100	1/4 - 1100	1/4 - 1100	1/4 - 1100
Fan Motor — Amps	1.1	1.2	1.2	1.2	1.2
Fan Dia. — CFM	20" - 2800	20" - 3000	20" - 3000	20" - 3000	20" - 3000
CFM @ E.S.P. — in. W.C.	850 @ .12	1000 @ .17	1150 @ .25	1300 @ .30	1450 @ .30
Refrigerant — Oz.	97	105	101	120	114
Shipping Weight -- Lbs.	199	211	211	240	240

(a) Refer to National Electric Code for additional derating factors for field installed conductors.
(b) Use time delay fuse or "HACR" type circuit breaker.
(c) Approved for use with 40 Amp overcurrent protection when supply wiring is #8 copper, 60°c min.

SYSTEM HEATING AND COOLING CAPACITIES

P3B(A,C) Series Air Conditioners		
Model Number	Cooling Nom. (btuh)	SEER
P3BA-024K	24000	10
P3BA-030K	30000	10
P3BA-036K	36000	10
P3BA-042K	42000	10
P3BA-048K	46000	10
P3BA-060K	56000	10
P3BC-024K	24000	12
P3BC-030K	28000	12
P3BC-036K	36000	12
P3BC-042K	42000	12
P3BC-048K	46500	12

Q3B(A,C) Series Heat Pumps				
Model Number	Cooling Nom. (btuh)	SEER	Heating Nom. (btuh)	HSPF
Q3BA-024K	24000	10	24000	6.6
Q3BA-030K	30000	10	30000	6.6
Q3BA-036K	36000	10	33500	6.6
Q3BA-042K	41000	10	40500	6.6
Q3BA-048K	48000	10	46500	6.6
Q3BA-060K	56000	10	57000	6.6
Q3BC-024K	24000	12	22800	7.2
Q3BC-030K	30000	12	27500	7.2
Q3BC-036K	36000	12	33500	7.2
Q3BC-042K	42000	12	42000	7.2
Q3BC-048K	46500	12	45600	7.2

ACCESSORIES

Description	Part Number
Plenum Connector, 14" Round (3)	903896
Base Pad, (25" X 25") (13)	903897
Receptacle/Cover Kit, 40A/250V, P/Q3B (12)	903898
Power Cord, P/Q3B (10)	903899
Power Cord, P/Q3B (1)	903973
Single Outlet Kit (6)	903966
Foundation Kit, 90° Duct Connectors	903967
Condensate Drain Kit (12)	903970
Fresh Air Wall Vent	903971
Fresh Air Wall Vent (Ducted)	903974
12"x12"x12" "Y" Connector with 2 clamps	911470
14"x12"x12" "Y" Connector with 2 clamps	917963
Flex Duct, 12" Round x 25 Ft.	520064
Flex Duct, 12" Round x 18 Ft.	520065
Flex Duct, 14" Round x 25 Ft.	520066
Flex Duct, 14" Round x 18 Ft.	520067
Clamps, 10" - 14" diameter	668659

CERTIFICATION APPLIES
ONLY WHEN THE
COMPLETE
SYSTEM IS LISTED
WITH ARI

081B-0901 (Replaces 081B-0801)

O'Fallon, MO NORDYNE

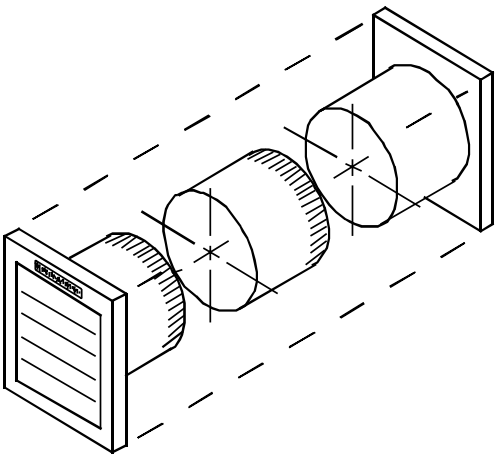
Before purchasing this appliance, read important energy cost and efficiency information available from your retailer. Specifications and illustrations subject to change without notice and without incurring obligations.

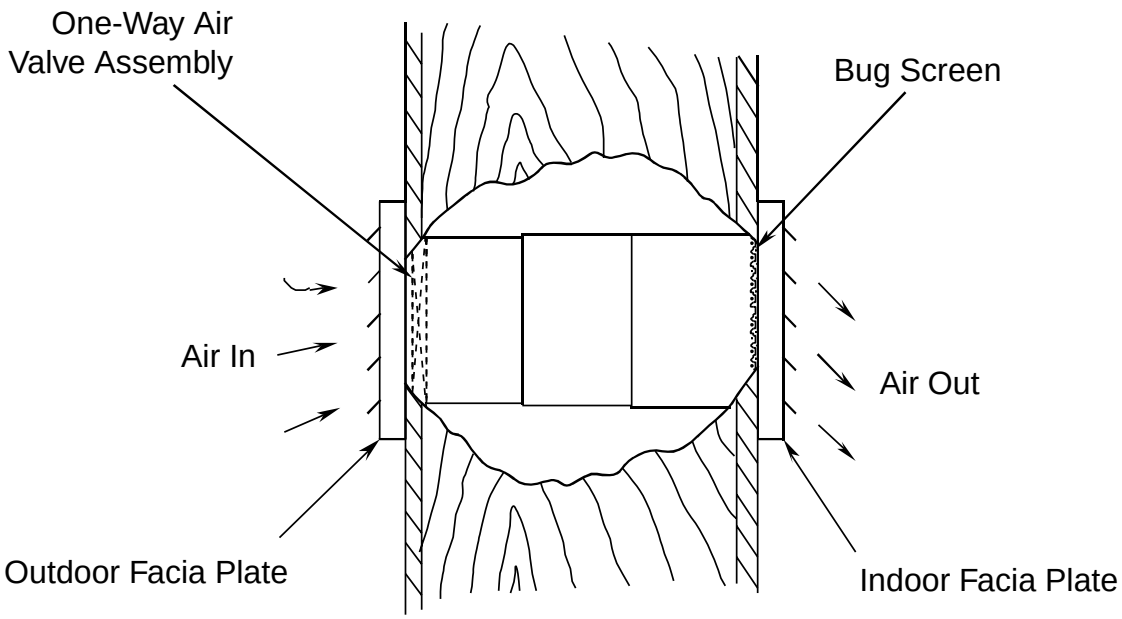
Printed in U.S.A. (09/01)

VentilAire™ Fresh Air Wall Vent System

Installation Instructions

903971 - Through-the-Wall Fresh Air Vent Kit





Accommodates Walls From $3\frac{5}{8}$" to 8" Thick

Kits conform to H.U.D. manufactured home construction and safety standard paragraphs 3280.103 (b)(2) for ventilation.

These instructions are primarily intended to assist qualified individuals experienced in the proper installation of heating and/or air conditioning appliances. Some local codes require licensed installation/service personnel for this type of equipment. All installations must be in accordance with these instructions and with all applicable national and local codes and standards.

Before beginning the installation, read these instructions thoroughly and follow all warnings and cautions in the instructions and on the unit.

DESCRIPTION

The NORDYNE fresh air wall vent system is designed to meet the fresh requirements of the HUD standard, paragraph 3280.103(b)(2), when applied in an outside wall of a furnace alcove or closet. Exception: This kit is not intended for use in alcove furnace installations when the return air path is through the furnace door.

The wall vent system allows fresh air from outside to enter the home by using the negative pressure of the indoor blower in the furnace alcove or closet. It allows the passage of air through a highly sensitive valve which opens slightly while the blower is operating and closes under its own weight to avoid drafts.

LOCATION

The VentilAire Fresh Air Wall Vent system MUST be located in the outside wall of the furnace alcove. It may be located behind an appliance provided a minimum clearance of 2" is maintained between the appliance and the wall.

NOTE: The actual location of the vent may be subject to other rules or codes applicable to the home in question. Compliance with these codes is the responsibility of the installer.

INSTALLATION

Separate the two halves of the vent assembly and remove the extension sleeve. Note: Ignore if one end is marked INSIDE and one OUTSIDE. This applies to another type application. It is important that the NORDYNE logo is located at the top and the half with the sensitive flapper valve be located on the outside of the home.

If the wall is between $3\frac{5}{8}$" and $5\frac{1}{2}$" in overall thickness, do not use the extension sleeve. Discard it. The sleeve must be used if the wall is between $5\frac{1}{2}$" and 8" thick. If it is determined that the extension sleeve is needed, slide it into the larger tube stub and tape it in place with duct tape, so that it will overlap the smaller tube stub at least $\frac{1}{2}$" when mounted in the wall.

⚠ WARNING:

Disconnect main power supply before drilling through the wall. Electrical wiring may be present.

1. Drill a pilot hole through the wall from the outside of the house, being careful to avoid wall studs or other obstructions. Next, cut a $4\frac{1}{8}$" diameter hole through both walls.

2. Apply caulking or an appropriate sealant around the base of the tube on the OUTSIDE vent half and insert it into the wall from the outside (with the extension sleeve taped in place, if needed). Use the four (4) wood screws provided to secure it to the wall.

3. From the inside of the house insert the INSIDE vent half in a similar fashion. Caulking may be omitted, if desired.

   Note: The outside sleeve slips into the inside sleeve.

VentilAire™ Fresh Air Wall Vent System

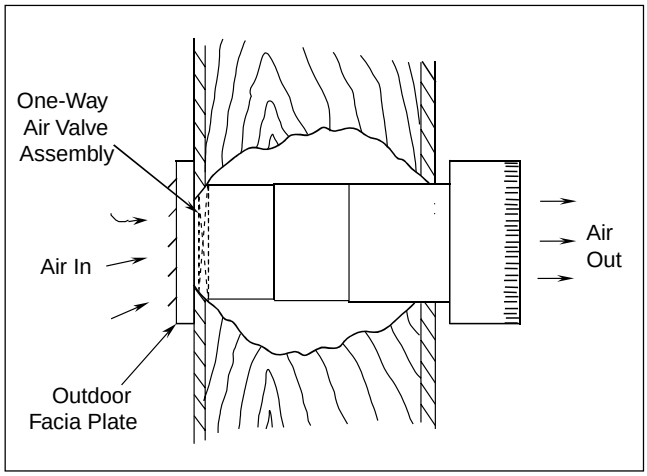
Installation Instructions

903974 - Through-the-Wall Fresh Air Vent Kit

DESCRIPTION

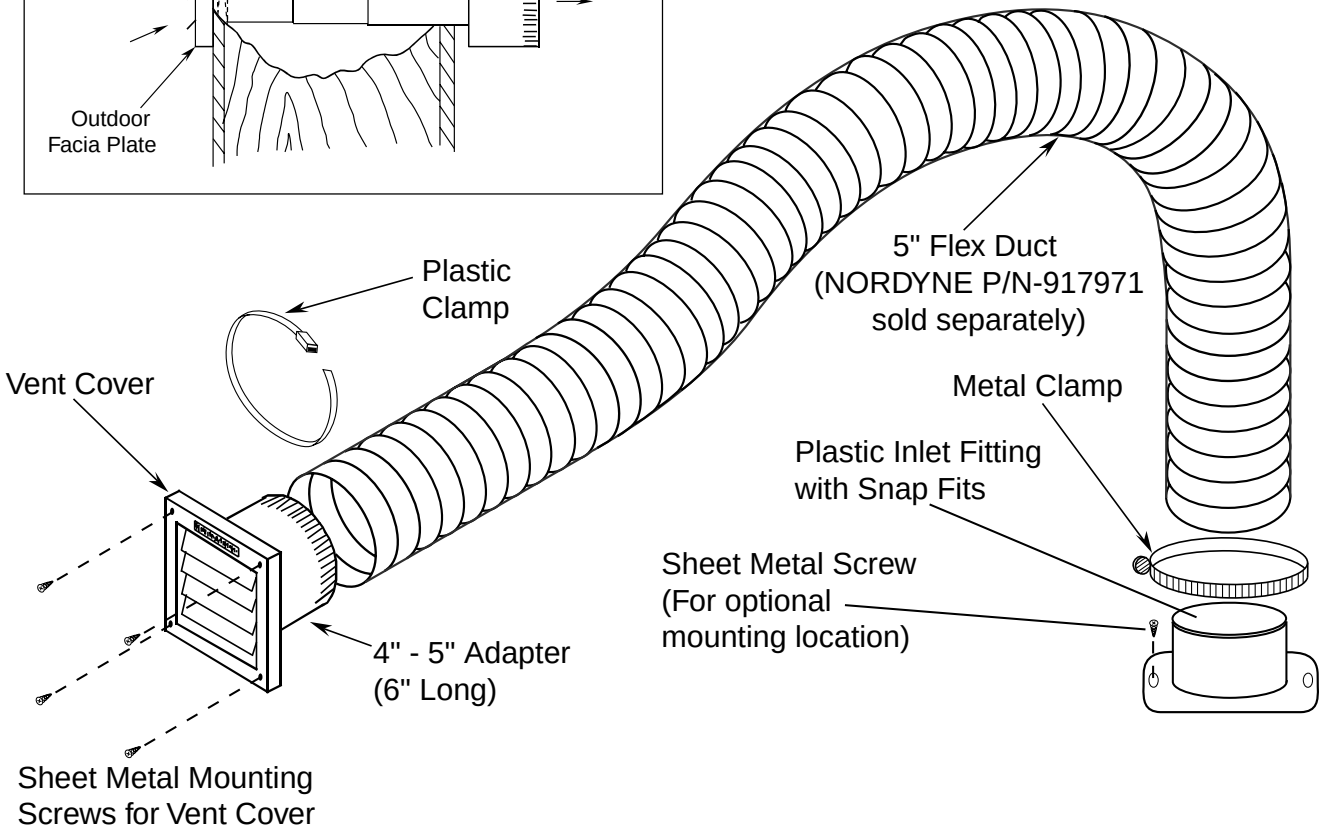
The NORDYNE fresh air wall vent system is designed for use in alcove furnace installations when the return air path is through the furnace door.

The wall vent system allows fresh air from outside to enter the home by using the negative pressure of the indoor blower.



Accommodates Walls From 3⅝" to 8" Thick

Kits conform to H.U.D. manufactured home construction and safety standard paragraphs 3280.103 (b)(2) for ventilation.



These instructions are primarily intended to assist qualified individuals experienced in the proper installation of heating and/or air conditioning appliances. Some local codes require licensed installation/service personnel for this type of equipment. All installations must be in accordance with these instructions and with all applicable national and local codes and standards.

Before beginning the installation, read these instructions thoroughly and follow all warnings and cautions in the instructions and on the unit.

— INSTALLER —

Do Not Discard These Instructions. After completing the installation, return these instructions to the Homeowner's Package for owner-user's future reference. **Complies with H.U.D. Manufactured Home Construction & Safety Standards.**

LOCATION

The VentilAire Fresh Air Wall Vent system MUST be located in the outside wall of the furnace alcove. It may be located behind an appliance provided a minimum clearance of 2" is maintained between the appliance and the wall.

NOTE: The actual location of the vent may be subject to other rules or codes applicable to the home in question. Compliance with these codes is the responsibility of the installer.

INSTALLATION

⚠ WARNING:

Disconnect main power supply before drilling through the wall. Electrical wiring may be present.

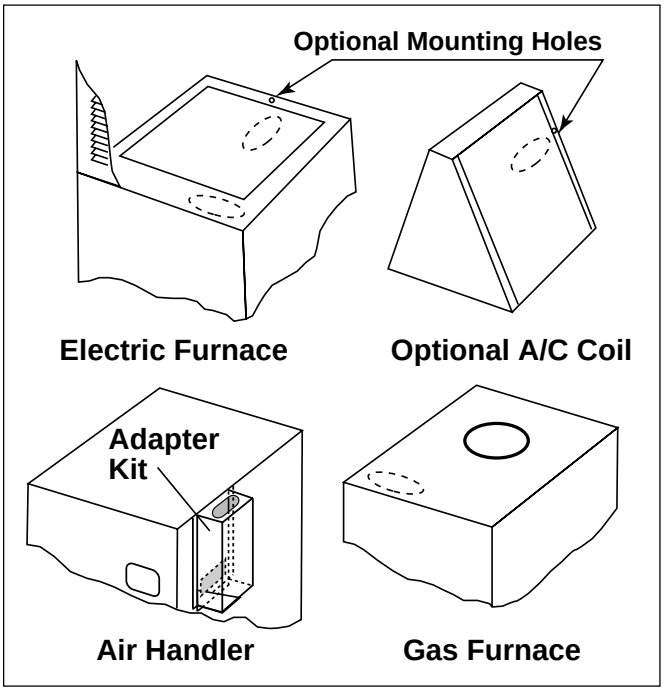
DO NOT REMOVE THE OVAL KNOCKOUT IN FURNACE TOP BEFORE COMPLETING STEP ONE.

1. Determine the location of the plastic inlet fitting.
   Gas Furnace - Oval knockout located at the top, near the front of the furnace.
   Air Handler - Oval knockout located on the sides of the air handler.
   Downflow Electric Furnace - Oval knockout located at top near the front of the furnace; **or** if using return air grilles, the plastic fitting may be mounted in the rear of the cabinet over the return air filter. When using an optional air conditioning coil it may be mounted to the front or rear coil flange using mounting holes provided. If either of these options are selected, **DO NOT REMOVE** the oval knockout on the electric furnace. If already removed, the knockout should be resealed to prevent bypass air.
   Upflow Electric Furnace - a special adaptor (914427) may be applied over the square refrigerant line knockout.
   Note: On air handlers, ensure at least 3 1/8" clearance is provided on side of unit for special duct adaptor kit (914120).

2a. For oval knockout installation, place the plastic inlet fitting with locking tabs onto the sheet metal. The side with tabs further apart (back) should be inserted first, then push gently on the front in the center of the part until front tabs fall below the sheet metal and release. Part will tighten securely in place after application of metal clamp.

2b. For optional locations use the sheet metal screw provided through one of the clearance holes on the plastic inlet flange.

3. If the wall is between 3 5/8" and 5 1/2" in overall thickness, do not use the extension sleeve. Discard it. The sleeve should be used if the wall is between 5 1/2" and 8" thick. If it is determined that the extension sleeve is needed, slide it into the larger tube stub and tape it in place with duct tape, so that it will overlap the smaller tube stub at least 1/2" when mounted in the wall.
   Drill a pilot hole through the wall from the outside of the house, being careful to avoid wall studs or other obstructions. Next, cut a 4 1/8" diameter hole through both walls.
4. Apply caulking or an appropriate sealant around the base of the tube on the OUTSIDE vent half and insert it into the wall from the outside (with the extension sleeve taped in place, if needed). Use the four (4) wood screws provided to secure it to the wall.
5. From the inside of the house attach the 5" adaptor half in a similar fashion. Caulking may be omitted, if desired.
6. Cut and route the desired length of U.L. approved Class 1 air duct (NORDYNE P/N-917971) from the 5" wall vent to the oval adaptor on the furnace. Secure using clamps provided as shown.



3 Wire Receptacle/Weatherproof While-In-Use Cover Kit

Installation Instructions

P3B(A,C) AND Q3B(A,C) Model Series Accessory

PRODUCT DESCRIPTION

Read these instructions thoroughly before starting the installation. Follow all precautions, warnings, and applications within these instructions.

This kit is specifically designed for application on NORDYNE P3B(A,C) or Q3B(A,C) Model Series Air Conditioning and Heat Pump equipment. This receptacle is suitable for a branch circuit rated at 40 Amp, 5 H.P. maximum.

This receptacle must be installed with #8 AWG branch circuit wiring and branch circuit overcurrent protection Time Delay Fuse or HACR Type Circuit Breaker rated 40 Ampere.

This receptacle may be used as a disconnecting means per N.E.C. and C.E.C. <u>ONLY</u> when used with NORDYNE Plug and Cord Set, SKU # 903899.

The weatherproof cover is designed to protect the plug and receptacle device in “Wet Locations” for “While-In-Use” requirements, and is NEMA 3R rated.

This kit (receptacle, cover, and metal tag) meets all requirements set forth under N.E.C. Section 550-15 (b) and H.U.D. Section 3280.813 (b) for connection of outdoor heating and/or air conditioning equipment.

INSTALLER:

PLEASE LEAVE THESE INSTALLATION INSTRUCTIONS WITH THE HOMEOWNER.

APPLICATION

⚠ WARNING:

This kit is to be installed by an Electrician or qualified service technician in accordance with these instructions and all codes having jurisdiction. Failure to follow these instructions could result in serious injury, property damage, or death. Unless otherwise noted in these instructions ONLY factory authorized parts may be used when modifying this product.

⚠ WARNING:

All electrical wiring must comply with the latest edition of the National Electrical Code (N.E.C.) ANSI/NFPA 70.

⚠ WARNING:

RISK OF ELECTRIC SHOCK. Ensure all power to this circuit is OFF before installing. Never wire energized electrical components.

⚠ CAUTION:

USE COPPER CONDUCTORS ONLY.

ASSEMBLY AND WIRING INSTRUCTIONS

The cover must be vertically mounted with the hinge located at the top. This kit also includes a gasket to ensure a watertight seal between the back of the cover and smooth mounting surface. Use of additional caulking is recommended on irregular surfaces.

NOTE: See Figure 1 for mounting options prior to wiring the receptacle. Cover and receptacle may be configured differently to meet installation needs.

1.) Strip conductors using strip gage on receptacle.
DO NOT TIN CONDUCTORS.

2.) Loosen terminal screws. Insert conductors fully into proper terminals per Table 1 and center under terminal screw.

3.) **ENSURE THERE ARE NO LOOSE STRANDS.**

4.) Tighten terminal screws to 30 lb-in. (3.4 Nm)

5.) Mount receptacle and box with screws provided. **NOTE: Ground must be oriented to the top as shown.**

TERMINAL	CONDUCTOR
Green, Gnd, G	Ground (Bare, Green or Green/Yellow
White, W	Line (White or Gray)
X, Y, Z or Blank (Other Than White or Green)	Line (NOT White, NOT Green)

Table 1

6.) **DO NOT OVER TIGHTEN SCREWS.**

7.) Open and close cover lid to ensure proper operation.

8.) The metal tag provided with this kit must be permanently affixed to the outside wall adjacent to the receptacle cover box. Attach the metal tag with screws provided or other equivalent means.

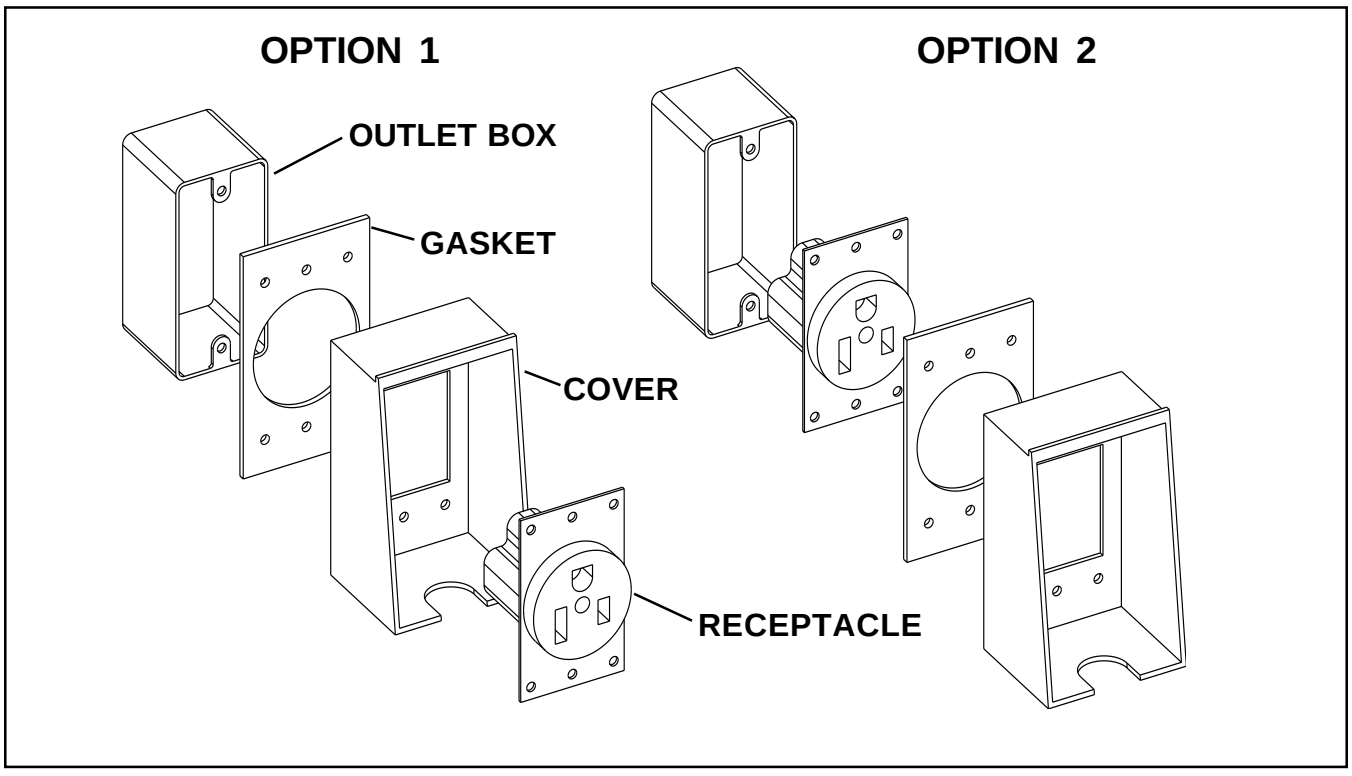


Figure 1. Mounting Options

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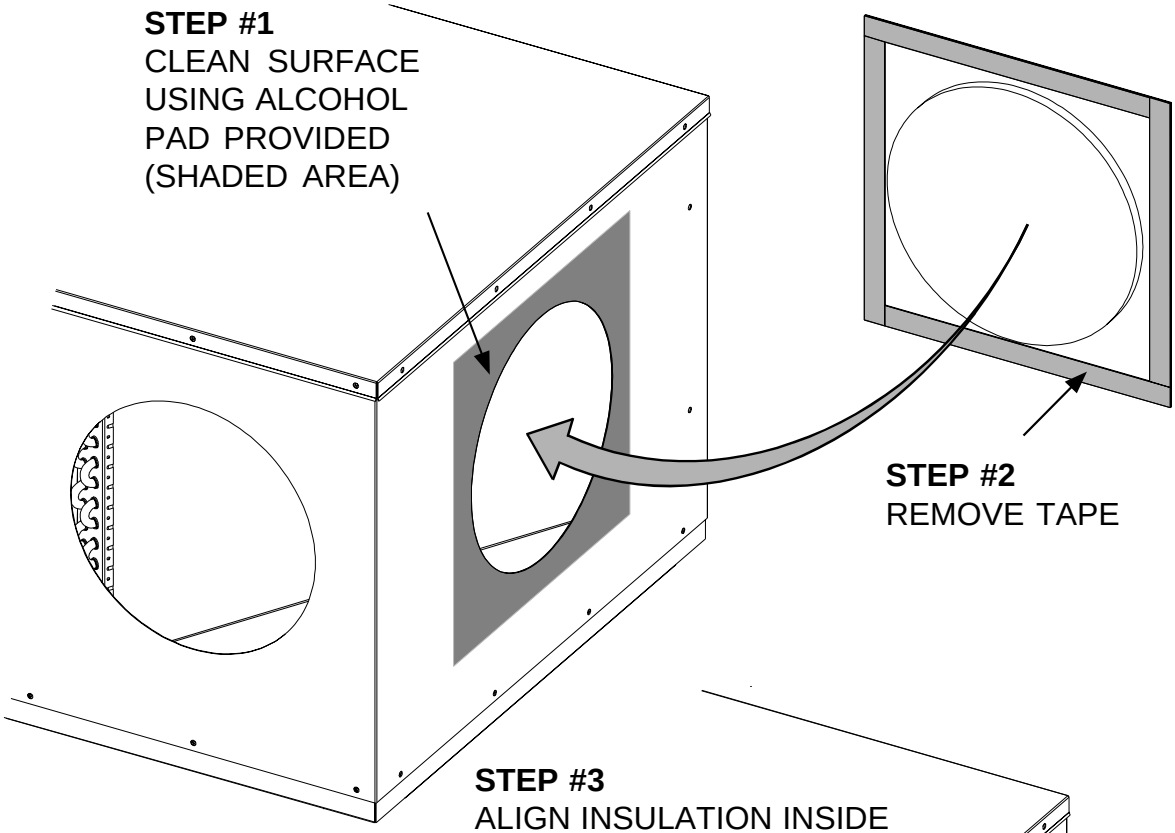
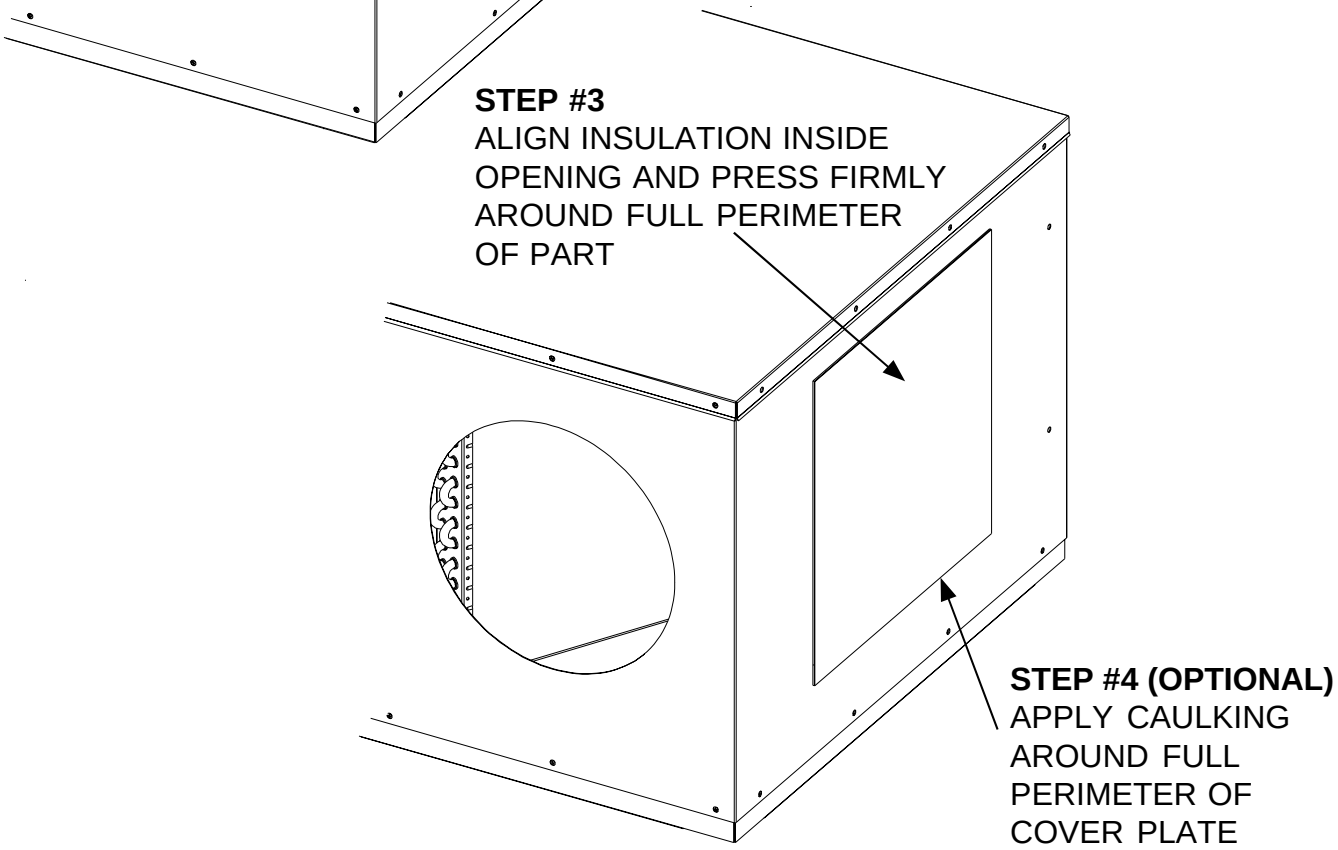
P3B*/Q3B* Series

Installation Instructions

Close-Off Plate Kit #903966 for Platinum Series Product Line





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O'Fallon, MO NORDYNE

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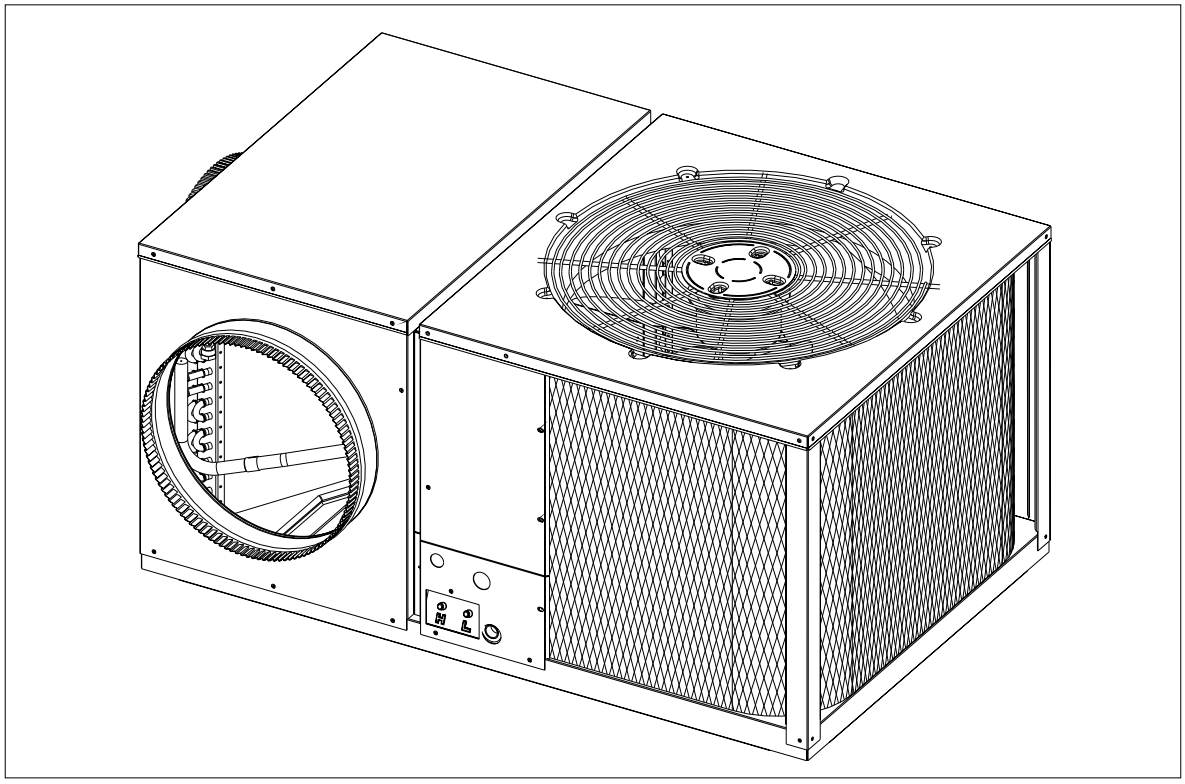
Platinum Series Literature Ordering Checklist

DESCRIPTION	LITERATURE #
DESIGN GUIDE	149B-0801
TECHNICAL SPECIFICATIONS	081B-0901
INSTALLATION INSTRUCTIONS PSB	7080150
INSTALLATION INSTRUCTIONS Q3B	7080170
P3B CHARGING CHARTS INCLUDED IN II	7080150
Q3B CHARGING CHARTS INCLUDED IN II	7080170
REPLACEMENT PARTS LIST P3B & Q3B	7080160

USER'S MANUAL AND INSTALLATION

P3B (A,C) Series 10 and 12 SEER
Single Package Air Conditioner



IMPORTANT

Read this owner information to become familiar with the capabilities and use of your appliance. Keep this with literature of other appliances where you have easy access to it in the future. If a problem occurs, check the instructions and follow recommendations given. If these suggestions don't eliminate your problem, call your installing contractor or distributor in your area.

INTRODUCTION

Most any air conditioner will keep you cool. Our air conditioner was designed to do it efficiently. Efficiency means less cost to you while keeping you comfortable.

WHY YOUR AIR CONDITIONER WORKS SO WELL, SO QUIETLY

1. Air is cooled by a large evaporator coil. Moisture is also removed from the air by this same coil.
2. Air is then delivered through the main duct, via registers, into your home.
3. Return air is drawn through the return grille.
4. This air enters the unit, passes through the evaporator coil, is cooled and dehumidified. Then the cycle begins again.

SECTION 1. OWNER INFORMATION

OPERATING INSTRUCTIONS

To Turn On Air Conditioner

1. Set the system switch to "Cool."
2. Set the thermostat at the temperature level you desire.
3. Your air conditioner should start as soon as room temperature rises above the setting on the thermostat.

To Shut Off Air Conditioner

1. Turn the system switch to "Heat" or "Off."
2. Turn the thermostat to the desired heating temperature setting.

BEFORE YOU CALL A SERVICEMAN

Check your system at the start of each air conditioning season. Make sure it's working right, clean or change filters and make any needed adjustments.

In addition, follow these simple rules:

1. Never run your system without a filter. If you do, the cooling coils will collect dirt and may become clogged.
2. Set your thermostat at the comfort level you wish -- and then leave it alone. Let it control the operation of the air conditioning system. If you get chilly, turn it up a degree at a time until comfort is restored.
3. It takes longer for an air conditioner to cool your dwelling than it does for your furnace to heat it. So . . . don't turn the unit on and expect a dramatic drop in temperature, at least not right away. If your home is hot and humid, the temperature will drop slowly.
4. Check your filters every 30 days in summer to see if they are dirty. To keep them clean, use a mild solution of detergent and water on washable types. Replace non washable filters.
5. Keep your outdoor condenser coil clean. You can hose it down when it gets dirty.

If your air conditioner isn't working:

1. Make sure the fuses are not blown or that your circuit breakers are on.
2. See that your thermostat is set at the desired temperature and that your system's switch is on "Cool."
3. For best air flow, make sure your return grille is not covered and that the filter is clean.
4. Check the outdoor condenser coil and make sure it is clean and not clogged with grass or leaves.

If your air conditioner still isn't working, call your nearest distributor.

SECTION 2. INSTALLER INFORMATION

GENERAL

Read the following instructions completely before performing the installation.

These instructions are for the use of qualified personnel specially trained and experienced in the installation of this type of equipment and related system components. Some states require installation and service personnel to be licensed. Unqualified individuals should not attempt to interpret these instructions or install this equipment.

The single packaged air conditioners are designed for outdoor installation only and can be readily connected into the high static duct system of a home. The only connections needed for installation are the supply and return ducts, the line voltage, and thermostat wiring.

The single package air conditioner is completely assembled, factory wired, and factory run tested. The units are ready for easy and immediate installation.

PRE-INSTALLATION CHECK

Before any installation is attempted, the cooling load of the area to be conditioned must be calculated and a system of the proper capacity selected. It is recommended that the area to be conditioned be completely insulated and vapor sealed.

The installer should comply with all local codes and regulations which govern the installation of this type of equipment. Local codes and regulations take precedence over any recommendations contained in these instructions. Consult local building codes and the National Electrical Code (ANSI CI) for special installation requirements.

The electrical supply should be checked to determine if adequate power is available. If there is any question concerning the power supply, contact the local power company.

Inspecting Equipment: All units are securely packed at the time of shipment and, upon arrival, should be carefully inspected for damage. Claims for damage (apparent or concealed) should be filed immediately with the carrier.

INSTALLATION

(For Platinum Series ready homes)

1. LOCATE THE 40 AMP BRANCH CIRCUIT DISCONNECT RECEPTACLE AND DISCONNECT COVER LOCATED OUTSIDE ON ONE OF THE OUTER WALLS OF THE HOME.

Locate the unit within the reach of the Power Cord assembly and branch circuit receptacle.

- Create a solid, level position, preferably on a concrete slab or plastic pad (use NORDYNE P/N-903897 or equivalent) and slightly above grade level, located where the skirting channel across top of unit is directly under bottom edge of wall. (See Fig. 1)
- Minimum clearances to obstructions. (See Fig. 1)

2. UNPACK THE UNIT

It is recommended that the unit be unpacked at the installation site to minimize damage due to handling.

a. Remove the bands from around the unit.
b. Unfold the top and bottom cap flanges.
c. Carefully remove the top cap and tube.

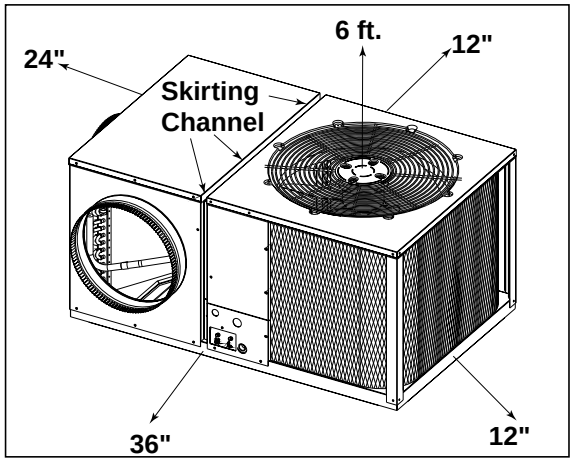


Figure 1. Minimum Unit Clearances

⚠ CAUTION:

Do not tip the unit on its side. Oil may enter the compressor cylinders and cause starting trouble. If unit has been set on its side, restore to upright position and do not run for several hours. Then run unit for a few seconds. Do this three or four times with five minutes between runs.

3. INSTALL THE RETURN AND SUPPLY AIR FITTINGS ON THE UNIT

The supply and return fittings are shipped in the supply duct. They attach to the unit openings with a flange and bead arrangement, secured with two sheet metal screws. Note: For ease of access, install fitting before positioning unit in final location.

SUPPLY DUCT

Position the supply duct collar so the edge of the unit openings fit between the flange and the bead. Overlap the collar ends keeping the small screw holes underneath. Align the holes in the crimped area and install one screw.

Tap collar as necessary to ensure engagement with unit opening and install second screw. Tighten first screw.

DUCTING SYSTEM

DUCT REQUIREMENTS

THE AIR OUTPUT OF THE SYSTEM WILL NOT CONDITION THE HOME IF THE AIR IS LOST TO THE OUTSIDE THROUGH LEAKS

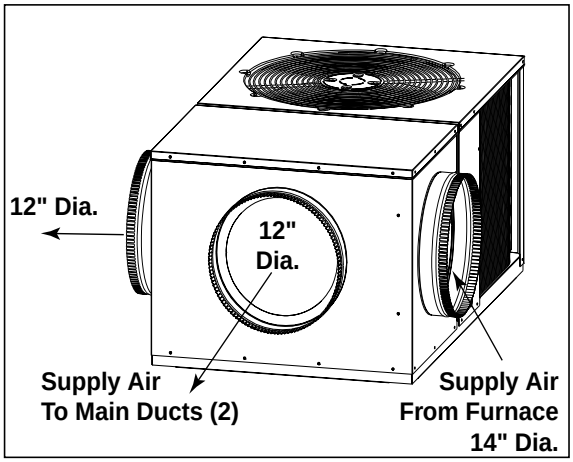


Figure 2. Supply Air Fittings

IN THE DUCT SYSTEM. ALSO, DUCTS WHICH ARE COLLAPSED OR RESTRICTED BY FOREIGN OBJECTS WILL PREVENT ADEQUATE AIR FLOW.

CONNECTING THE RETURN AND SUPPLY AIR FLEXIBLE DUCTS

a. Use 12" duct to connect unit to the home duct system. (See Fig. 2 and 3)
b. Use 14" duct to connect unit to furnace. (See Fig. 2 and 3)
c. The flexible ducts can be connected to the corresponding fittings with the clamps provided with the ducts. Note: All connections should be leak tight or a loss in cooling capacity will result.
d. The flexible ducts may be cut to the required length, see instructions packed with duct. Keep all ducts as short and straight as possible. Avoid sharp bends.
e. Ducts may be spliced with sheet metal sleeves and clamps.
f. Once the inner duct is connected to the proper fitting, the insulation and plastic sleeve should be pulled over the connection and clamped.
g. For homes with multiple supply ducts or for special applications, a Y fitting is available to divide the supply air so it can be ducted to different areas of the home for more efficient cooling. Note: The Y fitting should be insulated for maximum performance.

CONDENSATE DRAIN

A 3/4" condensate drain connection is located on the side of the unit below the electrical compartment. A field supplied condensate drain should be installed. Route the condensate to a suitable drainage area. Any connecting tube or hose must have the outlet below the fitting on the unit for proper drainage.

⚠ WARNING:

Turn off electrical power before servicing controls. Severe electrical shock may result unless power is turned off. Unit must be installed in compliance with the National Electrical Code (NEC) and local codes.

ELECTRICAL CONNECTIONS

1. ELECTRICAL SERVICE

HIGH VOLTAGE

a. An approved branch circuit disconnect receptacle of adequate size and disconnect cover per NEC has already been installed at the intended location of the unit on one of the four exterior walls of the home.
b. Attach the approved Power Cord/Disconnect Plug (NORDYNE P/N-903899) to the unit using a strain relief connector (Romex type or equivalent) through the high voltage knockout provided.
c. Extend the power cord leads up into the control panel and connect L1 (Black) and L2 (White) directly to the contactor lugs provided. (See Fig. 4)
d. Ground the air conditioning unit by attaching the power cord ground wire (Green-w/ eyelet) to the unit using the green grounding screw provided in the control panel. (See Fig. 4)

LOW VOLTAGE

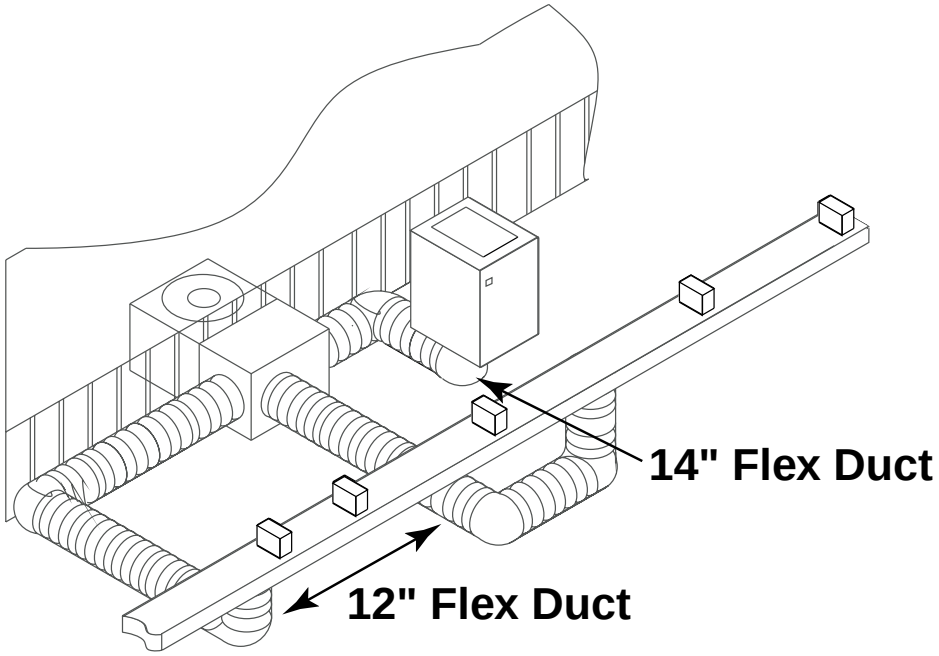
a. Low voltage wiring from the indoor furnace and thermostat will be located under the home near the branch circuit receptacle and cover. Route the 24V control wires through the low voltage sealing grommet. (See Figure 4)
b. Connect the low voltage control wires to the leads in the low voltage compartment as shown in Figure 4 and 5.

2. OVERCURRENT PROTECTION

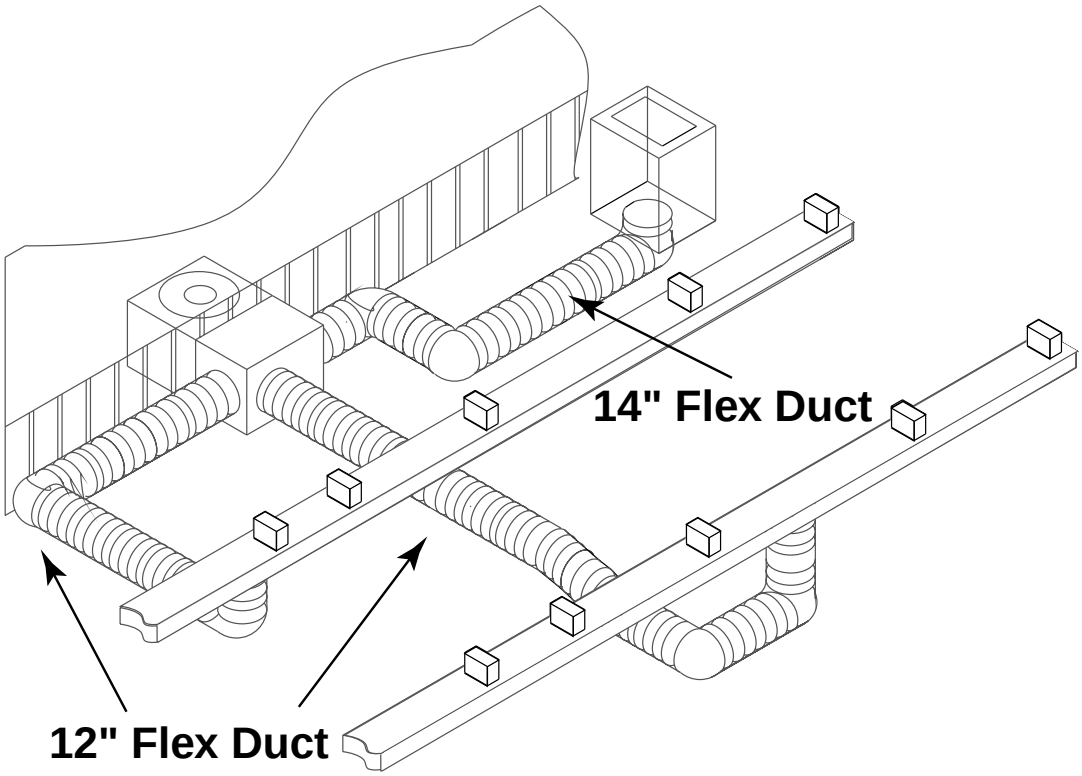
In general, the best fuse or breaker for any air conditioner is the smallest size that will permit the equipment to run under normal use and service without nuisance trips. Such a device, sized properly, gives maximum equipment protection. The principal reason for specifying a time delay type is to prevent nuisance trips when the unit starts.

In the event that a fuse does blow or a breaker trips, always determine the reason. Do not arbitrarily put in a larger fuse or breaker and do not, in any case, exceed the maximum size listed on the data label of the unit.

P3B WITH M1 OR E2 FURNACE INSTALLATION



SINGLE DUCT APPLICATION



MULTIPLE DUCT APPLICATION

Figure 3. Typical Applications

3. HEAT-COOL THERMOSTAT OPERATION

Heat-Cool Thermostat: Your thermostat should be located on an inside wall approximately five feet from the floor away from drafts and doors. Do not locate lamps or other objects near the thermostat which could affect its operation or block a free flow of air.

The heat-cool thermostat is equipped with a system HEAT-COOL switch, which provides a positive means of preventing simultaneous operation of the heating and cooling mode. The thermostat is also equipped with an AUTO-ON fan switch which allows the home owner to operate the indoor blower when air circulation is desired.

SYSTEM OPERATION

1. PRE-START CHECK LIST

The following check list should be observed prior to starting the unit.

☐ Is the unit level? It should be level or slightly slanted toward the drain for proper condensate drainage.

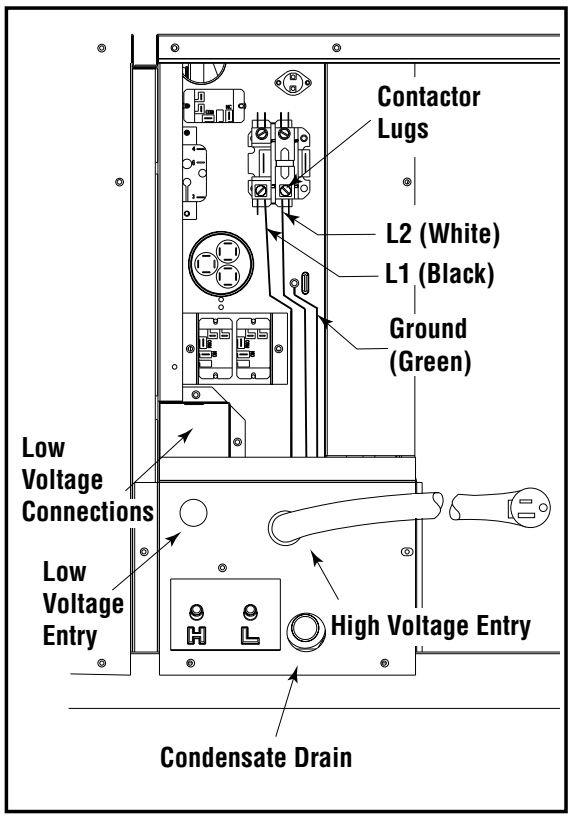


Figure 4. Power Entry and Hook Up

☐ Is there free air flow to and from the condenser? A one foot clearance around the coil, and six foot clearance above the fan?

☐ Is the wiring correct according to the wiring diagram and electrical codes?

☐ Are all the wiring connections tight? Check the condenser fan to make sure it turns freely.

☐ Is the thermostat wired correctly? Is it installed in a proper location?

2. START-UP PROCEDURE

a. Set the system switch to the OFF position.
b. Dial thermostat setting as high as it will go.
c. Turn on power supply at the circuit breaker.
d. Set the system switch to ON or COOL. Set the temperature setting to below room temperature. Verify that the indoor blower, outdoor fan, and compressor are energized and the cooling function starts.
e. Verify that the discharge air grilles are adjusted and the system is balanced.
f. Verify that there are no air leaks in the duct work.
g. Verify that the condensate drain is properly installed and that it functions correctly.
h. Dial the thermostat higher than room temperature. The unit should stop.
i. If using a combination heating-cooling thermostat, set to the HEAT position. Proceed to check for correct furnace operation.
j. Verify that the furnace controls and burners or heating elements operate correctly.
k. Instruct the owner on unit operation, filter servicing, and proper thermostat operation.

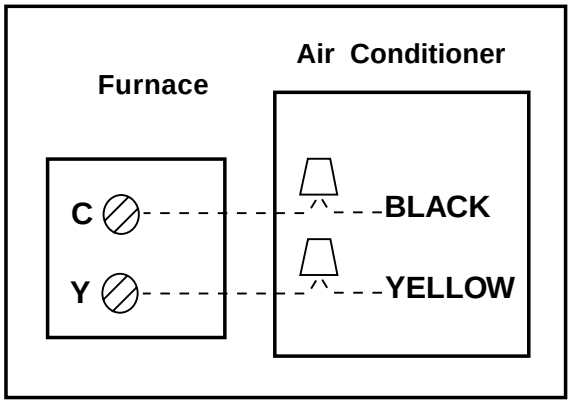


Figure 5. Low Voltage Connections

10 SEER - Refrigerant Charging Tables

2 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
71	172	151														
73	174	156	188	155												
75	176	161	190	160	203	159										
77	179	165	192	165	206	164	219	163								
79	183	167	195	169	208	169	221	168	235	167						
81			199	172	211	172	223	173	237	172	251	172				
83					214	176	227	176	239	176	253	176	266	176		
85							230	180	242	180	255	180	268	180	282	180
87							234	184	246	184	258	184	270	184	284	183
89									249	188	262	188	274	188	286	187
91											265	192	277	192	290	192
93													281	196	293	196
95															297	201
97																

2-1/2 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
69	187	153														
71	189	159	203	158												
73	191	164	205	163	220	162										
75	194	169	208	168	222	167	236	166								
77	197	171	210	172	224	171	238	170	252	170						
79			214	175	227	175	240	175	254	174	269	174				
81					230	179	243	179	257	178	271	178	285	177		
83							247	183	260	182	273	182	287	181	301	181
85							250	186	263	186	276	186	289	185	303	185
87									267	190	280	190	293	190	305	189
89											283	194	296	194	309	193
91													300	198	313	198
93															316	202
95																

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

10 SEER - Refrigerant Charging Tables

3 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
67	205	167														
69	208	172	221	171												
71	210	177	223	176	237	175										
73	212	182	225	181	239	180	252	179								
75	216	185	228	185	241	185	254	184	268	183						
77			232	188	244	189	256	188	270	187	283	187				
79					247	192	259	192	272	192	285	191	299	190		
81							263	196	275	196	287	195	301	194	314	194
83							266	199	278	199	291	199	303	198	316	198
85									282	203	294	203	306	203	318	202
87											297	207	310	207	322	206
89													313	211	325	211
91															329	215
93																

3-1/2 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
70	197	157														
72	199	162	213	162												
74	202	168	216	167	229	167										
76	203	174	218	172	232	171	246	171								
78	207	177	220	177	234	176	248	176	262	175						
80			223	180	236	181	250	180	264	180	278	180				
82					240	184	252	184	266	184	280	184	294	184		
84							256	188	269	188	282	188	296	188	310	188
86							259	192	272	192	285	192	298	192	312	191
88									276	196	289	196	302	196	314	195
90											292	200	305	200	318	200
92													308	205	321	205
94															325	209
96																

* Note: All pressures are listed in psig. and all temperatures in °F.

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10 SEER - Refrigerant Charging Tables

4 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
68	202	162														
70	204	168	219	169												
72	206	173	221	174	236	175										
74	208	180	223	179	238	179	253	181								
76	211	182	225	184	241	184	256	185	271	186						
78			229	187	243	189	258	190	273	191	288	192				
80					246	192	260	194	275	195	290	196	305	198		
82							264	198	278	199	292	200	307	202	322	203
84							267	201	281	203	295	204	309	206	324	207
86									285	207	299	209	313	210	326	211
88											302	213	316	214	330	215
90													320	218	334	220
92															337	224
94																

5 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
58	195	166														
60	197	171	212	171												
62	199	177	214	176	229	176										
64	201	184	216	181	231	181	246	180								
66	204	186	218	187	234	185	249	185	264	185						
68			222	190	236	190	251	190	266	189	281	189				
70					239	194	253	194	268	194	283	193	298	193		
72							257	197	271	198	285	198	300	197	315	197
74							260	201	274	202	288	202	302	201	317	201
76									278	205	292	206	306	206	319	205
78											295	210	309	210	323	210
80													313	214	327	214
82															330	219
84																

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

12 SEER - Refrigerant Charging Tables

2 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
72	163	137														
74	165	143	178	141												
76	167	148	180	146	192	145										
78	170	153	182	151	194	150	207	148								
80	173	156	185	156	196	154	209	153	221	152						
82			188	159	199	158	211	157	223	156	236	155				
84					203	162	214	161	225	160	238	159	250	158		
86							217	165	229	164	240	163	252	162	265	161
88							221	169	232	168	243	167	254	166	267	165
90									236	172	247	171	258	170	269	169
92											250	176	261	175	273	174
94													265	179	276	178
96															280	183
98																

2-1/2 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
72	168	142														
74	171	147	183	147												
76	173	152	185	152	198	153										
78	175	158	188	157	200	158	213	159								
80	178	160	190	162	202	163	215	163	228	164						
82			194	165	205	167	217	168	230	168	243	169				
84					209	170	220	172	232	173	245	174	258	175		
86							224	176	235	177	247	178	260	179	272	180
88							227	179	239	181	250	182	262	183	274	184
90									242	185	254	186	265	187	276	187
92											257	190	269	191	280	192
94													272	196	284	197
96															287	201
98																

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

12 SEER - Refrigerant Charging Tables

3 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
72	175	128														
74	177	133	192	135												
76	179	139	195	140	210	141										
78	180	148	197	145	212	146	227	148								
80	183	151	198	152	214	151	229	152	244	154						
82			201	155	215	157	231	157	246	158	262	160				
84					219	160	233	162	248	163	264	164	279	165		
86							237	165	251	167	266	168	281	169	296	170
88							240	169	255	171	269	172	283	173	298	174
90									258	174	272	176	287	178	300	178
92											276	180	290	182	305	183
94													294	186	308	188
96															311	192
98																

3-1/2 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
70	171	152														
72	173	157	188	155												
74	176	162	191	160	206	158										
76	179	165	193	165	208	162	223	160								
78	183	168	196	168	210	167	225	165	240	163						
80			200	171	214	171	227	170	242	168	258	166				
82					217	174	231	173	245	172	260	170	275	169		
84							234	177	248	176	262	175	277	173	292	172
86							238	181	251	180	265	179	279	177	294	176
88									255	184	269	183	282	181	296	179
90											272	187	286	185	300	184
92													289	190	303	188
94															307	193
96																

*Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

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- Discharge temperatures greater than charted values indicate an undercharged system.

12 SEER - Refrigerant Charging Tables

4 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
64	178	145														
66	181	150	194	151												
68	183	156	197	156	210	156										
70	184	163	199	161	212	161	226	162								
72	187	166	200	167	215	166	228	166	242	167						
74			204	170	217	171	230	171	244	171	258	172				
76					220	174	233	175	246	176	260	176	274	177		
78							236	179	249	180	262	180	276	181	289	181
80							240	183	253	184	265	184	278	185	291	185
82									256	188	269	188	282	189	293	189
84											272	193	285	193	298	194
86													289	198	301	198
88															305	203
90																

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

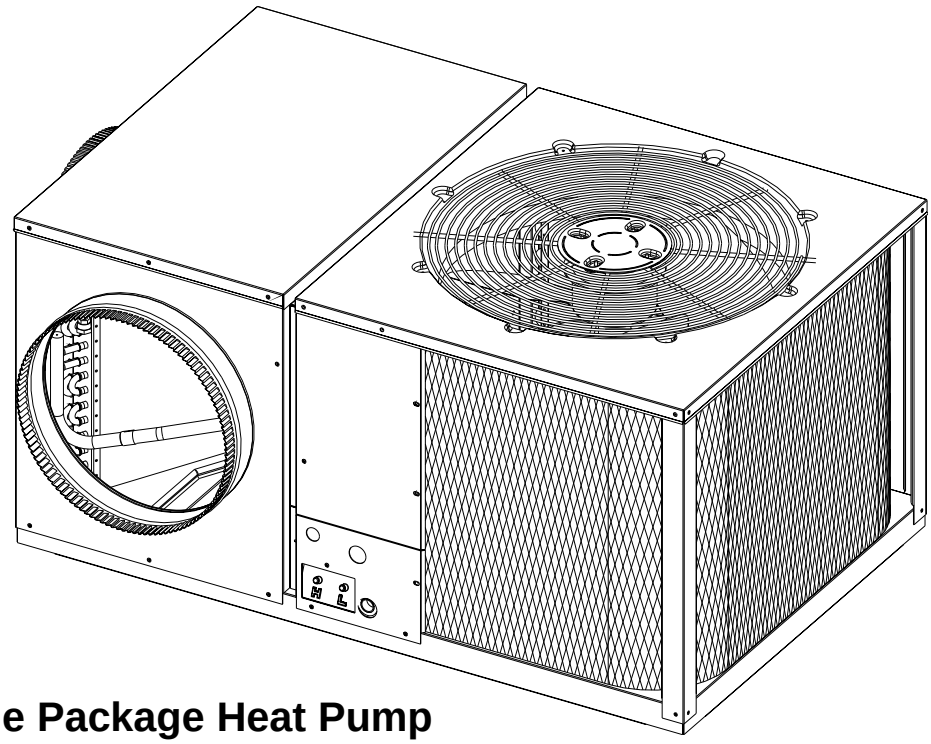
INSTALLER:
PLEASE LEAVE THESE INSTALLATION INSTRUCTIONS WITH THE HOMEOWNER.

7080150

7080150

USER'S MANUAL AND INSTALLATION

Q3B (A,C) Series 10 and 12 SEER Single Package Heat Pump



Single Package Heat Pump

IMPORTANT

Read this owner information to become familiar with the capabilities and use of your appliance. Keep this with literature of other appliances where you have easy access to it in the future. If a problem occurs, check the instructions and follow recommendations given. If these suggestions don't eliminate your problem, call your installing contractor or distributor in your area.

INTRODUCTION

Your heat pump is a unique, all weather comfort-control system appliance. The basic operation of the heating/cooling system is described on page 2 of this manual. The surprising fact that heat exists in air even at below-freezing temperatures is actually the basic law of physics which the heat pump uses to provide energy saving heating comfort. At outdoor temperatures of 47° Fahrenheit (or 8° Celsius), your heat pump can deliver approximately 2 to 3 units of heat energy per each unit of electrical energy used, as compared to a maximum of only 1 unit of heat energy produced with conventional heating systems. During the cooling season, the heat pump reverses the flow of the heat-absorbing refrigerant to become an energy-efficient, central air conditioner.

SECTION 1. OWNER INFORMATION

Your heat pump will heat and cool your home year round, saving your energy dollars. During the summer, a heat pump performs like any normal air conditioner. That is, the excess heat energy inside the home is absorbed by the refrigerant and exhausted outside the home. During the winter months, a heat pump performs like an air conditioner running in reverse. That is, available heat energy outside the home is absorbed by the refrigerant and exhausted inside the home. This is an efficient heating means because you only pay for “moving” the heat from the outdoors to the indoor area. You do not pay to generate the heat, as is the case with more traditional furnace designs.

OPERATING INSTRUCTIONS

To Operate Your Heat Pump in Cooling —

1. Set the thermostat system switch to COOL and the thermostat fan switch to AUTO. (See Figure 1)
2. Set the thermostat temperature selector to the desired cooling temperature. The outdoor unit fan, the indoor blower, and the compressor will all cycle on and off to maintain the indoor temperature at the desired cooling level.

To Shut Off Air Conditioner

1. Turn the system switch to "Heat" or "Off."
2. Turn the thermostat to the desired heating temperature setting.

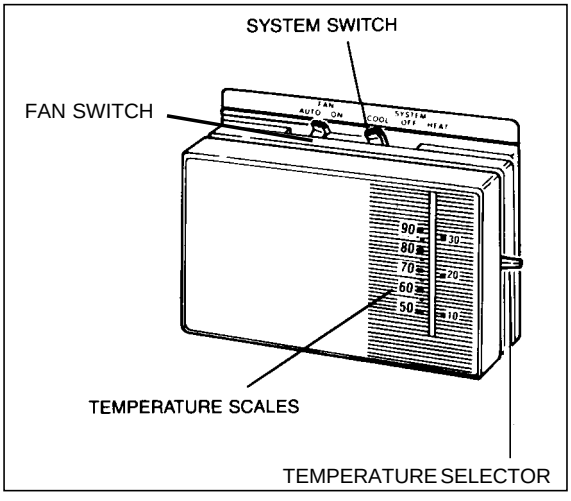


Figure 1. Typical Heat/Cool Thermostat

To Operate Your Heat Pump For Heating —

1. Set the thermostat system switch to HEAT and the thermostat fan switch to AUTO. (See Figure 1)
2. Set the thermostat temperature selector to the desired heating temperature. The outdoor unit fan, the indoor blower, and the compressor will all cycle on and off to maintain the indoor temperature at the desired heating level.

Defrost — During cold weather heating operation, the outdoor unit will develop a coating of snow and ice on the heat transfer coil. This is normal and the unit will periodically defrost itself. During the defrost cycle, the outdoor fan will stop, while the compressor continues to run and heat the outdoor coil, causing the snow and ice to melt. During defrost, there may be some steam rising from the outdoor unit as the warm coil causes some melted frost to evaporate.

BEFORE YOU CALL A SERVICEMAN

Check your system at the start of each air conditioning season. Make sure it's working correctly, clean or change filters and make any needed adjustments.

In addition, follow these simple rules:

1. Never run your system without a filter. If you do, the cooling coils will collect dirt and may become clogged.
2. Leave thermostat set at the comfort level you wish. Let it control the operation of the air conditioning system. If room temp is unsatisfactory, gradually raise the setting until comfort is restored.
3. It takes longer for an air conditioner to cool your dwelling than it does for your furnace to heat it. So . . . don't turn the unit on and expect an immediate drop in temperature. If your home is hot and humid, the temperature will drop slowly.
4. Check your filters every 30 days to see if they are dirty. To keep them clean, use a mild solution of detergent and water on washable types. Replace non washable filters.
5. Keep your outdoor condenser coil clean. (You can hose it down when it gets dirty.)

If your air conditioner isn't working:

1. Make sure the fuses are not blown or that your circuit breakers are on.

2. See that your thermostat is set at the desired temperature and that your system's switch is on "Cool."
3. For best air flow, make sure your return grille is not covered and that the filter is clean.
4. Check the outdoor condenser coil and make sure it is clean and not clogged with grass or leaves.

If your air conditioner still isn't working, call your nearest distributor.

SECTION 2. INSTALLER INFORMATION

GENERAL

Read the following instructions completely before performing the installation.
These instructions are for the use of qualified personnel specially trained and experienced in the installation of this type of equipment and related system components. Some states require installation and service personnel to be licensed. Unqualified individuals should not attempt to interpret these instructions or install this equipment.

The single packaged heat pumps are designed for outdoor installation only and can be readily connected into the high static duct system of a home. The only connections needed for installation are the supply and return ducts, the line voltage, and thermostat wiring.

The single package heat pump is completely assembled, factory wired, and factory run tested. The units are ready for easy and immediate installation.

Use of components other than those specified may invalidate ARI Certification, Code Agency Listing, and limited warranty on the heat pump.

PRE-INSTALLATION CHECK

Before any installation is attempted, the cooling load of the area to be conditioned must be calculated and a system of the proper capacity selected. It is recommended that the area to be conditioned be completely insulated and vapor sealed.

The installer should comply with all local codes and regulations which govern the installation of this type of equipment. Local codes and regulations take precedence over any recommendations contained in these instructions. Consult local building codes and the National Electrical Code (ANSI CI) for special installation requirements.

The electrical supply should be checked to determine if adequate power is available. If there is any question concerning the power supply, contact the local power company.

Inspecting Equipment: All units are securely packed at the time of shipment and, upon arrival, should be carefully inspected for damage. Claims for damage (apparent or concealed) should be filed immediately with the carrier.

INSTALLATION

(For Platinum Series ready homes)

1. **LOCATE THE 40 AMP BRANCH CIRCUIT DISCONNECT RECEPTACLE AND DISCONNECT COVER LOCATED OUTSIDE ON ONE OF THE OUTER WALLS OF THE HOME.**

Locate the unit within the reach of the Power Cord assembly and branch circuit receptacle.

- Create a solid, level position, preferably on a concrete slab or plastic pad (use NORDYNE P/N-903897 or equivalent) and slightly above grade level, located where the skirting channel across top of unit is directly under bottom edge of wall. (See Fig. 2)
- Minimum clearances to obstructions. (See Fig. 2)

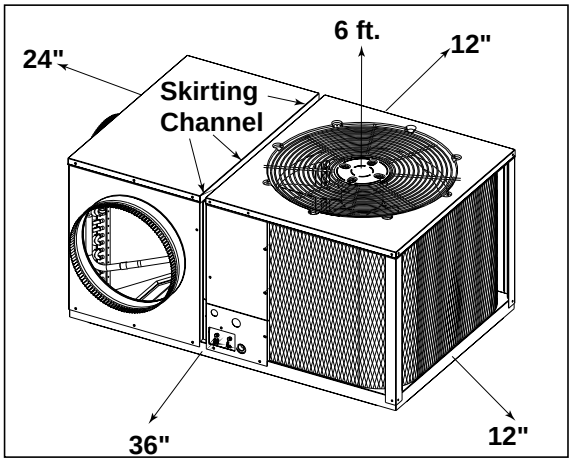


Figure 2. Minimum Unit Clearances

2. UNPACK THE UNIT

It is recommended that the unit be unpacked at the installation site to minimize damage due to handling.

a. Remove the bands from around the unit.
b. Unfold the top and bottom cap flanges.
c. Carefully remove the top cap and tube.

⚠ CAUTION:

Do not tip the unit on its side. Oil may enter the compressor cylinders and cause starting trouble. If unit has been set on its side, restore to upright position and do not run for several hours. Then run unit for a few seconds. Do this three or four times with five minutes between runs.

3. INSTALL THE RETURN AND SUPPLY AIR FITTINGS ON THE UNIT

The supply and return fittings are shipped in the supply duct. They attach to the unit openings with a flange and bead arrangement, secured with two sheet metal screws. Note: For ease of access, install fitting before positioning unit in final location.

SUPPLY DUCT

Position the supply duct collar so the edge of the unit openings fit between the flange and the bead. Overlap the collar ends keeping the small screw holes underneath. Align the holes in the crimped area and install one screw.

Tap collar as necessary to ensure engagement with unit opening and install second screw. Tighten first screw.

DUCTING SYSTEM

DUCT REQUIREMENTS

THE AIR OUTPUT OF THE SYSTEM WILL NOT CONDITION THE HOME IF THE AIR IS LOST TO THE OUTSIDE THROUGH LEAKS IN THE DUCT SYSTEM. ALSO, DUCTS WHICH ARE COLLAPSED OR RESTRICTED BY FOREIGN OBJECTS WILL PREVENT ADEQUATE AIR FLOW.

CONNECTING THE RETURN AND SUPPLY AIR FLEXIBLE DUCTS

a. Use 12” duct to connect unit to the home duct system. (See Fig. 3 and 4)
b. Use 14” duct to connect unit to furnace. (See Fig. 3 and 4)
c. The flexible ducts can be connected to the corresponding fittings with clamps (field supplied). Note: All connections should be leak tight or a loss in cooling capacity will result.
d. The flexible ducts may be cut to the required length, see instructions packed with duct. Keep all ducts as short and straight as possible. Avoid sharp bends.
e. Ducts may be spliced with sheet metal sleeves and clamps.
f. Once the inner duct is connected to the proper fitting, the insulation and plastic sleeve should be pulled over the connection and clamped.
g. For homes with multiple supply ducts or for special applications, a Y fitting is available to divide the supply air so it can be ducted to different areas of the home for more efficient cooling/heating. Note: The Y fitting should be insulated for maximum performance.

CONDENSATE DRAIN

A 3/4” condensate drain connection is located on the side of the unit below the electrical compartment. (See Figure 5). A field supplied condensate drain should be installed. Route the condensate to a suitable drainage area. Any connecting tube or hose must have the outlet below the fitting on the unit for proper drainage.

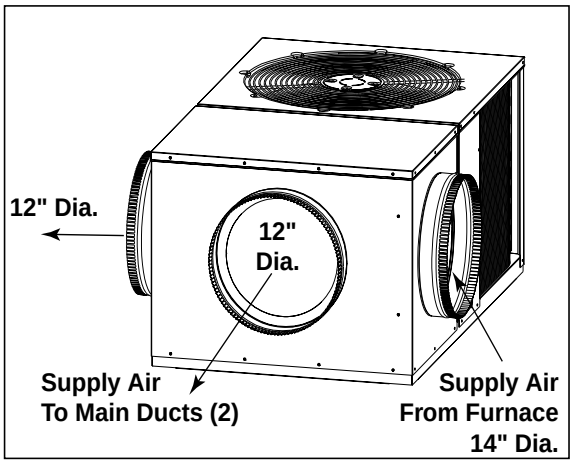
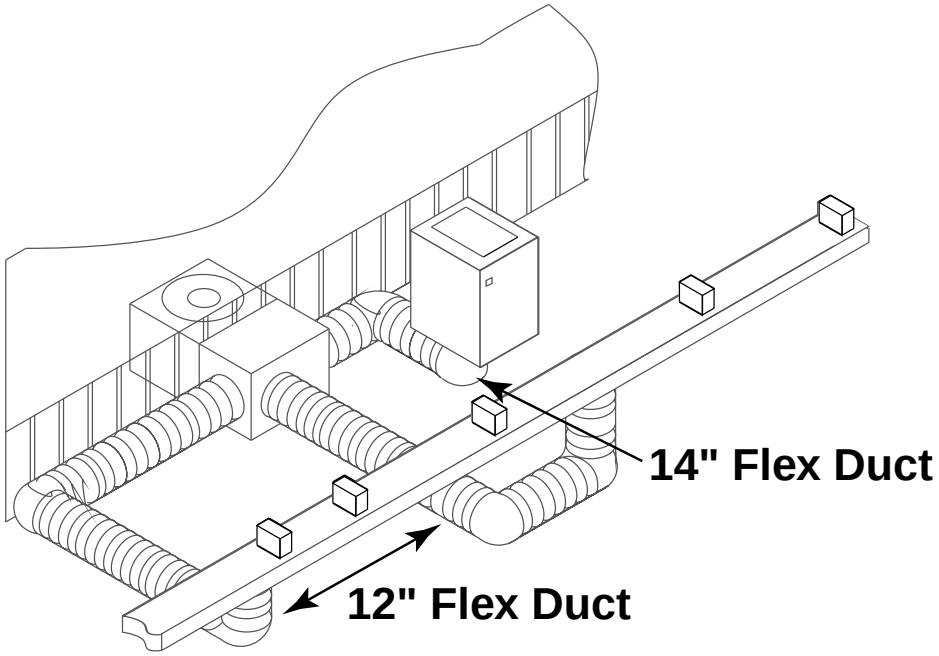
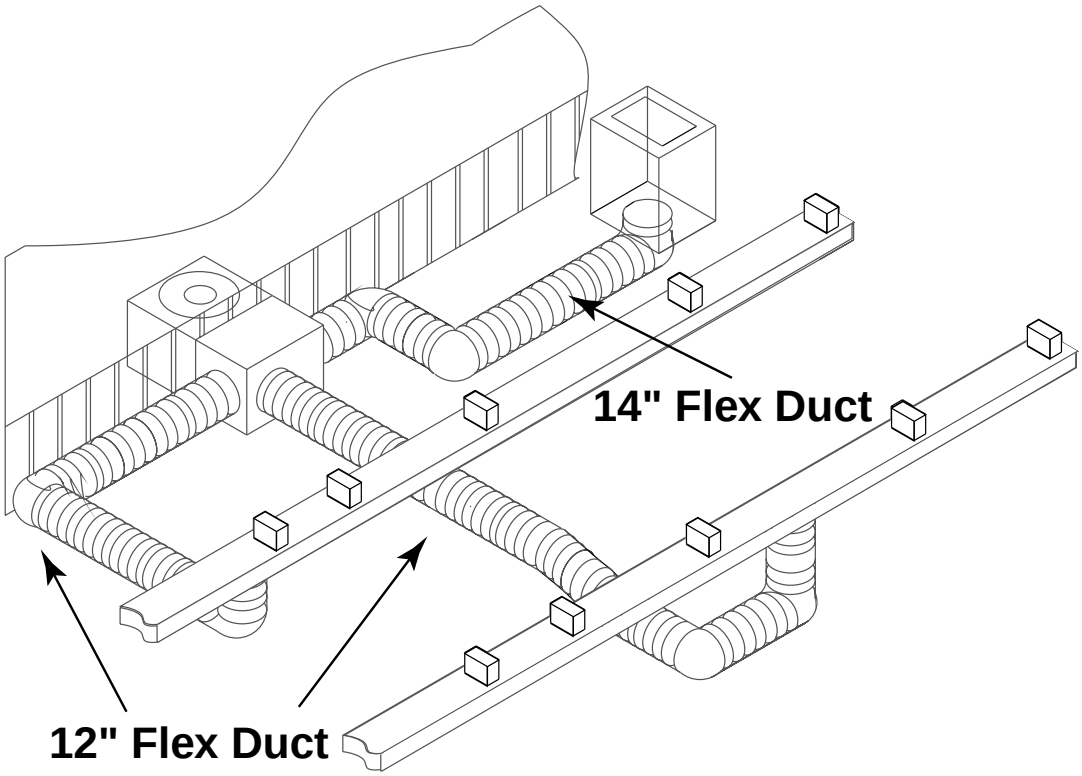


Figure 3. Supply Air Fittings

Q3B WITH M1 OR E2 FURNACE INSTALLATION



SINGLE DUCT APPLICATION



MULTIPLE DUCT APPLICATION

Figure 4. Typical Applications

⚠ WARNING:

Turn off electrical power before servicing controls. Severe electrical shock may result unless power is turned off. Unit must be installed in compliance with the National Electrical Code (NEC) and local codes.

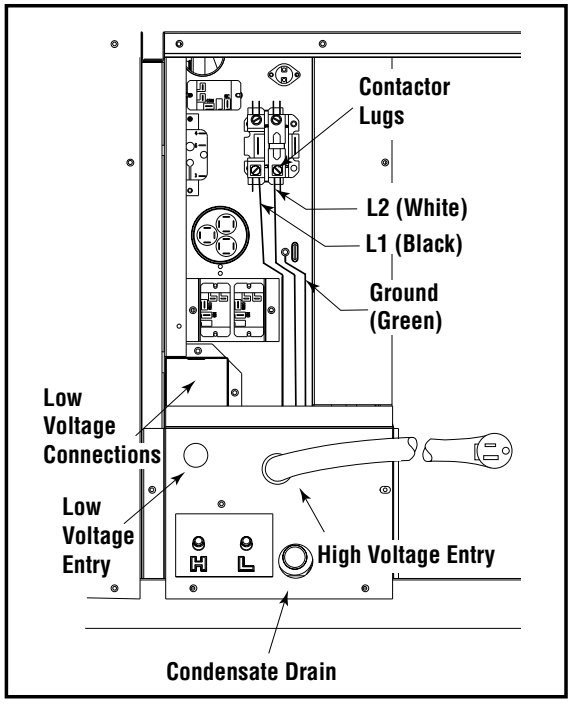


Figure 5. Power Entry and Hook Up

ELECTRICAL CONNECTIONS

1. ELECTRICAL SERVICE

HIGH VOLTAGE

a. An approved branch circuit disconnect receptacle of adequate size and disconnect cover per NEC has already been installed at the intended location of the unit on one of the four exterior walls of the home.

b. Attach the approved Power Cord/Disconnect Plug (NORDYNE P/N-903899) to the unit using a strain relief connector (Romex type or equivalent) through the high voltage knockout provided.

c. Extend the power cord leads up into the control panel and connect L1 (Black) and L2 (White) directly to the contactor lugs provided. (See Fig. 5)

d. Ground the heat pump unit by attaching the power cord ground wire (Green-w/ eyelet) to the unit using the green grounding screw provided in the control panel. (See Fig. 5)

LOW VOLTAGE

a. Low voltage wiring from the indoor furnace and thermostat will be located under the home near the branch circuit receptacle and cover. Route the 24V control wires through the low voltage sealing grommet. (See Figure 5)

b. Connect the low voltage control wires to the leads in the low voltage compartment as shown in Figure 5 and 6.

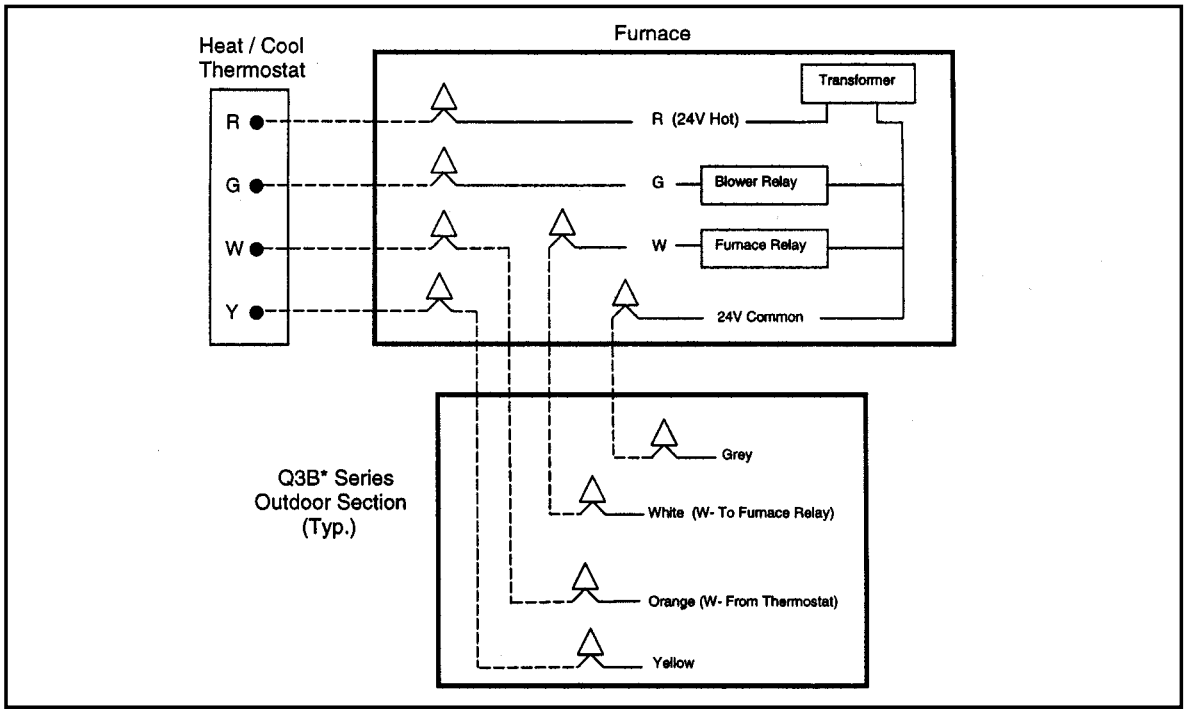


Figure 6. Low Voltage Connections

2. OVERCURRENT PROTECTION

In general, the best fuse or breaker for any air conditioner is the smallest size that will permit the equipment to run under normal use and service without nuisance trips. Such a device, sized properly, gives maximum equipment protection. The principal reason for specifying a time delay type is to prevent nuisance trips when the unit starts.

In the event that a fuse does blow or a breaker trips, always determine the reason. Do not arbitrarily put in a larger fuse or breaker and do not, in any case, exceed the maximum size listed on the data label of the unit.

3. HEAT-COOL THERMOSTAT OPERATION

Heat-Cool Thermostat: Your thermostat should be located on an inside wall approximately five feet from the floor away from drafts and doors. Do not locate lamps or other objects near the thermostat which could affect its operation or block a free flow of air.

The heat-cool thermostat is equipped with a system HEAT-COOL switch, which provides a positive means of preventing simultaneous operation of the heating and cooling mode. The thermostat is also equipped with an AUTO-ON fan switch which allows the home owner to operate the indoor blower when air circulation is desired.

4. DEFROST CYCLE CONTROL

The defrost cycle is initiated via a signal from a low pressure switch located in the outdoor side return gas tubing. This signal indicates the coil pressure has fallen low enough due to the build up of frost. The defrost cycle will terminate via a temperature switch located on the outdoor coil after the frost has been cleared.

5. OUTDOOR THERMOSTAT

The outdoor thermostat (located at the top of the control panel) prevents the auxiliary heat source (gas or electric) from operating above a certain set point. The thermostat is non-adjustable with a factory setting of 40°F.

SYSTEM OPERATION

1. PRE-START CHECK LIST

The following check list should be observed prior to starting the unit.

- ☐ Is the unit level? It should be level or slightly slanted toward the drain for proper condensate drainage.
- ☐ Is there free air flow to and from the condenser? A one foot clearance around the coil, and six foot clearance above the fan?
- ☐ Is the wiring correct according to the wiring diagram and electrical codes?
- ☐ Are all the wiring connections tight? Check the condenser fan to make sure it turns freely.
- ☐ Is the thermostat wired correctly? Is it installed in a proper location?

2. START-UP PROCEDURE

a. Set the system switch to the OFF position.
b. Dial thermostat setting as high as it will go.
c. Turn on power supply at the circuit breaker.
d. Set the system switch to ON or COOL. Set the temperature setting to below room temperature. Verify that the indoor blower, outdoor fan, and compressor are energized and the cooling function starts.
e. Verify that the discharge air grilles are adjusted and the system is balanced.
f. Verify that there are no air leaks in the duct work.
g. Verify that the condensate drain is properly installed and that it functions correctly.
h. Dial the thermostat higher than room temperature. The unit should stop.
i. Set thermostat to the HEAT position. Proceed to check for correct heat pump operation.
j. If outdoor temperature is below 35° F verify that the furnace controls and burners or heating elements operate correctly.
k. If outdoor temperature is above 35° F you may jumper out the outdoor thermostat to check for proper furnace operation.
l. Instruct the owner on unit operation, filter servicing, and proper thermostat operation.

10 SEER - Refrigerant Charging Tables for Heating Mode of Operation

2 Ton

OUTDOOR TEMPERATURE (DEG. F)																				
0			10			20			30			40			50			60		
Suc. Press	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.
16	112	116	24	139	133	32	166	151	40	193	168	48	205	188	54	226	209	61	247	231
17	119	114	25	145	131	33	171	149	41	197	166	49	212	185	55	233	205	62	254	225
18	126	112	26	151	129	34	176	147	42	200	164	50	219	182	56	240	200	63	261	219
19	133	110	27	157	127	35	180	145	43	204	162	51	226	179	57	247	196	64	268	213
20	140	108	28	163	125	36	185	143	44	208	160	52	233	176	58	254	191	65	275	206
21	147	106	29	169	123	37	190	141	45	211	158	53	240	173	59	261	187	66	282	200
22	154	104	30	174	121	38	195	139	46	215	156	54	247	171	60	268	182	67	289	194

2-1/2 Ton

OUTDOOR TEMPERATURE (DEG. F)																				
0			10			20			30			40			50			60		
Suc. Press	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.
15	121	132	22	140	136	29	158	140	36	176	144	45	186	155	55	209	172	65	233	190
16	128	130	23	146	134	30	163	138	37	180	142	46	193	152	56	216	168	66	240	183
17	135	128	24	151	132	31	168	136	38	184	140	47	200	149	57	223	163	67	247	177
18	142	126	25	157	130	32	172	134	39	187	138	48	207	146	58	230	159	68	254	171
19	149	124	26	163	128	33	177	132	40	191	136	49	214	144	59	237	154	69	261	165
20	156	122	27	169	126	34	182	130	41	195	134	50	221	141	60	244	150	70	268	159
21	163	120	28	175	124	35	187	128	42	198	132	51	228	138	61	251	145	71	275	153

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

Pressures shown are for heat pump operating only without back-up heat.

10 SEER - Refrigerant Charging Tables for Heating Mode of Operation - Continued

3 Ton

OUTDOOR TEMPERATURE (DEG. F)																				
0			10			20			30			40			50			60		
Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.
13	121	146	20	137	148	28	153	150	36	169	152	44	172	156	52	185	163	61	198	169
14	128	144	21	143	146	29	158	148	37	173	150	45	179	153	53	192	158	62	205	163
15	135	142	22	149	144	30	162	146	38	176	148	46	186	151	54	199	154	63	212	157
16	142	140	23	154	142	31	167	144	39	180	146	47	193	148	55	206	149	64	219	151
17	149	138	24	160	140	32	172	142	40	184	144	48	200	145	56	213	145	65	226	145
18	156	136	25	166	138	33	177	140	41	187	142	49	207	142	57	220	140	66	233	139
19	163	134	26	172	136	34	182	138	42	191	140	50	214	139	58	227	136	67	240	132

3-1/2 Ton

OUTDOOR TEMPERATURE (DEG. F)																				
0			10			20			30			40			50			60		
Suc. Press	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.
12	127	148	21	141	150	29	155	151	37	169	152	45	172	167	53	186	196	61	200	224
13	134	146	22	147	148	30	160	149	38	173	150	46	179	164	54	193	191	62	207	218
14	141	144	23	153	146	31	165	147	39	177	148	47	186	162	55	200	187	63	214	212
15	148	142	24	159	144	32	169	145	40	180	146	48	193	159	56	207	182	64	221	205
16	155	140	25	164	142	33	174	143	41	184	144	49	200	156	57	214	178	65	228	199
17	162	138	26	170	140	34	179	141	42	188	142	50	207	153	58	221	173	66	235	193
18	169	136	27	176	138	35	184	139	43	191	140	51	214	150	59	228	169	67	242	187

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

Pressures shown are for heat pump operating only without back-up heat.

10 SEER - Refrigerant Charging Tables for Heating Mode of Operation - Continued

4 Ton

OUTDOOR TEMPERATURE (DEG. F)																			
0			10			20			30			40			50			60		
Suc. Press	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.
19	147	139	22	154	138	25	161	137	28	168	135	37	174	157	52	200	201	68	226	245
20	154	137	23	160	136	26	166	135	29	172	133	38	181	154	53	207	196	69	233	239
21	161	135	24	166	134	27	171	133	30	176	131	39	188	151	54	214	192	70	240	232
22	168	133	25	172	132	28	176	131	31	179	129	40	195	148	55	221	187	71	247	226
23	175	131	26	178	130	29	180	129	32	183	127	41	202	145	56	228	183	72	254	220
24	182	129	27	183	128	30	185	127	33	187	125	42	209	143	57	235	178	73	261	214
25	189	127	28	189	126	31	190	125	34	190	123	43	216	140	58	242	174	74	268	208

5 Ton

OUTDOOR TEMPERATURE (DEG. F)																			
0			10			20			30			40			50			60		
Suc. Press	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.
11	150	152	15	163	152	20	175	151	25	188	150	35	203	166	51	243	198	66	284	230
12	157	150	16	168	150	21	180	149	26	191	148	36	210	163	52	250	193	67	291	224
13	164	148	17	174	148	22	185	147	27	195	146	37	217	160	53	257	189	68	298	218
14	171	146	18	180	146	23	189	145	28	199	144	38	224	157	54	264	184	69	305	211
15	178	144	19	186	144	24	194	143	29	202	142	39	231	154	55	271	180	70	312	205
16	185	142	20	192	142	25	199	141	30	206	140	40	238	151	56	278	175	71	319	199
17	192	140	21	198	140	26	204	139	31	210	138	41	245	149	57	285	171	72	326	193

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

Pressures shown are for heat pump operating only without back-up heat.

12 SEER - Refrigerant Charging Tables for Heating Mode of Operation

2 Ton

OUTDOOR TEMPERATURE (DEG. F)																				
0			10			20			30			40			50			60		
Suc. Press	Disch. Press.	Disch. Temp.	Suc. Press	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.
15	110	96	23	132	116	32	155	136	40	177	156	48	187	176	53	207	196	59	228	216
16	117	94	24	138	114	33	159	134	41	181	154	49	194	173	54	214	192	60	235	210
17	124	92	25	144	112	34	164	132	42	185	152	50	201	170	55	221	187	61	242	204
18	131	90	26	150	110	35	169	130	43	188	150	51	208	168	56	228	183	62	249	198
19	138	88	27	156	108	36	174	128	44	192	148	52	215	165	57	235	178	63	256	192
20	145	86	28	162	106	37	179	126	45	196	146	53	222	162	58	242	174	64	263	186
21	152	84	29	167	104	38	183	124	46	199	144	54	229	159	59	249	169	65	270	179

2-1/2 Ton

OUTDOOR TEMPERATURE (DEG. F)																				
0			10			20			30			40			50			60		
Suc. Press	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.
12	120	128	21	133	132	30	147	136	39	160	140	48	158	152	55	164	173	62	170	194
13	127	126	22	139	130	31	151	134	40	164	138	49	165	150	56	171	169	63	177	187
14	134	124	23	145	128	32	156	132	41	167	136	50	172	147	57	178	164	64	184	181
15	141	122	24	151	126	33	161	130	42	171	134	51	179	144	58	185	160	65	191	175
16	148	120	25	157	124	34	166	128	43	175	132	52	186	141	59	192	155	66	198	169
17	155	118	26	163	122	35	170	126	44	178	130	53	193	138	60	199	151	67	205	163
18	162	116	27	169	120	36	175	124	45	182	128	54	200	135	61	206	146	68	212	157

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

Pressures shown are for heat pump operating only without back-up heat.

12 SEER - Refrigerant Charging Tables for Heating Mode of Operation - Continued

3 Ton

OUTDOOR TEMPERATURE (DEG. F)																				
0			10			20			30			40			50			60		
Suc. Press	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.
13	120	118	22	136	126	31	152	135	40	167	143	48	169	155	57	179	170	65	189	185
14	127	116	23	142	124	32	156	133	41	171	141	49	176	152	58	186	165	66	196	179
15	134	114	24	148	122	33	161	131	42	174	139	50	183	149	59	193	161	67	203	173
16	141	112	25	154	120	34	166	129	43	178	137	51	190	146	60	200	156	68	210	167
17	148	110	26	159	118	35	171	127	44	182	135	52	197	143	61	207	152	69	217	160
18	155	108	27	165	116	36	175	125	45	185	133	53	204	141	62	214	147	70	224	154
19	162	106	28	171	114	37	180	123	46	189	131	54	211	138	63	221	143	71	231	148

3-1/2 Ton

OUTDOOR TEMPERATURE (DEG. F)																				
0			10			20			30			40			50			60		
Suc. Press	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.
21	133	124	25	146	127	29	160	130	34	173	132	43	183	155	56	213	198	70	243	242
22	140	122	26	152	125	30	164	128	35	176	130	44	190	152	57	220	194	71	250	235
23	147	120	27	158	123	31	169	126	36	180	128	45	197	150	58	227	189	72	257	229
24	154	118	28	164	121	32	174	124	37	184	126	46	204	147	59	234	185	73	264	223
25	161	116	29	170	119	33	179	122	38	187	124	47	211	144	60	241	180	74	271	217
26	168	114	30	176	117	34	184	120	39	191	122	48	218	141	61	248	176	75	278	211
27	175	112	31	182	115	35	188	118	40	195	120	49	225	138	62	255	171	76	285	205

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

Pressures shown are for heat pump operating only without back-up heat.

12 SEER - Refrigerant Charging Tables for Heating Mode of Operation - Continued

4 Ton

OUTDOOR TEMPERATURE (DEG. F)																				
0			10			20			30			40			50			60		
Suc. Press	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.	Suc. Press.	Disch. Press.	Disch. Temp.
7	122	121	16	137	123	24	152	125	32	167	126	43	175	144	57	202	178	71	228	213
8	129	119	17	143	121	25	157	123	33	170	124	44	182	141	58	209	174	72	235	206
9	136	117	18	149	119	26	161	121	34	174	122	45	189	138	59	216	169	73	242	200
10	143	115	19	155	117	27	166	119	35	178	120	46	196	136	60	223	165	74	249	194
11	150	113	20	161	115	28	171	117	36	181	118	47	203	133	61	230	160	75	256	188
12	157	111	21	167	113	29	176	115	37	185	116	48	210	130	62	237	156	76	263	182
13	164	109	22	172	111	30	180	113	38	189	114	49	217	127	63	244	151	77	270	176

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

Pressures shown are for heat pump operating only without back-up heat.

10 SEER - Refrigerant Charging Tables for Cooling Mode of Operation

2 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
69	170	167														
71	172	172	186	169												
73	174	178	188	174	202	171										
75	179	178	190	179	204	176	218	173								
77	183	181	195	181	206	181	220	178	234	175						
79			198	184	210	183	222	182	236	180	250	177				
81					214	187	226	186	238	184	252	182	266	180		
83							229	189	242	188	254	186	268	184	282	182
85							233	193	245	192	257	190	270	188	284	186
87									249	196	261	194	273	192	286	190
89											264	198	276	196	289	194
91													280	200	292	198
93															295	203
95																

2-1/2 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
68	188	161														
70	190	167	205	165												
72	192	172	207	170	221	169										
74	196	175	209	175	224	174	238	172								
76	199	178	212	178	226	178	240	177	255	176						
78			216	181	229	182	242	182	257	181	272	180				
80					233	185	246	185	259	185	274	184	288	183		
82							249	189	263	189	276	188	290	187	305	187
84							253	193	266	193	279	192	292	191	307	191
86									269	197	283	196	296	196	309	195
88											286	200	299	200	313	199
90													303	204	316	204
92															319	208
94																

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

Pressures shown are for heat pump operating only without back-up heat.

10 SEER - Refrigerant Charging Tables for Cooling Mode of Operation - Continued

3 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
67	196	160														
69	199	165	213	165												
71	201	170	215	170	229	171										
73	202	179	217	175	231	176	245	176								
75	205	181	218	182	233	180	247	180	261	181						
77			222	185	235	186	249	185	263	185	277	185				
79					238	189	251	189	265	189	279	190	293	190		
81							255	193	268	194	281	194	295	194	309	194
83							258	197	271	197	284	198	297	198	311	198
85									275	201	288	202	301	202	313	202
87											291	206	304	206	317	207
89													308	211	321	211
91															324	216
93																

3-1/2 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
70	207	162														
72	209	168	223	168												
74	211	173	225	173	238	173										
76	211	183	227	178	240	178	254	178								
78	215	186	227	186	242	183	256	182	269	182						
80			231	189	244	189	258	187	271	187	284	187				
82					247	192	260	192	273	191	286	191	300	191		
84							263	195	276	195	289	195	302	195	315	195
86							267	199	279	199	292	199	304	199	317	198
88									283	203	295	203	308	203	319	202
90											299	207	311	208	324	207
92													315	212	327	212
94															331	216
96																

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

Pressures shown are for heat pump operating only without back-up heat.

10 SEER - Refrigerant Charging Tables for Cooling Mode of Operation - Continued

4 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
65	200	140														
67	202	146	218	150												
69	204	151	220	155	236	159										
71	204	162	222	160	239	164	255	168								
73	207	165	223	168	241	169	257	172	273	176						
75			226	171	242	175	259	177	275	181	291	185				
77					245	178	261	182	277	185	293	189	309	192		
79							264	185	280	189	295	193	311	196	327	200
81							268	189	283	193	299	197	313	200	329	204
83									287	197	302	201	318	205	331	208
85											306	205	321	209	337	213
87													325	213	340	218
89															343	222
91																

5 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
56	188	143														
58	190	148	205	151												
60	193	154	207	156	222	159										
62	193	163	210	161	225	163	239	166								
64	196	166	210	168	227	168	242	171	256	173						
66			214	171	228	174	244	175	259	178	274	180				
68					232	177	246	180	261	182	276	184	290	187		
70							249	184	263	186	278	189	292	191	307	193
72							253	187	267	190	281	193	294	195	309	197
74									270	194	284	197	299	199	311	201
76											288	201	302	204	316	206
78													305	208	320	211
80															323	215
82																

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

Pressures shown are for heat pump operating only without back-up heat.

12 SEER - Refrigerant Charging Tables for Cooling Mode of Operation

2 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
73	176	98														
75	178	103	190	108												
77	180	109	192	113	203	118										
79	180	120	194	118	206	123	217	128								
81	183	123	194	127	208	128	219	132	231	137						
83			198	130	209	134	221	137	233	141	244	146				
85					212	137	223	142	235	146	246	150	258	155		
87							227	146	238	150	249	154	260	159	271	163
89							230	149	241	154	252	158	262	163	273	167
91									244	158	255	163	266	167	275	171
93											259	167	270	171	281	176
95													273	176	284	181
97															287	185
99																

2-1/2 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
75	187	124														
77	189	129	203	133												
79	191	135	205	138	218	141										
81	192	143	207	143	221	146	234	149								
83	196	146	208	149	223	151	236	154	250	157						
85			212	152	224	156	238	158	252	161	266	165				
87					228	159	241	163	254	166	268	169	281	172		
89							244	166	257	170	270	173	283	176	297	180
91							248	170	260	174	273	177	285	180	299	183
93									264	178	276	181	289	185	301	187
95											280	185	293	189	305	192
97													296	193	309	197
99															312	201
101																

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

Pressures shown are for heat pump operating only without back-up heat.

12 SEER - Refrigerant Charging Tables for Cooling Mode of Operation - Continued

3 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
71	183	135														
73	186	140	201	142												
75	188	145	203	147	218	148										
77	188	156	205	152	220	153	235	155								
79	191	158	206	160	222	158	238	159	253	161						
81			209	163	224	164	240	164	255	165	270	167				
83					227	167	242	169	257	170	272	171	287	172		
85							245	172	259	174	274	175	289	176	304	178
87							248	176	263	178	277	179	291	180	306	182
89									266	182	281	183	295	185	308	185
91											284	187	299	189	313	191
93													302	193	316	195
95															320	200
97																

3-1/2 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
71	171	138														
73	173	143	189	144												
75	176	148	192	149	207	150										
77	177	156	194	154	210	155	225	156								
79	180	159	195	160	212	160	228	160	244	161						
81			199	163	214	165	230	165	246	166	262	167				
83					217	168	232	169	248	170	264	171	279	172		
85							236	173	251	174	266	175	281	176	297	177
87							239	177	254	178	269	179	283	180	299	181
89									258	182	272	183	287	184	301	185
91											276	187	291	189	306	190
93													294	193	309	194
95															313	199
97																

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

Pressures shown are for heat pump operating only without back-up heat.

12 SEER - Refrigerant Charging Tables for Cooling Mode of Operation - Continued

4 Ton

	OUTDOOR TEMPERATURE (°F)															
	70		75		80		85		90		95		100		105	
Suct. Press.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.	Dis. Press.	Dis. Temp.
68	170	138														
70	172	144	187	145												
72	175	149	189	150	204	152										
74	175	158	191	155	206	157	221	158								
76	178	161	192	163	208	162	223	163	237	165						
78			196	166	209	167	225	168	239	169	254	171				
80					213	171	227	172	242	174	256	175	271	176		
82							230	176	244	178	258	179	273	180	287	182
84							234	180	248	182	262	183	275	184	289	186
86									251	185	265	187	279	189	291	190
88											268	191	282	193	296	195
90													286	197	300	199
92															303	204
94																

* Note: All pressures are listed in psig. and all temperatures in °F.

- Shaded Boxes indicate flooded conditions

- Rated Design Values. Suction Pressure will be lower than design value if indoor air flow, entering dry bulb, or entering wet bulb temperatures are lower than design.

- Discharge temperatures greater than charted values indicate an undercharged system.

Pressures shown are for heat pump operating only without back-up heat.

INSTALLER

PLEASE LEAVE THESE INSTALLATION INSTRUCTIONS WITH THE HOMEOWNER.

7080170

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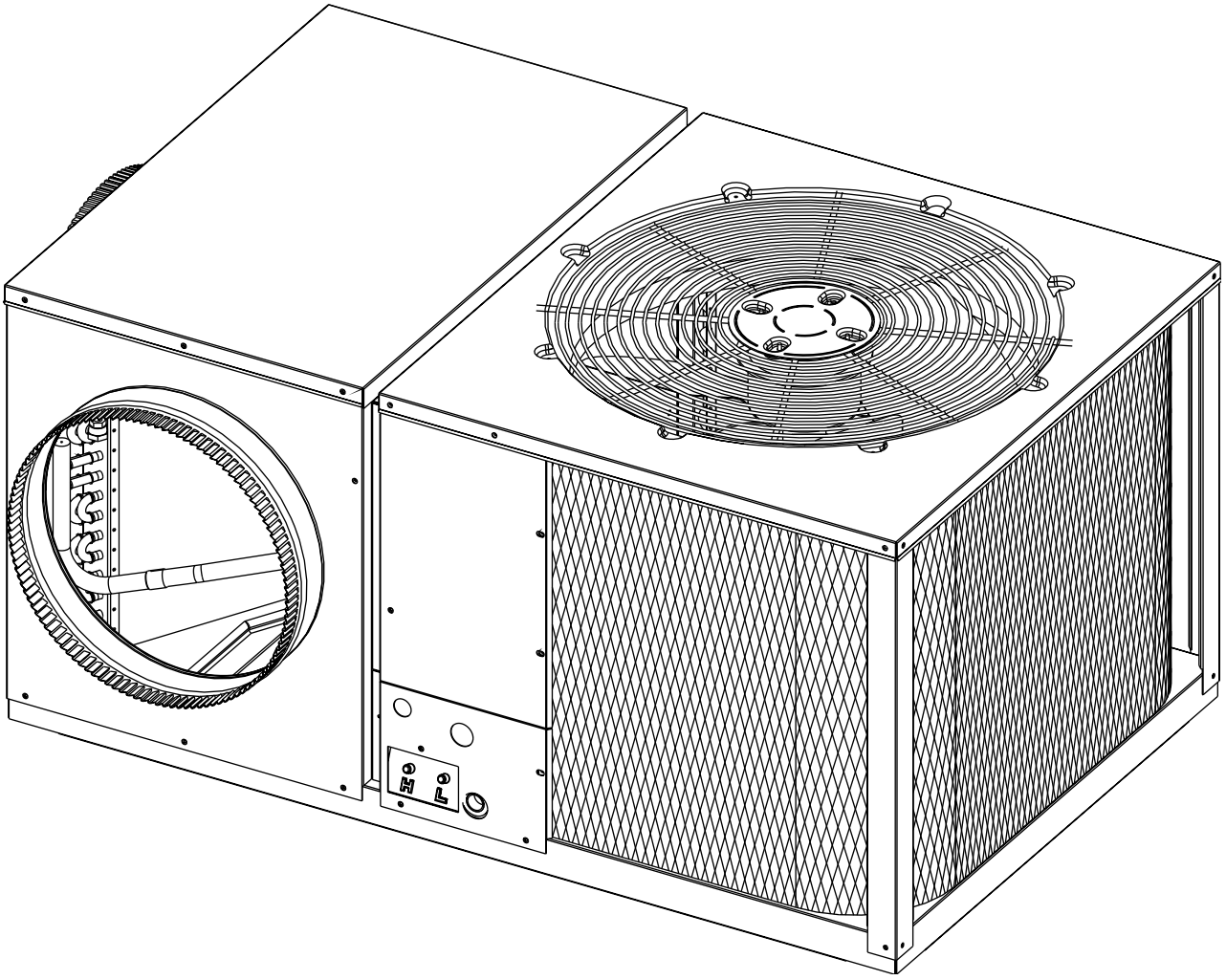
Printed in U.S.A. (6/01)

7080170

PARTNERS CHOICE™
HEATING & COOLING REPLACEMENT PARTS

REPLACEMENT PARTS LIST

Single Package Air Conditioner and Heat Pump
P3B (A,C) and Q3B (A,C) Series
10 SEER and 12 SEER Models



10 and 12 SEER Single Package Air Conditioner
Model P3B(A,C)

Replacement Parts List			P3BA Series (10 SEER Package A/C)						P3BC Series (12 SEER Package A/C)				
Item	Part #	Description	-024	-030	-036	-042	-048	-060	-024	-030	-036	-042	-048
			917501	917502	917503	917504	917505	917506	917511	917512	917513	917514	917515
1	669175	Grille, Outdoor Fan	1	1	1	1	1	1	1	1	1	1	1
2	621925	Motor, Outdoor Fan - 208/230, 1/8 HP	1	1	1				1	1			
	621926	Motor, Outdoor Fan - 208/230, 1/4 HP				1	1	1			1	1	1
3	667279	Fan Blade - 3 Blade, 20", 26 Deg.	1	1	1	1			1	1			
	667278	Fan Blade - 3 Blade, 20", 30 Deg.					1	1			1	1	1
4	D01181	Pan, Condenser Top	1	1	1								
	D01182	Pan, Condenser Top				1	1	1	1	1	1	1	1
5	391871	Panel, Condenser End	1	1	1								
	391872	Panel, Condenser End				1	1	1	1	1	1	1	1
6	391861R	Panel, Divider w/Insulation	1	1	1								
	391862R	Panel, Divider w/Insulation				1	1	1	1	1	1	1	1
7	N/A												
8	N/A												
9	913319	Compressor, CR20K6	1						1				
	912957	Compressor, CR28K6		1									
	914955	Compressor, CR34K6			1								
	912958	Compressor, CR38K6				1							
	912959	Compressor, CR42K6					1						
	914749	Compressor, ZR57KC						1					
	912956	Compressor, CR22K6								1			
	914927	Compressor, ZR32K3									1		
	917861	Compressor, ZR36K3										1	
	917243	Compressor, ZR42K3											1
10	D09991	Brace, Corner	2	2	2								
	D09992	Brace, Corner				2	2	2	2	2	2	2	2
11	N/A												
12	N/A												
13	N/A												
14	N/A												
15	D11851R	Outdoor Coil Assy w/ Hail Guard	1										
	D11852R	Outdoor Coil Assy w/ Hail Guard		1									
	D11853R	Outdoor Coil Assy w/ Hail Guard			1								
	D11854R	Outdoor Coil Assy w/ Hail Guard				1	1		1	1	1		
	D12112R	Outdoor Coil Assy w/ Hail Guard						1				1	1
16	391811R	Pan, Bottom w/Insulation	1	1	1								
	391812R	Pan, Bottom w/Insulation				1	1	1	1	1	1	1	1
17	N/A												
18	N/A												
19	N/A												
20	268091	Bracket, Service Port	1	1	1	1	1	1	1	1	1	1	1
21	391931	Panel, Electrical	1	1	1	1	1	1	1	1	1	1	1
22	391941	Cover, Control Panel	1	1	1								
	391942	Cover, Control Panel				1	1	1	1	1	1	1	1
23	663871	Pipe, Condensate Drain, Evap.	1	1	1	1	1	1	1	1	1	1	1
24	663860	Pipe, Condensate Drain, Cond.	1	1	1	1	1	1	1	1	1	1	1
25	669354	Pan, Condensate Drain	1	1	1								
	669353	Pan, Condensate Drain				1	1	1	1	1	1	1	1
26	250102	Collar, Duct 14"	1	1	1	1	1	1	1	1	1	1	1
27	D11891R	Panel, Evaporator End w/Insulation	1	1	1								
	D11892R	Panel, Evaporator End w/Insulation				1	1	1	1	1	1	1	1
28	250101	Collar, Duct 12"	2	2	2	2	2	2	2	2	2	2	2

10 and 12 SEER Single Package Air Conditioner
Model P3B(A,C)

Replacement Parts List			P3BA Series (10 SEER Package A/C)						P3BC Series (12 SEER Package A/C)				
Item	Part #	Description	-024	-030	-036	-042	-048	-060	-024	-030	-036	-042	-048
			917501	917502	917503	917504	917505	917506	917511	917512	917513	917514	917515
29	391821R	Pan, Evaporator Top w/Insulation	1	1	1								
	391822R	Pan, Evaporator Top w/Insulation				1	1	1	1	1	1	1	1
30	663394	Connector, Swivel, Indoor	1	1	1	1	1	1	1	1	1	1	1
31	664058	Restrictor, Indoor	1										
	664067	Restrictor, Indoor		1									
	664069	Restrictor, Indoor			1								
	664077	Restrictor, Indoor				1							
	664083	Restrictor, Indoor											1
	664093	Restrictor, Indoor						1					
	664060	Restrictor, Indoor							1				
	664065	Restrictor, Indoor								1			
	664073	Restrictor, Indoor									1		
	664080	Restrictor, Indoor					1					1	
32	663580	Indoor Distributor Assy.	1	1	1					1			
	663719	Indoor Distributor Assy.				1					1		
	663584	Indoor Distributor Assy.					1	1				1	1
	663716	Indoor Distributor Assy.							1				
33	D12062R	Indoor Coil Assy w/Distributor Assy.	1										
	D12061R	Indoor Coil Assy w/Distributor Assy.		1	1								
	D12072R	Indoor Coil Assy w/Distributor Assy.				1					1		
	D12074R	Indoor Coil Assy w/Distributor Assy.					1						1
	D12073R	Indoor Coil Assy w/Distributor Assy.						1					
	D12063R	Indoor Coil Assy w/Distributor Assy.							1				
	D12075R	Indoor Coil Assy w/Distributor Assy.								1			
	D12076R	Indoor Coil Assy w/Distributor Assy.										1	
34	391911	Box, Control A/C			1								
	391912	Box, Control A/C				1	1	1			1	1	1
	391913	Box, Control A/C	1	1									
	391914	Box, Control A/C							1	1			
35	N/A												
36	N/A												
37	620777	Capacitor	1						1	1			
	620762	Capacitor		1									
	620779	Capacitor			1								
	620968	Capacitor				1	1						
	621153	Capacitor									1		
	621697	Capacitor										1	
	621698	Capacitor						1					1
38	N/A												
39	N/A												
40	268001	Divider, Low Voltage	1	1	1	1	1	1	1	1	1	1	1
41	N/A												
42	621661	Contactor	1	1	1	1			1	1	1	1	
	621662	Contactor					1	1					1

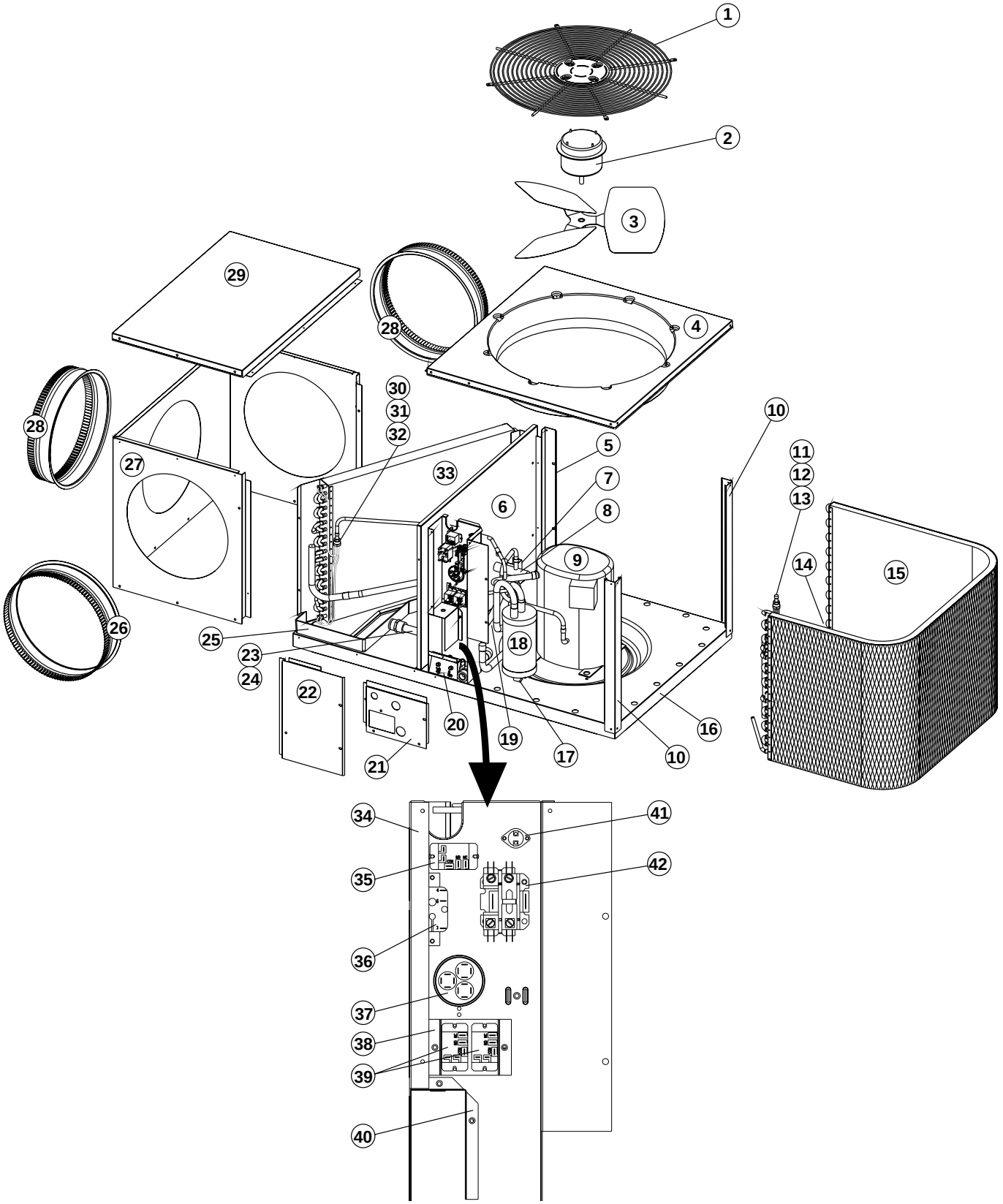
10 and 12 SEER Single Package Heat Pump
Model Q3B(A,C)

Replacement Parts List			Q3BA Series (10 SEER Pkg. Heat Pump)						Q3BC Series (12 SEER Pkg. Heat Pump)				
Item	Part #	Description	-024	-030	-036	-042	-048	-060	-024	-030	-036	-042	-048
			917521	917522	917523	917524	917525	917526	917531	917532	917533	917534	917535
1	669175	Grille, Outdoor Fan	1	1	1	1	1	1	1	1	1	1	1
2	621925	Motor, Outdoor Fan - 208/230, 1/8 HP	1	1	1				1				
	621926	Motor, Outdoor Fan - 208/230, 1/4 HP				1	1	1		1	1	1	1
3	667279	Fan Blade - 3 Blade, 20", 26 Deg.	1	1	1				1				
	667278	Fan Blade - 3 Blade, 20", 30 Deg.				1	1	1		1	1	1	1
4	D01181	Pan, Condenser Top	1	1	1								
	D01182	Pan, Condenser Top				1	1	1	1	1	1	1	1
5	391871	Panel, Condenser End	1	1	1								
	391872	Panel, Condenser End				1	1	1	1	1	1	1	1
6	391861R	Panel, Divider w/Insulation	1	1	1								
	391862R	Panel, Divider w/Insulation				1	1	1	1	1	1	1	1
7	669343	Coil, Reversing Valve	1	1	1	1	1	1	1	1	1	1	1
8	668766	Valve, Reversing 4-Way	1						1				
	668767	Valve, Reversing 4-Way		1	1	1				1	1		
	668769	Valve, Reversing 4-Way					1	1				1	1
9	914653	Compressor, ZR22K3							1				
	912957	Compressor, CR28K6		1									
	914955	Compressor, CR34K6			1								
	912958	Compressor, CR38K6				1							
	912956	Compressor, CR22K6	1										
	914654	Compressor, ZR26K3								1			
	914927	Compressor, ZR32K3									1		
	914656	Compressor, ZR40K3										1	
	917243	Compressor, ZR42K3											1
	914749	Compressor, ZR47KC					1						
	917865	Compressor, ZR61KC						1					
10	D09991	Brace, Corner	2	2	2								
	D09992	Brace, Corner				2	2	2	2	2	2	2	2
11	663394	Connector, Swivel, Outdoor (H.P. Only)	1	1	1	1	1	1	1	1	1	1	1
12	664041	Restrictor, Outdoor (H.P. Only)	1										
	664049	Restrictor, Outdoor (H.P. Only)							1				
	664067	Restrictor, Outdoor (H.P. Only)			1								
	664069	Restrictor, Outdoor (H.P. Only)				1							
	664075	Restrictor, Outdoor (H.P. Only)											1
	664077	Restrictor, Outdoor (H.P. Only)					1						
	664083	Restrictor, Outdoor (H.P. Only)						1					
	664055	Restrictor, Outdoor (H.P. Only)		1									
	664060	Restrictor, Outdoor (H.P. Only)								1			
	664066	Restrictor, Outdoor (H.P. Only)									1		
	664063	Restrictor, Outdoor (H.P. Only)										1	
13	663716	Outdoor Distributor Assy. (H.P. Only)	1	1	1				1	1			
	663580	Outdoor Distributor Assy. (H.P. Only)				1	1				1		
	663582	Outdoor Distributor Assy. (H.P. Only)						1				1	1
14	626507	Switch, Sensor, Defrost (Not Shown)	1	1	1	1	1	1	1	1	1	1	1
15	D11855R	Outdoor Coil Assy w/ Hail Guard	1		1								
	D11856R	Outdoor Coil Assy w/ Hail Guard		1									
	D12221R	Outdoor Coil Assy w/ Hail Guard					1					1	
	D12222R	Outdoor Coil Assy w/ Hail Guard						1					
	D12223R	Outdoor Coil Assy w/ Hail Guard							1	1			
	D12224R	Outdoor Coil Assy w/ Hail Guard				1					1		
	D12111R	Outdoor Coil Assy w/ Hail Guard											1
16	391811R	Pan, Bottom w/Insulation	1	1	1								
	391812R	Pan, Bottom w/Insulation				1	1	1	1	1	1	1	1
17	269111	Bracket, Accumulator	1	1	1								
18	668793	Accumulator	1	1	1	1			1	1	1		
	668794	Accumulator					1	1				1	1
19	632374	Switch, Pressure (Not Shown)	1	1	1	1	1	1	1	1	1	1	1
20	268091	Bracket, Service Port	1	1	1	1	1	1	1	1	1	1	1

10 and 12 SEER Single Package Heat Pump
Model Q3B(A,C)

Replacement Parts List			Q3BA Series (10 SEER Pkg. Heat Pump)						Q3BC Series (12 SEER Pkg. Heat Pump)				
Item	Part #	Description	-024	-030	-036	-042	-048	-060	-024	-030	-036	-042	-048
			917521	917522	917523	917524	917525	917526	917531	917532	917533	917534	917535
21	391931	Panel, Electrical	1	1	1	1	1	1	1	1	1	1	1
22	391941	Cover, Control Panel	1	1	1								
	391942	Cover, Control Panel				1	1	1	1	1	1	1	1
23	663871	Pipe, Condensate Drain, Evap.	1	1	1	1	1	1	1	1	1	1	1
24	663860	Pipe, Condensate Drain, Cond.	1	1	1	1	1	1	1	1	1	1	1
25	669354	Pan, Condensate Drain	1	1	1								
	669353	Pan, Condensate Drain				1	1	1	1	1	1	1	1
26	250102	Collar, Duct 14"	1	1	1	1	1	1	1	1	1	1	1
27	D11891R	Panel, Evaporator End w/Insulation	1	1	1								
	D11892R	Panel, Evaporator End w/Insulation				1	1	1	1	1	1	1	1
28	250101	Collar, Duct 12"	2	2	2	2	2	2	2	2	2	2	2
29	391821R	Pan, Evaporator Top w/Insulation	1	1	1								
	391822R	Pan, Evaporator Top w/Insulation				1	1	1	1	1	1	1	1
30	663394	Connector, Swivel, Indoor	1	1	1	1	1	1	1	1	1	1	1
31	664083	Restrictor, Indoor											1
	664093	Restrictor, Indoor						1					
	664073	Restrictor, Indoor			1	1							
	664080	Restrictor, Indoor										1	
	664060	Restrictor, Indoor	1							1			
	664065	Restrictor, Indoor		1									
	664068	Restrictor, Indoor									1		
	664082	Restrictor, Indoor					1						
	664061	Restrictor, Indoor							1				
	664066	Restrictor, Indoor					1						
32	663580	Indoor Distributor Assy.	1	1	1				1	1	1		
	663719	Indoor Distributor Assy.				1							
	663584	Indoor Distributor Assy.					1	1				1	1
33	271721R	Indoor Coil Assy w/Distributor Assy.			1								
	D12061R	Indoor Coil Assy w/Distributor Assy.	1	1									
	D12063R	Indoor Coil Assy w/Distributor Assy.							1				
	D12075R	Indoor Coil Assy w/Distributor Assy.								1	1		
	D12077R	Indoor Coil Assy w/Distributor Assy.				1							
	D12074R	Indoor Coil Assy w/Distributor Assy.					1						1
	D12073R	Indoor Coil Assy w/Distributor Assy.						1					
	D12076R	Indoor Coil Assy w/Distributor Assy.										1	
34	392221	Box, Control H.P.			1								
	392222	Box, Control H.P.				1		1	1	1	1	1	1
	392223	Box, Control H.P.	1	1									
	392224	Box, Control H.P.					1						
35	621899	Relay, SPST, NC	1	1	1	1	1	1	1	1	1	1	1
36	621867	Relay, DPST	1	1	1	1	1	1	1	1	1	1	1
37	620777	Capacitor	1										
	620762	Capacitor		1									
	620763	Capacitor							1	1			
	620779	Capacitor			1								
	620968	Capacitor				1							
	620888	Capacitor					1						
	621153	Capacitor									1		
	621697	Capacitor										1	
	621698	Capacitor											1
	621944	Capacitor						1					
38	269101	Bracket, Relay	1	1	1	1	1	1	1	1	1	1	1
39	621898	Relay, SPST, NO	2	2	2	2	2	2	2	2	2	2	2
40	268001	Divider, Low Voltage	1	1	1	1	1	1	1	1	1	1	1
41	626506	Switch, Limit, 35 CI/50CO	1	1	1	1	1	1	1	1	1	1	1
42	621661	Contactor	1	1	1	1			1	1	1	1	
	621662	Contactor					1	1					1

Q3B* Model Series Shown



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