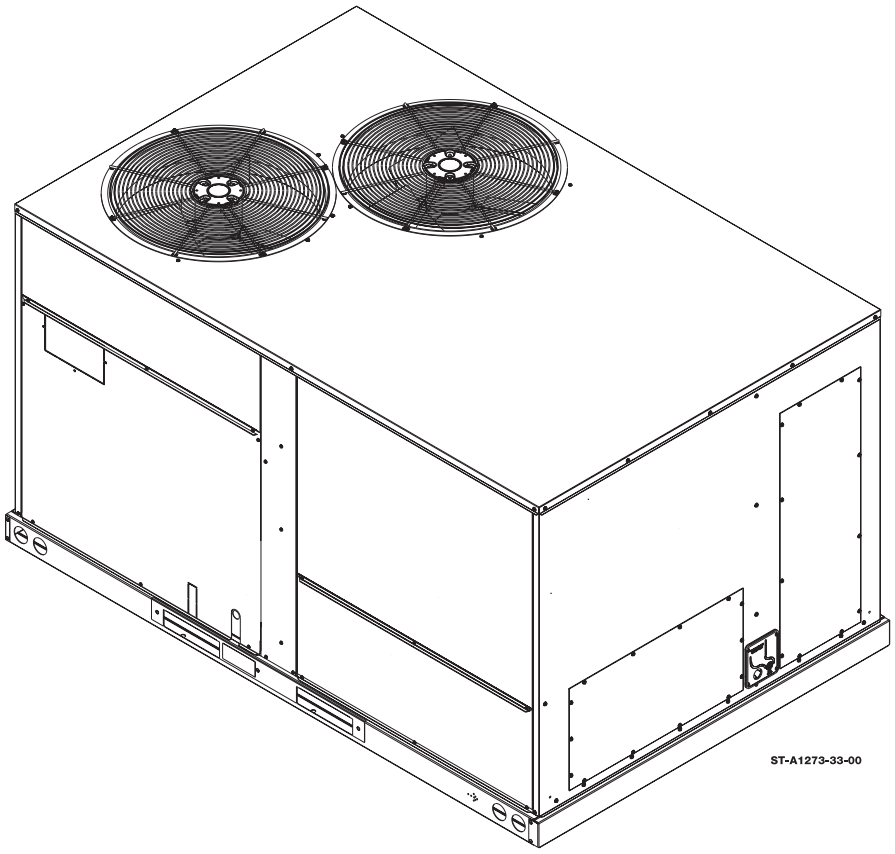
INSTALLATION INSTRUCTIONS

PACKAGE HEAT PUMPS FEATURING INDUSTRY STANDARD R410 REFRIGERANT R-410A

RHPD SERIES 7.5 & 10 TON [26.4 & 35.2 kW]
60 Hz MODELS



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

DO NOT DESTROY

PLEASE READ CAREFULLY AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

⚠WARNING

THESE INSTRUCTIONS ARE INTENDED AS AN AID TO QUALIFIED, LICENSED SERVICE PERSONNEL FOR PROPER INSTALLATION, ADJUSTMENT AND OPERATION OF THIS UNIT. READ THESE INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING INSTALLATION OR OPERATION. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN IMPROPER INSTALLATION, ADJUSTMENT, SERVICE OR MAINTENANCE POSSIBLY RESULTING IN FIRE, ELECTRICAL SHOCK, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

c UL us LISTED

Accredited by the RvA
ABS Quality Evaluations, Inc. Management System Certification
ANAB ACCREDITED
ISO 9001:2015
Certificate Number: 30164

AHRI CERTIFIED®
www.ahridirectory.org
Unitary Large AC
AHRI Standard 340/360
Certification applies only when the complete system is listed with AHRI.

[ ] Designates metric conversions

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⚠ NOTICE

BREAK-IN PERIOD

PRIOR TO AGENCY TESTING, RUN THE COMPRESSOR FOR 16 HOURS AT 115ºF OUTDOOR AMBIENT TEMPERATURE AND 80º DRY BULB/75º WET BULB INDOOR AMBIENT TEMPERATURE.

⚠ NOTICE

EFFICIENCY TESTING NOTICE

FOR PURPOSES OF VERIFYING OR TESTING EFFICIENCY RATINGS, THE TEST PROCEDURE IN TITLE 10 PART 431 APPENDIX A TO SUBPART F (UNIFORM TEST METHOD FOR MEASURING THE ENERGY CONSUMPTION OF SMALL, LARGE, AND VERY LARGE COMMERCIAL PACKAGE AIR CONDITIONING AND HEATING EQUIPMENT), AND THE CLARIFYING PROVISIONS PROVIDED IN THE AHRI OPERATIONS MANUALS FOR UNITARY LARGE EQUIPMENT 340/360, 365 THAT WERE APPLICABLE AT THE DATE OF MANUFACTURE SHOULD BE USED FOR TEST SET UP AND PERFORMANCE.

I. SAFETY INFORMATION

⚠ WARNING

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

⚠ WARNING

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

⚠ CAUTION

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

⚠ WARNING

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

⚠ WARNING

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

⚠ WARNING

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

II. INTRODUCTION

⚠ WARNING

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

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

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

III. CHECKING PRODUCT RECEIVED

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

IV. EQUIPMENT PROTECTION FROM THE ENVIRONMENT

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

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

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

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

⚠ WARNING

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

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

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

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

V. SPECIFICATIONS

A. GENERAL

The Packaged Heat Pump is available without auxiliary heat or with 15, 20, 30 or 40 kW electric heat. Cooling and heating capacities of 7½, and 10 nominal tons are available. Units are convertible from horizontal supply and return to bottom supply and return by relocation of supply and return air access panels. See cover installation detail.

The units are weatherized for mounting outside of the building.

The information on the rating plate is in compliance with the FTC and DOE rating for single phase units. The following information is for three phase units which **are not** covered under the DOE certification program.

1. The efficiency rating of this unit is a product thermal efficiency rating determined under continuous operating conditions independent of any installed system.

B. MAJOR COMPONENTS

The unit includes a hermetically-sealed refrigerating system (consisting of a compressor, condenser coil, evaporator coil biflow thermal expansion valve, reversing valve), a circulation air blower, a condenser fan, and all necessary internal electrical wiring. The cooling system of these units is factory-evacuated, charged and performance tested. Refrigerant amount and type are indicated on rating plate.

C. R-410A REFRIGERANT

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

1. Specification of R-410A:

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

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

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

2. Quick Reference Guide For R-410A

- R-410A refrigerant operates at approximately 60% higher pressure (1.6 times) than R-22. Ensure that servicing equipment is designed to operate with R-410A.
- R-410A refrigerant cylinders are pink.
- R-410A, as with other HFC's is only compatible with POE oils.
- Vacuum pumps will not remove moisture from POE oil.
- R-410A systems are to be charged with liquid refrigerants.

Prior to March 1999, R-410A refrigerant cylinders had a dip tube. These cylinders should be kept upright for equipment charging. Post March 1999 cylinders do not have a dip tube and should be inverted to ensure liquid charging of the equipment.

- Do not install a suction line filter drier in the liquid line.
- A liquid line filter drier is standard on every unit.
- Desiccant (drying agent) must be compatible for POE oils and R-410A.

3. Thermostatic Expansion Valve (TXV)

The Bi-Flow TXV is specifically designed to operate with R-410A heat pumps. **Replacement of the TXV should only be made with the factory specified bi-flow R-410A valve. Do not use an R-22 TXV.**

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

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

Manifold Hoses:
-Service Pressure Rating of 800 PSIG

Recovery Cylinders:
-400 PSIG Pressure Rating
-Dept. of Transportation 4BA400 or BW400

⚠ CAUTION

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

FIGURE 1
UNIT DIMENSIONS AND ACCESS LOCATIONS

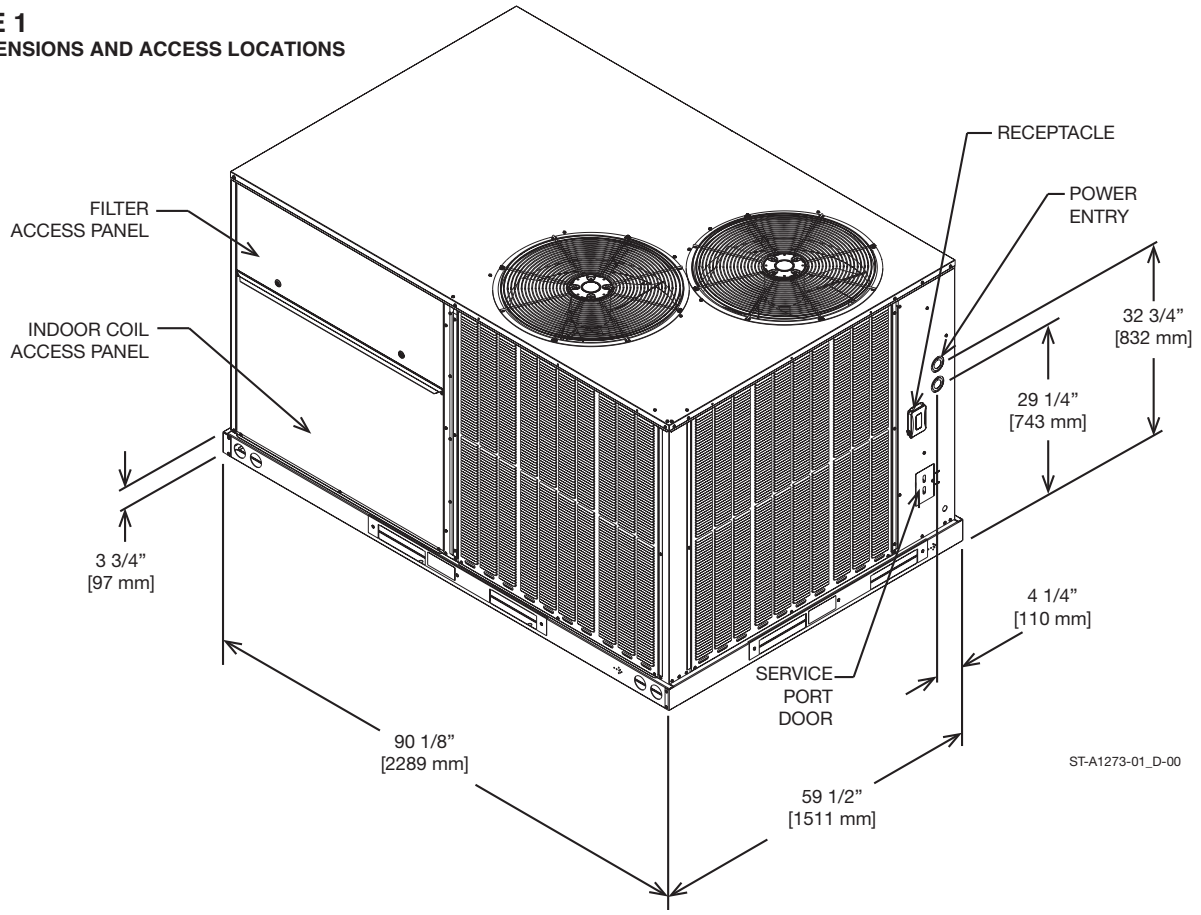


FIGURE 2
UNIT DIMENSIONS

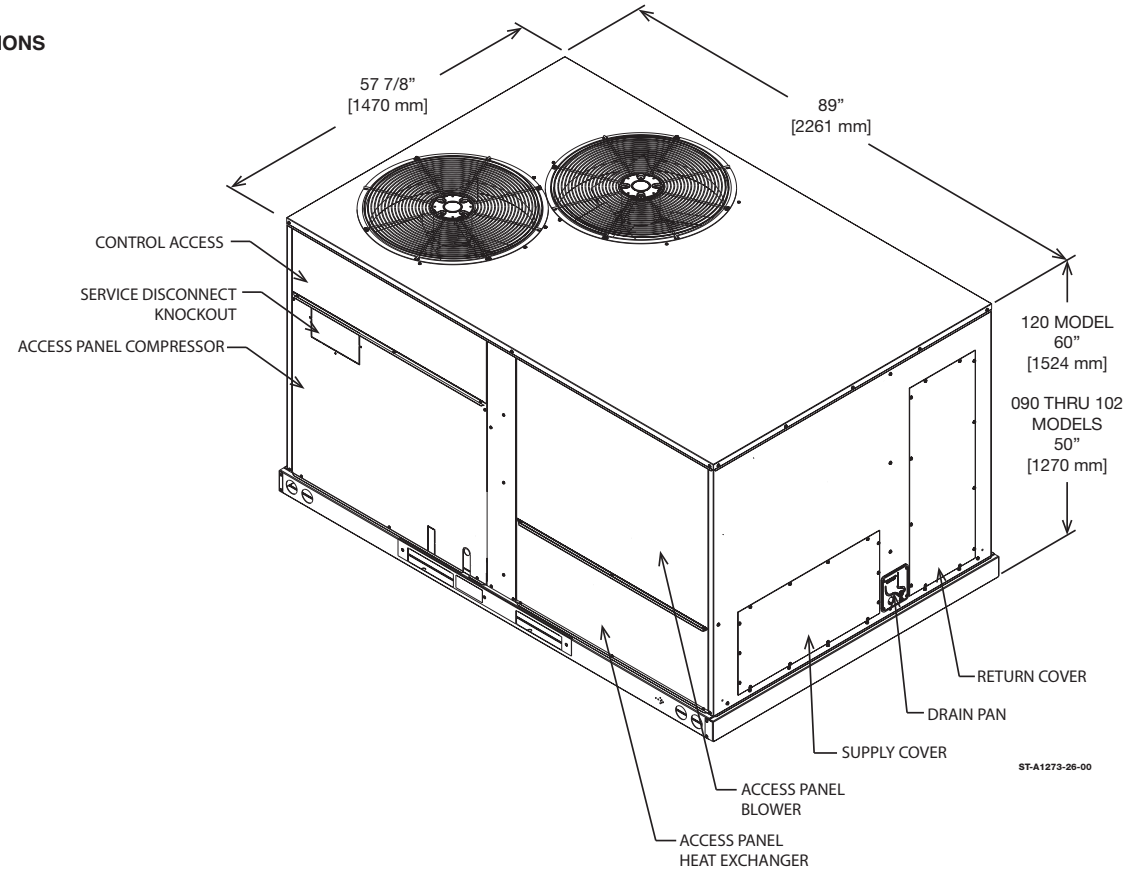


FIGURE 3
BOTTOM VIEW

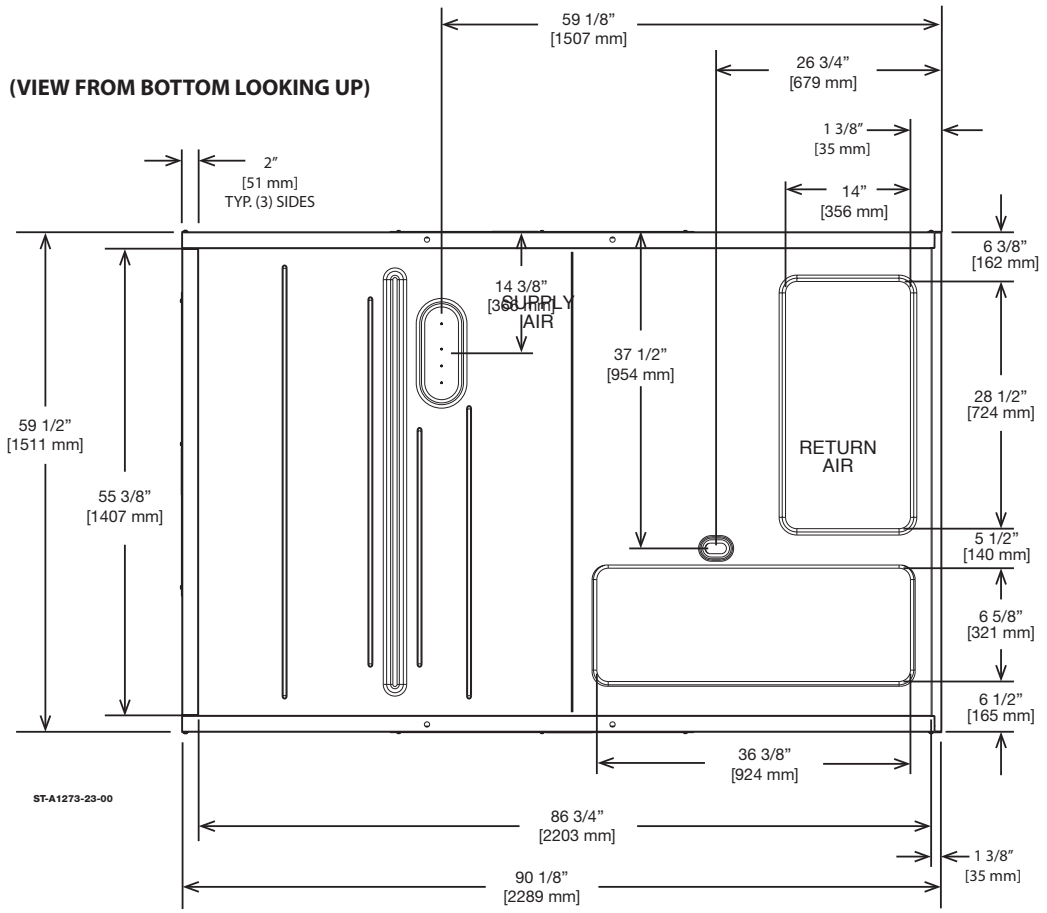
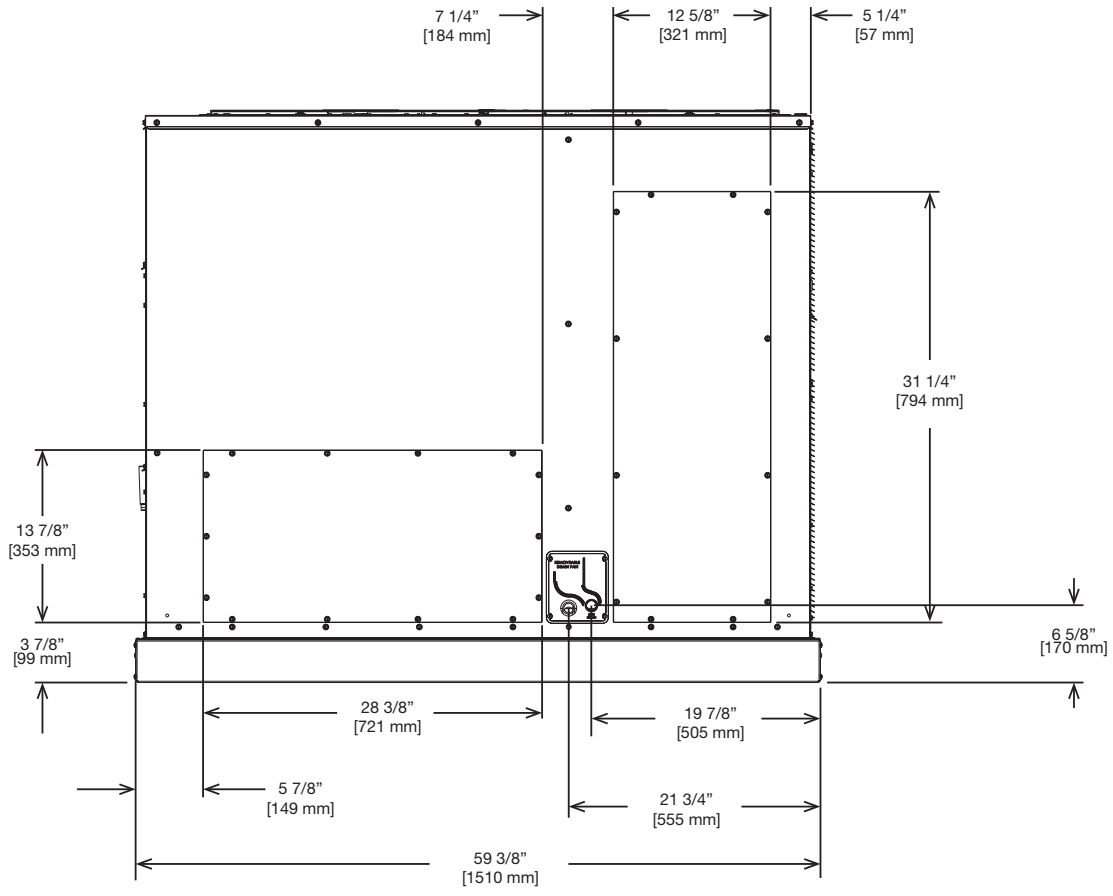


FIGURE 4
REAR VIEW



GENERAL DATA

Model -HPDZR Series	090ACA	090ACB	090ACC	090ADA
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]
AHRI Net Cooling Capacity Btu [kW]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]
Net Sensible Capacity Btu [kW]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]
Net Latent Capacity Btu [kW]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	7.55	7.55	7.55	7.55
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]
System Power KW / COP	6.84/3.3	6.84/3.3	6.84/3.3	6.84/3.3
Low Temp. Btuh [kW] Rating	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]
System Power KW / COP	6.44/2.25	6.44/2.25	6.44/2.25	6.44/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1 [25.4]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	2	3	3	2
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	179 [5075]	179 [5075]	179 [5075]	179 [5075]
Weights				
Net Weight lbs. [kg]	775 [352]	775 [352]	786 [357]	775 [352]
Ship Weight lbs. [kg]	814 [369]	814 [369]	825 [374]	814 [369]

NOTES:

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

GENERAL DATA

Model -HPDZR Series	090ADB	090ADC	090AYA	090AYB
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]
AHRI Net Cooling Capacity Btu [kW]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]
Net Sensible Capacity Btu [kW]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]
Net Latent Capacity Btu [kW]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	7.55	7.55	7.55	7.55
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]
System Power KW / COP	6.84/3.3	6.84/3.3	6.84/3.3	6.84/3.3
Low Temp. Btuh [kW] Rating	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]
System Power KW / COP	6.44/2.25	6.44/2.25	6.44/2.25	6.44/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1 [25.4]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	3	3	2	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	179 [5075]	179 [5075]	179 [5075]	179 [5075]
Weights				
Net Weight lbs. [kg]	775 [352]	775 [352]	775 [352]	785 [356]
Ship Weight lbs. [kg]	814 [369]	814 [369]	814 [369]	824 [374]

NOTES:

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

GENERAL DATA

Model -HPDZR Series	090AYC	102ACA	102ACB	102ACC
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	89,000 [26.08]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3000/3030 [1416/1430]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]
AHRI Net Cooling Capacity Btu [kW]	86,000 [25.2]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
Net Sensible Capacity Btu [kW]	62,800 [18.4]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]
Net Latent Capacity Btu [kW]	23,200 [6.8]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	7.55	8.47	8.47	8.47
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	84,000 [24.6]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
System Power KW / COP	6.84/3.3	7.99/3.3	7.99/3.3	7.99/3.3
Low Temp. Btuh [kW] Rating	48,000 [14.06]	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]
System Power KW / COP	6.44/2.25	7.54/2.25	7.54/2.25	7.54/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	22.8 [2.12]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	3	2	3	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	179 [5075]	197 [5585]	197 [5585]	197 [5585]
Weights				
Net Weight lbs. [kg]	786 [357]	811 [368]	811 [368]	822 [373]
Ship Weight lbs. [kg]	825 [374]	850 [386]	850 [386]	861 [391]

NOTES:

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

GENERAL DATA

Model -HPDZR Series	102ADA	102ADB	102ADC	102AYA
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]
AHRI Net Cooling Capacity Btu [kW]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
Net Sensible Capacity Btu [kW]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]
Net Latent Capacity Btu [kW]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	8.47	8.47	8.47	8.47
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
System Power KW / COP	7.99/3.3	7.99/3.3	7.99/3.3	7.99/3.3
Low Temp. Btuh [kW] Rating	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]
System Power KW / COP	7.54/2.25	7.54/2.25	7.54/2.25	7.54/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	2	3	3	2
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	197 [5585]	197 [5585]	197 [5585]	197 [5585]
Weights				
Net Weight lbs. [kg]	811 [368]	821 [372]	822 [373]	811 [368]
Ship Weight lbs. [kg]	850 [386]	860 [390]	861 [391]	850 [386]

NOTES:

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

GENERAL DATA

Model -HPDZR Series	102AYB	102AYC	120ACA	120ACB
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	101,000 [29.59]	101,000 [29.59]	119,000 [34.87]	119,000 [34.87]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	4000/4060 [1888/1916]	4000/4060 [1888/1916]
AHRI Net Cooling Capacity Btu [kW]	98,000 [28.71]	98,000 [28.71]	114,000 [33.4]	114,000 [33.4]
Net Sensible Capacity Btu [kW]	71,000 [20.8]	71,000 [20.8]	82,800 [24.26]	82,800 [24.26]
Net Latent Capacity Btu [kW]	27,000 [7.91]	27,000 [7.91]	31,200 [9.14]	31,200 [9.14]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	8.47	8.47	10.13	10.13
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	98,000 [28.71]	98,000 [28.71]	112,000 [32.8]	112,000 [32.8]
System Power KW / COP	7.99/3.3	7.99/3.3	9.03/3.3	9.03/3.3
Low Temp. Btuh [kW] Rating	60,000 [17.58]	60,000 [17.58]	68,000 [20.0]	68,000 [20.0]
System Power KW / COP	7.54/2.25	7.54/2.25	8.3/2.25	8.3/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	22.4 [2.08]	22.4 [2.08]	28.8 [2.68]	28.8 [2.68]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	13.2 [1.23]	13.2 [1.23]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	3	3	2	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]
Refrigerant Charge Oz. [g]	197 [5585]	197 [5585]	214.4 [6078.14]	214.4 [6078.14]
Weights				
Net Weight lbs. [kg]	821 [372]	822 [373]	863 [391]	863 [391]
Ship Weight lbs. [kg]	860 [390]	861 [391]	902 [409]	902 [409]

NOTES:

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

GENERAL DATA

Model -HPDZR Series	120ACC	120ADA	120ADB	120ADC
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]
AHRI Net Cooling Capacity Btu [kW]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]
Net Sensible Capacity Btu [kW]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]
Net Latent Capacity Btu [kW]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	10.13	10.13	10.13	10.13
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]
System Power KW / COP	9.03/3.3	9.03/3.3	9.03/3.3	9.03/3.3
Low Temp. Btuh [kW] Rating	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]
System Power KW / COP	8.3/2.25	8.3/2.25	8.3/2.25	8.3/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	3	2	3	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]
Refrigerant Charge Oz. [g]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]
Weights				
Net Weight lbs. [kg]	874 [396]	863 [391]	863 [391]	874 [396]
Ship Weight lbs. [kg]	913 [414]	902 [409]	902 [409]	913 [414]

NOTES:

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

GENERAL DATA

Model -HPDZR Series	120AYA	120AYB	120AYC	
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]	
EER/SEER2	11/NA	11/NA	11/NA	
Nominal CFM/AHRI Rated CFM [L/s]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	
AHRI Net Cooling Capacity Btu [kW]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]	
Net Sensible Capacity Btu [kW]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]	
Net Latent Capacity Btu [kW]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]	
IEER3	12.2	12.2	12.2	
Net System Power kW	10.13	10.13	10.13	
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]	
System Power KW / COP	9.03/3.3	9.03/3.3	9.03/3.3	
Low Temp. Btuh [kW] Rating	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]	
System Power KW / COP	8.3/2.25	8.3/2.25	8.3/2.25	
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	
Outdoor Sound Rating (dB)5	88	88	88	
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	
Tube Type	MicroChannel	MicroChannel	MicroChannel	
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	
Face Area sq. ft. [sq. m]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]	
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	
Refrigerant Control	TX Valves	TX Valves	TX Valves	
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	
Tube Type	MicroChannel	MicroChannel	MicroChannel	
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	
Face Area sq. ft. [sq. m]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]	
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	
Refrigerant Control	TX Valves	TX Valves	TX Valves	
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	
Outdoor Fan - Type	Propeller	Propeller	Propeller	
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	
Motor RPM	1075	1075	1075	
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	
No. Speeds	Single	Single	Single	
No. Motors	1	1	1	
Motor HP	2	3	3	
Motor RPM	1725	1725	1725	
Motor Frame Size	56	56	56	
Filter - Type	Disposable	Disposable	Disposable	
Furnished	Yes	Yes	Yes	
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	
Refrigerant Charge Oz. [g]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]	
Weights				
Net Weight lbs. [kg]	863 [391]	873 [396]	874 [396]	
Ship Weight lbs. [kg]	902 [409]	912 [414]	913 [414]	

NOTES:

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

GENERAL DATA

Model -HPDZS Series	090ACA	090ACB	090ACC	090ACF
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]
AHRI Net Cooling Capacity Btu [kW]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]
Net Sensible Capacity Btu [kW]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]
Net Latent Capacity Btu [kW]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	7.55	7.55	7.55	7.55
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]
System Power KW / COP	6.84/3.3	6.84/3.3	6.84/3.3	6.84/3.3
Low Temp. Btuh [kW] Rating	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]
System Power KW / COP	6.44/2.25	6.44/2.25	6.44/2.25	6.44/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1 [25.4]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	2	3	3	2
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	179 [5075]	179 [5075]	179 [5075]	179 [5075]
Weights				
Net Weight lbs. [kg]	775 [352]	785 [356]	786 [357]	775 [352]
Ship Weight lbs. [kg]	814 [369]	824 [374]	825 [374]	814 [369]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	090ACG	090ACH	090ADA	090ADB
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]
AHRI Net Cooling Capacity Btu [kW]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]
Net Sensible Capacity Btu [kW]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]
Net Latent Capacity Btu [kW]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	7.55	7.55	7.55	7.55
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]
System Power KW / COP	6.84/3.3	6.84/3.3	6.84/3.3	6.84/3.3
Low Temp. Btuh [kW] Rating	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]
System Power KW / COP	6.44/2.25	6.44/2.25	6.44/2.25	6.44/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1 [25.4]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	3	3	2	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	179 [5075]	179 [5075]	179 [5075]	179 [5075]
Weights				
Net Weight lbs. [kg]	785 [356]	786 [357]	775 [352]	785 [356]
Ship Weight lbs. [kg]	824 [374]	825 [374]	814 [369]	824 [374]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	090ADC	090ADF	090ADG	090ADH
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]
AHRI Net Cooling Capacity Btu [kW]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]
Net Sensible Capacity Btu [kW]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]
Net Latent Capacity Btu [kW]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	7.55	7.55	7.55	7.55
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]
System Power KW / COP	6.84/3.3	6.84/3.3	6.84/3.3	6.84/3.3
Low Temp. Btuh [kW] Rating	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]
System Power KW / COP	6.44/2.25	6.44/2.25	6.44/2.25	6.44/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1 [25.4]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	3	2	3	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	179 [5075]	179 [5075]	179 [5075]	179 [5075]
Weights				
Net Weight lbs. [kg]	786 [357]	775 [352]	785 [356]	786 [357]
Ship Weight lbs. [kg]	825 [374]	814 [369]	824 [374]	825 [374]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	090AYA	090AYB	090AYC	090AYF
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]
AHRI Net Cooling Capacity Btu [kW]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]
Net Sensible Capacity Btu [kW]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]
Net Latent Capacity Btu [kW]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	7.55	7.55	7.55	7.55
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]
System Power KW / COP	6.84/3.3	6.84/3.3	6.84/3.3	6.84/3.3
Low Temp. Btuh [kW] Rating	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]
System Power KW / COP	6.44/2.25	6.44/2.25	6.44/2.25	6.44/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1 [25.4]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	2	3	3	2
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	179 [5075]	179 [5075]	179 [5075]	179 [5075]
Weights				
Net Weight lbs. [kg]	775 [352]	785 [356]	786 [357]	775 [352]
Ship Weight lbs. [kg]	814 [369]	824 [374]	825 [374]	814 [369]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	090AYG	090AYH	102ACA	102ACB
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	89,000 [26.08]	89,000 [26.08]	101,000 [29.59]	101,000 [29.59]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3400/3345 [1604/1579]	3400/3345 [1604/1579]
AHRI Net Cooling Capacity Btu [kW]	86,000 [25.2]	86,000 [25.2]	98,000 [28.71]	98,000 [28.71]
Net Sensible Capacity Btu [kW]	62,800 [18.4]	62,800 [18.4]	71,000 [20.8]	71,000 [20.8]
Net Latent Capacity Btu [kW]	23,200 [6.8]	23,200 [6.8]	27,000 [7.91]	27,000 [7.91]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	7.55	7.55	8.47	8.47
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	84,000 [24.6]	84,000 [24.6]	98,000 [28.71]	98,000 [28.71]
System Power KW / COP	6.84/3.3	6.84/3.3	7.99/3.3	7.99/3.3
Low Temp. Btuh [kW] Rating	48,000 [14.06]	48,000 [14.06]	60,000 [17.58]	60,000 [17.58]
System Power KW / COP	6.44/2.25	6.44/2.25	7.54/2.25	7.54/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1 [25.4]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	22.8 [2.12]	22.8 [2.12]	22.4 [2.08]	22.4 [2.08]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	3	3	2	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	179 [5075]	179 [5075]	197 [5585]	197 [5585]
Weights				
Net Weight lbs. [kg]	785 [356]	786 [357]	811 [368]	821 [372]
Ship Weight lbs. [kg]	824 [374]	825 [374]	850 [386]	860 [390]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	102ACC	102ACF	102ACG	102ACH
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]
AHRI Net Cooling Capacity Btu [kW]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
Net Sensible Capacity Btu [kW]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]
Net Latent Capacity Btu [kW]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	8.47	8.47	8.47	8.47
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
System Power KW / COP	7.99/3.3	7.99/3.3	7.99/3.3	7.99/3.3
Low Temp. Btuh [kW] Rating	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]
System Power KW / COP	7.54/2.25	7.54/2.25	7.54/2.25	7.54/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	3	2	3	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	197 [5585]	197 [5585]	197 [5585]	197 [5585]
Weights				
Net Weight lbs. [kg]	822 [373]	811 [368]	821 [372]	822 [373]
Ship Weight lbs. [kg]	861 [391]	850 [386]	860 [390]	861 [391]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	102ADA	102ADB	102ADC	102ADF
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]
AHRI Net Cooling Capacity Btu [kW]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
Net Sensible Capacity Btu [kW]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]
Net Latent Capacity Btu [kW]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	8.47	8.47	8.47	8.47
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
System Power KW / COP	7.99/3.3	7.99/3.3	7.99/3.3	7.99/3.3
Low Temp. Btuh [kW] Rating	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]
System Power KW / COP	7.54/2.25	7.54/2.25	7.54/2.25	7.54/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	2	3	3	2
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	197 [5585]	197 [5585]	197 [5585]	197 [5585]
Weights				
Net Weight lbs. [kg]	811 [368]	821 [372]	822 [373]	811 [368]
Ship Weight lbs. [kg]	850 [386]	860 [390]	861 [391]	850 [386]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	102ADG	102ADH	102AYA	102AYB
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]
AHRI Net Cooling Capacity Btu [kW]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
Net Sensible Capacity Btu [kW]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]
Net Latent Capacity Btu [kW]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	8.47	8.47	8.47	8.47
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
System Power KW / COP	7.99/3.3	7.99/3.3	7.99/3.3	7.99/3.3
Low Temp. Btuh [kW] Rating	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]
System Power KW / COP	7.54/2.25	7.54/2.25	7.54/2.25	7.54/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	3	3	2	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	197 [5585]	197 [5585]	197 [5585]	197 [5585]
Weights				
Net Weight lbs. [kg]	821 [372]	822 [373]	811 [368]	821 [372]
Ship Weight lbs. [kg]	860 [390]	861 [391]	850 [386]	860 [390]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	102AYC	102AYF	102AYG	102AYH
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]
AHRI Net Cooling Capacity Btu [kW]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
Net Sensible Capacity Btu [kW]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]
Net Latent Capacity Btu [kW]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	8.47	8.47	8.47	8.47
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
System Power KW / COP	7.99/3.3	7.99/3.3	7.99/3.3	7.99/3.3
Low Temp. Btuh [kW] Rating	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]
System Power KW / COP	7.54/2.25	7.54/2.25	7.54/2.25	7.54/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	3	2	3	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	197 [5585]	197 [5585]	197 [5585]	197 [5585]
Weights				
Net Weight lbs. [kg]	822 [373]	811 [368]	821 [372]	822 [373]
Ship Weight lbs. [kg]	861 [391]	850 [386]	860 [390]	861 [391]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	120ACA	120ACB	120ACC	120ACF
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]
AHRI Net Cooling Capacity Btu [kW]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]
Net Sensible Capacity Btu [kW]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]
Net Latent Capacity Btu [kW]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	10.13	10.13	10.13	10.13
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]
System Power KW / COP	9.03/3.3	9.03/3.3	9.03/3.3	9.03/3.3
Low Temp. Btuh [kW] Rating	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]
System Power KW / COP	8.3/2.25	8.3/2.25	8.3/2.25	8.3/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	2	3	3	2
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]
Refrigerant Charge Oz. [g]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]
Weights				
Net Weight lbs. [kg]	863 [391]	873 [396]	874 [396]	863 [391]
Ship Weight lbs. [kg]	902 [409]	912 [414]	913 [414]	902 [409]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	120ACG	120ACH	120ADA	120ADB
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]
AHRI Net Cooling Capacity Btu [kW]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]
Net Sensible Capacity Btu [kW]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]
Net Latent Capacity Btu [kW]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	10.13	10.13	10.13	10.13
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]
System Power KW / COP	9.03/3.3	9.03/3.3	9.03/3.3	9.03/3.3
Low Temp. Btuh [kW] Rating	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]
System Power KW / COP	8.3/2.25	8.3/2.25	8.3/2.25	8.3/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	3	3	2	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]
Refrigerant Charge Oz. [g]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]
Weights				
Net Weight lbs. [kg]	873 [396]	874 [396]	863 [391]	873 [396]
Ship Weight lbs. [kg]	912 [414]	913 [414]	902 [409]	912 [414]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	120ADC	120ADF	120ADG	120ADH
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]
AHRI Net Cooling Capacity Btu [kW]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]
Net Sensible Capacity Btu [kW]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]
Net Latent Capacity Btu [kW]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	10.13	10.13	10.13	10.13
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]
System Power KW / COP	9.03/3.3	9.03/3.3	9.03/3.3	9.03/3.3
Low Temp. Btuh [kW] Rating	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]
System Power KW / COP	8.3/2.25	8.3/2.25	8.3/2.25	8.3/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	0.26 [6.6]
Face Area sq. ft. [sq. m]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	3	2	3	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]
Refrigerant Charge Oz. [g]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]
Weights				
Net Weight lbs. [kg]	874 [396]	863 [391]	873 [396]	874 [396]
Ship Weight lbs. [kg]	913 [414]	902 [409]	912 [414]	913 [414]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	120AYA	120AYB	120AYC	120AYF
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]
AHRI Net Cooling Capacity Btu [kW]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]
Net Sensible Capacity Btu [kW]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]
Net Latent Capacity Btu [kW]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]
IEER3	12.2	12.2	12.2	12.2
Net System Power kW	10.13	10.13	10.13	10.13
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]
System Power KW / COP	9.03/3.3	9.03/3.3	9.03/3.3	9.03/3.3
Low Temp. Btuh [kW] Rating	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]
System Power KW / COP	8.3/2.25	8.3/2.25	8.3/2.25	8.3/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single	Single	Single
No. Motors	1	1	1	1
Motor HP	2	3	3	2
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]
Refrigerant Charge Oz. [g]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]
Weights				
Net Weight lbs. [kg]	863 [391]	873 [396]	874 [396]	863 [391]
Ship Weight lbs. [kg]	902 [409]	912 [414]	913 [414]	902 [409]

NOTES:

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

GENERAL DATA

Model -HPDZS Series	120AYG	120AYH
Cooling Performance1		Continued ->
Gross Cooling Capacity Btu [kW]	119,000 [34.87]	119,000 [34.87]
EER/SEER2	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	4000/4060 [1888/1916]	4000/4060 [1888/1916]
AHRI Net Cooling Capacity Btu [kW]	114,000 [33.4]	114,000 [33.4]
Net Sensible Capacity Btu [kW]	82,800 [24.26]	82,800 [24.26]
Net Latent Capacity Btu [kW]	31,200 [9.14]	31,200 [9.14]
IEER3	12.2	12.2
Net System Power kW	10.13	10.13
Heating Performance (Heat Pumps)		
High Temp. Btuh [kW] Rating	112,000 [32.8]	112,000 [32.8]
System Power KW / COP	9.03/3.3	9.03/3.3
Low Temp. Btuh [kW] Rating	68,000 [20.0]	68,000 [20.0]
System Power KW / COP	8.3/2.25	8.3/2.25
Compressor		
No./Type	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88
Outdoor Coil - Fin Type	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	28.8 [2.68]	28.8 [2.68]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	13.2 [1.23]	13.2 [1.23]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Single	Single
No. Motors	1	1
Motor HP	3	3
Motor RPM	1725	1725
Motor Frame Size	56	56
Filter - Type	Disposable	Disposable
Furnished	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]
Refrigerant Charge Oz. [g]	214.4 [6078.14]	214.4 [6078.14]
Weights		
Net Weight lbs. [kg]	873 [396]	874 [396]
Ship Weight lbs. [kg]	912 [414]	913 [414]

NOTES:

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

GENERAL DATA

Model -HPDZT Series	090ACF	090ACG	090ACH	090ADF
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]
AHRI Net Cooling Capacity Btu [kW]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]
Net Sensible Capacity Btu [kW]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]
Net Latent Capacity Btu [kW]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]
IEER3	14.1	14.1	14.1	14.1
Net System Power kW	7.55	7.55	7.55	7.55
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]
System Power KW / COP	6.84/3.4	6.84/3.4	6.84/3.4	6.84/3.4
Low Temp. Btuh [kW] Rating	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]
System Power KW / COP	6.44/2.25	6.44/2.25	6.44/2.25	6.44/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1 [25.4]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Dual	Dual	Dual	Dual
No. Motors	1	1	1	1
Motor HP	2	3	3	2
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	179 [5075]	179 [5075]	179 [5075]	179 [5075]
Weights				
Net Weight lbs. [kg]	775 [352]	785 [356]	786 [357]	775 [352]
Ship Weight lbs. [kg]	814 [369]	824 [374]	825 [374]	814 [369]

NOTES:

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

GENERAL DATA

Model -HPDZT Series	090ADG	090ADH	090AYF	090AYG
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]	89,000 [26.08]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]	3000/3030 [1416/1430]
AHRI Net Cooling Capacity Btu [kW]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]
Net Sensible Capacity Btu [kW]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]	62,800 [18.4]
Net Latent Capacity Btu [kW]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]	23,200 [6.8]
IEER3	14.1	14.1	14.1	14.1
Net System Power kW	7.55	7.55	7.55	7.55
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]	84,000 [24.6]
System Power KW / COP	6.84/3.4	6.84/3.4	6.84/3.4	6.84/3.4
Low Temp. Btuh [kW] Rating	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]	48,000 [14.06]
System Power KW / COP	6.44/2.25	6.44/2.25	6.44/2.25	6.44/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1 [25.4]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]	22.8 [2.12]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Dual	Dual	Dual	Dual
No. Motors	1	1	1	1
Motor HP	3	3	2	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	179 [5075]	179 [5075]	179 [5075]	179 [5075]
Weights				
Net Weight lbs. [kg]	785 [356]	786 [357]	775 [352]	785 [356]
Ship Weight lbs. [kg]	824 [374]	825 [374]	814 [369]	824 [374]

NOTES:

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

GENERAL DATA

Model -HPDZT Series	090AYH	102ACF	102ACG	102ACH
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	89,000 [26.08]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3000/3030 [1416/1430]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]
AHRI Net Cooling Capacity Btu [kW]	86,000 [25.2]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
Net Sensible Capacity Btu [kW]	62,800 [18.4]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]
Net Latent Capacity Btu [kW]	23,200 [6.8]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]
IEER3	14.1	14.1	14.1	14.1
Net System Power kW	7.55	8.47	8.47	8.47
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	84,000 [24.6]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
System Power KW / COP	6.84/3.4	7.99/3.4	7.99/3.4	7.99/3.4
Low Temp. Btuh [kW] Rating	48,000 [14.06]	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]
System Power KW / COP	6.44/2.25	7.54/2.25	7.54/2.25	7.54/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	22.8 [2.12]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Dual	Dual	Dual	Dual
No. Motors	1	1	1	1
Motor HP	3	2	3	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	179 [5075]	197 [5585]	197 [5585]	197 [5585]
Weights				
Net Weight lbs. [kg]	786 [357]	811 [368]	821 [372]	822 [373]
Ship Weight lbs. [kg]	825 [374]	850 [386]	860 [390]	861 [391]

NOTES:

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

GENERAL DATA

Model -HPDZT Series	102ADF	102ADG	102ADH	102AYF
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]	101,000 [29.59]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	3400/3345 [1604/1579]
AHRI Net Cooling Capacity Btu [kW]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
Net Sensible Capacity Btu [kW]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]	71,000 [20.8]
Net Latent Capacity Btu [kW]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]
IEER3	14.1	14.1	14.1	14.1
Net System Power kW	8.47	8.47	8.47	8.47
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]	98,000 [28.71]
System Power KW / COP	7.99/3.4	7.99/3.4	7.99/3.4	7.99/3.4
Low Temp. Btuh [kW] Rating	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]
System Power KW / COP	7.54/2.25	7.54/2.25	7.54/2.25	7.54/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]	22.4 [2.08]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]	10.9 [1.01]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Dual	Dual	Dual	Dual
No. Motors	1	1	1	1
Motor HP	2	3	3	2
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]
Refrigerant Charge Oz. [g]	197 [5585]	197 [5585]	197 [5585]	197 [5585]
Weights				
Net Weight lbs. [kg]	811 [368]	821 [372]	822 [373]	811 [368]
Ship Weight lbs. [kg]	850 [386]	860 [390]	861 [391]	850 [386]

NOTES:

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

GENERAL DATA

Model -HPDZT Series	102AYG	102AYH	120ACF	120ACG
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	101,000 [29.59]	101,000 [29.59]	119,000 [34.87]	119,000 [34.87]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	3400/3345 [1604/1579]	3400/3345 [1604/1579]	4000/4060 [1888/1916]	4000/4060 [1888/1916]
AHRI Net Cooling Capacity Btu [kW]	98,000 [28.71]	98,000 [28.71]	114,000 [33.4]	114,000 [33.4]
Net Sensible Capacity Btu [kW]	71,000 [20.8]	71,000 [20.8]	82,800 [24.26]	82,800 [24.26]
Net Latent Capacity Btu [kW]	27,000 [7.91]	27,000 [7.91]	31,200 [9.14]	31,200 [9.14]
IEER3	14.1	14.1	14.1	14.1
Net System Power kW	8.47	8.47	10.13	10.13
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	98,000 [28.71]	98,000 [28.71]	112,000 [32.8]	112,000 [32.8]
System Power KW / COP	7.99/3.4	7.99/3.4	9.03/3.4	9.03/3.4
Low Temp. Btuh [kW] Rating	60,000 [17.58]	60,000 [17.58]	68,000 [20.0]	68,000 [20.0]
System Power KW / COP	7.54/2.25	7.54/2.25	8.3/2.25	8.3/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	22.4 [2.08]	22.4 [2.08]	28.8 [2.68]	28.8 [2.68]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	10.9 [1.01]	10.9 [1.01]	13.2 [1.23]	13.2 [1.23]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Dual	Dual	Dual	Dual
No. Motors	1	1	1	1
Motor HP	3	3	2	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]
Refrigerant Charge Oz. [g]	197 [5585]	197 [5585]	214.4 [6078.14]	214.4 [6078.14]
Weights				
Net Weight lbs. [kg]	821 [372]	822 [373]	863 [391]	873 [396]
Ship Weight lbs. [kg]	860 [390]	861 [391]	902 [409]	912 [414]

NOTES:

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

GENERAL DATA

Model -HPDZT Series	120ACH	120ADF	120ADG	120ADH
Cooling Performance1				Continued ->
Gross Cooling Capacity Btu [kW]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]
EER/SEER2	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]
AHRI Net Cooling Capacity Btu [kW]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]
Net Sensible Capacity Btu [kW]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]
Net Latent Capacity Btu [kW]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]
IEER3	14.1	14.1	14.1	14.1
Net System Power kW	10.13	10.13	10.13	10.13
Heating Performance (Heat Pumps)				
High Temp. Btuh [kW] Rating	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]
System Power KW / COP	9.03/3.4	9.03/3.4	9.03/3.4	9.03/3.4
Low Temp. Btuh [kW] Rating	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]
System Power KW / COP	8.3/2.25	8.3/2.25	8.3/2.25	8.3/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Dual	Dual	Dual	Dual
No. Motors	1	1	1	1
Motor HP	3	2	3	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	56	56	56
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]
Refrigerant Charge Oz. [g]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]
Weights				
Net Weight lbs. [kg]	874 [396]	863 [391]	873 [396]	874 [396]
Ship Weight lbs. [kg]	913 [414]	902 [409]	912 [414]	913 [414]

NOTES:

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

GENERAL DATA

Model -HPDZT Series	120AYF	120AYG	120AYH
Cooling Performance1			
Gross Cooling Capacity Btu [kW]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]
EER/SEER2	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	4000/4060 [1888/1916]	4000/4060 [1888/1916]	4000/4060 [1888/1916]
AHRI Net Cooling Capacity Btu [kW]	114,000 [33.4]	114,000 [33.4]	114,000 [33.4]
Net Sensible Capacity Btu [kW]	82,800 [24.26]	82,800 [24.26]	82,800 [24.26]
Net Latent Capacity Btu [kW]	31,200 [9.14]	31,200 [9.14]	31,200 [9.14]
IEER3	14.1	14.1	14.1
Net System Power kW	10.13	10.13	10.13
Heating Performance (Heat Pumps)			
High Temp. Btuh [kW] Rating	112,000 [32.8]	112,000 [32.8]	112,000 [32.8]
System Power KW / COP	9.03/3.4	9.03/3.4	9.03/3.4
Low Temp. Btuh [kW] Rating	68,000 [20.0]	68,000 [20.0]	68,000 [20.0]
System Power KW / COP	8.3/2.25	8.3/2.25	8.3/2.25
Compressor			
No./Type	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)5	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	28.8 [2.68]	28.8 [2.68]	28.8 [2.68]
Rows / FPI [FPcm]	1 / 16 [6]	1 / 16 [6]	1 / 16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	13.2 [1.23]	13.2 [1.23]	13.2 [1.23]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1
CFM [L/s]	8000 [3775]	8000 [3775]	8000 [3775]
No. Motors/HP	2 at 1/2 HP	2 at 1/2 HP	2 at 1/2 HP
Motor RPM	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds	Dual	Dual	Dual
No. Motors	1	1	1
Motor HP	2	3	3
Motor RPM	1725	1725	1725
Motor Frame Size	56	56	56
Filter - Type	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]	(4)2x25x20 [51x635x508]
Refrigerant Charge Oz. [g]	214.4 [6078.14]	214.4 [6078.14]	214.4 [6078.14]
Weights			
Net Weight lbs. [kg]	863 [391]	873 [396]	874 [396]
Ship Weight lbs. [kg]	902 [409]	912 [414]	913 [414]

NOTES:

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

ELECTRICAL DATA - HPDZR SERIES										
		090ACA	**090ACB**	**090ACC**	**090ADA**	**090ADB**	**090ADC**	**090AYA**	**090AYB**	**090AYC**
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506	517-632	517-632	517-632
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	Hz	60	60	60	60	60	60	60	60	60
	Minimum Circuit Ampacity	43	46	46	23	24	24	17	18	18
	Minimum Overcurrent Protection Device Size	50	60	60	30	30	30	20	25	25
	Maximum Overcurrent Protection Device Size	60	70	70	35	35	35	25	25	25
Compressor Motor	No.	1	1	1	1	1	1	1	1	1
	Volts	200/230	200/230	200/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	7	7	7	7	7	7	7	7	7
	Amps (RLA), Comp. 1	25	25	25	12.8	12.8	12.8	9.6	9.6	9.6
	Amps (LRA), Comp. 1	164	164	164	100	100	100	78	78	78
	HP, Compressor 2									
	Amps (RLA), Comp. 2									
	Amps (LRA), Comp. 2									
Condenser Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	2.5	2.5	2.5	1.5	1.5	1.5	1.1	1.1	1.1
	Amps (LRA, each)	5.6	5.6	5.6	3.1	3.1	3.1	1.5	1.5	1.5
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	HP	2	3	3	2	3	3	2	3	3
	Amps (FLA, each)	6.6	9.1	9.1	3.2	4.6	4.6	2.5	3.5	3.5
	Amps (LRA, each)	45	74.5	74.5	45	38.1	38.1	19	20	20

ELECTRICAL DATA - HPDZR SERIES

		102ACA	102ACB	102ACC	102ADA	102ADB	102ADC	102AYA	102AYB	102AYC
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506	517-632	517-632	517-632
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	Hz	60	60	60	60	60	60	60	60	60
	Minimum Circuit Ampacity	47	49	52	23	24	25	17	18	18
	Minimum Overcurrent Protection Device Size	60	60	60	30	30	30	20	25	25
	Maximum Overcurrent Protection Device Size	70	70	70	35	35	35	25	25	25
Compressor Motor	No.	1	1	1	1	1	1	1	1	1
	Volts	200/230	200/230	200/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2
	Amps (RLA), Comp. 1	27.6	27.6	27.6	12.8	12.8	12.8	9.6	9.6	9.6
	Amps (LRA), Comp. 1	191	191	191	100	100	100	78	78	78
	HP, Compressor 2									
	Amps (RLA), Comp. 2									
	Amps (LRA), Comp. 2									
Condenser Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	2.5	2.5	2.5	1.5	1.5	1.5	1.1	1.1	1.1
	Amps (LRA, each)	5.6	5.6	5.6	3.1	3.1	3.1	1.5	1.5	1.5
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	HP	2	3	3	2	3	3	2	3	3
	Amps (FLA, each)	7	8.9	12	3.5	4.4	6	2.5	3.5	3.5
	Amps (LRA, each)	45	74.5	74.5	22.5	38.1	38.1	19	20	20

ELECTRICAL DATA - HPDZR SERIES										
		120ACA	**120ACB**	**120ACC**	**120ADA**	**120ADB**	**120ADC**	**120AYA**	**120AYB**	**120AYC**
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506	517-632	517-632	517-632
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	Hz	60	60	60	60	60	60	60	60	60
	Minimum Circuit Ampacity	48	51	53	26	27	28	19	20	20
	Minimum Overcurrent Protection Device Size	60	60	60	30	35	35	25	25	25
	Maximum Overcurrent Protection Device Size	70	70	80	40	40	40	30	30	30
Compressor Motor	No.	1	1	1	1	1	1	1	1	1
	Volts	200/230	200/230	200/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	10	10	10	10	10	10	10	10	10
	Amps (RLA), Comp. 1	28.2	28.2	28.2	14.7	14.7	14.7	11.3	11.3	11.3
	Amps (LRA), Comp. 1	239	239	239	130	130	130	93.7	93.7	93.7
	HP, Compressor 2									
	Amps (RLA), Comp. 2									
	Amps (LRA), Comp. 2									
Condenser Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	2.5	2.5	2.5	1.5	1.5	1.5	1.1	1.1	1.1
	Amps (LRA, each)	5.6	5.6	5.6	3.1	3.1	3.1	1.5	1.5	1.5
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	HP	2	3	3	2	3	3	2	3	3
	Amps (FLA, each)	7.7	10.4	12	3.9	5.2	6	2.5	3.5	3.5
	Amps (LRA, each)	45	74.5	74.5	23.5	38.1	38.1	19	20	20

ELECTRICAL DATA - HPDZS SERIES

		090ACA	090ACB	090ACC	090ACF	090ACG	090ACH	090ADA	090ADB	090ADC
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	187-253	187-253	187-253	414-506	414-506	414-506
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	460	460	460
	Phase	3	3	3	3	3	3	3	3	3
	Hz	60	60	60	60	60	60	60	60	60
	Minimum Circuit Ampacity	44	46	46	44	46	46	19	20	20
	Minimum Overcurrent Protection Device Size	50	60	60	50	60	60	25	25	25
	Maximum Overcurrent Protection Device Size	60	70	70	60	70	70	25	25	25
Compressor Motor	No.	1	1	1	1	1	1	1	1	1
	Volts	200/230	200/230	200/230	200/230	200/230	200/230	460	460	460
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	7	7	7	7	7	7	7	7	7
	Amps (RLA), Comp. 1	25.3	25.3	25.3	25.3	25.3	25.3	9.6	9.6	9.6
	Amps (LRA), Comp. 1	184	184	184	184	184	184	84	84	84
	HP, Compressor 2									
	Amps (RLA), Comp. 2									
	Amps (LRA), Comp. 2									
Condenser Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	460	460	460
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	2.5	2.5	2.5	2.5	2.5	2.5	1.5	1.5	1.5
	Amps (LRA, each)	5.6	5.6	5.6	5.6	5.6	5.6	3.1	3.1	3.1
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	460	460	460
	Phase	3	3	3	3	3	3	3	3	3
	HP	2	3	3	2	3	3	2	3	3
	Amps (FLA, each)	6.6	9.1	9.1	6.6	9.1	9.1	3.2	4.6	4.6
	Amps (LRA, each)	45	74.5	74.5	45	74.5	74.5	45	38.1	38.1

ELECTRICAL DATA - HPDZS SERIES

		090ADF	090ADG	090ADH	090AYA	090AYB	090AYC	090AYF	090AYG	090AYH
Unit Information	Unit Operating Voltage Range	414-506	414-506	414-506	517-632	517-632	517-632	517-632	517-632	517-632
	Volts	460	460	460	575	575	575	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	Hz	60	60	60	60	60	60	60	60	60
	Minimum Circuit Ampacity	19	20	20	14	15	15	14	15	15
	Minimum Overcurrent Protection Device Size	25	25	25	20	20	20	20	20	20
	Maximum Overcurrent Protection Device Size	25	25	25	20	20	20	20	20	20
Compressor Motor	No.	1	1	1	1	1	1	1	1	1
	Volts	460	460	460	575	575	575	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	7	7	7	7	7	7	7	7	7
	Amps (RLA), Comp. 1	9.6	9.6	9.6	7.1	7.1	7.1	7.1	7.1	7.1
	Amps (LRA), Comp. 1	84	84	84	60	60	60	60	60	60
	HP, Compressor 2									
	Amps (RLA), Comp. 2									
	Amps (LRA), Comp. 2									
Condenser Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	460	460	460	575	575	575	575	575	575
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	1.5	1.5	1.5	1.1	1.1	1.1	1.1	1.1	1.1
	Amps (LRA, each)	3.1	3.1	3.1	1.5	1.5	1.5	1.5	1.5	1.5
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	460	460	460	575	575	575	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	HP	2	3	3	2	3	3	2	3	3
	Amps (FLA, each)	3.2	4.6	4.6	2.5	3.5	3.5	2.5	3.5	3.5
	Amps (LRA, each)	45	38.1	38.1	19	20	20	19	20	20

ELECTRICAL DATA - HPDZS SERIES

		102ACA	102ACB	102ACC	102ACF	102ACG	102ACH	102ADA	102ADB	102ADC
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	187-253	187-253	187-253	414-506	414-506	414-506
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	460	460	460
	Phase	3	3	3	3	3	3	3	3	3
	Hz	60	60	60	60	60	60	60	60	60
	Minimum Circuit Ampacity	48	50	53	48	50	53	23	24	25
	Minimum Overcurrent Protection Device Size	60	60	70	60	60	70	30	30	30
	Maximum Overcurrent Protection Device Size	70	70	80	70	70	80	30	35	35
Compressor Motor	No.	1	1	1	1	1	1	1	1	1
	Volts	200/230	200/230	200/230	200/230	200/230	200/230	460	460	460
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2
	Amps (RLA), Comp. 1	28.8	28.8	28.8	28.8	28.8	28.8	12.5	12.5	12.5
	Amps (LRA), Comp. 1	191	191	191	191	191	191	100	100	100
	HP, Compressor 2									
	Amps (RLA), Comp. 2									
	Amps (LRA), Comp. 2									
Condenser Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	460	460	460
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	2.5	2.5	2.5	2.5	2.5	2.5	1.5	1.5	1.5
	Amps (LRA, each)	5.6	5.6	5.6	5.6	5.6	5.6	3.1	3.1	3.1
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	460	460	460
	Phase	3	3	3	3	3	3	3	3	3
	HP	2	3	3	2	3	3	2	3	3
	Amps (FLA, each)	7	8.9	12	7	8.9	12	3.5	4.4	6
	Amps (LRA, each)	45	74.5	74.5	45	74.5	74.5	22.5	38.1	38.1

ELECTRICAL DATA - HPDZS SERIES										
		102ADF	**102ADG**	**102ADH**	**102AYA**	**102AYB**	**102AYC**	**102AYF**	**102AYG**	**102AYH**
Unit Information	Unit Operating Voltage Range	414-506	414-506	414-506	517-632	517-632	517-632	517-632	517-632	517-632
	Volts	460	460	460	575	575	575	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	Hz	60	60	60	60	60	60	60	60	60
	Minimum Circuit Ampacity	23	24	25	17	18	18	17	18	18
	Minimum Overcurrent Protection Device Size	30	30	30	20	25	25	20	25	25
	Maximum Overcurrent Protection Device Size	30	35	35	25	25	25	25	25	25
Compressor Motor	No.	1	1	1	1	1	1	1	1	1
	Volts	460	460	460	575	575	575	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2
	Amps (RLA), Comp. 1	12.5	12.5	12.5	9.7	9.7	9.7	9.7	9.7	9.7
	Amps (LRA), Comp. 1	100	100	100	70	70	70	70	70	70
	HP, Compressor 2									
	Amps (RLA), Comp. 2									
	Amps (LRA), Comp. 2									
Condenser Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	460	460	460	575	575	575	575	575	575
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	1.5	1.5	1.5	1.1	1.1	1.1	1.1	1.1	1.1
	Amps (LRA, each)	3.1	3.1	3.1	1.5	1.5	1.5	1.5	1.5	1.5
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	460	460	460	575	575	575	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	HP	2	3	3	2	3	3	2	3	3
	Amps (FLA, each)	3.5	4.4	6	2.5	3.5	3.5	2.5	3.5	3.5
	Amps (LRA, each)	22.5	38.1	38.1	19	20	20	19	20	20

ELECTRICAL DATA - HPDZS SERIES

		120ACA	120ACB	120ACC	120ACF	120ACG	120ACH	120ADA	120ADB	120ADC
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	187-253	187-253	187-253	414-506	414-506	414-506
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	460	460	460
	Phase	3	3	3	3	3	3	3	3	3
	Hz	60	60	60	60	60	60	60	60	60
	Minimum Circuit Ampacity	54	57	58	54	57	58	26	27	28
	Minimum Overcurrent Protection Device Size	70	70	70	70	70	70	30	35	35
	Maximum Overcurrent Protection Device Size	80	80	90	80	80	90	40	40	40
Compressor Motor	No.	1	1	1	1	1	1	1	1	1
	Volts	200/230	200/230	200/230	200/230	200/230	200/230	460	460	460
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	10	10	10	10	10	10	10	10	10
	Amps (RLA), Comp. 1	32.6	32.6	32.6	32.6	32.6	32.6	14.8	14.8	14.8
	Amps (LRA), Comp. 1	240	240	240	240	240	240	130	130	130
	HP, Compressor 2									
	Amps (RLA), Comp. 2									
	Amps (LRA), Comp. 2									
Condenser Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	460	460	460
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	2.5	2.5	2.5	2.5	2.5	2.5	1.5	1.5	1.5
	Amps (LRA, each)	5.6	5.6	5.6	5.6	5.6	5.6	3.1	3.1	3.1
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	208/230	208/230	208/230	460	460	460
	Phase	3	3	3	3	3	3	3	3	3
	HP	2	3	3	2	3	3	2	3	3
	Amps (FLA, each)	7.7	10.4	12	7.7	10.4	12	3.9	5.2	6
	Amps (LRA, each)	45	74.5	74.5	45	74.5	74.5	23.5	38.1	38.1

ELECTRICAL DATA - HPDZS SERIES

		120ADF	120ADG	120ADH	120AYA	120AYB	120AYC	120AYF	120AYG	120AYH
Unit Information	Unit Operating Voltage Range	414-506	414-506	414-506	517-632	517-632	517-632	517-632	517-632	517-632
	Volts	460	460	460	575	575	575	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	Hz	60	60	60	60	60	60	60	60	60
	Minimum Circuit Ampacity	26	27	28	19	20	20	19	20	20
	Minimum Overcurrent Protection Device Size	30	35	35	25	25	25	25	25	25
	Maximum Overcurrent Protection Device Size	40	40	40	25	30	30	25	30	30
Compressor Motor	No.	1	1	1	1	1	1	1	1	1
	Volts	460	460	460	575	575	575	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	10	10	10	10	10	10	10	10	10
	Amps (RLA), Comp. 1	14.8	14.8	14.8	11.1	11.1	11.1	11.1	11.1	11.1
	Amps (LRA), Comp. 1	130	130	130	93.7	93.7	93.7	93.7	93.7	93.7
	HP, Compressor 2									
	Amps (RLA), Comp. 2									
	Amps (LRA), Comp. 2									
Condenser Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	460	460	460	575	575	575	575	575	575
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	1.5	1.5	1.5	1.1	1.1	1.1	1.1	1.1	1.1
	Amps (LRA, each)	3.1	3.1	3.1	1.5	1.5	1.5	1.5	1.5	1.5
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	460	460	460	575	575	575	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	HP	2	3	3	2	3	3	2	3	3
	Amps (FLA, each)	3.9	5.2	6	2.5	3.5	3.5	2.5	3.5	3.5
	Amps (LRA, each)	23.5	38.1	38.1	19	20	20	19	20	20

ELECTRICAL DATA - HPDZT SERIES

		090ACF	090ACG	090ACH	090ADF	090ADG	090ADH	090AYF	090AYG	090AYH
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506	517-632	517-632	517-632
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	Hz	60	60	60	60	60	60	60	60	60
	Minimum Circuit Ampacity	44	46	46	19	20	20	14	15	15
	Minimum Overcurrent Protection Device Size	50	60	60	25	25	25	20	20	20
	Maximum Overcurrent Protection Device Size	60	70	70	25	25	25	20	20	20
Compressor Motor	No.	1	1	1	1	1	1	1	1	1
	Volts	200/230	200/230	200/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	7	7	7	7	7	7	7	7	7
	Amps (RLA), Comp. 1	25.3	25.3	25.3	9.6	9.6	9.6	7.1	7.1	7.1
	Amps (LRA), Comp. 1	184	184	184	84	84	84	60	60	60
	HP, Compressor 2									
	Amps (RLA), Comp. 2									
	Amps (LRA), Comp. 2									
Condenser Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	2.5	2.5	2.5	1.5	1.5	1.5	1.1	1.1	1.1
	Amps (LRA, each)	5.6	5.6	5.6	3.1	3.1	3.1	1.5	1.5	1.5
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	HP	2	3	3	2	3	3	2	3	3
	Amps (FLA, each)	6.6	9.1	9.1	3.2	4.6	4.6	2.5	3.5	3.5
	Amps (LRA, each)	45	74.5	74.5	45	38.1	38.1	19	20	20

ELECTRICAL DATA - HPDZT SERIES										
		102ACF	**102ACG**	**102ACH**	**102ADF**	**102ADG**	**102ADH**	**102AYF**	**102AYG**	**102AYH**
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506	517-632	517-632	517-632
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	Hz	60	60	60	60	60	60	60	60	60
	Minimum Circuit Ampacity	48	50	53	23	24	25	17	18	18
	Minimum Overcurrent Protection Device Size	60	60	70	30	30	30	20	25	25
	Maximum Overcurrent Protection Device Size	70	70	80	30	35	35	25	25	25
Compressor Motor	No.	1	1	1	1	1	1	1	1	1
	Volts	200/230	200/230	200/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2
	Amps (RLA), Comp. 1	28.8	28.8	28.8	12.5	12.5	12.5	9.7	9.7	9.7
	Amps (LRA), Comp. 1	191	191	191	100	100	100	70	70	70
	HP, Compressor 2									
	Amps (RLA), Comp. 2									
	Amps (LRA), Comp. 2									
Condenser Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	2.5	2.5	2.5	1.5	1.5	1.5	1.1	1.1	1.1
	Amps (LRA, each)	5.6	5.6	5.6	3.1	3.1	3.1	1.5	1.5	1.5
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	HP	2	3	3	2	3	3	2	3	3
	Amps (FLA, each)	7	8.9	12	3.5	4.4	6	2.5	3.5	3.5
	Amps (LRA, each)	45	74.5	74.5	22.5	38.1	38.1	19	20	20

ELECTRICAL DATA - HPDZT SERIES

		120ACF	120ACG	120ACH	120ADF	120ADG	120ADH	120AYF	120AYG	120AYH
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506	517-632	517-632	517-632
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	Hz	60	60	60	60	60	60	60	60	60
	Minimum Circuit Ampacity	54	57	58	26	27	28	19	20	20
	Minimum Overcurrent Protection Device Size	70	70	70	30	35	35	25	25	25
	Maximum Overcurrent Protection Device Size	80	80	90	40	40	40	25	30	30
Compressor Motor	No.	1	1	1	1	1	1	1	1	1
	Volts	200/230	200/230	200/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	10	10	10	10	10	10	10	10	10
	Amps (RLA), Comp. 1	32.6	32.6	32.6	14.8	14.8	14.8	11.1	11.1	11.1
	Amps (LRA), Comp. 1	240	240	240	130	130	130	93.7	93.7	93.7
	HP, Compressor 2									
	Amps (RLA), Comp. 2									
	Amps (LRA), Comp. 2									
Condenser Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	2.5	2.5	2.5	1.5	1.5	1.5	1.1	1.1	1.1
	Amps (LRA, each)	5.6	5.6	5.6	3.1	3.1	3.1	1.5	1.5	1.5
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460	575	575	575
	Phase	3	3	3	3	3	3	3	3	3
	HP	2	3	3	2	3	3	2	3	3
	Amps (FLA, each)	7.7	10.4	12	3.9	5.2	6	2.5	3.5	3.5
	Amps (LRA, each)	45	74.5	74.5	23.5	38.1	38.1	19	20	20

VI. INSTALLATION

A. GENERAL

1. PRE-INSTALLATION CHECK-POINTS

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

a. Structural strength of supporting members. (rooftop installation)
b. Clearances and provision for servicing.
c. Power supply and wiring.
d. Air duct connections.
e. Drain facilities and connections.
f. Location for minimum noise.

2. LOCATION

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

B. OUTSIDE SLAB INSTALLATION (Typical outdoor slab installations are shown in Figures 5 and 6.)

1. Select a location where external water drainage cannot collect around the unit.
2. Provide a level concrete slab extending 3" [76.2 mm] beyond all four sides of the unit. The slab should be sufficient above grade to prevent ground water from entering the unit. ***IMPORTANT:*** *To prevent transmission of noise or vibration, slab should not be connected to building structure.*
3. The location of the unit should be such as to provide proper access for inspection and servicing.
4. Locate unit where operating sounds will not disturb owner or neighbors.
5. Locate unit so roof runoff water does not pour directly on the unit. Provide gutter or other shielding at roof level. Do not locate unit in an area where excessive snow drifting may occur or accumulate.
6. It is essential that the unit be elevated above the base pad to allow for condensate drainage and possible refreezing of condensation. Provide a base pad which is slightly pitched away from the structure. Route condensate off base pad to an area which will not become slippery and result in personal injury.
7. Where snowfall is anticipated, the height of the unit above the ground level must be considered. Mount unit high enough to be above average area snowfall and to allow for proper condensate drainage.

C. CLEARANCES

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

1. Unit is design certified for application on combustible flooring with 0" minimum clearance.
2. See Figure 5 for illustration of minimum installation-service clearances.

FIGURE 5
PACKAGED HEAT PUMP
OUTSIDE SLAB INSTALLATION, BASEMENT OR CRAWL SPACE DISTRIBUTION SYSTEM

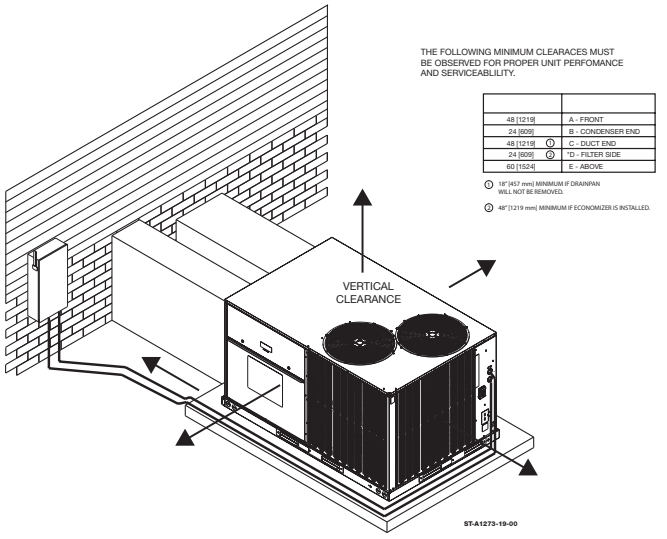
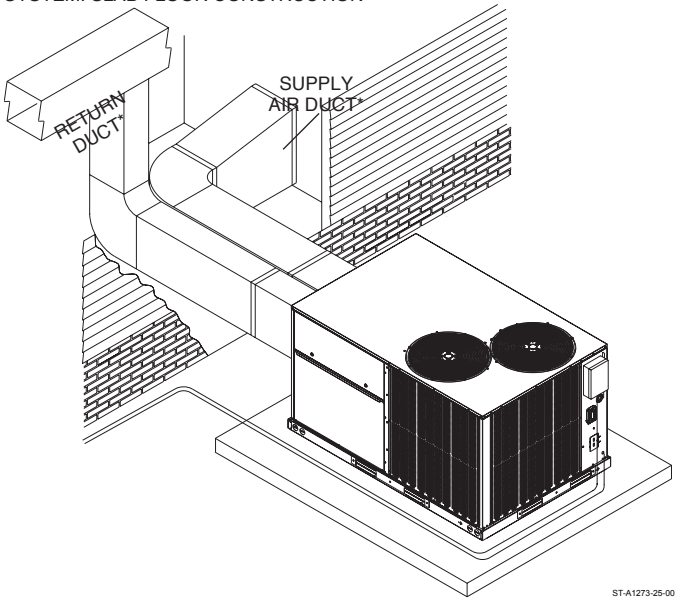


FIGURE 6
PACKAGED HEAT PUMP
OUTSIDE SLAB INSTALLATION, CLOSET DISTRIBUTION SYSTEM. SLAB FLOOR CONSTRUCTION

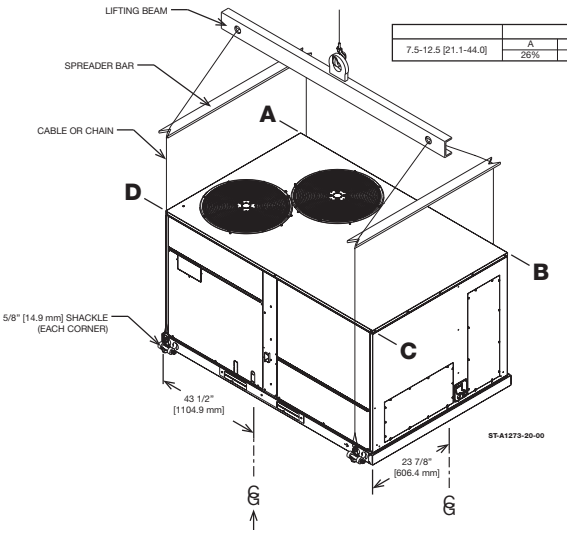


D. ROOFTOP INSTALLATION

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

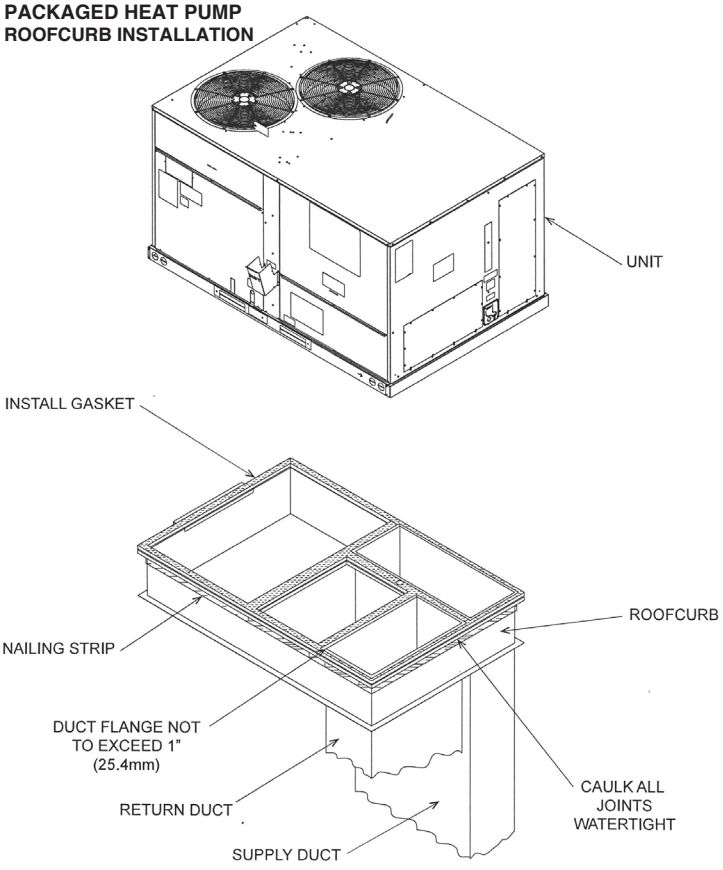
IMPORTANT: *If unit will not be put into service immediately, cover supply and return openings to prevent excessive condensation.*

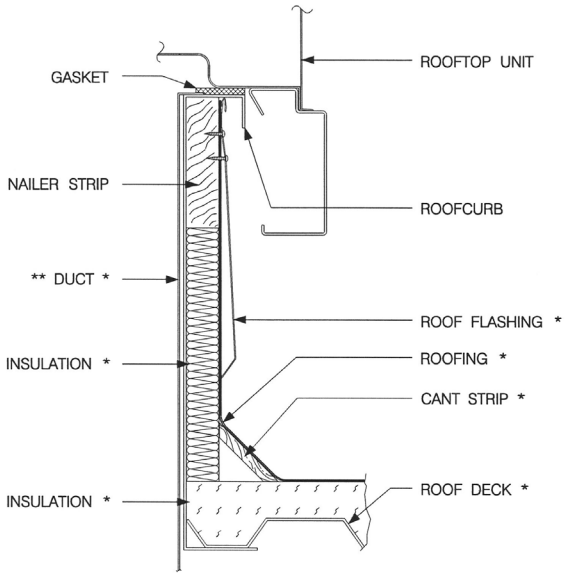
FIGURE 7
PACKAGED HEAT PUMP
RIGGING FOR LIFTING



	A	B	C	D
7.5-12.5 [21.1-44.0]	26%	34%	17%	23%

FIGURE 8
PACKAGED HEAT PUMP
ROOFCURB INSTALLATION



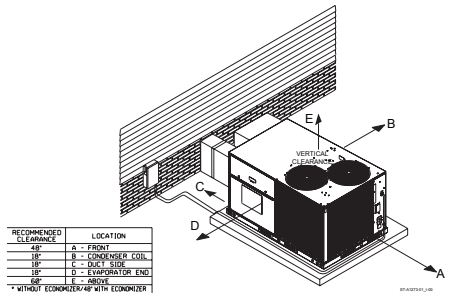


* BY CONTRACTOR

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

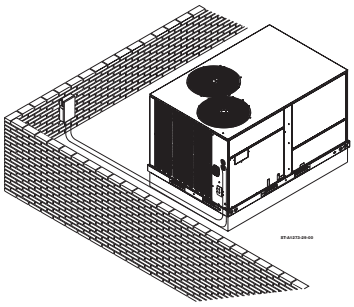
ST-A1273-01_N-00

FIGURE 9
PACKAGED HEAT PUMP
FLAT ROOFTOP INSTALLATION, ATTIC OR DROP CEILING DISTRIBUTION SYSTEM. MOUNTED ON ROOFCURB. CURB MUST BE LEVEL.



RECOMMENDED CLEARANCE	LOCATION
48"	A - FRONT
18"	B - CONDENSER COIL
18"	C - DUCT SIDE
18"	D - EVAPORATOR END
60"	E - ABOVE

* WITHOUT ECONOMIZER/48" WITH ECONOMIZER



VII. DUCTWORK

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

⚠WARNING

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

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

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

On ductwork exposed to outside air conditions of temperature and humidity, use a minimum of 2" [50.8 mm] of insulation and a vapor barrier. Distribution system in attic, furred space or crawl space should be insulated with at least 2" [50.8 mm] of insulation with vapor barrier. One-half to 1" [25.4 mm] thickness of insulation is usually sufficient for ductwork inside the air conditioned space.

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

When installing ductwork, consider the following items:

1. Noncombustible flexible connectors should be used between ductwork and unit to reduce noise and vibration transmission into the ductwork.
2. When auxiliary heaters are installed, use noncombustible flexible connectors and clearance to combustible material of 0" for the first 3 feet [0.91 m] of discharge duct. Clearance to unit top and side is 0".

VIII. FILTERS

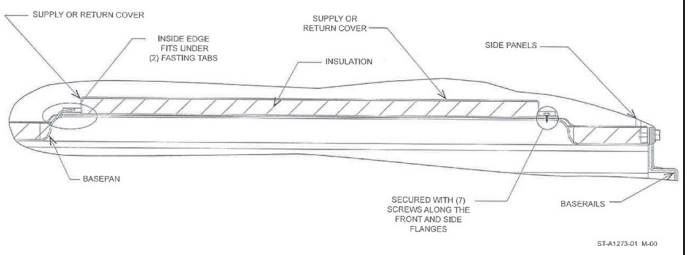
This unit is provided with 4 – 2" × 20" × 20" [51 mm × 508 mm × 508 mm] disposable filters. When replacing filters, ensure they are inserted fully to the back to prevent bypass.

IX. CONVERSION PROCEDURE

DOWNFLOW TO HORIZONTAL

1. Remove the screws and covers from the outside of the supply and return sections.
2. Install the covers over the bottom supply and return openings, painted side up inserting the leading flange under the bracket provided. Place the back flange to the top of the front bracket provided. See Figure 10.
3. Secure the return and supply cover to the front bracket with screws.

FIGURE 10
COVER GASKET DETAIL



X. CONDENSATE DRAIN

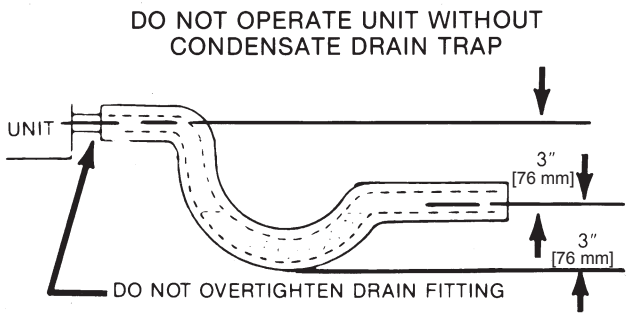
IMPORTANT: Install a condensate trap to ensure proper condensate drainage. See Figure 11.

The condensate drain pan has a threaded female 3.4" [19.1 mm] NPT (11.5 TPI) connection. Consult local codes or ordinances for specific requirements of condensate drain piping and disposal.

- To use the removable drain pan feature of this unit, some of the condensate line joints should assembled for easy removal and cleaning.
- Use a thin layer of Teflon tape or paste on drain pan connections and install only hand tight.
- Do not over tighten drain pan connections as damage to the drain pan may occur.

- Drain line MUST NOT block service access panels.
- Drain line must be no smaller than drain pan outlet and adequately sized to accommodate the condensate discharge from the unit.
- Drain line should slope away from unit a minimum of 1/8" per foot to ensure proper drainage.
- Drain line must be routed to an acceptable drain or outdoors in accordance with local codes.
- Do not connect condensate drain line to a closed sewer pipe.
- Drain line may need insulation or freeze protection in certain applications.

FIGURE 11
CONDENSATE DRAIN



XI. CONDENSATE DRAIN, OUTDOOR COIL

The outdoor coil during heating operation will sweat or run water off. The outdoor coil will also run water off during the defrost cycle. See Section VI, Installation, Page 48 for mounting precautions.

XII. ELECTRICAL WIRING

Field wiring must comply with the National Electrical Code (CEC in Canada) and local ordinances that may apply.

A. POWER WIRING

1. This unit incorporates dual point electrical connections for the unit and electric heat accessory. A single point wiring accessory kit is available for field installation.
2. It is important that proper electrical power is available to the unit. Voltage should not vary more than 10% from the values marked on the unit rating plate. Phase voltages must be balanced within 3%.
3. Install a branch circuit disconnect within sight of the unit. See Figure 17. Use the unit rating plate or RHPD Electrical Data to determine the required size.
4. The branch circuit wire must be sized in accordance with the National Electrical Code (C.E.C. in Canada) and local ordinances that may apply using the minimum circuit ampacity found on the unit rating plate.
5. Field-installed power wiring must be run through grounded rain-tight conduit attached to the unit power entry panel and connected as follows:

RXJJ-Series Heater Kit Installation Instructions

IMPORTANT: To ensure proper installation and operation, please read all instructions prior to assembly, installation, operation, maintenance, or repair of this product. After unpacking the heater kit, inspect all parts for damage prior to installation and start up.

INTRODUCTION

The information contained in these instructions has been prepared to assist in the proper installation and operation of the auxiliary electric heaters. Improper installation can result in unsatisfactory operation or dangerous conditions not covered by the unit warranty and may invalidate the Underwriters Laboratories listing.

CHECKING PRODUCT RECEIVED

Upon receiving the heater and any related accessories, inspect all items for shipping damage. Claims for damage should be filed immediately with the shipping company,

Check heater kit and accessory model numbers to determine that they are the correct series for the unit and are of the desired kW size and voltage.

APPLICATION

These auxiliary electric resistance heater kits are designed for installation in the discharge air compartment of the indoor blower. Improper usage can cause results which may be dangerous. Do not use heater kits other than those referenced on the unit rating plate and unit Installation Instructions.

OPERATION

The heater elements are energized through controllers operated by the 24V thermostat circuit in conjunction with the unit integrated electric furnace control board (IFC).

TOOLS NEEDED

The following tools can be helpful in installing the heater kits:

- Slotted screwdrivers and 5/16” nut driver.
- Some kits may require the use of Allen wrenches.
- Needle-nose pliers, large slip-joint pliers.
- Wire cutters and strippers

INDOOR BLOWER SPEED

Refer to the indoor blower airflow tables in the unit installations instructions to set the proper blower speed for your airflow CFM and external static pressure requirements.

WARNING! DISCONNECT ALL POWER BEFORE BEGINNING HEATER KIT INSTALLATION. FAILURE TO DO SO CAN RESULT IN SEVERE ELECTRICAL SHOCK OR DEATH.

ELECTRICAL WIRING

Field wiring must comply with applicable National, State, and Local electrical codes and ordinances.

POWER WIRING

If the unit has been in operation without an electric heater kit installed, it may be necessary to change the field installed power wiring. The added current of the electric heater kit may require larger gauge wiring than that required for the unit alone. Refer to the unit rating plate or installation instructions for the required supply circuit ampacity and overcurrent protection.

It is important that adequate electrical power is available to the unit and heater kit. Voltage should not vary more than 10% from that marked on the unit rating plate. Phase voltages must be balanced within 3%.

A properly size disconnect switch or switches shall be located within sight of the unit or as required by applicable National and Local codes.

Power wiring and ground conductor must be routed in rain-tight conduit.

Refer to the unit installation instructions, the illustrations in these instructions, and the unit wiring diagram for power entry, connection, and component locations.

HEATER KIT INSTALLATION

Dual Circuit Power Supply Wiring - (separate heater kit and unit power wiring)

1. Remove package unit blower and heater compartment access panel.
2. Remove unit control box and compressor access panels.
3. Install heater kit in opening under blower deck and secure with the four provided screws (**figure 16**).
4. Route heater power supply wiring from code-compliant disconnect, circuit breaker, or fuse box in rain tight conduit through lower knockout in unit corner post to knockout in outdoor section bulkhead. Label on bulkhead shows knockout location (**figure 12**).
5. Connect heater kit field power wiring to terminal block on heater kit.
6. Connect heater kit grounding conductor to ground lug on heater kit.
7. Connect heater kit control plug to receptacle in heater kit area.
8. Route unit power supply wiring from code-compliant disconnect, circuit breaker, or fuse box in rain tight conduit through upper knockout in unit corner post to opening in bottom of control box below unit contactor.
9. Connect unit field power supply wiring to unit contactor.
10. Connect unit grounding conductor to ground lug in unit control box.
11. Reinstall all access panel.
12. Verify proper unit operation.

Single-Point Unit Wiring - (unit and heater kit power supplied from a single circuit) requires optional **RXJX-**series single-point connection box kit.

KIT MODEL #	VOLTS	UNIT APPLICATION
RXJX-AC0605	C VOLTAGE 240V	ACD 090/102
RXJX-AC0805	C VOLTAGE 240V	ACD 120
RXJX-AD0605	D VOLTAGE 480/600V	ACD 090/102/120
RXJX-AC0805	C VOLTAGE 240V	HPD 090/102
RXJX-AD0405	D VOLTAGE 480/600V	HPD 090/102
RXJX-AC0909	C VOLTAGE 240V	ACD 150
RXJX-AD0609	D VOLTAGE 480/600V	ACD 150
RXJX-AC0909	C VOLTAGE 240V	HPD 120
RXJX-AD0409	D VOLTAGE 480/600V	HPD 120

1. Verify that you have the correct RXJX kit. Refer to above table.
2. Remove package unit blower and heater kit access panels.
3. Remove package unit control box and compressor access panels.
4. Install heater kit in opening under blower deck and secure to blower deck flange and unit base rail with the four screws provided (**figure 16**).
5. Install RXJX single-point connection box as described below.
    a. Remove and retain three screws in bulkhead (**figure 12**).
    b. Remove knockout from bulkhead blockoff (**figure 12**, label indicates location).
    c. Remove left side top and bottom panels from single-point box to allow access to bulkhead securement screws (**figure 13**).
    d. Position single-point box directly against blower bulkhead. Note that the flange on the bulkhead blockoff slides through the slot in the right side of the box (**figure 13**).
    e. Secure box to bulkhead with the three screws removed in step “5a” above.
    f. Secure box to unit base pan with two additional screws included with kit (**figure 13**).
    g. Remove concentric knock-out from left side bottom panel as required
    h. Reinstall left side top and bottom panels (**figures 14 & 15**).
    i. Install snap bushing through hole in single-point box and blower bulkhead (**figure 16**).
6. Route power supply wiring from code-compliant disconnect, circuit breaker, or fuse box in rain tight conduit through lower knockout in unit corner post to knockout in side of single-point connection box.
7. Connect power wiring to terminal block in single-point box.
8. Connect grounding conductor to ground lug in single-point box.
9. Connect unit power leads from fuse block to L1, L2, L3 on unit contactor in unit control box.
10. Connect heater kit wiring leads from terminal block in single-point kit through bulkhead opening to terminal block on heater kit.
11. Connect heater kit control plug to receptacle in heater kit area.
12. Reinstall all access panels.
13. Verify proper unit operation.

FIGURE 12

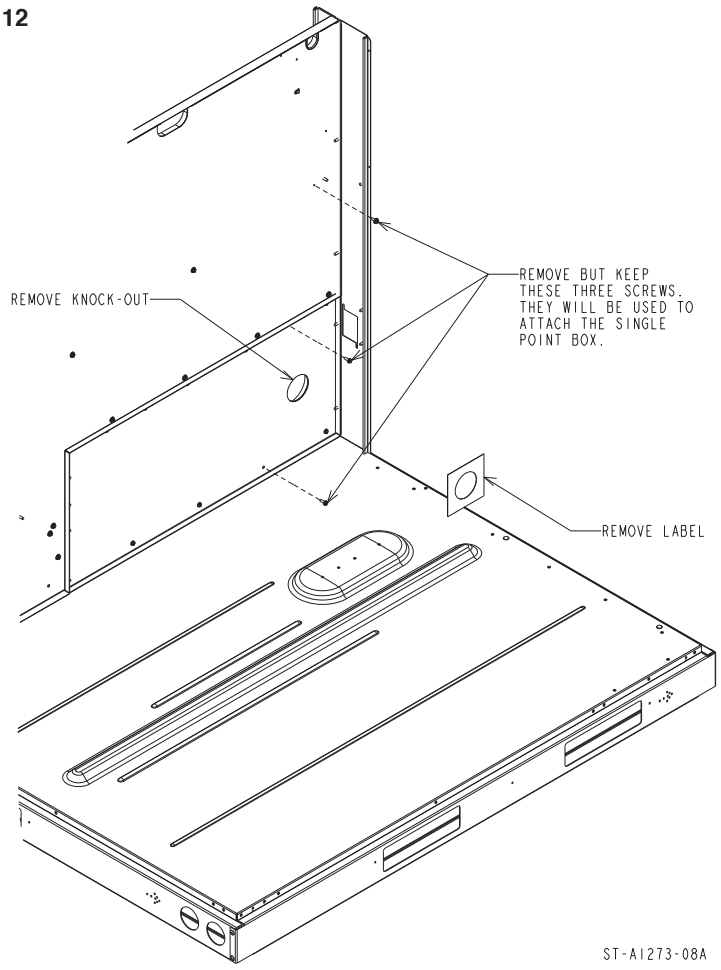


FIGURE 13

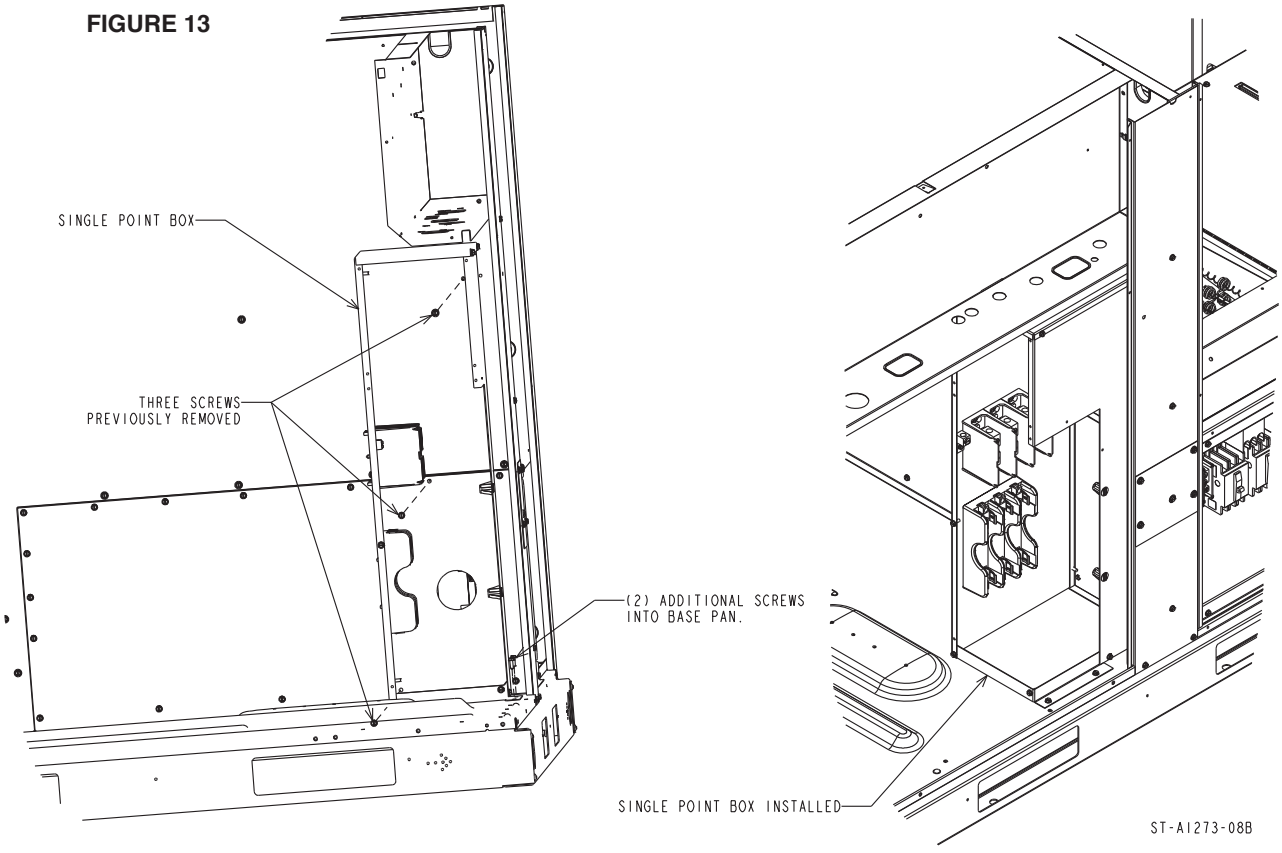


FIGURE 14

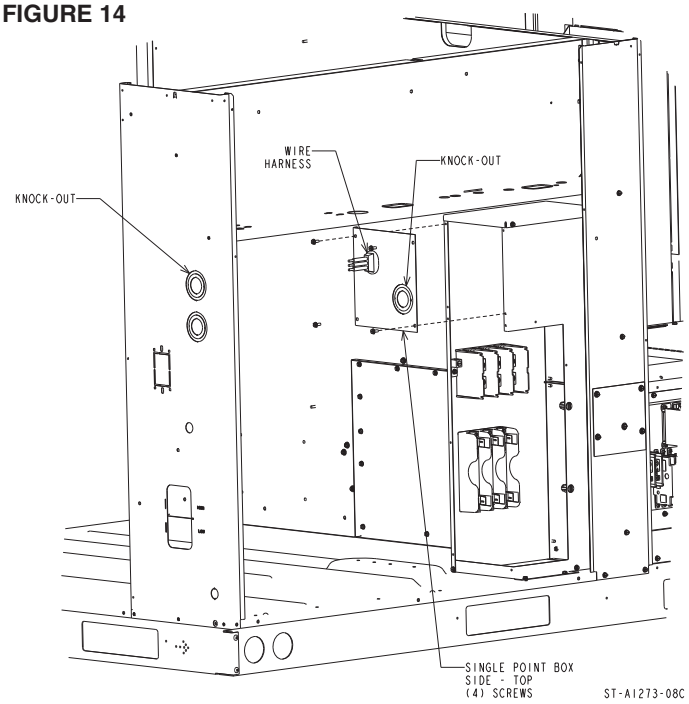


FIGURE 15

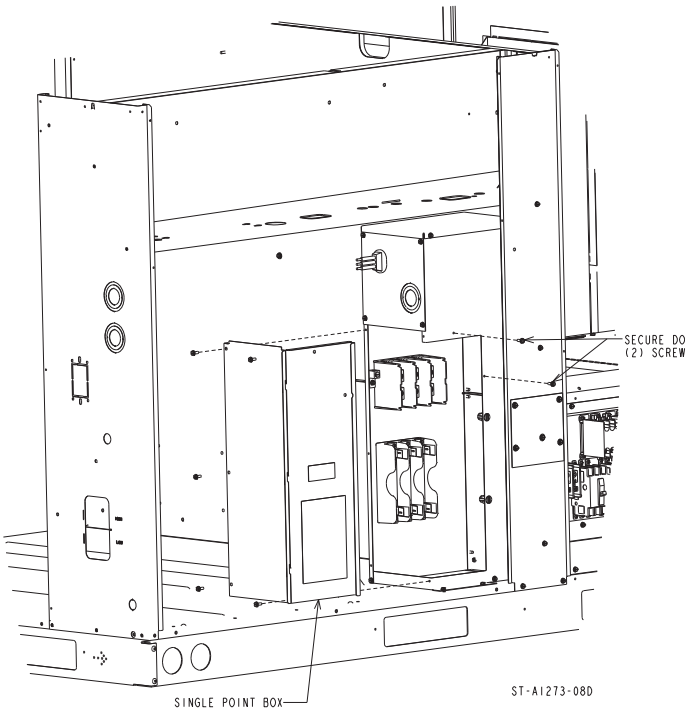


FIGURE 16

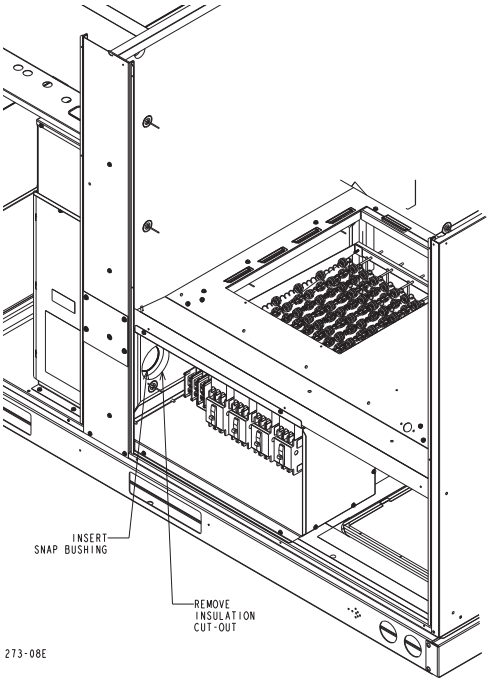
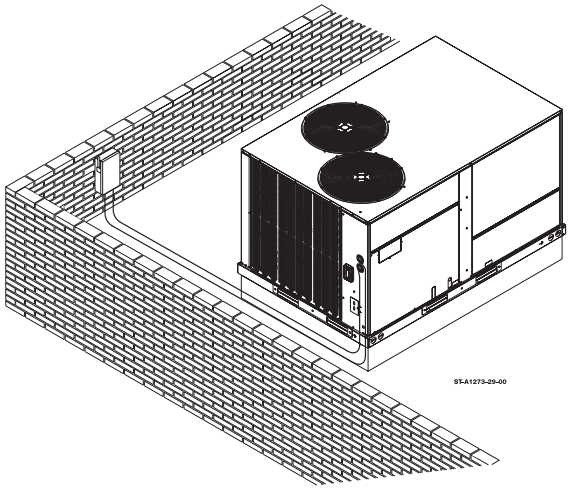


FIGURE 17
BRANCH CIRCUIT DISCONNECT LOCATION



B. CONTROL WIRING (Class II)

1. Low voltage wiring should not be run in conduit with power wiring.
2. Control wiring is routed through the 7/8" [22 mm] hole in the unit side panel. Use a minimum #18 AWG thermostat wire. For wire lengths exceeding 50' [15.24 m] use #16 AWG thermostat wire. Connect the control wiring to the low voltage terminal block located on the unit integrated control. Route wires under the control voltage shield. See Figure 15.
3. It is necessary that only approved thermostats be used. Please contact your distributor for part number information. See thermostat specification catalog for recommended thermostat.
4. Figure 18 shows representative low voltage connection diagrams. Read your thermostat installation instructions for any special requirements for your specific thermostat.

C. INTERNAL WIRING

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

   Transformer is factory-wired for 230 volts on 208/230 volt models and must be changed for 208-volt applications. See unit wiring diagram for 208-volt wiring.

FIGURE 18
THROUGH THE BASE HIGH AND LOW VOLTAGE POWER ENTRY

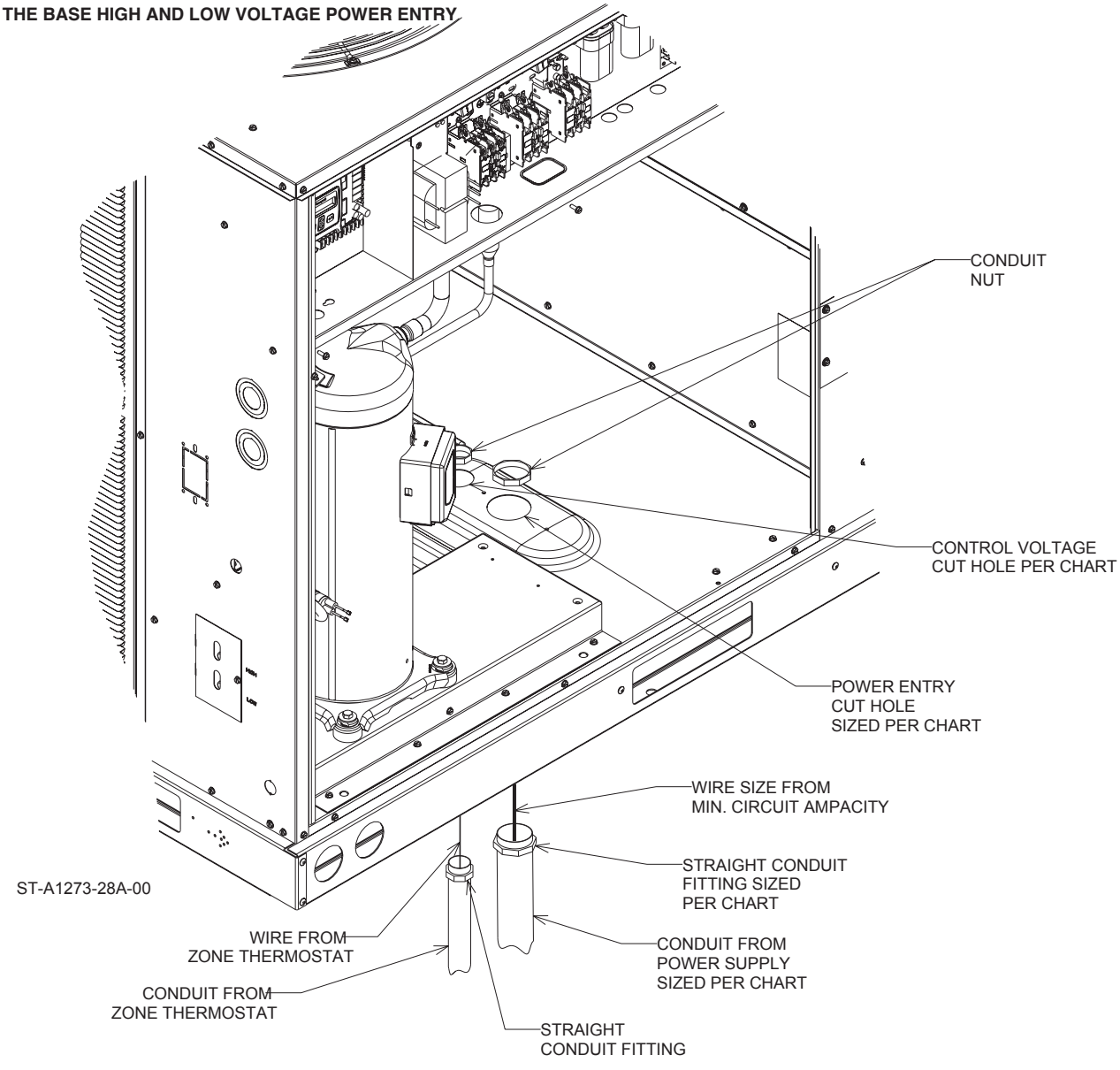


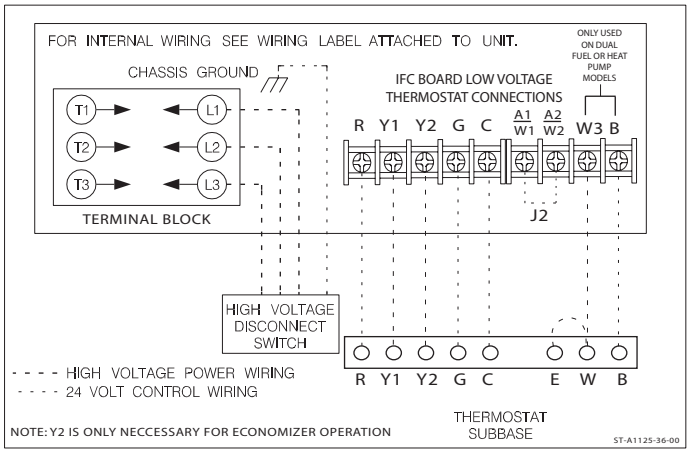
TABLE 1. COPPER WIRE SIZE — AWG (1% VOLTAGE DROP)

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

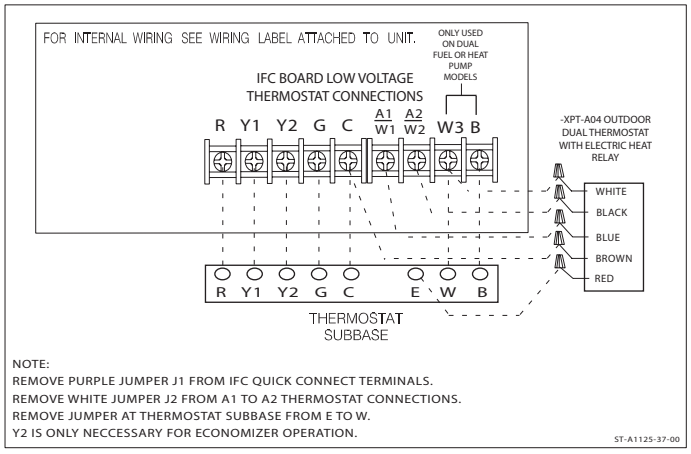
NOTE:
1. Wire size based on 60ºC type copper conductors below 100 ampacity. 2. Wire size based on 75ºC type copper conductors for 100 ampacity and above.

FIGURE 19
THERMOSTAT CONNECTIONS DIAGRAMS

STANDARD WIRING



ALTERNATE LOW VOLTAGE WIRING WITH OUTDOOR THERMOSTAT



D. GROUNDING

⚠WARNING

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

GROUNDING MAY ALSO BE ACCOMPLISHED BY GROUNDING THE POWER LINE CONDUIT TO THE UNIT. MAKE SURE THE CONDUIT NUT LOCKING TEETH HAVE PIERCED THE INSULATING PAINT FILM OF THE SIDE PANEL.

E. THERMOSTAT

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

XIII. INDOOR AIR FLOW DATA

Belt-drive blower models have motor sheaves set for proper CFM at a typical external static. See Airflow Data Tables to determine if adjustments are necessary.

XIV. CRANKCASE HEAT

Crankcase heat is standard on 7½ & 10 ton models. The auxiliary switch on the compressor contactor turns off the heater when the compressor is running.

XV. PRE-START CHECK

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

XVI. STARTUP

1. Turn thermostat to “OFF,” turn “on” power supply at disconnect switch.
2. Turn temperature setting as high as it will go.
3. Turn fan switch to “ON.”
4. Indoor blower should run. Be sure it is running in the right direction.
5. Turn fan switch to “AUTO.” Turn system switch to “COOL” and turn temperature setting below room temperature. Unit should run in cooling mode after 5 minute compressor on-delay has expired.
6. Are outdoor fans operating correctly in the right direction?
7. Is compressor running correctly?
8. Record the following after the unit has run some time.
   A. Operating Mode _____
   B. Discharge Pressures (High) _____ PSIG
   C. Vapor Pressure at Compressors (Low)_____ PSIG
   D. Vapor Line Temperature at Compressors_____ °F.
   E. Indoor Dry Bulb_____ °F.
   F. Indoor Wet Bulb _____ °F.
   G. Outdoor Dry Bulb _____ °F.
   H. Outdoor Wet Bulb _____ °F.
   I. Voltage at Contactor _____Volts
   J. Current at Contactors _____ Amps
   K. Model Number _____
   L. Serial Number _____
   M. Location _____
   N. Owner _____
   O. Date _____
9. Turn thermostat system switch to “HEAT.” Unit should stop. Raise temperature setting to above room temperature. Unit should run in heating mode after 5 minute delay. Auxiliary heaters, if installed, will energize 30 to 50 seconds after the initiation of a “W3” call.
10. Check the refrigerant charge using the instructions located on compressor access panel cover. Replace service port caps. Service port cores are for system access only and will leak if not tightly capped.
11. Adjust discharge air grilles and balance system.
12. Check ducts for condensation and air leaks.
13. Check unit for tubing and sheet metal rattles.
14. Instruct the owner on operation and maintenance.
15. Leave “INSTALLATION” and ”USE AND CARE“ instructions with owner.

XVII. OPERATION

COOLING MODE

With thermostat in the cool mode, fan auto and the room temperature higher than the thermostat setting:

A. Indoor blower contactor is energized through thermostat contact (G).

B. Compressor contactor is energized through thermostat contact (Y1). A 5 minute short cycle delay is standard on this unit. Compressor will start immediately if test pins on the defrost board are shorted and released.

C. Reversing valve is de-energized in the cooling mode through thermostat contact (B).

D. Economizer enthalpy control (if installed) controls operation of first-stage cooling and positions fresh air damper to maintain mixed air temperature. Second-stage cooling operates normally as required by second stage of thermostats.

E. The system will continue in cooling operation as long as all safety controls are closed, until the thermostat is satisfied.

HEATING MODE

With thermostat in the heat mode, fan auto and the room temperature lower than the thermostat setting:

A. Indoor blower contactor is energized through thermostat contact (G).

B. Compressor contactor is energized through thermostat contact (Y1). A 5 minute short cycle delay is standard on this unit. Compressor will start immediately if test pins on the defrost board are shorted and released.

C. Reversing valve is energized in the heating mode through thermostat contact (B).

D. Economizer enthalpy control (if installed) is electrically bypassed with the heat pump control relay during heating operation.

E. Should the heat requirement be more than the heat pump can supply, a portion of the electric heat accessory (if supplied) is energized through thermostat contact (W3).

F. The system will continue in heating operation as long as all safety controls are closed, until the thermostat is satisfied.

G. The unit will function in a defrost mode, reversing the refrigerant cycle to cooling and energizing the electric heat (if supplied) as required through the defrost relay.

H. If the refrigerant system becomes inoperable during a need for heating, the thermostat may be set to emergency heat which will energize the electric heat (if supplied).

At initial start-up or after extended shutdown periods make sure the crankcase heater is energized for at least 12 hours before the compressor is started.

XVIII. AUXILIARY HEAT

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

⚠ WARNING

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

XIX. DEMAND DEFROST CONTROL AND HIGH/LOW PRESSURE CONTROLS

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

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

DEFROST INITIATION

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

1.The outdoor coil temperature is below 35°F as measured by a good coil sensor,

2.The compressor has operated for at least 34 minutes with the outdoor coil temperature below 35°F and

3.The measured difference between the ambient temperature and the outdoor coil temperature is greater than the calculated difference determined by the defrost control microprocessor.

DEFROST TERMINATION

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

TEMPERATURE SENSORS

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

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

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

TEST MODE

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

Test Sequence of Operation:

1)Provide a heating call to the heat pump.

2)Short test pins to bypass anti-short cycle timer. (If unit is running, this step is not necessary.)

3)Short test pins and hold them shorted to enter defrost mode.

4)Release test pins once control exits noise abatement delay.

5)Monitor coil temperature when control exits defrost.

6)Unit should return to heating mode.

TROUBLESHOOTING DEMAND DEFROST

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

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

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

HIGH/LOW PRESSURE CONTROL MONITORING -

ENHANCED DEFROST CONTROL

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

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

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

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

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

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

ENHANCED FEATURE DEFROST CONTROL DIAGNOSTIC CODES
SENSOR TEMPERATURE VS. RESISTANCE

TABLE
REPLACEMENT PARTS

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

Contact your local distributor for a complete parts list.

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

CHARGE INFORMATION

Refer to the appropriate charge chart on the unit, or in this booklet.

TROUBLESHOOTING

Refer to the troubleshooting chart included in this manual.

WIRING DIAGRAMS

Refer to the appropriate wiring diagram included in this manual.

AIRFLOW PERFORMANCE — 7.5 TON [26.4kW] — 60 Hz — DOWNFLOW

Air Flow CFM [L/s]	Model RHPDZ*090* Voltage 208/230, 460, 575 — 3 phase 60 Hz																																			
	External Static Pressure — Inches of Water [kPa]																																			
	0.1 [.02]		0.2 [.05]		0.3 [.07]		0.4 [.10]		0.5 [.12]		0.6 [.15]		0.7 [.17]		0.8 [.20]		0.9 [.22]		1.0 [.25]		1.1 [.27]		1.2 [.30]		1.3 [.32]		1.4 [.35]		1.5 [.37]		1.6 [.40]		1.7 [.42]		1.8 [.45]		1.9 [.47]		2.0 [.50]	
	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W
2400 [1133]	—	—	551	782	585	814	619	848	652	885	684	926	717	969	748	1016	780	1065	810	1118	841	1174	870	1233	900	1294	929	1359	957	1427	985	1498	1012	1572	1039	1649	1065	1729	1091	1813
2500 [1180]	—	—	562	816	596	848	629	884	661	923	693	964	725	1009	756	1057	787	1108	817	1162	846	1219	876	1279	904	1343	933	1409	960	1478	987	1550	1014	1626	1040	1704	1066	1786	1092	1870
2600 [1227]	—	—	574	851	607	885	639	922	671	962	702	1006	733	1052	764	1101	794	1153	823	1209	852	1267	881	1329	909	1393	937	1461	964	1531	990	1605	1016	1682	1042	1762	1067	1844	1092	1930
2700 [1274]	553	857	585	889	618	925	650	963	681	1004	712	1049	742	1096	772	1147	801	1201	830	1258	858	1317	886	1380	914	1446	941	1515	967	1587	993	1662	1019	1740	1044	1821	1068	1905	1092	1993
2800 [1321]	565	896	597	930	629	966	660	1006	691	1049	721	1095	751	1144	780	1196	808	1251	837	1309	864	1370	892	1434	919	1501	945	1572	971	1645	996	1721	1021	1801	1045	1883	1069	1969	1093	2057
2900 [1368]	577	937	609	972	640	1010	670	1051	701	1096	730	1143	759	1193	788	1246	816	1303	843	1362	871	1425	897	1490	923	1559	949	1630	974	1705	999	1783	1023	1864	1047	1948	1070	2035	1093	2124
3000 [1416]	590	981	621	1017	651	1057	681	1099	710	1145	739	1193	768	1245	796	1300	823	1357	850	1418	877	1482	903	1549	928	1619	953	1692	978	1768	1002	1847	1026	1929	1049	2014	1072	2103	1094	2194
3100 [1463]	602	1027	633	1065	662	1105	692	1149	720	1196	749	1246	777	1299	804	1355	831	1414	857	1476	883	1541	908	1610	933	1681	958	1755	982	1833	1005	1913	1028	1997	1051	2083	1073	2173	1094	2266
3200 [1510]	615	1075	645	1114	674	1157	702	1202	731	1250	758	1301	785	1356	812	1413	838	1473	864	1537	889	1603	914	1673	938	1746	962	1821	986	1900	1008	1982	1031	2067	1053	2155	1074	2246	1095	2340
3300 [1557]	628	1126	657	1166	685	1210	713	1256	741	1306	768	1359	794	1414	820	1473	846	1535	871	1600	896	1668	920	1739	944	1813	967	1890	989	1970	1012	2053	1033	2139	1055	2229	1075	2321	1096	2416
3400 [1604]	640	1179	669	1221	697	1266	724	1314	751	1365	777	1419	803	1476	829	1536	854	1599	878	1665	902	1734	926	1807	949	1882	971	1960	993	2042	1015	2126	1036	2214	1057	2305	1077	2398	1097	2495
3500 [1652]	653	1235	681	1278	708	1324	735	1373	761	1425	787	1481	812	1539	837	1601	861	1665	885	1733	909	1803	932	1877	954	1954	976	2034	997	2116	1018	2202	1039	2291	1059	2383	1078	2478	1097	2576
3600 [1699]	666	1292	693	1337	720	1384	746	1435	771	1489	797	1545	821	1605	845	1668	869	1734	892	1803	915	1875	938	1950	959	2028	981	2109	1001	2193	1022	2280	1042	2371	1061	2464	1080	2560	1098	2660

NOTE: A/F-Drive left of bold line, B/G-Drive right of bold line, C/H-Drive right of double line.

Drive Package	A/F						B/G						C/H					
Motor H.P. [W]	2 [1491.4]						3 [2237.1]						3 [2237.1]					
Blower Sheave	AK84H						AK84H						AK84H					
Motor Sheave	1VL40*7/8						1VP50*7/8						1VP56*7/8					
Belt	A49						A50						A51					
Turns Open	0	1	**2**	3	4	5	0	1	2	3	4	**5**	0	1	2	3	4	**5**
RPM	767	721	**678**	635	590	548	992	949	908	866	823	**782**	1108	1067	1029	987	946	**905**

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

Airflow	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE			
				Wet Coil	Vertical Economizer RA Damper Open	Concentric Diffuser RXRN-AEF2000 & Concentric Adapter RXMC-DD01 (Flush)	Concentric Diffuser RXRN-AED2000 & Concentric Adapter RXMC-DD01 (Drop)
CFM [L/s]	Total MBH	Sensible MBH	Power kW	Resistance — Inches of Water [kPa]			
2400 [1133]	0.97	0.92	0.99	0.06 [.01]	0.01 [.00]	0.66 [.16]	0.53 [.13]
2500 [1180]	0.97	0.93	0.99	0.06 [.01]	0.02 [.00]	0.71 [.18]	0.57 [.14]
2600 [1227]	0.98	0.95	0.99	0.06 [.02]	0.02 [.01]	0.75 [.19]	0.60 [.15]
2700 [1274]	0.99	0.96	0.99	0.07 [.02]	0.03 [.01]	0.80 [.20]	0.65 [.16]
2800 [1321]	0.99	0.98	1.00	0.07 [.02]	0.04 [.01]	0.85 [.21]	0.69 [.17]
2900 [1368]	1.00	1.00	1.00	0.08 [.02]	0.04 [.01]	0.91 [.23]	0.74 [.18]
3000 [1416]	1.01	1.01	1.00	0.08 [.02]	0.05 [.01]	0.96 [.24]	0.79 [.20]
3100 [1463]	1.01	1.03	1.00	0.09 [.02]	0.06 [.02]	1.02 [.25]	0.86 [.21]
3200 [1510]	1.02	1.04	1.01	0.10 [.02]	0.07 [.02]	1.08 [.27]	0.92 [.23]
3300 [1557]	1.02	1.06	1.01	0.10 [.03]	0.08 [.02]	1.15 [.29]	0.99 [.25]
3400 [1604]	1.03	1.08	1.01	0.11 [.03]	0.09 [.02]	1.21 [.30]	1.05 [.26]
3500 [1652]	1.04	1.09	1.01	0.11 [.03]	0.10 [.02]	1.29 [.32]	1.09 [.27]
3600 [1699]	1.04	1.11	1.02	0.12 [.03]	0.11 [.03]	1.36 [.34]	1.13 [.28]

* Multiply correction factor times gross performance data — resulting sensible capacity cannot exceed total capacity. [ ] Designates Metric Conversions

AIRFLOW PERFORMANCE — 7.5 TON [26.4kW] — 60 Hz — SIDEFLOW

Air Flow CFM [L/s]	Model RHPDZ*090* Voltage 208/230, 460, 575 — 3 phase 60 Hz																																					
	External Static Pressure — Inches of Water [kPa]																																						
	0.1 [.02]		0.2 [.05]		0.3 [.07]		0.4 [.10]		0.5 [.12]		0.6 [.15]		0.7 [.17]		0.8 [.20]		0.9 [.22]		1.0 [.25]		1.1 [.27]		1.2 [.30]		1.3 [.32]		1.4 [.35]		1.5 [.37]		1.6 [.40]		1.7 [.42]		1.8 [.45]		1.9 [.47]		2.0 [.50]	
	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W
2400 [1133]	—	—	—	—	558	822	594	853	629	887	663	925	697	965	730	1009	763	1056	794	1106	826	1159	856	1216	886	1275	915	1338	943	1404	971	1474	998	1546	1025	1622	1051	1700	1076	1782
2500 [1180]	—	—	—	—	568	848	604	881	638	917	672	956	705	998	738	1044	769	1092	801	1144	831	1199	861	1258	890	1319	919	1384	947	1452	974	1523	1001	1597	1027	1674	1052	1755	1077	1838
2600 [1227]	—	—	543	846	579	877	613	912	647	950	681	991	713	1035	745	1082	777	1132	807	1186	837	1243	867	1303	895	1366	923	1433	951	1502	978	1575	1004	1651	1029	1730	1054	1812	1078	1898
2700 [1274]	—	—	554	877	589	910	623	946	657	986	689	1029	722	1074	753	1124	784	1176	814	1231	844	1290	872	1352	901	1417	928	1485	955	1556	981	1631	1007	1708	1032	1789	1056	1873	1079	1961
2800 [1321]	—	—	566	911	600	946	634	984	666	1026	699	1070	730	1118	761	1169	792	1223	821	1280	850	1340	878	1404	906	1470	933	1540	959	1613	985	1690	1010	1769	1034	1852	1058	1938	1081	2027
2900 [1368]	543	916	577	949	611	986	644	1026	676	1069	708	1115	739	1164	770	1217	799	1273	828	1332	857	1394	885	1459	912	1528	938	1599	964	1674	989	1752	1014	1833	1037	1918	1061	2005	1083	2096
3000 [1416]	555	955	589	990	622	1029	655	1070	687	1115	718	1163	748	1214	778	1269	807	1326	836	1387	864	1451	891	1518	918	1588	944	1662	969	1738	994	1818	1017	1901	1041	1987	1063	2077	1085	2169
3100 [1463]	568	998	601	1035	634	1075	666	1118	697	1165	728	1215	758	1268	787	1324	816	1383	844	1445	871	1511	898	1580	924	1652	949	1727	974	1806	998	1887	1022	1972	1044	2060	1066	2151	1088	2245
3200 [1510]	581	1044	614	1083	646	1125	677	1170	708	1218	738	1270	768	1324	796	1382	824	1443	852	1507	879	1575	905	1646	931	1719	955	1796	980	1876	1003	1960	1026	2046	1048	2136	1070	2229	1091	2325
3300 [1557]	594	1093	626	1134	658	1178	689	1225	719	1275	749	1328	778	1384	806	1444	833	1507	860	1573	887	1642	912	1714	937	1790	962	1869	985	1951	1008	2036	1031	2124	1052	2216	1073	2310	1094	2408
3400 [1604]	607	1146	639	1189	670	1234	701	1283	730	1335	759	1390	788	1448	815	1509	843	1574	869	1642	895	1713	920	1787	944	1864	968	1945	991	2028	1014	2115	1036	2205	1057	2298	1077	2395	1097	2494
3500 [1652]	621	1203	652	1247	683	1294	713	1344	742	1398	770	1455	798	1515	825	1578	852	1644	878	1714	903	1786	928	1862	952	1941	975	2024	997	2109	1019	2198	1041	2290	1061	2385	1081	2483	1101	2584
3600 [1699]	635	1262	666	1308	696	1357	725	1409	754	1465	782	1523	809	1585	836	1650	862	1718	887	1789	912	1864	936	1941	959	2022	982	2106	1004	2194	1025	2284	1046	2378	1066	2474	1086	2574	1104	2677

NOTE: A/F-Drive left of bold line, B/G-Drive right of bold line, C/H-Drive right of double line.

Drive Package	A/F						B/G						C/H					
Motor H.P. [W]	2 [1491.4]						3 [2237.1]						3 [2237.1]					
Blower Sheave	AK84H						AK84H						AK84H					
Motor Sheave	1VL40*7/8						1VP50*7/8						1VP56*7/8					
Belt	A49						A50						A51					
Turns Open	0	1	**2**	3	4	5	0	1	2	3	4	**5**	0	1	2	3	4	**5**
RPM	765	720	**676**	633	589	544	989	949	908	865	823	**780**	1108	1067	1029	987	946	**905**

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

Airflow	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE			
				Wet Coil	Horizontal Economizer RA Damper Open	Concentric Diffuser RXRN-AEF2000 & Concentric Adapter RXMC-DD01 (Flush)	Concentric Diffuser RXRN-AED2000 & Concentric Adapter RXMC-DD01 (Drop)
CFM [L/s]	Total MBH	Sensible MBH	Power kW	Resistance — Inches of Water [kPa]			
2400 [1133]	0.97	0.92	0.99	0.06 [.01]	0.01 [.00]	0.66 [.16]	0.53 [.13]
2500 [1180]	0.97	0.93	0.99	0.06 [.01]	0.02 [.00]	0.71 [.18]	0.57 [.14]
2600 [1227]	0.98	0.95	0.99	0.06 [.02]	0.02 [.00]	0.75 [.19]	0.60 [.15]
2700 [1274]	0.99	0.96	0.99	0.07 [.02]	0.03 [.01]	0.80 [.20]	0.65 [.16]
2800 [1321]	0.99	0.98	1.00	0.07 [.02]	0.04 [.01]	0.85 [.21]	0.69 [.17]
2900 [1368]	1.00	1.00	1.00	0.08 [.02]	0.04 [.01]	0.91 [.23]	0.74 [.18]
3000 [1416]	1.01	1.01	1.00	0.08 [.02]	0.05 [.01]	0.96 [.24]	0.79 [.20]
3100 [1463]	1.01	1.03	1.00	0.09 [.02]	0.06 [.01]	1.02 [.25]	0.86 [.21]
3200 [1510]	1.02	1.04	1.01	0.10 [.02]	0.07 [.02]	1.08 [.27]	0.92 [.23]
3300 [1557]	1.02	1.06	1.01	0.10 [.03]	0.08 [.02]	1.15 [.29]	0.99 [.25]
3400 [1604]	1.03	1.08	1.01	0.11 [.03]	0.09 [.02]	1.21 [.30]	1.05 [.26]
3500 [1652]	1.04	1.09	1.01	0.11 [.03]	0.10 [.02]	1.29 [.32]	1.09 [.27]
3600 [1699]	1.04	1.11	1.02	0.12 [.03]	0.11 [.03]	1.36 [.34]	1.13 [.28]

* Multiply correction factor times gross performance data — resulting sensible capacity cannot exceed total capacity. [ ] Designates Metric Conversions

AIRFLOW PERFORMANCE — 8.5 TON [29.9kW] — 60 Hz — DOWNFLOW

Air Flow CFM [L/s]	Model RHPDZ*102* Voltage 208/230, 460, 575 — 3 phase 60 Hz																																					
	External Static Pressure — Inches of Water [kPa]																																						
	0.1 [.02]		0.2 [.05]		0.3 [.07]		0.4 [.10]		0.5 [.12]		0.6 [.15]		0.7 [.17]		0.8 [.20]		0.9 [.22]		1.0 [.25]		1.1 [.27]		1.2 [.30]		1.3 [.32]		1.4 [.35]		1.5 [.37]		1.6 [.40]		1.7 [.42]		1.8 [.45]		1.9 [.47]		2.0 [.50]	
	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W
2700 [1274]	—	—	561	894	596	934	631	975	665	1018	698	1062	730	1108	762	1155	793	1203	823	1253	853	1304	882	1357	910	1411	937	1467	964	1524	990	1583	1015	1643	1039	1704	1063	1767	1086	1832
2800 [1321]	—	—	573	927	608	969	642	1013	676	1058	708	1104	740	1152	771	1201	802	1252	832	1304	861	1358	889	1413	917	1470	943	1528	970	1587	995	1648	1020	1711	1044	1775	1067	1840	1090	1907
2900 [1368]	—	—	586	964	620	1008	654	1054	687	1101	719	1150	750	1200	781	1252	811	1305	840	1360	869	1416	897	1473	924	1532	950	1593	976	1654	1001	1718	1025	1782	1048	1848	1071	1916	1093	1985
3000 [1416]	564	959	599	1004	633	1051	666	1099	698	1149	730	1200	761	1253	791	1307	820	1362	849	1419	877	1477	904	1537	931	1598	957	1661	982	1725	1006	1791	1030	1858	1053	1926	1075	1996	1097	2067
3100 [1463]	578	1001	612	1048	645	1098	678	1148	710	1200	741	1254	771	1308	801	1365	830	1423	858	1482	886	1542	912	1605	939	1668	964	1733	989	1800	1012	1868	1036	1937	1058	2008	1080	2080	1101	2154
3200 [1510]	592	1046	625	1096	658	1148	690	1201	721	1255	752	1311	782	1368	811	1427	840	1487	867	1548	894	1611	921	1676	946	1742	971	1809	995	1878	1019	1948	1041	2020	1063	2093	1085	2168	1105	2244
3300 [1557]	605	1096	638	1148	671	1202	702	1257	733	1314	763	1372	793	1432	821	1493	849	1555	877	1619	903	1684	929	1751	954	1819	979	1889	1002	1960	1025	2033	1047	2107	1069	2182	1090	2259	1110	2337
3400 [1604]	619	1149	652	1204	684	1260	715	1317	745	1376	775	1437	804	1499	832	1562	860	1627	886	1693	912	1761	938	1830	962	1900	986	1972	1009	2046	1032	2121	1053	2197	1074	2275	1095	2354	1114	2435
3500 [1652]	634	1206	666	1263	697	1322	728	1382	758	1443	787	1506	815	1570	843	1635	870	1702	896	1771	922	1841	946	1912	970	1985	994	2060	1017	2135	1038	2213	1060	2291	1080	2371	1100	2453	1119	2536
3600 [1699]	648	1267	680	1326	711	1387	741	1449	770	1513	799	1578	827	1645	854	1713	880	1782	906	1853	931	1925	955	1999	979	2074	1002	2151	1024	2229	1045	2308	1066	2389	1086	2472	1105	2556	1124	2641
3700 [1746]	663	1332	694	1393	724	1456	754	1521	783	1587	811	1654	838	1723	865	1793	891	1865	916	1938	941	2013	965	2089	988	2167	1010	2246	1032	2326	1053	2408	1073	2491	1092	2576	1111	2662	1129	2750
3800 [1793]	678	1400	708	1464	738	1529	767	1596	795	1665	823	1734	850	1805	876	1878	902	1952	926	2028	951	2105	974	2183	996	2263	1018	2344	1039	2427	1060	2511	1080	2597	1099	2684	1117	2772	1134	2862
3900 [1840]	693	1472	723	1538	752	1606	781	1675	808	1746	836	1818	862	1892	888	1966	913	2043	937	2121	961	2200	983	2281	1005	2363	1027	2447	1048	2532	1067	2618	1087	2706	1105	2796	1123	2886	1140	2979
4000 [1888]	708	1548	737	1617	766	1687	794	1758	822	1831	848	1906	874	1981	900	2059	924	2137	948	2218	971	2299	993	2382	1015	2467	1036	2553	1056	2640	1075	2729	1094	2819	1112	2911	1129	3004	1146	3099
4100 [1935]	723	1628	752	1699	781	1771	808	1845	835	1920	861	1997	887	2075	911	2155	935	2236	959	2318	981	2402	1003	2488	1024	2574	1045	2663	1064	2752	1083	2844	1101	2936	1119	3030	1136	3126	1152	3223

NOTE: A/F-Drive left of bold line, B/G-Drive right of bold line, C/H-Drive right of double line.

Drive Package	A/F						B/G						C/H					
Motor H.P. [W]	2 [1491.4]						3 [2237.1]						3 [2237.1]					
Blower Sheave	AK79H						AK79H						AK79H					
Motor Sheave	1VL40*7/8						1VP50*7/8						1VP56*7/8					
Belt	A49						A50						A51					
Turns Open	0	1	**2**	3	4	5	0	1	2	3	4	**5**	0	1	2	3	4	**5**
RPM	804	758	**710**	661	616	559	1048	1003	959	914	872	**826**	1168	1128	1087	1044	1002	**957**

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

Airflow	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE			
				Wet Coil	Vertical Economizer RA Damper Open	Concentric Diffuser RXRN-AEF2000 & Concentric Adapter RXMC-DD01 (Flush)	Concentric Diffuser RXRN-AED2000 & Concentric Adapter RXMC-DD01 (Drop)
CFM [L/s]	Total MBH	Sensible MBH	Power kW	Resistance — Inches of Water [kPa]			
2700 [1274]	0.99	0.96	0.99	0.07 [.02]	0.03 [.01]	0.80 [.20]	0.65 [.16]
2800 [1321]	0.99	0.98	1.00	0.07 [.02]	0.03 [.01]	0.85 [.21]	0.69 [.17]
2900 [1368]	1.00	1.00	1.00	0.08 [.02]	0.04 [.01]	0.91 [.23]	0.74 [.18]
3000 [1416]	1.01	1.01	1.00	0.08 [.02]	0.05 [.01]	0.96 [.24]	0.79 [.20]
3100 [1463]	1.01	1.03	1.00	0.09 [.02]	0.06 [.01]	1.02 [.25]	0.86 [.21]
3200 [1510]	1.02	1.04	1.01	0.10 [.02]	0.07 [.02]	1.08 [.27]	0.92 [.23]
3300 [1557]	1.02	1.06	1.01	0.10 [.02]	0.08 [.02]	1.15 [.29]	0.99 [.25]
3400 [1604]	1.03	1.08	1.01	0.11 [.03]	0.09 [.02]	1.21 [.30]	1.05 [.26]
3500 [1652]	1.04	1.09	1.01	0.11 [.03]	0.10 [.02]	1.29 [.32]	1.09 [.27]
3600 [1699]	1.04	1.11	1.02	0.12 [.03]	0.11 [.03]	1.36 [.34]	1.13 [.28]
3700 [1746]	1.05	1.12	1.02	0.13 [.03]	0.12 [.03]	1.43 [.36]	1.18 [.29]
3800 [1793]	1.05	1.14	1.02	0.13 [.03]	0.13 [.03]	1.50 [.37]	1.23 [.31]
3900 [1840]	1.06	1.16	1.02	0.14 [.03]	0.15 [.04]	1.59 [.40]	1.31 [.33]
4000 [1888]	1.07	1.17	1.02	0.15 [.04]	0.16 [.04]	1.68 [.42]	1.38 [.34]
4100 [1935]	1.07	1.19	1.03	0.15 [.04]	0.17 [.04]	1.74 [.43]	1.44 [.36]

* Multiply correction factor times gross performance data — resulting sensible capacity cannot exceed total capacity. [ ] Designates Metric Conversions

AIRFLOW PERFORMANCE — 8.5 TON [29.9kW] — 60 Hz — SIDEFLOW

Air Flow CFM [L/s]	Model RHPDZ*102* Voltage 208/230, 460, 575 — 3 phase 60 Hz External Static Pressure — Inches of Water [kPa]																																					
	0.1 [.02]		0.2 [.05]		0.3 [.07]		0.4 [.10]		0.5 [.12]		0.6 [.15]		0.7 [.17]		0.8 [.20]		0.9 [.22]		1.0 [.25]		1.1 [.27]		1.2 [.30]		1.3 [.32]		1.4 [.35]		1.5 [.37]		1.6 [.40]		1.7 [.42]		1.8 [.45]		1.9 [.47]		2.0 [.50]	
	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W
2700 [1274]	—	—	—	—	577	932	611	969	644	1009	677	1052	710	1098	742	1147	774	1199	806	1254	837	1312	868	1373	898	1437	929	1505	959	1575	988	1648	1017	1725	1046	1804	1074	1886	1102	1972
2800 [1321]	—	—	556	926	589	962	622	1000	655	1042	687	1087	719	1134	751	1185	783	1239	814	1295	844	1355	875	1418	905	1484	934	1553	963	1624	992	1699	1021	1777	1049	1858	1077	1942	1105	2029
2900 [1368]	—	—	568	958	601	995	633	1036	666	1079	697	1125	729	1174	760	1227	791	1282	821	1340	851	1402	881	1466	911	1533	940	1604	968	1677	997	1754	1025	1834	1052	1916	1080	2002	1107	2090
3000 [1416]	—	—	580	994	613	1033	645	1074	676	1119	708	1167	738	1218	769	1272	799	1329	829	1389	859	1452	888	1518	917	1587	945	1659	973	1734	1001	1812	1029	1894	1056	1978	1082	2065	1109	2155
3100 [1463]	561	996	593	1033	624	1073	656	1117	687	1163	718	1213	748	1265	778	1321	808	1379	837	1441	866	1506	895	1573	923	1644	951	1718	978	1794	1006	1874	1033	1957	1059	2043	1085	2132	1111	2224
3200 [1510]	574	1037	605	1076	636	1118	667	1163	698	1211	728	1262	758	1316	787	1373	816	1434	845	1497	873	1563	902	1632	929	1705	957	1780	984	1858	1010	1940	1037	2024	1063	2112	1088	2202	1113	2296
3300 [1557]	587	1082	618	1122	648	1166	679	1212	709	1262	738	1315	767	1371	796	1430	825	1491	853	1556	881	1624	908	1695	936	1769	962	1846	989	1926	1015	2009	1041	2095	1066	2184	1091	2276	1116	2372
3400 [1604]	600	1130	630	1172	660	1217	690	1266	720	1317	749	1371	777	1429	806	1489	834	1553	861	1619	888	1689	915	1761	942	1837	968	1916	994	1997	1020	2082	1045	2170	1070	2260	1094	2354	1118	2451
3500 [1652]	613	1182	643	1226	672	1273	702	1323	730	1376	759	1432	787	1491	815	1553	842	1618	869	1686	896	1757	922	1831	948	1909	974	1989	999	2072	1024	2158	1049	2248	1073	2340	1097	2436	1121	2534
3600 [1699]	626	1238	656	1283	685	1332	713	1383	741	1438	769	1495	797	1556	824	1620	851	1687	877	1756	904	1829	929	1905	955	1984	980	2066	1005	2151	1029	2238	1053	2329	1077	2423	1100	2520	1123	2621
3700 [1746]	640	1297	668	1344	697	1394	725	1447	753	1504	780	1563	807	1625	833	1690	860	1759	886	1830	911	1905	937	1982	961	2063	986	2146	1010	2233	1034	2322	1057	2415	1081	2510	1103	2609	1126	2711
3800 [1793]	653	1360	681	1409	709	1460	737	1515	764	1573	790	1634	817	1698	843	1765	869	1835	894	1908	919	1984	944	2063	968	2145	992	2230	1016	2318	1039	2410	1062	2504	1084	2601	1107	2701	1128	2805
3900 [1840]	667	1426	694	1477	721	1530	748	1587	775	1646	801	1709	827	1774	852	1843	878	1914	902	1989	927	2067	951	2147	975	2231	998	2318	1021	2408	1044	2500	1066	2596	1088	2695	1110	2797	1131	2902
4000 [1888]	680	1496	707	1548	734	1604	760	1662	786	1723	812	1787	837	1854	862	1924	887	1998	911	2074	935	2153	958	2235	981	2321	1004	2409	1027	2501	1049	2595	1071	2693	1092	2793	1113	2897	1134	3003
4100 [1935]	694	1570	720	1624	746	1681	772	1740	797	1803	822	1869	847	1938	872	2009	896	2084	919	2162	943	2243	965	2327	988	2414	1010	2504	1032	2597	1054	2693	1075	2792	1096	2895	1116	3000	1137	3108

NOTE: A/F-Drive left of bold line, B/G-Drive right of bold line, C/H-Drive right of double line.

Drive Package	A/F						B/G						C/H					
Motor H.P. [W]	2 [1491.4]						3 [2237.1]						3 [2237.1]					
Blower Sheave	AK79H						AK79H						AK79H					
Motor Sheave	1VL40*7/8						1VP50*7/8						1VP56*7/8					
Belt	A49						A50						A51					
Turns Open	0	1	**2**	3	4	5	0	1	2	3	4	**5**	0	1	2	3	4	**5**
RPM	802	754	**707**	662	616	555	1048	1005	960	916	870	**827**	1170	1126	1085	1044	1000	**956**

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

Airflow	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE			
				Wet Coil	Horizontal Economizer RA Damper Open	Concentric Diffuser RXRN-AEF2000 & Concentric Adapter RXMC-DD01 (Flush)	Concentric Diffuser RXRN-AED2000 & Concentric Adapter RXMC-DD01 (Drop)
CFM [L/s]	Total MBH	Sensible MBH	Power kW	Resistance — Inches of Water [kPa]			
2700 [1274]	0.99	0.96	0.99	0.07 [.02]	0.03 [.01]	0.80 [.20]	0.65 [.16]
2800 [1321]	0.99	0.98	1.00	0.07 [.02]	0.03 [.01]	0.85 [.21]	0.69 [.17]
2900 [1368]	1.00	1.00	1.00	0.08 [.02]	0.04 [.01]	0.91 [.23]	0.74 [.18]
3000 [1416]	1.01	1.01	1.00	0.08 [.02]	0.05 [.01]	0.96 [.24]	0.79 [.20]
3100 [1463]	1.01	1.03	1.00	0.09 [.02]	0.06 [.01]	1.02 [.25]	0.86 [.21]
3200 [1510]	1.02	1.04	1.01	0.10 [.02]	0.07 [.02]	1.08 [.27]	0.92 [.23]
3300 [1557]	1.02	1.06	1.01	0.10 [.03]	0.08 [.02]	1.15 [.29]	0.99 [.25]
3400 [1604]	1.03	1.08	1.01	0.11 [.03]	0.09 [.02]	1.21 [.30]	1.05 [.26]
3500 [1652]	1.04	1.09	1.01	0.11 [.03]	0.10 [.02]	1.29 [.32]	1.09 [.27]
3600 [1699]	1.04	1.11	1.02	0.12 [.03]	0.11 [.03]	1.36 [.34]	1.13 [.28]
3700 [1746]	1.05	1.12	1.02	0.13 [.03]	0.12 [.03]	1.43 [.36]	1.18 [.29]
3800 [1793]	1.05	1.14	1.02	0.13 [.03]	0.13 [.03]	1.50 [.37]	1.23 [.31]
3900 [1840]	1.06	1.16	1.02	0.14 [.04]	0.15 [.04]	1.59 [.40]	1.31 [.33]
4000 [1888]	1.07	1.17	1.02	0.15 [.04]	0.16 [.04]	1.68 [.42]	1.38 [.34]
4100 [1935]	1.07	1.19	1.03	0.15 [.04]	0.17 [.04]	1.74 [.43]	1.44 [.36]

* Multiply correction factor times gross performance data — resulting sensible capacity cannot exceed total capacity. [ ] Designates Metric Conversions

AIRFLOW PERFORMANCE — 10 TON [35.1kW] — 60 Hz — DOWNFLOW

Air Flow CFM [L/s]	Model RHPDZ*120* Voltage 208/230, 460, 575 — 3 phase 60 Hz External Static Pressure — Inches of Water [kPa]																																			
	0.1 [.02]		0.2 [.05]		0.3 [.07]		0.4 [.10]		0.5 [.12]		0.6 [.15]		0.7 [.17]		0.8 [.20]		0.9 [.22]		1.0 [.25]		1.1 [.27]		1.2 [.30]		1.3 [.32]		1.4 [.35]		1.5 [.37]		1.6 [.40]		1.7 [.42]		1.8 [.45]		1.9 [.47]		2.0 [.50]	
	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W
3200 [1510]	620	952	648	1005	676	1059	704	1115	732	1174	759	1234	785	1295	812	1359	838	1425	864	1492	889	1562	914	1633	939	1706	964	1781	988	1858	1011	1937	1035	2017	1058	2100	1081	2184	1103	2270
3300 [1557]	634	998	662	1053	690	1110	718	1169	745	1229	771	1292	798	1356	824	1422	850	1491	875	1561	900	1632	925	1706	949	1782	973	1859	997	1939	1020	2020	1043	2103	1066	2188	1088	2275	1110	2363
3400 [1604]	649	1049	677	1106	704	1166	731	1227	758	1290	784	1355	810	1422	836	1491	861	1561	886	1634	911	1708	935	1784	959	1863	983	1942	1006	2024	1029	2108	1052	2194	1074	2281	1096	2370	1118	2462
3500 [1652]	663	1105	691	1165	718	1227	744	1291	771	1356	797	1424	822	1493	848	1564	873	1637	897	1712	922	1789	946	1868	969	1948	993	2031	1016	2115	1038	2201	1060	2289	1082	2379	1104	2471	1125	2565
3600 [1699]	678	1166	705	1229	732	1293	758	1359	784	1427	809	1497	835	1569	860	1643	884	1718	909	1796	932	1875	956	1956	979	2039	1002	2124	1025	2211	1047	2300	1069	2390	1091	2483	1112	2577	1133	2673
3700 [1746]	693	1232	719	1297	745	1364	771	1433	797	1503	822	1576	847	1650	872	1726	896	1804	920	1884	943	1966	967	2050	990	2135	1012	2223	1034	2312	1056	2403	1078	2496	1099	2591	1120	2688	1140	2787
3800 [1793]	707	1303	734	1371	759	1440	785	1511	810	1584	835	1659	860	1736	884	1815	908	1896	931	1978	954	2062	977	2148	1000	2237	1022	2326	1044	2418	1065	2512	1086	2607	1107	2705	1128	2804	1148	2905
3900 [1840]	722	1380	748	1450	773	1521	799	1595	823	1671	848	1748	872	1827	896	1909	919	1992	942	2077	965	2163	988	2252	1010	2343	1032	2435	1053	2529	1074	2626	1095	2724	1116	2823	1136	2925	1156	3029
4000 [1888]	737	1461	762	1533	787	1608	812	1684	837	1762	861	1842	884	1924	908	2007	931	2093	954	2180	976	2270	998	2361	1020	2454	1042	2549	1063	2646	1083	2744	1104	2845	1124	2947	1144	3051	1163	3158
4100 [1935]	752	1547	777	1622	801	1699	826	1778	850	1858	874	1941	897	2025	920	2111	943	2199	965	2289	987	2381	1009	2475	1030	2570	1051	2668	1072	2767	1093	2868	1113	2971	1132	3076	1152	3183	—	—
4200 [1982]	766	1639	791	1716	815	1796	839	1877	863	1960	887	2045	910	2132	932	2220	955	2311	977	2403	998	2497	1020	2594	1041	2692	1061	2792	1082	2893	1102	2997	1121	3102	1141	3210	1160	3319	—	—
4300 [2029]	781	1735	806	1815	830	1897	853	1981	877	2066	900	2154	922	2243	944	2334	966	2427	988	2522	1009	2619	1030	2718	1051	2818	1071	2920	1091	3025	1111	3131	1130	3239	1149	3349	—	—	—	—
4400 [2076]	796	1837	820	1919	844	2004	867	2090	890	2178	913	2268	935	2360	957	2453	978	2549	1000	2646	1021	2745	1041	2847	1061	2950	1081	3054	1101	3161	1120	3270	1139	3380	1158	3493	—	—	—	—
4500 [2123]	811	1944	835	2029	858	2115	881	2204	903	2295	926	2387	947	2481	969	2577	990	2675	1011	2775	1032	2877	1052	2981	1072	3086	1091	3194	1111	3303	1130	3414	1148	3527	—	—	—	—	—	—
4600 [2171]	826	2056	849	2143	872	2232	895	2323	917	2416	939	2511	960	2608	981	2707	1002	2807	1023	2910	1043	3014	1063	3120	1082	3228	1101	3338	1120	3449	1139	3563	1157	3679	—	—	—	—	—	—
4700 [2218]	841	2172	864	2262	886	2354	908	2448	930	2543	952	2641	973	2740	994	2841	1014	2944	1034	3049	1054	3156	1074	3264	1093	3375	1112	3487	1130	3601	1148	3717	—	—	—	—	—	—	—	—
4800 [2265]	856	2294	878	2387	900	2481	922	2577	944	2675	965	2775	986	2877	1006	2980	1026	3086	1046	3193	1065	3302	1084	3414	1103	3526	1122	3641	1140	3758	1158	3877	—	—	—	—	—	—	—	—

NOTE: A/F-Drive left of bold line, B/G-Drive right of bold line, C/H-Drive right of double line.

Drive Package	A/F						B/G						C/H					
Motor H.P. [W]	2 [1491.4]						3 [2237.1]						3 [2237.1]					
Blower Sheave	AK79H						AK79H						AK79H					
Motor Sheave	1VL40*7/8						1VP50*7/8						1VP56*7/8					
Belt	A49						A50						A51					
Turns Open	0	1	**2**	3	4	5	0	1	2	3	4	**5**	0	1	2	3	4	**5**
RPM	826	781	**735**	689	643	591	1041	999	956	914	870	**826**	1159	1121	1080	1039	998	**955**

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

Airflow	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE			
				Wet Coil	Vertical Economizer RA Damper Open	Concentric Diffuser RXRN-AEF3415 & Diffuser RXMC-DD02 (Flush)	Concentric Diffuser RXRN-AED3415 & Diffuser RXMC-DD02 (Drop)
CFM [L/s]	Total MBH	Sensible MBH	Power kW	Resistance — Inches of Water [kPa]			
3200 [1510]	0.96	0.91	0.98	0.07 [.02]	0.07 [.02]	0.74 [.18]	0.56 [.14]
3300 [1557]	0.97	0.92	0.99	0.07 [.02]	0.08 [.02]	0.79 [.20]	0.59 [.15]
3400 [1604]	0.97	0.93	0.99	0.07 [.02]	0.09 [.02]	0.84 [.21]	0.62 [.15]
3500 [1652]	0.98	0.94	0.99	0.08 [.02]	0.10 [.02]	0.90 [.22]	0.66 [.16]
3600 [1699]	0.98	0.95	0.99	0.08 [.02]	0.11 [.03]	0.95 [.24]	0.69 [.17]
3700 [1746]	0.99	0.97	1.00	0.09 [.02]	0.12 [.03]	1.00 [.25]	0.73 [.18]
3800 [1793]	0.99	0.98	1.00	0.09 [.02]	0.13 [.03]	1.04 [.26]	0.76 [.19]
3900 [1840]	1.00	0.99	1.00	0.09 [.02]	0.15 [.04]	1.09 [.27]	0.80 [.20]
4000 [1888]	1.00	1.00	1.01	0.10 [.02]	0.16 [.04]	1.13 [.28]	0.84 [.21]
4100 [1935]	1.00	1.01	1.01	0.10 [.03]	0.17 [.04]	1.19 [.30]	0.88 [.22]
4200 [1982]	1.01	1.02	1.01	0.11 [.03]	0.19 [.05]	1.24 [.31]	0.92 [.23]
4300 [2029]	1.01	1.03	1.01	0.11 [.03]	0.20 [.05]	1.31 [.33]	0.97 [.24]
4400 [2076]	1.02	1.05	1.02	0.12 [.03]	0.21 [.05]	1.37 [.34]	1.02 [.25]
4500 [2123]	1.02	1.06	1.02	0.13 [.03]	0.23 [.06]	1.43 [.35]	1.07 [.27]
4600 [2171]	1.03	1.07	1.02	0.13 [.03]	0.24 [.06]	1.48 [.37]	1.11 [.28]
4700 [2218]	1.03	1.08	1.03	0.14 [.03]	0.26 [.06]	1.54 [.38]	1.15 [.29]
4800 [2265]	1.04	1.09	1.03	0.14 [.04]	0.28 [.07]	1.59 [.40]	1.19 [.30]

* Multiply correction factor times gross performance data — resulting sensible capacity cannot exceed total capacity. [ ] Designates Metric Conversions

AIRFLOW PERFORMANCE — 10 TON [35.1kW] — 60 Hz — SIDEFLOW

Air Flow CFM [L/s]	Model RHPDZ*120* Voltage 208/230, 460, 575 — 3 phase 60 Hz External Static Pressure — Inches of Water [kPa]																																			
	0.1 [.02]		0.2 [.05]		0.3 [.07]		0.4 [.10]		0.5 [.12]		0.6 [.15]		0.7 [.17]		0.8 [.20]		0.9 [.22]		1.0 [.25]		1.1 [.27]		1.2 [.30]		1.3 [.32]		1.4 [.35]		1.5 [.37]		1.6 [.40]		1.7 [.42]		1.8 [.45]		1.9 [.47]		2.0 [.50]	
	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W
3200 [1510]	—	—	620	1031	650	1078	679	1128	708	1180	736	1235	765	1291	792	1349	820	1410	847	1472	874	1537	900	1604	926	1672	951	1743	977	1817	1001	1892	1026	1969	1050	2049	1074	2130	1097	2214
3300 [1557]	603	1031	632	1079	661	1129	690	1181	719	1235	747	1292	775	1350	802	1411	829	1474	855	1538	882	1605	908	1674	933	1746	958	1819	983	1894	1007	1972	1031	2051	1055	2133	1078	2217	1101	2303
3400 [1604]	615	1081	644	1131	673	1183	702	1238	730	1294	757	1353	785	1414	812	1476	838	1541	864	1608	890	1678	915	1749	941	1822	965	1898	990	1976	1014	2055	1037	2137	1060	2221	1083	2307	1106	2395
3500 [1652]	628	1134	657	1187	685	1241	713	1298	741	1357	768	1418	795	1481	821	1546	847	1613	873	1682	899	1754	924	1827	948	1903	972	1981	996	2061	1020	2143	1043	2227	1066	2313	1088	2401	1110	2492
3600 [1699]	641	1191	669	1246	697	1303	725	1362	752	1423	779	1486	805	1551	831	1619	857	1688	882	1760	907	1834	932	1909	956	1987	980	2067	1003	2149	1026	2234	1049	2320	1071	2409	1093	2499	1115	2592
3700 [1746]	654	1252	682	1309	709	1368	737	1430	763	1493	790	1558	816	1626	841	1695	866	1767	891	1841	916	1917	940	1995	964	2075	987	2158	1010	2242	1033	2329	1055	2417	1077	2508	1099	2601	1120	2696
3800 [1793]	667	1317	695	1376	722	1438	748	1501	775	1567	801	1634	826	1704	851	1776	876	1850	901	1926	925	2004	948	2085	972	2167	995	2252	1017	2338	1040	2427	1061	2518	1083	2611	1104	2706	1125	2804
3900 [1840]	681	1386	708	1447	734	1511	760	1576	786	1644	812	1714	837	1786	862	1860	886	1937	910	2015	934	2095	957	2178	980	2263	1003	2350	1025	2439	1046	2530	1068	2623	1089	2718	1110	2815	1130	2915
4000 [1888]	694	1458	721	1521	747	1587	773	1655	798	1725	823	1798	848	1872	872	1948	896	2027	920	2108	943	2190	966	2275	988	2362	1010	2451	1032	2542	1053	2636	1074	2731	1095	2829	1115	2928	1135	3030
4100 [1935]	708	1534	734	1600	760	1668	785	1738	810	1810	835	1885	859	1961	883	2040	906	2121	930	2204	952	2289	975	2376	997	2465	1018	2557	1040	2650	1061	2746	1081	2843	1101	2943	1121	3045	1141	3149
4200 [1982]	722	1613	747	1682	773	1752	797	1825	822	1899	846	1976	870	2055	894	2136	917	2219	939	2304	962	2391	984	2481	1005	2572	1027	2666	1047	2761	1068	2859	1088	2959	1108	3061	1127	3165	1146	3272
4300 [2029]	735	1697	761	1767	786	1840	810	1915	834	1992	858	2071	881	2152	904	2235	927	2320	949	2408	971	2497	993	2589	1014	2683	1035	2779	1055	2877	1075	2977	1095	3079	1114	3183	1133	3290	1152	3398
4400 [2076]	750	1784	774	1857	799	1932	823	2009	847	2088	870	2169	893	2253	915	2338	938	2426	960	2515	981	2607	1002	2701	1023	2797	1043	2895	1063	2995	1083	3098	1102	3202	1121	3309	1140	3417	1158	3528
4500 [2123]	764	1875	788	1950	812	2027	836	2107	859	2188	882	2271	904	2357	927	2445	948	2535	970	2627	991	2721	1012	2817	1032	2915	1052	3015	1071	3118	1091	3223	1110	3329	1128	3438	1146	3549	—	—
4600 [2171]	778	1970	802	2047	826	2126	849	2208	872	2292	894	2377	916	2465	938	2555	959	2647	980	2742	1001	2838	1021	2936	1041	3037	1061	3140	1080	3244	1099	3351	1117	3460	1135	3571	1153	3685	—	—
4700 [2218]	793	2068	816	2148	839	2229	862	2313	884	2399	906	2487	928	2577	949	2670	970	2764	991	2860	1011	2959	1031	3060	1050	3163	1069	3267	1088	3374	1107	3484	1124	3595	1142	3708	1159	3824	—	—
4800 [2265]	807	2170	830	2252	853	2336	875	2422	897	2510	919	2601	940	2693	961	2788	982	2884	1002	2983	1021	3084	1041	3187	1060	3292	1078	3399	1097	3508	1115	3620	1132	3733	1149	3849	—	—	—	—

NOTE: A/F-Drive left of bold line, B/G-Drive right of bold line, C/H-Drive right of double line.

Drive Package	A/F						B/G						C/H					
Motor H.P. [W]	2 [1491.4]						3 [2237.1]						3 [2237.1]					
Blower Sheave	AK79H						AK79H						AK79H					
Motor Sheave	1VL40*7/8						1VP50*7/8						1VP56*7/8					
Belt	A49						A50						A51					
Turns Open	0	1	**2**	3	4	5	0	1	2	3	4	**5**	0	1	2	3	4	**5**
RPM	817	773	**731**	685	641	594	1038	996	954	912	866	**824**	1152	1117	1077	1035	994	**950**

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

Airflow	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE			
				Wet Coil	Horizontal Economizer RA Damper Open	Concentric Diffuser RXRN-AEF3415 & Diffuser RXMC-DD02 (Flush)	Concentric Diffuser RXRN-AED3415 & Diffuser RXMC-DD02 (Drop)
CFM [L/s]	Total MBH	Sensible MBH	Power kW	Resistance — Inches of Water [kPa]			
3200 [1510]	0.96	0.91	0.98	0.07 [.02]	0.07 [.02]	0.74 [.18]	0.56 [.14]
3300 [1557]	0.97	0.92	0.99	0.07 [.02]	0.08 [.02]	0.79 [.20]	0.59 [.15]
3400 [1604]	0.97	0.93	0.99	0.07 [.02]	0.09 [.02]	0.84 [.21]	0.62 [.15]
3500 [1652]	0.98	0.94	0.99	0.08 [.02]	0.10 [.02]	0.90 [.22]	0.66 [.16]
3600 [1699]	0.98	0.95	0.99	0.08 [.02]	0.11 [.03]	0.95 [.24]	0.69 [.17]
3700 [1746]	0.99	0.97	1.00	0.09 [.02]	0.12 [.03]	1.00 [.25]	0.73 [.18]
3800 [1793]	0.99	0.98	1.00	0.09 [.02]	0.13 [.03]	1.04 [.26]	0.76 [.19]
3900 [1840]	1.00	0.99	1.00	0.09 [.02]	0.15 [.04]	1.09 [.27]	0.80 [.20]
4000 [1888]	1.00	1.00	1.01	0.10 [.02]	0.16 [.04]	1.13 [.28]	0.84 [.21]
4100 [1935]	1.00	1.01	1.01	0.10 [.03]	0.17 [.04]	1.19 [.30]	0.88 [.22]
4200 [1982]	1.01	1.02	1.01	0.11 [.03]	0.19 [.05]	1.24 [.31]	0.92 [.23]
4300 [2029]	1.01	1.03	1.01	0.11 [.03]	0.20 [.05]	1.31 [.33]	0.97 [.24]
4400 [2076]	1.02	1.05	1.02	0.12 [.03]	0.21 [.05]	1.37 [.34]	1.02 [.25]
4500 [2123]	1.02	1.06	1.02	0.13 [.03]	0.23 [.06]	1.43 [.35]	1.07 [.27]
4600 [2171]	1.03	1.07	1.02	0.13 [.03]	0.24 [.06]	1.48 [.37]	1.11 [.28]
4700 [2218]	1.03	1.08	1.03	0.14 [.03]	0.26 [.06]	1.54 [.38]	1.15 [.29]
4800 [2265]	1.04	1.09	1.03	0.14 [.04]	0.28 [.07]	1.59 [.40]	1.19 [.30]

* Multiply correction factor times gross performance data — resulting sensible capacity cannot exceed total capacity. [ ] Designates Metric Conversions

XX. HEATER KIT CHARACTERISTICS FOR TABLE 2. AUXILIARY HEATER KITS CHARACTERISTICS AND APPLICATION

208/240 VOLT, THREE PHASE, 60 Hz, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION													
Single Power Supply for Both Unit and Heater Kit										Separate Power Supply for Both Unit and Heater Kit			
RHEEM Model Number	Heater Kit					Heat Pump				Heater Kit		Heat Pump		
	RXJJ- Heater Kit Nominal kW	No. of Sequence Steps	Rated Heater kW @ 208/240 V	Heater KBTU/Hr @ 208/240 V	Heater Amp. @ 208/240 V	Unit Min. Ckt. Ampacity @ 208/240 V	Over Current Protective Device Size			Min. Ckt. Ampacity 208/240V	Max. Fuse Size 208/240V	Min. Circuit Ampacity 208/240V	Over Current Protective Device Size	
							Min./Max. @ 208 V	Min./Max. @ 240 V					Min./Max. @ 208 V	Min./Max. @ 240 V
RHPDZR090ACA	No Heat	-----	-----	-----	-----	43/43	50/60	50/60		-----	-----	43/43	50/60	50/60
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	69/73	80/80	80/90		26/30	30/30	43/43	50/60	50/60
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	81/87	90/90	90/100		38/44	40/45	43/43	50/60	50/60
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	95/103	100/100	110/110		52/60	60/60	43/43	50/60	50/60
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	118/130	125/125	150/150		75/87	80/90	43/43	50/60	50/60
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	146/162	150/150	175/175		104/119	110/125	43/43	50/60	50/60
RHPDZR090ACB	No Heat	-----	-----	-----	-----	46/46	60/70	60/70		-----	-----	46/46	60/70	60/70
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	72/76	80/90	80/90		26/30	30/30	46/46	60/70	60/70
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	83/89	90/100	100/100		38/44	40/45	46/46	60/70	60/70
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	97/105	110/110	110/110		52/60	60/60	46/46	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	121/132	125/125	150/150		75/87	80/90	46/46	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	149/165	175/175	175/175		104/119	110/125	46/46	60/70	60/70
RHPDZR090ACC	No Heat	-----	-----	-----	-----	46/46	60/70	60/70		-----	-----	46/46	60/70	60/70
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	72/76	80/90	80/90		26/30	30/30	46/46	60/70	60/70
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	83/89	90/100	100/100		38/44	40/45	46/46	60/70	60/70
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	97/105	110/110	110/110		52/60	60/60	46/46	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	121/132	125/125	150/150		75/87	80/90	46/46	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	149/165	175/175	175/175		104/119	110/125	46/46	60/70	60/70
RHPDZR102ACA	No Heat	-----	-----	-----	-----	47/47	60/70	60/70		-----	-----	47/47	60/70	60/70
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	73/77	80/90	80/90		26/30	30/30	47/47	60/70	60/70
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	84/90	90/100	100/100		38/44	40/45	47/47	60/70	60/70
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	99/106	110/110	110/110		52/60	60/60	47/47	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	122/134	125/125	150/150		75/87	80/90	47/47	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	150/166	175/175	175/175		104/119	110/125	47/47	60/70	60/70
RHPDZR102ACB	No Heat	-----	-----	-----	-----	49/49	60/70	60/70		-----	-----	49/49	60/70	60/70
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	75/79	80/90	90/90		26/30	30/30	49/49	60/70	60/70
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	86/92	90/100	100/110		38/44	40/45	49/49	60/70	60/70

	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	101/108	110/110	125/125	52/60	60/60	49/49	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	124/136	150/150	150/150	75/87	80/90	49/49	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	152/168	175/175	175/175	104/119	110/125	49/49	60/70	60/70
RHPDZR102ACC	No Heat	-----	-----	-----	-----	52/52	60/70	60/70	-----	-----	52/52	60/70	60/70
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	78/82	90/90	90/100	26/30	30/30	52/52	60/70	60/70
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	89/95	100/100	100/110	38/44	40/45	52/52	60/70	60/70
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	104/111	110/110	125/125	52/60	60/60	52/52	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	127/139	150/150	150/150	75/87	80/90	52/52	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	155/171	175/175	175/175	104/119	110/125	52/52	60/70	60/70
RHPDZR120ACA	No Heat	-----	-----	-----	-----	48/48	60/70	60/70	-----	-----	48/48	60/70	60/70
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	74/78	80/90	90/90	26/30	30/30	48/48	60/70	60/70
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	86/92	90/100	100/110	38/44	40/45	48/48	60/70	60/70
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	100/108	110/110	125/125	52/60	60/60	48/48	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	123/135	150/150	150/150	75/87	80/90	48/48	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	152/167	175/175	175/175	104/119	110/125	48/48	60/70	60/70
RHPDZR120ACB	No Heat	-----	-----	-----	-----	51/51	60/70	60/70	-----	-----	51/51	60/70	60/70
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	77/81	90/90	90/100	26/30	30/30	51/51	60/70	60/70
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	89/94	100/100	100/110	38/44	40/45	51/51	60/70	60/70
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	103/111	110/110	125/125	52/60	60/60	51/51	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	126/138	150/150	150/150	75/87	80/90	51/51	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	154/170	175/175	175/175	104/119	110/125	51/51	60/70	60/70
RHPDZR120ACC	No Heat	-----	-----	-----	-----	53/53	60/80	60/80	-----	-----	53/53	60/80	60/80
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	78/82	90/100	90/100	26/30	30/30	53/53	60/80	60/80
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	90/96	100/110	100/110	38/44	40/45	53/53	60/80	60/80
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	104/112	110/110	125/125	52/60	60/60	53/53	60/80	60/80
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	128/139	150/150	150/150	75/87	80/90	53/53	60/80	60/80
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	156/172	175/175	200/200	104/119	110/125	53/53	60/80	60/80
RHPDZS090ACA	No Heat	-----	-----	-----	-----	44/44	50/60	50/60	-----	-----	44/44	50/60	50/60
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	69/73	80/80	80/90	26/30	30/30	44/44	50/60	50/60
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	81/87	90/90	90/100	38/44	40/45	44/44	50/60	50/60
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	95/103	100/100	110/110	52/60	60/60	44/44	50/60	50/60
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	119/130	125/125	150/150	75/87	80/90	44/44	50/60	50/60
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	147/163	150/150	175/175	104/119	110/125	44/44	50/60	50/60

RHPDZS090ACB	No Heat	-----	-----	-----	-----	46/46	60/70	60/70	-----	-----	46/46	60/70	60/70	
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	72/76	80/90	80/90	26/30	30/30	46/46	60/70	60/70	
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	84/89	90/100	100/100	38/44	40/45	46/46	60/70	60/70	
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	98/106	110/110	110/110	52/60	60/60	46/46	60/70	60/70	
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	121/133	125/125	150/150	75/87	80/90	46/46	60/70	60/70	
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	149/165	175/175	175/175	104/119	110/125	46/46	60/70	60/70	
RHPDZS090ACC	No Heat	-----	-----	-----	-----	46/46	60/70	60/70	-----	-----	46/46	60/70	60/70	
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	72/76	80/90	80/90	26/30	30/30	46/46	60/70	60/70	
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	84/89	90/100	100/100	38/44	40/45	46/46	60/70	60/70	
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	98/106	110/110	110/110	52/60	60/60	46/46	60/70	60/70	
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	121/133	125/125	150/150	75/87	80/90	46/46	60/70	60/70	
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	149/165	175/175	175/175	104/119	110/125	46/46	60/70	60/70	
RHPDZS090ACF	No Heat	-----	-----	-----	-----	44/44	50/60	50/60	-----	-----	44/44	50/60	50/60	
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	69/73	80/80	80/90	26/30	30/30	44/44	50/60	50/60	
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	81/87	90/90	90/100	38/44	40/45	44/44	50/60	50/60	
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	95/103	100/100	110/110	52/60	60/60	44/44	50/60	50/60	
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	119/130	125/125	150/150	75/87	80/90	44/44	50/60	50/60	
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	147/163	150/150	175/175	104/119	110/125	44/44	50/60	50/60	
RHPDZS090ACG	No Heat	-----	-----	-----	-----	46/46	60/70	60/70	-----	-----	46/46	60/70	60/70	
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	72/76	80/90	80/90	26/30	30/30	46/46	60/70	60/70	
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	84/89	90/100	100/100	38/44	40/45	46/46	60/70	60/70	
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	98/106	110/110	110/110	52/60	60/60	46/46	60/70	60/70	
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	121/133	125/125	150/150	75/87	80/90	46/46	60/70	60/70	
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	149/165	175/175	175/175	104/119	110/125	46/46	60/70	60/70	
RHPDZS090ACH	No Heat	-----	-----	-----	-----	46/46	60/70	60/70	-----	-----	46/46	60/70	60/70	
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	72/76	80/90	80/90	26/30	30/30	46/46	60/70	60/70	
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	84/89	90/100	100/100	38/44	40/45	46/46	60/70	60/70	
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	98/106	110/110	110/110	52/60	60/60	46/46	60/70	60/70	
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	121/133	125/125	150/150	75/87	80/90	46/46	60/70	60/70	
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	149/165	175/175	175/175	104/119	110/125	46/46	60/70	60/70	
RHPDZS102ACA	No Heat	-----	-----	-----	-----	48/48	60/70	60/70	-----	-----	48/48	60/70	60/70	
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	74/78	80/90	90/100	26/30	30/30	48/48	60/70	60/70	

	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	86/92	90/100	100/110	38/44	40/45	48/48	60/70	60/70
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	100/108	110/110	125/125	52/60	60/60	48/48	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	123/135	150/150	150/150	75/87	80/90	48/48	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	152/167	175/175	175/175	104/119	110/125	48/48	60/70	60/70
RHPDZS102ACB	No Heat	-----	-----	-----	-----	50/50	60/70	60/70	-----	-----	50/50	60/70	60/70
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	76/80	80/90	90/100	26/30	30/30	50/50	60/70	60/70
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	88/94	100/100	100/110	38/44	40/45	50/50	60/70	60/70
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	102/110	110/110	125/125	52/60	60/60	50/50	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	125/137	150/150	150/150	75/87	80/90	50/50	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	154/169	175/175	175/175	104/119	110/125	50/50	60/70	60/70
RHPDZS102ACC	No Heat	-----	-----	-----	-----	53/53	70/80	70/80	-----	-----	53/53	70/80	70/80
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	79/83	90/100	90/100	26/30	30/30	53/53	70/80	70/80
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	91/97	100/110	110/110	38/44	40/45	53/53	70/80	70/80
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	105/113	110/110	125/125	52/60	60/60	53/53	70/80	70/80
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	128/140	150/150	150/150	75/87	80/90	53/53	70/80	70/80
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	157/172	175/175	200/200	104/119	110/125	53/53	70/80	70/80
RHPDZS102ACF	No Heat	-----	-----	-----	-----	48/48	60/70	60/70	-----	-----	48/48	60/70	60/70
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	74/78	80/90	90/100	26/30	30/30	48/48	60/70	60/70
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	86/92	90/100	100/110	38/44	40/45	48/48	60/70	60/70
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	100/108	110/110	125/125	52/60	60/60	48/48	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	123/135	150/150	150/150	75/87	80/90	48/48	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	152/167	175/175	175/175	104/119	110/125	48/48	60/70	60/70
RHPDZS102ACG	No Heat	-----	-----	-----	-----	50/50	60/70	60/70	-----	-----	50/50	60/70	60/70
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	76/80	80/90	90/100	26/30	30/30	50/50	60/70	60/70
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	88/94	100/100	100/110	38/44	40/45	50/50	60/70	60/70
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	102/110	110/110	125/125	52/60	60/60	50/50	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	125/137	150/150	150/150	75/87	80/90	50/50	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	154/169	175/175	175/175	104/119	110/125	50/50	60/70	60/70
RHPDZS102ACH	No Heat	-----	-----	-----	-----	53/53	70/80	70/80	-----	-----	53/53	70/80	70/80
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	79/83	90/100	90/100	26/30	30/30	53/53	70/80	70/80
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	91/97	100/110	110/110	38/44	40/45	53/53	70/80	70/80
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	105/113	110/110	125/125	52/60	60/60	53/53	70/80	70/80
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	128/140	150/150	150/150	75/87	80/90	53/53	70/80	70/80

	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	157/172	175/175	200/200	104/119	110/125	53/53	70/80	70/80
RHPDZS120ACA	No Heat	-----	-----	-----	-----	54/54	70/80	70/80	-----	-----	54/54	70/80	70/80
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	80/84	90/100	90/100	26/30	30/30	54/54	70/80	70/80
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	91/97	100/110	100/110	38/44	40/45	54/54	70/80	70/80
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	106/113	110/125	125/125	52/60	60/60	54/54	70/80	70/80
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	129/141	150/150	150/150	75/87	80/90	54/54	70/80	70/80
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	157/173	175/175	200/200	104/119	110/125	54/54	70/80	70/80
RHPDZS120ACB	No Heat	-----	-----	-----	-----	57/57	70/80	70/80	-----	-----	57/57	70/80	70/80
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	82/86	90/100	90/110	26/30	30/30	57/57	70/80	70/80
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	94/100	100/110	110/110	38/44	40/45	57/57	70/80	70/80
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	108/116	125/125	125/125	52/60	60/60	57/57	70/80	70/80
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	132/143	150/150	150/150	75/87	80/90	57/57	70/80	70/80
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	160/176	175/175	200/200	104/119	110/125	57/57	70/80	70/80
RHPDZS120ACC	No Heat	-----	-----	-----	-----	58/58	70/90	70/90	-----	-----	58/58	70/90	70/90
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	84/88	90/110	100/110	26/30	30/30	58/58	70/90	70/90
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	96/101	100/110	110/110	38/44	40/45	58/58	70/90	70/90
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	110/118	125/125	125/125	52/60	60/60	58/58	70/90	70/90
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	133/145	150/150	150/150	75/87	80/90	58/58	70/90	70/90
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	161/177	175/175	200/200	104/119	110/125	58/58	70/90	70/90
RHPDZS120ACF	No Heat	-----	-----	-----	-----	54/54	70/80	70/80	-----	-----	54/54	70/80	70/80
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	80/84	90/100	90/100	26/30	30/30	54/54	70/80	70/80
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	91/97	100/110	100/110	38/44	40/45	54/54	70/80	70/80
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	106/113	110/125	125/125	52/60	60/60	54/54	70/80	70/80
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	129/141	150/150	150/150	75/87	80/90	54/54	70/80	70/80
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	157/173	175/175	200/200	104/119	110/125	54/54	70/80	70/80
RHPDZS120ACG	No Heat	-----	-----	-----	-----	57/57	70/80	70/80	-----	-----	57/57	70/80	70/80
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	82/86	90/100	90/110	26/30	30/30	57/57	70/80	70/80
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	94/100	100/110	110/110	38/44	40/45	57/57	70/80	70/80
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	108/116	125/125	125/125	52/60	60/60	57/57	70/80	70/80
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	132/143	150/150	150/150	75/87	80/90	57/57	70/80	70/80
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	160/176	175/175	200/200	104/119	110/125	57/57	70/80	70/80
RHPDZS120ACH	No Heat	-----	-----	-----	-----	58/58	70/90	70/90	-----	-----	58/58	70/90	70/90

	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	84/88	90/110	100/110	26/30	30/30	58/58	70/90	70/90
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	96/101	100/110	110/110	38/44	40/45	58/58	70/90	70/90
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	110/118	125/125	125/125	52/60	60/60	58/58	70/90	70/90
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	133/145	150/150	150/150	75/87	80/90	58/58	70/90	70/90
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	161/177	175/175	200/200	104/119	110/125	58/58	70/90	70/90
RHPDZT090ACF	No Heat	-----	-----	-----	-----	44/44	50/60	50/60	-----	-----	44/44	50/60	50/60
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	69/73	80/80	80/90	26/30	30/30	44/44	50/60	50/60
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	81/87	90/90	90/100	38/44	40/45	44/44	50/60	50/60
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	95/103	100/100	110/110	52/60	60/60	44/44	50/60	50/60
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	119/130	125/125	150/150	75/87	80/90	44/44	50/60	50/60
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	147/163	150/150	175/175	104/119	110/125	44/44	50/60	50/60
RHPDZT090ACG	No Heat	-----	-----	-----	-----	46/46	60/70	60/70	-----	-----	46/46	60/70	60/70
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	72/76	80/90	80/90	26/30	30/30	46/46	60/70	60/70
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	84/89	90/100	100/100	38/44	40/45	46/46	60/70	60/70
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	98/106	110/110	110/110	52/60	60/60	46/46	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	121/133	125/125	150/150	75/87	80/90	46/46	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	149/165	175/175	175/175	104/119	110/125	46/46	60/70	60/70
RHPDZT090ACH	No Heat	-----	-----	-----	-----	46/46	60/70	60/70	-----	-----	46/46	60/70	60/70
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	72/76	80/90	80/90	26/30	30/30	46/46	60/70	60/70
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	84/89	90/100	100/100	38/44	40/45	46/46	60/70	60/70
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	98/106	110/110	110/110	52/60	60/60	46/46	60/70	60/70
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	121/133	125/125	150/150	75/87	80/90	46/46	60/70	60/70
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	149/165	175/175	175/175	104/119	110/125	46/46	60/70	60/70
RHPDZT102ACF	No Heat	-----	-----	-----	-----	48/48	60/70	50/60	-----	-----	48/48	60/70	50/60
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	74/78	80/90	90/100	26/30	30/30	48/48	60/70	50/60
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	86/92	90/100	100/110	38/44	40/45	48/48	60/70	50/60
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	100/108	110/110	125/125	52/60	60/60	48/48	60/70	50/60
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	123/135	150/150	150/150	75/87	80/90	48/48	60/70	50/60
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	152/167	175/175	175/175	104/119	110/125	48/48	60/70	50/60
RHPDZT102ACG	No Heat	-----	-----	-----	-----	50/50	60/70	50/60	-----	-----	50/50	60/70	50/60
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	76/80	80/90	90/100	26/30	30/30	50/50	60/70	50/60
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	88/94	100/100	100/110	38/44	40/45	50/50	60/70	50/60
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	102/110	110/110	125/125	52/60	60/60	50/50	60/70	50/60

	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	125/137	150/150	150/150	75/87	80/90	50/50	60/70	50/60
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	154/169	175/175	175/175	104/119	110/125	50/50	60/70	50/60
RHPDZT102ACH	No Heat	-----	-----	-----	-----	53/53	70/80	70/80	-----	-----	53/53	70/80	70/80
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	79/83	90/100	90/100	26/30	30/30	53/53	70/80	70/80
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	91/97	100/110	110/110	38/44	40/45	53/53	70/80	70/80
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	105/113	110/110	125/125	52/60	60/60	53/53	70/80	70/80
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	128/140	150/150	150/150	75/87	80/90	53/53	70/80	70/80
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	157/172	175/175	200/200	104/119	110/125	53/53	70/80	70/80
RHPDZT120ACF	No Heat	-----	-----	-----	-----	54/54	70/80	70/80	-----	-----	54/54	70/80	70/80
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	80/84	90/100	90/100	26/30	30/30	54/54	70/80	70/80
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	91/97	100/110	100/110	38/44	40/45	54/54	70/80	70/80
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	106/113	110/125	125/125	52/60	60/60	54/54	70/80	70/80
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	129/141	150/150	150/150	75/87	80/90	54/54	70/80	70/80
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	157/173	175/175	200/200	104/119	110/125	54/54	70/80	70/80
RHPDZT120ACG	No Heat	-----	-----	-----	-----	57/57	70/80	70/80	-----	-----	57/57	70/80	70/80
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	82/86	90/100	90/110	26/30	30/30	57/57	70/80	70/80
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	94/100	100/110	110/110	38/44	40/45	57/57	70/80	70/80
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	108/116	125/125	125/125	52/60	60/60	57/57	70/80	70/80
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	132/143	150/150	150/150	75/87	80/90	57/57	70/80	70/80
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	160/176	175/175	200/200	104/119	110/125	57/57	70/80	70/80
RHPDZT120ACH	No Heat	-----	-----	-----	-----	58/58	70/90	70/90	-----	-----	58/58	70/90	70/90
	DD10CP	1	7.4/9.9	25.25/33.78	20.6/23.8	84/88	90/110	100/110	26/30	30/30	58/58	70/90	70/90
	DD15CP	1	10.8/14.4	36.85/49.13	30.0/34.6	96/101	100/110	110/110	38/44	40/45	58/58	70/90	70/90
	DD20CP	1	14.9/19.8	50.84/67.56	41.3/47.6	110/118	125/125	125/125	52/60	60/60	58/58	70/90	70/90
	DD30CP	1	21.6/28.8	73.70/98.27	60.0/69.3	133/145	150/150	150/150	75/87	80/90	58/58	70/90	70/90
	DD40CP	1	29.7/39.6	101.34/135.12	82.5/95.2	161/177	175/175	200/200	104/119	110/125	58/58	70/90	70/90

480 VOLT, THREE PHASE, 60 Hz, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION													
Single Power Supply for Both Unit and Heater Kit									Separate Power Supply for Both Unit and Heater Kit				
RHEEM Model Number	Heater Kit					Heat Pump			Heater Kit		Heat Pump		
	RXJJ- Heater Kit Nominal kW	No. of Sequence Steps	Rated Heater kW @ 480 V	Heater KBTU/Hr @ 480 V	Heater Amp. @ 480 V	Unit Min. Ckt. Ampacity @ 480 V	Over Current Protective Device Size		Min. Ckt. Ampacity 480V	Max. Fuse Size 480V	Min. Circuit Ampacity 480V	Over Current Protective Device Size	
							Min./Max. @ 480 V					Min./Max. @ 480 V	
RHPDZR090ADA	No Heat	-----	-----	-----	-----	23	30/35	-----	-----	-----	23	30/35	-----
	DD10DNV	1	9.9	33.78	11.9	38	40/45	-----	15	15	23	30/35	-----
	DD15DNV	1	14.4	49.13	17.3	44	50/50	-----	22	25	23	30/35	-----
	DD20DNV	1	19.8	67.56	23.8	52	60/60	-----	30	30	23	30/35	-----
	DD30DNV	1	28.8	98.27	34.6	66	70/70	-----	44	45	23	30/35	-----
	DD40DNV	1	39.6	135.12	47.6	82	90/90	-----	60	60	23	30/35	-----
RHPDZR090ADB	No Heat	-----	-----	-----	-----	24	30/35	-----	-----	-----	24	30/35	-----
	DD10DNV	1	9.9	33.78	11.9	39	45/45	-----	15	15	24	30/35	-----
	DD15DNV	1	14.4	49.13	17.3	46	50/50	-----	22	25	24	30/35	-----
	DD20DNV	1	19.8	67.56	23.8	54	60/60	-----	30	30	24	30/35	-----
	DD30DNV	1	28.8	98.27	34.6	67	70/70	-----	44	45	24	30/35	-----
	DD40DNV	1	39.6	135.12	47.6	84	90/90	-----	60	60	24	30/35	-----
RHPDZR090ADC	No Heat	-----	-----	-----	-----	24	30/35	-----	-----	-----	24	30/35	-----
	DD10DNV	1	9.9	33.78	11.9	39	45/45	-----	15	15	24	30/35	-----
	DD15DNV	1	14.4	49.13	17.3	46	50/50	-----	22	25	24	30/35	-----
	DD20DNV	1	19.8	67.56	23.8	54	60/60	-----	30	30	24	30/35	-----
	DD30DNV	1	28.8	98.27	34.6	67	70/70	-----	44	45	24	30/35	-----
	DD40DNV	1	39.6	135.12	47.6	84	90/90	-----	60	60	24	30/35	-----
RHPDZR102ADA	No Heat	-----	-----	-----	-----	23	30/35	-----	-----	-----	23	30/35	-----
	DD10DNV	1	9.9	33.78	11.9	38	40/45	-----	15	15	23	30/35	-----
	DD15DNV	1	14.4	49.13	17.3	45	50/50	-----	22	25	23	30/35	-----
	DD20DNV	1	19.8	67.56	23.8	53	60/60	-----	30	30	23	30/35	-----
	DD30DNV	1	28.8	98.27	34.6	66	70/70	-----	44	45	23	30/35	-----
	DD40DNV	1	39.6	135.12	47.6	82	90/90	-----	60	60	23	30/35	-----
RHPDZR102ADB	No Heat	-----	-----	-----	-----	24	30/35	-----	-----	-----	24	30/35	-----
	DD10DNV	1	9.9	33.78	11.9	39	45/45	-----	15	15	24	30/35	-----

	DD15DNV	1	14.4	49.13	17.3	46	50/50	-----	22	25	24	30/35	-----
	DD20DNV	1	19.8	67.56	23.8	54	60/60	-----	30	30	24	30/35	-----
	DD30DNV	1	28.8	98.27	34.6	67	70/70	-----	44	45	24	30/35	-----
	DD40DNV	1	39.6	135.12	47.6	83	90/90	-----	60	60	24	30/35	-----
RHPDZR102ADC	No Heat	-----	-----	-----	-----	25	30/35	-----	-----	-----	25	30/35	-----
	DD10DNV	1	9.9	33.78	11.9	40	45/45	-----	15	15	25	30/35	-----
	DD15DNV	1	14.4	49.13	17.3	47	50/50	-----	22	25	25	30/35	-----
	DD20DNV	1	19.8	67.56	23.8	55	60/60	-----	30	30	25	30/35	-----
	DD30DNV	1	28.8	98.27	34.6	69	80/80	-----	44	45	25	30/35	-----
	DD40DNV	1	39.6	135.12	47.6	85	90/90	-----	60	60	25	30/35	-----
RHPDZR120ADA	No Heat	-----	-----	-----	-----	26	30/40	-----	-----	-----	26	30/40	-----
	DD10DNV	1	9.9	33.78	11.9	41	45/50	-----	15	15	26	30/40	-----
	DD15DNV	1	14.4	49.13	17.3	47	50/50	-----	22	25	26	30/40	-----
	DD20DNV	1	19.8	67.56	23.8	56	60/60	-----	30	30	26	30/40	-----
	DD30DNV	1	28.8	98.27	34.6	69	80/80	-----	44	45	26	30/40	-----
	DD40DNV	1	39.6	135.12	47.6	85	90/90	-----	60	60	26	30/40	-----
RHPDZR120ADB	No Heat	-----	-----	-----	-----	27	35/40	-----	-----	-----	27	35/40	-----
	DD10DNV	1	9.9	33.78	11.9	42	45/50	-----	15	15	27	35/40	-----
	DD15DNV	1	14.4	49.13	17.3	49	60/60	-----	22	25	27	35/40	-----
	DD20DNV	1	19.8	67.56	23.8	57	60/60	-----	30	30	27	35/40	-----
	DD30DNV	1	28.8	98.27	34.6	70	80/80	-----	44	45	27	35/40	-----
	DD40DNV	1	39.6	135.12	47.6	87	90/90	-----	60	60	27	35/40	-----
RHPDZR120ADC	No Heat	-----	-----	-----	-----	28	35/40	-----	-----	-----	28	35/40	-----
	DD10DNV	1	9.9	33.78	11.9	43	45/50	-----	15	15	28	35/40	-----
	DD15DNV	1	14.4	49.13	17.3	49	60/60	-----	22	25	28	35/40	-----
	DD20DNV	1	19.8	67.56	23.8	58	60/60	-----	30	30	28	35/40	-----
	DD30DNV	1	28.8	98.27	34.6	71	80/80	-----	44	45	28	35/40	-----
	DD40DNV	1	39.6	135.12	47.6	87	90/90	-----	60	60	28	35/40	-----
RHPDZS090ADA	No Heat	-----	-----	-----	-----	19	25/25	-----	-----	-----	19	25/25	-----
	DD10DNV	1	9.9	33.78	11.9	34	35/35	-----	15	15	19	25/25	-----
	DD15DNV	1	14.4	49.13	17.3	40	45/45	-----	22	25	19	25/25	-----
	DD20DNV	1	19.8	67.56	23.8	48	50/50	-----	30	30	19	25/25	-----
	DD30DNV	1	28.8	98.27	34.6	62	70/70	-----	44	45	19	25/25	-----

	DD40DNV	1	39.6	135.12	47.6	78	80/80	-----	60	60	19	25/25	-----
RHPDZS090ADB	No Heat	-----	-----	-----	-----	20	25/25	-----	-----	-----	20	25/25	-----
	DD10DNV	1	9.9	33.78	11.9	35	40/40	-----	15	15	20	25/25	-----
	DD15DNV	1	14.4	49.13	17.3	42	45/45	-----	22	25	20	25/25	-----
	DD20DNV	1	19.8	67.56	23.8	50	60/60	-----	30	30	20	25/25	-----
	DD30DNV	1	28.8	98.27	34.6	63	70/70	-----	44	45	20	25/25	-----
	DD40DNV	1	39.6	135.12	47.6	80	90/90	-----	60	60	20	25/25	-----
RHPDZS090ADC	No Heat	-----	-----	-----	-----	20	25/25	-----	-----	-----	20	25/25	-----
	DD10DNV	1	9.9	33.78	11.9	35	40/40	-----	15	15	20	25/25	-----
	DD15DNV	1	14.4	49.13	17.3	42	45/45	-----	22	25	20	25/25	-----
	DD20DNV	1	19.8	67.56	23.8	50	60/60	-----	30	30	20	25/25	-----
	DD30DNV	1	28.8	98.27	34.6	63	70/70	-----	44	45	20	25/25	-----
	DD40DNV	1	39.6	135.12	47.6	80	90/90	-----	60	60	20	25/25	-----
RHPDZS090ADF	No Heat	-----	-----	-----	-----	19	25/25	-----	-----	-----	19	25/25	-----
	DD10DNV	1	9.9	33.78	11.9	34	35/35	-----	15	15	19	25/25	-----
	DD15DNV	1	14.4	49.13	17.3	40	45/45	-----	22	25	19	25/25	-----
	DD20DNV	1	19.8	67.56	23.8	48	50/50	-----	30	30	19	25/25	-----
	DD30DNV	1	28.8	98.27	34.6	62	70/70	-----	44	45	19	25/25	-----
	DD40DNV	1	39.6	135.12	47.6	78	80/80	-----	60	60	19	25/25	-----
RHPDZS090ADG	No Heat	-----	-----	-----	-----	20	25/25	-----	-----	-----	20	25/25	-----
	DD10DNV	1	9.9	33.78	11.9	35	40/40	-----	15	15	20	25/25	-----
	DD15DNV	1	14.4	49.13	17.3	42	45/45	-----	22	25	20	25/25	-----
	DD20DNV	1	19.8	67.56	23.8	50	60/60	-----	30	30	20	25/25	-----
	DD30DNV	1	28.8	98.27	34.6	63	70/70	-----	44	45	20	25/25	-----
	DD40DNV	1	39.6	135.12	47.6	80	90/90	-----	60	60	20	25/25	-----
RHPDZS090ADH	No Heat	-----	-----	-----	-----	20	25/25	-----	-----	-----	20	25/25	-----
	DD10DNV	1	9.9	33.78	11.9	35	40/40	-----	15	15	20	25/25	-----
	DD15DNV	1	14.4	49.13	17.3	42	45/45	-----	22	25	20	25/25	-----
	DD20DNV	1	19.8	67.56	23.8	50	60/60	-----	30	30	20	25/25	-----
	DD30DNV	1	28.8	98.27	34.6	63	70/70	-----	44	45	20	25/25	-----
	DD40DNV	1	39.6	135.12	47.6	80	90/90	-----	60	60	20	25/25	-----
RHPDZS102ADA	No Heat	-----	-----	-----	-----	23	30/30	-----	-----	-----	23	30/30	-----

	DD10DNV	1	9.9	33.78	11.9	37	40/45	-----	15	15	23	30/30	-----
	DD15DNV	1	14.4	49.13	17.3	44	50/50	-----	22	25	23	30/30	-----
	DD20DNV	1	19.8	67.56	23.8	52	60/60	-----	30	30	23	30/30	-----
	DD30DNV	1	28.8	98.27	34.6	66	70/70	-----	44	45	23	30/30	-----
	DD40DNV	1	39.6	135.12	47.6	82	90/90	-----	60	60	23	30/30	-----
RHPDZS102ADB	No Heat	-----	-----	-----	-----	24	30/35	-----	-----	-----	24	30/35	-----
	DD10DNV	1	9.9	33.78	11.9	38	40/45	-----	15	15	24	30/35	-----
	DD15DNV	1	14.4	49.13	17.3	45	50/50	-----	22	25	24	30/35	-----
	DD20DNV	1	19.8	67.56	23.8	53	60/60	-----	30	30	24	30/35	-----
	DD30DNV	1	28.8	98.27	34.6	67	70/70	-----	44	45	24	30/35	-----
	DD40DNV	1	39.6	135.12	47.6	83	90/90	-----	60	60	24	30/35	-----
RHPDZS102ADC	No Heat	-----	-----	-----	-----	25	30/35	-----	-----	-----	25	30/35	-----
	DD10DNV	1	9.9	33.78	11.9	40	45/45	-----	15	15	25	30/35	-----
	DD15DNV	1	14.4	49.13	17.3	47	50/50	-----	22	25	25	30/35	-----
	DD20DNV	1	19.8	67.56	23.8	55	60/60	-----	30	30	25	30/35	-----
	DD30DNV	1	28.8	98.27	34.6	68	80/80	-----	44	45	25	30/35	-----
	DD40DNV	1	39.6	135.12	47.6	85	90/90	-----	60	60	25	30/35	-----
RHPDZS102ADF	No Heat	-----	-----	-----	-----	23	30/30	-----	-----	-----	23	30/30	-----
	DD10DNV	1	9.9	33.78	11.9	37	40/45	-----	15	15	23	30/30	-----
	DD15DNV	1	14.4	49.13	17.3	44	50/50	-----	22	25	23	30/30	-----
	DD20DNV	1	19.8	67.56	23.8	52	60/60	-----	30	30	23	30/30	-----
	DD30DNV	1	28.8	98.27	34.6	66	70/70	-----	44	45	23	30/30	-----
	DD40DNV	1	39.6	135.12	47.6	82	90/90	-----	60	60	23	30/30	-----
RHPDZS102ADG	No Heat	-----	-----	-----	-----	24	30/35	-----	-----	-----	24	30/35	-----
	DD10DNV	1	9.9	33.78	11.9	38	40/45	-----	15	15	24	30/35	-----
	DD15DNV	1	14.4	49.13	17.3	45	50/50	-----	22	25	24	30/35	-----
	DD20DNV	1	19.8	67.56	23.8	53	60/60	-----	30	30	24	30/35	-----
	DD30DNV	1	28.8	98.27	34.6	67	70/70	-----	44	45	24	30/35	-----
	DD40DNV	1	39.6	135.12	47.6	83	90/90	-----	60	60	24	30/35	-----
RHPDZS102ADH	No Heat	-----	-----	-----	-----	25	30/35	-----	-----	-----	25	30/35	-----
	DD10DNV	1	9.9	33.78	11.9	40	45/45	-----	15	15	25	30/35	-----
	DD15DNV	1	14.4	49.13	17.3	47	50/50	-----	22	25	25	30/35	-----
	DD20DNV	1	19.8	67.56	23.8	55	60/60	-----	30	30	25	30/35	-----

	DD30DNV	1	28.8	98.27	34.6	68	80/80	-----	44	45	25	30/35	-----
	DD40DNV	1	39.6	135.12	47.6	85	90/90	-----	60	60	25	30/35	-----
RHPDZS120ADA	No Heat	-----	-----	-----	-----	26	30/40	-----	-----	-----	26	30/40	-----
	DD10DNV	1	9.9	33.78	11.9	41	45/50	-----	15	15	26	30/40	-----
	DD15DNV	1	14.4	49.13	17.3	48	50/50	-----	22	25	26	30/40	-----
	DD20DNV	1	19.8	67.56	23.8	56	60/60	-----	30	30	26	30/40	-----
	DD30DNV	1	28.8	98.27	34.6	69	80/80	-----	44	45	26	30/40	-----
	DD40DNV	1	39.6	135.12	47.6	85	90/90	-----	60	60	26	30/40	-----
RHPDZS120ADB	No Heat	-----	-----	-----	-----	27	35/45	-----	-----	-----	27	35/45	-----
	DD10DNV	1	9.9	33.78	11.9	42	45/50	-----	15	15	27	35/45	-----
	DD15DNV	1	14.4	49.13	17.3	49	60/60	-----	22	25	27	35/45	-----
	DD20DNV	1	19.8	67.56	23.8	57	60/60	-----	30	30	27	35/45	-----
	DD30DNV	1	28.8	98.27	34.6	70	80/80	-----	44	45	27	35/45	-----
	DD40DNV	1	39.6	135.12	47.6	87	90/90	-----	60	60	27	35/45	-----
RHPDZS120ADC	No Heat	-----	-----	-----	-----	28	35/40	-----	-----	-----	28	35/40	-----
	DD10DNV	1	9.9	33.78	11.9	43	45/50	-----	15	15	28	35/40	-----
	DD15DNV	1	14.4	49.13	17.3	50	60/60	-----	22	25	28	35/40	-----
	DD20DNV	1	19.8	67.56	23.8	58	60/60	-----	30	30	28	35/40	-----
	DD30DNV	1	28.8	98.27	34.6	71	80/80	-----	44	45	28	35/40	-----
	DD40DNV	1	39.6	135.12	47.6	87	90/90	-----	60	60	28	35/40	-----
RHPDZS120ADF	No Heat	-----	-----	-----	-----	26	30/40	-----	-----	-----	26	30/40	-----
	DD10DNV	1	9.9	33.78	11.9	41	45/50	-----	15	15	26	30/40	-----
	DD15DNV	1	14.4	49.13	17.3	48	50/50	-----	22	25	26	30/40	-----
	DD20DNV	1	19.8	67.56	23.8	56	60/60	-----	30	30	26	30/40	-----
	DD30DNV	1	28.8	98.27	34.6	69	80/80	-----	44	45	26	30/40	-----
	DD40DNV	1	39.6	135.12	47.6	85	90/90	-----	60	60	26	30/40	-----
RHPDZS120ADG	No Heat	-----	-----	-----	-----	27	35/45	-----	-----	-----	27	35/45	-----
	DD10DNV	1	9.9	33.78	11.9	42	45/50	-----	15	15	27	35/45	-----
	DD15DNV	1	14.4	49.13	17.3	49	60/60	-----	22	25	27	35/45	-----
	DD20DNV	1	19.8	67.56	23.8	57	60/60	-----	30	30	27	35/45	-----
	DD30DNV	1	28.8	98.27	34.6	70	80/80	-----	44	45	27	35/45	-----
	DD40DNV	1	39.6	135.12	47.6	87	90/90	-----	60	60	27	35/45	-----

RHPDZS120ADH	No Heat	-----	-----	-----	-----	28	35/40	-----	-----	-----	28	35/40	-----
	DD10DNV	1	9.9	33.78	11.9	43	45/50	-----	15	15	28	35/40	-----
	DD15DNV	1	14.4	49.13	17.3	50	60/60	-----	22	25	28	35/40	-----
	DD20DNV	1	19.8	67.56	23.8	58	60/60	-----	30	30	28	35/40	-----
	DD30DNV	1	28.8	98.27	34.6	71	80/80	-----	44	45	28	35/40	-----
	DD40DNV	1	39.6	135.12	47.6	87	90/90	-----	60	60	28	35/40	-----
RHPDZT090ADF	No Heat	-----	-----	-----	-----	19	25/25	-----	-----	-----	19	25/25	-----
	DD10DNV	1	9.9	33.78	11.9	34	35/35	-----	15	15	19	25/25	-----
	DD15DNV	1	14.4	49.13	17.3	40	45/45	-----	22	25	19	25/25	-----
	DD20DNV	1	19.8	67.56	23.8	48	50/50	-----	30	30	19	25/25	-----
	DD30DNV	1	28.8	98.27	34.6	62	70/70	-----	44	45	19	25/25	-----
	DD40DNV	1	39.6	135.12	47.6	78	80/80	-----	60	60	19	25/25	-----
RHPDZT090ADG	No Heat	-----	-----	-----	-----	20	25/25	-----	-----	-----	20	25/25	-----
	DD10DNV	1	9.9	33.78	11.9	35	40/40	-----	15	15	20	25/25	-----
	DD15DNV	1	14.4	49.13	17.3	42	45/45	-----	22	25	20	25/25	-----
	DD20DNV	1	19.8	67.56	23.8	50	60/60	-----	30	30	20	25/25	-----
	DD30DNV	1	28.8	98.27	34.6	63	70/70	-----	44	45	20	25/25	-----
	DD40DNV	1	39.6	135.12	47.6	80	90/90	-----	60	60	20	25/25	-----
RHPDZT090ADH	No Heat	-----	-----	-----	-----	20	25/25	-----	-----	-----	20	25/25	-----
	DD10DNV	1	9.9	33.78	11.9	35	40/40	-----	15	15	20	25/25	-----
	DD15DNV	1	14.4	49.13	17.3	42	45/45	-----	22	25	20	25/25	-----
	DD20DNV	1	19.8	67.56	23.8	50	60/60	-----	30	30	20	25/25	-----
	DD30DNV	1	28.8	98.27	34.6	63	70/70	-----	44	45	20	25/25	-----
	DD40DNV	1	39.6	135.12	47.6	80	90/90	-----	60	60	20	25/25	-----
RHPDZT102ADF	No Heat	-----	-----	-----	-----	23	30/30	-----	-----	-----	23	30/30	-----
	DD10DNV	1	9.9	33.78	11.9	37	40/45	-----	15	15	23	30/30	-----
	DD15DNV	1	14.4	49.13	17.3	44	50/50	-----	22	25	23	30/30	-----
	DD20DNV	1	19.8	67.56	23.8	52	60/60	-----	30	30	23	30/30	-----
	DD30DNV	1	28.8	98.27	34.6	66	70/70	-----	44	45	23	30/30	-----
	DD40DNV	1	39.6	135.12	47.6	82	90/90	-----	60	60	23	30/30	-----
RHPDZT102ADG	No Heat	-----	-----	-----	-----	24	30/35	-----	-----	-----	24	30/35	-----
	DD10DNV	1	9.9	33.78	11.9	38	40/45	-----	15	15	24	30/35	-----
	DD15DNV	1	14.4	49.13	17.3	45	50/50	-----	22	25	24	30/35	-----

	DD20DNV	1	19.8	67.56	23.8	53	60/60	-----	30	30	24	30/35	-----
	DD30DNV	1	28.8	98.27	34.6	67	70/70	-----	44	45	24	30/35	-----
	DD40DNV	1	39.6	135.12	47.6	83	90/90	-----	60	60	24	30/35	-----
RHPDZT102ADH	No Heat	-----	-----	-----	-----	25	30/35	-----	-----	-----	25	30/35	-----
	DD10DNV	1	9.9	33.78	11.9	40	45/45	-----	15	15	25	30/35	-----
	DD15DNV	1	14.4	49.13	17.3	47	50/50	-----	22	25	25	30/35	-----
	DD20DNV	1	19.8	67.56	23.8	55	60/60	-----	30	30	25	30/35	-----
	DD30DNV	1	28.8	98.27	34.6	68	80/80	-----	44	45	25	30/35	-----
	DD40DNV	1	39.6	135.12	47.6	85	90/90	-----	60	60	25	30/35	-----
RHPDZT120ADF	No Heat	-----	-----	-----	-----	26	35/40	-----	-----	-----	26	35/40	-----
	DD10DNV	1	9.9	33.78	11.9	41	45/50	-----	15	15	26	35/40	-----
	DD15DNV	1	14.4	49.13	17.3	48	50/50	-----	22	25	26	35/40	-----
	DD20DNV	1	19.8	67.56	23.8	56	60/60	-----	30	30	26	35/40	-----
	DD30DNV	1	28.8	98.27	34.6	69	80/80	-----	44	45	26	35/40	-----
	DD40DNV	1	39.6	135.12	47.6	85	90/90	-----	60	60	26	35/40	-----
RHPDZT120ADG	No Heat	-----	-----	-----	-----	27	35/45	-----	-----	-----	27	35/45	-----
	DD10DNV	1	9.9	33.78	11.9	42	45/50	-----	15	15	27	35/45	-----
	DD15DNV	1	14.4	49.13	17.3	49	60/60	-----	22	25	27	35/45	-----
	DD20DNV	1	19.8	67.56	23.8	57	60/60	-----	30	30	27	35/45	-----
	DD30DNV	1	28.8	98.27	34.6	70	80/80	-----	44	45	27	35/45	-----
	DD40DNV	1	39.6	135.12	47.6	87	90/90	-----	60	60	27	35/45	-----
RHPDZT120ADH	No Heat	-----	-----	-----	-----	28	35/40	-----	-----	-----	28	35/40	-----
	DD10DNV	1	9.9	33.78	11.9	43	45/50	-----	15	15	28	35/40	-----
	DD15DNV	1	14.4	49.13	17.3	50	60/60	-----	22	25	28	35/40	-----
	DD20DNV	1	19.8	67.56	23.8	58	60/60	-----	30	30	28	35/40	-----
	DD30DNV	1	28.8	98.27	34.6	71	80/80	-----	44	45	28	35/40	-----
	DD40DNV	1	39.6	135.12	47.6	87	90/90	-----	60	60	28	35/40	-----

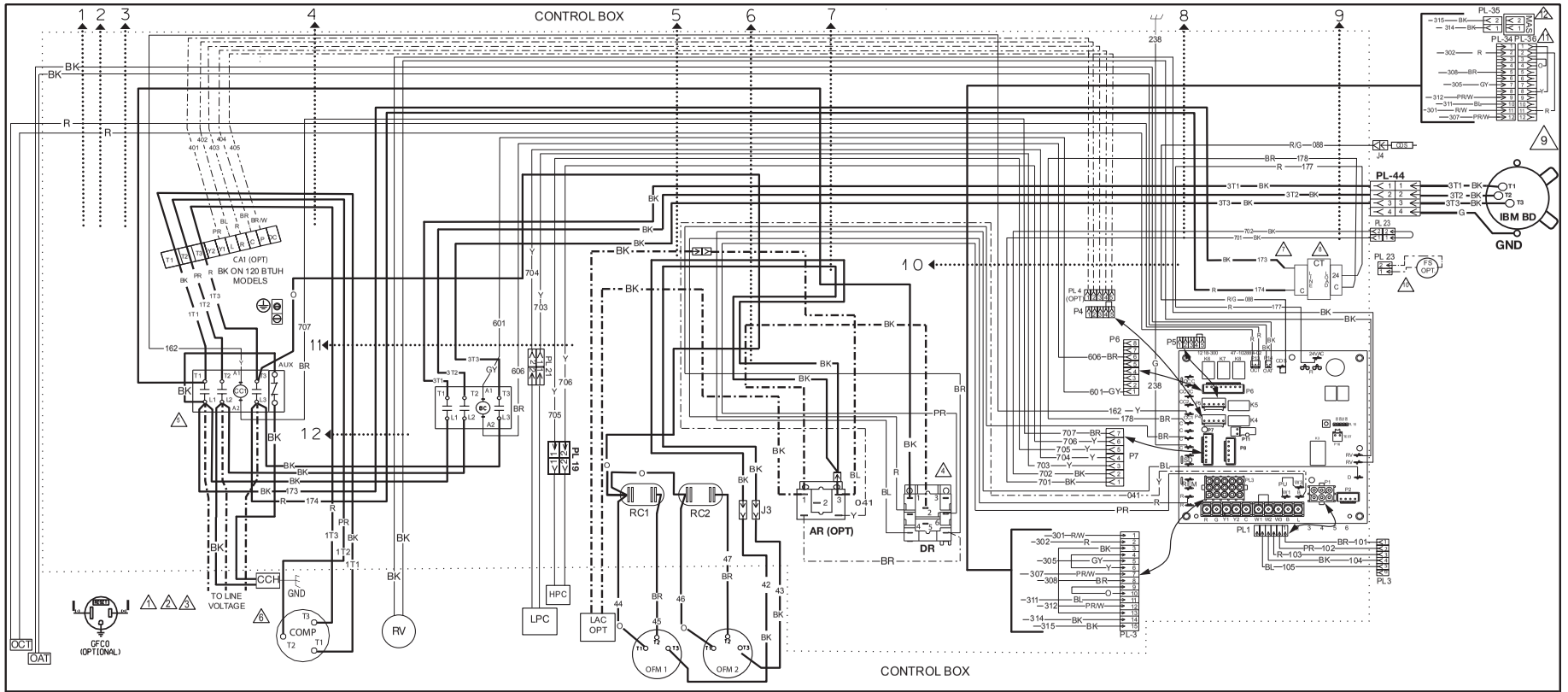
TROUBLESHOOTING CHART

⚠ WARNING

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

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

FIGURE 20



WIRING INFORMATION

LINE VOLTAGE
-FACTORY STANDARD
-FACTORY OPTION
-FIELD INSTALLED

LOW VOLTAGE
-FACTORY STANDARD
-FACTORY OPTION
-FIELD INSTALLED

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

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

NOTES

1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
2. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.
3. CONNECT FIELD WIRE TO COMPRESSOR CONTACTOR (CC1).
4. REMOVE J3 AT DR(2) TO INSTALL LOW AMBIENT ACCESSORY.
5. CRANKCASE HEATER ATTACHED TO CC1 (L2) AND CC1 AUX (52).
6. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
7. TRANSFORMER FACTORY WIRED AS SHOWN BELOW. CHANGE PRIMARY VOLTAGE CONNECTION FOR ALTERNATE VOLTAGES, IF REQUIRED.

UNIT VOLTAGES -HZ	TRANSFORMER TERM.
200-220 -50 HZ	200
208 -60 HZ	230
230 -60 HZ	230
380 -50 HZ	400
380-415 -50 HZ	400
460 -60 HZ	460
575 -60 HZ	575

8. LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TRANSFORMER, 24VAC 50/60 HZ SUPPLIED.
9. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
10. REMOVE PL23 JUMPER FOR OPTIONAL FT LOCATED IN BLOWER COMPARTMENT.
11. REMOVE PL36 FOR ECONOMIZER ACCESSORY. PL34 AND PL36 LOCATED IN RETURN AIR SECTION.
12. MAS ACCESSORY PROVIDED WITH ECONOMIZER. PL35 LOCATED IN BLOWER COMPARTMENT.

COMPONENT CODES

BC	BLOWER CONTACTOR
CA	COMFORT ALERT MODULE
CC	COMPRESSOR CONTACTOR
CCH	CRANKCASE HEATER
CDS	CLOGGED DRAIN SENSOR
CFS	CLOGGED FILTER SWITCH
COMP	COMPRESSOR
CT	CONTROL TRANSFORMER
DAT	DISCHARGE AIR SENSOR
DISC	DISCONNECT SWITCH
FLMS	FLAME SENSOR
FP	FAN PROVING
FS	FREEZE SENSOR
GFCO	GROUND FAULT CONVENIENCE OUTLET
GL	GROUND LUG
GND	GROUND
HPC	HIGH PRESSURE CONTROL
IBM BD	INDOOR BLOWER MOTOR BELT DRIVE
IDM	INDUCED DRAFT MOTOR
IFC	INTEGRATED FURNACE CONTROL
J	JUMPER
LAC	LOW AMBIENT CONTROL
LPC	LOW PRESSURE CONTROL
MRLC	MANUAL RESET LIMIT CONTROL
NPC	NEGATIVE PRESSURE SWITCH
OAT	OUTSIDE AIR SENSOR
OFM	OUTDOOR FAN MOTOR
PL	PLUG
PT	POWER TRANSFORMER
RAT	RETURN AIR SENSOR
RC	RUN CAPACITOR
RTU-C	ROOFTOP UNIT CONTROL
SE	SPARK ELECTRODE
VFD	VARIABLE FREQUENCY DRIVE
##	WIRE TIES

WIRE COLOR CODE

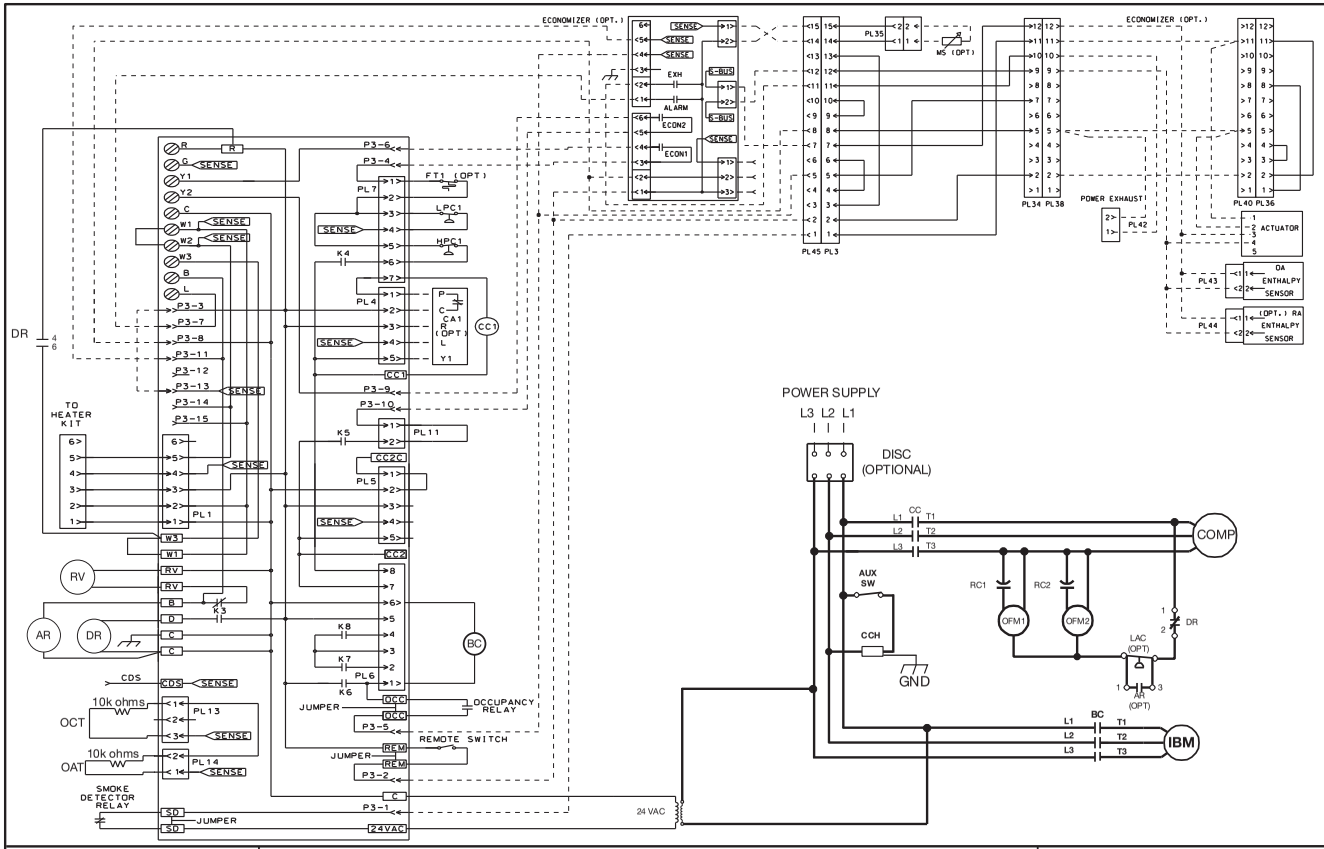
BK.....BLACK	G.....GREEN	PR.....PURPLE
BR.....BROWN	GY.....GRAY	R.....RED
BL.....BLUE	O.....ORANGE	W.....WHITE
		Y.....YELLOW

ELECTRICAL WIRING DIAGRAM

HP NON DDC 1-STG , 090,102 & 120
208/230/380/460/575V, 3PH 60 Hz.
HP NON DDC 1-STG 072/090/102
380-415V 3PH 50Hz.

APPROVED:	CHECKED:	ORIGINAL RELEASE NO.:
MODELED BY: TCJW	DATE: 08-09-18	R-1071S273
PART NO.: 90-106177-41		REV: 00

FIGURE 21



ALARM CODES

CODE	Description	FAULT LEVEL – 0,1,2,3*
0	STANDBY	0
c	COMPRESSOR ON – Low (Flashing if in time delay)	0
C	COMPRESSOR ON – High (Flashing if in time delay)	0
E	Economizer Cooling – No Compressor	0
F	CONTINUOUS FAN	0
h	HEAT ON – Low Stage	0
H	GAS HEAT ON – High Stage	0
4	Comfort Alert Code 4 for Compressor Circuit 1	3
5	Comfort Alert Code 5 for Compressor Circuit 1	3
6	Comfort Alert Code 6 for Compressor Circuit 1	3
7	Comfort Alert Code 7 for Compressor Circuit 1	3
8	Comfort Alert Code 8 for Compressor Circuit 1	3
9	Comfort Alert Code 9 for Compressor Circuit 1	3
10	1 hour Lockout	3
11	FAILED IGNITION	2
12	LO FLAME SENSE	1
13	FLAME LOST	2
14	UNEXPECTED FLAME	3
15	2nd Stage Gas valve improper voltage	2
20	REFRIGERANT LOW PRESSURE SWITCH OPEN – CIRCUIT 1	2
21	REFRIGERANT LOW PRESSURE SWITCH OPEN – CIRCUIT 2	2
22	MAIN LIMIT OPEN	2
29	REFRIGERANT HIGH PRESSURE SWITCH OPEN – CIRCUIT 1	2
30	REFRIGERANT HIGH PRESSURE SWITCH OPEN – CIRCUIT 2	2
33	MRLC (Rollout Limit) OPEN	2
34	Comfort Alert Code 4 for Compressor Circuit 2	3
35	Comfort Alert Code 5 for Compressor Circuit 2	3
36	Comfort Alert Code 6 for Compressor Circuit 2	3
37	Comfort Alert Code 7 for Compressor Circuit 2	3
38	Comfort Alert Code 8 for Compressor Circuit 2	3
39	Comfort Alert Code 9 for Compressor Circuit 2	3
42	Invalid Thermostat selection	1
44	1st Stage COMBUSTION PRESS SWITCH CLOSED	2
46	1st Stage COMBUSTION PRESS SWITCH OPEN	2
49	FREEZE SWITCH OPEN – CIRCUIT 1	2
50	FREEZE SWITCH OPEN – CIRCUIT 2	2
55	2nd Stage COMBUSTION PRESS SWITCH CLOSED	2
57	2nd Stage COMBUSTION PRESS SWITCH OPEN	2,3
59	Condensate Drain Plugged	3
61	Blower Fault – NO RUN	3
83	Condenser Coil Temp Sensor Fail – OCT	2
84	Outdoor Air Temperature Sensor Fail – OAT	2
88	Emergency Stop Fault	3
93	CONTROL Fault	3
97	Smoke Detection	3

*Fault levels: 0 = none, 1=warning, 2= problem, 3=shutdown

WIRING INFORMATION

LINE VOLTAGE
- FACTORY STANDARD
- FACTORY OPTION
- FIELD INSTALLED

LOW VOLTAGE
- FACTORY STANDARD
- FACTORY OPTION
- FIELD INSTALLED

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

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

NOTES

1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
2. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.
3. CONNECT FIELD WIRE TO COMPRESSOR CONTACTOR (CC1).
4. REMOVE J3 AT (CC1) TO INSTALL LOW AMBIENT ACCESSORY.
5. IF REQUIRED, ATTACH CRANKCASE HEATER ACCESSORY TO CC1 (L1) AND CC1 (L2).
6. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
7. TRANSFORMER FACTORY WIRED AS SHOWN BELOW. CHANGE PRIMARY VOLTAGE CONNECTIONS FOR ALTERNATE VOLTAGES, IF REQUIRED.
8. LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TRANSFORMER, 24VAC 50/60 HZ SUPPLIED.
9. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
10. REMOVE PL36 FOR ECOMOMIZER ACCESSORY. PL34 AND PL36 LOCATED IN RETURN AIR SECTION.

UNIT VOLTAGES - HZ	TRANSFORMER TERM.
200-220 - 50HZ	200
208 - 60HZ	230
230 - 60HZ	230
380 - 60HZ	400
380-415 - 50HZ	400
460 - 60HZ	460
575 - 60HZ	575

COMPONENT CODES

BR	BLOWER RELAY	LAC	LOW AMBIENT CONTROL
CA	COMFORT ALERT MODULE	LPC	LOW PRESSURE CONTROL
CC	COMPRESSOR CONTACTOR	MRLC	MANUAL RESET LIMIT CONTROL
CCH	CRANKCASE HEATER	NPC	NEGATIVE PRESSURE SWITCH
CDS	CLOG DRAIN SENSOR	OAT	OUTSIDE AIR SENSOR
CFS	CLOGGED FILTER SWITCH	OCT	OUTDOOR COIL TEMPERATURE SENSOR
COMP	COMPRESSOR	OFM	OUTDOOR FAN MOTOR
CT	CONTROL TRANSFORMER	PL	PLUG
DAT	DISCHARGE AIR ESENSOR	PT	POWER TRANSFORMER
DISC	DISCONNECT SWITCH	RAT	RETURN AIR SENSOR
DR	DEFROST RELAY	RC	RUN CAPACITOR
ELM	ECONOMIZER LOGIC MODULE	RTU-C	ROOFTOP UNIT CONTROL
FLMS	FLAME SENSOR	RV	REVERSING VALVE
FP	FAN PROVING	SE	SPARK ELECTRODE
FS	FREEZE SENSOR	TB	TERMINAL BLOCK
FT	FREEZE STAT	US	UNLOADER SOLENOID
GFCO	GROUND FAULT CONVENIENCE OUTLET	VFD	VARIABLE FREQUENCY DRIVE
GL	GROUND LUG		
GND	GROUND		
HPC	HIGH PRESSURE CONTROL		
IBM	INDOOR BLOWER MOTOR		
IDM	INDUCED DRAFT MOTOR		
IFC	INTEGRATED FURNACE CONTROL		

WIRE COLOR CODE

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

ELECTRICAL WIRING SCHEMATIC

HP NON DDC 1-STG, 090/102/120
208/230/380/460/575V, 3PH 60 Hz.
HP NON DDC 1-STG 072/090/102
380-415V 3PH 50Hz.

APPROVED:	CHECKED:	ORIGINAL RELEASE NO.:
MODELED BY: TCJW	DATE: 07-13-18	R-1071S220
PART NO.: 90-106178-41		REV: 00

FIGURE 22

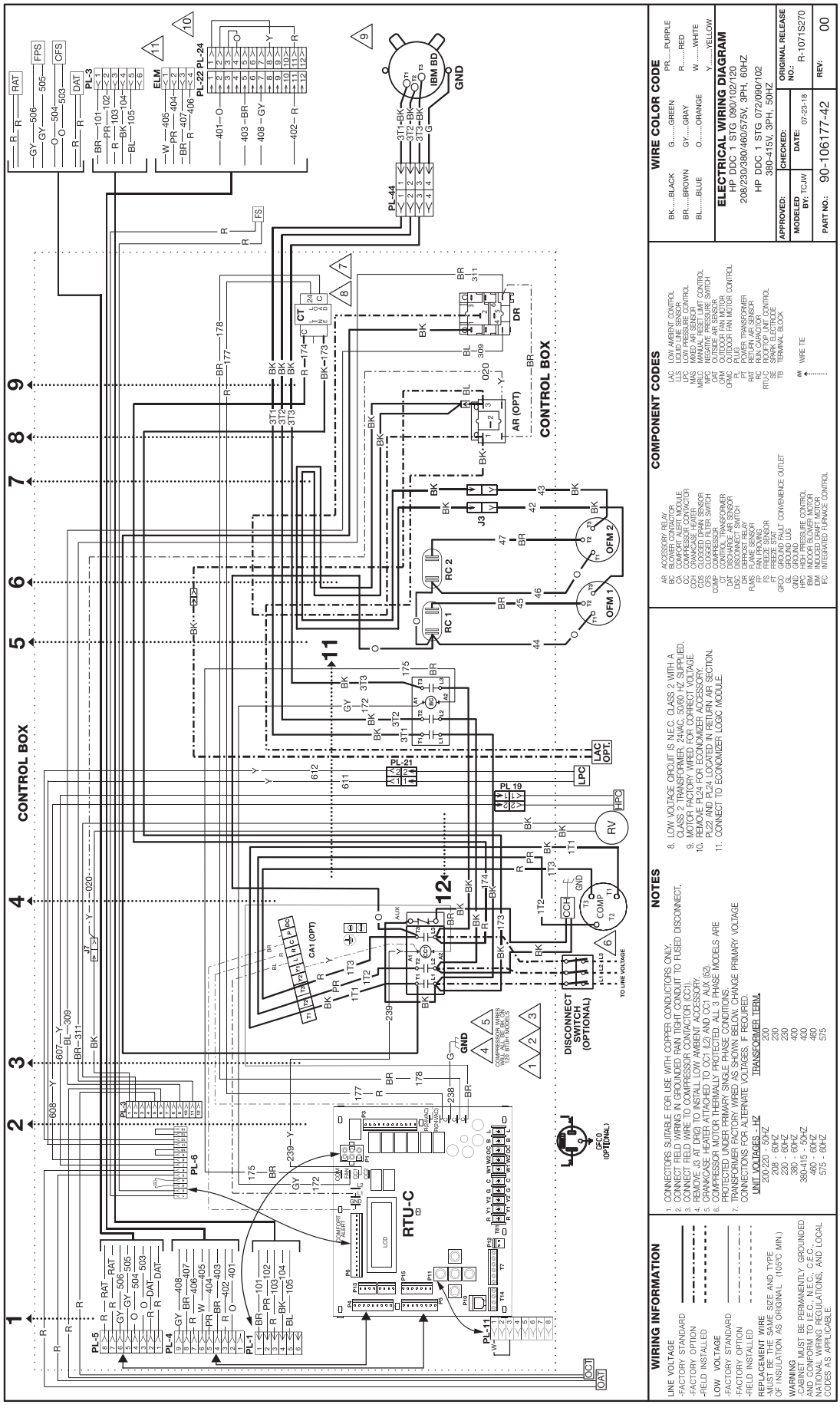
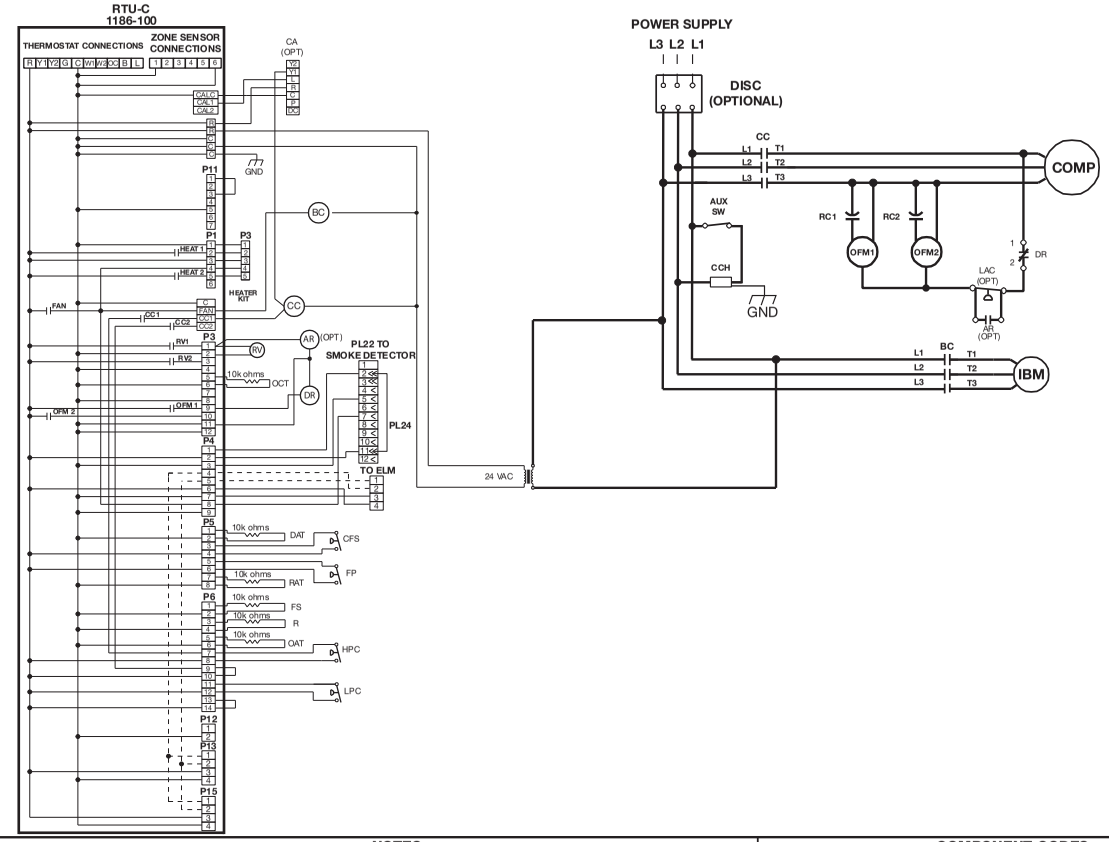

CONTROL BOX
RTU-C
PL-1
PL-3
PL-4
PL-5
PL-6
PL-11
PL-21
PL-22 PL-24
PL-44
ELM
IBM BD
GND
CT
DR
AR (OPT)
RC 1
RC 2
OFM 1
OFM 2
CA1 (OPT)
LAC OPT.
LPC
HPC
RV
COMP
CCH
GFCI (OPTIONAL)
DISCONNECT SWITCH (OPTIONAL)
TO LINE VOLTAGE
OCT
OAT
WIRE COLOR CODE
BK.....BLACK
G.....GREEN
PR.....PURPLE
BR.....BROWN
GY.....GRAY
R.....RED
BL.....BLUE
O.....ORANGE
W.....WHITE
Y.....YELLOW
ELECTRICAL WIRING DIAGRAM
HP DDC 1 STG 090/102/120
208/230/380/460/575V, 3PH, 60HZ
HP DDC 1 STG 072/090/102
380-415V, 3PH, 50HZ
APPROVED:
CHECKED:
ORIGINAL RELEASE NO.: R-1071S270
MODELED BY: TC-IW
DATE: 07-23-18
PART NO.: 90-106177-42
REV: 00
COMPONENT CODES
NOTES
WIRING INFORMATION

FIGURE 23



WIRING INFORMATION

LINE VOLTAGE
- FACTORY STANDARD
- FACTORY OPTION
- FIELD INSTALLED

LOW VOLTAGE
- FACTORY STANDARD
- FACTORY OPTION
- FIELD INSTALLED

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

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

NOTES

1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
2. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.
3. CONNECT FIELD WIRE TO COMPRESSOR CONTACTOR (CC1).
4. REMOVE J3 AT DR(2) TO INSTALL LOW AMBIENT ACCESSORY.
5. IF REQUIRED, ATTACH CRANKCASE HEATER ACCESSORY TO CC1 (L1) AND CC1 (L2).
6. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
7. TRANSFORMER FACTORY WIRED AS SHOWN BELOW. CHANGE PRIMARY VOLTAGE CONNECTIONS FOR ALTERNATE VOLTAGES, IF REQUIRED.

UNIT VOLTAGES - HZ	TRANSFORMER TERM.
200-220 - 50HZ	200
208 - 60HZ	230
230 - 60HZ	230
380 - 60HZ	400
380-415 - 50HZ	400
460 - 60HZ	460
575 - 60HZ	575

8. LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TRANSFORMER, 24VAC, 50/60 HZ SUPPLIED.
9. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
10. REMOVE PL24 FOR ECONOMIZER ACCESSORY. PL22 AND PL24 LOCATED IN RETURN AIR SECTION.

COMPONENT CODES

AR	ACCESSORY RELAY
BR	BLOWER RELAY
CA	COMFORT ALERT MODULE
CC	COMPRESSOR CONTACTOR
CCH	CRANKCASE HEATER
CDS	CLOGGED DRAIN SENSOR
CFS	CLOGGED FILTER SWITCH
COMP	COMPRESSOR
CT	CONTROL TRANSFORMER
DAT	DISCHARGE AIR SENSOR
DISC	DISCONNECT SWITCH
DR	DEFROST RELAY
FLMS	FLAME SENSOR
FP	FAN PROVING
FS	FREEZE SENSOR
FT	FREEZE STAT
GFCO	GROUND FAULT CONVENIENCE OUTLET
GL	GROUND LUG
GND	GROUND
HPC	HIGH PRESSURE CONTROL
IBM	INDOOR BLOWER MOTOR
IDM	INDUCED DRAFT MOTOR
IFC	INTEGRATED FURNACE CONTROL
LAC	LOW AMBIENT CONTROL
LPC	LOW PRESSURE CONTROL
MAS	MIXED AIR SENSOR
MRLC	MANUAL RESET LIMIT CONTROL
NPC	NEGATIVE PRESSURE SWITCH
OAT	OUTSIDE AIR SENSOR
OCT	OUTDOOR COIL TEMPERATURE SENSOR
OFM	OUTDOOR FAN MOTOR
PL	PLUG
PT	POWER TRANSFORMER
RAT	RETURN AIR SENSOR
RC	RUN CAPACITOR
RTU-C	ROOFTOP UNIT CONTROL
SE	SPARK ELECTRODE
RV	REVERSING VALVE
TB	TERMINAL BLOCK
UL	UNLOADER SOLENOID
VFD	VARIABLE FREQUENCY DRIVE

WIRE COLOR CODE

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

ELECTRICAL WIRING SCHEMATIC

HP DDC 1 STG 090/102/120
208/230/380/460/575V, 3PH, 60HZ

HP DDC 1 STG 072/090/102
380-415V, 3PH, 50HZ

APPROVED:	CHECKED:	ORIGINAL RELEASE NO.:
MODELED BY: TCJW	DATE: 04-23-18	R-1071S220
PART NO.: 90-106178-42		REV: 00

FIGURE 24

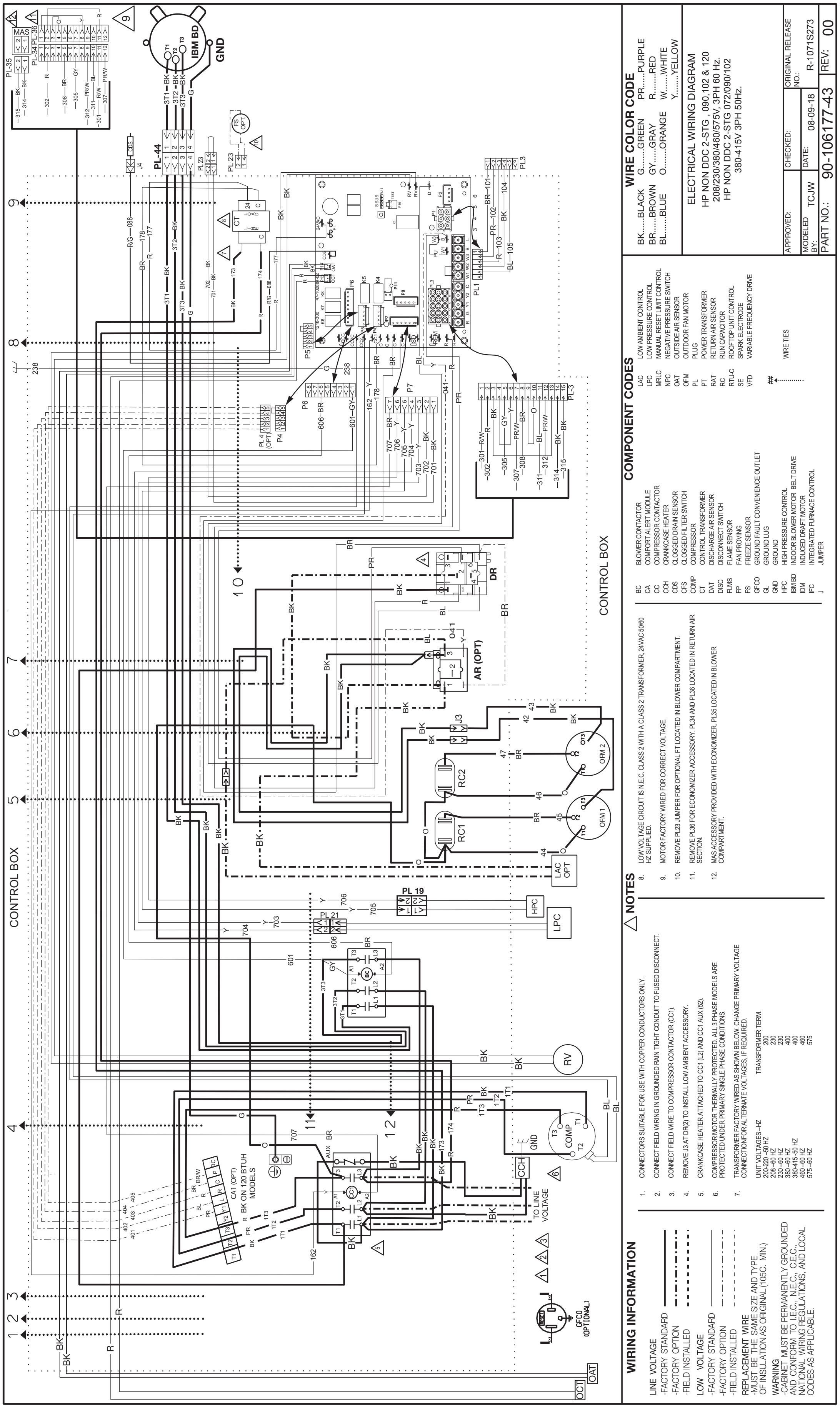
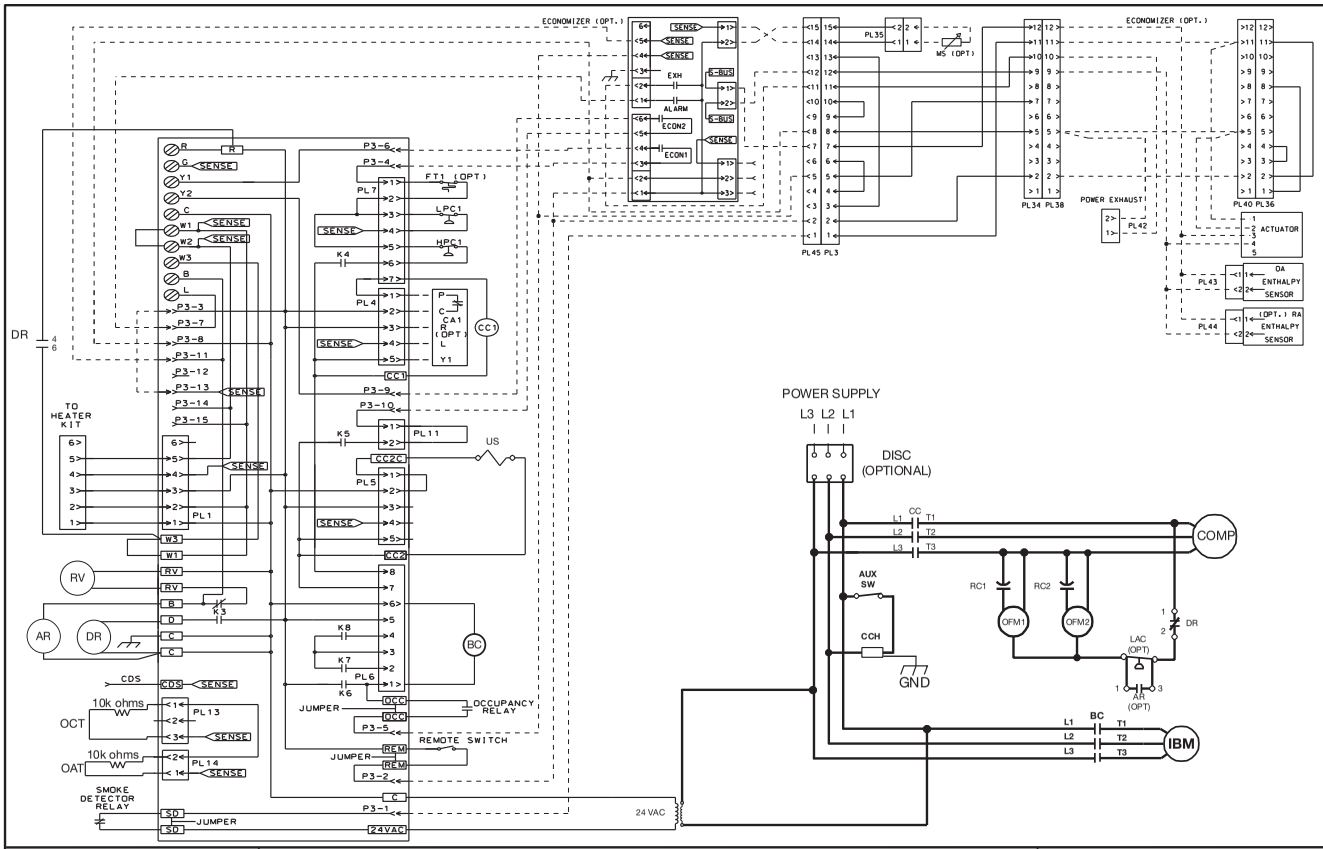

CONTROL BOX
WIRING INFORMATION
LINE VOLTAGE
-FACTORY STANDARD
-FACTORY OPTION
-FIELD INSTALLED
LOW VOLTAGE
-FACTORY STANDARD
-FACTORY OPTION
-FIELD INSTALLED
REPLACEMENT WIRE
-MUST BE THE SAME SIZE AND TYPE OF INSULATION AS ORIGINAL (105C. MIN.)
WARNING
-CABINET MUST BE PERMANENTLY GROUNDED AND CONFORM TO I.E.C., N.E.C., C.E.C., NATIONAL WIRING REGULATIONS, AND LOCAL CODES AS APPLICABLE.
NOTES
1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
2. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.
3. CONNECT FIELD WIRE TO COMPRESSOR CONTACTOR (CC1).
4. REMOVE J3 AT DR(2) TO INSTALL LOW AMBIENT ACCESSORY.
5. CRANKCASE HEATER ATTACHED TO CC1 (L2) AND CC1 AUX (52).
6. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
7. TRANSFORMER FACTORY WIRED AS SHOWN BELOW. CHANGE PRIMARY VOLTAGE CONNECTIONFOR ALTERNATE VOLTAGES, IF REQUIRED.
UNIT VOLTAGES –HZ / TRANSFORMER TERM.
200-220 –50 HZ 200
208 –60 HZ 230
230 –60 HZ 230
380 –60 HZ 400
380-415 -50 HZ 400
460 –60 HZ 460
575 –60 HZ 575
8. LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TRANSFORMER, 24VAC 50/60 HZ SUPPLIED.
9. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
10. REMOVE PL23 JUMPER FOR OPTIONAL FT LOCATED IN BLOWER COMPARTMENT.
11. REMOVE PL36 FOR ECONOMIZER ACCESSORY. PL34 AND PL36 LOCATED IN RETURN AIR SECTION.
12. MAS ACCESSORY PROVIDED WITH ECONOMIZER. PL35 LOCATED IN BLOWER COMPARTMENT.
COMPONENT CODES
BC BLOWER CONTACTOR
CA COMFORT ALERT MODULE
CC COMPRESSOR CONTACTOR
CCH CRANKCASE HEATER
CDS CLOGGED DRAIN SENSOR
CFS CLOGGED FILTER SWITCH
COMP COMPRESSOR
CT CONTROL TRANSFORMER
DAT DISCHARGE AIR SENSOR
DISC DISCONNECT SWITCH
FLMS FLAME SENSOR
FP FAN PROVING
FS FREEZE SENSOR
GFCO GROUND FAULT CONVENIENCE OUTLET
GL GROUND LUG
GND GROUND
HPC HIGH PRESSURE CONTROL
IBM BD INDOOR BLOWER MOTOR BELT DRIVE
IDM INDUCED DRAFT MOTOR
IFC INTEGRATED FURNACE CONTROL
J JUMPER
LAC LOW AMBIENT CONTROL
LPC LOW PRESSURE CONTROL
MRLC MANUAL RESET LIMIT CONTROL
NPC NEGATIVE PRESSURE SWITCH
OAT OUTSIDE AIR SENSOR
OFM OUTDOOR FAN MOTOR
PL PLUG
PT POWER TRANSFORMER
RAT RETURN AIR SENSOR
RC RUN CAPACITOR
RTU-C ROOFTOP UNIT CONTROL
SE SPARK ELECTRODE
VFD VARIABLE FREQUENCY DRIVE
WIRE TIES
WIRE COLOR CODE
BK......BLACK G........GREEN PR......PURPLE
BR......BROWN GY......GRAY R........RED
BL.......BLUE O........ORANGE W.......WHITE
Y........YELLOW
ELECTRICAL WIRING DIAGRAM
HP NON DDC 2-STG , 090,102 & 120
208/230/380/460/575V, 3PH 60 Hz.
HP NON DDC 2-STG 072/090/102
380-415V 3PH 50Hz.
APPROVED:
CHECKED:
ORIGINAL RELEASE NO.: R-1071S273
MODELED BY: TCJW
DATE: 08-09-18
PART NO.: 90-106177-43
REV: 00

FIGURE 25



ALARM CODES

CODE	Description	FAULT LEVEL -0,1,2,3*
0	STANDBY	0
c	COMPRESSOR ON – Low (Flashing if in time delay)	0
C	COMPRESSOR ON – High (Flashing if in time delay)	0
E	Economizer Cooling – No Compressor	0
F	CONTINUOUS FAN	0
h	HEAT ON – Low Stage	0
H	GAS HEAT ON – High Stage	0
4	Comfort Alert Code 4 for Compressor Circuit 1	3
5	Comfort Alert Code 5 for Compressor Circuit 1	3
6	Comfort Alert Code 6 for Compressor Circuit 1	3
7	Comfort Alert Code 7 for Compressor Circuit 1	3
8	Comfort Alert Code 8 for Compressor Circuit 1	3
9	Comfort Alert Code 9 for Compressor Circuit 1	3
10	1 hour Lockout	3
11	FAILED IGNITION	2
12	LO FLAME SENSE	1
13	FLAME LOST	2
14	UNEXPECTED FLAME	3
15	2nd Stage Gas valve improper voltage	2
20	REFRIGERANT LOW PRESSURE SWITCH OPEN – CIRCUIT 1	2
21	REFRIGERANT LOW PRESSURE SWITCH OPEN – CIRCUIT 2	2
22	MAIN LIMIT OPEN	2
29	REFRIGERANT HIGH PRESSURE SWITCH OPEN – CIRCUIT 1	2
30	REFRIGERANT HIGH PRESSURE SWITCH OPEN – CIRCUIT 2	2
33	MRLC (Rollout Limit) OPEN	2
34	Comfort Alert Code 4 for Compressor Circuit 2	3
35	Comfort Alert Code 5 for Compressor Circuit 2	3
36	Comfort Alert Code 6 for Compressor Circuit 2	3
37	Comfort Alert Code 7 for Compressor Circuit 2	3
38	Comfort Alert Code 8 for Compressor Circuit 2	3
39	Comfort Alert Code 9 for Compressor Circuit 2	3
42	Invalid Thermostat selection	1
44	1st Stage COMBUSTION PRESS SWITCH CLOSED	2
46	1st Stage COMBUSTION PRESS SWITCH OPEN	2
49	FREEZE SWITCH OPEN – CIRCUIT 1	2
50	FREEZE SWITCH OPEN – CIRCUIT 2	2
55	2nd Stage COMBUSTION PRESS SWITCH CLOSED	2
57	2nd Stage COMBUSTION PRESS SWITCH OPEN	2,3
59	Condensate Drain Plugged	3
61	Blower Fault – NO RUN	3
83	Condenser Coil Temp Sensor Fail – OCT	2
84	Outdoor Air Temperature Sensor Fail – OAT	2
88	Emergency Stop Fault	3
93	CONTROL Fault	3
97	Smoke Detection	3

*Fault levels:0= none, 1=warning, 2= problem, 3=shutdown

WIRING INFORMATION

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

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

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

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

NOTES

1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
2. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.
3. CONNECT FIELD WIRE TO COMPRESSOR CONTACTOR (CC1).
4. REMOVE J3 AT (CC1) TO INSTALL LOW AMBIENT ACCESSORY.
5. IF REQUIRED, ATTACH CRANKCASE HEATER ACCESSORY TO CC1 (L1) AND CC1 (L2).
6. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
7. TRANSFORMER FACTORY WIRED AS SHOWN BELOW. CHANGE PRIMARY VOLTAGE CONNECTIONS FOR ALTERNATE VOLTAGES, IF REQUIRED.

UNIT VOLTAGES - HZ	TRANSFORMER TERM.
200-220 - 50HZ	200
208 - 60HZ	208
230 - 60HZ	230
380 - 60HZ	400
380-415 - 50HZ	400
460 - 60HZ	460
575 - 60HZ	575

8. LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TRANSFORMER, 24VAC 50/60 HZ SUPPLIED.
9. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
10. REMOVE PL36 FOR ECOMOMIZER ACCESSORY. PL34 AND PL36 LOCATED IN RETURN AIR SECTION.

COMPONENT CODES

BR	BLOWER RELAY	LAC	LOW AMBIENT CONTROL
CA	COMFORT ALERT MODULE	LPC	LOW PRESSURE CONTROL
CC	COMPRESSOR CONTACTOR	MRLC	MANUAL RESET LIMIT CONTROL
CCH	CRANKCASE HEATER	NPC	NEGATIVE PRESSURE SWITCH
CDS	CLOG DRAIN SENSOR	OAT	OUTSIDE AIR SENSOR
CFS	CLOGGED FILTER SWITCH	OCT	OUTDOOR COIL TEMPERATURE SENSOR
COMP	COMPRESSOR	OFM	OUTDOOR FAN MOTOR
CT	CONTROL TRANSFORMER	PL	PLUG
DAT	DISCHARGE AIR ESENSOR	PT	POWER TRANSFORMER
DISC	DISCONNECT SWITCH	RAT	RETURN AIR S ENSOR
DR	DEFROST RELAY	RC	RUN CAPACITOR
ELM	ECONOMIZER LOGIC MODULE	RTU-C	ROOFTOP UNIT CONTROL
FLMS	FLAME SENSOR	RV	REVERSING VALVE
FP	FAN PROVING	SE	SPARK ELECTRODE
FS	FREEZE SENSOR	TB	TERMINAL BLOCK
FT	FREEZE STAT	US	UNLOADER SOLENOID
GFCO	GROUND FAULT CONVENIENCE OUTLET		
GL	GROUND LUG		
GND	GROUND		
HPC	HIGH PRESSURE CONTROL		
IBM	INDOOR BLOWER MOTOR		
IDM	INDUCED DRAFT MOTOR		
IFC	INTEGRATED FURNACE CONTROL		

WIRE COLOR CODE

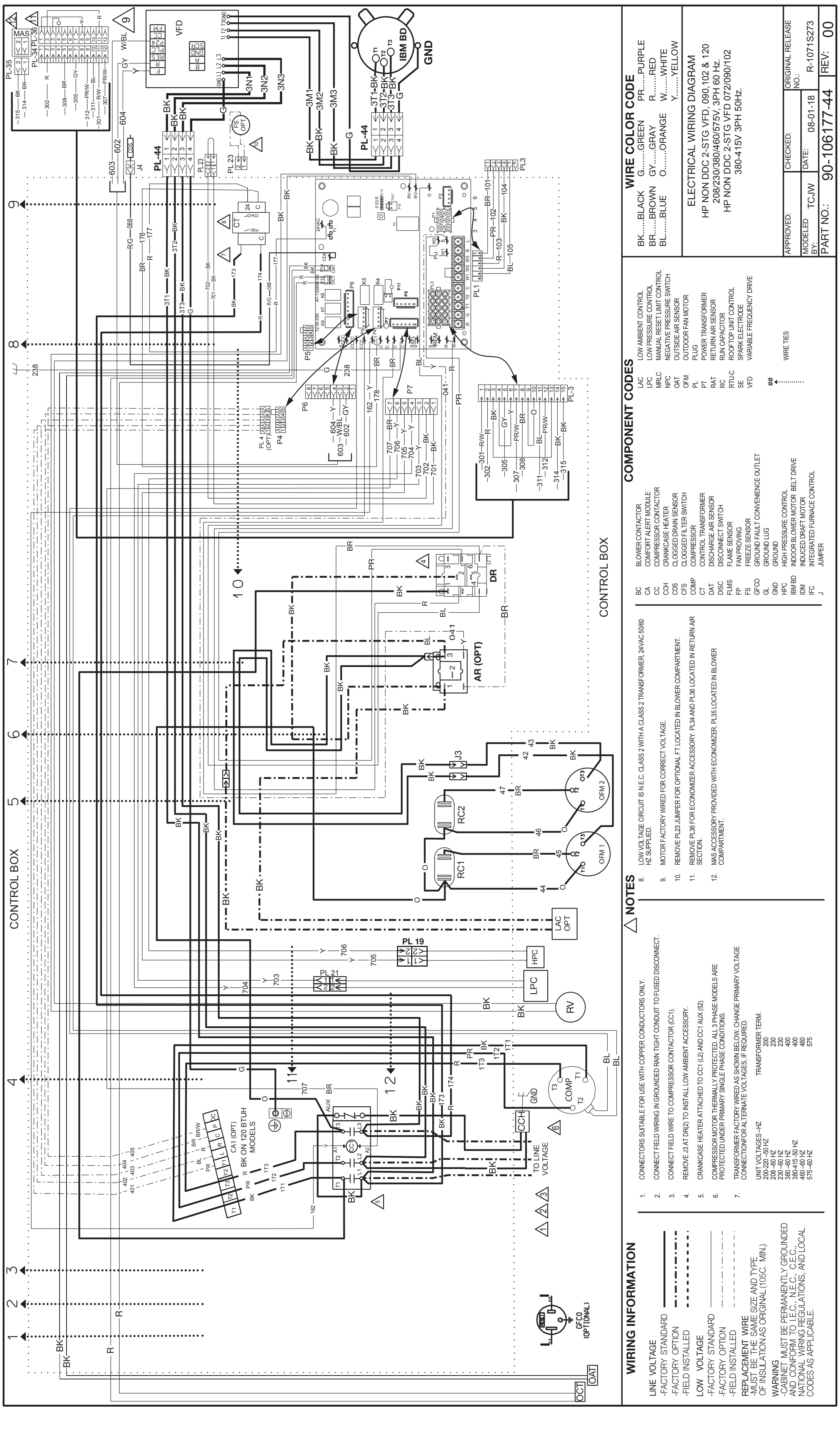
BK.....BLACK	G.....GREEN	PR.....PURPLE
BR.....BROWN	GY.....GRAY	R.....RED
BL.....BLUE	O.....ORANGE	W .....WHITE
		Y.....YELLOW

ELECTRICAL WIRING SCHEMATIC

HP NON DDC 2-STG, 090/102/120
208/230/380/460/575V, 3PH 60 Hz.
HP NON DDC 2-STG 072/090/102
380-415V 3PH 50Hz.

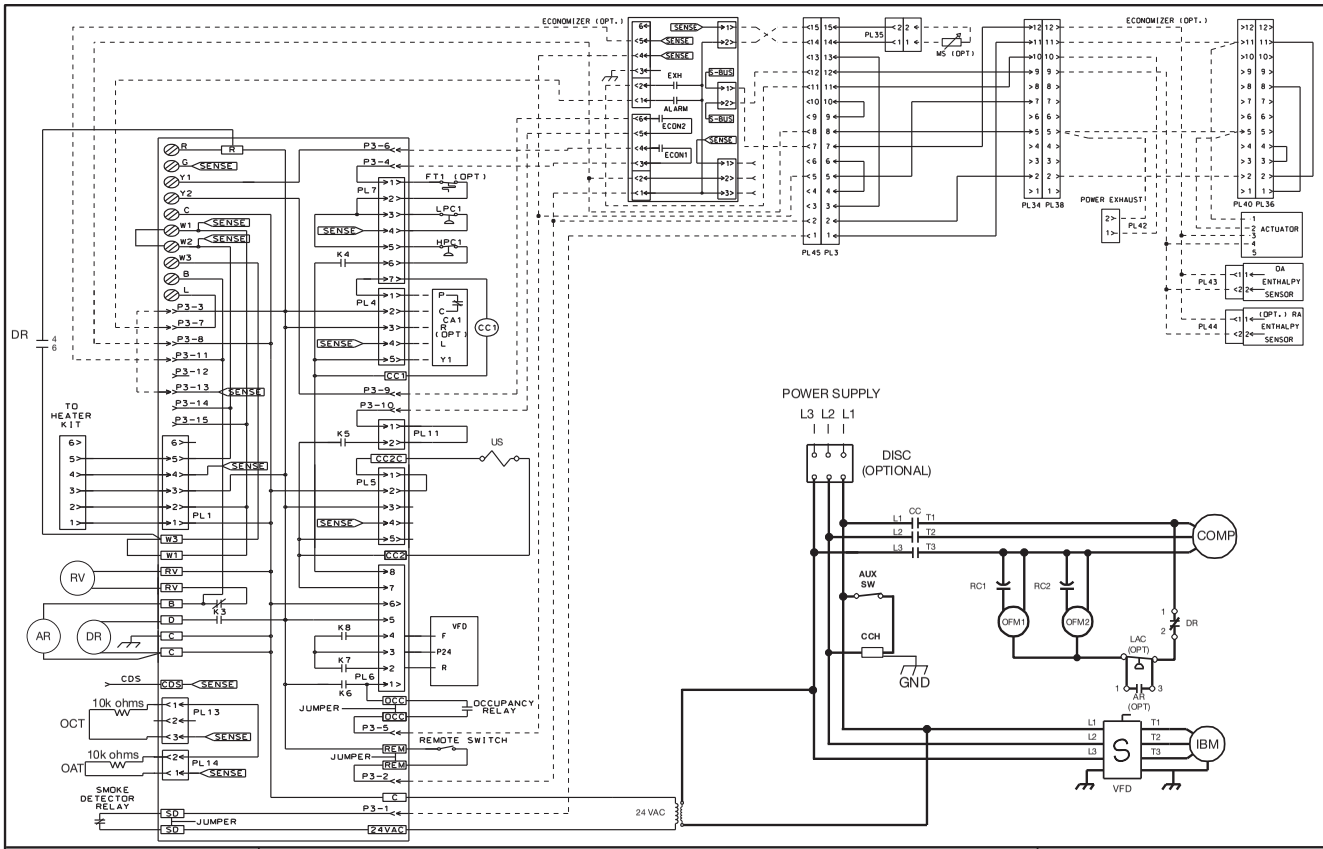
APPROVED:	CHECKED:	ORIGINAL RELEASE NO.:
MODELED BY: TCJW	DATE: 07-13-18	R-1071S220
PART NO.: 90-106178-43		REV: 00

FIGURE 26



CONTROL BOX
WIRING INFORMATION
LINE VOLTAGE
-FACTORY STANDARD
-FACTORY OPTION
-FIELD INSTALLED
LOW VOLTAGE
-FACTORY STANDARD
-FACTORY OPTION
-FIELD INSTALLED
REPLACEMENT WIRE
-MUST BE THE SAME SIZE AND TYPE OF INSULATION AS ORIGINAL (105C. MIN.)
WARNING
-CABINET MUST BE PERMANENTLY GROUNDED AND CONFORM TO I.E.C., N.E.C., C.E.C., NATIONAL WIRING REGULATIONS, AND LOCAL CODES AS APPLICABLE.
NOTES
1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
2. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.
3. CONNECT FIELD WIRE TO COMPRESSOR CONTACTOR (CC1).
4. REMOVE J3 AT DR(2) TO INSTALL LOW AMBIENT ACCESSORY.
5. CRANKCASE HEATER ATTACHED TO CC1 (L2) AND CC1 AUX (52).
6. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
7. TRANSFORMER FACTORY WIRED AS SHOWN BELOW. CHANGE PRIMARY VOLTAGE CONNECTIONFOR ALTERNATE VOLTAGES, IF REQUIRED.
UNIT VOLTAGES–HZ / TRANSFORMER TERM.
200-220 –50 HZ / 200
208 –60 HZ / 230
230 –60 HZ / 230
380 –60 HZ / 400
380-415 -50 HZ / 400
460 –60 HZ / 460
575 –60 HZ / 575
8. LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TRANSFORMER, 24VAC 50/60 HZ SUPPLIED.
9. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
10. REMOVE PL23 JUMPER FOR OPTIONAL FT LOCATED IN BLOWER COMPARTMENT.
11. REMOVE PL36 FOR ECONOMIZER ACCESSORY. PL34 AND PL36 LOCATED IN RETURN AIR SECTION.
12. MAS ACCESSORY PROVIDED WITH ECONOMIZER. PL35 LOCATED IN BLOWER COMPARTMENT.
COMPONENT CODES
BC BLOWER CONTACTOR
CA COMFORT ALERT MODULE
CC COMPRESSOR CONTACTOR
CCH CRANKCASE HEATER
CDS CLOGGED DRAIN SENSOR
CFS CLOGGED FILTER SWITCH
COMP COMPRESSOR
CT CONTROL TRANSFORMER
DAT DISCHARGE AIR SENSOR
DISC DISCONNECT SWITCH
FLMS FLAME SENSOR
FP FAN PROVING
FS FREEZE SENSOR
GFCO GROUND FAULT CONVENIENCE OUTLET
GL GROUND LUG
GND GROUND
HPC HIGH PRESSURE CONTROL
IBM BD INDOOR BLOWER MOTOR BELT DRIVE
IDM INDUCED DRAFT MOTOR
IFC INTEGRATED FURNACE CONTROL
J JUMPER
LAC LOW AMBIENT CONTROL
LPC LOW PRESSURE CONTROL
MRLC MANUAL RESET LIMIT CONTROL
NPC NEGATIVE PRESSURE SWITCH
OAT OUTSIDE AIR SENSOR
OFM OUTDOOR FAN MOTOR
PL PLUG
PT POWER TRANSFORMER
RAT RETURN AIR SENSOR
RC RUN CAPACITOR
RTU-C ROOFTOP UNIT CONTROL
SE SPARK ELECTRODE
VFD VARIABLE FREQUENCY DRIVE
WIRE TIES
WIRE COLOR CODE
BK......BLACK G.......GREEN PR......PURPLE
BR......BROWN GY......GRAY R.......RED
BL......BLUE O.......ORANGE W.......WHITE
Y.......YELLOW
ELECTRICAL WIRING DIAGRAM
HP NON DDC 2-STG VFD, 090,102 & 120
208/230/380/460/575V, 3PH 60 Hz.
HP NON DDC 2-STG VFD 072/090/102
380-415V 3PH 50Hz.
APPROVED:
CHECKED:
ORIGINAL RELEASE NO.:
MODELED BY: TCJW
DATE: 08-01-18
R-1071S273
PART NO.: 90-106177-44
REV: 00

FIGURE 27



ALARM CODES

CODE	Description	FAULT LEVEL -0,1,2,3*
0	STANDBY	0
c	COMPRESSOR ON – Low (Flashing if in time delay)	0
C	COMPRESSOR ON – High (Flashing if in time delay)	0
E	Economizer Cooling – No Compressor	0
F	CONTINUOUS FAN	0
h	HEAT ON – Low Stage	0
H	GAS HEAT ON – High Stage	0
4	Comfort Alert Code 4 for Compressor Circuit 1	3
5	Comfort Alert Code 5 for Compressor Circuit 1	3
6	Comfort Alert Code 6 for Compressor Circuit 1	3
7	Comfort Alert Code 7 for Compressor Circuit 1	3
8	Comfort Alert Code 8 for Compressor Circuit 1	3
9	Comfort Alert Code 9 for Compressor Circuit 1	3
10	1 hour Lockout	3
11	FAILED IGNITION	2
12	LO FLAME SENSE	1
13	FLAME LOST	2
14	UNEXPECTED FLAME	3
15	2nd Stage Gas valve improper voltage	2
20	REFRIGERANT LOW PRESSURE SWITCH OPEN – CIRCUIT 1	2
21	REFRIGERANT LOW PRESSURE SWITCH OPEN – CIRCUIT 2	2
22	MAIN LIMIT OPEN	2
29	REFRIGERANT HIGH PRESSURE SWITCH OPEN – CIRCUIT 1	2
30	REFRIGERANT HIGH PRESSURE SWITCH OPEN – CIRCUIT 2	2
33	MRLC (Rollout Limit) OPEN	2
34	Comfort Alert Code 4 for Compressor Circuit 2	3
35	Comfort Alert Code 5 for Compressor Circuit 2	3
36	Comfort Alert Code 6 for Compressor Circuit 2	3
37	Comfort Alert Code 7 for Compressor Circuit 2	3
38	Comfort Alert Code 8 for Compressor Circuit 2	3
39	Comfort Alert Code 9 for Compressor Circuit 2	3
42	Invalid Thermostat selection	1
44	1st Stage COMBUSTION PRESS SWITCH CLOSED	2
46	1st Stage COMBUSTION PRESS SWITCH OPEN	2
49	FREEZE SWITCH OPEN – CIRCUIT 1	2
50	FREEZE SWITCH OPEN – CIRCUIT 2	2
55	2nd Stage COMBUSTION PRESS SWITCH CLOSED	2
57	2nd Stage COMBUSTION PRESS SWITCH OPEN	2,3
59	Condensate Drain Plugged	3
61	Blower Fault – NO RUN	3
83	Condenser Coil Temp Sensor Fail – OCT	2
84	Outdoor Air Temperature Sensor Fail – OAT	2
88	Emergency Stop Fault	3
93	CONTROL Fault	3
97	Smoke Detection	3

*Fault levels:0= none, 1=warning, 2= problem, 3=shutdown

WIRING INFORMATION

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

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

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

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

NOTES

1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
2. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.
3. CONNECT FIELD WIRE TO COMPRESSOR CONTACTOR (CC1).
4. REMOVE J3 AT (CC1) TO INSTALL LOW AMBIENT ACCESSORY.
5. IF REQUIRED, ATTACH CRANKCASE HEATER ACCESSORY TO CC1 (L1) AND CC1 (L2).
6. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
7. TRANSFORMER FACTORY WIRED AS SHOWN BELOW. CHANGE PRIMARY VOLTAGE CONNECTIONS FOR ALTERNATE VOLTAGES, IF REQUIRED.

UNIT VOLTAGES - HZ	TRANSFORMER TERM.
200-220 - 50HZ	200
208 - 60HZ	200
230 - 60HZ	230
380 - 60HZ	400
380-415 - 50HZ	400
460 - 60HZ	460
575 - 60HZ	575

8. LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TRANSFORMER, 24VAC 50/60 HZ SUPPLIED.
9. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
10. REMOVE PL36 FOR ECOMOMIZER ACCESSORY. PL34 AND PL36 LOCATED IN RETURN AIR SECTION.

COMPONENT CODES

BR	BLOWER RELAY	LAC	LOW AMBIENT CONTROL
CA	COMFORT ALERT MODULE	LPC	LOW PRESSURE CONTROL
CC	COMPRESSOR CONTACTOR	MRLC	MANUAL RESET LIMIT CONTROL
CCH	CRANKCASE HEATER	NPC	NEGATIVE PRESSURE SWITCH
CDS	CLOG DRAIN SENSOR	OAT	OUTSIDE AIR SENSOR
CFS	CLOGGED FILTER SWITCH	OCT	OUTDOOR COIL TEMPERATURE SENSOR
COMP	COMPRESSOR	OFM	OUTDOOR FAN MOTOR
CT	CONTROL TRANSFORMER	PL	PLUG
DAT	DISCHARGE AIR ESENSOR	PT	POWER TRANSFORMER
DISC	DISCONNECT SWITCH	RAT	RETURN AIR SENSOR
DR	DEFROST RELAY	RC	RUN CAPACITOR
ELM	ECONOMIZER LOGIC MODULE	RTU-C	ROOFTOP UNIT CONTROL
FLMS	FLAME SENSOR	RV	REVERSING VALVE
FP	FAN PROVING	SE	SPARK ELECTRODE
FS	FREEZE SENSOR	TB	TERMINAL BLOCK
FT	FREEZE STAT	US	UNLOADER SOLENOID
GFCO	GROUND FAULT CONVENIENCE OUTLET	VFD	VARIABLE FREQUENCY DRIVE
GL	GROUND LUG		
GND	GROUND		
HPC	HIGH PRESSURE CONTROL		
IBM	INDOOR BLOWER MOTOR		
IDM	INDUCED DRAFT MOTOR		
IFC	INTEGRATED FURNACE CONTROL		

WIRE COLOR CODE

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

ELECTRICAL WIRING SCHEMATIC

HP NON DDC 2-STG VFD, 090/102/120
208/230/380/460/575V, 3PH 60 Hz.
HP NON DDC 2-STG VFD 072/090/102
380-415V 3PH 50Hz.

APPROVED:	CHECKED:	ORIGINAL RELEASE NO.:
MODELED BY: TCJW	DATE: 07-13-18	R-1071S220
PART NO.: 90-106178-44		REV: 00

FIGURE 28

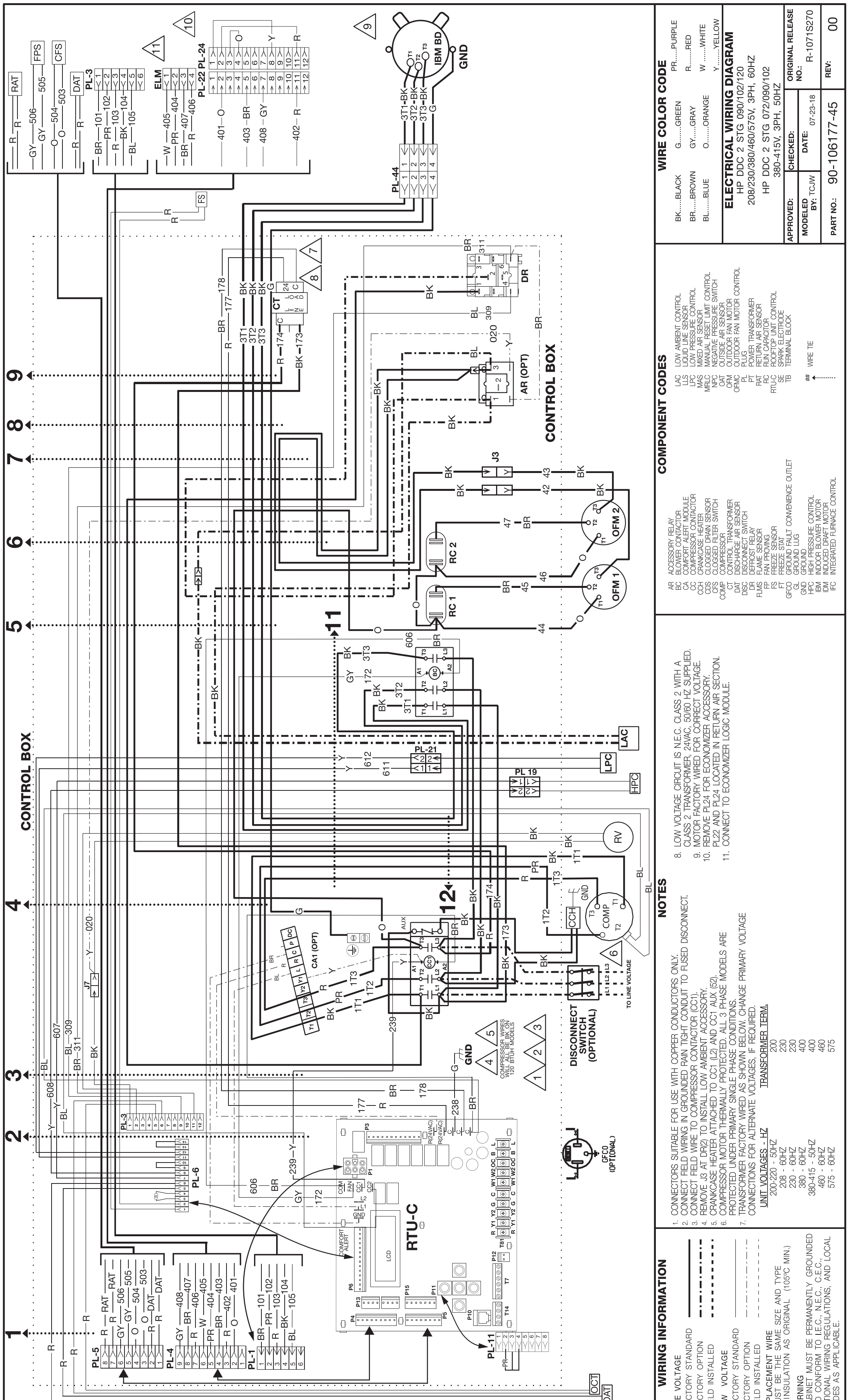
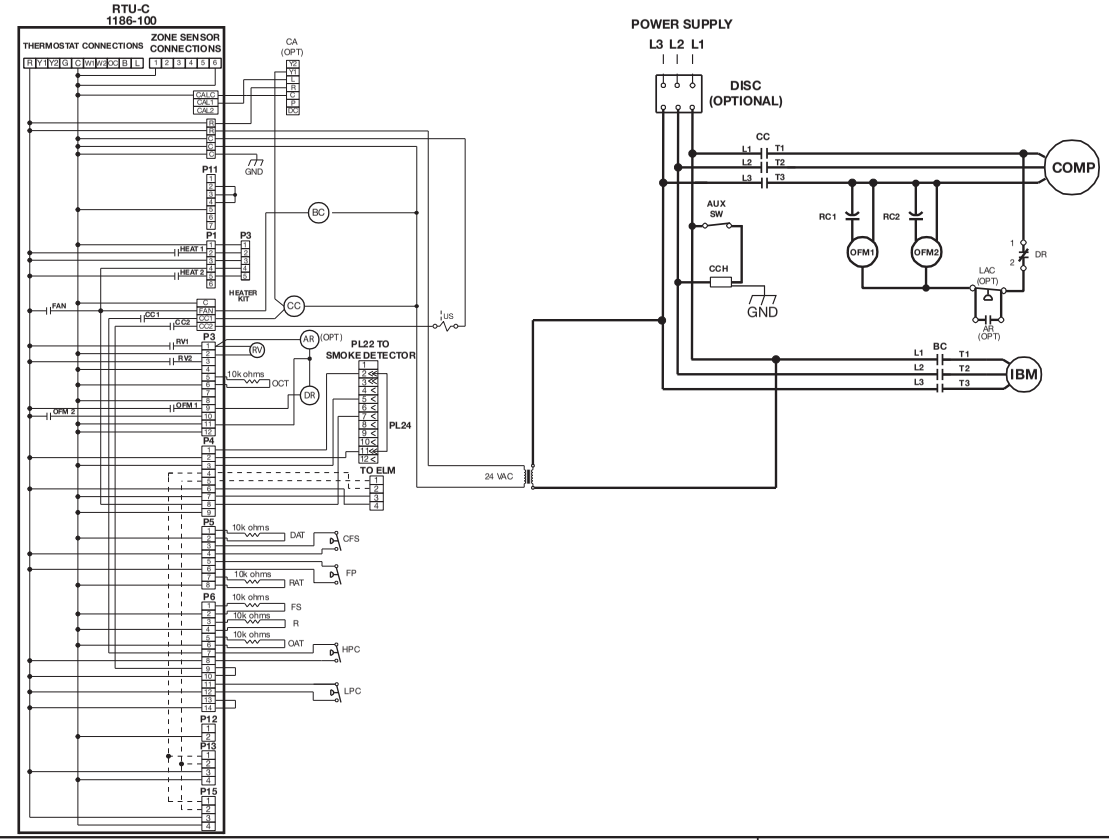

WIRE COLOR CODE
ELECTRICAL WIRING DIAGRAM
HP DDC 2 STG 090/102/120
208/230/380/460/575V, 3PH, 60HZ
HP DDC 2 STG 072/090/102
380-415V, 3PH, 50HZ
ORIGINAL RELEASE NO.: R-1071S270
DATE: 07-23-18
PART NO.: 90-106177-45
REV: 00
WIRING INFORMATION
NOTES
COMPONENT CODES
CONTROL BOX
RTU-C

FIGURE 29



WIRING INFORMATION

LINE VOLTAGE
- FACTORY STANDARD
- FACTORY OPTION
- FIELD INSTALLED

LOW VOLTAGE
- FACTORY STANDARD
- FACTORY OPTION
- FIELD INSTALLED

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

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

NOTES

1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
2. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.
3. CONNECT FIELD WIRE TO COMPRESSOR CONTACTOR (CC1).
4. REMOVE J3 AT DR(2) TO INSTALL LOW AMBIENT ACCESSORY.
5. IF REQUIRED, ATTACH CRANKCASE HEATER ACCESSORY TO CC1 (L1) AND CC1 (L2).
6. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
7. TRANSFORMER FACTORY WIRED AS SHOWN BELOW. CHANGE PRIMARY VOLTAGE CONNECTIONS FOR ALTERNATE VOLTAGES, IF REQUIRED.

UNIT VOLTAGES - HZ	TRANSFORMER TERM.
200-220 - 50HZ	200
208 - 60HZ	230
230 - 60HZ	230
380 - 60HZ	400
380-415 - 50HZ	400
460 - 60HZ	460
575 - 60HZ	575

8. LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TRANSFORMER, 24VAC, 50/60 HZ SUPPLIED.
9. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
10. REMOVE PL24 FOR ECONOMIZER ACCESSORY. PL22 AND PL24 LOCATED IN RETURN AIR SECTION.

COMPONENT CODES

AR	ACCESSORY RELAY
BC	BLOWER CONTACTOR
BR	BLOWER RELAY
CA	COMFORT ALERT MODULE
CC	COMPRESSOR CONTACTOR
CCH	CRANKCASE HEATER
CDS	CLOGGED DRAIN SENSOR
CFS	CLOGGED FILTER SWITCH
COMP	COMPRESSOR
CT	CONTROL TRANSFORMER
DAT	DISCHARGE AIR SENSOR
DISC	DISCONNECT SWITCH
DR	DEFROST RELAY
FLMS	FLAME SENSOR
FP	FAN PROVING
FS	FREEZE SENSOR
FT	FREEZE STAT
GFCO	GROUND FAULT CONVENIENCE OUTLET
GL	GROUND LUG
GND	GROUND
HPC	HIGH PRESSURE CONTROL
IBM	INDOOR BLOWER MOTOR
IDM	INDUCED DRAFT MOTOR
IFC	INTEGRATED FURNACE CONTROL
LAC	LOW AMBIENT CONTROL
LPC	LOW PRESSURE CONTROL
MAS	MIXED AIR SENSOR
MRLC	MANUAL RESET LIMIT CONTROL
NPC	NEGATIVE PRESSURE SWITCH
OAT	OUTSIDE AIR SENSOR
OCT	OUTDOOR COIL TEMPERATURE SENSOR
OFM	OUTDOOR FAN MOTOR
PL	PLUG
PT	POWER TRANSFORMER
RAT	RETURN AIR SENSOR
RC	RUN CAPACITOR
RTU-C	ROOFTOP UNIT CONTROL
SE	SPARK ELECTRODE
RV	REVERSING VALVE
TB	TERMINAL BLOCK
UL	UNLOADER SOLENOID
VFD	VARIABLE FREQUENCY DRIVE

WIRE COLOR CODE

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

ELECTRICAL WIRING SCHEMATIC

HP DDC 2 STG 090/102/120
208/230/380/460/575V, 3PH, 60HZ

HP DDC 2 STG 072/090/102
380-415V, 3PH, 50HZ

APPROVED:	CHECKED:	ORIGINAL RELEASE NO.:
MODELED BY: TCJW	DATE: 04-17-18	R-1071S220
PART NO.: 90-106178-45		REV: 00

FIGURE 30

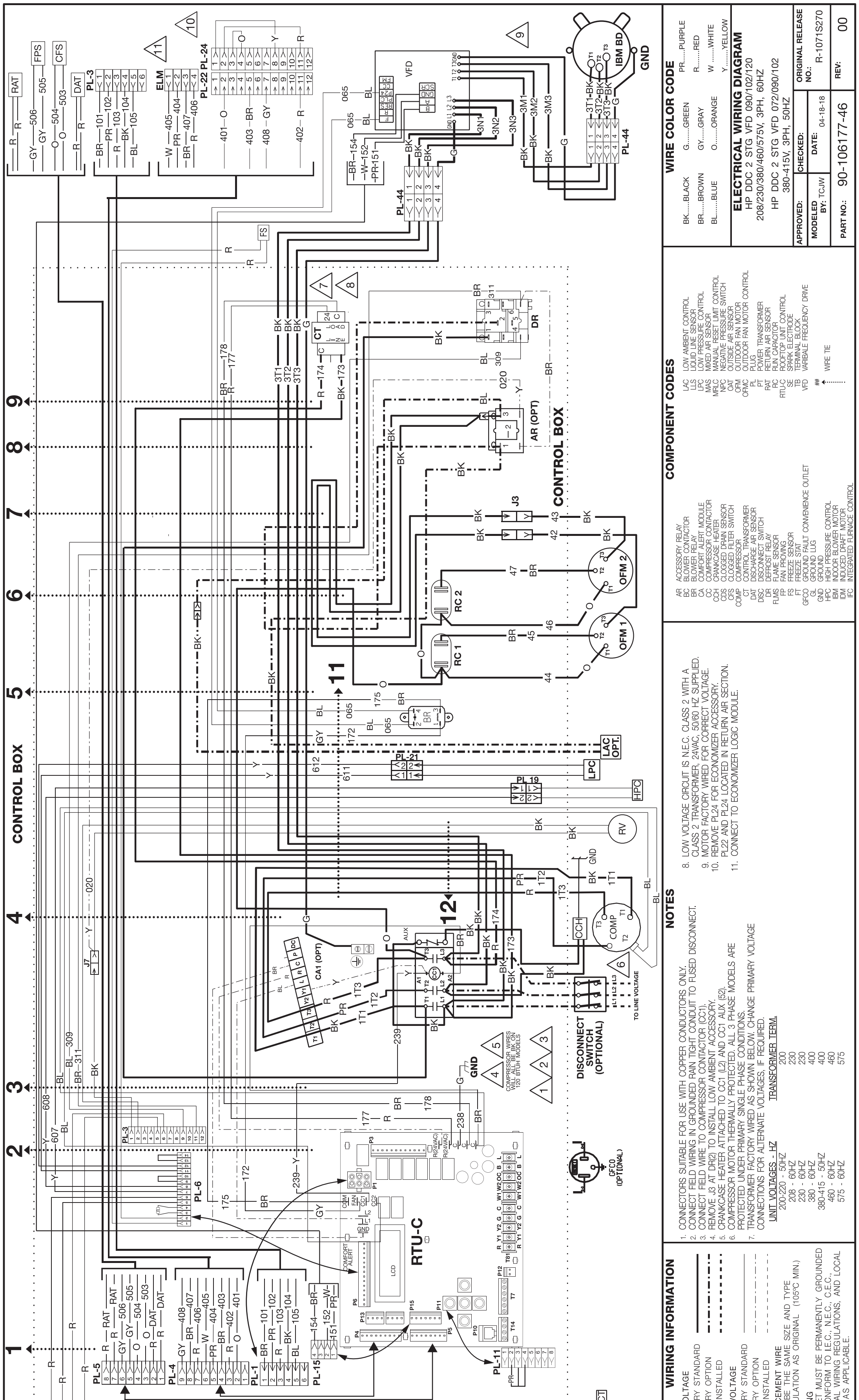
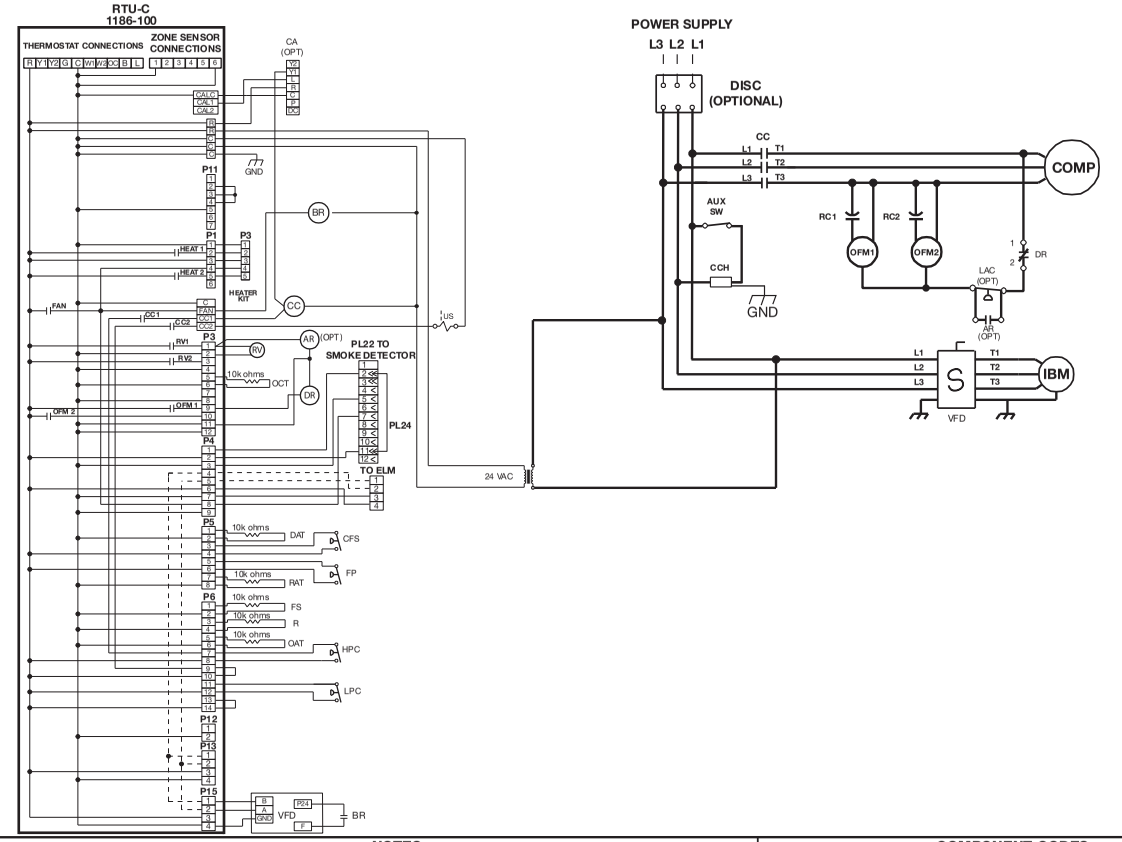

CONTROL BOX
RTU-C
WIRING INFORMATION
LINE VOLTAGE
-FACTORY STANDARD
-FACTORY OPTION
-FIELD INSTALLED
LOW VOLTAGE
-FACTORY STANDARD
-FACTORY OPTION
-FIELD INSTALLED
REPLACEMENT WIRE
-MUST BE THE SAME SIZE AND TYPE OF INSULATION AS ORIGINAL (105°C MIN.)
WARNING
CABINET MUST BE PERMANENTLY GROUNDED AND CONFORM TO I.E.C., N.E.C., C.E.C., NATIONAL WIRING REGULATIONS, AND LOCAL CODES AS APPLICABLE.
NOTES
1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
2. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.
3. CONNECT FIELD WIRE TO COMPRESSOR CONTACTOR (CC1).
4. REMOVE J3 AT DR(2) TO INSTALL LOW AMBIENT ACCESSORY.
5. CRANKCASE HEATER ATTACHED TO CC1 (L2) AND CC1 AUX (52).
6. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
7. TRANSFORMER FACTORY WIRED AS SHOWN BELOW. CHANGE PRIMARY VOLTAGE CONNECTIONS FOR ALTERNATE VOLTAGES, IF REQUIRED.
8. LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TRANSFORMER, 24VAC, 50/60 HZ SUPPLIED.
9. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
10. REMOVE PL24 FOR ECONOMIZER ACCESSORY. PL22 AND PL24 LOCATED IN RETURN AIR SECTION.
11. CONNECT TO ECONOMIZER LOGIC MODULE.
UNIT VOLTAGES - HZ / TRANSFORMER TERM.
200-220 - 60HZ / 200
208 - 60HZ / 230
230 - 60HZ / 230
380 - 60HZ / 400
380-415 - 50HZ / 400
460 - 60HZ / 460
575 - 60HZ / 575
COMPONENT CODES
AR ACCESSORY RELAY
BC BLOWER CONTACTOR
BR BLOWER RELAY
CA COMFORT ALERT MODULE
CC COMPRESSOR CONTACTOR
CCH CRANKCASE HEATER
CDS CLOGGED DRAIN SENSOR
CFS CLOGGED FILTER SWITCH
COMP COMPRESSOR
CT CONTROL TRANSFORMER
DAT DISCHARGE AIR SENSOR
DSC DISCONNECT SWITCH
DR DEFROST RELAY
FLMS FLAME SENSOR
FP FAN PROVING
FS FREEZE STAT
FT FREEZE SENSOR
GFCO GROUND FAULT CONVENIENCE OUTLET
GL GROUND LUG
GND GROUND
HPC HIGH PRESSURE CONTROL
IBM INDOOR BLOWER MOTOR
IDM INDUCED DRAFT MOTOR
IFC INTEGRATED FURNACE CONTROL
LAC LOW AMBIENT CONTROL
LLS LIQUID LINE SENSOR
LPC LOW PRESSURE CONTROL
MAS MIXED AIR SENSOR
MRLC MANUAL RESET LIMIT CONTROL
NPC NEGATIVE PRESSURE SWITCH
OAT OUTSIDE AIR SENSOR
OFM OUTDOOR FAN MOTOR
OFMC OUTDOOR FAN MOTOR CONTROL
PL PLUG
PT POWER TRANSFORMER
RAT RETURN AIR SENSOR
RC RUN CAPACITOR
RTU-C ROOFTOP UNIT CONTROL
SE SPARK ELECTRODE
TB TERMINAL BLOCK
VFD VARIABLE FREQUENCY DRIVE
WIRE TIE
WIRE COLOR CODE
BK.....BLACK G.....GREEN PR.....PURPLE
BR.....BROWN GY.....GRAY R.....RED
BL.....BLUE O.....ORANGE W.....WHITE
Y.....YELLOW
ELECTRICAL WIRING DIAGRAM
HP DDC 2 STG VFD 090/102/120
208/230/380/460/575V, 3PH, 60HZ
HP DDC 2 STG VFD 072/090/102
380-415V, 3PH, 50HZ
APPROVED: CHECKED: ORIGINAL RELEASE NO.: R-1071S270
MODELED BY: TCJW DATE: 04-18-18
PART NO.: 90-106177-46 REV: 00

FIGURE 31



WIRING INFORMATION

LINE VOLTAGE
- FACTORY STANDARD
- FACTORY OPTION
- FIELD INSTALLED

LOW VOLTAGE
- FACTORY STANDARD
- FACTORY OPTION
- FIELD INSTALLED

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

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

NOTES

1. CONNECTORS SUITABLE FOR USE WITH COPPER CONDUCTORS ONLY.
2. CONNECT FIELD WIRING IN GROUNDED RAIN TIGHT CONDUIT TO FUSED DISCONNECT.
3. CONNECT FIELD WIRE TO COMPRESSOR CONTACTOR (CC1).
4. REMOVE J3 AT DR(2) TO INSTALL LOW AMBIENT ACCESSORY.
5. IF REQUIRED, ATTACH CRANKCASE HEATER ACCESSORY TO CC1 (L1) AND CC1 (L2).
6. COMPRESSOR MOTOR THERMALLY PROTECTED. ALL 3 PHASE MODELS ARE PROTECTED UNDER PRIMARY SINGLE PHASE CONDITIONS.
7. TRANSFORMER FACTORY WIRED AS SHOWN BELOW. CHANGE PRIMARY VOLTAGE CONNECTIONS FOR ALTERNATE VOLTAGES, IF REQUIRED.

UNIT VOLTAGES - HZ	TRANSFORMER TERM.
200-220 - 50HZ	200
208 - 60HZ	230
230 - 60HZ	230
380 - 60HZ	400
380-415 - 50HZ	400
460 - 60HZ	460
575 - 60HZ	575

8. LOW VOLTAGE CIRCUIT IS N.E.C. CLASS 2 WITH A CLASS 2 TRANSFORMER, 24VAC, 50/60 HZ SUPPLIED.
9. MOTOR FACTORY WIRED FOR CORRECT VOLTAGE.
10. REMOVE PL24 FOR ECONOMIZER ACCESSORY. PL22 AND PL24 LOCATED IN RETURN AIR SECTION.

COMPONENT CODES

AR	ACCESSORY RELAY
BR	BLOWER RELAY
CA	COMFORT ALERT MODULE
CC	COMPRESSOR CONTACTOR
CCH	CRANKCASE HEATER
CDS	CLOGGED DRAIN SENSOR
CFS	CLOGGED FILTER SWITCH
COMP	COMPRESSOR
CT	CONTROL TRANSFORMER
DAT	DISCHARGE AIR SENSOR
DISC	DISCONNECT SWITCH
DR	DEFROST RELAY
FLMS	FLAME SENSOR
FP	FAN PROVING
FS	FREEZE SENSOR
FT	FREEZE STAT
GFCO	GROUND FAULT CONVENIENCE OUTLET
GL	GROUND LUG
GND	GROUND
HPC	HIGH PRESSURE CONTROL
IBM	INDOOR BLOWER MOTOR
IDM	INDUCED DRAFT MOTOR
IFC	INTEGRATED FURNACE CONTROL
LAC	LOW AMBIENT CONTROL
LPC	LOW PRESSURE CONTROL
MAS	MIXED AIR SENSOR
MRLC	MANUAL RESET LIMIT CONTROL
NPC	NEGATIVE PRESSURE SWITCH
OAT	OUTSIDE AIR SENSOR
OCT	OUTDOOR COIL TEMPERATURE SENSOR
OFM	OUTDOOR FAN MOTOR
PL	PLUG
PT	POWER TRANSFORMER
RAT	RETURN AIR SENSOR
PIC	RUN CAPACITOR
RTU-C	ROOFTOP UNIT CONTROL
SE	SPARK ELECTRODE
RV	REVERSING VALVE
TB	TERMINAL BLOCK
US	UNLOADER SOLENOID
VFD	VARIABLE FREQUENCY DRIVE

WIRE COLOR CODE

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

ELECTRICAL WIRING SCHEMATIC

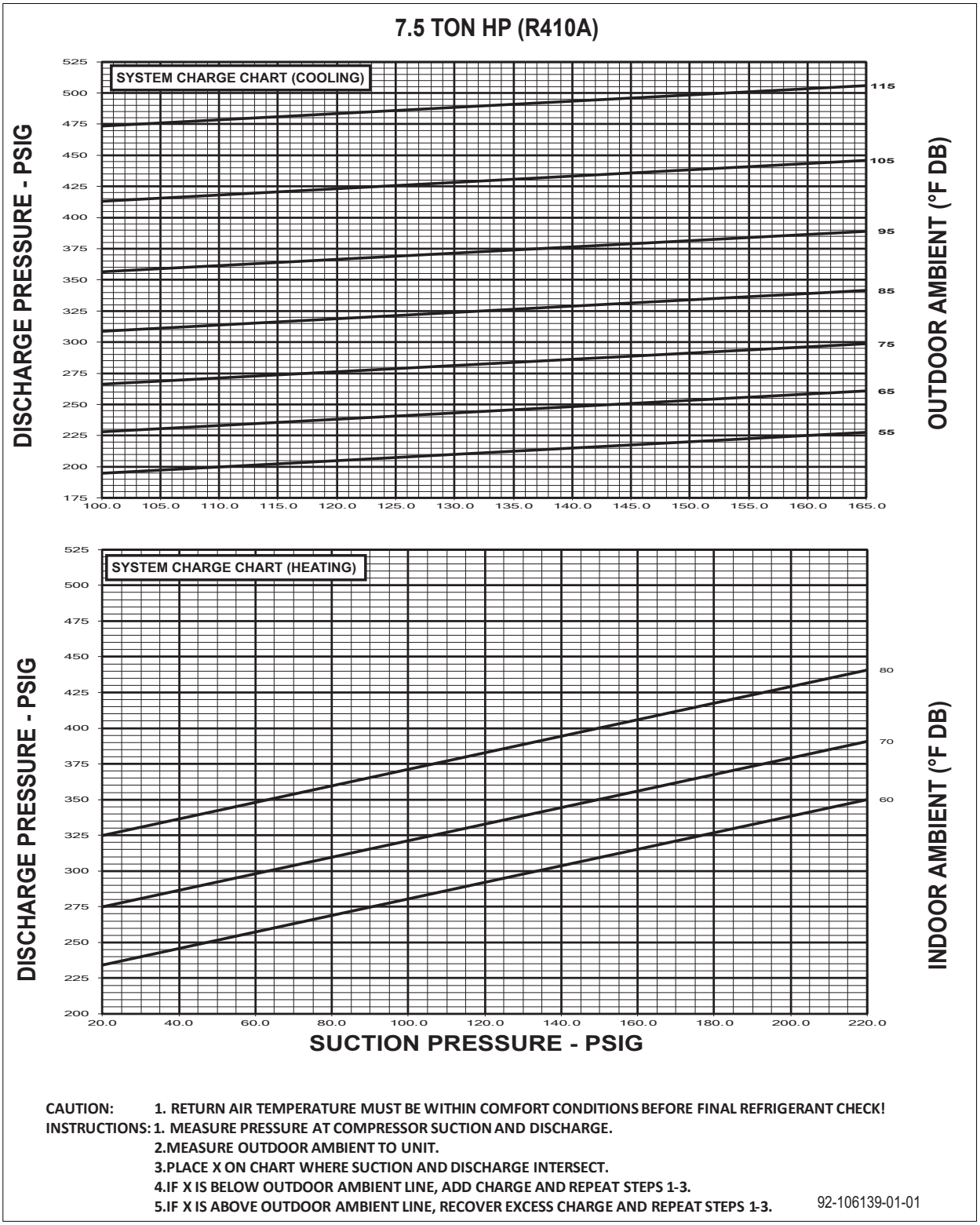
HP DDC 2 STG VFD 090/102/120
208/230/380/460/575V, 3PH, 60HZ

HP DDC 2 STG VFD 072/090/102
380-415V, 3PH, 50HZ

APPROVED:	CHECKED:	ORIGINAL RELEASE NO.:
MODELED BY: TCJW	DATE: 04-17-18	R-1071S220
PART NO.: 90-106178-46		REV: 00

CHARGING CHARTS

FIGURE 32



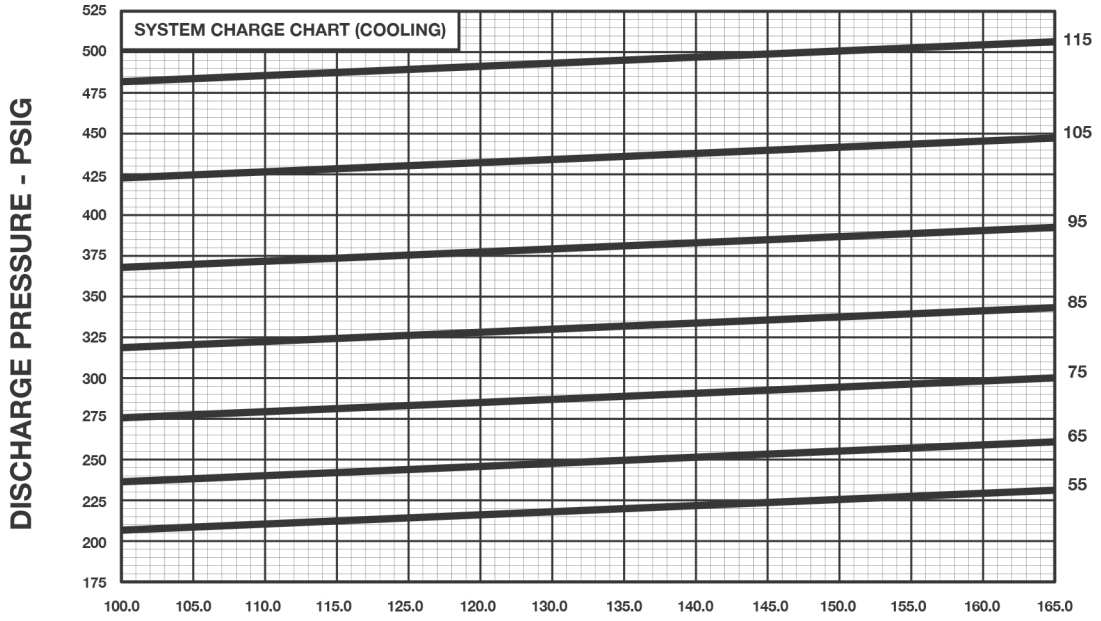
CAUTION: 1. RETURN AIR TEMPERATURE MUST BE WITHIN COMFORT CONDITIONS BEFORE FINAL REFRIGERANT CHECK!

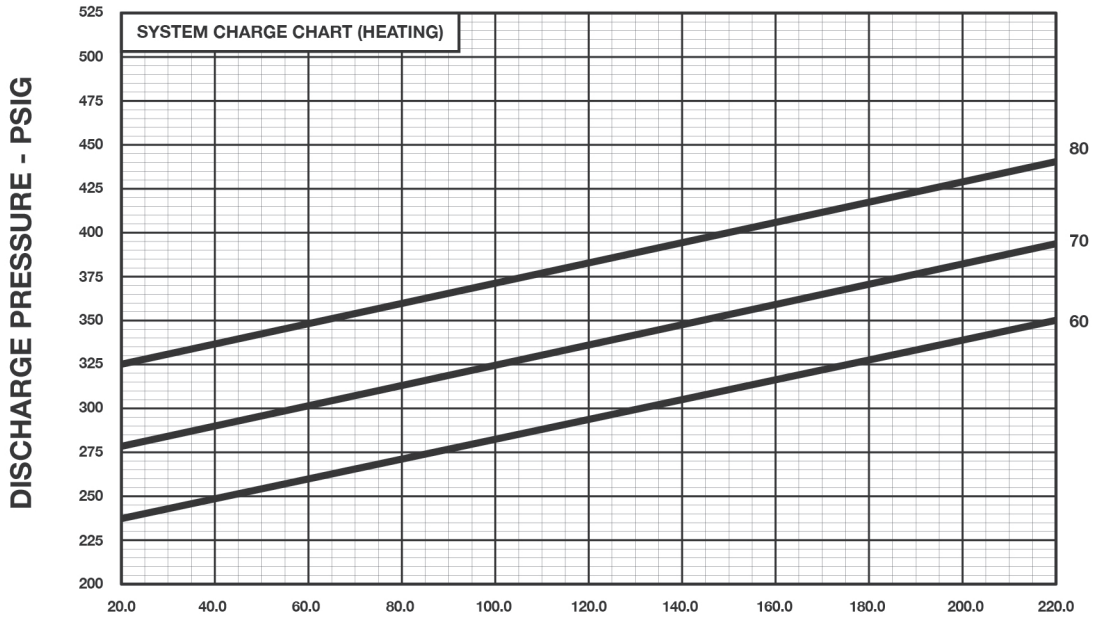
INSTRUCTIONS:
1. MEASURE PRESSURE AT COMPRESSOR SUCTION AND DISCHARGE.
2. MEASURE OUTDOOR AMBIENT TO UNIT.
3. PLACE X ON CHART WHERE SUCTION AND DISCHARGE INTERSECT.
4. IF X IS BELOW OUTDOOR AMBIENT LINE, ADD CHARGE AND REPEAT STEPS 1-3.
5. IF X IS ABOVE OUTDOOR AMBIENT LINE, RECOVER EXCESS CHARGE AND REPEAT STEPS 1-3.

92-106139-01-01

FIGURE 33

8.5 - TON CHARGE CHARTS





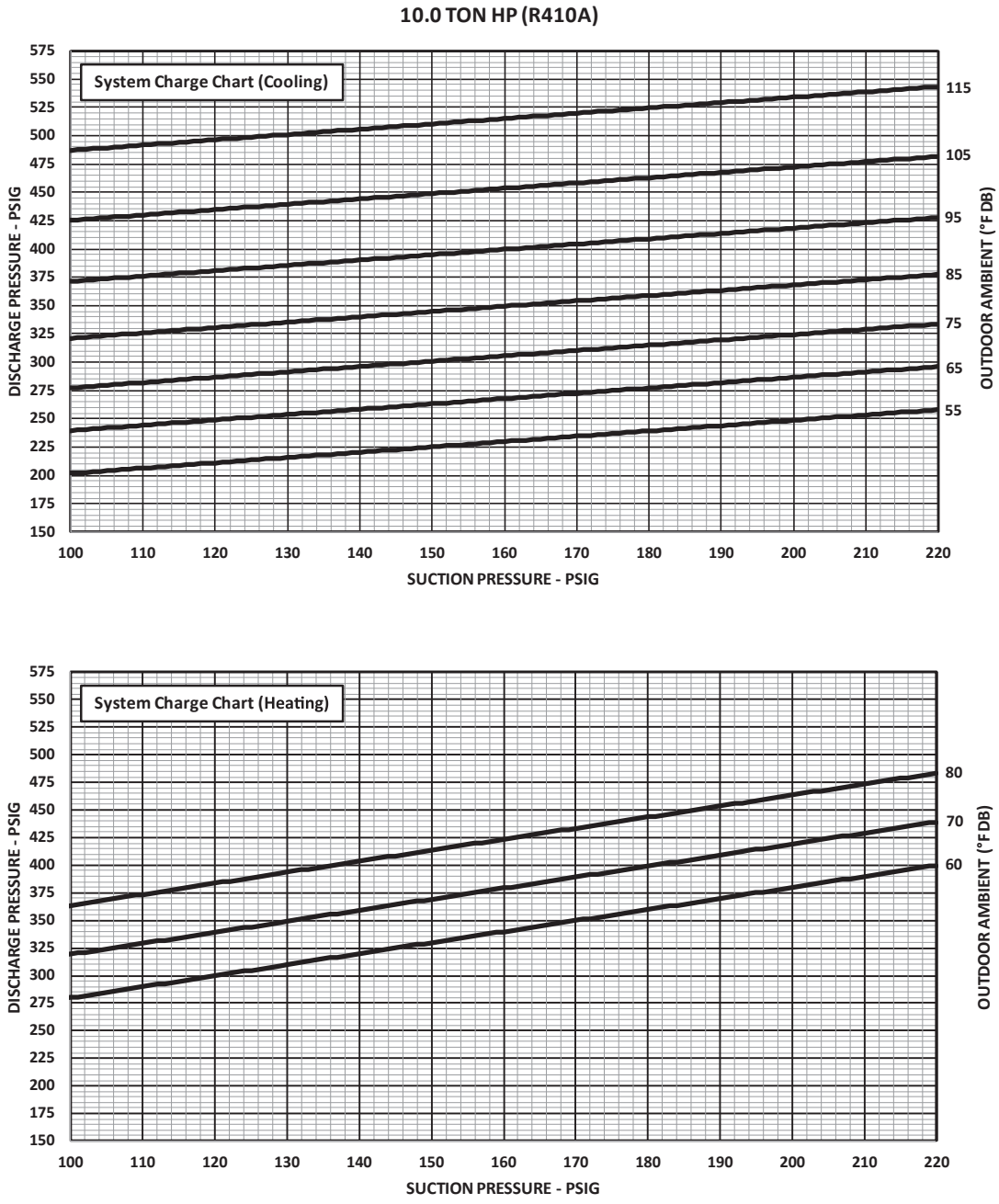
SUCTION PRESSURE, PSIG

CAUTION: 1. RETURN AIR TEMPERATURE MUST BE WITHIN COMFORT CONDITIONS BEFORE FINAL REFRIGERANT CHECK!

INSTRUCTIONS: 1. MEASURE PRESSURE AT COMPRESSOR SUCTION AND DISCHARGE.
2. MEASURE OUTDOOR AMBIENT TO UNIT.
3. PLACE X ON CHART WHERE SUCTION AND DISCHARGE INTERSECT.
4. IF X IS BELOW OUTDOOR AMBIENT LINE, ADD CHARGE AND REPEAT STEPS 1-3.
5. IF X IS ABOVE OUTDOOR AMBIENT LINE, RECOVER EXCESS CHARGE AND REPEAT STEPS 1-3.

92-106139-02-00

FIGURE 34



CAUTION: 1. RETURN AIR TEMPERTURE MUST BE WITHIN COMFORT CONDITIONS BEFORE FINAL REFRIGERANT CHECK!

INSTRUCTIONS: 1. MEASURE PRESSURE AT COMPRESSOR SUCTION AND DISCHARGE.

2. MEASURE OUTDOOR AMBIENT TO UNIT.

3. PLACE X ON CHART WHERE SUCTION AND DISCHARGE INTERSECT.

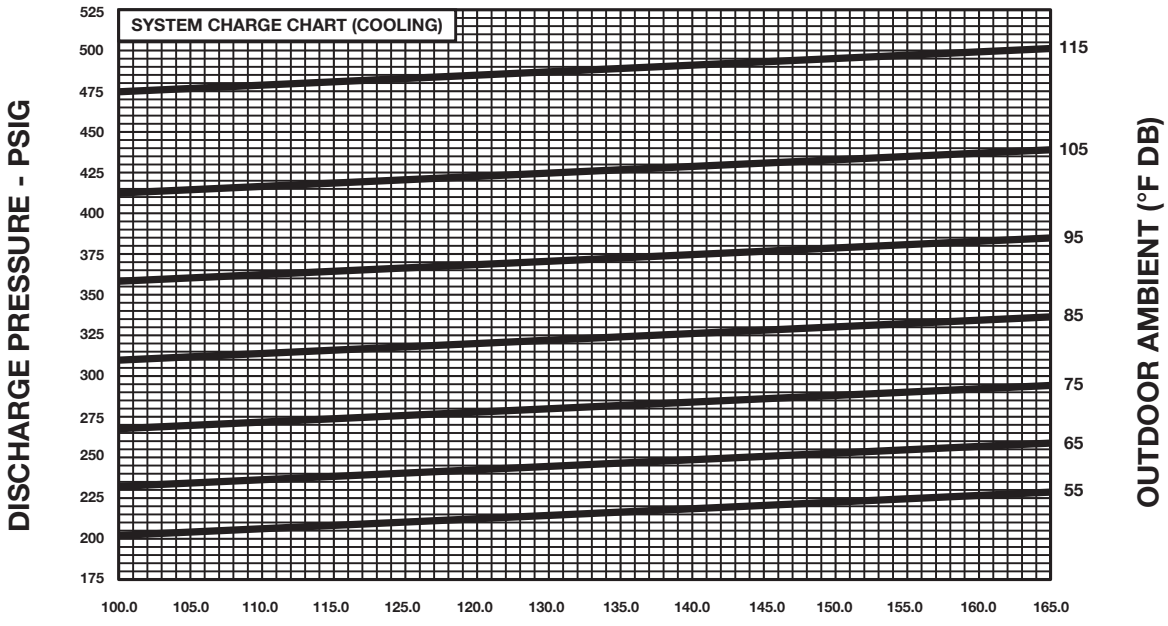
4. IF X IS BELOW OUTDOOR AMBIENT LINE, ADD CHARGE AND REPEAT STEP 1-3.

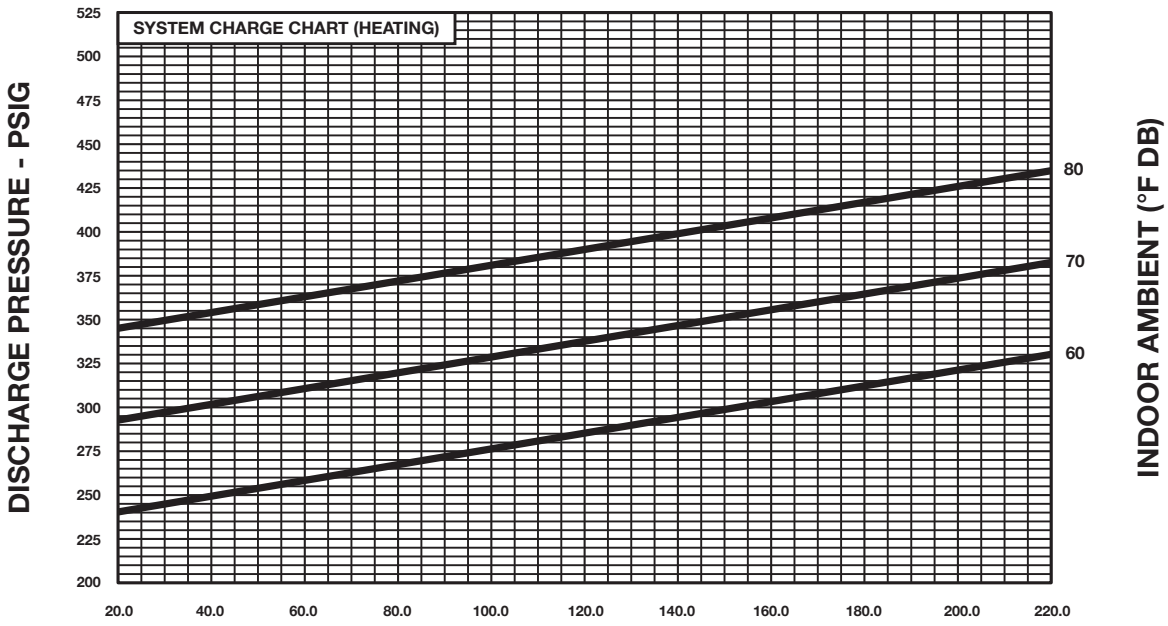
5. IF ABOVE OUTDOOR AMBIENT LINE, RECOVER EXCESS CHARGE AND REPEAT STEPS 1-3.

92-106139-03-02

FIGURE 35

7.5 - TON 2-STAGE CHARGE CHARTS





SUCTION PRESSURE, PSIG

CAUTION: 1. RETURN AIR TEMPERATURE MUST BE WITHIN COMFORT CONDITIONS BEFORE FINAL REFRIGERANT CHECK!

INSTRUCTIONS: 1. MEASURE PRESSURE AT COMPRESSOR SUCTION AND DISCHARGE.
2. MEASURE OUTDOOR AMBIENT TO UNIT.
3. PLACE X ON CHART WHERE SUCTION AND DISCHARGE INTERSECT.
4. IF X IS BELOW OUTDOOR AMBIENT LINE, ADD CHARGE AND REPEAT STEPS 1-3.
5. IF X IS ABOVE OUTDOOR AMBIENT LINE, RECOVER EXCESS CHARGE AND REPEAT STEPS 1-3.

92-106139-04-00

FIGURE 36

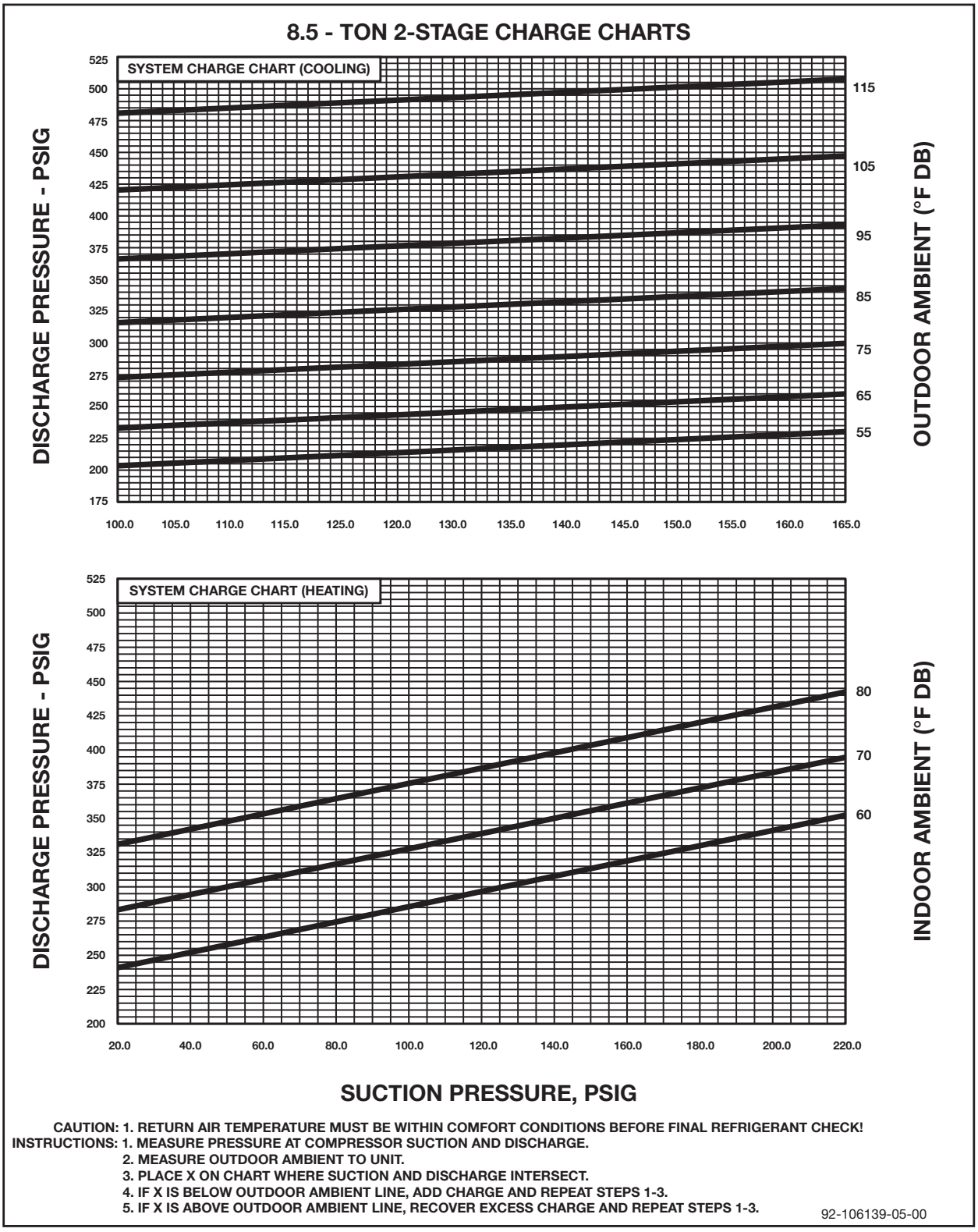
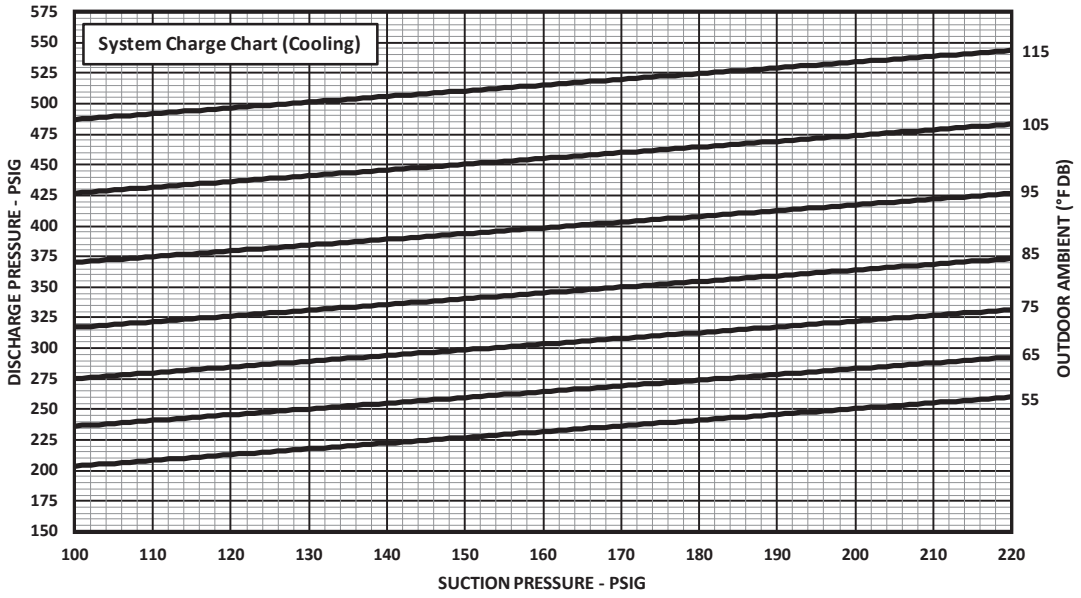
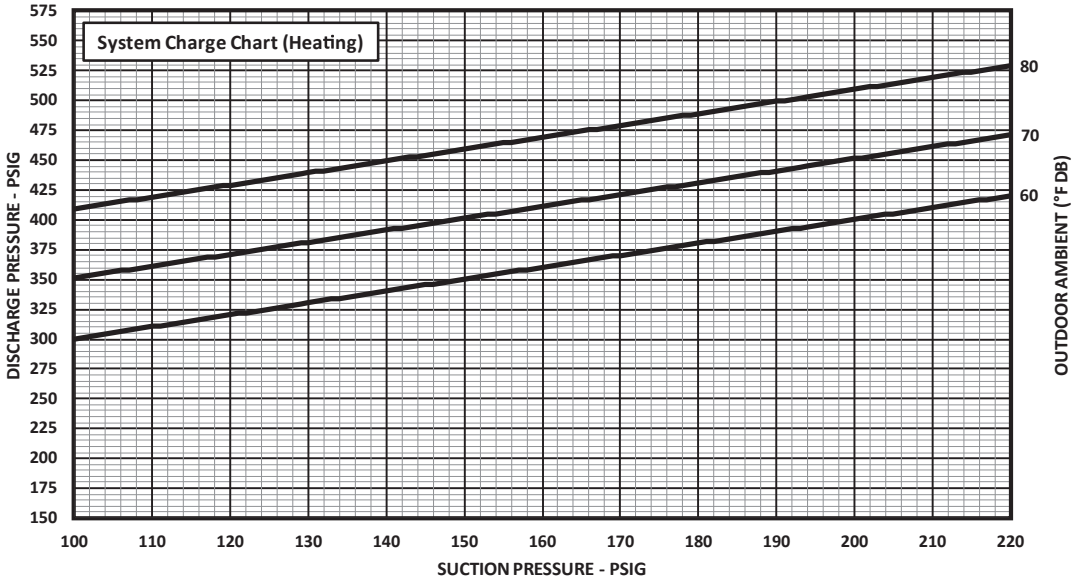

8.5 - TON 2-STAGE CHARGE CHARTS
SYSTEM CHARGE CHART (COOLING)
DISCHARGE PRESSURE - PSIG
525
500
475
450
425
400
375
350
325
300
275
250
225
200
175
100.0
105.0
110.0
115.0
125.0
120.0
130.0
135.0
140.0
145.0
150.0
155.0
160.0
165.0
115
105
95
85
75
65
55
OUTDOOR AMBIENT (°F DB)
SYSTEM CHARGE CHART (HEATING)
DISCHARGE PRESSURE - PSIG
525
500
475
450
425
400
375
350
325
300
275
250
225
200
20.0
40.0
60.0
80.0
100.0
120.0
140.0
160.0
180.0
200.0
220.0
80
70
60
INDOOR AMBIENT (°F DB)
SUCTION PRESSURE, PSIG
CAUTION: 1. RETURN AIR TEMPERATURE MUST BE WITHIN COMFORT CONDITIONS BEFORE FINAL REFRIGERANT CHECK!
INSTRUCTIONS: 1. MEASURE PRESSURE AT COMPRESSOR SUCTION AND DISCHARGE.
2. MEASURE OUTDOOR AMBIENT TO UNIT.
3. PLACE X ON CHART WHERE SUCTION AND DISCHARGE INTERSECT.
4. IF X IS BELOW OUTDOOR AMBIENT LINE, ADD CHARGE AND REPEAT STEPS 1-3.
5. IF X IS ABOVE OUTDOOR AMBIENT LINE, RECOVER EXCESS CHARGE AND REPEAT STEPS 1-3.
92-106139-05-00

FIGURE 37

10.0 TON 2-Stage HP (R410A)





CAUTION: 1. RETURN AIR TEMPERTURE MUST BE WITHIN COMFORT CONDITIONS BEFORE FINAL REFRIGERANT CHECK!

INSTRUCTIONS: 1. MEASURE PRESSURE AT COMPRESSOR SUCTION AND DISCHARGE.

2. MEASURE OUTDOOR AMBIENT TO UNIT.

3. PLACE X ON CHART WHERE SUCTION AND DISCHARGE INTERSECT.

4. IF X IS BELOW OUTDOOR AMBIENT LINE, ADD CHARGE AND REPEAT STEP 1-3.

5. IF ABOVE OUTDOOR AMBIENT LINE, RECOVER EXCESS CHARGE AND REPEAT STEPS 1-3.

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In keeping with its policy of continuous progress and product improvement, Rheem reserves the right to make changes without notice.

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