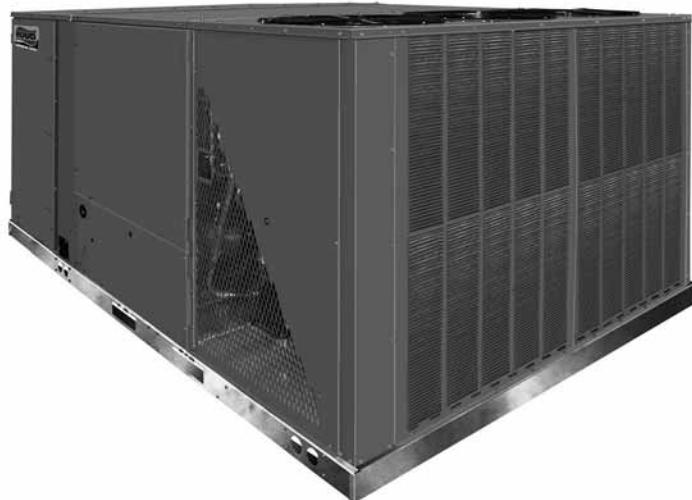


PACKAGE AIR CONDITIONER
RLKL-B SERIES

Ruud Commercial Value Series Package Air Conditioner



RLKL-B High Efficiency Series

Nominal Sizes 7.5, 10 & 12.5 Tons

[26.4, 35.2 & 44.0 kW]

ASHRAE 90.1-2010 Compliant Model



"Proper sizing and installation of equipment is critical to achieve optimal performance. Ask your Contractor for details or visit www.energystar.gov."

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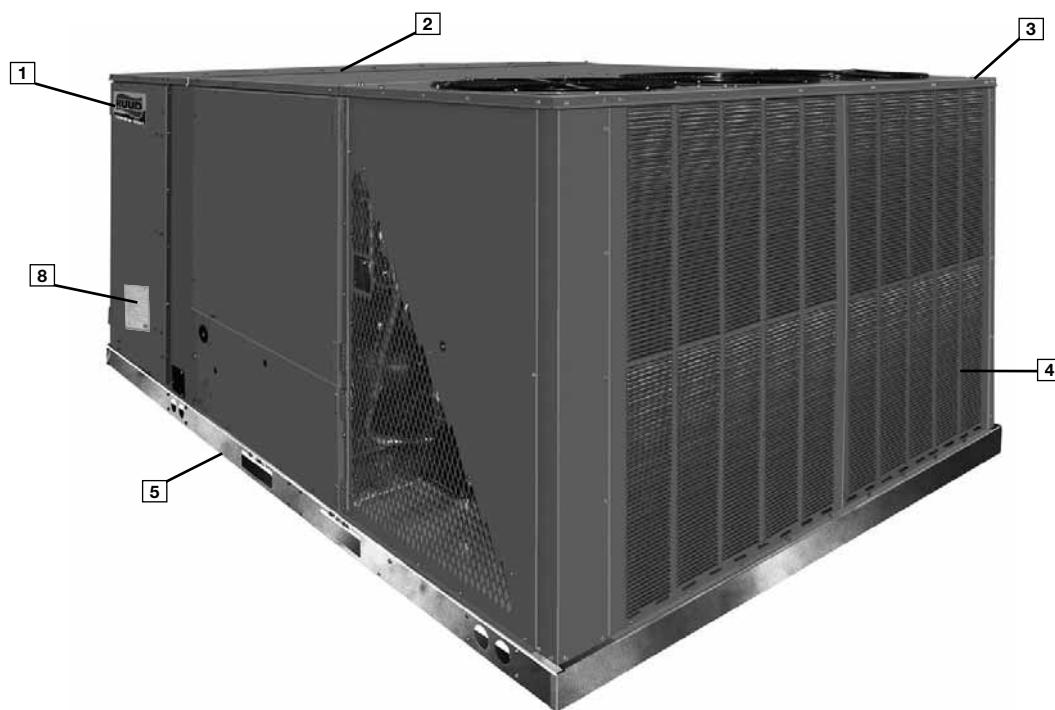
These quality features are included in the Ruud Package Air Conditioner Unit



STANDARD FEATURES INCLUDE:

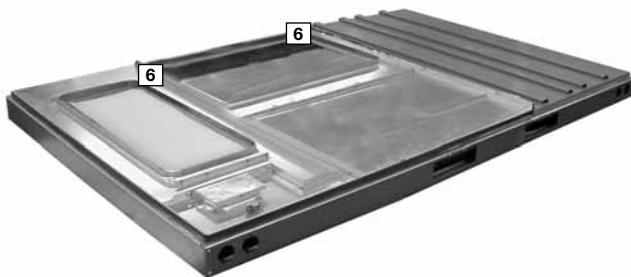
- R-410A HFC refrigerant.
- Complete factory charged, wired and run tested.
- Scroll compressors with internal line break overload and high-pressure protection.
- Single stage compressor.
- Convertible airflow.
- Orifice metering system on 7.5 and 10 ton. TXV metering on 12.5 ton.
- High Pressure and Low Pressure/Loss of charge protection standard on all models.
- Solid Core liquid line filter drier on each circuit.
- Single slab, single pass designed evaporator and condenser coils facilitate easy cleaning for maintained high efficiencies.
- MicroChannel outdoor coil.
- Cooling operation up to 125 degree F ambient.
- Foil faced insulation encapsulated throughout entire unit minimizes airborne fibers from the air stream.
- Mechanical fasteners, door with heavy-duty gasketing.
- Slide Out Indoor fan assembly for added service convenience.

- Powder Paint Finish meets ASTMB117 steel coated on each side for maximum protection. G90 galvanized.
- One piece top cover and one piece base pan with drawn supply and return opening for superior water management.
- Forkable base rails for easy handling and lifting.
- Single point electrical connections.
- Internally sloped slide out condensate pan conforms to ASHRAE 62 standards.
- High performance belt drive motor with variable pitch pulleys and quick adjust belt system.
- Permanently lubricated evaporator and condenser motors.
- Condenser motors are internally protected, totally enclosed with shaft down design.
- 2 inch filter standard with slide out design.
- 24 volt control system with resettable circuit breakers.
- Colored and labeled wiring.
- Molded compressor plug.
- Supplemental electric heat provides 100% efficient heating.



Ruud Package equipment is designed from the ground up with the latest features and benefits required to compete in today's market. The clean design stands alone in the industry and is a testament to the quality, reliability, ease of installation and serviceability that goes into each unit. Outwardly, the large Ruud *Commercial Series™* label (1) identifies the brand to the customer. The sheet-metal cabinet (2) uses nothing less than 18-gauge material for structural components with an underlying coat of G90. To ensure the leak-proof integrity of these units, the design utilizes a one-piece top with a 1/8" drip lip (3), gasket-protected panels and screws. The Ruud hail guard (optional) (4) is its trademark, and sets the standard for coil protection in the industry. Every Ruud package unit uses the toughest finish in the industry, using electro deposition baked-on enamel tested to withstand a rigorous 1000-hour salt spray test, per ASTM B117.

Anything built to last must start with the right foundation. In this case, the foundation is 14-gauge, commercial-grade, full-perimeter base rails (5), which integrate fork slots and rigging holes to save set-up time on the job site. The base pan is stamped, which forms a 1-1/8" flange around the supply and return cover and has eliminated the worry of water entering the conditioned space (6). The insulation has been placed on the underside of the basepan, removing areas that would allow for potential moisture accumulation, which can facilitate growth of harmful bacteria. All insulation is secured with both adhesive and mechanical fasteners, and all edges are hidden. The drainpan (7) is made of material that resists the growth of harmful bacteria and is sloped for the latest IAQ benefits. Furthermore, the drain pan slides out for easy cleaning.



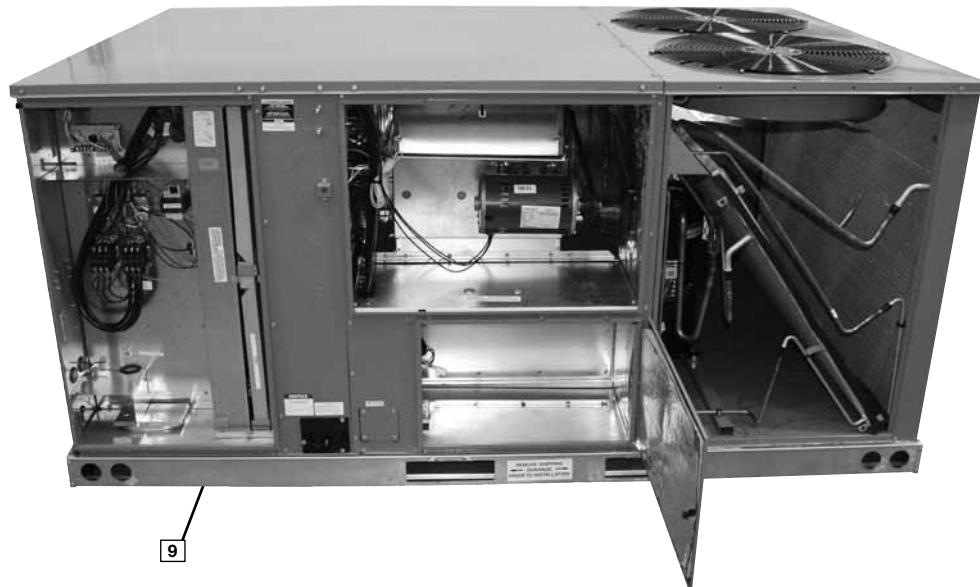
During development, each unit was tested to U.L. 1995, AHRI 340-370 and other Ruud-required reliability tests. Ruud adheres to stringent ISO 9002 quality procedures, and each unit bears the U.L. and AHRI certification labels located on the unit nameplate. Contractors can rest assured that when a Ruud package unit arrives at the job, it is ready to go with a factory charge and quality checks. Each unit also proudly displays the "Made in the USA" designation.

Access to all major compartments is from the front of the unit, including the filter and electrical compartment, blower compartment, heating section, and outdoor section. Each compartment has mechanical fasteners. Each panel is permanently embossed with the compartment name (control/filter access, blower access and electric heat access).

Electrical and filter compartment access is through a large, mechanically fastened panel. On the outside of the panel is the unit nameplate, which contains the model and serial number, electrical data and other important unit information.

The unit charging chart is located on the inside of the electrical and filter compartment door. Electrical wiring diagrams are found on the control box cover, which allows contractors to move them to more readable locations. To the right of the control box the model and serial number can be found. Having this information on the inside will assure model identification for the life of the product. The production line quality test assurance label is also placed in this location (8). The two-inch throwaway filters (9) are easily removed on a tracked system for easy replacement.





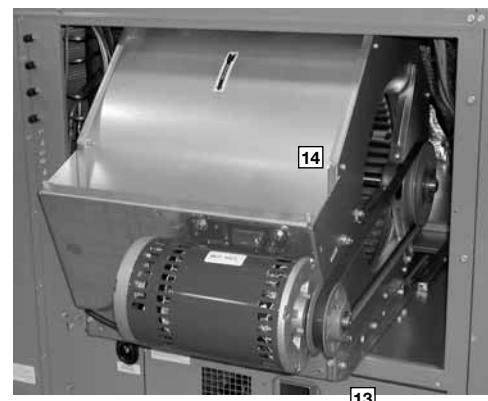
Inside the control box (**10**), each electrical component is clearly identified with a label that matches the component to the wire diagram for ease of trouble shooting. All wiring is numbered on each end of the termination and color-coded to match the wiring diagram. The control transformer has a low voltage circuit breaker that trips if a low voltage electrical short occurs. There is a blower contactor and compressor for each compressor.

For added convenience in the field, a factory-installed convenience outlet (**11**) is available. Low and High voltage can enter either from the side or through the base. Low-voltage connections are made integrated cooling control. The high-voltage connection is terminated at the number 1 compressor contactor. The suggested mounting for the field-installed disconnect is on the exterior side of the electrical control box.

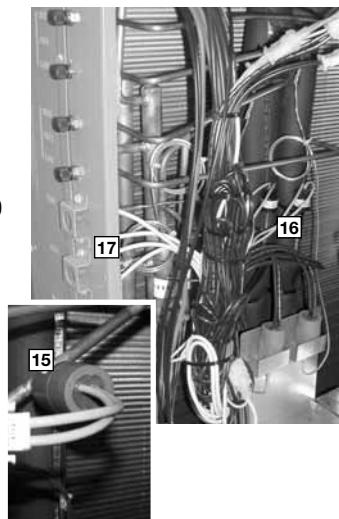
To the right of the electrical and filter compartment are the externally mounted gauge ports, which are permanently identified by embossed wording that clearly identifies the compressor circuit, high pressure connection and low pressure connection (**12**). With the gauge ports mounted externally, an accurate diagnostic of system operation can be performed quickly and easily. The blower compartment is to the right of the gauge ports and can be



accessed by removing mechanical turn fasteners. To allow easy maintenance of the blower assembly, the entire assembly easily slides out by removing the 3/8" screws from the blower retention bracket. The adjustable motor pulley (**13**) can easily be adjusted by loosening the bolts on either side of the motor mount. Removing the bolts allows for easy removal of the blower pulley by pushing the blower assembly up to loosen the belt. Once the pulley is removed, the motor sheave can be adjusted to the desired number of turns, ranging from 0 to 6 turns open. Where the demands for the job require high static, Ruud has high-static drives available that deliver nominal airflow up to 2" of static. By referring to the airflow performance tables listed in the installation instructions, proper static pressure and CFM requirements can be dialed in. The scroll housing (**14**) and blower scroll provide quiet and efficient airflow. The blower sheave is secured by an "H" bushing which firmly secures the pulley to the blower shaft for years of trouble-free operation. The "H" bushing allows for easy removal of the blower pulley from the shaft, as opposed to the use of a set screw, which can score the shaft, creating burrs that make blower-pulley removal difficult.

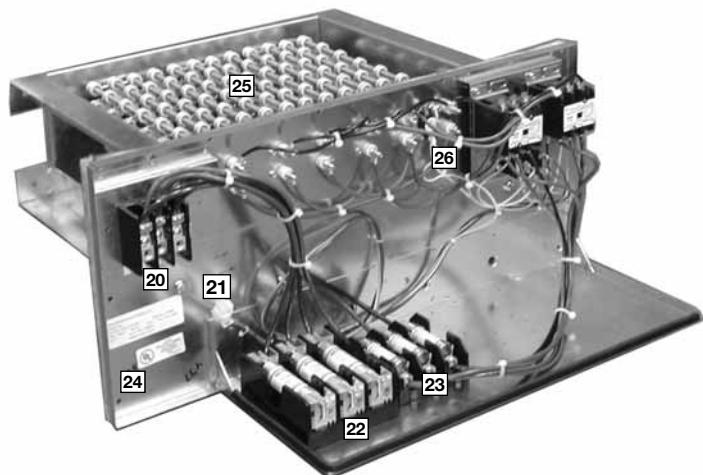
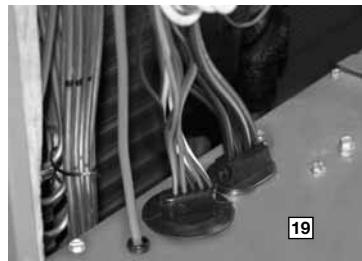


Also inside the blower compartment is the low-ambient control ([15]), low-pressure switch ([16]), high-pressure switch ([17]) and freeze stat refrigerant safety device ([18]) (optional). The low-ambient control allows for operation of the compressor down to 0 degrees ambient temperature by cycling the outdoor fans on high pressure. The high-pressure switch will shut off the compressors if pressures exceeds, 610 PSIG are detected, this may occur if the outdoor fan motor fails. The low-pressure switch shuts off the compressors if low pressure is detected due to loss of charge. The freeze stat protects the compressor if the evaporator coil gets too cold (below freezing) due to low airflow. Each factory-installed option is brazed into the appropriate high or low side and wired appropriately. Use of polarized plugs and shadern fittings allow for easy field installation.



Inside the blower compartment the interlaced evaporator can also be viewed. The evaporator uses enhanced fin technology for maximum heat transfer. The fixed orifice metering device (TXV's on 12.5 ton) assures even distribution of refrigerant throughout the evaporator. MicroChannel technology is used on outdoor coil.

Wiring throughout the unit is neatly bundled and routed. Where wire harnesses go through the condenser bulkhead or blower deck, a molded wire harness assembly ([19]) provides an air-tight and water-tight seal, and provides strain relief. Care is also taken to tuck raw edges of insulation behind sheet metal to improve indoor air quality.



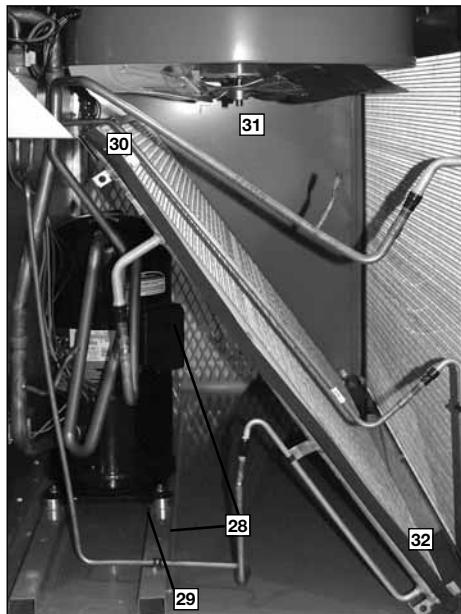
The heating compartment contains the latest electric furnace technology on the market. The 100% efficient electric furnace can be factory-installed or easily field-installed. Built with ease-of-installation in mind, the electric furnace is completely wired for slide-in, plug-and-play installation in the field. With choices of up to six kilowatt offerings, the contractor is assured to get the correct amount of heating output to meet the designed heating load.

Power hook-up in the field is easy with single-point wiring to a terminal block ([20]) and a polarized plug for the low-voltage connection ([21]). The electric furnace comes with fuses for the unit ([22]) and for the electric furnace ([23]), and is UL certified ([24]). The electric heating elements are of a wound-wire construction ([25]) and isolated with ceramic bushings. The limit switch ([26]) protects the design from over-temperature conditions. Each electric furnace has the capability to be converted from single-stage operation to two-stage operation by removing a jumper on the low-voltage terminal strip.

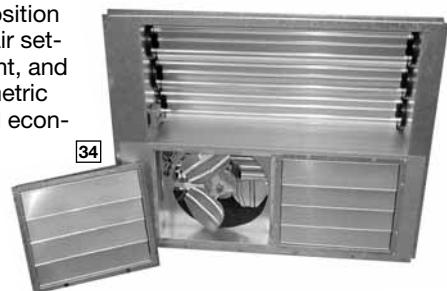
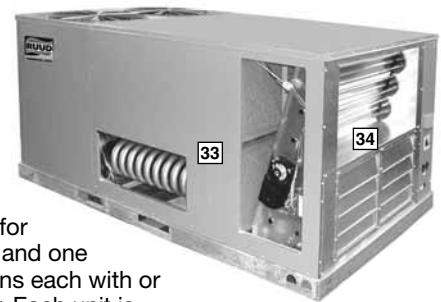
The compressor compartment houses the heart-beat of the unit. The scroll compressor (28) is known for its long life, and for reliable, quiet, and efficient operation. The suction and discharge lines are designed with shock loops (29) to absorb the strain and stress that the starting torque, steady state operation, and shut down cycle impose on the refrigerant tubing.

Each unit comes standard with filter dryer (30). The condenser fan motor (31) can easily be accessed and maintained through the compressor compartment. The polarized plug connection allows the motor to be changed quickly and eliminates the need to snake wires through the unit.

The outdoor coil uses the latest MicroChannel technology (32) for the most effective method of heat transfer. The outdoor coil is protected by optional louvered panels, which allow unobstructed airflow while protecting the unit from both Mother Nature and vandalism.



Each unit is designed for both downflow or horizontal applications (33) for job configuration flexibility. The return air compartment can also contain an economizer (34). Four models exits, one for downflow applications, and one for horizontal applications each with or without smoke detector. Each unit is pre-wired for the economizer to allow quick plug-in installation. The economizer is also available as a factory-installed option. Power Exhaust is easily field-installed. The economizer, which provides free cooling when outdoor conditions are suitable and also provides fresh air to meet local requirements, comes standard with single enthalpy controls. The controls can be upgraded to dual enthalpy easily in the field. The direct drive actuator combined with gear drive dampers has eliminated the need for linkage adjustment in the field. The economizer control has a minimum position setpoint, an outdoor-air setpoint, a mix-air setpoint, and a CO₂ setpoint. Barometric relief is standard on all economizers. The power exhaust is housed in the barometric relief opening and is easily slipped in with a plug-in assembly. The wire harness to the economizer also has accommodations for a smoke detector.



The Ruud roofcurb (35) is made for toolless assembly at the jobsite by engaging a pin into the hinged corner brackets into the adjacent curb sides, which makes the assembly process quick and easy.



To select an RLKL- Cooling and Heating unit to meet a job requirement, follow this procedure, with example, using data supplied in this specification sheet.

1. DETERMINE COOLING AND HEATING REQUIREMENTS AND SPECIFIC OPERATING CONDITIONS FROM PLANS AND SPECS.

Example:

Total cooling capacity—	106,000 BTUH [31.26 kW]
Sensible cooling capacity—	82,000 BTUH [24.03 kW]
Heating capacity—	150,000 BTUH [43.96 kW]
*Condenser Entering Air—	95°F [35°C] DB
*Evaporator Mixed Air Entering—	65°F [18°C] WB; 78°F [26°C] DB
*Indoor Air Flow (vertical)—	3600 CFM [1699 L/s]
*External Static Pressure—	.40 in. WG

2. SELECT UNIT TO MEET COOLING REQUIREMENTS.

Since total cooling is within the range of a nominal 10 ton [35.2 kW] unit, enter cooling performance table at 95°F [35°C] DB condenser inlet air. Interpolate between 63°F [2°C] and 67°F [19°C] to determine total and sensible capacity and power input for 65°F [18°C] WB evap inlet air at 4000 CFM [1888 L/s] indoor air flow (table basis):

Total Capacity = 118,900 BTUH [34.80 kW]

Sensible Capacity = 99,950 BTUH [29.29 kW]

Power Input (Compressor and Cond. Fans) = 8,950 watts

Use formula $[1.10 \times \text{CFM} \times (1 - DR) \times (\text{dbE} - 80)]$ in note ① to determine sensible capacity at 80°F [26.7°C] DB evaporator entering air:

Sensible Capacity = 92,268 BTUH [27.24 kW]

3. CORRECT CAPACITIES OF STEP 2 FOR ACTUAL AIR FLOW.

Select factors from airflow correction table at 3600 CFM [1699 L/s] and apply to data obtained in step 2 to obtain gross capacity:

Total Capacity, $118,900 \times .98 = 116,522 \text{ BTUH [34.15 kW]}$

Sensible Capacity, $92,268 \times .95 = 87,655 \text{ BTUH [25.67 kW]}$

Power Input $11,650 \times .99 = 8,861 \text{ Watts}$

These are Gross Capacities, not corrected for blower motor heat or power.

4. DETERMINE BLOWER SPEED AND WATTS TO MEET SYSTEM DESIGN.

Enter Indoor Blower performance table at 3600 CFM [1699 L/s]. Total ESP (external static pressure) per the spec of .40 in. includes the system duct and grilles. Add from the table "Component Air Resistance," .076 for wet coil, .13 for vertical air flow, for a total selection static pressure of .606 (.6) inches of water, and determine:

RPM = 796

WATTS = 1,650

DRIVE = L (standard 2 H.P. motor)

5. CALCULATE INDOOR BLOWER BTUH HEAT EFFECT FROM MOTOR WATTS, STEP 4.

$$\text{BTUH} = 1,650 \times 3.412 = 5,630$$

6. CALCULATE NET COOLING CAPACITIES, EQUAL TO GROSS CAPACITY, STEP 3, MINUS INDOOR BLOWER MOTOR HEAT.

$$\text{Net Total Capacity} = 116,522 - 5,630 = 110,892 \text{ BTUH [32.5 kW]}$$

$$\text{Net Sensible Capacity} = 87,655 - 5,630 = 82,025 \text{ BTUH [24.04 kW]}$$

7. CALCULATE UNIT INPUT AND JOB EER.

$$\text{Total Power Input} = 88,610 \text{ (step 3)} + 1,650 \text{ (step 4)} = 10,511 \text{ Watts}$$

$$\text{EER} = \frac{\text{Net Total BTUH [kW] (step 6)}}{\text{Power Input, Watts (above)}} = \frac{110,892}{10,511} = 10.55$$

8. SELECT UNIT HEATING CAPACITY.

Units with heater kits section find unit heater kw and convert watts to BTU: add blower BTUH heat effect (step 5).

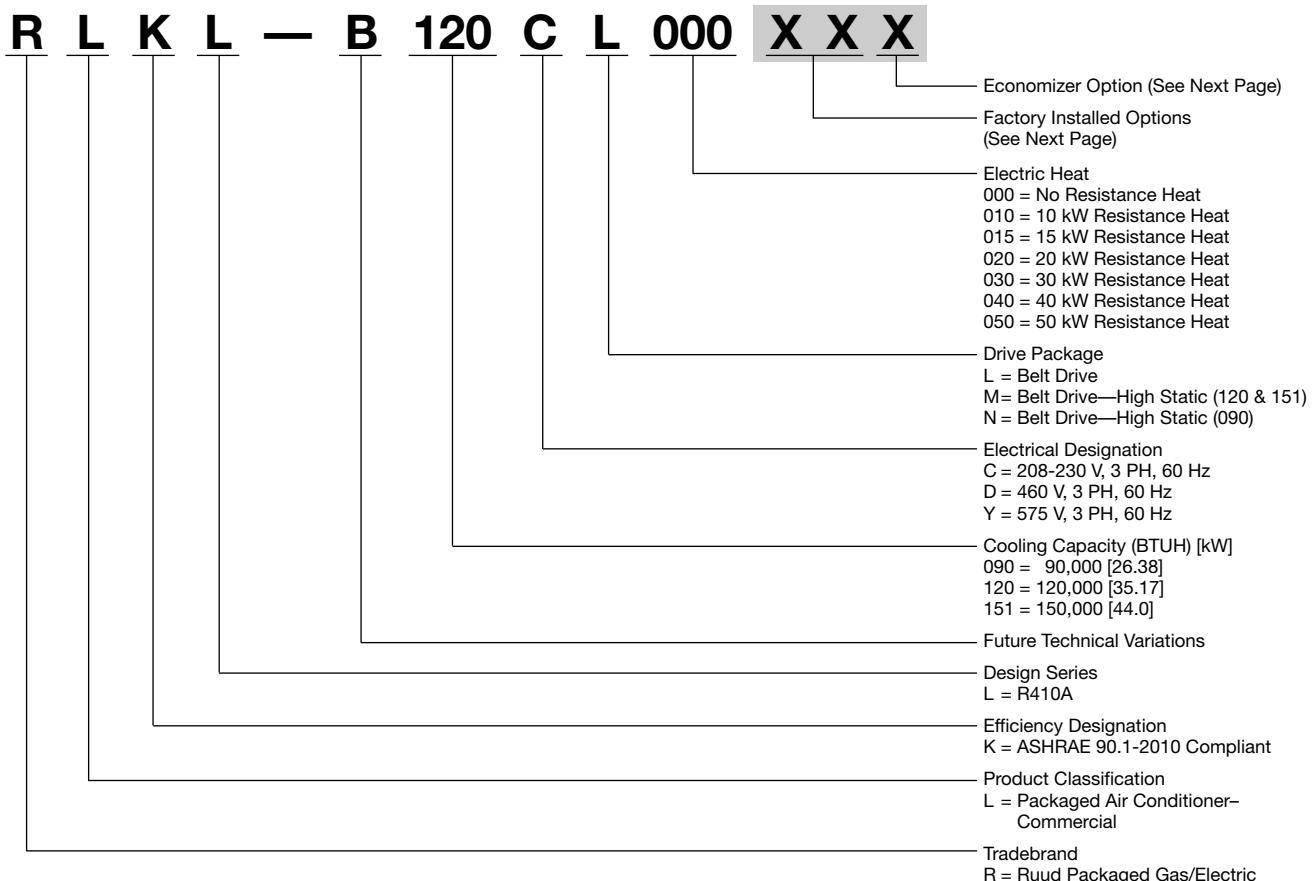
CC51C Heater Kit

$$\text{kW} \times 3412 = 163,776 \text{ BTUH [48.00 kW]} \\ + 5,630 \text{ BTUH [1.65 kW]}$$

$$\text{Heating Capacity} = 169,406 \text{ BTUH [49.65 kW]}$$

*NOTE: These operating conditions are typical of a commercial application in a 95°F/79°F [35°C/26°C] design area with indoor design of 76°F [24°C] DB and 50% RH and 10% ventilation air, with the unit roof mounted and centered on the zone it conditions by ducts.

[] Designates Metric Conversions



[] Designates Metric Conversions

7.5, 10, & 12.5 TON [26.4, 35.2 & 44.0 kW]

Option Code	Hail Guard	Non-Powered Convenience Outlet	Low Ambient/Freeze Stat
AD	X		
AG		X	
AP			X
BY	X		X
BJ	X	X	
CX	X	X	X
JC		X	X

"X" indicates factory installed option.

ECONOMIZER SELECTION FOR LKL 7.5, 10, & 12.5 TON [26.4, 35.2 & 44.0 kW]

Option Code	No Economizer	Single Enthalpy Economizer with Barometric Relief	Single Enthalpy Economizer with Barometric Relief and Smoke Detector
A	X		
F		X	
G			X

"X" indicates factory installed option.

Instructions for Factory Installed Option(s) Selection

Note: Three characters following the model number will be utilized to designate a factory-installed option or combination of options. If no factory option(s) is required, nothing follows the model number.

Step 1. After a basic rooftop model is selected, choose a *two-character* option code from the FACTORY INSTALLED OPTION SELECTION TABLE.

Proceed to Step 2.

Step 2. The last option code character is utilized for factory-installed economizers. Choose a character from the FACTORY INSTALLED ECONOMIZER SELECTION TABLE.

Examples:

RLKL-B120CL000this unit has no factory installed options.

RLKL-B120CL000ADAthis unit is equipped with hail guards.

RLKL-B120CL000BYAthis unit is equipped with hail guards, low ambient and unit freeze stat.

RLKL-B120CL000BYFthis unit is equipped as above and includes an Economizer with single enthalpy sensor and with barometric relief.

RLKL-B120CL000AAGthis unit is equipped with an Economizer with single enthalpy sensor and barometric relief with smoke detector.

[] Designates Metric Conversions

NOM. SIZES 7.5, 10, & 12.5 TON [26.4, 35.2 & 44.0 kW]

ASHRAE 90.1-2010 COMPLIANT MODELS

Model RLKL-Series	B090CL	B090CM	B090CN	B090DL
Cooling Performance¹	CONTINUED →			
Gross Cooling Capacity Btu [kW]	87,000 [25.49]	87,000 [25.49]	87,000 [25.49]	87,000 [25.49]
EER/SEER ²	11.2/NA	11.2/NA	11.2/NA	11.2/NA
Nominal CFM/AHRI Rated CFM [L/s]	2800/2925 [1321/1380]	2800/2925 [1321/1380]	2800/2925 [1321/1380]	2800/2925 [1321/1380]
AHRI Net Cooling Capacity Btu [kW]	84,000 [24.61]	84,000 [24.61]	84,000 [24.61]	84,000 [24.61]
Net Sensible Capacity Btu [kW]	64,800 [18.99]	64,800 [18.99]	64,800 [18.99]	64,800 [18.99]
Net Latent Capacity Btu [kW]	19,200 [5.63]	19,200 [5.63]	19,200 [5.63]	19,200 [5.63]
IEER ³	12.1	12.1	12.1	12.1
Net System Power kW	7.5	7.5	7.5	7.5
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)⁴	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]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]
Rows / FPI [FPcm]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]
Rows / FPI [FPcm]	2 / 18 [7]	2 / 18 [7]	2 / 18 [7]	2 / 18 [7]
Refrigerant Control	Orifices	Orifices	Orifices	Orifices
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	4500 [2124]	4500 [2124]	4500 [2124]	4500 [2124]
No. Motors/HP	1 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/No. Speeds	Belt/Variable	Belt/Variable	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	2	2	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]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]
Refrigerant Charge Oz. [g]	117.6 [3334]	117.6 [3334]	117.6 [3334]	117.6 [3334]
Weights				
Net Weight lbs. [kg]	882 [401]	882 [401]	890 [404]	882 [401]
Ship Weight lbs. [kg]	919 [417]	919 [417]	927 [420]	919 [417]

See Page 17 for Notes.

[] Designates Metric Conversions

NOM. SIZES 7.5, 10, & 12.5 TON [26.4, 35.2 & 44.0 kW]

ASHRAE 90.1-2010 COMPLIANT MODELS

Model RLKL- Series	B090DM	B090DN	B090YL	B090YM
Cooling Performance¹	CONTINUED →			
Gross Cooling Capacity Btu [kW]	87,000 [25.49]	87,000 [25.49]	87,000 [25.49]	87,000 [25.49]
EER/SEER ²	11.2/NA	11.2/NA	11.2/NA	11.2/NA
Nominal CFM/AHRI Rated CFM [L/s]	2800/2925 [1321/1380]	2800/2925 [1321/1380]	2800/2925 [1321/1380]	2800/2925 [1321/1380]
AHRI Net Cooling Capacity Btu [kW]	84,000 [24.61]	84,000 [24.61]	84,000 [24.61]	84,000 [24.61]
Net Sensible Capacity Btu [kW]	64,800 [18.99]	64,800 [18.99]	64,800 [18.99]	64,800 [18.99]
Net Latent Capacity Btu [kW]	19,200 [5.63]	19,200 [5.63]	19,200 [5.63]	19,200 [5.63]
IEER ³	12.1	12.1	12.1	12.1
Net System Power kW	7.5	7.5	7.5	7.5
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)⁴	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]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]
Rows / FPI [FPcm]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]
Rows / FPI [FPcm]	2 / 18 [7]	2 / 18 [7]	2 / 18 [7]	2 / 18 [7]
Refrigerant Control	Orifices	Orifices	Orifices	Orifices
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]	1/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	4500 [2124]	4500 [2124]	4500 [2124]	4500 [2124]
No. Motors/HP	1 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/No. Speeds	Belt/Variable	Belt/Variable	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	2	3	2	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]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]
Refrigerant Charge Oz. [g]	117.6 [3334]	117.6 [3334]	117.6 [3334]	117.6 [3334]
Weights				
Net Weight lbs. [kg]	882 [401]	890 [404]	882 [401]	882 [401]
Ship Weight lbs. [kg]	919 [417]	927 [420]	919 [420]	919 [420]

See Page 17 for Notes.

[] Designates Metric Conversions

NOM. SIZES 7.5, 10, & 12.5 TON [26.4, 35.2 & 44.0 kW]

ASHRAE 90.1-2010 COMPLIANT MODELS

Model RLKL-Series	B090YN	B120CL	B120CM	B120DL
Cooling Performance¹	CONTINUED →			
Gross Cooling Capacity Btu [kW]	87,000 [25.49]	123,000 [36.04]	123,000 [36.04]	123,000 [36.04]
EER/SEER ²	11.2/NA	11.2/NA	11.2/NA	11.2/NA
Nominal CFM/AHRI Rated CFM [L/s]	2800/2925 [1321/1380]	4000/3600 [1888/1699]	4000/3600 [1888/1699]	4000/3600 [1888/1699]
AHRI Net Cooling Capacity Btu [kW]	84,000 [24.61]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]
Net Sensible Capacity Btu [kW]	64,800 [18.99]	87,200 [25.55]	87,200 [25.55]	87,200 [25.55]
Net Latent Capacity Btu [kW]	19,200 [5.63]	31,800 [9.32]	31,800 [9.32]	31,800 [9.32]
IEER ³	12.1	12.2	12.2	12.2
Net System Power kW	7.5	10.62	10.62	10.62
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)⁴	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]	13.5 [1.25]	27 [2.51]	27 [2.51]	27 [2.51]
Rows / FPI [FPcm]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]
Rows / FPI [FPcm]	2 / 18 [7]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Refrigerant Control	Orifices	Orifices	Orifices	Orifices
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/24 [609.6]	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]	4500 [2124]	8400 [3964]	8400 [3964]	8400 [3964]
No. Motors/HP	1 at 1/2 HP	2 at 1/3 HP	2 at 1/3 HP	2 at 1/3 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
Drive Type/No. Speeds	Belt/Variable	Belt/Variable	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	3	2	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]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]
Refrigerant Charge Oz. [g]	117.6 [3334]	204.8 [5806]	204.8 [5806]	204.8 [5806]
Weights				
Net Weight lbs. [kg]	890 [404]	984 [446]	992 [450]	984 [446]
Ship Weight lbs. [kg]	927 [420]	1021 [463]	1029 [467]	1021 [463]

See Page 17 for Notes.

[] Designates Metric Conversions

NOM. SIZES 7.5, 10, & 12.5 TON [26.4, 35.2 & 44.0 kW]

ASHRAE 90.1-2010 COMPLIANT MODELS

Model RLKL- Series	B120DM	B120DL	B120YM	B151CL
Cooling Performance¹	CONTINUED →			
Gross Cooling Capacity Btu [kW]	123,000 [36.04]	123,000 [36.04]	123,000 [36.04]	146,000 [42.78]
EER/SEER ²	11.2/NA	11.2/NA	11.2/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	4000/3600 [1888/1699]	4000/3600 [1888/1699]	4000/3600 [1888/1699]	5000/4225 [2360/1994]
AHRI Net Cooling Capacity Btu [kW]	119,000 [34.87]	119,000 [34.87]	119,000 [34.87]	140,000 [41.02]
Net Sensible Capacity Btu [kW]	87,200 [25.55]	87,200 [25.55]	87,200 [25.55]	99,500 [29.15]
Net Latent Capacity Btu [kW]	31,800 [9.32]	31,800 [9.32]	31,800 [9.32]	40,500 [11.87]
IEER ³	12.2	12.2	12.2	10.8
Net System Power [kW]	10.62	10.62	10.62	12.73
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	2/Scroll
Outdoor Sound Rating (dB)⁴	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]	27 [2.51]	27 [2.51]	27 [2.51]	27 [2.51]
Rows / FPI [FPcm]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]	2 / 23 [9]
Indoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]	4 / 15 [6]
Refrigerant Control	Orifices	Orifices	Orifices	TX Valves
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan—Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	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]	8400 [3964]	8400 [3964]	8400 [3964]	8000 [3775]
No. Motors/HP	2 at 1/3 HP	2 at 1/3 HP	2 at 1/3 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/No. Speeds	Belt/Variable	Belt/Variable	Belt/Variable	Belt (Adjustable)/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]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]
Refrigerant Charge Oz. [g]	204.8 [5806]	204.8 [5806]	204.8 [5806]	147.2/152 [4173/4309]
Weights				
Net Weight lbs. [kg]	992 [450]	984 [446]	992 [450]	1230 [558]
Ship Weight lbs. [kg]	1029 [467]	1021 [463]	1029 [467]	1267 [575]

See Page 17 for Notes.

[] Designates Metric Conversions

NOM. SIZES 7.5, 10, & 12.5 TON [26.4, 35.2 & 44.0 kW]

ASHRAE 90.1-2010 COMPLIANT MODELS

Model RLKL- Series	B151CM	B151DL	B151DM	B151YL
Cooling Performance¹	CONTINUED →			
Gross Cooling Capacity Btu [kW]	146,000 [42.78]	146,000 [42.78]	146,000 [42.78]	146,000 [42.78]
EER/SEER ²	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	5000/4225 [2360/1994]	5000/4225 [2360/1994]	5000/4225 [2360/1994]	5000/4225 [2360/1994]
AHRI Net Cooling Capacity Btu [kW]	140,000 [41.02]	140,000 [41.02]	140,000 [41.02]	140,000 [41.02]
Net Sensible Capacity Btu [kW]	99,500 [29.15]	99,500 [29.15]	99,500 [29.15]	99,500 [29.15]
Net Latent Capacity Btu [kW]	40,500 [11.87]	40,500 [11.87]	40,500 [11.87]	40,500 [11.87]
IEER ³	10.8	10.8	10.8	10.8
Net System Power [kW]	12.73	12.73	12.73	12.73
Compressor				
No./Type	2/Scroll	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)⁴	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]	27 [2.51]	27 [2.51]	27 [2.51]	27 [2.51]
Rows / FPI [FPcm]	2 / 23 [9]	2 / 23 [9]	2 / 23 [9]	2 / 23 [9]
Indoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]	13.5 [1.25]
Rows / FPI [FPcm]	4 / 15 [6]	4 / 15 [6]	4 / 15 [6]	4 / 15 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan—Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	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			
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/No. Speeds	Belt (Adjustable)/Single	Belt (Adjustable)/Single	Belt (Adjustable)/Single	Belt (Adjustable)/Single
No. Motors	1	1	1	1
Motor HP	5	3	5	3
Motor RPM	1725	1725	1725	1725
Motor Frame Size	184	56	184	56
Filter—Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]	(6)2x18x18 [51x457x457]
Refrigerant Charge Oz. [g]	147.2/152 [4173/4309]	147.2/152 [4173/4309]	147.2/152 [4173/4309]	147.2/152 [4173/4309]
Weights				
Net Weight lbs. [kg]	1238 [562]	1230 [558]	1238 [562]	1230 [558]
Ship Weight lbs. [kg]	1275 [578]	1267 [575]	1275 [578]	1267 [575]

See Page 17 for Notes.

[] Designates Metric Conversions

NOM. SIZES 7.5, 10, & 12.5 TON [26.4, 35.2 & 44.0 kW]

ASHRAE 90.1-2010 COMPLIANT MODELS

Model RLKL- Series	B151YM
Cooling Performance¹	
Gross Cooling Capacity Btu [kW]	146,000 [42.78]
EER/SEER ²	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	5000/4225 [2360/1994]
AHRI Net Cooling Capacity Btu [kW]	140,000 [41.02]
Net Sensible Capacity Btu [kW]	99,500 [29.15]
Net Latent Capacity Btu [kW]	40,500 [11.87]
IEER ³	10.8
Net System Power [kW]	12.73
Compressor	
No./Type	2/Scroll
Outdoor Sound Rating (dB)⁴	
	88
Outdoor Coil—Fin Type	
Tube Type	Louvered
MicroChannel Depth In. [mm]	MicroChannel
Face Area sq. ft. [sq. m]	1 [25.4]
Rows / FPI [FPcm]	27 [2.51]
	2 / 23 [9]
Indoor Coil—Fin Type	
Tube Type	Rifled
Tube Size in. [mm]	0.375 [9.5]
Face Area sq. ft. [sq. m]	13.5 [1.25]
Rows / FPI [FPcm]	4 / 15 [6]
Refrigerant Control	TX Valves
Drain Connection No./Size in. [mm]	1/1 [25.4]
Outdoor Fan—Type	
No. Used/Diameter in. [mm]	Propeller
2/24 [609.6]	
Drive Type/No. Speeds	Direct/1
CFM [L/s]	8000 [3775]
No. Motors/HP	2 at 1/2 HP
Motor RPM	1075
Indoor Fan—Type	
No. Used/Diameter in. [mm]	FC Centrifugal
1/15x15 [381x381]	
Drive Type/No. Speeds	Belt (Adjustable)/Single
No. Motors	1
Motor HP	5
Motor RPM	1725
Motor Frame Size	184
Filter—Type	
Furnished	Disposable
Yes	
(NO.) Size Recommended in. [mm x mm x mm]	(6)2x18x18 [51x457x457]
Refrigerant Charge Oz. [g]	
	147.2/152 [4173/4309]
Weights	
Net Weight lbs. [kg]	1238 [562]
Ship Weight lbs. [kg]	1275 [578]

See Page 17 for Notes.

[] Designates Metric Conversions

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 $\pm 20\%$ of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 340/360.
2. EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
3. IEER is rated in accordance with AHRI Standard 340/360. 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.

GROSS SYSTEMS PERFORMANCE DATA—B090

		ENTERING INDOOR AIR @ 80°F [26.7°C] dB E ^①									
wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			
CFM [L/s]		3600 [1699]	2925 [1380]	2400 [1133]	3600 [1699]	2925 [1380]	2400 [1133]	3600 [1699]	2925 [1380]	2400 [1133]	
DR ①		.05	.09	.11	.05	.09	.11	.05	.09	.11	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	106.3 [31.2]	102.1 [29.9]	98.7 [28.9]	100.6 [29.5]	96.5 [28.3]	93.4 [27.4]	97.3 [28.5]	93.4 [27.4]	90.4 [26.5]
		Sens BTUH [kW]	73.3 [21.5]	62.0 [18.2]	53.7 [15.7]	84.3 [24.7]	72.0 [21.1]	63.1 [18.5]	94.8 [27.8]	81.7 [24.0]	72.1 [21.1]
		Power	5.7	5.5	5.5	5.6	5.4	5.4	5.4	5.3	5.2
	80 [26.7]	Total BTUH [kW]	104.4 [30.6]	100.2 [29.4]	96.9 [28.4]	98.6 [28.9]	94.6 [27.7]	91.6 [26.8]	95.3 [27.9]	91.5 [26.8]	88.5 [25.9]
		Sens BTUH [kW]	72.6 [21.3]	61.3 [18.0]	53.1 [15.6]	83.3 [24.4]	71.2 [20.9]	62.5 [18.3]	93.9 [27.5]	81.0 [23.7]	71.5 [21.0]
		Power	6.0	5.8	5.7	5.8	5.7	5.6	5.7	5.6	5.5
	85 [29.4]	Total BTUH [kW]	102.0 [29.9]	97.9 [28.7]	94.7 [27.8]	96.3 [28.2]	92.4 [27.1]	89.4 [26.2]	93.0 [27.3]	89.2 [26.1]	86.3 [25.3]
		Sens BTUH [kW]	71.3 [20.9]	60.3 [17.7]	52.3 [15.3]	82.2 [24.1]	70.3 [20.6]	61.7 [18.1]	92.8 [27.2]	80.0 [23.5]	70.6 [20.7]
		Power	6.3	6.1	6.0	6.2	6.0	5.9	6.0	5.9	5.8
	90 [32.2]	Total BTUH [kW]	99.3 [29.1]	95.3 [27.9]	92.2 [27.0]	93.5 [27.4]	89.8 [26.3]	86.8 [25.4]	90.3 [26.5]	86.6 [25.4]	83.8 [24.6]
		Sens BTUH [kW]	69.9 [20.5]	59.1 [17.3]	51.3 [15.0]	80.6 [23.6]	69.1 [20.3]	60.6 [17.8]	90.3 [26.5]	78.7 [23.1]	69.5 [20.4]
		Power	6.6	6.5	6.4	6.5	6.3	6.2	6.4	6.2	6.1
	95 [35]	Total BTUH [kW]	96.2 [28.2]	92.3 [27.1]	89.3 [26.2]	90.5 [26.5]	86.8 [25.4]	84.0 [24.6]	87.2 [25.6]	83.7 [24.5]	80.9 [23.7]
		Sens BTUH [kW]	68.1 [20.0]	57.6 [16.9]	50.0 [14.7]	79.0 [23.2]	67.6 [19.8]	59.4 [17.4]	87.2 [25.6]	77.3 [22.7]	68.3 [20.0]
		Power	6.9	6.8	6.7	6.8	6.7	6.6	6.7	6.6	6.5
	100 [37.8]	Total BTUH [kW]	92.7 [27.2]	89.0 [26.1]	86.1 [25.2]	87.0 [25.5]	83.5 [24.5]	80.8 [23.7]	83.7 [24.5]	80.3 [23.5]	77.7 [22.8]
		Sens BTUH [kW]	66.0 [19.4]	55.9 [16.4]	48.6 [14.3]	76.9 [22.5]	65.9 [19.3]	57.9 [17.0]	83.7 [24.5]	75.5 [22.1]	66.8 [19.6]
		Power	7.3	7.1	7.0	7.2	7.0	6.9	7.1	6.9	6.8
	105 [40.6]	Total BTUH [kW]	88.9 [26.1]	85.3 [25.0]	82.5 [24.2]	83.2 [24.4]	79.8 [23.4]	77.2 [22.6]	79.9 [23.4]	76.7 [22.5]	74.2 [21.7]
		Sens BTUH [kW]	63.7 [18.7]	53.9 [15.8]	46.8 [13.7]	74.5 [21.8]	63.9 [18.7]	56.2 [16.5]	79.9 [23.4]	73.6 [21.6]	65.1 [19.1]
		Power	7.6	7.5	7.4	7.5	7.4	7.3	7.4	7.3	7.2
	110 [43.3]	Total BTUH [kW]	84.7 [24.8]	81.3 [23.8]	78.7 [23.1]	79.0 [23.2]	75.8 [22.2]	73.3 [21.5]	75.7 [22.2]	72.6 [21.3]	70.3 [20.6]
		Sens BTUH [kW]	61.0 [17.9]	51.7 [15.2]	45.0 [13.2]	71.9 [21.1]	61.7 [18.1]	54.2 [15.9]	75.7 [22.2]	71.3 [20.9]	63.2 [18.5]
		Power	8.0	7.9	7.7	7.9	7.8	7.6	7.8	7.7	7.5
	115 [46.1]	Total BTUH [kW]	80.1 [23.5]	76.9 [22.5]	74.4 [21.8]	74.4 [21.8]	71.4 [20.9]	69.1 [20.3]	71.1 [20.8]	68.3 [20.0]	66.0 [19.3]
		Sens BTUH [kW]	58.0 [17.0]	49.2 [14.4]	42.8 [12.6]	68.9 [20.2]	59.2 [17.4]	52.1 [15.3]	71.1 [20.8]	68.3 [20.0]	61.1 [17.9]
		Power	8.4	8.3	8.1	8.3	8.2	8.0	8.2	8.1	7.9

GROSS SYSTEMS PERFORMANCE DATA—B120

		ENTERING INDOOR AIR @ 80°F [26.7°C] dB E ^①									
wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			
CFM [L/s]		4800 [2265]	3600 [1699]	3200 [1510]	4800 [2265]	3600 [1699]	3200 [1510]	4800 [2265]	3600 [1699]	3200 [1510]	
DR ①		.0	.04	.07	.0	.04	.07	.0	.04	.07	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	153.4 [45.0]	144.6 [42.4]	141.7 [41.5]	146.5 [42.9]	138.2 [40.5]	135.4 [39.7]	141.4 [41.4]	133.3 [39.1]	130.6 [38.3]
		Sens BTUH [kW]	105.0 [30.8]	82.1 [24.1]	75.1 [22.0]	123.1 [36.1]	98.2 [28.8]	90.5 [26.5]	140.1 [41.1]	113.1 [33.2]	104.7 [30.7]
		Power	7.8	7.6	7.5	7.6	7.4	7.3	7.4	7.2	7.2
	80 [26.7]	Total BTUH [kW]	150.0 [44.0]	141.5 [41.5]	138.6 [40.6]	143.2 [42.0]	135.0 [39.6]	132.3 [38.8]	138.0 [40.4]	130.2 [38.2]	127.5 [37.4]
		Sens BTUH [kW]	103.2 [30.3]	80.8 [23.7]	73.9 [21.7]	121.3 [35.6]	96.8 [28.4]	89.2 [26.2]	138.0 [40.5]	111.8 [32.8]	103.4 [30.3]
		Power	8.2	8.0	7.9	8.0	7.8	7.7	7.8	7.6	7.5
	85 [29.4]	Total BTUH [kW]	146.3 [42.9]	138.0 [40.4]	135.2 [39.6]	139.5 [40.9]	131.5 [38.5]	128.8 [37.7]	134.3 [39.4]	126.6 [37.1]	124.1 [36.4]
		Sens BTUH [kW]	101.1 [29.6]	79.2 [23.2]	72.4 [21.2]	119.3 [35.0]	95.2 [27.9]	87.7 [25.7]	134.3 [39.4]	110.2 [32.3]	102.1 [29.9]
		Power	8.6	8.3	8.3	8.4	8.2	8.1	8.2	8.0	7.9
	90 [32.2]	Total BTUH [kW]	142.2 [41.7]	134.1 [39.3]	131.4 [38.5]	135.4 [39.7]	127.6 [37.4]	125.0 [36.6]	130.2 [38.2]	122.8 [36.0]	120.3 [35.3]
		Sens BTUH [kW]	98.9 [29.0]	77.5 [22.7]	70.9 [20.8]	117.1 [34.3]	93.5 [27.4]	86.2 [25.3]	130.2 [38.2]	108.5 [31.8]	100.5 [29.5]
		Power	9.0	8.7	8.7	8.8	8.6	8.5	8.6	8.4	8.3
	95 [35]	Total BTUH [kW]	137.7 [40.4]	129.8 [38.0]	127.2 [37.3]	130.9 [38.4]	123.4 [36.2]	120.9 [35.4]	125.7 [36.8]	118.5 [34.7]	116.1 [34.0]
		Sens BTUH [kW]	96.4 [28.3]	75.5 [22.1]	69.1 [20.3]	114.5 [33.6]	91.6 [26.9]	84.5 [24.8]	125.7 [36.8]	106.6 [31.3]	98.8 [29.0]
		Power	9.4	9.2	9.1	9.2	9.0	8.9	9.0	8.8	8.7
	100 [37.8]	Total BTUH [kW]	132.8 [38.9]	125.2 [36.7]	122.7 [36.0]	126.0 [36.9]	118.8 [34.8]	116.4 [34.1]	120.8 [35.4]	113.9 [33.4]	111.6 [32.7]
		Sens BTUH [kW]	93.6 [27.4]	73.4 [21.5]	67.2 [19.7]	111.7 [32.7]	89.5 [26.2]	82.6 [24.2]	120.8 [35.4]	104.5 [30.6]	96.9 [28.4]
		Power	9.9	9.6	9.5	9.7	9.4	9.3	9.5	9.2	9.1
	105 [40.6]	Total BTUH [kW]	127.6 [37.4]	120.3 [35.3]	117.9 [34.6]	120.7 [35.4]	113.8 [33.4]	111.5 [32.7]	115.6 [33.9]	109.0 [31.9]	106.8 [31.3]
		Sens BTUH [kW]	90.7 [26.6]	71.2 [20.9]	65.2 [19.1]	108.7 [31.9]	87.2 [25.6]	80.5 [23.6]	115.6 [33.9]	102.2 [30.0]	94.8 [27.8]
		Power	10.4	10.1	10.0	10.2	9.9	9.8	10.0	9.7	9.6
	110 [43.3]	Total BTUH [kW]	121.9 [35.7]	115.0 [33.7]	112.6 [33.0]	115.1 [33.7]	108.5 [31.8]	106.3 [31.2]	109.9 [32.2]	103.6 [30.4]	101.5 [29.7]
		Sens BTUH [kW]	87.4 [25.6]	68.7 [20.1]	62.9 [18.4]	105.5 [30.9]	84.7 [24.8]	78.2 [22.9]	109.9 [32.2]	99.7 [29.2]	92.5 [27.1]
		Power	10.9	10.6	10.5	10.7	10.4	10.3	10.5	10.2	10.1
	115 [46.1]	Total BTUH [kW]	115.9 [34.0]	109.3 [32.0]	107.1 [31.4]	109.0 [31.9]	102.8 [30.1]	100.7 [29.5]	103.9 [30.5]	98.0 [28.7]	96.0 [28.1]
		Sens BTUH [kW]	84.0 [24.6]	66.1 [19.4]	60.6 [17.8]	102.0 [29.9]	82.1 [24.1]	75.9 [22.3]	103.9 [30.5]	97.1 [28.5]	90.2 [26.4]
		Power	11.4	11.1	11.0	11.2	10.9	10.8	11.0	10.7	10.6

DR —Depression ratio
dB E —Entering air dry bulb
wbE —Entering air wet bulb

Total —Total capacity x 1000 BTUH
Sens —Sensible capacity x 1000 BTUH
Power —KW input

NOTES: ① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 - DR) x (dB E - 80)].

[] Designates Metric Conversions

GROSS SYSTEMS PERFORMANCE DATA—B151

ENTERING INDOOR AIR @ 80°F [26.7°C] dB E ①											
wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			
CFM [L/s]		5070 [2393]	4225 [1994]	3380 [1595]	5070 [2393]	4225 [1994]	3380 [1595]	5070 [2393]	4225 [1994]	3380 [1595]	
DR ①		0.11	0.08	0.05	0.11	0.08	0.05	0.11	0.08	0.05	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	180.7 [52.9]	174.3 [51.1]	168 [49.2]	171.0 [50.1]	165 [48.3]	159 [46.6]	163 [47.8]	157.3 [46.1]	151.6 [44.4]
		Sens BTUH [kW]	98.6 [28.9]	90.2 [26.4]	81.8 [24.0]	119.8 [35.1]	109.6 [32.1]	99.4 [29.1]	137.4 [40.3]	125.7 [36.8]	114 [33.4]
		Power	9.2	9.1	8.9	9	8.8	8.7	8.8	8.6	8.5
	80 [26.7]	Total BTUH [kW]	176.1 [51.6]	169.9 [49.8]	163.7 [48.0]	166.4 [48.8]	160.6 [47.1]	154.7 [45.3]	158.4 [46.4]	152.9 [44.8]	147.3 [43.2]
		Sens BTUH [kW]	98.5 [28.9]	90.1 [26.4]	81.7 [23.9]	119.7 [35.1]	109.5 [32.1]	99.3 [29.1]	137.3 [40.2]	125.6 [36.8]	113.9 [33.4]
		Power	9.7	9.5	9.4	9.5	9.3	9.2	9.3	9.1	8.9
	85 [29.4]	Total BTUH [kW]	171.3 [50.2]	165.3 [48.4]	159.3 [46.7]	161.6 [47.4]	156 [45.7]	150.3 [44.0]	153.6 [45.0]	148.3 [43.4]	142.9 [41.9]
		Sens BTUH [kW]	97.8 [28.7]	89.4 [26.2]	81.1 [23.8]	119 [34.9]	108.8 [31.9]	98.7 [28.9]	136.6 [40.0]	124.9 [36.6]	113.3 [33.2]
		Power	10.2	10	9.9	10	9.8	9.6	9.8	9.6	9.4
	90 [32.2]	Total BTUH [kW]	166.4 [48.8]	160.5 [47.0]	154.7 [45.3]	156.7 [45.9]	151.2 [44.3]	145.7 [42.7]	148.7 [43.6]	143.5 [42.0]	138.2 [40.5]
		Sens BTUH [kW]	96.4 [28.2]	88.2 [25.8]	79.9 [23.4]	117.6 [34.5]	107.6 [31.5]	97.5 [28.6]	135.2 [39.6]	123.7 [36.2]	112.1 [32.9]
		Power	10.8	10.6	10.4	10.5	10.4	10.2	10.3	10.1	9.9
	95 [35]	Total BTUH [kW]	161.2 [47.2]	155.6 [45.6]	149.9 [43.9]	151.5 [44.4]	146.2 [42.8]	140.9 [41.3]	143.5 [42.1]	138.5 [40.6]	133.5 [39.1]
		Sens BTUH [kW]	94.4 [27.7]	86.3 [25.3]	78.3 [22.9]	115.6 [33.9]	105.7 [31.0]	95.8 [28.1]	133.2 [39.0]	121.8 [35.7]	110.4 [32.4]
		Power	11.3	11.1	10.9	11.1	10.9	10.7	10.9	10.7	10.5
	100 [37.8]	Total BTUH [kW]	155.9 [45.7]	150.4 [44.1]	144.9 [42.5]	146.2 [42.8]	141 [41.3]	135.9 [39.8]	138.2 [40.5]	133.3 [39.1]	128.5 [37.7]
		Sens BTUH [kW]	91.7 [26.9]	83.9 [24.6]	76 [22.3]	112.9 [33.1]	103.3 [30.3]	93.6 [27.4]	130.5 [38.2]	119.4 [35]	108.2 [31.7]
		Power	11.9	11.7	11.5	11.7	11.5	11.3	11.5	11.3	11.1
	105 [40.6]	Total BTUH [kW]	150.3 [44.1]	145.1 [42.5]	139.8 [41.0]	140.6 [41.2]	135.7 [39.8]	130.8 [38.3]	132.7 [38.9]	128 [37.5]	123.4 [36.1]
		Sens BTUH [kW]	88.4 [25.9]	80.8 [23.7]	73.3 [21.5]	109.6 [32.1]	100.2 [29.4]	90.9 [26.6]	127.2 [37.3]	116.3 [34.1]	105.5 [30.9]
		Power	12.6	12.4	12.1	12.3	12.1	11.9	12.1	11.9	11.7
	110 [43.3]	Total BTUH [kW]	144.6 [42.4]	139.6 [40.9]	134.5 [39.4]	134.9 [39.5]	130.2 [38.2]	125.5 [36.8]	126.9 [37.2]	122.5 [35.9]	118 [34.6]
		Sens BTUH [kW]	84.4 [24.7]	77.2 [22.6]	70 [20.5]	105.6 [30.9]	96.6 [28.3]	87.6 [25.7]	123.2 [36.1]	112.7 [33]	102.2 [29.9]
		Power	13.2	13	12.8	13	12.8	12.6	12.8	12.6	12.3
	115 [46.1]	Total BTUH [kW]	138.7 [40.7]	133.9 [39.2]	129 [37.8]	129 [37.8]	124.5 [36.5]	120 [35.2]	121 [35.5]	116.8 [34.2]	112.6 [33]
		Sens BTUH [kW]	79.8 [23.4]	73 [21.4]	66.2 [19.4]	101 [29.6]	92.4 [27.1]	83.8 [24.5]	118.6 [34.8]	108.5 [31.8]	98.4 [28.8]
		Power	13.9	13.7	13.4	13.7	13.5	13.2	13.5	13.2	13
	120 [48.9]	Total BTUH [kW]	132.6 [38.9]	128 [37.5]	123.3 [36.1]	122.9 [36.0]	118.6 [34.8]	114.3 [33.5]	115 [33.7]	110.9 [32.5]	106.9 [31.3]
		Sens BTUH [kW]	74.6 [21.8]	68.2 [20.0]	61.8 [18.1]	95.8 [28.1]	87.6 [25.7]	79.4 [23.3]	113.4 [33.2]	103.7 [30.4]	94 [27.6]
		Power	14.7	14.4	14.1	14.4	14.2	13.9	14.2	14	13.7
	125 [51.7]	Total BTUH [kW]	126.4 [37.0]	121.9 [35.7]	117.5 [34.4]	116.7 [34.2]	112.6 [33.0]	108.5 [31.8]	108.7 [31.8]	104.9 [30.7]	101 [29.6]
		Sens BTUH [kW]	68.7 [20.1]	62.8 [18.4]	56.9 [16.7]	89.9 [26.3]	82.2 [24.1]	74.5 [21.8]	107.5 [31.5]	98.3 [28.8]	89.1 [26.1]
		Power	15.4	15.1	14.9	15.2	14.9	14.7	15	14.7	14.4

DR —Depression ratio
dB E —Entering air dry bulb
wbE —Entering air wet bulb

Total —Total capacity x 1000 BTUH
Sens —Sensible capacity x 1000 BTUH
Power —kW input

NOTES: ① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 - DR) x (dB E - 80)].

[] Designates Metric Conversions

AIRFLOW PERFORMANCE—7.5 TON [26.4 kW] (B090)

External Static Pressure—Inches of Water [kPa]											
Capacity		7.5 Ton [26.4 kW]									
Air Flow	CFM [L/s]	0.1 [0.02]	0.2 [0.05]	0.3 [0.07]	0.4 [0.10]	0.5 [0.12]	0.6 [0.15]	0.7 [0.17]	0.8 [0.20]	0.9 [0.22]	1.0 [0.25]
CFM	CFM	RPM	RPM	W	RPM	W	RPM	W	RPM	W	RPM
2400 [1133]	—	—	—	—	540	580	582	664	612	729	645
2500 [1180]	—	—	—	—	562	633	593	717	624	791	656
2600 [1227]	—	—	—	—	564	687	603	769	635	853	945
2700 [1274]	—	—	—	—	539	670	577	744	614	828	648
2800 [1321]	—	—	—	—	554	733	590	801	625	887	660
2900 [1369]	—	—	—	—	569	801	604	866	638	956	673
3000 [1416]	546	741	854	869	617	931	650	1024	685	1144	734
3100 [1463]	560	804	598	940	632	1010	664	1107	713	1187	743
3200 [1510]	576	876	612	1011	646	1089	678	1189	722	1247	751
3300 [1557]	582	954	628	1096	660	1163	692	1274	731	1307	760
3400 [1605]	607	1030	643	1180	673	1247	710	1306	739	1388	769
3500 [1652]	622	1112	688	1271	689	1344	719	1366	748	1428	777
3600 [1699]	638	1202	672	1361	704	1440	728	1426	757	1498	786

Drive Package	L	M	N
Motor H.P. [W]	2.0 [1491.4]	2.0 [1491.4]	3.0 [2237.1]
Blower Sheave	BK110	BK90	BK65
Motor Sheave	1VP-44	1VP-44	1VP-44
Turns Open	1	2	3
RPM	682	650	620

NOTES: 1. Factory sheave settings are shown in bold print.

2. Re-adjustment of sheave required to achieve rated airflow at AHR minimum E.S.P.

3. Do not operate above blower RPM shown as motor overloading will occur.

4. Do not set motor sheave below one turn open.

AIRFLOW CORRECTION FACTORS 7.5 TON [26.4 kW] (B090)

ACTUAL—CFM [L/s]	2600 [1227]	2800 [1321]	3000 [1416]	3200 [1510]	3400 [1605]	3600 [1699]	3800 [1733]	Component	2400 [1133]	2600 [1227]	2800 [1321]	3000 [1416]	3200 [1510]	3400 [1604]	3600 [1699]
TOTAL MBH	0.97	0.98	0.99	1.00	1.01	1.02	1.03								
SENSIBLE MBH	0.91	0.94	0.97	1.00	1.02	1.05	1.08								
POWER kW	0.99	0.99	0.99	1.00	1.00	1.01	1.02								
								Wet Coil	0.047 [0.012]	0.051 [0.013]	0.055 [0.014]	0.060 [0.015]	0.065 [0.016]	0.071 [0.018]	0.076 [0.019]
								Concentric Diffuser RXRN-AA65 or FA/5 & Transition RXMC-CD04	DNA						
								Concentric Diffuser RXRN-AA61 or AA71 & Transition RXMC-CE05	0.05 [0.012]	0.06 [0.015]	0.07 [0.017]	0.08 [0.020]	0.09 [0.022]	0.10 [0.025]	0.11 [0.027]
								Economizer	0.05 [0.012]	0.06 [0.015]	0.07 [0.017]	0.08 [0.020]	0.09 [0.022]	0.10 [0.025]	0.11 [0.027]
								100% R.A. Damper Open	0.03 [0.007]	0.04 [0.009]	0.05 [0.011]	0.06 [0.012]	0.07 [0.014]	0.08 [0.015]	0.09 [0.016]
								Horizontal Economizer	0.08 [0.020]	0.08 [0.020]	0.08 [0.020]	0.10 [0.024]	0.11 [0.027]	0.12 [0.030]	0.13 [0.032]
								100% R.A. Damper Open	0.08 [0.020]	0.08 [0.020]	0.08 [0.020]	0.10 [0.024]	0.11 [0.027]	0.12 [0.030]	0.13 [0.032]
								100% O.A. Damper Open	0.08 [0.020]	0.08 [0.020]	0.08 [0.020]	0.10 [0.024]	0.11 [0.027]	0.12 [0.030]	0.13 [0.032]

NOTES: 1. Multiply correction factor times gross performance data.
2. Resulting sensible capacity cannot exceed total capacity.

4. Do not set motor sheave below one turn open.

[] Designates Metric Conversions

COMPONENT AIR RESISTANCE, IWC 7.5 TON [26.4 kW] (B090)

Standard Indoor Airflow—CFM [L/s]		Resistance—Inches Water [kPa]	
2400 [1133]	2600 [1227]	2800 [1321]	3000 [1416]
Component			
Wet Coil	0.047 [0.012]	0.051 [0.013]	0.055 [0.014]
Concentric Diffuser RXRN-AA65 or FA/5 & Transition RXMC-CD04	DNA	DNA	DNA
Concentric Diffuser RXRN-AA61 or AA71 & Transition RXMC-CE05	0.05 [0.012]	0.06 [0.015]	0.07 [0.017]
Economizer	0.05 [0.012]	0.06 [0.015]	0.07 [0.017]
100% R.A. Damper Open	0.03 [0.007]	0.04 [0.009]	0.05 [0.011]
Horizontal Economizer	0.08 [0.020]	0.08 [0.020]	0.08 [0.020]
100% R.A. Damper Open	0.08 [0.020]	0.08 [0.020]	0.08 [0.020]
Horizontal Economizer	0.08 [0.020]	0.08 [0.020]	0.08 [0.020]
100% O.A. Damper Open	0.08 [0.020]	0.08 [0.020]	0.08 [0.020]

NOTE: Add component resistance to duct resistance to determine total external static pressure.

DNA = Data not Available.

AIRFLOW PERFORMANCE—10 TON [35.2 kW] (B120)

Air Capacity 10 Ton [35.2 kW]		External Static Pressure—Inches of Water [kPa]																																					
Air Flow CFM [L/s]	CFM [L/s]	0.1 [0.02]	0.2 [0.05]	0.3 [0.07]	0.4 [0.10]	0.5 [0.12]	0.6 [0.15]	0.7 [0.17]	0.8 [0.20]	0.9 [0.22]	1.0 [0.25]	1.1 [0.27]	1.2 [0.30]	1.3 [0.32]	1.4 [0.35]	1.5 [0.37]	1.6 [0.40]	1.7 [0.42]	1.8 [0.45]	1.9 [0.47]	2.0 [0.50]	2.1 [0.52]	2.2 [0.55]	2.3 [0.57]															
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 [15.01]	—	—	—	—	—	657	1170	715	1245	742	1319	770	1394	797	1464	825	1543	880	1629	966	1698	976	1757	1036	1159	1261	1179	2038											
3300 [15.65]	—	—	—	—	—	673	1179	701	1253	728	1328	756	1402	783	1477	811	1561	838	1626	964	1703	948	1822	976	1935	1024	1049	1146	1186	2057									
3400 [16.05]	—	—	—	—	—	687	1261	714	1336	742	1410	769	1485	797	1559	824	1634	852	1708	879	1763	950	1811	971	1827	962	1941	989	2054	1032	1153	1284							
3500 [16.62]	—	—	—	—	—	673	1270	700	1344	728	1419	755	1493	783	1568	810	1642	838	1717	865	1791	958	1813	958	1832	978	1946	975	2059	1003	1123	1275							
3600 [17.24]	—	—	—	—	—	686	1352	714	1427	741	1501	769	1650	824	1725	851	1787	891	1874	945	1882	966	1951	976	2065	988	2072	1016	1047	1141	1284	2070							
3700 [17.74]	—	—	—	—	—	672	1361	700	1435	725	1510	754	1659	811	1783	837	1898	953	1937	965	2037	983	2083	1020	2237	1039	2141	1054	2054	1077	2146	1108	2052	1168	2080				
3800 [17.93]	—	—	—	—	—	686	1443	713	1518	741	1592	768	1667	796	1741	823	1818	861	1890	878	1965	940	2003	960	2075	981	2118	989	2093	1143	2097	1163	3210	1183	3324				
3900 [18.41]	—	—	—	—	—	699	1526	727	1601	754	1675	782	1750	809	1824	837	1899	864	1973	927	2015	948	2080	968	2194	988	2307	1008	2421	1029	2534	1067	2648	1069	2761	1110	2988		
4000 [18.88]	—	—	—	—	—	713	1609	740	1683	768	1756	795	1832	823	1907	850	1861	878	2056	985	2085	955	2199	975	2312	996	2426	1016	2339	1043	2633	1070	2676	1077	2890	1097	2994		
4100 [19.95]	—	—	—	—	—	724	1692	754	1766	781	1841	784	1900	864	2064	922	2091	942	2204	963	2318	973	2434	1003	2545	1024	2558	1084	2599	1107	2621	1126	2744	1166	2856				
4200 [19.92]	—	—	—	—	—	740	1774	767	1849	795	1923	812	1988	850	2072	877	2147	924	2230	973	2323	980	2450	1011	2523	1027	2577	1070	2890	1097	3004	1192	3117	1122	3231	1133	3345		
4300 [20.29]	—	—	—	—	—	753	1857	781	1932	808	2006	836	2081	853	2155	917	2215	937	2328	957	2442	978	2555	988	2669	1018	2782	1039	2886	1083	3009	1111	3123	1099	3236	1120	3350	1140	3433
4400 [20.71]	—	—	—	—	—	767	1940	794	2014	822	2089	849	2163	877	2238	924	2333	945	2447	965	2560	985	2674	1006	2787	1026	2901	1046	3014	1097	3128	1124	3241	1117	3347	1148	3463		
4500 [21.24]	—	—	—	—	—	780	2023	808	2097	835	2023	808	2120	835	2193	832	2248	912	2338	932	2452	952	2585	1023	2793	993	2875	1030	3133	1110	3260	1043	3378	1137	3487	1155	3587		
4600 [21.71]	—	—	—	—	—	794	2101	811	2180	840	2124	851	2254	876	2309	919	2457	921	2561	960	2798	1000	2911	1021	3138	1061	3252	1131	3356	1142	3476	1163	3581	1181	3633	1193	3685		
4700 [22.18]	—	—	—	—	—	807	2188	835	2263	866	2237	896	2337	906	2452	927	2576	947	2659	967	2803	988	2916	1008	3030	1028	3143	1048	3257	1069	3377	1137	3484	1165	3598	1110	3638	1171	3780
4800 [22.65]	—	—	—	—	—	821	2271	848	2345	876	2220	914	2561	934	2695	955	2808	975	2922	995	3035	1015	3149	1093	3226	1056	3376	1076	3489	1151	3639	1178	3716	1157	3843	1178	4057	1198	4170

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

Drive Package	L	M
Motor H.P. [W]	2.0 [1491.4]	3.0 [2237.1]
Blower Sheave	BK90	BK65
Motor Sheave	1VP-44	1VP-44
Turns Open	1	2
RPM	845	810

COMPONENT AIR RESISTANCE, IWC 10 TON [35.2 kW] (B120)

Component	Standard Indoor Airflow—CFM [L/s]					
	3200 [1510]	3400 [1604]	3600 [1699]	3800 [1793]	4000 [1888]	4200 [1982]
	Resistance—Inches Water [kPa]					
Wet Coil	0.065 [0.016]	0.071 [0.018]	0.076 [0.019]	0.082 [0.020]	0.087 [0.023]	0.093 [0.025]
Concentric Diffuser RXRN-FA65 or FA75 & Transition RXMC-CD04	0.31 [0.077]	0.37 [0.092]	DNA	DNA	DNA	DNA
Concentric Diffuser RXRN-AA61 or AA71 & Transition RXMC-CE05	DNA	DNA	0.17 [0.042]	0.18 [0.045]	0.21 [0.052]	0.24 [0.060]
Concentric Diffuser RXRN-AA66 or AA76 & Transition RXMC-CF06	DNA	DNA	DNA	DNA	DNA	DNA
Economizer	0.09 [0.022]	0.10 [0.025]	0.11 [0.027]	0.12 [0.030]	0.13 [0.032]	0.14 [0.035]
100% R.A. Damper Open	0.05 [0.012]	0.06 [0.014]	0.06 [0.015]	0.07 [0.017]	0.08 [0.020]	0.09 [0.021]
Horizontal Economizer	0.11 [0.027]	0.12 [0.030]	0.13 [0.032]	0.15 [0.036]	0.16 [0.040]	0.18 [0.044]
100% R.A. Damper Open	0.05 [0.012]	0.06 [0.014]	0.06 [0.015]	0.07 [0.017]	0.08 [0.020]	0.09 [0.021]
Horizontal Economizer	0.11 [0.027]	0.12 [0.030]	0.13 [0.032]	0.15 [0.036]	0.16 [0.040]	0.18 [0.044]
100% OA Damper Open	0.05 [0.012]	0.06 [0.014]	0.06 [0.015]	0.07 [0.017]	0.08 [0.020]	0.09 [0.021]

NOTE: Add component resistance to duct resistance to determine total external static pressure.

AIRFLOW CORRECTION FACTORS 10 TON [35.2 kW] (B120)

ACTUAL—CFM	3200	3400	3600	3800	4000	4200	4400	4600	4800
[L/s]	[1510]	[1605]	[1699]	[1793]	[1888]	[1982]	[2077]	[2171]	[2265]
TOTAL MBH	0.96	0.97	0.98	0.99	1.00	1.01	1.02	1.03	1.04
SENSIBLE MBH	0.91	0.93	0.95	0.97	1.00	1.02	1.05	1.07	1.09
POWER kW	0.98	0.98	0.99	0.99	1.00	1.00	1.01	1.01	1.01

NOTES: 1. Multiply correction factor times gross performance data.
2. Resulting sensible capacity cannot exceed total capacity.

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NOTES:

- 1. Factory sheave settings are shown in bold print.
- 2. Re-adjustment of sheave required to achieve rated airflow at AHR minimum E.S.P.
- 3. Do not operate above blower RPM shown as motor overloading will occur.
- 4. Do not set motor choices below optimum speed.

AIRFLOW PERFORMANCE—12.5 TON [44.0 kW] (B151)

External Static Pressure—Inches of Water [kPa]												
Air Flow CFM [l/s]												
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]	
RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	
3800 [1793]	—	—	—	828	1605	854	1661	879	1722	904	1786	
4000 [1888]	—	—	—	—	830	1735	855	1796	905	1927	930	1997
4200 [1982]	—	—	—	—	832	1877	858	1941	908	2079	932	2153
4400 [2076]	836	2029	862	2096	886	2167	911	2241	936	2319	960	2400
4600 [2171]	867	2263	891	2337	916	2415	940	2496	964	2561	988	2639
4800 [2265]	887	2518	922	2599	946	2684	970	2772	983	2864	1017	2959
5000 [2359]	929	2795	953	2883	976	2975	1000	3070	1023	3168	1046	3270
5200 [2454]	961	3093	984	3188	1007	3286	1030	3388	1053	3494	1076	3603
5400 [2548]	983	3412	1016	3514	1039	3619	1062	3728	1084	3841	1106	3956
5600 [2643]	1026	3752	1049	3861	1071	3974	1093	4089	1115	4209	1137	4331
5800 [2737]	1060	4114	1082	4230	1104	4349	1126	4472	1147	4598	1169	4728

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

Drive Package	L	M	
Motor H.P. [W]	3.0 [2237.1]	5.0 [3728.5]	
Blower Sheave	BK72H	BK85H	
Motor Sheave	1VP-44	1VP-65	
Turns Open	1	2	3
RPM	1051	1009	966
	920	876	824
	1294	1256	1216
	1177	1137	1136
	1094		

NOTES: 1. Factory sheave settings are shown in bold print.

2. Do not set motor sheave below minimum or maximum turns open shown.

3. Re-adjustment of sheave required to achieve rated airflow at ARI minimum External Static Pressure.

4. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

AIRFLOW CORRECTION FACTORS 12.5 TON [44.0 kW] (B151)

ACTUAL—CFM [l/s]	3800 [1793]	4000 [1888]	4200 [1982]	4400 [2077]	4600 [2171]	4800 [2265]	5000 [2359]	5200 [2454]	5400 [2549]	5600 [2643]	5800 [2737]
TOTAL MBH	0.98	0.99	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.07	
SENSIBLE MBH	0.93	0.96	1.00	1.04	1.07	1.11	1.14	1.18	1.21	1.25	
POWER kW	0.99	1.00	1.00	1.00	1.01	1.01	1.02	1.03	1.03	1.03	

NOTES: 1. Multiply correction factor times gross performance data.
2. Resulting sensible capacity cannot exceed total capacity.

[] Designates Metric Conversions

COMPONENT AIR RESISTANCE, IWC 12.5 TON [44.0 kW] (B151)

Component	3800 [1793]	4000 [1888]	4200 [1982]	4400 [2076]	4600 [2171]	4800 [2265]	5000 [2359]	5200 [2454]	5400 [2548]	5600 [2643]	5800 [2737]
Wet Coil	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.13	0.13	0.14
Downflow Economizer	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
RA Damper Open	[.03]	[.03]	[.03]	[.04]	[.04]	[.04]	[.04]	[.04]	[.05]	[.05]	[.05]
Horizontal Economizer	0.07	0.07	0.08	0.09	0.10	0.10	0.10	0.11	0.11	0.12	0.13
RA Damper Open	[.02]	[.02]	[.02]	[.02]	[.02]	[.02]	[.02]	[.02]	[.03]	[.03]	[.03]
Concentric Grill RXRN-AA61 or RXRN-AA71 & Transition RXMC-CE05	0.19	0.21	0.24	0.27	0.30	0.33	0.36	0.40	0.44	0.48	0.52
Concentric Grill RXRN-AA66 or RXRN-AA76 & Transition RXMC-CF06	0.23	0.25	0.27	0.29	0.30	0.32	0.34	0.36	0.40	0.43	0.43

NOTE: Add component resistance to duct resistance to determine total external static pressure.

ELECTRICAL DATA – RLKL SERIES							
		B090CL	B090CM	B090CN	B090DL	B090DM	B090DN
Unit Information	Unit Operating Voltage Range	187-253	187-253	187-253	414-506	414-506	414-506
	Volts	208/230	208/230	208/230	460	460	460
	Minimum Circuit Ampacity	40/40	40/40	45/45	20	20	23
	Minimum Overcurrent Protection Device Size	50/50	50/50	60/60	25	25	30
	Maximum Overcurrent Protection Device Size	60/60	60/60	60/60	30	30	30
Compressor Motor	No.	1	1	1	1	1	1
	Volts	200/240	200/240	200/240	480	480	480
	Phase	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	6	6	6	6	6	6
	Amps (RLA), Comp. 1	23.2/23.2	23.2/23.2	23.2/23.2	11.2	11.2	11.2
	Amps (LRA), Comp. 1	164/164	164/164	164/164	75	75	75
	HP, Compressor 2	—	—	—	—	—	—
	Amps (RLA), Comp. 2	—	—	—	—	—	—
	Amps (LRA), Comp. 2	—	—	—	—	—	—
Condenser Motor	No.	1	1	1	1	1	1
	Volts	208/230	208/230	208/230	460	460	460
	Phase	1	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	2.3/2.3	2.3/2.3	2.3/2.3	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
	Volts	208/230	208/230	208/230	460	460	460
	Phase	3	3	3	3	3	3
	HP	2	2	3	2	3	2
	Amps (FLA, each)	8/8	8/8	13/13	4	4	7
	Amps (LRA, each)	56/56	56/56	74.5/74.5	28	28	38.1

ELECTRICAL DATA – RLKL SERIES

		B090YM	B090YN	B120CL	B120CM	B120DL	B120DM	B120YL
Unit Information	Unit Operating Voltage Range	518-632	518-632	187-253	187-253	414-506	414-506	518-632
	Volts	575	575	208/230	208/230	460	460	575
	Minimum Circuit Ampacity	15	19	51/51	56/56	28	31	22
	Minimum Overcurrent Protection Device Size	20	25	60/60	70/70	35	35	25
	Maximum Overcurrent Protection Device Size	20	25	80/80	80/80	40	45	30
Compressor Motor	No.	1	1	1	1	1	1	1
	Volts	600	600	200/240	200/240	480	480	600
	Phase	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	6	6	10	10	10	10	10
	Amps (RLA), Comp. 1	7.9	7.9	30.1/30.1	30.1/30.1	16.7	16.7	12.2
	Amps (LRA), Comp. 1	54	54	225/225	225/225	114	114	80
	HP, Compressor 2	—	—	—	—	—	—	—
	Amps (RLA), Comp 2	—	—	—	—	—	—	—
	Amps (LLA), Comp 2	—	—	—	—	—	—	—
Condenser Motor	No.	1	1	2	2	2	2	2
	Volts	575	575	208/230	208/230	460	460	575
	Phase	1	1	1	1	1	1	1
	HP	1/2	1/2	1/3	1/3	1/3	1/3	1/3
	Amps (FLA, each)	1	1	2.4/2.4	2.4/2.4	1.4	1.4	1
	Amps (LRA, each)	2.2	2.2	4.7/4.7	4.7/4.7	2.4	2.4	1.5
Evaporator Fan	No.	1	1	1	1	1	1	1
	Volts	575	575	208/230	208/230	460	460	575
	Phase	3	3	3	3	3	3	3
	HP	2	3	2	3	2	3	2
	Amps (FLA, each)	4	8	8/8	13/13	4	7	4
	Amps (LRA, each)	19	20	56/56	74.5/74.5	28	38.1	19

ELECTRICAL DATA – RLKL SERIES							
	B120YM	B151CL	B151CM	B151DL	B151DM	B151YL	B151YM
Unit Information	Unit Operating Voltage Range	518-632	187-253	187-253	414-506	414-506	518-632
	Volts	575	208/230	208/230	460	460	575
	Minimum Circuit Ampacity	26	67/67	71/71	33	36	28
	Minimum Overcurrent Protection Device Size	30	70/70	75/75	35	40	30
	Maximum Overcurrent Protection Device Size	35	80/80	90/90	40	45	35
Compressor Motor	No.	1	2	2	2	2	2
	Volts	600	208/230	208/230	460	460	575
	Phase	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	10	5 3/4	5 3/4	5 3/4	5 3/4	5 3/4
	Amps (RLA), Comp. 1	12.2	22.4/22.4	22.4/22.4	10.6	10.6	7.7
	Amps (LRA), Comp. 1	80	149/149	149/149	75	75	54
	HP, Compressor 2	—	5 1/4	5 1/4	5 1/4	5 1/4	5 1/4
	Amps (RLA), Comp 2	—	19/19	19/19	9.7	9.7	7.4
	Amps (LLA), Comp 2	—	123/123	123/123	62	62	50
Condenser Motor	No.	2	2	2	2	2	2
	Volts	575	208/230	208/230	460	460	575
	Phase	1	1	1	1	1	1
	HP	1/3	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	1	2.3/2.3	2.3/2.3	1.5	1.5	1
	Amps (LRA, each)	1.5	5.6/5.6	5.6/5.6	3.1	3.1	2.2
Evaporator Fan	No.	1	1	1	1	1	1
	Volts	575	208/230	208/230	460	460	575
	Phase	3	3	3	3	3	3
	HP	3	3	5	3	5	5
	Amps (FLA, each)	8	15/15	18.8/18.8	7	10	8
	Amps (LRA, each)	20	74.5/74.5	82.6/82.6	38.1	41.3	20

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

Single Power Supply For Both Unit and Heater Kit							Separate Power Supply For Both Unit and Heater Kit						
Unit Model No. RLKL-	RXJX- Heater Kit Nominal kW	Heater Kit			Air Conditioner			Heater Kit			Air Conditioner		
		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 @ 208 V	Min. Ckt. Ampacity 208/240 V	Max. Fuse Size 208/240 V	Min. Circuit Ampacity 208/240 V	Over Current Protective Device Size @ 208 V	Min./Max. @ 208 V	Protective Device Size @ 240 V
B090CL	No Heat	—	7.2/9.6	24.56/32.75	20/23.1	40/40	50/60	50/60	—	—	—	50/60	50/60
	CC10C	1	10.8/14.4	36.84/49.13	30/34.6	48/54	50/60	50/60	25/29	25/30	—	—	—
	CC15C	1	14.4/19.2	49.13/65.5	40/46.2	60/68	60/60	60/60	38/44	40/45	—	—	—
	CC20C	1	21.6/28.8	73.69/98.25	60/69.3	85/97	70/70	70/70	50/58	50/60	—	—	—
	CC30C	1	21.6/28.8	73.69/98.25	60/69.3	85/97	90/90	100/100	75/87	80/90	—	—	—
	CC31C	1	28.8/38.4	98.25/131	80.1/92.4	111/126	125/125	100/100	75/87	80/90	—	—	—
	CC40C	1	28.8/38.4	98.25/131	80.1/92.4	111/126	125/125	150/150	101/116	110/125	—	—	—
	CC41C	1	—	—	—	51/51	100/100	100/100	101/116	110/125	—	—	—
	No Heat	—	7.2/9.6	24.56/32.75	20/23.1	51/51	60/80	60/80	—	—	51/51	60/80	60/80
	CC10C	1	10.8/14.4	36.84/49.13	30/34.6	51/54	60/80	60/80	25/29	25/30	—	—	—
B120CL	CC15C	1	14.4/19.2	49.13/65.5	40/46.2	60/68	60/80	70/80	38/44	40/45	—	—	—
	CC20C	1	21.6/28.8	73.69/98.25	60/69.3	85/97	90/90	100/100	50/58	50/60	—	—	—
	CC30C	1	28.8/38.4	98.25/131	80.1/92.4	111/126	125/125	150/150	75/87	80/90	—	—	—
	CC40C	1	36.1/48	123.16/163.75	100.1/115.5	136/155	150/150	175/175	126/145	150/150	—	—	—
	No Heat	—	—	—	—	67/67	70/80	70/80	—	—	67/67	70/80	70/80
	CC10C	1	7.2/9.6	24.56/32.75	20/23.1	67/67	80/80	80/80	25/29	25/30	—	—	—
	CC15C	1	10.8/14.4	36.84/49.13	30/34.6	67/67	80/80	80/80	38/44	40/45	—	—	—
	CC20C	1	14.4/19.2	49.13/65.5	40/46.2	69/77	80/80	80/80	50/58	50/60	—	—	—
	CC30C	1	21.6/28.8	73.69/98.25	60/69.3	94/106	100/100	110/110	75/87	80/90	—	—	—
	CC40C	1	28.8/38.4	98.25/131	80.1/92.4	119/135	125/125	150/150	101/116	110/125	—	—	—
B151CL	CC50C	1	36.1/48	123.16/163.75	100.1/115.5	144/164	150/150	175/175	126/145	150/150	—	—	—
	No Heat	—	—	—	—	40/40	50/60	50/60	—	—	67/67	70/80	70/80
	CC10C	1	7.2/9.6	24.56/32.75	20/23.1	40/40	50/60	50/60	25/29	25/30	—	—	—
	CC15C	1	10.8/14.4	36.84/49.13	30/34.6	48/54	50/60	60/60	38/44	40/45	—	—	—
	CC20C	1	14.4/19.2	49.13/65.5	40/46.2	60/68	60/60	70/70	50/58	50/60	—	—	—
	CC30C	1	21.6/28.8	73.69/98.25	60/69.3	94/106	100/100	110/110	75/87	80/90	—	—	—
	CC40C	1	28.8/38.4	98.25/131	80.1/92.4	111/126	125/125	150/150	101/116	110/125	—	—	—
	CC41C	1	36.1/48	123.16/163.75	100.1/115.5	144/164	150/150	175/175	126/145	150/150	—	—	—
	No Heat	—	—	—	—	40/40	50/60	50/60	—	—	40/40	50/60	50/60
	CC10C	1	10.8/14.4	36.84/49.13	30/34.6	48/54	50/60	60/60	25/29	25/30	—	—	—
B090CM	CC15C	1	14.4/19.2	49.13/65.5	40/46.2	60/68	60/60	70/70	38/44	40/45	—	—	—
	CC20C	1	21.6/28.8	73.69/98.25	60/69.3	85/97	90/90	100/100	50/58	50/60	—	—	—
	CC30C	1	21.6/28.8	73.69/98.25	60/69.3	85/97	90/90	100/100	75/87	80/90	—	—	—
	CC31C	1	28.8/38.4	98.25/131	80.1/92.4	111/126	125/125	150/150	101/116	110/125	—	—	—
	CC40C	1	28.8/38.4	98.25/131	80.1/92.4	111/126	125/125	150/150	101/116	110/125	—	—	—
	CC41C	1	36.1/48	123.16/163.75	100.1/115.5	142/161	150/150	175/175	126/145	150/150	—	—	—
	No Heat	—	—	—	—	56/56	70/80	70/80	—	—	56/56	70/80	70/80
	CC10C	1	7.2/9.6	24.56/32.75	20/23.1	56/56	70/80	70/80	25/29	25/30	—	—	—
	CC15C	1	10.8/14.4	36.84/49.13	30/34.6	56/60	70/80	70/80	38/44	40/45	—	—	—
	CC20C	1	14.4/19.2	49.13/65.5	40/46.2	67/75	70/80	80/80	50/58	50/60	—	—	—
B120CM	CC30C	1	21.6/28.8	73.69/98.25	60/69.3	92/103	100/100	110/110	75/87	80/90	—	—	—
	CC31C	1	28.8/38.4	98.25/131	80.1/92.4	117/132	125/125	150/150	101/116	110/125	—	—	—
	CC40C	1	36.1/48	123.16/163.75	100.1/115.5	142/161	150/150	175/175	126/145	150/150	—	—	—
	CC50C	1	—	—	—	—	—	—	—	—	—	—	—
	No Heat	—	—	—	—	—	—	—	—	—	—	—	—

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

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

Single Power Supply For Both Unit and Heater Kit								Separate Power Supply For Both Unit and Heater Kit					
Unit Model No. RLKL-	RXJ-J Heater Kit Nominal kW	Heater Kit		Air Conditioner		Heater Kit		Air Conditioner		Over Current Protective Device Size	Min./Max. @ 208 V	Min./Max. @ 240 V	
		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	Unit Max. Ckt. Ampacity @ 208/240 V	Min. Fuse Size 208/240 V	Min. Circuit Ampacity 208/240 V				
C151CM	No Heat	—	—	—	—	71/71	75/90	—	—	71/71	75/90	75/90	
	CC110C	1	7.2/9.6	24.56/32.75	20/23.1	71/71	80/90	25/29	25/30	—	—	—	
	CC115C	1	10.8/14.4	36.84/49.13	30/34.6	71/71	80/90	38/44	40/45	—	—	—	
	CC220C	1	14.4/19.2	49.13/65.5	40/46.2	74/82	80/90	50/58	50/60	—	—	—	
	CC330C	1	21.6/28.8	73.69/98.25	60/69.3	99/111	100/100	125/125	75/87	80/90	—	—	
	CC440C	1	28.8/38.4	98.25/131	80.1/92.4	124/140	125/125	150/150	101/116	110/125	—	—	
	CC550C	1	36.1/48	123.16/163.75	100.1/115.5	149/168	150/150	175/175	126/145	150/150	—	—	
	No Heat	—	—	—	—	45/45	60/60	—	—	45/45	60/60	60/60	
B090CN	CC110C	1	7.2/9.6	24.56/32.75	20/23.1	45/46	60/60	25/29	25/30	—	—	—	
	CC115C	1	10.8/14.4	36.84/49.13	30/34.6	54/60	60/60	38/44	40/45	—	—	—	
	CC220C	1	14.4/19.2	49.13/65.5	40/46.2	67/75	70/70	80/80	50/58	50/60	—	—	
	CC330C	1	21.6/28.8	73.69/98.25	60/69.3	92/103	100/100	110/110	75/87	80/90	—	—	
	CC331C	1	21.6/28.8	73.69/98.25	60/69.3	92/103	100/100	110/110	75/87	80/90	—	—	
	CC440C	1	28.8/38.4	98.25/131	80.1/92.4	117/132	125/125	150/150	101/116	110/125	—	—	
	CC441C	1	28.8/38.4	98.25/131	80.1/92.4	117/132	125/125	150/150	101/116	110/125	—	—	

*= For Canadian use only. Uses "P" fuses for inductive circuit.

+ = Field installed only.

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

Unit Model No. RLKL-	RXJ-J Heater Kit Nominal kW	Single Power Supply For Both Unit and Heater Kit				Separate Power Supply For Both Unit and Heater Kit			
		Heater Kit		Unit Min. Ckt. Ampacity @ 480 V	Air Conditioner		Heater Kit		Air Conditioner
		No. of Sequence Steps	Rated Heater kW @ 480 V		Heater Amp. @ 480 V	Protective Device Size Min./Max. @ 480 V	Max. Fuse Size 480 V	Min. Circuit Ampacity 480 V	Protective Device Size Min./Max. @ 480 V
B090DL	No Heat	—	9.6	32.75	11.5	20	25/30	—	25/30
	CC10D	1	14.4	49.13	17.3	27	25/30	15	—
	CC15D	1	19.2	65.5	23.1	34	30/30	22	—
	CC20D	1	28.8	98.25	34.6	49	35/35	29	—
	CC30D	1	28.8	98.25	34.6	49	50/50	44	—
	CC31D	1	38.4	131	46.2	63	50/50	44	—
	CC40D	1	38.4	131	46.2	63	70/70	58	—
	CC41D	1	—	—	—	—	70/70	58	—
	No Heat	—	9.6	32.75	11.5	28	35/40	—	—
	CC10D	1	14.4	49.13	17.3	28	35/40	15	28
B120DL	CC15D	1	19.2	65.5	23.1	34	35/40	22	35/40
	CC20D	1	28.8	98.25	34.6	49	35/40	29	—
	CC30D	1	38.4	131	46.2	63	50/50	44	—
	CC40D	1	48	163.75	57.7	78	70/70	58	—
	CC50D	1	—	—	—	—	80/80	73	—
	No Heat	—	9.6	32.75	11.5	33	35/40	—	—
	CC10D	1	14.4	49.13	17.3	33	40/40	15	33
	CC15D	1	19.2	65.5	23.1	38	40/40	22	35/40
	CC20D	1	28.8	98.25	34.6	52	60/60	29	—
	CC30D	1	38.4	131	46.2	67	70/70	58	—
B151DL	CC40D	1	48	163.75	57.7	81	90/90	73	—
	CC50D	1	—	—	—	—	—	—	—
	No Heat	—	9.6	32.75	11.5	20	25/30	—	25/30
	CC10D	1	14.4	49.13	17.3	27	25/30	15	—
	CC15D	1	19.2	65.5	23.1	34	30/30	22	—
	CC20D	1	28.8	98.25	34.6	49	35/35	29	—
	CC30D	1	28.8	98.25	34.6	49	50/50	44	—
	CC31D	1	38.4	131	46.2	63	50/50	44	—
	CC40D	1	38.4	131	46.2	63	70/70	58	—
	CC41D	1	—	—	—	—	70/70	58	—
B090DM	No Heat	—	9.6	32.75	11.5	31	35/45	—	35/45
	CC10D	1	14.4	49.13	17.3	31	35/45	15	—
	CC15D	1	19.2	65.5	23.1	38	35/45	22	—
	CC20D	1	28.8	98.25	34.6	49	40/45	29	—
	CC30D	1	28.8	98.25	34.6	49	60/60	44	—
	CC31D	1	38.4	131	46.2	67	70/70	58	—
	CC40D	1	38.4	131	46.2	67	90/90	81	—
	CC41D	1	48	163.75	57.7	81	—	—	—
	No Heat	—	9.6	32.75	11.5	31	35/45	—	31
	CC10D	1	14.4	49.13	17.3	31	35/45	15	—
B120DM	CC15D	1	19.2	65.5	23.1	38	40/45	22	—
	CC20D	1	28.8	98.25	34.6	49	60/60	30	—
	CC30D	1	28.8	98.25	34.6	49	70/70	44	—
	CC40D	1	38.4	131	46.2	67	90/90	60	—
	CC50D	1	48	163.75	57.7	81	—	80	—

* = For Canadian use only. Uses "P" fuses for inductive circuit.

+ = Field installed only.

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

Single Power Supply For Both Unit and Heater Kit							Separate Power Supply For Both Unit and Heater Kit							
Unit Model No. RLKL-	RXJ- Heater Kit Nominal kW	Heater Kit			Air Conditioner			Unit Min. Ckt. Ampacity @ 480 V	Over Current Protective Device Size Min./Max. @ 480 V	Min. Ckt. Ampacity 480 V	Max. Fuse Size 480 V	Min. Circuit Ampacity 480 V	Over Current Protective Device Size Min./Max. @ 480 V	Air Conditioner
		No. of Sequence Steps	Rated Heater kW @ 480 V	Heater KBTU/Hr @ 480 V	Heater Amp. @ 480 V	Unit Min. Ckt. Ampacity @ 480 V	Protective Device Size Min./Max. @ 480 V							
B151DM	No Heat	—	—	—	—	36	40/45	—	—	15	15	36	40/45	—
	CC10D	1	9.6	32.75	11.5	36	40/45	—	—	22	25	—	—	—
	CC15D	1	14.4	49.13	17.3	36	40/45	—	—	29	30	—	—	—
	CC20D	1	19.2	65.5	23.1	42	45/45	—	—	44	45	—	—	—
	CC30D	1	28.8	98.25	34.6	56	60/60	—	—	58	60	—	—	—
	CC40D	1	38.4	131	46.2	71	80/80	—	—	73	80	—	—	—
	CC50D	1	48	163.75	57.7	85	90/90	—	—	—	—	—	—	—
B090DDN	No Heat	—	—	—	—	23	30/30	—	—	—	—	23	30/30	—
	CC10D	1	9.6	32.75	11.5	24	30/30	—	—	15	15	—	—	—
	CC15D	1	14.4	49.13	17.3	31	35/35	—	—	22	25	—	—	—
	CC20D	1	19.2	65.5	23.1	38	40/40	—	—	29	30	—	—	—
	CC30D	1	28.8	98.25	34.6	52	60/60	—	—	44	45	—	—	—
	CC31D	1	28.8	98.25	34.6	52	60/60	—	—	44	45	—	—	—
	CC40D	1	38.4	131	46.2	67	70/70	—	—	58	60	—	—	—
	CC41D	1	38.4	131	46.2	67	70/70	—	—	58	60	—	—	—

*= For Canadian use only. Uses "P" fuses for inductive circuit.

+= Field installed only.

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

Single Power Supply For Both Unit and Heater Kit										Separate Power Supply For Both Unit and Heater Kit					
Unit Model No.	RXJU-Heater Kit Nominal kW	Heater Kit			Air Conditioner			Heater Kit			Air Conditioner				
		No. of Sequence Steps	Rated Heater kW @ 600 V	Heater KBTU/Hr @ 600 V	Unit Min. Ckt. Ampacity @ 600 V	Unit Max. Ckt. Ampacity @ 600 V	Over Current Protective Device Size Min./Max. @ 600 V	Min. Ckt. Ampacity 600 V	Max. Fuse Size 600 V	Min. Circuit Ampacity 600 V	Min./Max. @ 600 V	Protective Device Size Min./Max. @ 600 V	Over Current Protective Device Size Min./Max. @ 600 V		
B090YL	No Heat	—	—	—	—	15	20/20	—	—	15	20/20	—	—	—	—
	CC10Y	1	9.6	32.75	9.2	17	20/20	—	12	15	—	—	—	—	—
	CC15Y	1	14.4	49.13	13.9	23	25/25	—	18	20	—	—	—	—	—
	CC20Y	1	19.2	65.5	18.5	29	30/30	—	24	25	—	—	—	—	—
	CC30Y	1	28.8	98.25	27.7	40	40/40	—	35	35	—	—	—	—	—
	CC40Y	1	38.4	131	37	52	60/60	—	47	50	—	—	—	—	—
	No Heat	—	—	—	—	22	25/30	—	—	22	25/30	—	—	—	—
B120YL	CC10Y	1	9.6	32.75	9.2	22	25/30	—	12	15	—	—	—	—	—
	CC15Y	1	14.4	49.13	13.9	23	25/30	—	18	20	—	—	—	—	—
	CC20Y	1	19.2	65.5	18.5	29	30/30	—	24	25	—	—	—	—	—
	CC30Y	1	28.8	98.25	27.7	40	40/40	—	35	35	—	—	—	—	—
	CC40Y	1	38.4	131	37	52	60/60	—	47	50	—	—	—	—	—
	CC50Y	1	48	163.75	46.2	63	70/70	—	58	60	—	—	—	—	—
	No Heat	—	—	—	—	28	30/35	—	—	28	30/35	—	—	—	—
B151YL	CC10Y	1	9.6	32.75	9.2	28	30/35	—	12	15	—	—	—	—	—
	CC15Y	1	14.4	49.13	13.9	28	30/35	—	18	20	—	—	—	—	—
	CC20Y	1	19.2	65.5	18.5	34	35/35	—	24	25	—	—	—	—	—
	CC30Y	1	28.8	98.25	27.7	45	45/45	—	35	35	—	—	—	—	—
	CC40Y	1	38.4	131	37	57	60/60	—	47	50	—	—	—	—	—
	CC50Y	1	48	163.75	46.2	68	70/70	—	58	60	—	—	—	—	—
	No Heat	—	—	—	—	15	20/20	—	—	15	20/20	—	—	—	—
B090YMM	CC10Y	1	9.6	32.75	9.2	17	20/20	—	12	15	—	—	—	—	—
	CC15Y	1	14.4	49.13	13.9	23	25/25	—	18	20	—	—	—	—	—
	CC20Y	1	19.2	65.5	18.5	29	30/30	—	24	25	—	—	—	—	—
	CC30Y	1	28.8	98.25	27.7	40	40/40	—	35	35	—	—	—	—	—
	CC40Y	1	38.4	131	37	52	60/60	—	47	50	—	—	—	—	—
	CC50Y	1	48	163.75	46.2	68	70/70	—	58	60	—	—	—	—	—
	No Heat	—	—	—	—	26	30/35	—	—	26	30/35	—	—	—	—
B120YMM	CC10Y	1	9.6	32.75	9.2	26	30/35	—	12	15	—	—	—	—	—
	CC15Y	1	14.4	49.13	13.9	28	30/35	—	18	20	—	—	—	—	—
	CC20Y	1	19.2	65.5	18.5	34	35/35	—	24	25	—	—	—	—	—
	CC30Y	1	28.8	98.25	27.7	45	45/45	—	35	35	—	—	—	—	—
	CC40Y	1	38.4	131	37	57	60/60	—	47	50	—	—	—	—	—
	CC50Y	1	48	163.75	46.2	68	70/70	—	58	60	—	—	—	—	—
	No Heat	—	—	—	—	26	30/35	—	—	26	30/35	—	—	—	—

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+ = Field installed only.

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

Single Power Supply For Both Unit and Heater Kit							Separate Power Supply For Both Unit and Heater Kit							
Unit Model No. RLKL-	RXJU- Heater Kit Nominal kW	Heater Kit			Air Conditioner			Min. Ckt. Ampacity 600 V	Max. Fuse Size 600 V	Min. Circuit Ampacity 600 V	Over Current Protective Device Size Min./Max. @ 600 V	Min./Max. @ 600 V	Over Current Protective Device Size Min./Max. @ 600 V	Air Conditioner
		No. of Sequence Steps	Rated Heater kW @ 600 V	Heater KBTU/Hr @ 600 V	Heater Amp. @ 600 V	Unit Min. Ckt. Ampacity @ 600 V	Unit Max. Ckt. Ampacity @ 600 V							
B151YM	No Heat	—	—	—	—	28	30/35	—	—	28	15	30/35	—	—
	CC10Y	1	9.6	32.75	9.2	28	30/35	—	—	12	18	—	—	—
	CC15Y	1	14.4	49.13	13.9	28	30/35	—	—	20	25	—	—	—
	CC20Y	1	19.2	65.5	18.5	34	35/35	—	—	24	35	—	—	—
	CC30Y	1	28.8	98.25	27.7	45	45/45	—	—	47	50	—	—	—
	CC40Y	1	38.4	131	37	57	60/60	—	—	58	60	—	—	—
	CC50Y	1	48	163.75	46.2	68	70/70	—	—	—	—	—	—	—
	No Heat	—	—	—	19	25/25	—	—	—	19	15	25/25	—	—
	CC10Y	1	9.6	32.75	9.2	22	25/25	—	—	12	18	—	—	—
	CC15Y	1	14.4	49.13	13.9	28	30/30	—	—	24	35	—	—	—
B090YN	CC20Y	1	19.2	65.5	18.5	34	35/35	—	—	35	35	—	—	—
	CC30Y	1	28.8	98.25	27.7	45	45/45	—	—	47	50	—	—	—
	CC40Y	1	38.4	131	37	57	60/60	—	—	—	—	—	—	—

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

PACKAGE AIR CONDITIONER

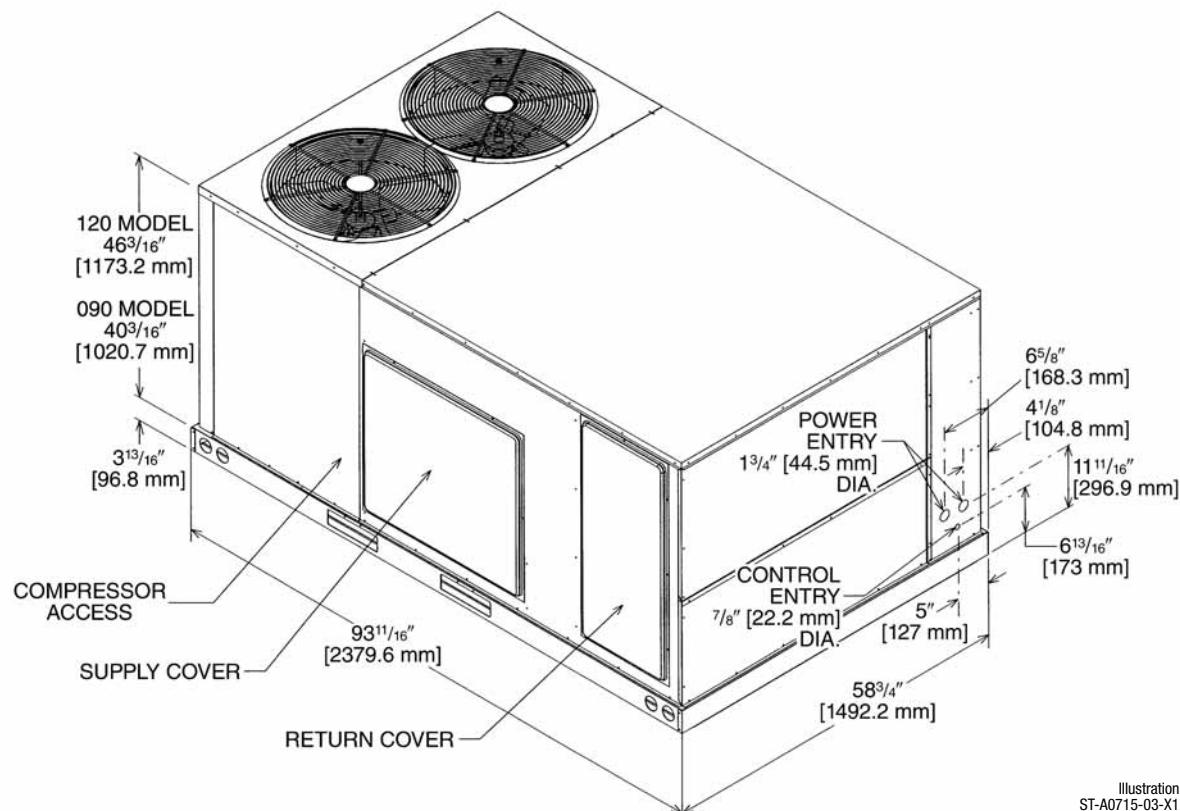


Illustration
ST-A0715-03-X1

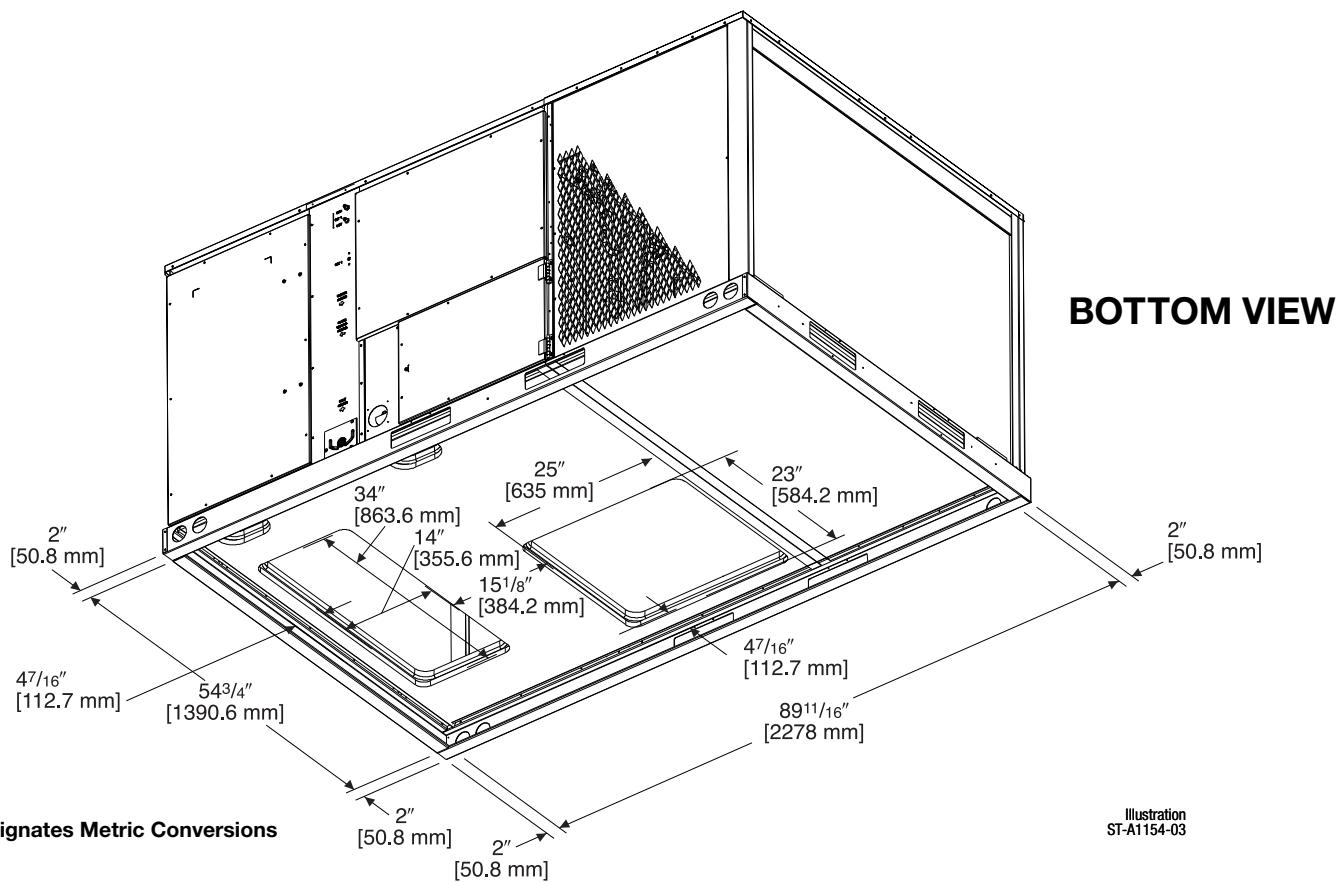
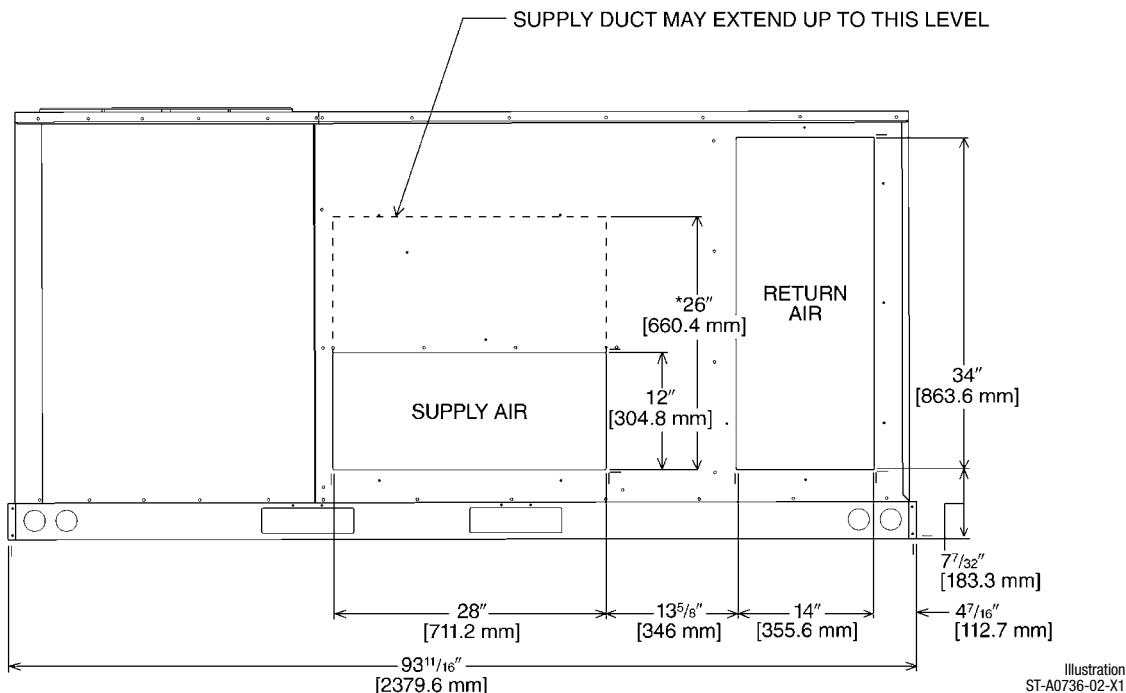


Illustration
ST-A1154-03

[] Designates Metric Conversions

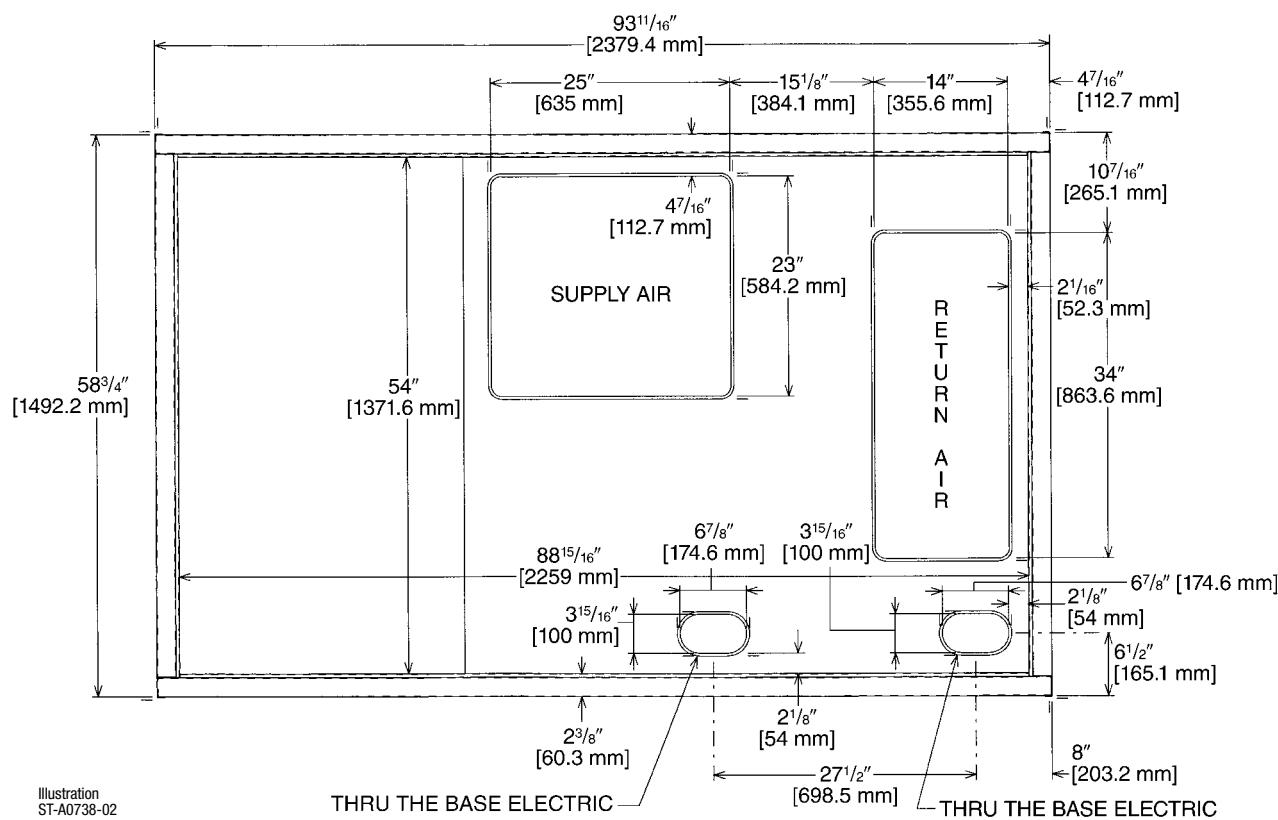
PACKAGE AIR CONDITIONER

SUPPLY AND RETURN DIMENSIONS FOR HORIZONTAL APPLICATIONS



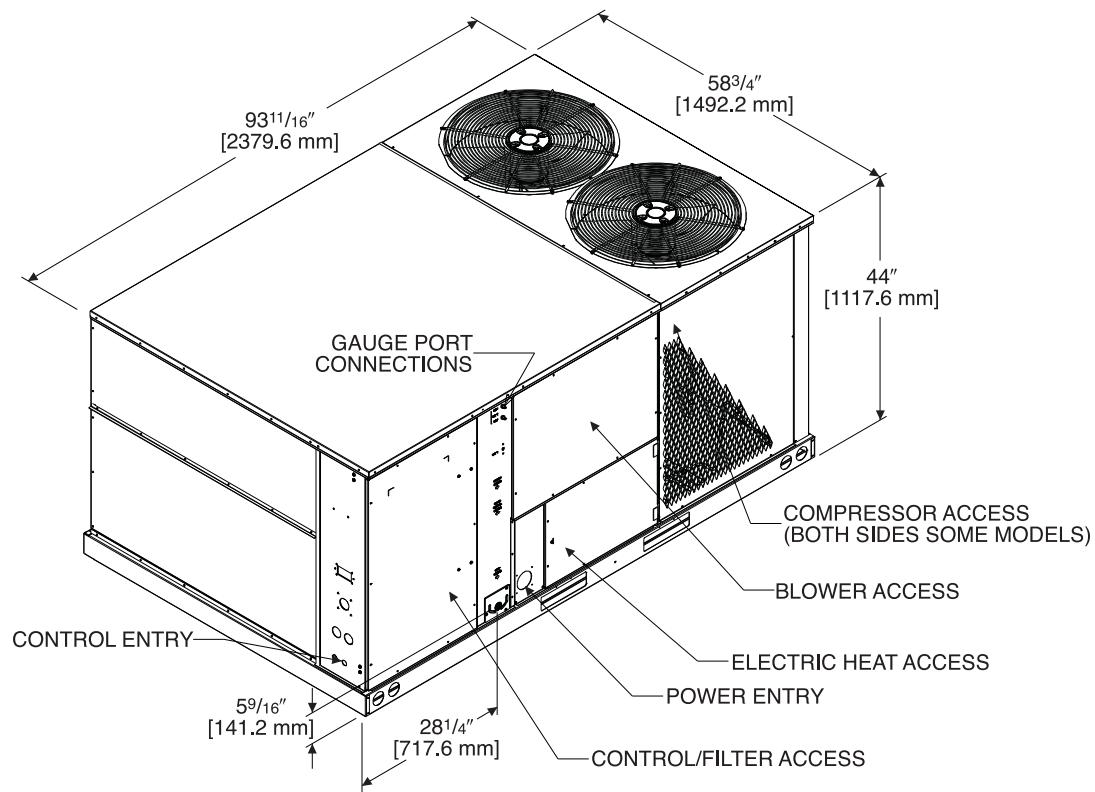
*RECOMMENDED DUCT DIMENSIONS ARE 26"

SUPPLY AND RETURN DIMENSIONS FOR DOWNFLOW APPLICATIONS



[] Designates Metric Conversions

PACKAGE AIR CONDITIONER



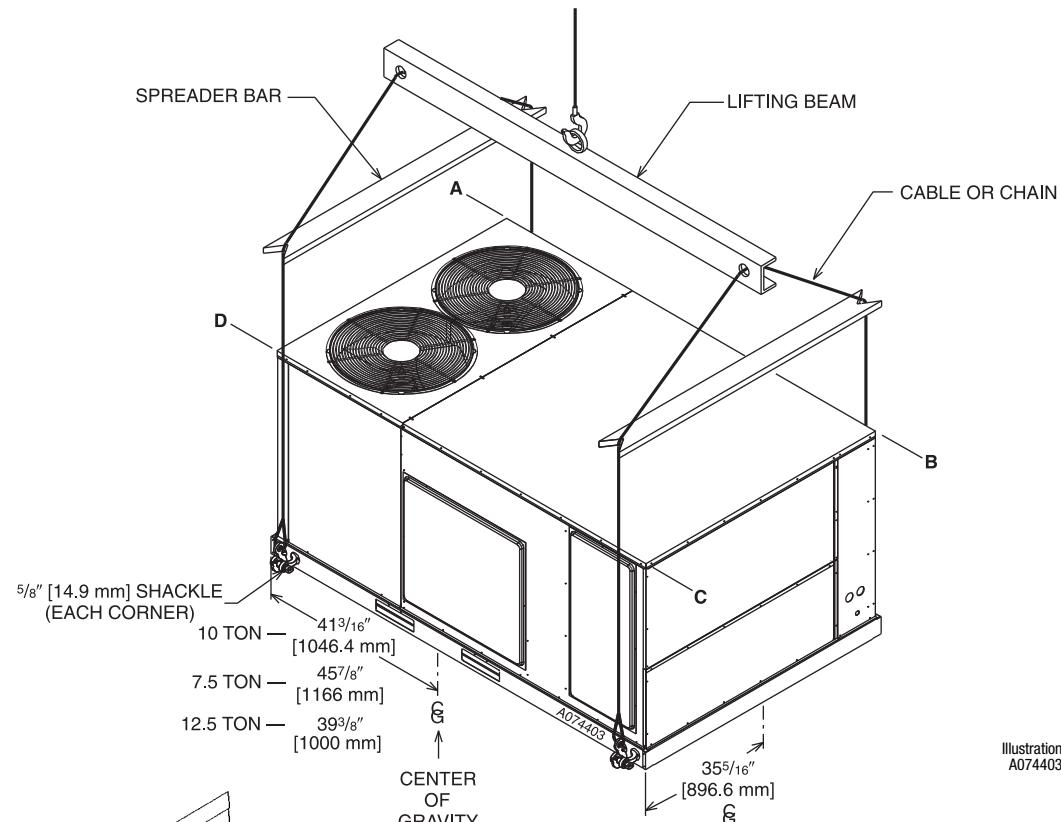
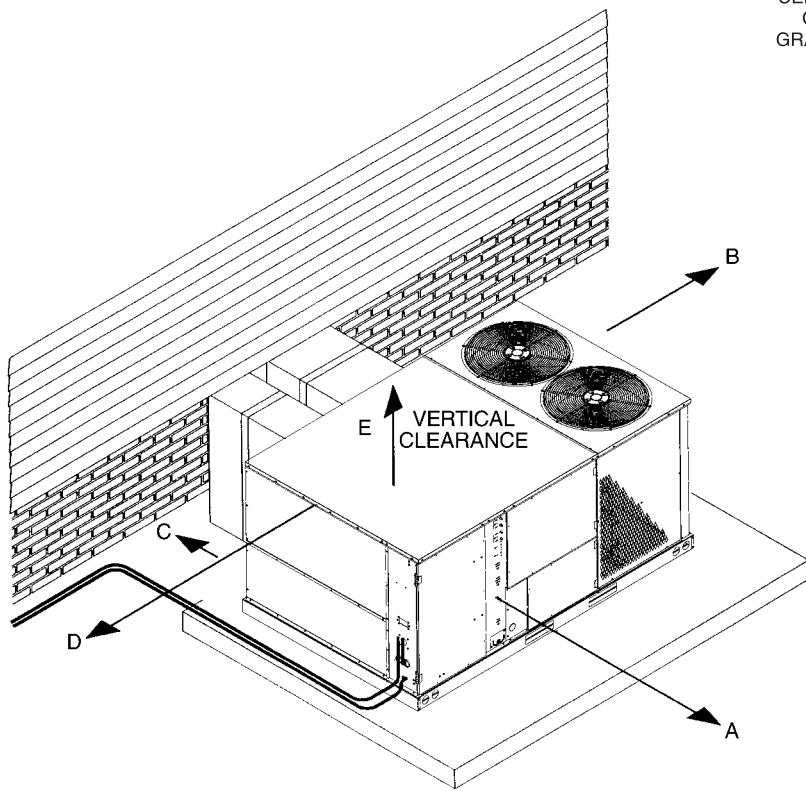
[] Designates Metric Conversions

Illustration
ST-A1154-04

WEIGHTS

Accessory	Shipping—lbs [kg]	Operating—lbs [kg]
Economizer	90 [40.82]	81 [36.70]
Power Exhaust	44 [19.96]	42 [19.05]
Fresh Air Damper (Manual)	26 [11.79]	21 [9.53]
Fresh Air Damper (Motorized)	43 [19.50]	38 [17.24]
Roof Curb 14"	90 [40.82]	85 [38.60]
Roof Curb 24"	140 [63.50]	135 [61.23]

Capacity Tons [kW]	Corner Weights by Percentage			
	A	B	C	D
7.5 [26.4]	30%	35%	14%	21%
10 [35.2]	33%	27%	17%	23%
12.5 [44.0]	44%	30%	12%	14%

Illustration
A074403**CLEARANCES**

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

Recommended Clearance In. [mm]	Location
48 [1219]	A - Front
18 [457]	B - Condenser Coil
18 [457]	C - Duct Side
18 [457]	*D - Evaporator End
60 [1524]	E - Above

*Without Economizer. 48" [1219 mm] With Economizer

[] Designates Metric Conversions

FIELD INSTALLED ACCESSORY EQUIPMENT

Accessory	Model Number	Shipping Weight Lbs. [kg]	Installed Weight Lbs. [kg]	Factory Installation Available?
Thermostats	See Thermostat Specification Sheet for Details (T22-001)			No
Electric Heaters*—Canadian Use Only.	RXJJ-CC10 (C,D,Y)	46 [20.9]	36 [16.3]	Yes
	RXJJ-CC15 (C,D,Y)	46 [20.9]	36 [16.3]	Yes
	RXJJ-CC20 (C,D,Y)	46 [20.9]	36 [16.3]	Yes
Electric Heaters*—Canadian Use Only.	RXJJ-CC30 (C,D,Y)	47 [21.3]	37 [16.8]	Yes
Electric Heaters*—Canadian Use Only.	RXJJ-CC40 (C,D,Y)	49 [22.2]	39 [17.7]	Yes
Electric Heaters*—Canadian Use Only.	RXJJ-CC50 (C,D,Y)	51 [23.1]	41 [18.6]	Yes
Economizer w/Single Enthalpy	AXRD-PDCM3	90 [40.8]	81 [36.7]	Yes
Economizer w/Single Enthalpy and Smoke Dectector	AXRD-SDCM3	91 [41.3]	82 [37.2]	Yes
Dual Enthalpy Kit	RXRX-AV02	1 [0.5]	1 [0.5]	No
Horizontal Economizer w/Single Enthalpy	AXRD-RDCM3	94 [42.6]	89 [40.4]	No
Carbon Dioxide Sensor	RXRX-AR02	3 [1.4]	2 [1.0]	No
Power Exhaust	RXRX-BFF02 (C,D,Y)	43 [19.5]	38 [17.2]	No
Manual Fresh Air (Left Panel Mounted)	AXRF-KDA1	38 [17.2]	31 [14.0]	No
Manual Fresh Air (Return Panel)	AXRF-JDA1	26 [11.8]	21 [9.5]	No
Motorized Fresh Air (Return Panel)	AXRF-JDB1	43 [19.5]	21 [9.5]	No
Motor Kit for RXRF-KDA1 (Left Panel Mounted)	RXRX-AW02	35 [15.19]	27 [17.7]	No
Roof curb, 14"	RXKG-CAE14	90 [40.8]	85 [38.5]	No
Roof curb, 24"	RXKG-CAE24	140 [63.5]	135 [61.2]	No
Roof curb Adapters	RXRX-CDCE50	300 [136.1]	290 [131.5]	No
	RXRX-CFCE54	325 [147.4]	315 [142.9]	No
	RXRX-CFCE56	350 [158.8]	340 [154.2]	No
	RXRX-CGCC12	450 [204.1]	410 [186.0]	No
Concentric Diffuser (Step-Down, 18 x 28)	RXRN-AA61	200 [90.7]	185 [83.9]	No
Concentric Diffuser (Step-Down, 18 x 32)	RXRN-AA66	247 [112.0]	227 [103.0]	No
Concentric Diffuser (Flush, 18 x 28)	RXRN-AA71	170 [77.1]	155 [70.3]	No
Concentric Diffuser (Flush, 18 x 32)	RXRN-AA76	176 [79.8]	161 [73.0]	No
Downflow Adapters (Rect. to Round)	RXMC-CD04	15 [6.8]	13 [5.9]	No
Downflow Adapters (Rect. to Rect., 18 x 28)	RXMC-CE05 ①	18 [8.2]	16 [7.3]	No
Downflow Adapters (Rect. to Rect., 18 x 32)	RXMC-CF06 ②	20 [9.1]	18 [8.2]	No
Compressor Time-Delay Relay Kit	RXMD-A04	2 [1.0]	1 [0.5]	No
Low-Ambient Control Kit (1 Per Compressor)	RXRZ-C02	3 [1.4]	2 [1.0]	Yes
Freeze-Stat Kit	RXRX-AM01	1 [0.5]	0.5 [0.2]	Yes
Outdoor Coil Louver Kit	AXRX-AAD02A (7½-12½ Ton)	29 [11.3]	26 [11.8]	Yes
Unwired Convenience Outlet	RXRX-AN01	2 [1.0]	1.5 [0.7]	Yes

NOTES: ① Used with RXRN-AA61 and RXRN-AA71 concentric diffusers.

② Used with RXRN-AA66 and RXRN-AA76 concentric diffusers.

③ Please refer to conversion kit index provided with the unit for LP conversion kit.

[] Designates Metric Conversions

THERMOSTATS



200-Series *
Programmable



300-Series *
Deluxe
Programmable



400-Series *
Special Applications/
Programmable

500-Series *
Communicating/
Programmable

Brand	Descriptor (3 Characters)	Series (3 Characters)	System (2 Characters)	Type (2 Characters)
UHC	- TST	213	UN	MS

UHC=Ruud TST=Thermostat

200=Programmable
300=Deluxe Programmable
400=Special Applications/
Programmable
500=Communicating/
Programmable

GE=Gas/Electric
UN=Universal (AC/HP/GE)
MD=Modulating Furnace
DF=Dual Fuel
CM=Communicating

SS=Single-Stage
MS=Multi-Stage

* Photos are representative. Actual models may vary.

For detailed thermostat match-up information,
see specification sheet form number T22-001.

ECONOMIZER FOR DOWNSFLOW DUCT INSTALLATION

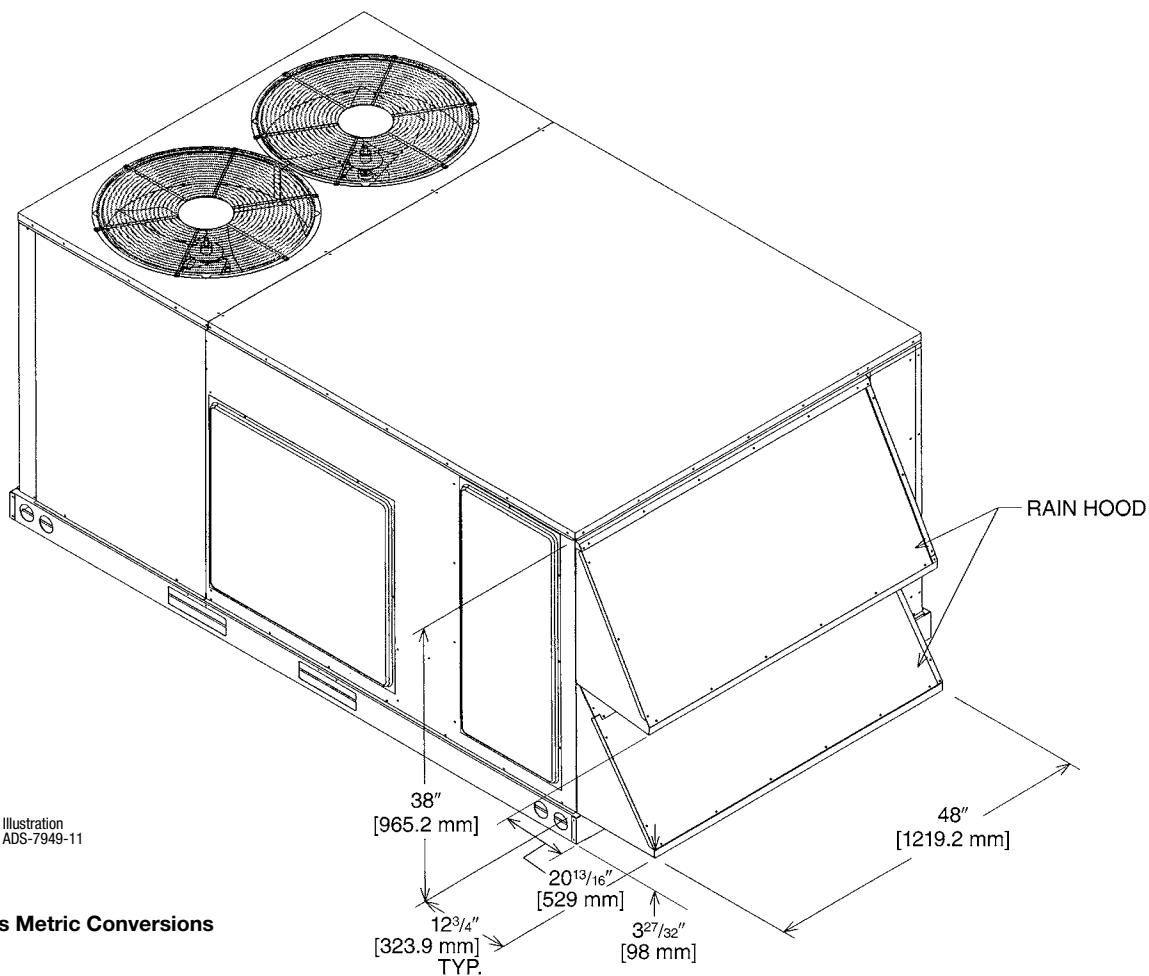
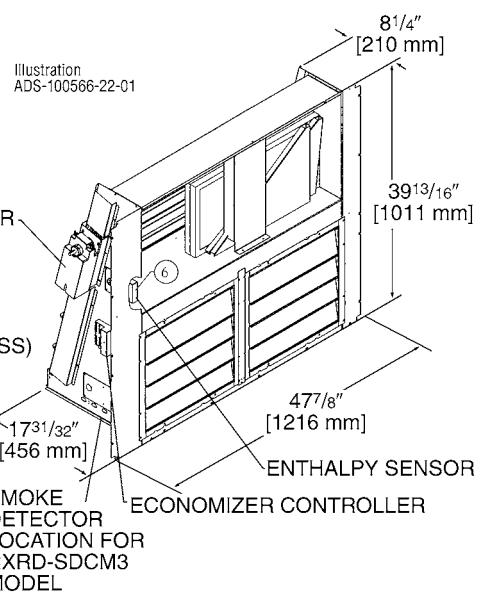
Use to Select Factory Installed Options Only

AXRD-PDCM3—Single Enthalpy (Outdoor) and AXRD-SDCM3 Single Enthalpy with Smoke Detector

RXRX-AV02—Dual Enthalpy Upgrade Kit

RXRX-AR02—Optional Wall-Mounted CO₂ Sensor

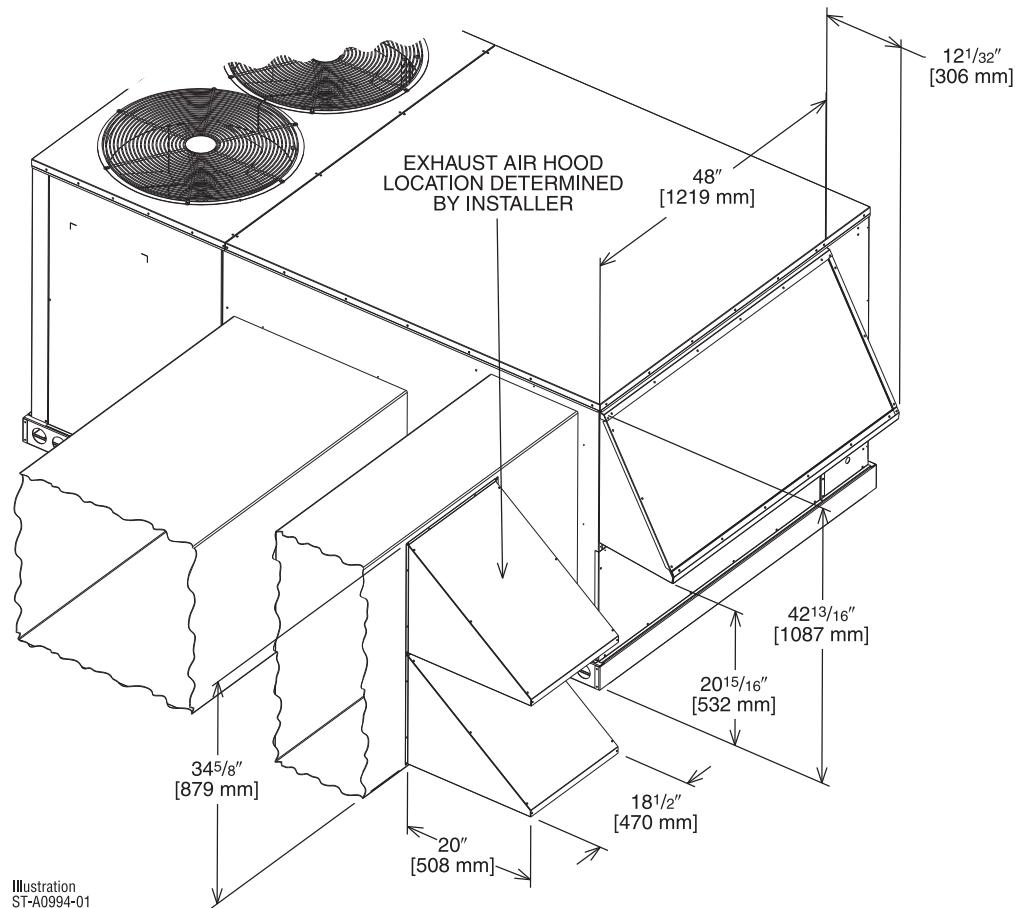
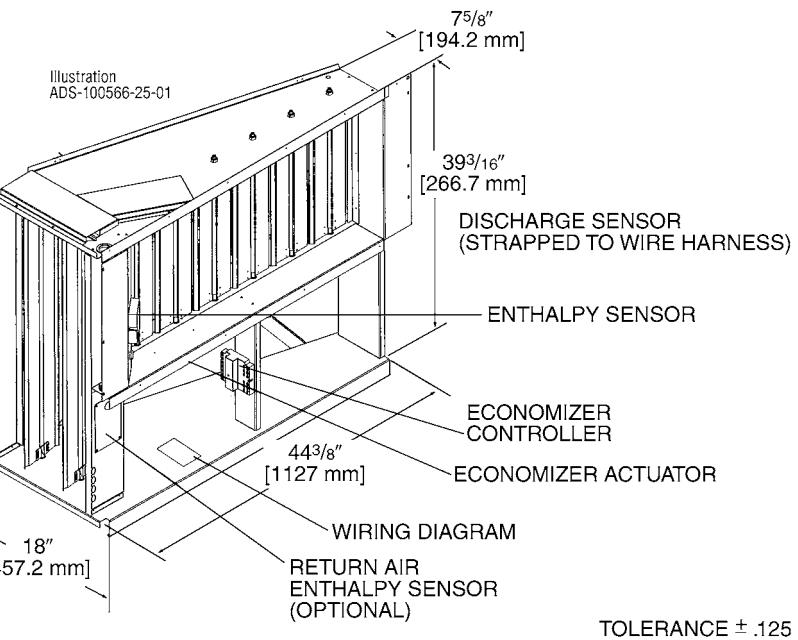
- Features **Honeywell** Controls
- Available Factory Installed or Field Accessory
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Low Leakage Dampers
- Slip-In Design for Easy Installation
- Plug-In Polarized 12-pin Electrical Connections
- Pre-Configured—No Field Adjustments Necessary
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO₂ Input Sensor Available
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Downflow Duct Application.
- Optional Remote Minimum Position Potentiometer (Honeywell #S963B1128) is Available from Prostock.
- Field Installed Power Exhaust Available
- Prewired for Smoke Detector



[] Designates Metric Conversions

ECONOMIZER FOR HORIZONTAL DUCT INSTALLATION**Field Installed Only****AXRD-RDCM3—Single Enthalpy (Outdoor)****RXRX-AV02—Dual Enthalpy Upgrade Kit****RXRX-AR02—Wall-mounted CO₂ Sensor**

- Features **Honeywell** Controls
- Available as a Field Installed Accessory Only
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Low Leakage Dampers
- Slip-In Design for Easy Installation
- Plug-In Polarized 12-pin Electrical Connections
- Pre-Configured—
No Field Adjustments Necessary
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO₂ Input Sensor Available
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Horizontal Duct Application
- Optional Remote Minimum Position Potentiometer (Honeywell #S963B1128) is Available from Prostock
- Field Installed Power Exhaust Available



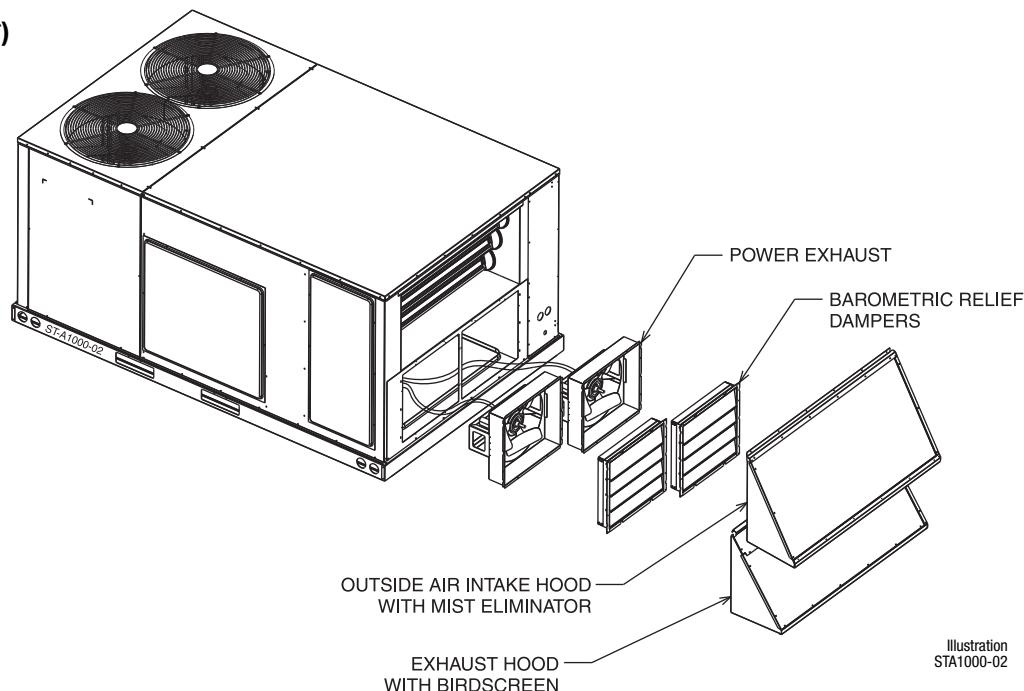
[] Designates Metric Conversions

POWER EXHAUST KIT FOR RXRD-PDCM3(-), RXRD-RDCM3(-), RXRD-SDCM3 ECONOMIZERS

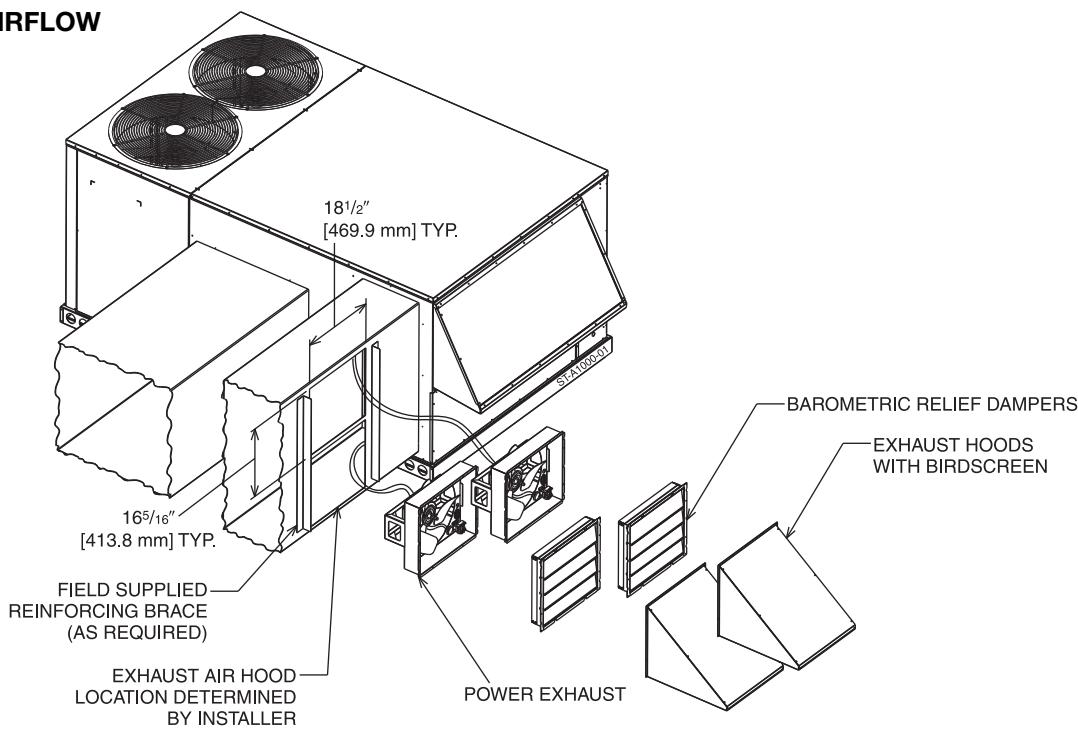
RXRX-BFF02 (C, D, or Y*)

*Voltage Code

VERTICAL AIRFLOW



HORIZONTAL AIRFLOW



Model No.	No. of Fans	Volts	Phase	HP (ea.)	Low Speed		High Speed ①		FLA (ea.)	LRA (ea.)
					CFM [L/s] ②	RPM	CFM [L/s] ②	RPM		
RXRX-BFF02C	2	208-230	1	0.33	2200 [1038]	1518	2500 [1179]	1670	1.48	3.6
RXRX-BFF02D	2	460	1	0.33	2200 [1038]	1518	2500 [1179]	1670	0.75	1.8
RXRX-BFF02Y	2	575	1	0.33	2200 [1038]	1518	2500 [1179]	1670	0.81	1.5

NOTES: ① Power exhaust is factory set on high speed motor tap.

② CFM is per fan at 0° w.c. external static pressure.

[] Designates Metric Conversions

FRESH AIR DAMPER

MOTORIZED DAMPER KIT

RXRX-AWO2

(Motor Kit for RXRF-KDA1)

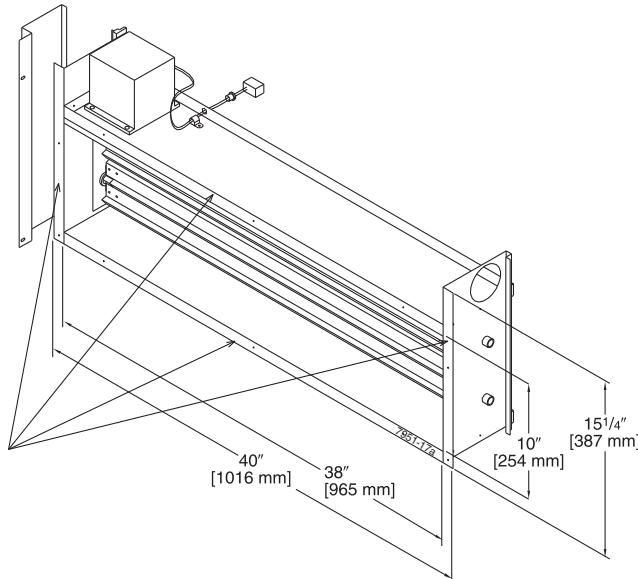


Illustration
ST-7951-17

AXRF-KDA1 (Manual)

**DOWNFLOW OR
HORIZONTAL APPLICATION**

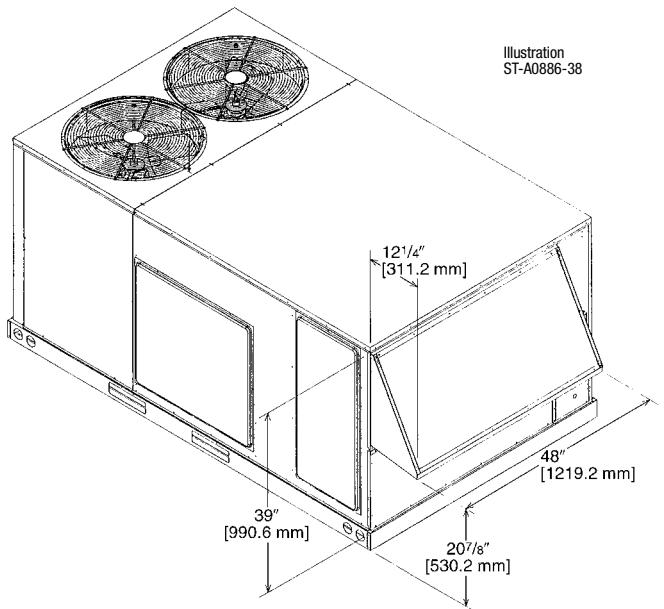


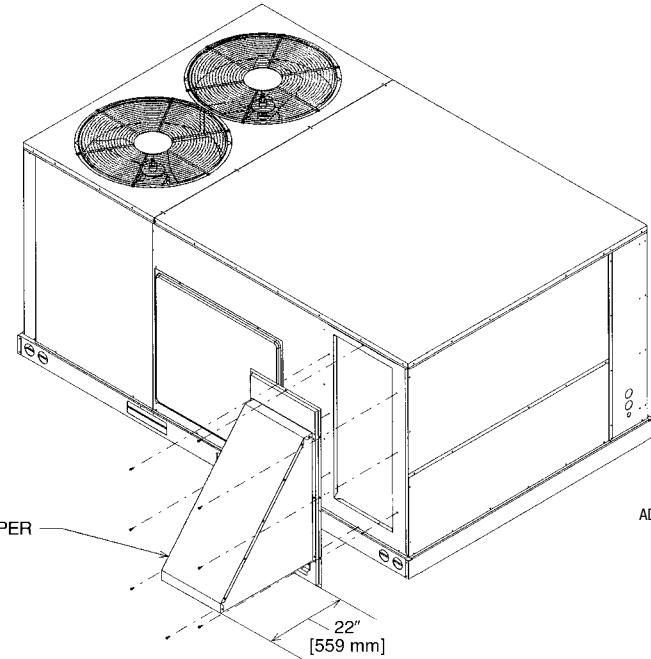
Illustration
ST-A0886-38

[] Designates Metric Conversions

FRESH AIR DAMPER (Cont.)

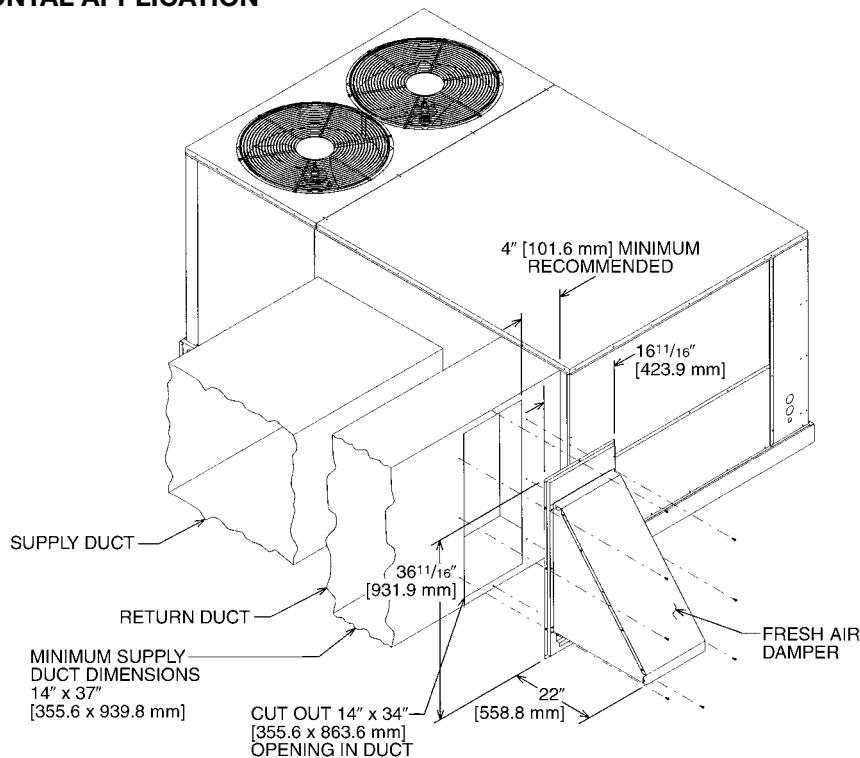
AXRF-JDA1 (Manual)
AXRF-JDB1 (Motorized)

DOWNTIME APPLICATION



HORIZONTAL APPLICATION

Illustration
ST-A0901-01



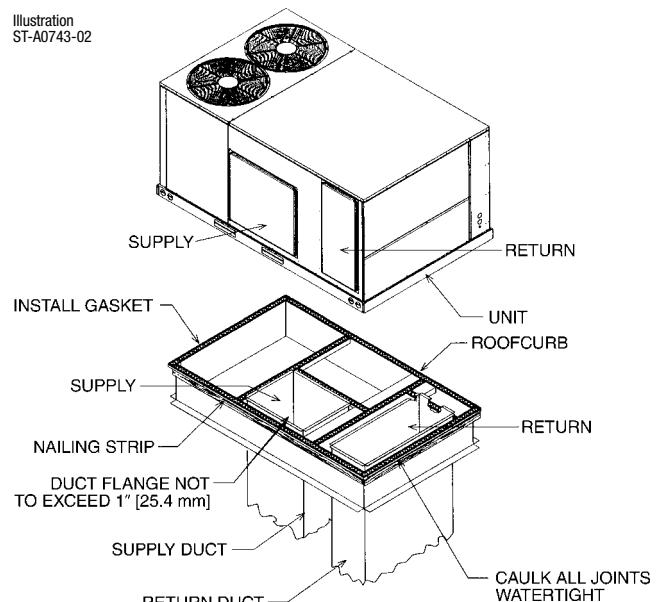
[] Designates Metric Conversions

ROOFCURBS (Full Perimeter)

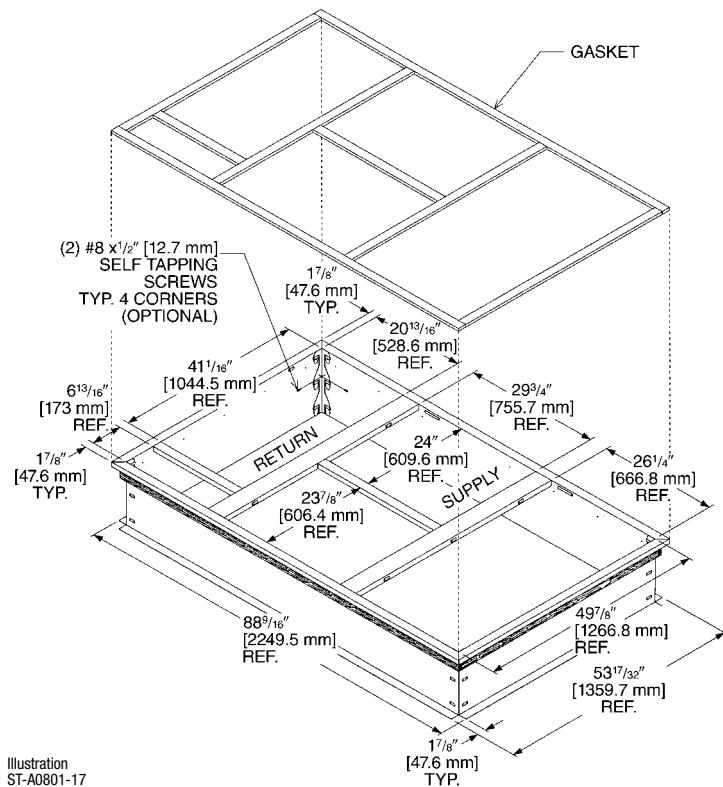
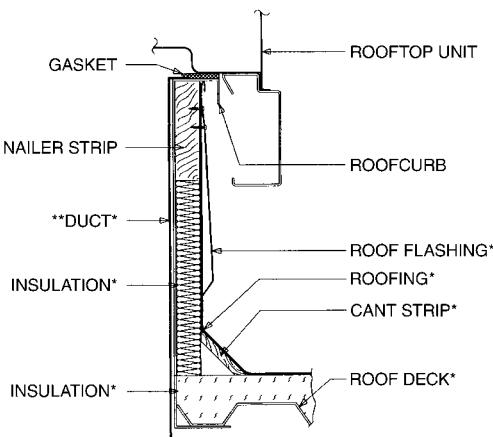
- Ruud's roofcurb design can be utilized on 7.5 & 10 ton [26.4 & 35.2 kW] RLKL-B models.
- Two available heights (14" [356 mm] and 24" [610 mm]) for ALL models.
- Quick assembly corners for simple and fast assembly.
- Opening provided in bottom pan to match the "Thru the Curb" electrical connection opening provided on the unit base pan.
- 1" [25 mm] x 4" [102 mm] Nailer provided.
- Insulating panels not required because of insulated outdoor base pan.
- Sealing gasket (40' [12.2 m]) provided with Roofcurb.
- Packaged for easy field assembly.

Roofcurb Model	Height of Curb
RXKG-CAE14	14" [356 mm]
RXKG-CAE24	24" [610 mm]

TYPICAL INSTALLATION

Illustration
ST-A0743-02

ROOFCURB INSTALLATION

Illustration
ST-A0801-17

*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.

Illustration
ST-A0743-02

[] Designates Metric Conversions

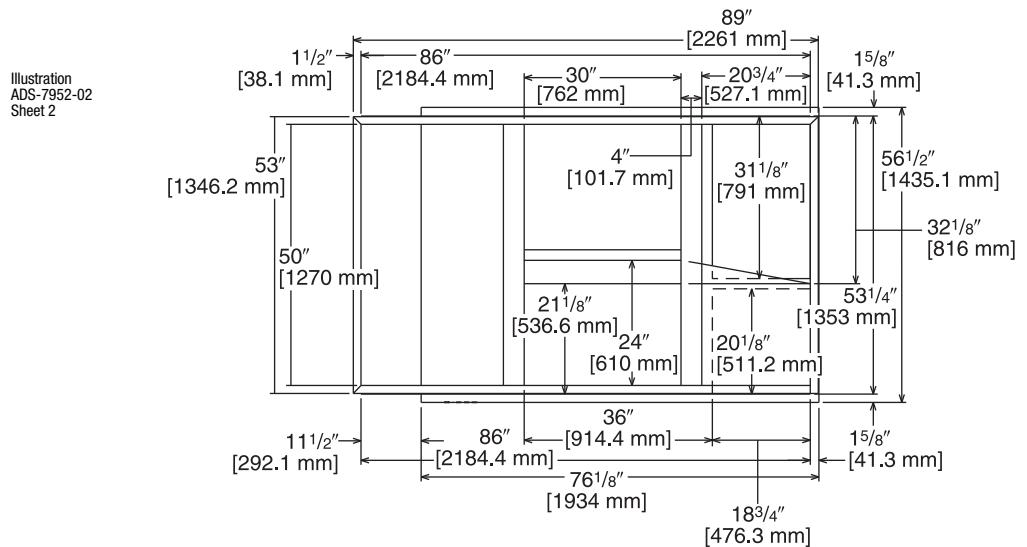
ROOFCURB ADAPTERS

OLD MODELS	OLD ROOFCURB	ROOFCURB ADAPTER	NEW MODELS (All Share Common Cabinet)
(-)RCF, (-)REF-075/076 (-)RGF-150075, (-)RGF-131076 (-)RGF-201076	RXRK-E50	RXRX-CDCE50	
(-)RGF-200075 (-)RGG, (-)REG, (-)RCG-075 (-)RGF, (-)REF, (-)RCF-085 (-)RGF, (-)REF, (-)RCF-100 (-)RGG, (-)REG, (-)RCG-100	RXRK-E54	RXRX-CFCE54	(R)LKL-B090 (R)LKL-B120 (R)LKL-B151
(-)RGF, (-)REF, (-)RCF-125	RXRK-E56	RXRX-CFCE56	
(-)PDC-075 (-)PDC-100/101	RXPK-C12	RXRX-CGCC12	

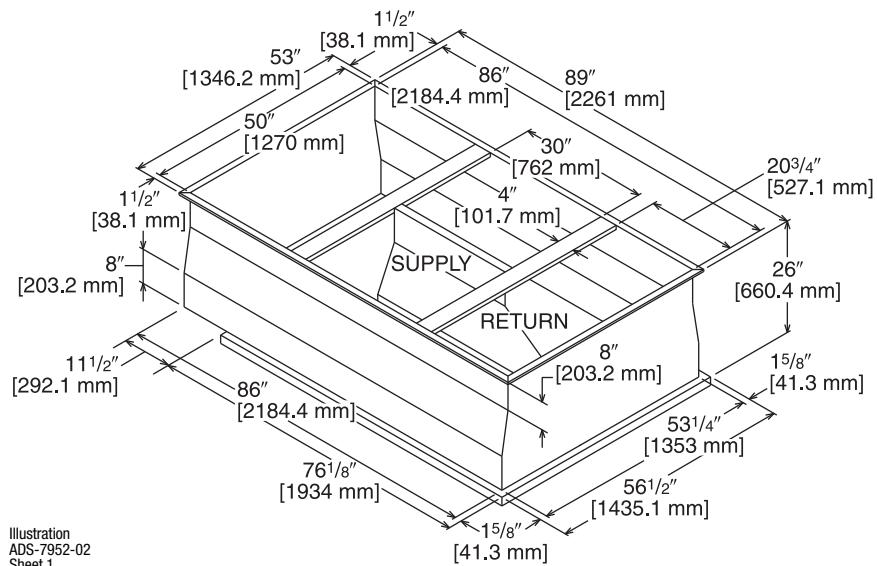
NOTE: Ductwork modifications may be necessary if the capacity and/or indoor airflow rate of replacement unit is not equivalent to that of the unit being replaced.
RLKL- B090, B120 and B151 on same roofcurb as the RLKB- A090, A120 and A150, RLMB- A090, A120 and A150, RLNB- A090 and A120.

ROOFCURB ADAPTERS (Cont.)

RXRX-CDCE50



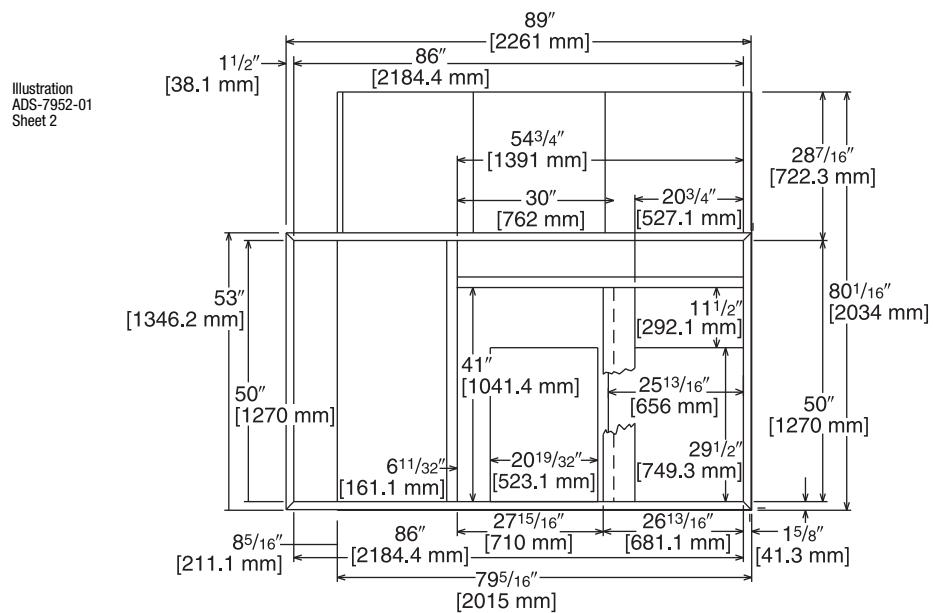
TOP VIEW

Illustration
ADS-7952-02
Sheet 1

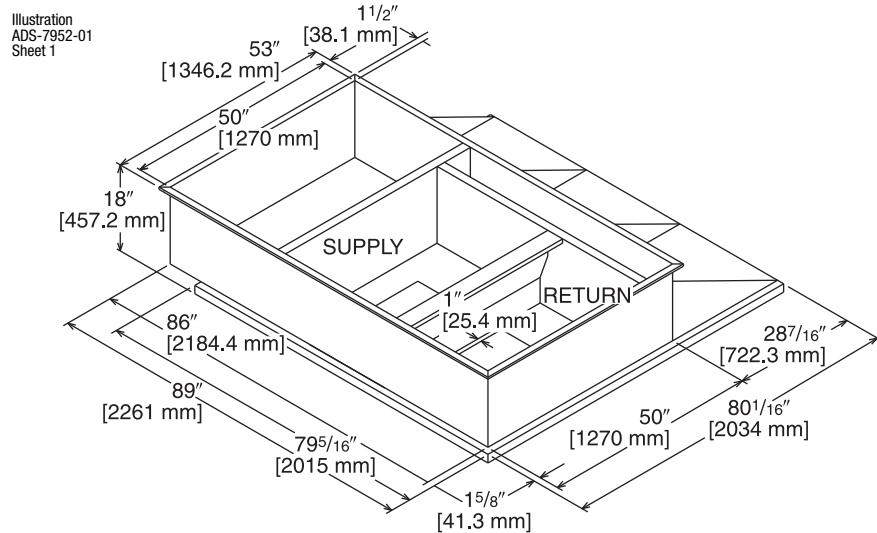
[] Designates Metric Conversions

ROOFCURB ADAPTERS (Cont.)

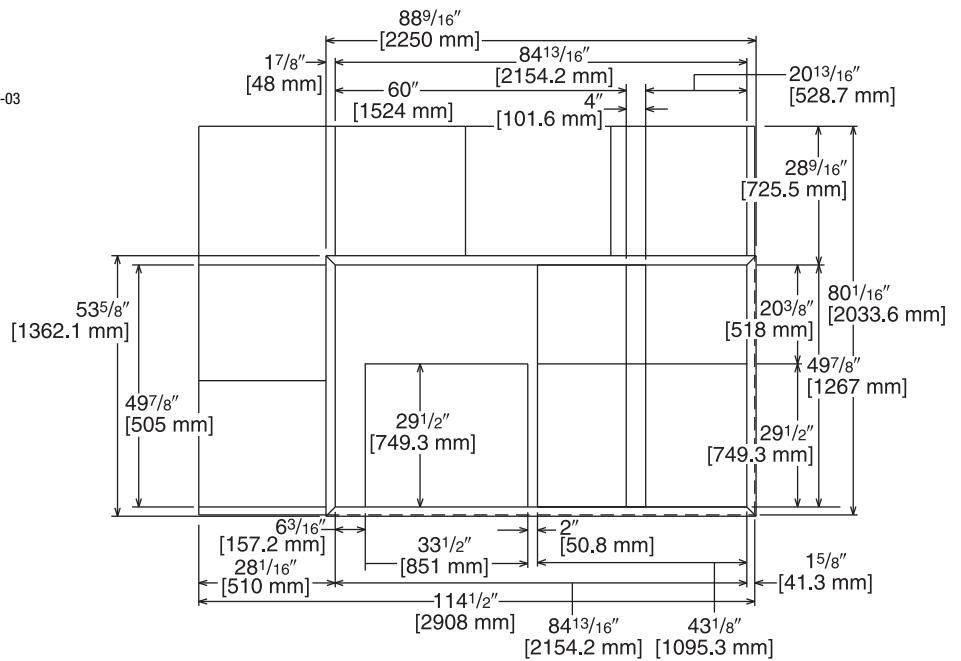
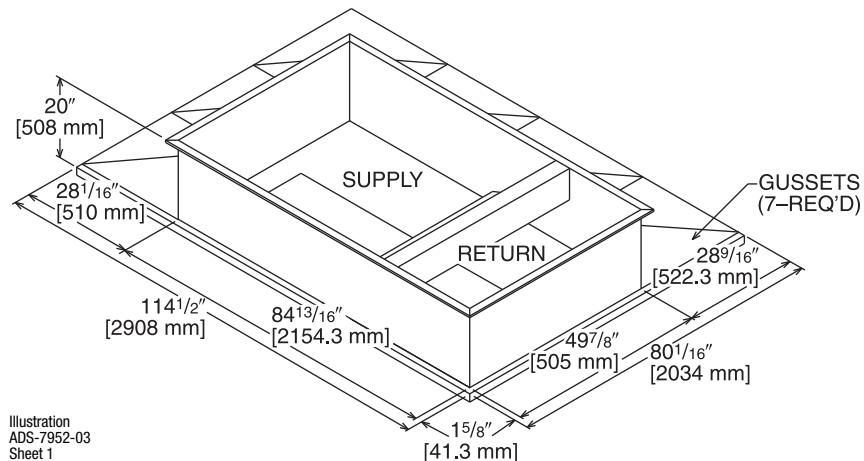
RXRX-CFCE54



TOP VIEW



[] Designates Metric Conversions

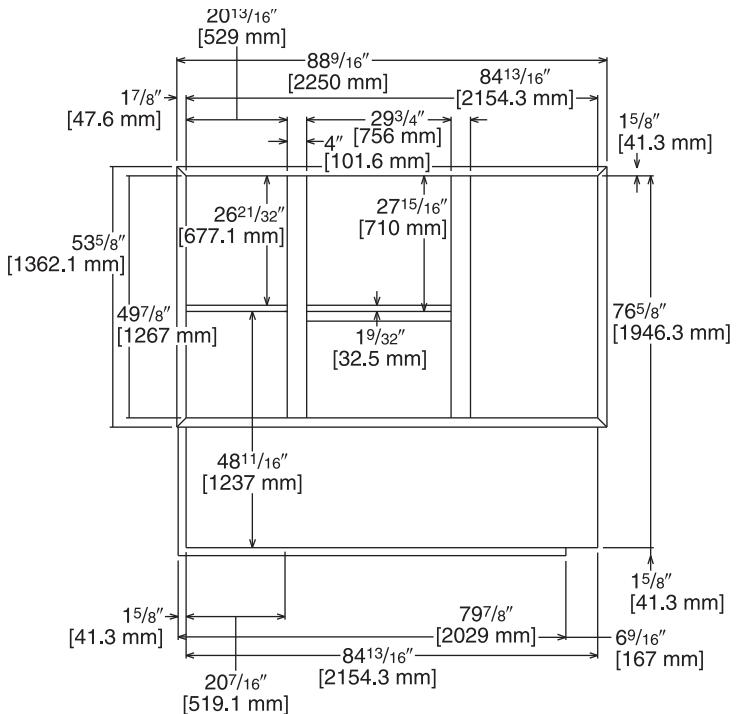
ROOFCURB ADAPTERS (Cont.)**RXRX-CFCE56**Illustration
ADS-7952-03
Sheet 2**TOP VIEW**Illustration
ADS-7952-03
Sheet 1

[] Designates Metric Conversions

ROOFCURB ADAPTERS (Cont.)

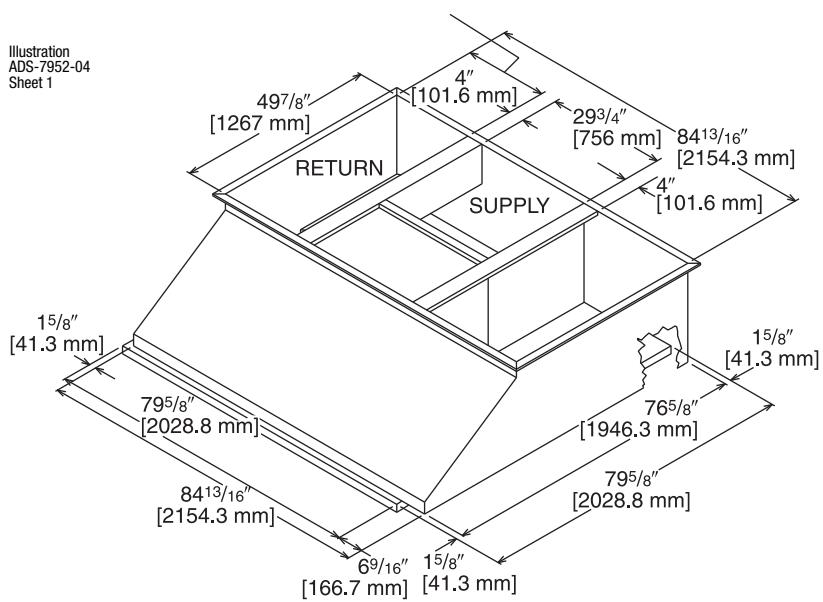
RXRX-CGCC12

Illustration
ADS-7952-04
Sheet 2



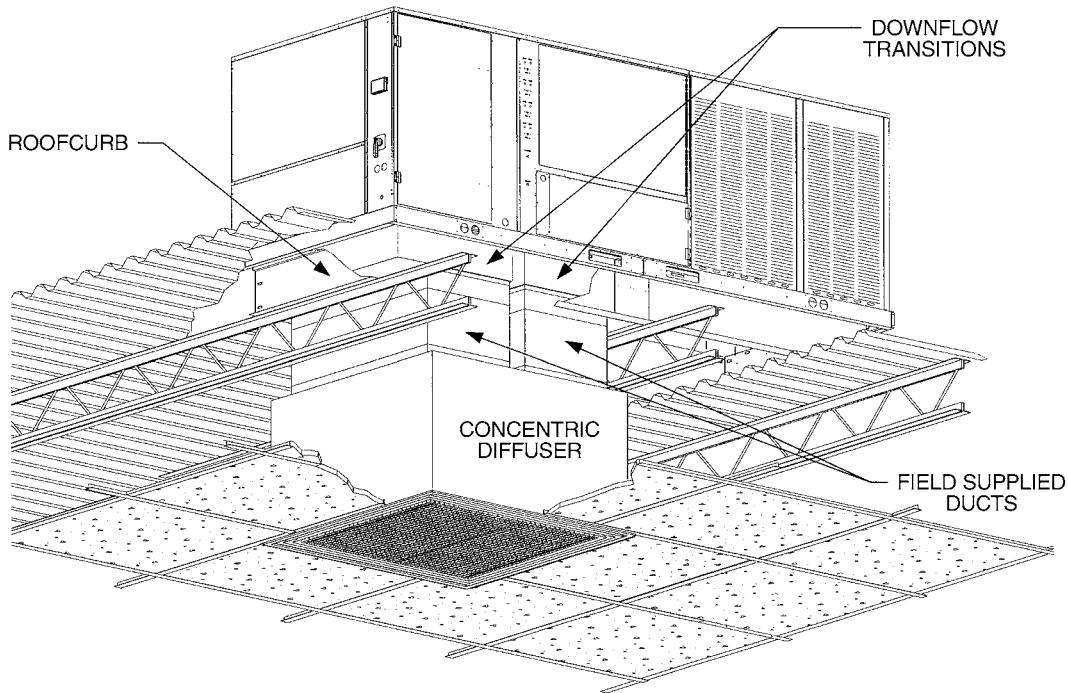
TOP VIEW

Illustration
ADS-7952-04
Sheet 1



[] Designates Metric Conversions

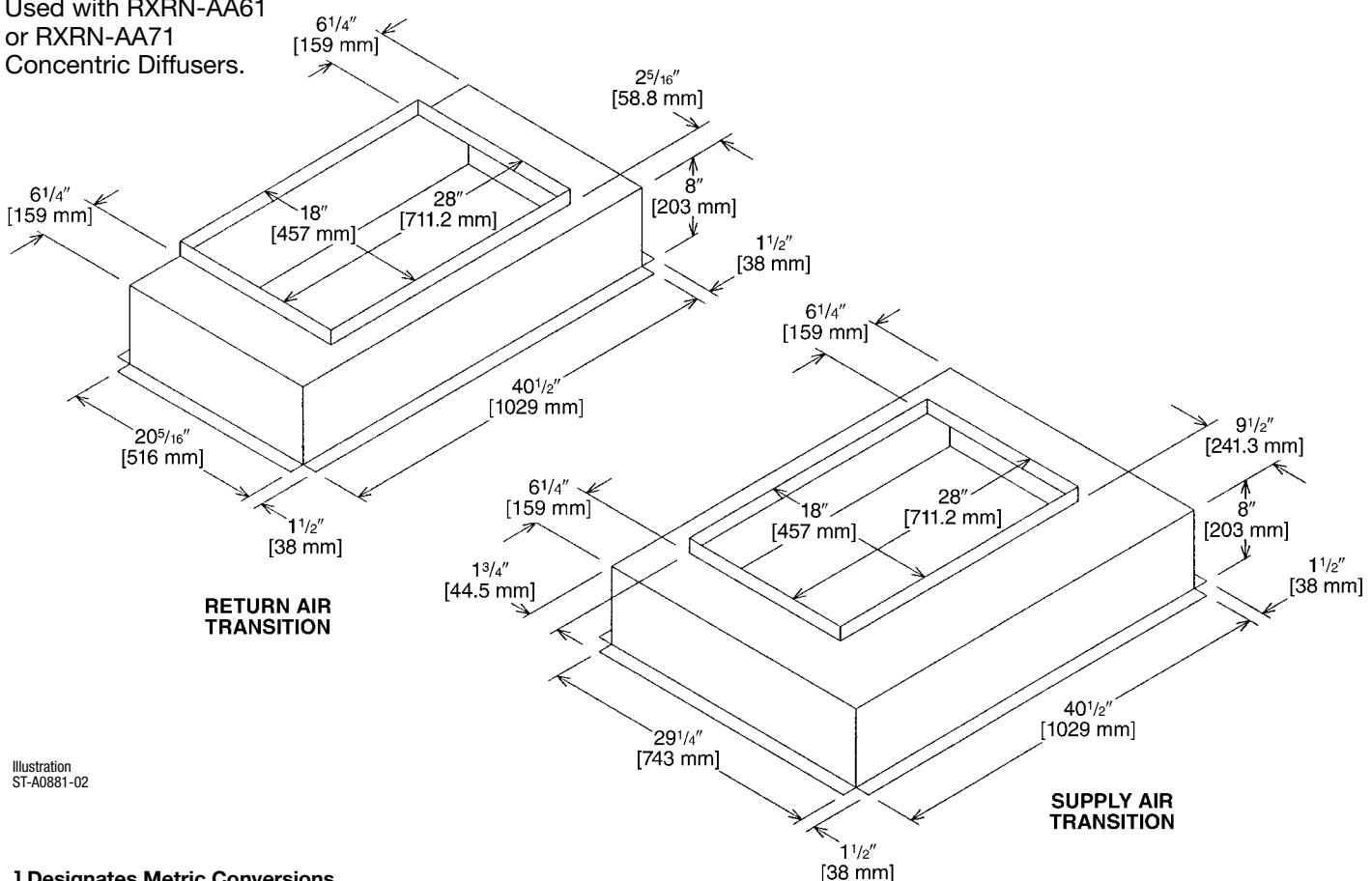
CONCENTRIC DIFFUSER APPLICATION

Illustration
ST-A0840-02

DOWNGLOW TRANSITION DRAWINGS

RXMC-CE05

- Used with RXRN-AA61 or RXRN-AA71 Concentric Diffusers.

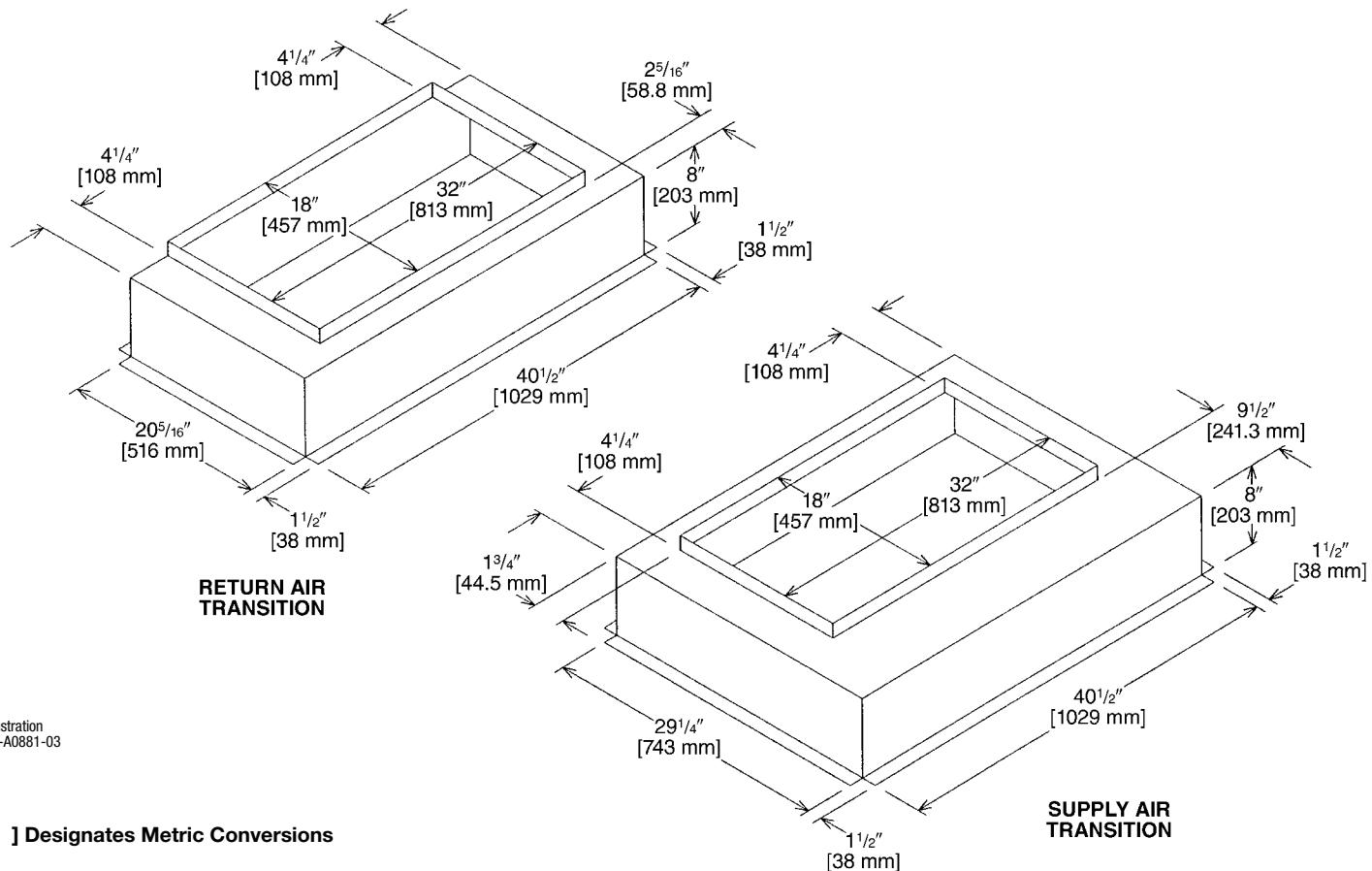
Illustration
ST-A0881-02

[] Designates Metric Conversions

DOWNFLOW TRANSITION DRAWINGS (Cont.)

RXMC-CF06

- Used with RXRN-AA66 or RXRN-AA76 Concentric Diffusers.



DNWFLOW TRANSITION DRAWINGS (Cont.)

RXMC-CD04

- Used with RXRN-FA65 or RXRN-FA75 Concentric Diffusers.

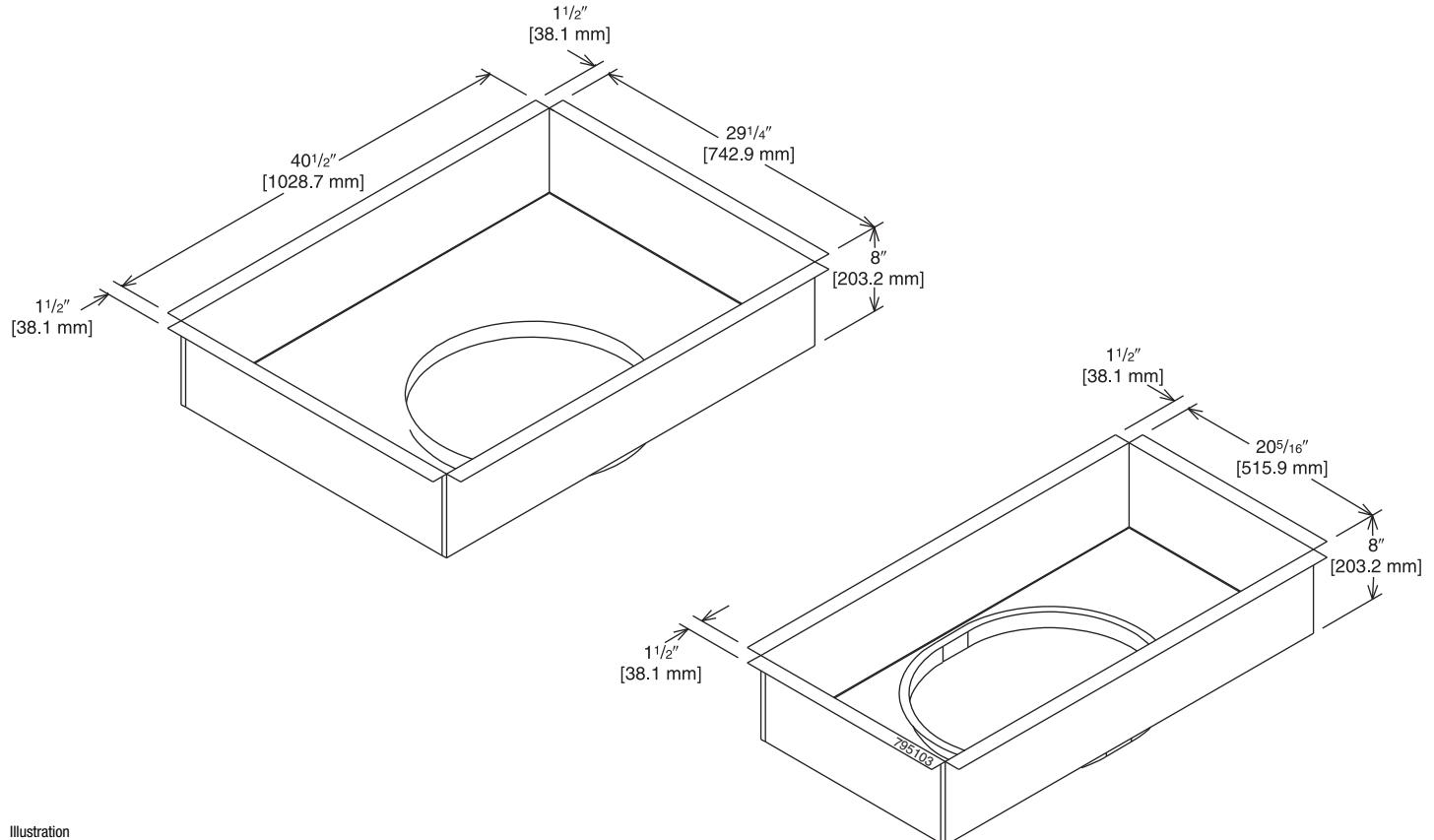
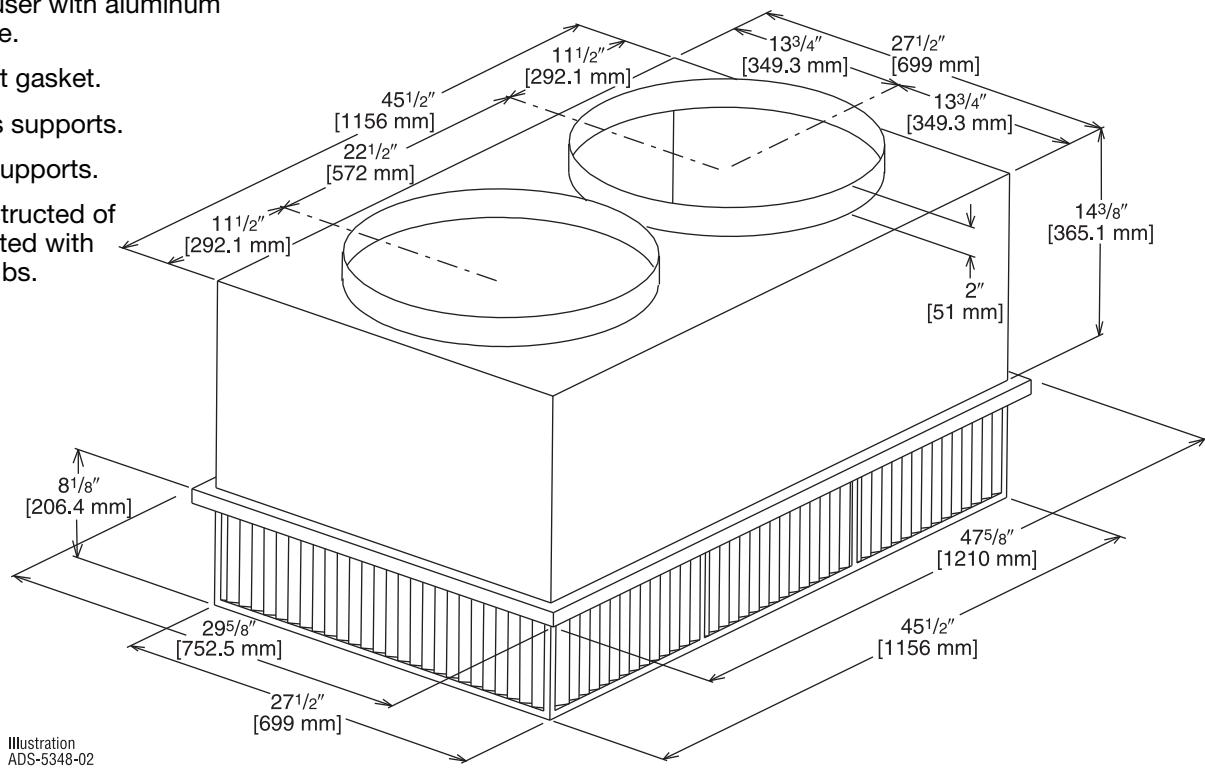


Illustration
ADS-7951-03

[] Designates Metric Conversions

CONCENTRIC DIFFUSER—STEP DOWN**RXRN-FA65 (7.5 & 8.5 Ton [26.4 & 29.9 kW] Models)****For Use With Downflow Transition (RXMC-CD04)
and 20" [508 mm] Round Supply and Return Ducts**

- All aluminum diffuser with aluminum return air eggcrate.
- Built-in anti-sweat gasket.
- Molded fiberglass supports.
- Built-in hanging supports.
- Diffuser box constructed of sheetmetal insulated with 1" [25.4 mm] 1.5 lbs. [.7 kg] duct liner.

**ENGINEERING DATA^①**

Model No.	Flow Rate CFM [L/s]	Static Pressure in. w.c. [kPa]	Throw ^{②③} Feet [m]	Neck Velocity fpm [m/s]	Noise Level ^④ (dBa)
RXRN-FA65	2600 [1227]	0.17 [0.042]	24-29 [7.3-8.8]	669 [3.4]	20
	2800 [1321]	0.20 [0.050]	25-30 [7.6-9.1]	720 [3.7]	25
	3000 [1416]	0.25 [0.062]	27-33 [8.2-10.1]	772 [3.9]	25
	3200 [1510]	0.31 [0.077]	28-35 [8.5-10.7]	823 [4.2]	25
	3400 [1604]	0.37 [0.092]	30-37 [9.1-11.3]	874 [4.4]	30

NOTES: ① All data is based on the air diffusion council guidelines.

② Throw data is based on 75 FPM Terminal Velocities using isothermal air.

③ Throw is based on diffuser blades being directed in a straight pattern.

④ Actual noise levels may vary due to duct design and do not include transmitted unit noise.

Adequate duct attenuation must be provided to reduce sound output from the unit.

[] Designates Metric Conversions

CONCENTRIC DIFFUSER—STEP DOWN

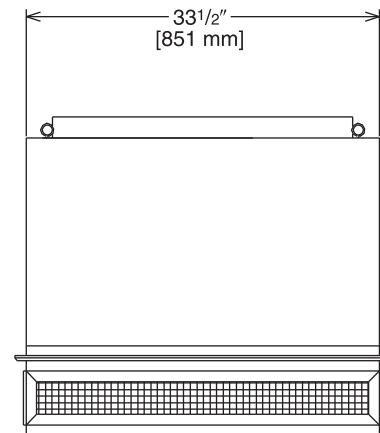
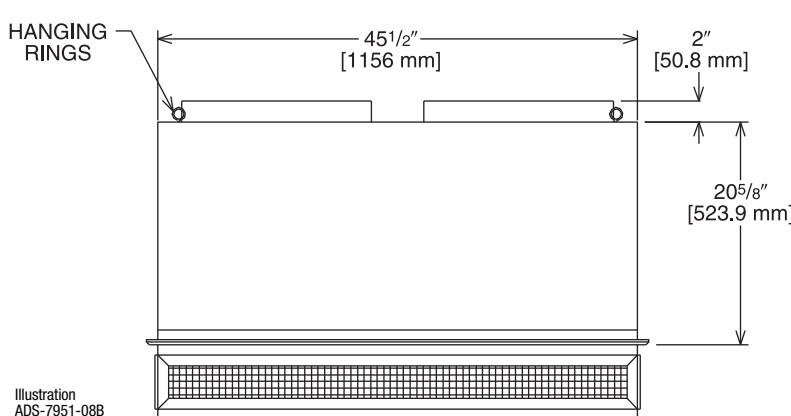
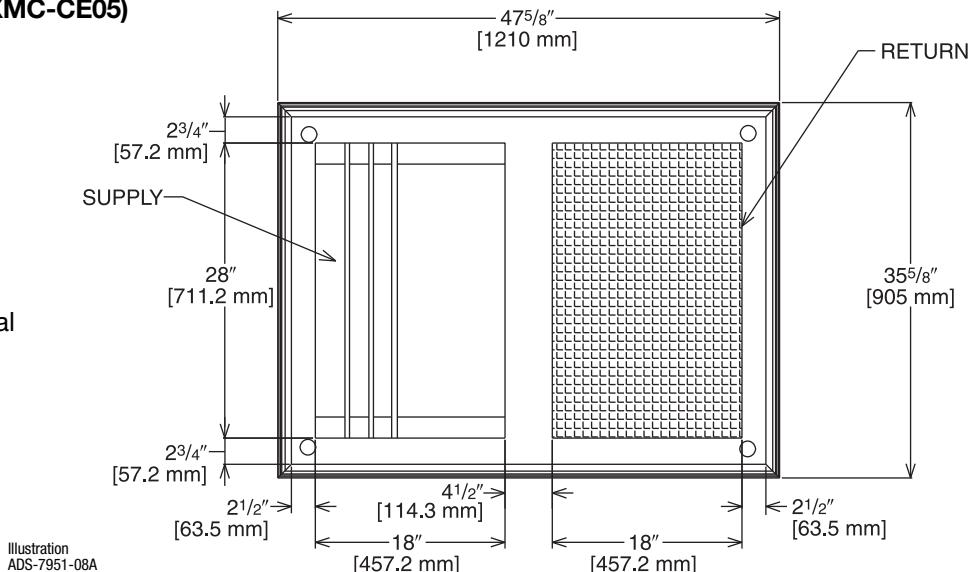
18" x 28" [457.2 x 711.2 mm]

RXRN-AA61 (8.5 & 10 Ton [29.9 kW & 35.2] Models)

For Use With Downflow Transition (RXMC-CE05)
and 18" x 28" [457.2 x 711.2 mm]

Supply and Return Ducts

- All aluminum diffuser with aluminum return air eggcrate.
- Built-in anti-sweat gasket.
- Molded fiberglass supports.
- Built-in hanging supports.
- Diffuser box constructed of sheetmetal insulated with 1" [25.4 mm] 1.5 lbs.
.7 kg] duct liner.
- Double deflection diffuser with the blades secured by spring steel.



ENGINEERING DATA^①

Model No.	Flow Rate CFM [L/s]	Static Pressure in w.c. [kPa]	Throw ^{②③} Feet [m]	Neck Velocity fpm [m/s]	Noise Level ^④ (dBa)
RXRN-AA61	3600 [1699]	0.17 [0.042]	25-33 [7.6-10.1]	851 [4.3]	30
	3800 [1793]	0.18 [0.045]	27-35 [8.2-10.7]	898 [4.6]	30
	4000 [1888]	0.21 [0.052]	29-37 [8.8-11.3]	946 [4.8]	30
	4200 [1982]	0.24 [0.060]	32-40 [9.8-12.2]	993 [5.0]	30
	4400 [2076]	0.27 [0.067]	34-42 [10.4-12.8]	1040 [5.3]	30

NOTES: ① All data is based on the air diffusion council guidelines.

② Throw data is based on 75 FPM Terminal Velocities using isothermal air.

③ Throw is based on diffuser blades being directed in a straight pattern.

④ Actual noise levels may vary due to duct design and do not include transmitted unit noise.

Adequate duct attenuation must be provided to reduce sound output from the unit.

[] Designates Metric Conversions

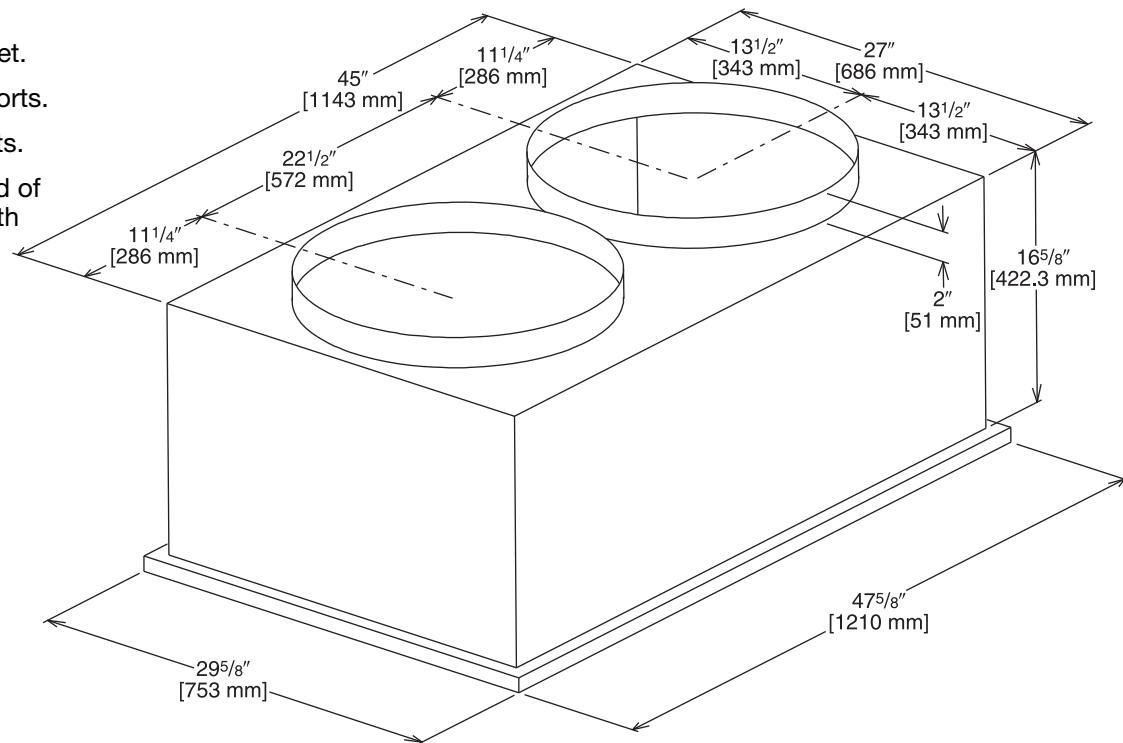
FLUSH MOUNT CONCENTRIC DIFFUSER—FLUSH

RXRN-FA75 (7.5 & 8.5 Ton [26.4 & 29.9 kW] Models)

**For Use With Downflow Transition (RXMC-CD04)
and 20" [508 mm] Round Supply and Return Ducts**

- All aluminum diffuser with aluminum return air eggcrate.
- Built-in anti-sweat gasket.
- Molded fiberglass supports.
- Built-in hanging supports.
- Diffuser box constructed of sheetmetal insulated with 1" [25.4 mm] 1.5 lbs. [.7 kg] duct liner.

Illustration
ADS-5348-04



ENGINEERING DATA^①

Model No.	Flow Rate CFM [L/s]	Static Pressure in. w.c. [kPa]	Throw ② ③ Feet [m]	Neck Velocity fpm [m/s]	Noise Level ④ (dBa)
RXRN-FA75	2600 [1227]	.17 [0.042]	19-24 [5.8-7.3]	663 [3.4]	30
	2800 [1321]	.20 [0.050]	20-28 [6.1-8.5]	714 [3.6]	35
	3000 [1416]	.25 [0.062]	21-29 [6.4-8.8]	765 [3.9]	35
	3200 [1510]	.31 [0.077]	22-29 [6.7-8.8]	816 [4.1]	40
	3400 [1604]	.37 [0.092]	22-30 [6.7-9.1]	867 [4.4]	40

NOTES: ① All data is based on the air diffusion council guidelines.

② Throw data is based on 75 FPM Terminal Velocities using isothermal air.

③ Throw is based on diffuser blades being directed in a straight pattern.

④ Actual noise levels may vary due to duct design and do not include transmitted unit noise.

Adequate duct attenuation must be provided to reduce sound output from the unit.

[] Designates Metric Conversions

CONCENTRIC DIFFUSER—FLUSH and 18" x 28" [457.2 x 711.2 mm]

RXRN-AA71 (8.5 & 10 Ton [29.9 & 35.2] Models)

For Use With Downflow Transition (RXMC-CE05)
and 18" x 28" [457.2 x 711.2 mm]
Supply and Return Ducts

- All aluminum diffuser with aluminum return air eggcrate.
- Built-in anti-sweat gasket.
- Molded fiberglass supports.
- Built-in hanging supports.
- Diffuser box constructed of sheetmetal insulated with 1" [25.4 mm] 1.5 lbs.
.7 kg] duct liner.

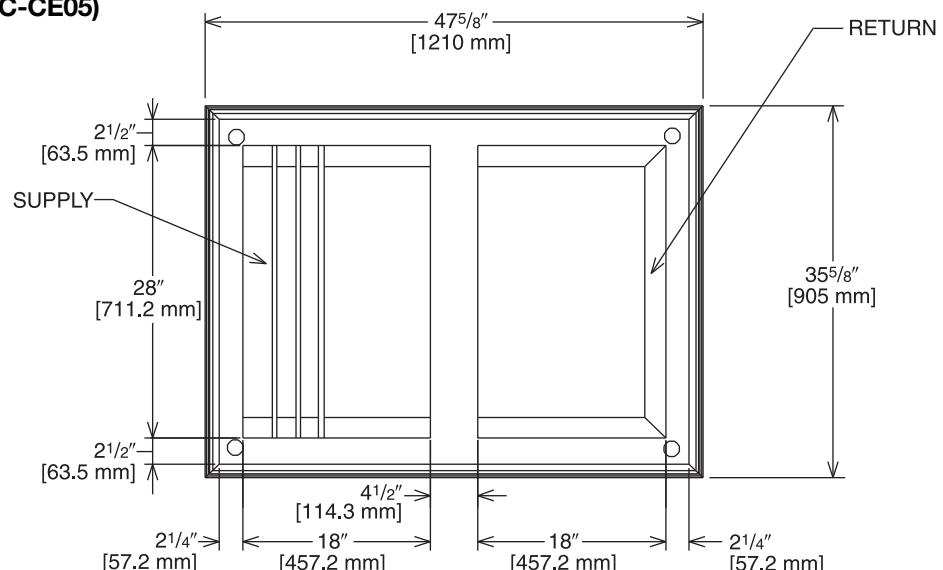


Illustration
ADS-7951-06A

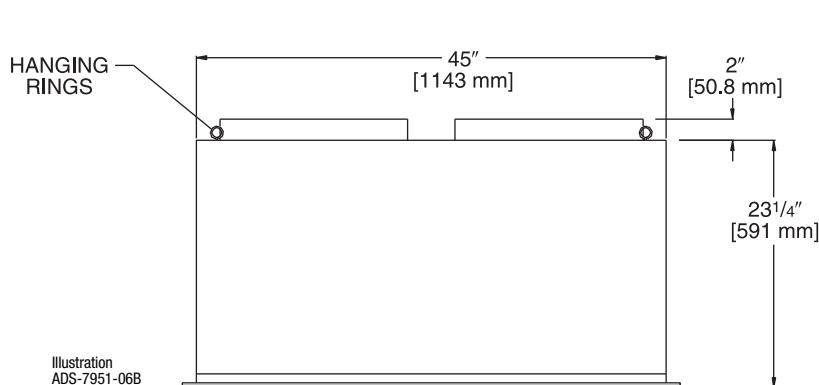


Illustration
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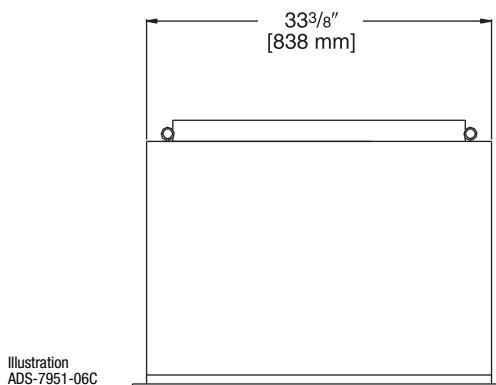


Illustration
ADS-7951-06C

ENGINEERING DATA^①

Model No.	Flow Rate CFM [L/s]	Static Pressure in w.c. [kPa]	Throw ^{②③} Feet [m]	Neck Velocity fpm [m/s]	Noise Level ^④ (dBa)
RXRN-AA71	3600 [1699]	0.17 [0.042]	22-29 [6.7-8.8]	844 [4.3]	35
	3800 [1793]	0.18 [0.045]	22-30 [6.7-9.1]	891 [4.5]	40
	4000 [1888]	0.21 [0.052]	24-33 [7.3-10.1]	938 [4.8]	40
	4200 [1982]	0.24 [0.060]	26-35 [7.9-10.7]	985 [5.0]	40
	4400 [2076]	0.27 [0.067]	28-37 [8.5-11.3]	1032 [5.2]	40

NOTES: ① All data is based on the air diffusion council guidelines.

② Throw data is based on 75 FPM Terminal Velocities using isothermal air.

③ Throw is based on diffuser blades being directed in a straight pattern.

④ Actual noise levels may vary due to duct design and do not include transmitted unit noise.

Adequate duct attenuation must be provided to reduce sound output from the unit.

[] Designates Metric Conversions

General

Units shall be convertible airflow. Operating range for units with electromechanical controls shall be between 125°F (51.7°C) and 50°F (4.4°C). Cooling performance shall be rated in accordance with DOE and/or AHRI testing procedures. All units shall be factory assembled, internally wired, fully charged with R-410A, and 100 percent run-tested before leaving the factory. Wiring internal to the unit shall be colored and numbered for simplified identification. Units shall be UL listed and labeled, classified in accordance to UL 1995/CAN/CSA No. 236-M90 for central cooling air conditioners. Canadian units shall be CUL certified.

Casing

Unit casing shall be constructed of zinc coated, heavy gauge, galvanized steel. Exterior surfaces shall be cleaned, phosphatized, and finished with a weather-resistant baked enamel finish. Unit's surface shall be tested 1000 hours in a salt spray test in compliance with ASTM B117. Cabinet construction shall allow for all maintenance on one side of the unit. All exposed vertical panels and top covers in the indoor air section shall be insulated with a cleanable foil faced, fire retardant permanent, odorless glass fiber material and secured with adhesive and mechanical fasteners. The base of the unit shall be insulated with foil-faced material. All insulation edges shall be either captured or sealed. The unit's base pan shall have no penetrations within the perimeter of the curb other than the raised 1-1/8" [28.58 mm] high downflow supply return openings to provide an added water integrity precaution. The base rails of the unit shall have provisions for forklift and crane lifting, with forklift capabilities on three sides of the unit.

Unit Top

The indoor top cover shall be one-piece construction, it shall not be double-hemmed and gasket-sealed.

Filters

Two inch [50.8 mm], throwaway filters shall be standard on all units.

Compressors

Units shall have direct-drive, hermetic, scroll type compressors with centrifugal type oil pumps. Motor shall be suction gas-cooled and shall have a voltage utilization range of plus or minus 10 percent of unit nameplate voltage. Internal overloads shall be provided with the scroll compressors. The compressor shall have external isolation to minimize noise.

Refrigerant Circuits

Each refrigerant circuit shall have orifice refrigerant control expansion device or TXV. Service pressure ports, shall be factory-installed as standard.

Evaporator Coils and MicroChannel Condenser Coils

Evaporator shall be internally finned, 3/8" [9.53 mm] copper tubes mechanically bonded to a configured aluminum plate fin shall be standard. Condenser coil shall be MicroChannel. Coils shall be leak tested at the factory to ensure pressure integrity. The evaporator coil and condenser coil shall be leak tested to 200 psig and pressure tested to 450 psig. A sloped condensate drain pan shall be standard and shall be removable.

Outdoor Fans

The outdoor fans shall be direct-drive statically and dynamically balanced, draw-through in the vertical discharge position. The fan motor shall be permanently lubricated and shall have built-in thermal overload protection.

Indoor Fans

All 3-phase units offer belt drive, FC centrifugal fans with adjustable motor sheaves. All motors shall be thermally protected. All indoor fan motors meet the U.S. Energy Policy Act of 1992 (EPACT).

Controls

Unit shall be completely factory wired with necessary controls and contactor pressure lugs or terminal block for power wiring. Units shall provide an external location for mounting a fused disconnect device.

24-volt electromechanical control circuit shall include control transformer and contactor pressure lugs for power wiring. Unit shall have single point power entry as standard.

Accessories/Option

Roof Curb—The roof curb shall be designed to mate with the unit's downflow supply and return openings and provide support and a watertight installation when installed properly. The roof curb design shall allow field-fabricated rectangular supply/return ductwork to be connected directly to the curb. Curb design shall comply with NRCA requirements. Curbs shall be shipped knocked down for tool-less field assembly and shall include wood nailer strips.

Economizer—This accessory shall be either field or factory-installed and is available with barometric relief standard. The assembly includes direct drive gear driver, fully modulating 0-100 percent motor and dampers, minimum position setting, mixed air sensor, wiring harness with plug, and single enthalpy control. Optional differential enthalpy control shall be field-installed. The factory-installed economizer arrives ready for operation.

Remote Potentiometer—Field installed, the minimum position setting of economizer shall be adjusted with this accessory.

Motorized Outside Air Dampers

Field-installed manually set outdoor air dampers shall provide up to 50 percent outside air. Once set, outdoor air dampers shall open to set position when indoor fan starts. The damper shall close to the full closed position when indoor fan shuts down.

Manual Outside Air Damper—Factory or field-installed rain hood and screen shall provide up to 50 percent outside air.

Oversized Motors—Factory installed belt drive oversized motors shall be available for high static applications.

Powered Exhaust—The field installed powered exhaust, available for all units, shall provide exhaust of return air, when using an economizer, to maintain better building pressurization.

[] Designates Metric Conversions

Through the Base Electrical Access—An electrical service entrance shall be factory provided allowing electrical access for both control and main power connection inside the curb and through the base of the unit. Option will allow for field installation of liquid-tight conduit and an external field-installed disconnect switch.

Through the Base Electrical with Disconnect Switch—Factory-installed 3-pole, molded case disconnect switch with provisions for through the base electrical connections are available. The disconnect switch will be installed in the unit in a watertight enclosure with access through a hinged door. Factory wiring will be provided from the switch to the unit high voltage terminal block. The switch will be UL/CSA agency recognized. Note: The disconnect switch will be sized per NEC and UL guidelines but will not be used in place of unit over current protection.

Freeze/Clogged Filter Switches—This factory or field-installed option allows for individual fan failure or dirty filter protection. If indoor coil gets too cold due to low airflow, compressor operation will be temporarily interrupted.

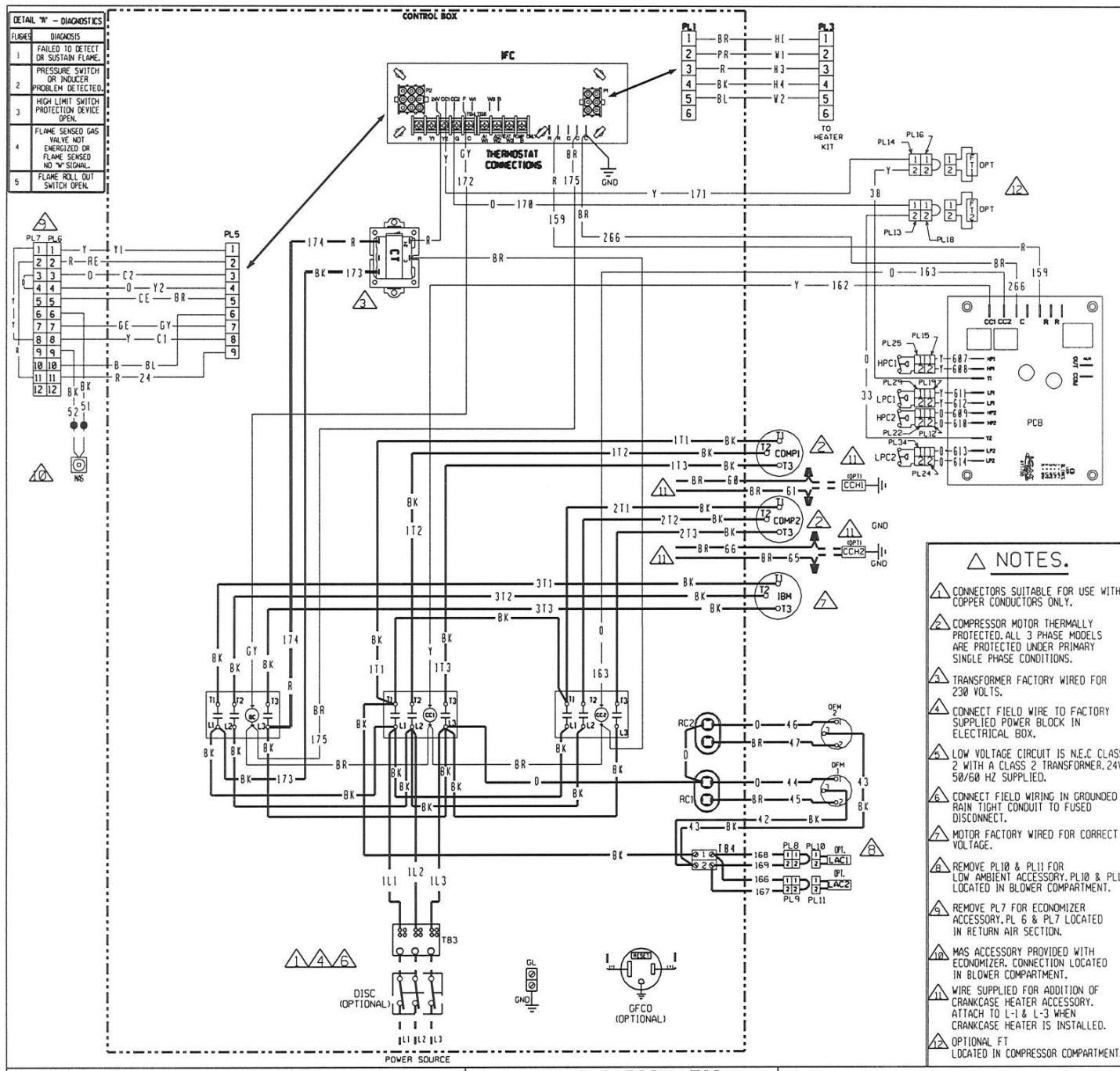
Enthalpy Control—Single Enthalpy Control shall be standard for all economizers. Enthalpy control offers a higher level of comfort control, along with energy savings potential, than the standard dry bulb control. This is due to the additional wet bulb sensing capability.

High Pressure Cutout—High pressure cutout shall be standard on all models and 1/4 turn fasteners. All scroll compressors shall include Internal Pressure Relief as standard.

Thermostats—Two stage heating and cooling operation shall be available, for field installation, in either manual or automatic changeover. Automatic programmable electronic with night set back shall also be available.

Differential Enthalpy—Adds on to the standard single control with other enthalpy sensors that compare total heat content of the indoor air and outdoor air to determine the most efficient air source. This control option offers the highest level of comfort control, plus energy efficiency available.

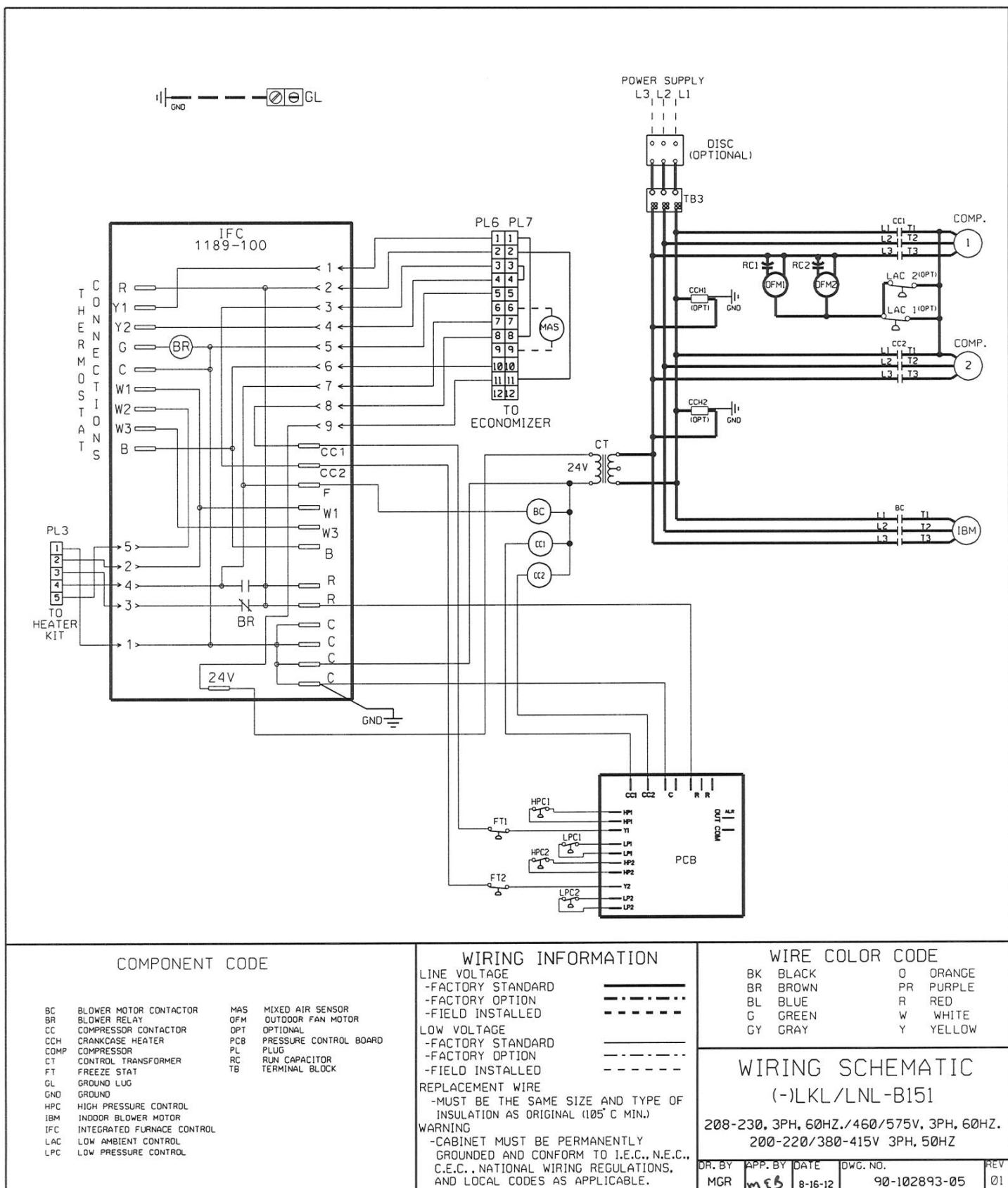
Low Ambient Cooling—Electromechanical models have cooling capabilities to 40°F as built, or to 0°F by adding the optional low ambient (frostat) control.

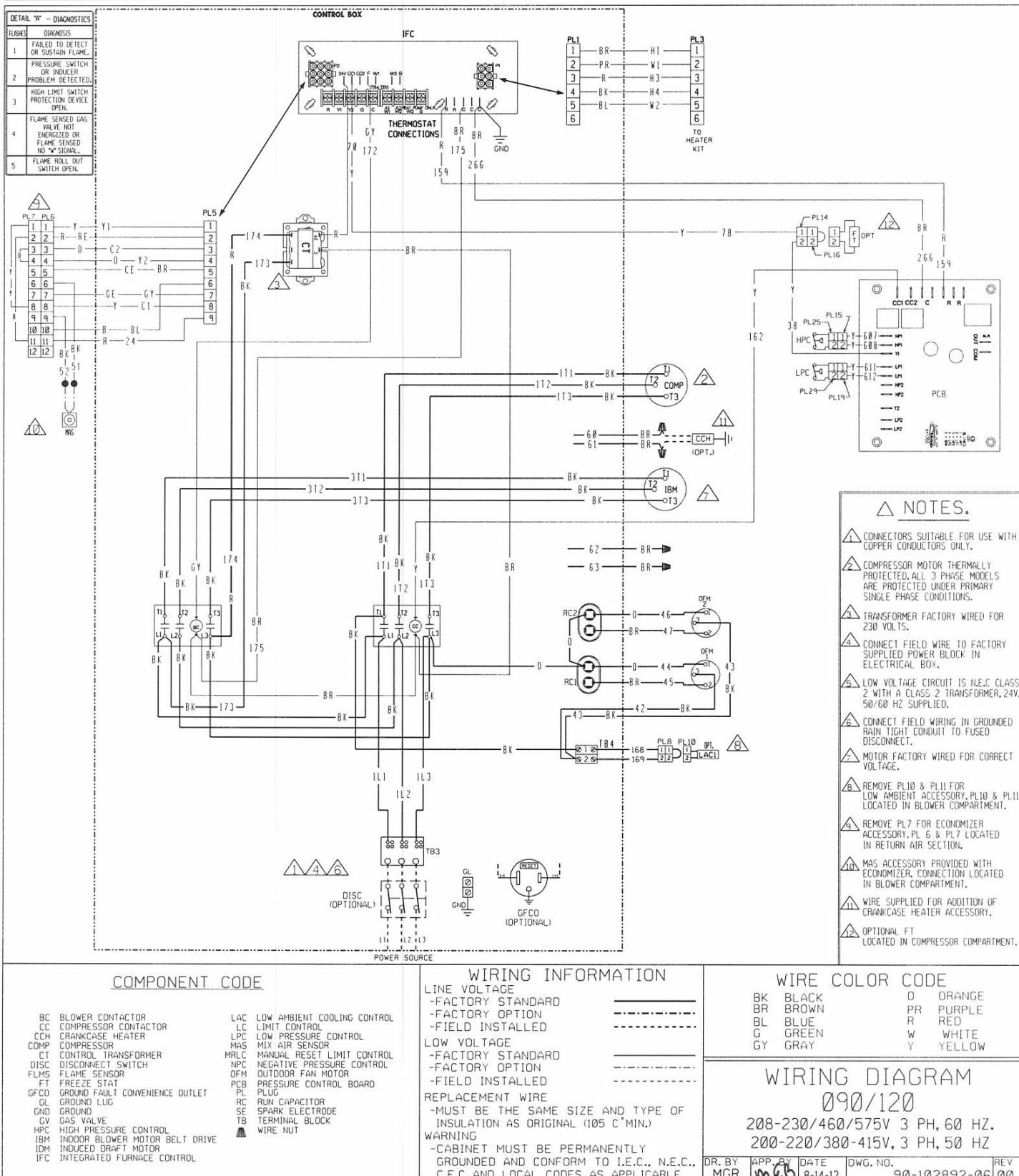


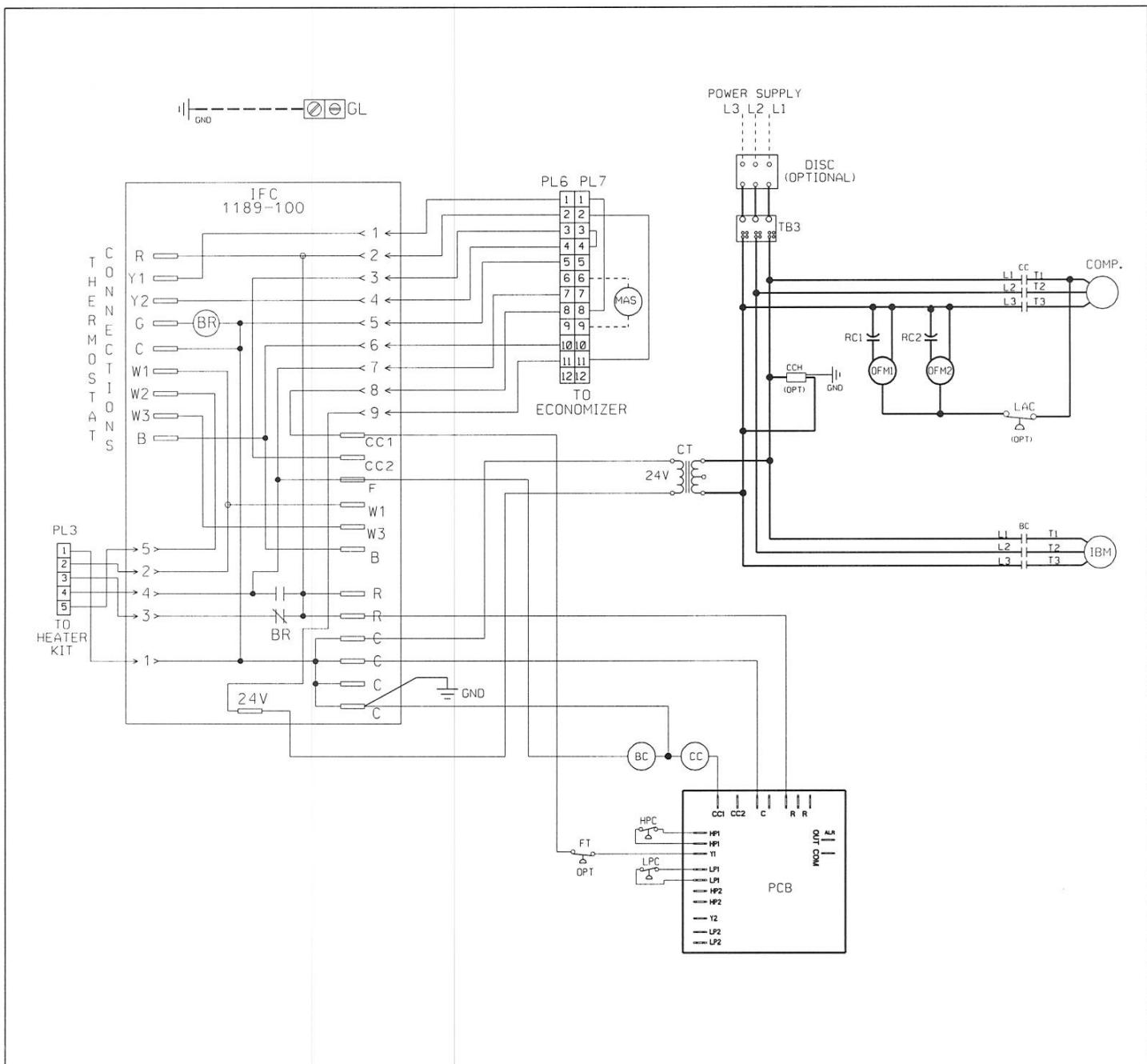
COMPONENT CODE	WIRING INFORMATION	WIRE COLOR CODE
BC BLOWER CONTACTOR CC COMPRESSOR CONTACTOR CCH CRANKCASE HEATER COMP COMPRESSOR CT CONTROL TRANSFORMER DISC DISCONNECT SWITCH FLMS FLAME SENSOR FT FREEZE STAT GFCO GROUND FAULT CONVENIENCE OUTLET GL GROUND LUG GND GROUND GV GAS VALVE HPC HIGH PRESSURE CONTROL IBM INDOOR BLOWER MOTOR BELT DRIVE IDM INDUCED DRAFT MOTOR IFC INTEGRATED FURNACE CONTROL	LAC LOW AMBIENT COOLING CONTROL LC LIMIT CONTROL LPC LOW PRESSURE CONTROL MAS MIX AIR SENSOR MLC MANUAL RESET LIMIT CONTROL NPC NEGATIVE PRESSURE CONTROL OFM OUTDOOR FAN MOTOR PCB PRESSURE CONTROL BOARD PL POWER LINE RC RUN CAPACITOR SE SPARK ELECTRODE TB TERMINAL BLOCK WIRE NUT	BK BLACK BR BROWN BL BLUE G GREEN GY GRAY O ORANGE PR PURPLE R RED W WHITE Y YELLOW

WIRING DIAGRAM
(-)LKL/LNL-B151
208-230/460/575V 3 PH, 60 HZ.
200-220/380-415V, 3 PH, 50HZ

DR. BY	APP. BY	DATE	DWG. NO.
MGR	MEB	8-14-12	REV 90-102892-05 01







COMPONENT CODE		WIRING INFORMATION	WIRE COLOR CODE	
BC	BLOWER MOTOR CONTACTOR	MAS	BLACK	O ORANGE
BR	BLOWER RELAY	OFM	BR BROWN	PR PURPLE
CC	COMPRESSOR CONTACTOR	OPT	BL BLUE	R RED
CCH	CRANKCASE HEATER	PCB	G GREEN	W WHITE
COMP	COMPRESSOR	PLUG	GY GRAY	Y YELLOW
CT	CONTROL TRANSFORMER	RC		
FT	FREEZE STAT	TB		
GL	GROUND LUG			
GND	GROUND			
HPC	HIGH PRESSURE CONTROL			
IBM	INDOOR BLOWER MOTOR			
IFC	INTEGRATED FURNACE CONTROL			
LAC	LOW AMBIENT CONTROL			
LPC	LOW PRESSURE CONTROL			
		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.	-----	
WIRING SCHEMATIC		090/120		
		208-230/460/575V, 3PH, 60Hz.		
		200-220/380-415V, 3 PH 50 HZ		
DR. BY	APP. BY	DATE	DWG. NO.	REV
MGR	MEB	8-14-12	90-102893-06	00

BEFORE PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.

GENERAL TERMS OF LIMITED WARRANTY*

Ruud will furnish a replacement for any part of this product which fails in normal use and service within the applicable periods stated, in accordance with the terms of the limited warranty.

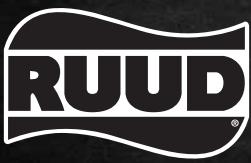
*For complete details of the Limited and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.

Compressor

3 Phase, Commercial ApplicationsFive (5) Years

Parts

3 Phase, Commercial Applications.....One (1) Year



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

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