



The new degree of comfort.™



Air

Package Air Conditioner
RLNL-B Series

Rheem *Commercial Classic*® Series Package Air Conditioner



RLNL-B Standard Efficiency Series

Nominal Sizes 15-25 Tons [52.8-87.9 kW]
ASHRAE 90.1-2007 Compliant Model



INTEGRATED AIR & WATER

FORM NO. S11-957 REV. 7

TABLE OF CONTENTS

Unit Features & Benefits	3-7
Model Number Identification	8
Options.....	9
Selection Procedure	10
General Data	
RLNL-B Series.....	11-19
General Data Notes	20
Gross Systems Performance Data	
RLNL-B Series.....	21-24
Indoor Airflow Performance	
RLNL-B Series.....	25-34
Electrical Data	
RLNL-B Series.....	35-39
Electric Heater Kits	40-48
Dimensional Data	49-52
Accessories	53-64
Mechanical Specifications	65-69
Limited Warranty	70



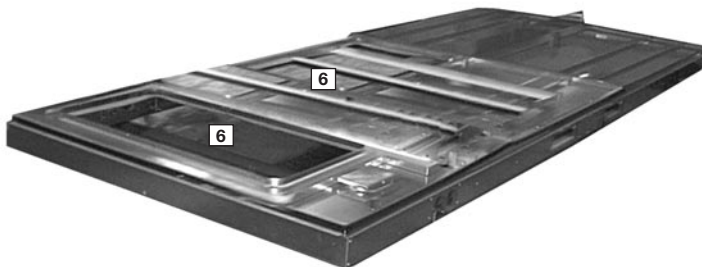
STANDARD FEATURES INCLUDE:

- R-410A HFC refrigerant.
- Complete factory charged, wired and run tested.
- Scroll compressors with internal line break overload and high-pressure protection.
- Two independent refrigerant circuits each with a scroll compressor provide two stage cooling operation.
- Convertible airflow – vertical downflow or horizontal sideflow.
- TXV refrigerant metering system on each circuit.
- 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 maintaining high efficiencies.
- Cooling operation up to 125 degree F ambient.
- Foil faced insulation encapsulated throughout entire unit minimizes airborne fibers from the air stream.
- Hinged major access door with heavy-duty gasketing, 1/4 turn latches and door retainers.
- Slide Out Indoor fan assembly for added service convenience.
- 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, condenser and gas heat inducer 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.
- Copper tube/Aluminum Fin coils. (Exception: B241 models have microchannel condenser coils)
- Supplemental electric heat provides 100% efficient heating.
- MERV 8 (RXMF-M08A22520) & MERV 13 (RXMF-M13A22520) filters are available as an accessory.



Rheem 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 Rheem *Commercial Series*™ label (1) identifies the brand to the customer. The sheet-metal cabinet (2) uses nothing less than 20-gauge material for structural components with an underlying coat of G90. To ensure the leak-proof integrity of these units, the design utilizes a top with a 1/8" drip lip (3), gasket-protected panels and screws. (4) The outdoor coil is slanted to protect from hail. Every Rheem 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 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. 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.

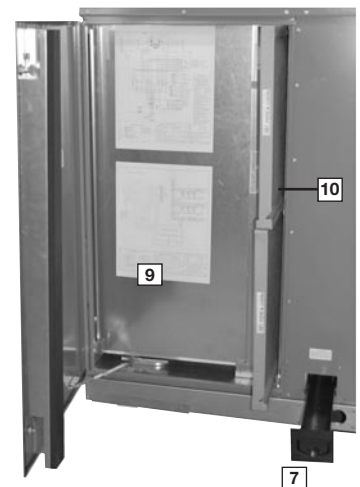


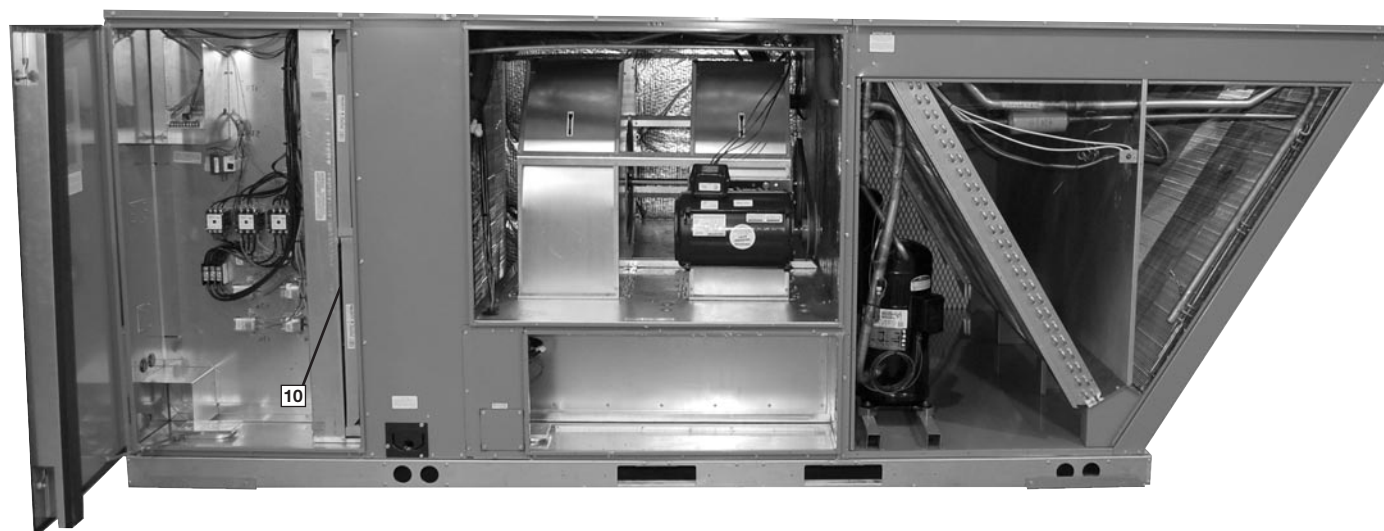
During development, each unit was tested to U.L. 1995, AHRI 340-360 and other Rheem-required reliability tests. Rheem adheres to stringent ISO 9002 quality procedures, and each unit bears the U.L. and AHRI certification labels located on the unit nameplate (8). Contractors can rest assured that when a Rheem package unit arrives at the job, it is ready to go with a factory charge and quality checks.

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 panel is permanently embossed with the compartment name (control/filter access, blower access and furnace access).

Electrical and filter compartment access is through a large, hinged-access panel with 1/4 turn latches. On the outside of the panel is the unit nameplate, which contains the model and serial number, electrical data and other important unit information.

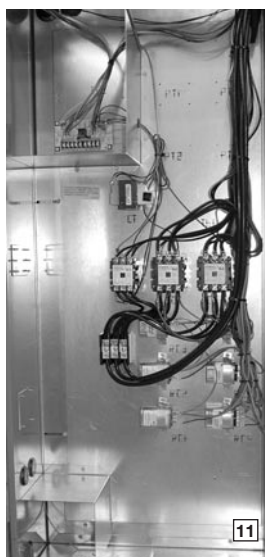
The unit charging chart is located on the inside of the electrical and filter compartment door. Electrical wiring diagrams are found on the control box cover, which allows contractors to move them to more readable locations. To the right of the control box the model and serial number can be found. Having 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 (9). The two-inch throwaway filters (10) are easily removed on a tracked system for easy replacement.



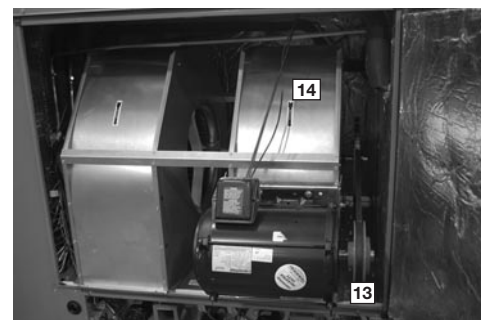


Inside the control box (**11**), each electrical component is clearly identified with a label that matches the component to the wire diagram for ease of trouble shooting. All wiring is numbered on each end of the termination and color-coded to match the wiring diagram. The control transformer has a low voltage circuit breaker that trips if a low voltage electrical short occurs. There is a blower contactor and contactor for each compressor.

For added convenience in the field, a factory-installed convenience outlet (**12**) is available. Low and High voltage can enter either from the side or through the base. Low-voltage connections are made through the low-voltage terminal strip. For ease of access, the U.L.-required low voltage barrier can be temporarily removed for low-voltage termination and then reinstalled. The high-voltage connection is terminated at the high voltage terminal block. The suggested mounting for the field-installed disconnect is on the exterior side of the electrical control box.

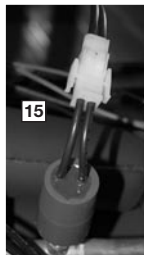


The blower compartment is to the right of the control box and can be accessed by 1/4 turn latches. To allow easy maintenance of the blower assembly, the entire assembly easily slides out by removing four #10 screws from the blower assembly. The adjustable motor pulley (**13**) can easily be adjusted 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, Rheem 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.





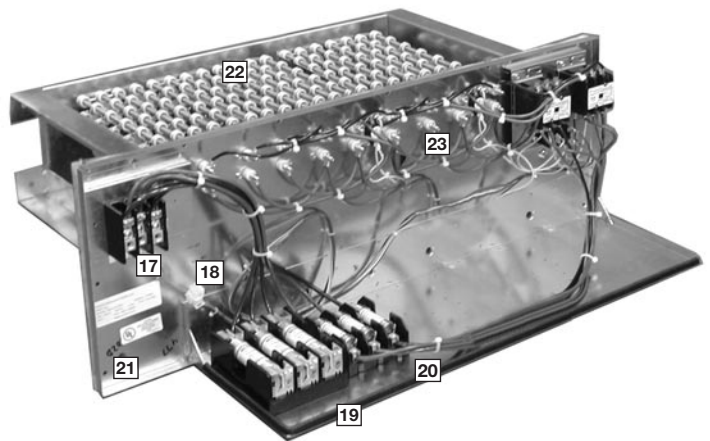
Also inside the blower compartment are the optional low-ambient controls ([15]). The optional low-ambient controls allow for operation of the compressors down to 0 degrees ambient temperature by cycling the outdoor fans on high pressure.



Inside the blower compartment the interlaced evaporator can also be viewed. The evaporator uses enhanced fin technology for maximum heat transfer. The TXV metering device assures even distribution of refrigerant throughout the evaporator.

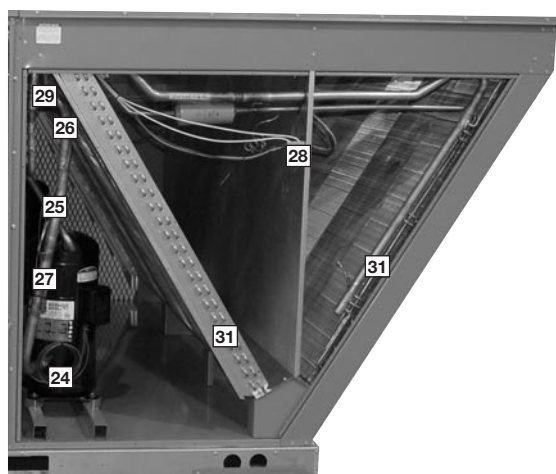
Wiring throughout the unit is neatly bundled and routed. Where wire harnesses go through the condenser bulkhead or blower deck, a molded wire harness assembly ([16]) provides an air-tight and water-tight seal, and provides strain relief. Care is also taken to tuck raw edges of insulation behind sheet 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 up for slide-in, plug-and-play installation in the field. With choices of up to four 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 ([17]) and a polarized plug for the low-voltage connection ([18]). The electric furnace comes with fuses for the unit ([19]) and for the electric furnace ([20]), and is UL certified ([21]). The electric heating elements are of a wound-wire construction ([22]) and isolated with ceramic bushings. The limit switch ([23]) protects the design from over-temperature conditions.

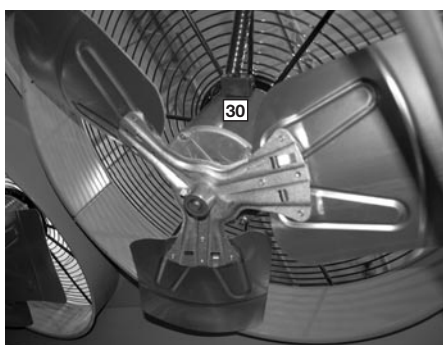
The compressor compartment houses the heartbeat of the unit. The scroll compressor ([24]) is known for its long life, and for reliable, quiet, and efficient operation. The suction and discharge lines are designed with shock loops ([25]) to absorb the strain and stress that the starting torque, steady state operation, and shut down cycle impose on the refrigerant tubing. Each compressor and circuit is independent for built-in redundancy, and each circuit is clearly marked throughout the system. Each unit has two stages of efficient cooling operation, first stage is approximately 50% of second stage.



In the outdoor section are the external gauge ports (26). With the gauge ports mounted externally, an accurate diagnosis of system operation can be performed quickly and easily. Also located in this area are the refrigerant safety devices: the low-pressure switches (27), high-pressure switches (28) and the optional freeze-stats (29). The high-pressure switches will shut off the compressors if pressures exceeding 610 psig are detected as may occur if the outdoor fan motor fails. The low pressure switches shut off the compressors if low pressure is detected due to loss of refrigerant charge. The optional freeze-stats protect the compressors if the evaporator gets too cold (below freezing) due to low airflow. The factory-installed high and low pressure switches are brazed into the appropriate high or low side and wired appropriately. The optional freezestats clip on the suction lines above the compressors and connect to the low voltage circuit with the use of polarized plugs and a removable jumper for easy field or factory installation.

The condenser fan motor (30) can easily be accessed and maintained by removing the protective fan grille. 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 enhanced fin design (31) for the most effective method of heat transfer. The outdoor coil is slanted to protect the unit from Mother Nature.



Each unit is designed for both downflow or horizontal applications (32) for job configuration flexibility. The return air compartment can also contain an economizer (33).



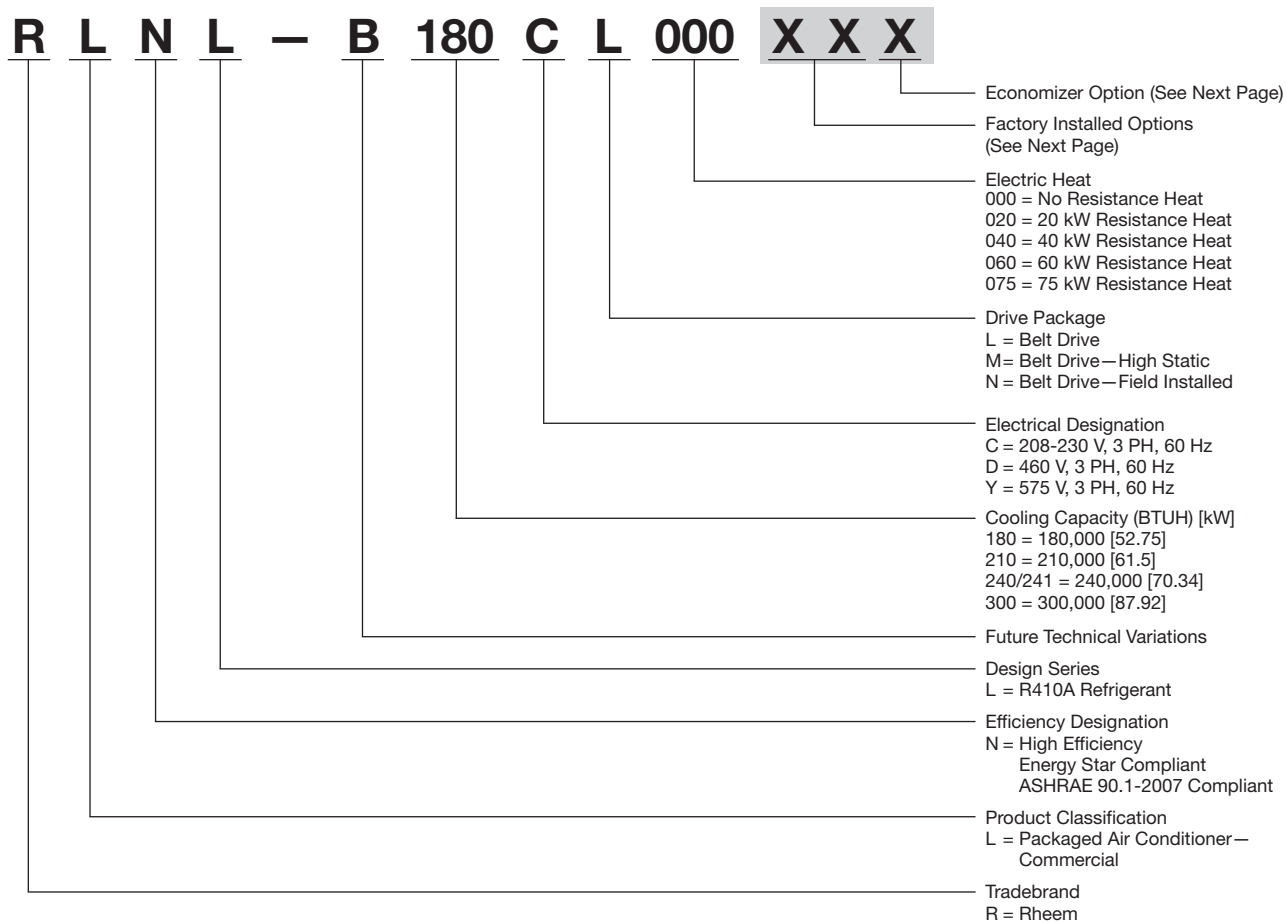
Two models exits, one for downflow applications, and one for horizontal applications. Each unit is pre-wired for the economizer to allow quick plug-in installation. The downflow economizer is also available as a factory-installed option. Power Exhaust is easily field-installed. The economizer, which 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. (33) The power exhaust is housed in the barometric relief opening and is easily slipped in with a plug-in assembly.



The Rheem roofcurb (34) is made for toolless assembly at the jobsite by inserting a pin into the hinged corners (35), which makes the assembly process quick and easy.

35





[] Designates Metric Conversions

FACTORY INSTALLED OPTION CODES FOR RLNL- (15-20 TON) [52.8-70.3 kW] (B180, B210, B240, B241)

Option Code	Hail Guard	Non-Powered Convenience Outlet	Low Ambient/ Freeze Stat
AA	NO OPTIONS		
AD	X		
AG		X	
AP			X
BY	X		X
BJ	X	X	
JC		X	X
CX	X	X	X

Example: RLNL-B180CL000XXX (where **XX** is factory installed option)

Example: No Options

RLNL-B180CL000

Example: No Options with factory installed economizer

RLNL-B180CL000AAE

Example: Options with low ambient/freezestat and no factory installed economizer

RLNL-B180CL000APA

Example: Options same as above with factory installed economizer

RLNL-B180CL000APG

ECONOMIZER SELECTION FOR RLNL- (B180, B210, B240, B241, B300)

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.

*Downflow economizer only.

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.

[] Designates Metric Conversions



To select an RLNL-B 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:

Voltage —	240 V – 3 Phase – 60 Hz
Total Cooling Capacity —	205,000 BTUH [60.0 kW]
Sensible Cooling Capacity —	155,000 BTUH [45.4 kW]
Heating Capacity —	235,000 BTUH [68.8 kW]
*Condenser Entering Air —	95°F [35.0 °C] DB
*Evaporator Mixed Air Entering —	65°F [18.3 °C] WB 78°F [25.6 °C] DB
*Indoor Air Flow (vertical) —	7200 CFM [3398 L/s]
*External Static Pressure —	0.70 in. WG [.17 kPa]

2. SELECT UNIT TO MEET COOLING REQUIREMENTS.

Since total cooling is within the range of a nominal 20 ton [70.3 kW] unit, enter cooling performance table at 95°F [35.0 °C] DB condenser inlet air. Interpolate between 63°F [17.2 °C] WB and 67°F [19.4 °C] WB to determine total and sensible capacity and power input for 65°F [18.3 °C] WB evaporator inlet air at 7725 CFM [3645 L/s] indoor air flow (table basis):

Total Cooling Capacity = 238,250 BTUH [69.76 kW]
Sensible Cooling Capacity = 192,550 BTUH [56.38 kW]
Power Input (Compressor and Cond. Fans) = 18,200 watts

Use formula in note ① to determine sensible capacity at 78°F [25.6 °C] DB evaporator entering air:

$$192,550 + (1.10 \times 7,200 \times (1 - 0.11) \times (78 - 80))$$

$$\text{Sensible Cooling Capacity} = 178,452 \text{ BTUH [52.25 kW]}$$

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

Select factors from airflow correction table at 7200 CFM [3398 L/s] and apply to data obtained in step 2 to obtain gross capacity:

$$\begin{aligned}\text{Total Capacity} &= 238,250 \times 0.99 = 235,868 \text{ BTUH [69.06 kW]} \\ \text{Sensible Capacity} &= 178,452 \times 0.96 = 171,314 \text{ BTUH [50.16 kW]} \\ \text{Power Input} &= 18,200 \times 0.99 = 18,018 \text{ Watts}\end{aligned}$$

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 7200 CFM [3398 L/s]. Total ESP (external static pressure) per the spec of 0.70 in. WG [.17 kPa] includes the system duct and grilles. Add from the table “Component Air Resistance”, 0.01 in. WG [.00 kPa] for wet coil, 0.08 in. WG [.02 kPa] for downflow air flow, for a total selection static pressure of 0.79 (0.8) in. WG [.20 kPa], and determine:

$$\text{RPM} = 739$$

$$\text{WATTS} = 2,862$$

$$\text{DRIVE} = \text{L (standard 5 H.P. motor)}$$

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

$$2,862 \times 3.412 = 9,765 \text{ BTUH [2.86 kW]}$$

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

$$\begin{aligned}\text{Net Total Capacity} &= 235,868 - 9,765 = \\ &226,103 \text{ BTUH [66.21 kW]}\end{aligned}$$

$$\begin{aligned}\text{Net Sensible Capacity} &= 171,314 - 9,765 = \\ &161,549 \text{ BTUH [47.30 kW]}\end{aligned}$$

7. CALCULATE UNIT INPUT AND JOB EER.

$$\begin{aligned}\text{Total Power Input} &= 18,018 \text{ (step 3)} + 2,862 \\ &\text{(step 4)} = 20,880 \text{ Watts}\end{aligned}$$

$$\text{EER} = \frac{\text{Net Total BTUH [kW] (step 6)}}{\text{Power Input, Watts (above)}} = \frac{226,103}{20,880} = 10.83$$

8. SELECT UNIT HEATING CAPACITY.

From Heater Kit Table select kW to meet heating capacity requirement; multiply kW x 3412 to convert to BTUH

Use 75 kW Heater Kit

Heater Kit Model: RXJJ-CE75C

Heater Kit Capacity: 245,323 BTUH [71.8 kW]

Add indoor blower heat effect (step 5) to Heater Kit Capacity to get total heating capacity:

$$245,323 + 9,765 = 255,088 \text{ BTUH [74.7 kW]}$$

9. CHOOSE MODEL RLNL-B240CL075

*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



NOM. SIZES 15-20 TONS [52.8-70.3 kW]

Model RLNL- Series	B180CL	B180CM	B180DL	B180DM
Cooling Performance¹				CONTINUED →
Gross Cooling Capacity Btu [kW]	188,000 [53.47]	188,000 [53.47]	188,000 [53.47]	188,000 [53.47]
EER/SEER ²	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	6000/5900 [2831/2784]	6000/5900 [2831/2784]	6000/5900 [2831/2784]	6000/5900 [2831/2784]
AHRI Net Cooling Capacity Btu [kW]	172,000 [48.92]	172,000 [48.92]	172,000 [48.92]	172,000 [48.92]
Net Sensible Capacity Btu [kW]	125,700 [35.75]	125,700 [35.75]	125,700 [35.75]	125,700 [35.75]
Net Latent Capacity Btu [kW]	46,300 [13.17]	46,300 [13.17]	46,300 [13.17]	46,300 [13.17]
IEER ³	12.4	12.4	12.4	12.4
Net System Power kW	15.64	15.64	15.64	15.64
Compressor				
No./Type	2/Scroll	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)⁴	91	91	91	91
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	53.3 [4.95]	53.3 [4.95]	53.3 [4.95]	53.3 [4.95]
Rows / FPI [FPcm]	1 / 22 [9]	1 / 22 [9]	1 / 22 [9]	1 / 22 [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]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]
Rows / FPI [FPcm]	2 / 18 [7]	2 / 18 [7]	2 / 18 [7]	2 / 18 [7]
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]	4/24 [609.6]	4/24 [609.6]	4/24 [609.6]	4/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	16000 [7550]	16000 [7550]	16000 [7550]	16000 [7550]
No. Motors/HP	4 at 1/3 HP	4 at 1/3 HP	4 at 1/3 HP	4 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]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]
Drive Type/No. Speeds	Belt/Variable	Belt/Variable	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	3	5	3	5
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	184	56	184
Filter—Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(No.) Size Recommended in. [mm]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]
Refrigerant Charge Oz. (Sys. 1/Sys. 2) [g]	205/211 [5812/5982]	205/211 [5812/5982]	205/211 [5812/5982]	205/211 [5812/5982]
Weights				
Net Weight lbs. [kg]	1826 [828]	1855 [841]	1958 [888]	1987 [901]
Ship Weight lbs. [kg]	1926 [874]	1955 [887]	2058 [934]	2087 [947]

See Page 20 for Notes.

[] Designates Metric Conversions

NOM. SIZES 15-20 TONS [52.8-70.3 kW]

Model RLNL- Series	B180YL	B180YM	B210CL	B210CM
Cooling Performance¹				CONTINUED 
Gross Cooling Capacity Btu [kW]	188,000 [53.47]	188,000 [53.47]	212,000 [60.30]	212,000 [60.30]
EER/SEER ²	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	6000/5900 [2831/2784]	6000/5900 [2831/2784]	7000/6900 [3303/3256]	7000/6900 [3303/3256]
AHRI Net Cooling Capacity Btu [kW]	172,000 [48.92]	172,000 [48.92]	200,000 [56.88]	200,000 [56.88]
Net Sensible Capacity Btu [kW]	125,700 [35.75]	125,700 [35.75]	150,900 [42.91]	150,900 [42.91]
Net Latent Capacity Btu [kW]	46,300 [13.17]	46,300 [13.17]	49,100 [13.96]	49,100 [13.96]
IEER ³	12.4	12.4	12.4	12.4
Net System Power kW	15.64	15.64	18.18	18.18
Compressor				
No./Type	2/Scroll	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)⁴	91	91	91	91
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	53.3 [4.95]	53.3 [4.95]	53.3 [4.95]	53.3 [4.95]
Rows / FPI [FPCm]	1 / 22 [9]	1 / 22 [9]	2 / 18 [7]	2 / 18 [7]
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]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]
Rows / FPI [FPCm]	2 / 18 [7]	2 / 18 [7]	2 / 18 [7]	2 / 18 [7]
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]	4/24 [609.6]	4/24 [609.6]	4/24 [609.6]	4/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	16000 [7550]	16000 [7550]	14800 [6984]	14800 [6984]
No. Motors/HP	4 at 1/3 HP	4 at 1/3 HP	4 at 1/3 HP	4 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]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]
Drive Type/No. Speeds	Belt/Variable	Belt/Variable	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	3	5	3	5
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	184	56	184
Filter—Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(No.) Size Recommended in. [mm]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]
Refrigerant Charge Oz. (Sys. 1/Sys. 2) [g]	205/211 [5812/5982]	205/211 [5812/5982]	294/302 [8335/8562]	294/302 [8335/8562]
Weights				
Net Weight lbs. [kg]	1826 [828]	1855 [841]	2013 [913]	2042 [926]
Ship Weight lbs. [kg]	1926 [874]	1955 [887]	2140 [971]	2169 [984]

See Page 20 for Notes.

[] Designates Metric Conversions

NOM. SIZES 15-20 TONS [52.8-70.3 kW]

Model RLNL- Series	B210DL	B210DM	B210YL	B210YM
Cooling Performance¹				CONTINUED 
Gross Cooling Capacity Btu [kW]	212,000 [60.30]	212,000 [60.30]	212,000 [60.30]	212,000 [60.30]
EER/SEER ²	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	7000/6900 [3303/3256]	7000/6900 [3303/3256]	7000/6900 [3303/3256]	7000/6900 [3303/3256]
AHRI Net Cooling Capacity Btu [kW]	200,000 [56.88]	200,000 [56.88]	200,000 [56.88]	200,000 [56.88]
Net Sensible Capacity Btu [kW]	150,900 [42.91]	150,900 [42.91]	150,900 [42.91]	150,900 [42.91]
Net Latent Capacity Btu [kW]	49,100 [13.96]	49,100 [13.96]	49,100 [13.96]	49,100 [13.96]
IEER ³	12.4	12.4	12.4	12.4
Net System Power kW	18.18	18.18	18.18	18.18
Compressor				
No./Type	2/Scroll	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)⁴	91	91	91	91
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	53.3 [4.95]	53.3 [4.95]	53.3 [4.95]	53.3 [4.95]
Rows / FPI [FPcm]	2 / 18 [7]	2 / 18 [7]	2 / 18 [7]	2 / 18 [7]
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]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]
Rows / FPI [FPcm]	2 / 18 [7]	2 / 18 [7]	2 / 18 [7]	2 / 18 [7]
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]	4/24 [609.6]	4/24 [609.6]	4/24 [609.6]	4/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	14800 [6984]	14800 [6984]	1800 [849]	14800 [6984]
No. Motors/HP	4 at 1/3 HP	4 at 1/3 HP	4 at 1/3 HP	4 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]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]
Drive Type/No. Speeds	Belt/Variable	Belt/Variable	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	3	5	3	5
Motor RPM	1725	1725	1725	1725
Motor Frame Size	56	184	56	184
Filter—Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(No.) Size Recommended in. [mm]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]
Refrigerant Charge Oz. (Sys. 1/Sys. 2) [g]	296/302 [8392/8562]	294/302 [8335/8562]	294/302 [8335/8562]	294/302 [8335/8562]
Weights				
Net Weight lbs. [kg]	2013 [913]	2042 [926]	2013 [913]	2042 [926]
Ship Weight lbs. [kg]	2140 [971]	2169 [984]	2140 [971]	2169 [984]

See Page 20 for Notes.

[] Designates Metric Conversions

NOM. SIZES 15-20 TONS [52.8-70.3 kW]

Model RLNL- Series	B240CL	B240CM	B240CN	B240DL
Cooling Performance¹	CONTINUED →			
Gross Cooling Capacity Btu [kW]	244,000 [69.40]	244,000 [69.40]	244,000 [69.40]	244,000 [69.40]
EER/SEER ²	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	8000/7725 [3775/3645]	8000/7725 [3775/3645]	8000/7725 [3775/3645]	8000/7725 [3775/3645]
AHRI Net Cooling Capacity Btu [kW]	228,000 [64.85]	228,000 [64.85]	228,000 [64.85]	228,000 [64.85]
Net Sensible Capacity Btu [kW]	165,600 [47.10]	165,600 [47.10]	165,600 [47.10]	165,600 [47.10]
Net Latent Capacity Btu [kW]	62,400 [17.75]	62,400 [17.75]	62,400 [17.75]	62,400 [17.75]
IEER ³	12.4	12.4	12.4	12.4
Net System Power kW	20.72	20.72	20.72	20.72
Compressor				
No./Type	2/Scroll	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)⁴	91	91	91	91
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	53.3 [4.95]	53.3 [4.95]	53.3 [4.95]	53.3 [4.95]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]	2 / 22 [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]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]
Rows / FPI [FPcm]	3 / 13 [5]	3 / 13 [5]	3 / 13 [5]	3 / 13 [5]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan—Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	6/24 [609.6]	6/24 [609.6]	6/24 [609.6]	6/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	19800 [9344]	19800 [9344]	19800 [9344]	19800 [9344]
No. Motors/HP	6 at 1/3 HP	6 at 1/3 HP	6 at 1/3 HP	6 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]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]
Drive Type/No. Speeds	Belt/Variable	Belt/Variable	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	5	7 1/2	7 1/2	5
Motor RPM	1725	1725	1725	1725
Motor Frame Size	184	213	213	184
Filter—Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(No.) Size Recommended in. [mm]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]
Refrigerant Charge Oz. (Sys. 1/Sys. 2) [g]	402/331 [11397/9384]	402/331 [11397/9384]	402/331 [11397/9384]	402/331 [11397/9384]
Weights				
Net Weight lbs. [kg]	2151 [976]	2189 [993]	2187 [992]	2289 [1038]
Ship Weight lbs. [kg]	2251 [1021]	2289 [1038]	2287 [1037]	2389 [1084]

See Page 20 for Notes.

[] Designates Metric Conversions

NOM. SIZES 15-20 TONS [52.8-70.3 kW]

Model RLNL- Series	B240DM	B240DN	B240YL	B240YM
Cooling Performance¹				CONTINUED →
Gross Cooling Capacity Btu [kW]	244,000 [69.40]	244,000 [69.40]	244,000 [69.40]	244,000 [69.40]
EER/SEER ²	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	8000/7725 [3775/3645]	8000/7725 [3775/3645]	8000/7725 [3775/3645]	8000/7725 [3775/3645]
AHRI Net Cooling Capacity Btu [kW]	228,000 [64.85]	228,000 [64.85]	228,000 [64.85]	228,000 [64.85]
Net Sensible Capacity Btu [kW]	165,600 [47.10]	165,600 [47.10]	165,600 [47.10]	165,600 [47.10]
Net Latent Capacity Btu [kW]	62,400 [17.75]	62,400 [17.75]	62,400 [17.75]	62,400 [17.75]
IEER ³	12.4	12.4	12.4	12.4
Net System Power kW	20.72	20.72	20.72	20.72
Compressor				
No./Type	2/Scroll	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)⁴	91	91	91	91
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	53.3 [4.95]	53.3 [4.95]	53.3 [4.95]	53.3 [4.95]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]	2 / 22 [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]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]
Rows / FPI [FPcm]	3 / 13 [5]	3 / 13 [5]	3 / 13 [5]	3 / 13 [5]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan—Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	6/24 [609.6]	6/24 [609.6]	6/24 [609.6]	6/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	19800 [9344]	19800 [9344]	19800 [9344]	19800 [9344]
No. Motors/HP	6 at 1/3 HP	6 at 1/3 HP	6 at 1/3 HP	6 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]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]
Drive Type/No. Speeds	Belt/Variable	Belt/Variable	Belt/Variable	Belt/Variable
No. Motors	1	1	1	1
Motor HP	7 1/2	7 1/2	5	7 1/2
Motor RPM	1725	1725	1725	1725
Motor Frame Size	184	184	184	213
Filter—Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(No.) Size Recommended in. [mm]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]
Refrigerant Charge Oz. (Sys. 1/Sys. 2) [g]	402/331 [11397/9384]	402/331 [11397/9384]	402/331 [11397/9384]	402/331 [11397/9384]
Weights				
Net Weight lbs. [kg]	2327 [1056]	2325 [1055]	2151 [976]	2189 [993]
Ship Weight lbs. [kg]	2427 [1101]	2425 [1100]	2251 [1021]	2289 [1038]

See Page 20 for Notes.

[] Designates Metric Conversions

NOM. SIZES 15-20 TONS [52.8-70.3 kW]

Model RLNL- Series	B240YN	B241CL	B241CM
Cooling Performance¹			CONTINUED →
Gross Cooling Capacity Btu [kW]	244,000 [69.40]	240,000 [68.26]	240,000 [68.26]
EER/SEER ²	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	8000/7725 [3775/3645]	8000/7375 [3775/3480]	8000/7375 [3775/3480]
AHRI Net Cooling Capacity Btu [kW]	228,000 [64.85]	228,000 [64.85]	228,000 [64.85]
Net Sensible Capacity Btu [kW]	165,600 [47.10]	167,000 [47.50]	167,000 [47.50]
Net Latent Capacity Btu [kW]	62,400 [17.75]	63,000 [17.92]	63,000 [17.92]
IEER ³ (Standard / VFD)	12.4	12.4	12.4
Net System Power [kW]	20.72	20.73	20.73
Compressor			
No./Type	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)⁴	91	91	91
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered
Tube Type	Rifled	MicroChannel	MicroChannel
Tube Size in. [mm] OD	0.375 [9.5]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	53.3 [4.95]	50.8 [4.72]	50.8 [4.72]
Rows / FPI [FPcm]	2 / 22 [9]	1 / 23 [9]	1 / 23 [9]
Indoor Coil—Fin Type	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]
Rows / FPI [FPcm]	3 / 13 [5]	4 / 15 [6]	4 / 15 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan—Type	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	6/24 [609.6]	6/24 [609.6]	6/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1
CFM [L/s]	19800 [9344]	19800 [9344]	19800 [9344]
No. Motors/HP	6 at 1/3 HP	6 at 1/3 HP	6 at 1/3 HP
Motor RPM	1075	1075	1075
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]
Drive Type/No. Speeds	Belt/Variable	Belt (Adjustable)/Single/Multiple	Belt (Adjustable)/Single/Multiple
No. Motors	1	1	1
Motor HP	7 1/2	5	7 1/2
Motor RPM	1725	1725	1725
Motor Frame Size	213	184	213
Filter—Type	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]
Refrigerant Charge Oz. [g] (Sys. 1/Sys. 2) [g]	402/331 [11397/9384]	271/227 [7683/6435]	271/227 [7683/6435]
Weights			
Net Weight lbs. [kg]	2187 [992]	2151 [976]	2189 [993]
Ship Weight lbs. [kg]	2287 [1037]	2251 [1021]	2289 [1038]

See Page 20 for Notes.

[] Designates Metric Conversions

NOM. SIZES 15-20 TONS [52.8-70.3 kW]

Model RLRL- Series	B241DL	B241DM	B241YL	B241YM
Cooling Performance¹				CONTINUED →
Gross Cooling Capacity Btu [kW]	240,000 [68.26]	240,000 [68.26]	240,000 [68.26]	240,000 [68.26]
EER/SEER ²	11/NA	11/NA	11/NA	11/NA
Nominal CFM/AHRI Rated CFM [L/s]	8000/7375 [3775/3480]	8000/7375 [3775/3480]	8000/7375 [3775/3480]	8000/7375 [3775/3480]
AHRI Net Cooling Capacity Btu [kW]	228,000 [64.85]	228,000 [64.85]	228,000 [64.85]	228,000 [64.85]
Net Sensible Capacity Btu [kW]	167,000 [47.50]	167,000 [47.50]	167,000 [47.50]	167,000 [47.50]
Net Latent Capacity Btu [kW]	63,000 [17.92]	63,000 [17.92]	63,000 [17.92]	63,000 [17.92]
IEER ³ (Standard / VFD)	12.4	12.4	12.4	12.4
Net System Power [kW]	20.73	20.73	20.73	20.73
Compressor				
No./Type	2/Scroll	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)⁴	91	91	91	91
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
Tube Size in. [mm] OD	1 [25.4]	1 [25.4]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	50.8 [4.72]	50.8 [4.72]	50.8 [4.72]	50.8 [4.72]
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]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]
Rows / FPI [FPcm]	4 / 15 [6]	14 / 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]	6/24 [609.6]	6/24 [609.6]	6/24 [609.6]	6/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	19800 [9344]	19800 [9344]	19800 [9344]	19800 [9344]
No. Motors/HP	6 at 1/3 HP	6 at 1/3 HP	6 at 1/3 HP	6 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]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]
Drive Type	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Speeds (Standard / VFD)	Single / Multiple	Single / Multiple	Single	Single
No. Motors	1	1	1	1
Motor HP	5	7 1/2	5	7 1/2
Motor RPM	1725	1725	1725	1725
Motor Frame Size	184	184	184	213
Filter—Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]
Refrigerant Charge Oz. [g] (Sys. 1/Sys. 2) [g]	271/227 [7683/6435]	271/227 [7683/6435]	271/227 [7683/6435]	271/227 [7683/6435]
Weights				
Net Weight lbs. [kg]	2289 [1038]	2327 [1056]	2151 [976]	2189 [993]
Ship Weight lbs. [kg]	2389 [1084]	2427 [1101]	2251 [1021]	2289 [1038]

See Page 20 for Notes.

[] Designates Metric Conversions

NOM. SIZES 15-25 TONS [52.8-87.9 kW]

Model RLRL- Series	B300CL	B300CM	B300DL
Cooling Performance¹			
Gross Cooling Capacity Btu [kW]	312,000 [91.42]	312,000 [91.42]	312,000 [91.42]
EER/SEER ²	10/NA	10/NA	10/NA
Nominal CFM/AHRI Rated CFM [L/s]	10000/9700 [4719/4577]	10000/9700 [4719/4577]	10000/9700 [4719/4577]
AHRI Net Cooling Capacity Btu [kW]	290,000 [84.99]	290,000 [84.99]	290,000 [84.99]
Net Sensible Capacity Btu [kW]	208,900 [61.22]	208,900 [61.22]	208,900 [61.22]
Net Latent Capacity Btu [kW]	81,100 [23.76]	81,100 [23.76]	81,100 [23.76]
IEER ³	11.6	11.6	11.6
Net System Power kW	29.00	29.00	29.00
Compressor			
No./Type	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)⁴			
	92	92	92
Outdoor Coil—Fin Type			
Tube Type	Louvered	Louvered	Louvered
Tube Size in. [mm] OD	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	53.3 [4.95]	53.3 [4.95]	53.3 [4.95]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Indoor Coil—Fin Type			
Tube Type	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]
Rows / FPI [FPcm]	4 / 15 [6]	4 / 15 [6]	4 / 15 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan—Type			
Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	6/24 [609.6]	6/24 [609.6]	6/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1
CFM [L/s]	19800 [9344]	19800 [9344]	19800 [9344]
No. Motors/HP	6 at 1/3 HP	6 at 1/3 HP	6 at 1/3 HP
Motor RPM	1075	1075	1075
Indoor Fan—Type			
FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]
Drive Type/No. Speeds	Belt/Variable	Belt/Variable	Belt/Variable
No. Motors	1	1	1
Motor HP	7 1/2	10	7 1/2
Motor RPM	1725	1725	1725
Motor Frame Size	213	215	213
Filter—Type			
Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes
(No.) Size Recommended in. [mm]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]
Refrigerant Charge Oz. (Sys. 1/Sys. 2) [g]			
	339/357 [9611/10121]	339/357 [9611/10121]	339/357 [9611/10121]
Weights			
Net Weight lbs. [kg]	2250 [1021]	2261 [1026]	2388 [1083]
Ship Weight lbs. [kg]	2350 [1066]	2361 [1071]	2488 [1129]

CONTINUED →

See Page 20 for Notes.

[] Designates Metric Conversions

NOM. SIZES 15-25 TONS [52.8-87.9 kW]

Model RLNL- Series	B300DM	B300YL	B300YM
Cooling Performance¹			
Gross Cooling Capacity Btu [kW]	312,000 [91.42]	312,000 [91.42]	312,000 [91.42]
EER/SEER ²	10/NA	10/NA	10/NA
Nominal CFM/AHRI Rated CFM [L/s]	10000/9700 [4719/4577]	10000/9700 [4719/4577]	10000/9700 [4719/4577]
AHRI Net Cooling Capacity Btu [kW]	290,000 [84.99]	290,000 [84.99]	290,000 [84.99]
Net Sensible Capacity Btu [kW]	208,900 [61.22]	208,900 [61.22]	208,900 [61.22]
Net Latent Capacity Btu [kW]	81,100 [23.76]	81,100 [23.76]	81,100 [23.76]
IEER ³	11.6	11.6	11.6
Net System Power kW	29.00	29.00	29.00
Compressor			
No./Type	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)⁴			
	92	92	92
Outdoor Coil—Fin Type			
Tube Type	Louvered	Louvered	Louvered
Tube Size in. [mm] OD	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	53.3 [4.95]	53.3 [4.95]	53.3 [4.95]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Indoor Coil—Fin Type			
Tube Type	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled
Tube Size in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	26.67 [2.48]	26.67 [2.48]	26.67 [2.48]
Rows / FPI [FPcm]	4 / 15 [6]	4 / 15 [6]	4 / 15 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/1 [25.4]	1/1 [25.4]	1/1 [25.4]
Outdoor Fan—Type			
	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	6/24 [609.6]	6/24 [609.6]	6/24 [609.6]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1
CFM [L/s]	19800 [9344]	19800 [9344]	19800 [9344]
No. Motors/HP	6 at 1/3 HP	6 at 1/3 HP	6 at 1/3 HP
Motor RPM	1075	1075	1075
Indoor Fan—Type			
	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	2/18x9 [457x229]	2/18x9 [457x229]	2/18x9 [457x229]
Drive Type/No. Speeds	Belt/Variable	Belt/Variable	Belt/Variable
No. Motors	1	1	1
Motor HP	10	7 1/2	10
Motor RPM	1725	1725	1725
Motor Frame Size	215	213	215
Filter—Type			
	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes
(No.) Size Recommended in. [mm]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]	(8)2x25x20 [51x635x508]
Refrigerant Charge Oz. (Sys. 1/Sys. 2) [g]			
	339/357 [9611/10121]	339/357 [9611/10121]	339/357 [9611/10121]
Weights			
Net Weight lbs. [kg]	2399 [1088]	2250 [1021]	2261 [1026]
Ship Weight lbs. [kg]	2499 [1134]	2350 [1066]	2361 [1071]

See Page 20 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 is rated at AHRI conditions and in accordance with DOE test procedures.
3. Integrated Energy Efficient Ratio (IEER) is rated with AHRI Standard 340/360.
4. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.



GROSS SYSTEMS PERFORMANCE DATA—B180

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
CFM [L/s]			7200 [3398]	5900 [2784]	4800 [2265]	7200 [3398]	5900 [2784]	4800 [2265]	7200 [3398]	5900 [2784]	4800 [2265]
DR ①			.04	.08	.13	.04	.08	.13	.04	.08	.13
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	226.5 [66.4]	217.8 [63.8]	210.4 [61.7]	214.3 [62.8]	206.0 [60.4]	199.0 [58.3]	206.3 [60.5]	198.4 [58.1]	191.7 [56.2]
		Sens BTUH [kW]	148.8 [43.6]	126.2 [37.0]	108.5 [31.8]	174.1 [51.0]	149.6 [43.9]	130.2 [38.2]	193.4 [56.7]	167.5 [49.1]	146.8 [43.0]
		Power	12.6	12.3	12.1	12.4	12.2	12.0	12.2	12.0	11.8
	80 [26.7]	Total BTUH [kW]	222.2 [65.1]	213.6 [62.6]	206.4 [60.5]	209.9 [61.5]	201.8 [59.1]	195.0 [57.1]	202.0 [59.2]	194.2 [56.9]	187.6 [55.0]
		Sens BTUH [kW]	146.6 [43.0]	124.3 [36.4]	106.9 [31.3]	171.9 [50.4]	147.8 [43.3]	128.7 [37.7]	191.3 [56.1]	165.7 [48.6]	145.3 [42.6]
		Power	13.1	12.9	12.7	13.0	12.7	12.5	12.8	12.6	12.4
	85 [29.4]	Total BTUH [kW]	217.5 [63.7]	209.1 [61.3]	202.0 [59.2]	205.3 [60.2]	197.3 [57.8]	190.7 [55.9]	197.3 [57.8]	189.7 [55.6]	183.3 [53.7]
		Sens BTUH [kW]	144.1 [42.2]	122.3 [35.9]	105.2 [30.8]	169.5 [49.7]	145.7 [42.7]	127.0 [37.2]	188.8 [55.3]	163.6 [48.0]	143.5 [42.1]
		Power	13.8	13.5	13.3	13.6	13.4	13.1	13.5	13.2	13.0
90 [32.2]	Total BTUH [kW]	212.5 [62.3]	204.3 [59.9]	197.4 [57.9]	200.2 [58.7]	192.5 [56.4]	186.0 [54.5]	192.3 [56.4]	184.9 [54.2]	178.6 [52.3]	
	Sens BTUH [kW]	141.4 [41.5]	120.0 [35.2]	103.3 [30.3]	166.7 [48.9]	143.5 [42.1]	125.1 [36.7]	186.2 [54.6]	161.4 [47.3]	141.6 [41.5]	
	Power	14.5	14.2	14.0	14.3	14.0	13.8	14.2	13.9	13.7	
95 [35]	Total BTUH [kW]	207.2 [60.7]	199.2 [58.4]	192.4 [56.4]	194.9 [57.1]	187.4 [54.9]	181.0 [53.0]	187.0 [54.8]	179.8 [52.7]	173.7 [50.9]	
	Sens BTUH [kW]	138.5 [40.6]	117.6 [34.5]	101.2 [29.7]	163.9 [48.0]	141.1 [41.4]	123.0 [36.1]	183.3 [53.7]	159.0 [46.6]	139.6 [40.9]	
	Power	15.2	14.9	14.7	15.1	14.8	14.5	14.9	14.6	14.4	
100 [37.8]	Total BTUH [kW]	201.5 [59.1]	193.7 [56.8]	187.2 [54.9]	189.2 [55.4]	181.9 [53.3]	175.8 [51.5]	181.3 [53.1]	174.3 [51.1]	168.4 [49.4]	
	Sens BTUH [kW]	135.4 [39.7]	115.0 [33.7]	99.1 [29.1]	160.7 [47.1]	138.4 [40.6]	120.8 [35.4]	180.1 [52.8]	156.3 [45.8]	137.3 [40.2]	
	Power	16.0	15.7	15.4	15.9	15.6	15.3	15.7	15.4	15.1	
105 [40.6]	Total BTUH [kW]	195.5 [57.3]	188.0 [55.1]	181.6 [53.2]	183.2 [53.7]	176.2 [51.6]	170.2 [49.9]	175.3 [51.4]	168.5 [49.4]	162.8 [47.7]	
	Sens BTUH [kW]	132.0 [38.7]	112.2 [32.9]	96.6 [28.3]	157.3 [46.1]	135.6 [39.8]	118.3 [34.7]	175.3 [51.4]	153.4 [45.0]	134.8 [39.5]	
	Power	16.9	16.5	16.3	16.7	16.4	16.1	16.5	16.2	16.0	
110 [43.3]	Total BTUH [kW]	189.2 [55.4]	181.9 [53.3]	175.7 [51.5]	176.9 [51.8]	170.1 [49.9]	164.3 [48.2]	169.0 [49.5]	162.5 [47.6]	156.9 [46.0]	
	Sens BTUH [kW]	128.4 [37.6]	109.1 [32.0]	93.9 [27.5]	153.7 [45.1]	132.6 [38.9]	115.8 [33.9]	169.0 [49.5]	150.5 [44.1]	132.3 [38.8]	
	Power	17.8	17.4	17.1	17.6	17.3	17.0	17.5	17.1	16.8	
115 [46.1]	Total BTUH [kW]	182.5 [53.5]	175.5 [51.4]	169.5 [49.7]	170.2 [49.9]	163.7 [48.0]	158.1 [46.3]	162.3 [47.6]	156.0 [45.7]	150.8 [44.2]	
	Sens BTUH [kW]	124.5 [36.5]	105.9 [31.0]	91.2 [26.7]	149.9 [43.9]	129.4 [37.9]	113.0 [33.1]	162.3 [47.6]	147.2 [43.2]	129.6 [38.0]	
	Power	18.7	18.4	18.1	18.6	18.2	17.9	18.4	18.1	17.8	

GROSS SYSTEMS PERFORMANCE DATA—B210

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			
CFM [L/s]		8400 [3964]	7025 [3315]	5600 [2643]	8400 [3964]	7025 [3315]	5600 [2643]	8400 [3964]	7025 [3315]	5600 [2643]	
DR ①		.06	.09	.13	.06	.09	.13	.06	.09	.13	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	258.4 [75.7]	249.5 [73.1]	240.3 [70.4]	244.1 [71.5]	235.7 [69.1]	227.0 [66.5]	231.9 [68.0]	223.9 [65.6]	215.7 [63.2]
		Sens BTUH [kW]	193.9 [56.8]	168.8 [49.5]	144.5 [42.4]	224.6 [65.8]	197.4 [57.9]	170.8 [50.1]	231.9 [68.0]	217.1 [63.6]	189.1 [55.4]
		Power	13.0	12.8	12.5	12.8	12.6	12.4	12.7	12.4	12.2
	80 [26.7]	Total BTUH [kW]	252.7 [74.1]	244.0 [71.5]	235.0 [68.9]	238.4 [69.9]	230.2 [67.5]	221.7 [65.0]	226.2 [66.3]	218.4 [64.0]	210.4 [61.7]
		Sens BTUH [kW]	182.3 [53.4]	158.3 [46.4]	135.2 [39.6]	212.9 [62.4]	186.9 [54.8]	161.5 [47.3]	226.2 [66.3]	206.6 [60.6]	179.8 [52.7]
		Power	13.6	13.4	13.1	13.4	13.2	13.0	13.3	13.0	12.8
	85 [29.4]	Total BTUH [kW]	246.7 [72.3]	238.2 [69.8]	229.4 [67.2]	232.4 [68.1]	224.4 [65.8]	216.1 [63.3]	220.2 [64.5]	212.6 [62.3]	204.8 [60.0]
		Sens BTUH [kW]	171.9 [50.4]	149.0 [43.7]	126.9 [37.2]	202.7 [59.4]	177.7 [52.1]	153.4 [45.0]	220.2 [64.5]	197.4 [57.9]	171.7 [50.3]
		Power	14.2	14.0	13.7	14.1	13.8	13.6	13.9	13.7	13.4
90 [32.2]	Total BTUH [kW]	240.4 [70.5]	232.1 [68.0]	223.5 [65.5]	226.1 [66.3]	218.3 [64.0]	210.3 [61.6]	213.9 [62.7]	206.5 [60.5]	198.9 [58.3]	
	Sens BTUH [kW]	162.9 [47.8]	141.0 [41.3]	119.9 [35.1]	193.6 [56.7]	169.6 [49.7]	146.3 [42.9]	213.9 [62.7]	189.3 [55.5]	164.5 [48.2]	
	Power	14.9	14.7	14.4	14.8	14.5	14.3	14.6	14.4	14.1	
95 [35]	Total BTUH [kW]	233.8 [68.5]	225.7 [66.1]	217.4 [63.7]	219.5 [64.3]	212.0 [62.1]	204.1 [59.8]	207.3 [60.8]	200.2 [58.7]	192.8 [56.5]	
	Sens BTUH [kW]	155.3 [45.5]	134.2 [39.3]	114.0 [33.4]	186.0 [54.5]	162.9 [47.8]	140.3 [41.1]	207.0 [60.7]	182.6 [53.5]	158.6 [46.5]	
	Power	15.7	15.4	15.1	15.5	15.2	15.0	15.3	15.1	14.8	
100 [37.8]	Total BTUH [kW]	226.9 [66.5]	219.1 [64.2]	211.0 [61.8]	212.6 [62.3]	205.3 [60.2]	197.7 [57.9]	200.4 [58.7]	193.5 [56.7]	186.4 [54.6]	
	Sens BTUH [kW]	149.0 [43.7]	128.7 [37.7]	109.2 [32.0]	179.6 [52.6]	157.3 [46.1]	135.5 [39.7]	200.4 [58.7]	177.0 [51.9]	153.8 [45.1]	
	Power	16.5	16.2	15.9	16.3	16.0	15.7	16.1	15.9	15.6	
105 [40.6]	Total BTUH [kW]	219.7 [64.4]	212.1 [62.2]	204.3 [59.9]	205.4 [60.2]	198.3 [58.1]	191.0 [56.0]	193.2 [56.6]	186.5 [54.7]	179.7 [52.7]	
	Sens BTUH [kW]	143.9 [42.2]	124.3 [36.4]	105.5 [30.9]	174.6 [51.2]	152.9 [44.8]	131.8 [38.6]	193.2 [56.6]	172.7 [50.6]	150.2 [44.0]	
	Power	17.3	17.0	16.7	17.1	16.8	16.5	17.0	16.7	16.4	
110 [43.3]	Total BTUH [kW]	212.2 [62.2]	204.9 [60.1]	197.3 [57.8]	197.9 [58.0]	191.1 [56.0]	184.0 [53.9]	185.7 [54.4]	179.3 [52.5]	172.7 [50.6]	
	Sens BTUH [kW]	140.3 [41.1]	121.3 [35.6]	102.9 [30.2]	171.0 [50.1]	149.9 [43.9]	129.3 [37.9]	185.7 [54.4]	169.6 [49.7]	147.6 [43.3]	
	Power	18.2	17.9	17.5	18.0	17.7	17.4	17.9	17.6	17.2	
115 [46.1]	Total BTUH [kW]	204.4 [59.9]	197.3 [57.8]	190.1 [55.7]	190.1 [55.7]	183.5 [53.8]	176.8 [51.8]	177.9 [52.1]	171.8 [50.3]	165.4 [48.5]	
	Sens BTUH [kW]	138.1 [40.5]	119.4 [35.0]	101.6 [29.8]	168.7 [49.5]	148.0 [43.4]	127.9 [37.5]	177.9 [52.1]	167.8 [49.2]	146.1 [42.8]	
	Power	9.1	18.8	18.5	19.0	18.6	18.3	18.8	18.5	18.1	

DR —Depression ratio
dbE —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 (dbE - 80)].

[] Designates Metric Conversions





GROSS SYSTEMS PERFORMANCE DATA—B240

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
CFM [L/s]			9600 [4530]	7725 [3646]	6400 [3020]	9600 [4530]	7725 [3646]	6400 [3020]	9600 [4530]	7725 [3646]	6400 [3020]
DR ①			.06	.11	.15	.06	.11	.15	.06	.11	.15
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	283.5 [83.1]	271.5 [79.6]	263.0 [77.1]	269.6 [79.0]	258.2 [75.7]	250.2 [73.3]	258.7 [75.8]	247.8 [72.6]	240.0 [70.3]
		Sens BTUH [kW]	187.4 [54.9]	156.3 [45.8]	136.0 [39.9]	220.5 [64.6]	186.7 [54.7]	164.4 [48.2]	245.6 [72.0]	209.7 [61.5]	185.7 [54.4]
		Power	15.4	15.1	14.9	15.3	15.0	14.7	15.1	14.8	14.6
	80 [26.7]	Total BTUH [kW]	280.8 [82.3]	269.0 [78.8]	260.6 [76.4]	267.0 [78.2]	255.7 [74.9]	247.7 [72.6]	256.1 [75.1]	245.3 [71.9]	237.6 [69.6]
		Sens BTUH [kW]	186.4 [54.6]	155.6 [45.6]	135.4 [39.7]	219.6 [64.4]	186.0 [54.5]	163.8 [48.0]	244.7 [71.7]	209.0 [61.3]	185.2 [54.3]
		Power	16.2	15.9	15.6	16.0	15.7	15.5	15.9	15.5	15.3
	85 [29.4]	Total BTUH [kW]	277.4 [81.3]	265.7 [77.9]	257.4 [75.4]	263.5 [77.2]	252.4 [74.0]	244.5 [71.7]	252.6 [74.0]	242.0 [70.9]	234.4 [68.7]
		Sens BTUH [kW]	184.9 [54.2]	154.4 [45.3]	134.4 [39.4]	218.1 [63.9]	184.8 [54.2]	162.7 [47.7]	243.1 [71.3]	207.8 [60.9]	184.2 [54.0]
		Power	17.0	16.7	16.4	16.9	16.5	16.3	16.7	16.3	16.1
90 [32.2]	Total BTUH [kW]	273.1 [80.0]	261.6 [76.7]	253.4 [74.3]	259.3 [76.0]	248.3 [72.8]	240.6 [70.5]	248.4 [72.8]	237.9 [69.7]	230.5 [67.6]	
	Sens BTUH [kW]	182.8 [53.6]	152.7 [44.8]	132.9 [39.0]	216.2 [63.4]	183.2 [53.7]	161.5 [47.3]	241.1 [70.7]	206.1 [60.4]	182.8 [53.6]	
	Power	17.9	17.5	17.3	17.7	17.4	17.1	17.6	17.2	16.9	
95 [35]	Total BTUH [kW]	268.1 [78.6]	256.7 [75.2]	248.7 [72.9]	254.2 [74.5]	243.5 [71.4]	235.9 [69.1]	243.3 [71.3]	233.0 [68.3]	225.8 [66.2]	
	Sens BTUH [kW]	180.2 [52.8]	150.5 [44.1]	131.1 [38.4]	213.5 [62.6]	181.1 [53.1]	159.6 [46.8]	238.6 [69.9]	204.0 [59.8]	181.0 [53.1]	
	Power	18.8	18.4	18.2	18.7	18.3	18.0	18.5	18.1	17.8	
100 [37.8]	Total BTUH [kW]	262.2 [76.8]	251.1 [73.6]	243.3 [71.3]	248.3 [72.8]	237.8 [69.7]	230.4 [67.5]	237.4 [69.6]	227.4 [66.6]	220.3 [64.6]	
	Sens BTUH [kW]	177.1 [51.9]	148.0 [43.4]	129.0 [37.8]	210.4 [61.7]	178.5 [52.3]	157.4 [46.1]	235.3 [69.0]	201.4 [59.0]	178.7 [52.4]	
	Power	19.8	19.4	19.1	19.6	19.2	18.9	19.5	19.1	18.8	
105 [40.6]	Total BTUH [kW]	255.5 [74.9]	244.7 [71.7]	237.1 [69.5]	241.6 [70.8]	231.4 [67.8]	224.2 [65.7]	230.7 [67.6]	221.0 [64.8]	214.1 [62.7]	
	Sens BTUH [kW]	173.4 [50.8]	145.0 [42.5]	126.4 [37.1]	206.6 [60.6]	175.4 [51.4]	154.7 [45.3]	230.7 [67.6]	198.4 [58.2]	176.2 [51.6]	
	Power	20.8	20.4	20.1	20.7	20.2	19.9	20.5	20.1	19.8	
110 [43.3]	Total BTUH [kW]	248.0 [72.7]	237.5 [69.6]	230.1 [67.4]	234.1 [68.6]	224.2 [65.7]	217.2 [63.7]	223.2 [65.4]	213.8 [62.7]	207.1 [60.7]	
	Sens BTUH [kW]	169.2 [49.6]	141.5 [41.5]	123.4 [36.2]	202.4 [59.3]	171.9 [50.4]	151.7 [44.5]	223.2 [65.4]	194.9 [57.1]	173.1 [50.7]	
	Power	21.9	21.5	21.1	21.7	21.3	21.0	21.6	21.1	20.8	
115 [46.1]	Total BTUH [kW]	239.6 [70.2]	229.5 [67.3]	222.3 [65.1]	225.8 [66.2]	216.2 [63.4]	209.5 [61.4]	214.9 [63.0]	205.8 [60.3]	199.4 [58.4]	
	Sens BTUH [kW]	164.3 [48.2]	137.5 [40.3]	119.9 [35.1]	197.7 [58.0]	168.0 [49.2]	148.4 [43.5]	214.9 [63.0]	191.0 [56.0]	169.8 [49.8]	
	Power	23.1	22.6	22.2	22.9	22.4	22.1	22.7	22.2	21.9	

DR —Depression ratio
dbE —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 (dbE – 80)].

[] Designates Metric Conversions



GROSS SYSTEMS PERFORMANCE DATA—RLNL-B241

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			
CFM [L/s]		8113 [3829]	7375 [3481]	6269 [2959]	8113 [3829]	7375 [3481]	6269 [2959]	8113 [3829]	7375 [3481]	6269 [2959]	
DR ①		.11	.09	.06	.11	.09	.06	.11	.09	.06	
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW] Sens BTUH [kW] Power	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2
	80 [26.7]	Total BTUH [kW] Sens BTUH [kW] Power	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2
	85 [29.4]	Total BTUH [kW] Sens BTUH [kW] Power	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2
	90 [32.2]	Total BTUH [kW] Sens BTUH [kW] Power	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2
	95 [35]	Total BTUH [kW] Sens BTUH [kW] Power	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2
	100 [37.8]	Total BTUH [kW] Sens BTUH [kW] Power	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2
	105 [40.6]	Total BTUH [kW] Sens BTUH [kW] Power	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2
	110 [43.3]	Total BTUH [kW] Sens BTUH [kW] Power	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2
	115 [46.1]	Total BTUH [kW] Sens BTUH [kW] Power	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2
	120 [48.9]	Total BTUH [kW] Sens BTUH [kW] Power	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2
	125 [51.7]	Total BTUH [kW] Sens BTUH [kW] Power	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2	245.4 [71.9] 186.3 [54.6] 16.5	241.0 [70.6] 178.0 [52.2] 16.4	234.4 [68.7] 165.5 [48.5] 16.2

DR —Depression ratio
dbE —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 $[1.10 \times \text{CFM} \times (1 - \text{DR}) \times (\text{dbE} - 80)]$.

[] Designates Metric Conversions



GROSS SYSTEMS PERFORMANCE DATA—B300

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①											
wbE			71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]		
CFM [L/s]			12000 [5663]	9475 [4472]	8000 [3776]	12000 [5663]	9475 [4472]	8000 [3776]	12000 [5663]	9475 [4472]	8000 [3776]
DR ①			.02	.08	.11	.02	.08	.11	.02	.08	.11
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total BTUH [kW]	376.4 [110.3]	359.0 [105.2]	348.9 [102.3]	358.0 [104.9]	341.5 [100.1]	331.8 [97.2]	347.0 [101.7]	330.9 [97.0]	321.6 [94.3]
		Sens BTUH [kW]	251.6 [73.7]	206.4 [60.5]	182.0 [53.3]	294.2 [86.2]	245.2 [71.9]	218.4 [64.0]	326.2 [95.6]	274.0 [80.3]	245.5 [72.0]
		Power	20.8	20.3	20.0	20.5	20.0	19.7	20.2	19.7	19.5
	80 [26.7]	Total BTUH [kW]	369.9 [108.4]	352.8 [103.4]	342.8 [100.5]	351.5 [103.0]	335.2 [98.2]	325.7 [95.5]	340.4 [99.8]	324.6 [95.1]	315.5 [92.5]
		Sens BTUH [kW]	248.1 [72.7]	203.6 [59.7]	179.5 [52.6]	290.8 [85.2]	242.3 [71.0]	215.9 [63.3]	322.6 [94.6]	271.1 [79.5]	243.0 [71.2]
		Power	21.7	21.2	21.0	21.4	21.0	20.7	21.2	20.7	20.4
	85 [29.4]	Total BTUH [kW]	362.5 [106.2]	345.7 [101.3]	335.9 [98.4]	344.1 [100.8]	328.2 [96.2]	318.9 [93.5]	333.0 [97.6]	317.6 [93.1]	308.6 [90.4]
		Sens BTUH [kW]	244.2 [71.6]	200.4 [58.7]	176.8 [51.8]	286.8 [84.1]	239.2 [70.1]	213.2 [62.5]	318.6 [93.4]	268.0 [78.6]	240.2 [70.4]
		Power	22.8	22.2	21.9	22.5	22.0	21.7	22.2	21.7	21.4
	90 [32.2]	Total BTUH [kW]	354.3 [103.8]	338.0 [99.1]	328.4 [96.2]	335.9 [98.4]	320.4 [93.9]	311.3 [91.2]	324.9 [95.2]	309.8 [90.8]	301.1 [88.2]
Sens BTUH [kW]		239.8 [70.3]	197.0 [57.7]	173.8 [50.9]	282.4 [82.8]	235.7 [69.1]	210.1 [61.6]	314.4 [92.2]	264.5 [77.5]	237.2 [69.5]	
Power		23.9	23.3	23.0	23.6	23.0	22.7	23.3	22.7	22.4	
95 [35]	Total BTUH [kW]	345.4 [101.2]	329.4 [96.5]	320.1 [93.8]	327.0 [95.8]	311.9 [91.4]	303.1 [88.8]	315.9 [92.6]	301.3 [88.3]	292.8 [85.8]	
	Sens BTUH [kW]	235.2 [68.9]	193.2 [56.6]	170.5 [50.0]	277.8 [81.4]	232.0 [68.0]	207.0 [60.7]	309.7 [90.8]	260.8 [76.4]	234.0 [68.6]	
	Power	25.0	24.4	24.1	24.7	24.1	23.8	24.4	23.9	23.5	
100 [37.8]	Total BTUH [kW]	335.7 [98.4]	320.2 [93.8]	311.1 [91.2]	317.3 [93.0]	302.6 [88.7]	294.1 [86.2]	306.2 [89.7]	292.1 [85.6]	283.8 [83.2]	
	Sens BTUH [kW]	230.3 [67.5]	189.3 [55.5]	167.1 [49.0]	272.9 [80.0]	228.0 [66.8]	203.6 [59.7]	304.7 [89.3]	256.9 [75.3]	230.5 [67.6]	
	Power	26.2	25.6	25.3	25.9	25.3	25.0	25.6	25.1	24.7	
105 [40.6]	Total BTUH [kW]	325.2 [95.3]	310.2 [90.9]	301.4 [88.3]	306.8 [89.9]	292.6 [85.8]	284.3 [83.3]	295.7 [86.7]	282.0 [82.6]	274.1 [80.3]	
	Sens BTUH [kW]	224.9 [65.9]	185.0 [54.2]	163.4 [47.9]	267.5 [78.4]	223.7 [65.6]	199.8 [58.6]	295.7 [86.7]	252.5 [74.0]	226.8 [66.5]	
	Power	27.5	26.9	26.5	27.2	26.6	26.2	26.9	26.3	25.9	
110 [43.3]	Total BTUH [kW]	313.9 [92.0]	299.4 [87.7]	290.9 [85.3]	295.5 [86.6]	281.9 [82.6]	273.9 [80.3]	284.4 [83.3]	271.3 [79.5]	263.6 [77.3]	
	Sens BTUH [kW]	219.3 [64.3]	180.5 [52.9]	159.5 [46.8]	261.9 [76.8]	219.3 [64.3]	195.9 [57.4]	284.4 [83.4]	248.1 [72.7]	222.9 [65.3]	
	Power	28.9	28.2	27.8	28.6	27.9	27.5	28.3	27.6	27.2	
115 [46.1]	Total BTUH [kW]	301.8 [88.4]	287.9 [84.4]	279.7 [82.0]	283.4 [83.1]	270.4 [79.2]	262.7 [77.0]	272.4 [79.8]	259.8 [76.1]	252.4 [74.0]	
	Sens BTUH [kW]	213.2 [62.5]	175.7 [51.5]	155.3 [45.5]	255.8 [75.0]	214.5 [62.9]	191.8 [56.2]	272.4 [79.8]	243.3 [71.3]	218.8 [64.1]	
	Power	30.3	29.6	29.2	30.0	29.3	28.9	29.7	29.0	28.6	

DR —Depression ratio
dbE —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 (dbE – 80)].

[] Designates Metric Conversions



AIRFLOW PERFORMANCE — 15 TON [52.8 kW]—SIDEFLOW

Air Flow CFM [L/s]	Model RLNL-B180 Voltage 208/230, 460, 575 — 3 Phase																																						
	External Static Pressure—Inches of Water [kPa]																																						
	0.1 [0.02]	0.2 [0.05]	0.3 [0.07]	0.4 [0.10]	0.5 [0.12]	0.6 [0.15]	0.7 [0.17]	0.8 [0.20]	0.9 [0.22]	1.0 [0.25]	1.1 [0.27]	1.2 [0.30]	1.3 [0.32]	1.4 [0.35]	1.5 [0.37]	1.6 [0.40]	1.7 [0.42]	1.8 [0.45]	1.9 [0.47]	2.0 [0.50]																			
RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W																		
4800 [2265]	—	—	—	—	—	583	1393	608	1508	632	1621	656	1732	679	1841	701	1947	723	2052	744	2154	764	2254	785	2326	805	2430	825	2537	844	2647	863	2761	881	2878				
5000 [2359]	—	—	—	—	—	591	1476	616	1593	640	1707	663	1820	686	1930	708	2038	729	2145	750	2248	771	2350	791	2420	811	2523	836	2640	850	2755	868	2873	897	2995				
5200 [2454]	—	—	—	—	575	1442	600	1562	624	1681	648	1797	671	1911	693	2023	715	2133	736	2241	757	2346	777	2410	797	2520	817	2638	836	2749	855	2869	874	2992	897	3118			
5400 [2548]	—	—	—	—	583	1530	608	1652	632	1772	655	1890	678	2005	701	2119	722	2231	743	2340	764	2447	784	2512	804	2626	823	2744	842	2865	861	2989	879	3177	897	3248			
5600 [2643]	—	—	—	—	592	1621	616	1745	640	1866	663	2103	686	2108	721	2219	729	2331	750	2442	770	2551	791	2620	810	2739	839	2987	867	3176	885	3248	903	3384					
5800 [2737]	—	—	—	576	1588	601	1715	625	1840	649	1964	672	2085	694	2204	716	2321	737	2436	757	2548	778	2614	798	2735	817	2858	836	2985	855	3116	873	3249	891	3386	901	3527		
6000 [2831]	—	—	—	585	1683	610	1813	634	1940	657	2065	680	2187	702	2308	724	2426	744	2543	765	2657	785	2731	805	2856	824	2984	843	3116	861	3251	879	3389	897	3531	914	3676		
6200 [2926]	—	—	—	570	1650	595	1783	619	1913	643	2042	666	2169	688	2293	710	2415	731	2535	752	2653	773	2728	792	2854	812	2984	831	3116	850	3253	868	3392	886	3535	903	3692	920	3832
6400 [3020]	—	—	579	1750	604	1885	628	2017	652	2148	674	2276	697	2402	718	2526	739	2648	760	2767	780	2852	800	3119	818	338	3358	845	3356	875	3541	892	3688	909	3839	926	3994		
6600 [3114]	—	—	589	1854	614	1991	637	2125	661	2257	683	2386	705	2514	727	2640	748	2763	788	2884	788	2984	808	3117	827	3258	848	3400	863	3549	881	3696	899	3847	916	4003	—	—	
6800 [3209]	—	574	1822	599	1961	623	2099	647	2235	670	2369	692	2500	714	2629	735	2756	786	2882	776	2984	796	3121	815	3262	834	3405	853	3552	871	3702	888	3856	905	4013	922	4173	—	—
7000 [3303]	—	584	1930	609	2072	633	2211	656	2349	679	2484	701	2617	723	2748	744	2877	764	3003	795	3124	804	3265	823	3410	842	3559	860	3710	878	3865	895	4024	912	4185	929	4350	—	—
7200 [3398]	570	1897	595	2042	619	2185	643	2327	666	2466	689	2602	711	2737	732	2870	753	3000	773	3127	812	3416	831	3566	849	3719	868	3875	885	4035	918	4198	919	4364	—	—	—	—	

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	BK105H												BK105H											
Motor Sheave	1VL-44												1VP-56											
Turns Open	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
RPM	733	701	669	640	605	572	927	903	873	840	808	775	927	903	873	840	808	775	927	903	873	840	808	775

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



COMPONENT AIR RESISTANCE — 15 TON [52.8 kW]

CFM [L/s]	Resistance — Inches of Water [kPa]													
	4800 [2265]	5000 [2360]	5200 [2454]	5400 [2549]	5600 [2643]	5800 [2737]	6000 [2832]	6200 [2926]	6400 [3020]	6600 [3115]	6800 [3209]	7000 [3304]	7200 [3398]	
Wet Coil	0.03 [0.01]	0.04 [0.01]	0.05 [0.01]	0.06 [0.01]	0.06 [0.01]	0.07 [0.02]	0.08 [0.02]	0.09 [0.02]	0.10 [0.02]	0.10 [0.02]	0.11 [0.03]	0.12 [0.03]	0.13 [0.03]	
Downflow	0.05 [0.01]	0.05 [0.01]	0.05 [0.01]	0.05 [0.01]	0.05 [0.01]	0.05 [0.01]	0.05 [0.01]	0.06 [0.01]	0.06 [0.01]	0.06 [0.01]	0.07 [0.02]	0.08 [0.02]	0.08 [0.02]	
Downflow Economizer R.A. Damper Open	0.09 [0.02]	0.10 [0.02]	0.10 [0.02]	0.11 [0.03]	0.12 [0.03]	0.13 [0.03]	0.13 [0.03]	0.14 [0.03]	0.15 [0.04]	0.16 [0.04]	0.16 [0.04]	0.17 [0.04]	0.18 [0.04]	
Horizontal Economizer R.A. Damper Open	0.00 [0.00]	0.01 [0.00]	0.01 [0.00]	0.02 [0.00]	0.02 [0.00]	0.03 [0.01]	0.03 [0.01]	0.04 [0.01]	0.04 [0.01]	0.05 [0.01]	0.05 [0.01]	0.06 [0.01]	0.06 [0.01]	
Concentric Grill RXRN-AD80 or RXRN-AD81 & Transition RXMC-CJ07	0.21 [0.05]	0.25 [0.06]	0.28 [0.07]	0.32 [0.08]	0.35 [0.09]	0.39 [0.10]	0.43 [0.11]	0.46 [0.11]	0.50 [0.12]	0.54 [0.13]	0.57 [0.14]	0.61 [0.15]	0.64 [0.16]	
Pressure Drop MERV 8	0.068 [.02]	0.072 [.02]	0.076 [.02]	0.08 [.02]	0.084 [.02]	0.088 [.02]	0.092 [.02]	0.096 [.02]	0.1 [.02]	0.104 [.02]	0.108 [.03]	0.112 [.03]	0.116 [.03]	
Pressure Drop MERV 13	0.009 [.00]	0.015 [.00]	0.021 [.00]	0.028 [.01]	0.034 [.01]	0.04 [.01]	0.046 [.01]	0.052 [.01]	0.058 [.01]	0.065 [.02]	0.071 [.02]	0.077 [.02]	0.083 [.02]	

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

AIRFLOW CORRECTION FACTORS — 15 TON [52.8 kW]

ACTUAL—CFM [L/s]	4800 [2265]	5000 [2360]	5200 [2454]	5400 [2549]	5600 [2643]	5800 [2737]	6000 [2832]	6200 [2926]	6400 [3020]	6600 [3115]	6800 [3209]	7000 [3304]	7200 [3398]
TOTAL MBTUH	0.97	0.97	0.98	0.98	0.99	1.00	1.00	1.01	1.02	1.02	1.03	1.03	1.04
SENSIBLE MBTUH	0.87	0.90	0.92	0.94	0.97	0.99	1.02	1.04	1.06	1.09	1.11	1.14	1.16
POWER kW	0.98	0.98	0.99	0.99	0.99	1.00	1.00	1.00	1.01	1.01	1.01	1.02	1.02

NOTES: Multiply correction factor times gross performance data—resulting sensible capacity cannot exceed total capacity.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE — 17.5 TON [61.5 kW]—SIDEFLOW

Air Flow CFM [L/s]	Model RLNL-B210 Voltage 208/230, 460, 575 — 3 Phase																				
	External Static Pressure—Inches of Water [kPa]																				
	0.1 [0.02]	0.2 [0.05]	0.3 [0.07]	0.4 [0.10]	0.5 [0.12]	0.6 [0.15]	0.7 [0.17]	0.8 [0.20]	0.9 [0.22]	1.0 [0.25]	1.1 [0.27]	1.2 [0.30]	1.3 [0.32]	1.4 [0.35]	1.5 [0.37]	1.6 [0.40]	1.7 [0.42]	1.8 [0.45]	1.9 [0.47]	2.0 [0.50]	
RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W
5600 [2643]	—	—	—	—	599 1627	625 1762	651 1900	676 2042	701 2186	725 2334	749 2484	773 2638	796 2795	819 2955	841 3119	863 3285	885 3455	906 3628	927 3803	—	—
5800 [2737]	—	—	—	—	610 1719	635 1856	661 1996	685 2140	710 2286	734 2436	757 2588	780 2744	803 2903	825 3065	847 3230	869 3399	890 3570	911 3745	931 3923	—	—
6000 [2831]	—	—	—	—	621 1822	646 1961	671 2103	695 2248	719 2397	742 2548	765 2703	788 2860	810 3021	832 3185	854 3353	875 3523	896 3696	916 3873	936 4053	—	—
6200 [2926]	—	—	—	—	607 1797	632 1935	657 2076	681 2220	705 2367	728 2517	751 2671	774 2827	796 2987	818 3150	840 3316	861 3485	881 3657	902 3833	921 4011	941 4193	—
6400 [3020]	—	—	—	—	619 1919	644 2058	668 2201	692 2347	715 2496	738 2649	761 2804	783 2962	805 3124	826 3289	847 3457	868 3628	888 3802	908 3980	927 4160	—	—
6600 [3114]	—	—	—	—	607 1912	632 2051	656 2192	679 2337	703 2485	726 2636	748 2790	770 2947	792 3108	813 3272	834 3438	855 3608	875 3781	895 3957	914 4137	933 4319	—
6800 [3209]	—	—	—	—	620 2052	644 2193	668 2336	691 2483	714 2633	737 2786	759 2942	780 3101	802 3264	822 3429	843 3598	863 3770	883 3945	902 4123	921 4304	940 4489	—
7000 [3303]	610 2064	634 2203	657 2345	681 2491	703 2640	726 2791	748 2946	769 3104	791 3266	811 3430	832 3598	852 3768	871 3942	891 4119	910 4299	928 4482	—	—	—	—	
7200 [3398]	624 2223	648 2364	671 2508	693 2656	716 2807	738 2960	759 3117	780 3277	801 3440	822 3607	841 3776	861 3949	880 4124	899 4303	917 4485	936 4670	—	—	—	—	
7400 [3492]	639 2392	662 2536	684 2682	707 2831	728 2984	750 3139	771 3298	792 3460	812 3625	832 3794	851 3965	871 4139	889 4317	908 4498	926 4682	—	—	—	—	—	
7600 [3586]	653 2572	676 2717	698 2866	720 3017	742 3171	763 3329	783 3490	803 3654	823 3821	843 3991	862 4164	881 4341	899 4520	917 4703	934 4889	—	—	—	—	—	
7800 [3681]	669 2762	691 2910	713 3060	734 3213	755 3369	775 3529	796 3692	815 3857	835 4026	854 4199	872 4374	891 4552	909 4734	926 4918	—	—	—	—	—	—	
8000 [3775]	684 2963	706 3112	727 3264	748 3419	769 3578	789 3739	808 3904	828 4072	847 4243	865 4417	883 4594	901 4774	919 4958	936 5144	—	—	—	—	—	—	
8200 [3869]	700 3174	721 3325	742 3479	762 3636	783 3796	802 3960	821 4127	840 4296	859 4469	877 4645	895 4824	912 5007	929 5192	—	—	—	—	—	—	—	
8400 [3964]	716 3395	737 3548	757 3704	777 3863	797 4026	816 4191	835 4359	853 4531	871 4706	889 4884	906 5065	923 5249	940 5437	—	—	—	—	—	—	—	

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	BK100H						BK105H					
Motor Sheave	1VP-44						1VP-56					
Turns Open	1	2	3	4	5	6	1	2	3	4	5	6
RPM	763	731	699	666	633	601	939	909	879	845	814	781

- NOTES: 1. Factory sheave settings are shown in bold type.
2. Do not set motor sheave below minimum turns open shown.
3. Re-adjustment of sheave required to achieve rated airflow at AHRl 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.



Air

Indoor Airflow Performance
RLNL-B Series



INTEGRATED AIR & WATER

COMPONENT AIR RESISTANCE—17.5 TON [61.5 kW]

CFM [L/s]	5600	5800	6000	6200	6400	6600	6800	7000	7200	7400	7600	7800	8000	8200	8400
	[2643]	[2737]	[2831]	[2926]	[3020]	[3114]	[3209]	[3303]	[3398]	[3492]	[3586]	[3681]	[3775]	[3869]	[3964]
	Resistance — Inches of Water [kPa]														
Wet Coil	0.06 [.01]	0.07 [.02]	0.08 [.02]	0.09 [.02]	0.10 [.02]	0.10 [.02]	0.11 [.03]	0.12 [.03]	0.13 [.03]	0.14 [.03]	0.14 [.03]	0.15 [.04]	0.16 [.04]	0.17 [.04]	0.18 [.04]
Downflow	0.05 [.01]	0.05 [.01]	0.05 [.01]	0.06 [.01]	0.06 [.01]	0.06 [.01]	0.07 [.02]	0.08 [.02]	0.08 [.02]	0.09 [.02]	0.10 [.03]	0.11 [.03]	0.12 [.03]	0.13 [.03]	0.14 [.03]
Downflow Economizer R.A. Damper Open	0.12 [.03]	0.13 [.03]	0.13 [.03]	0.14 [.03]	0.15 [.04]	0.16 [.04]	0.16 [.04]	0.17 [.04]	0.18 [.04]	0.19 [.05]	0.20 [.05]	0.21 [.05]	0.22 [.05]	0.23 [.06]	0.24 [.06]
Horizontal Economizer R.A. Damper Open	0.02 [.00]	0.03 [.01]	0.03 [.01]	0.04 [.01]	0.04 [.01]	0.05 [.01]	0.05 [.01]	0.06 [.01]	0.06 [.01]	0.07 [.02]	0.07 [.02]	0.08 [.02]	0.09 [.02]	0.09 [.02]	0.10 [.02]
Concentric Grill RXRN-AD80 or RXRN-AD81 & Transition RXMC-CJ07	0.35 [.09]	0.39 [.10]	0.43 [.11]	0.46 [.11]	0.50 [.11]	0.54 [.13]	0.57 [.14]	0.61 [.15]	0.64 [.16]	0.68 [.17]	0.72 [.18]	0.75 [.19]	0.79 [.20]	0.83 [.21]	0.86 [.21]
Concentric Grill RXRN-AD86 & Transition RXMC-CK08	0.14 [.03]	0.17 [.04]	0.20 [.05]	0.23 [.06]	0.26 [.06]	0.29 [.07]	0.32 [.08]	0.35 [.09]	0.38 [.09]	0.41 [.10]	0.44 [.11]	0.47 [.12]	0.50 [.12]	0.53 [.13]	0.56 [.14]
Pressure Drop MERV 8	0.084 [.02]	0.088 [.02]	0.092 [.02]	0.096 [.02]	0.1 [.02]	0.104 [.02]	0.108 [.03]	0.112 [.03]	0.116 [.03]	0.12 [.03]	0.124 [.03]	0.128 [.03]	0.132 [.03]	0.136 [.03]	0.14 [.03]
Pressure Drop MERV 13	0.034 [.02]	0.04 [.02]	0.046 [.02]	0.052 [.02]	0.058 [.02]	0.065 [.02]	0.071 [.02]	0.077 [.02]	0.083 [.02]	0.089 [.02]	0.095 [.02]	0.102 [.02]	0.108 [.03]	0.114 [.03]	0.12 [.03]

AIRFLOW CORRECTION FACTORS—17.5 TON [61.5 kW]

ACTUAL—CFM [L/s]	5600 [2643]	5800 [2737]	6000 [2831]	6200 [2926]	6400 [3020]	6600 [3114]	6800 [3209]	7000 [3303]	7200 [3398]	7400 [3492]	7600 [3586]	7800 [3681]	8000 [3775]	8200 [3869]	8400 [3964]
TOTAL MBUH	0.96	0.97	0.97	0.98	0.98	0.99	0.99	1.00	1.00	1.01	1.01	1.02	1.03	1.03	1.04
SENSIBLE MBUH	0.86	0.88	0.90	0.92	0.94	0.96	0.98	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14
POWER kW	0.99	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.02	1.02	1.02

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

AIRFLOW PERFORMANCE—20 TON [70.3 kW]—SIDEFLOW (B240)

Air Flow CFM [L/s]	Model RLNL-B240		Voltage 208/230, 460, 575 — 3 Phase																																	
	External Static Pressure—Inches of Water [kPa]																																			
	0.1 [0.02] RPM	0.2 [0.05] W	0.3 [0.07] RPM	0.4 [0.10] W	0.5 [0.12] RPM	0.6 [0.15] W	0.7 [0.17] RPM	0.8 [0.20] W	0.9 [0.22] RPM	1.0 [0.25] W	1.1 [0.27] RPM	1.2 [0.30] W	1.3 [0.32] RPM	1.4 [0.35] W	1.5 [0.37] RPM	1.6 [0.40] W	1.7 [0.42] RPM	1.8 [0.45] W	1.9 [0.47] RPM	2.0 [0.50] W																
6400 [3020]	—	—	—	—	632	2007	654	2111	676	2218	698	2328	719	2439	741	2553	763	2670	785	2789	810	3065	830	3203	850	3342	869	3481	888	3621	906	3761	923	3902	937	4121
6600 [3115]	—	—	—	—	642	2106	664	2217	686	2330	707	2446	729	2564	751	2685	773	2808	798	3060	819	3201	838	3342	857	3484	876	3626	894	3769	912	3912	930	4056	944	4271
6800 [3209]	—	—	—	—	630	2100	652	2215	674	2332	696	2452	718	2574	739	2699	761	2826	783	2955	807	3202	827	3346	846	3490	865	3634	884	3780	901	3926	919	4072	933	4283
7000 [3304]	—	—	—	—	641	2213	663	2334	684	2458	706	2585	728	2713	750	2844	772	2977	796	3207	816	3352	835	3499	854	3646	873	3794	891	3942	909	4091	926	4240	940	4448
7200 [3398]	—	—	—	—	630	2211	651	2336	673	2464	695	2594	717	2727	739	2862	761	2999	783	3139	805	3362	825	3511	844	3661	863	3811	881	3961	898	4112	916	4264	932	4417
7400 [3492]	—	—	—	—	641	2338	663	2470	684	2604	706	2741	728	2880	750	3021	772	3165	795	3375	815	3526	834	3678	853	3831	871	3984	889	4137	906	4292	923	4447	938	4650
7600 [3587]	—	—	—	—	630	2339	652	2475	674	2613	696	2754	718	2897	740	3043	761	3190	783	3341	805	3545	824	3699	843	3854	862	4009	879	4165	897	4322	914	4479	930	4637
7800 [3681]	—	—	—	—	642	2480	664	2622	686	2767	707	2914	729	3064	751	3216	773	3370	795	3567	815	3723	834	3880	852	4038	870	4197	888	4356	905	4515	922	4675	936	4878
8000 [3776]	632	2485	654	2631	676	2780	698	2931	719	3085	741	3241	763	3399	785	3559	806	3750	825	3910	844	4070	862	4231	880	4392	897	4554	914	4717	930	4880	944	5084	961	5255
8200 [3870]	644	2640	666	2793	688	2948	710	3105	732	3265	754	3427	776	3592	797	3760	816	3942	835	4105	854	4268	871	4432	889	4596	906	4761	922	4927	936	5130	952	5300		
8400 [3964]	657	2805	679	2964	701	3126	723	3290	745	3456	767	3625	789	3796	808	3978	827	4143	846	4309	864	4475	881	4642	898	4809	915	4977	931	5146	944	5352	961	5528		
8600 [4059]	670	2980	692	3146	714	3314	736	3484	758	3657	780	3832	800	4017	819	4184	838	4352	856	4521	874	4690	891	4860	907	5030	924	5201	937	5408	953	5584	969	5765		
8800 [4153]	683	3166	705	3338	727	3512	749	3689	771	3868	793	4059	812	4229	831	4399	849	4570	867	4742	884	4914	901	5087	917	5260	933	5434	946	5645	962	5826	978	6013		
9000 [4248]	697	3361	719	3540	741	3721	763	3904	785	4089	805	4276	824	4449	842	4622	860	4796	877	4971	894	5146	911	5322	927	5498	939	5712	955	5892	971	6079	986	6272		
9200 [4342]	711	3567	733	3752	755	3939	777	4129	798	4327	817	4502	835	4678	853	4854	871	5031	888	5209	905	5387	921	5565	933	5784	949	5963	964	6149	980	6342	995	6541		
9400 [4436]	725	3783	747	3975	769	4168	792	4381	811	4558	829	4736	847	4915	865	5094	882	5274	899	5455	915	5636	931	5818	942	6040	958	6225	973	6418	989	6616	1004	6821		
9600 [4531]	739	4010	762	4207	784	4407	805	4617	823	4798	842	4979	859	5161	877	5343	894	5526	910	5709	926	5894	937	6122	952	6307	968	6498	983	6696	998	6901	—	—		

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

Drive Package	L						M						N (field installed only)					
Motor H.P. [W]	5.0 [3728.5]						7.5 [5592.7]						7.5 [5592.7]					
Blower Sheave	BK130H						BK130H						BK120H					
Motor Sheave	1VP-56						1VP-71						1VP-71					
Turns Open	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
RPM	756	734	709	683	658	631	928	902	874	847	820	793	1009	981	955	928	899	870

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

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

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

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

COMPONENT AIRFLOW RESISTANCE—20 TON [70.3 kW] (B240)

CFM [L/s]	6400	6600	6800	7000	7200	7400	7600	7800	8000	8200	8400	8600	8800	9000	9200	9400	9600
	[3020]	[3114]	[3209]	[3303]	[3398]	[3492]	[3586]	[3681]	[3775]	[3869]	[3964]	[4058]	[4153]	[4247]	[4341]	[4436]	[4530]
Resistance — Inches of Water [kPa]																	
Wet Coil	0.00 [.00]	0.00 [.00]	0.00 [.00]	0.01 [.00]	0.01 [.00]	0.02 [.00]	0.02 [.00]	0.03 [.01]	0.03 [.01]	0.04 [.01]	0.04 [.01]	0.05 [.01]	0.05 [.01]	0.06 [.01]	0.06 [.01]	0.07 [.02]	0.07 [.02]
Downflow	0.06 [.01]	0.06 [.01]	0.07 [.02]	0.08 [.02]	0.08 [.02]	0.09 [.02]	0.10 [.02]	0.11 [.03]	0.12 [.03]	0.13 [.03]	0.14 [.03]	0.15 [.04]	0.16 [.04]	0.18 [.04]	0.19 [.05]	0.20 [.05]	0.22 [.05]
Downflow Economizer R.A. Damper Open	0.15 [.04]	0.16 [.04]	0.16 [.04]	0.17 [.04]	0.18 [.04]	0.19 [.05]	0.20 [.05]	0.21 [.05]	0.22 [.05]	0.23 [.06]	0.24 [.06]	0.25 [.06]	0.26 [.06]	0.27 [.07]	0.28 [.07]	0.29 [.07]	0.30 [.07]
Horizontal Economizer R.A. Damper Open	0.04 [.01]	0.05 [.01]	0.05 [.01]	0.06 [.01]	0.06 [.01]	0.07 [.02]	0.07 [.02]	0.08 [.02]	0.09 [.02]	0.09 [.02]	0.10 [.02]	0.10 [.02]	0.11 [.03]	0.11 [.03]	0.12 [.03]	0.12 [.03]	0.13 [.03]
Pressure Drop MERV 8	0.1 [.02]	0.104 [.02]	0.108 [.03]	0.112 [.03]	0.116 [.03]	0.12 [.03]	0.124 [.03]	0.128 [.03]	0.132 [.03]	0.136 [.03]	0.14 [.03]	0.144 [.03]	0.148 [.04]	0.152 [.04]	0.156 [.04]	0.16 [.04]	0.164 [.04]
Pressure Drop MERV 13	0.058 [.01]	0.065 [.02]	0.071 [.02]	0.077 [.02]	0.083 [.02]	0.089 [.02]	0.095 [.02]	0.102 [.02]	0.108 [.03]	0.114 [.03]	0.12 [.03]	0.126 [.03]	0.132 [.03]	0.138 [.03]	0.145 [.04]	0.151 [.04]	0.157 [.04]

AIRFLOW CORRECTION FACTORS—20 TON [70.3 kW] (B240)

ACTUAL—CFM [L/s]	6400 [3020]	6600 [3114]	6800 [3209]	7000 [3303]	7200 [3398]	7400 [3492]	7600 [3586]	7800 [3681]	8000 [3775]	8200 [3869]	8400 [3964]	8600 [4058]	8800 [4153]	9000 [4247]	9200 [4341]	9400 [4436]	9600 [4530]
TOTAL MBH	0.97	0.97	0.98	0.98	0.99	0.99	1.00	1.00	1.01	1.01	1.02	1.02	1.03	1.03	1.04	1.04	1.04
SENSIBLE MBH	0.88	0.90	0.92	0.94	0.96	0.97	0.99	1.01	1.03	1.05	1.07	1.09	1.10	1.12	1.14	1.16	1.18
POWER kW	0.98	0.99	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.02	1.02	1.02

NOTES: Multiply correction factor times gross performance data—resulting sensible capacity cannot exceed total capacity.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE — 20 TON [70.3 kW] — 60 Hz — SIDEFLOW (B241)

Air Flow CFM [L/s]		Model RLNL-B241		Voltage 208/230, 460, 575 — 3 Phase 60 Hz		External Static Pressure—Inches of Water [kPa]																																												
						0.1 [0.02]		0.2 [0.05]		0.3 [0.07]		0.4 [0.10]		0.5 [0.12]		0.6 [0.15]		0.7 [0.17]		0.8 [0.20]		0.9 [0.22]		1.0 [0.25]		1.1 [0.27]		1.2 [0.30]		1.3 [0.32]		1.4 [0.35]		1.5 [0.37]		1.6 [0.40]		1.7 [0.42]		1.8 [0.45]		1.9 [0.47]		2.0 [0.50]						
		RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W					
6400 [3020]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
6600 [3114]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
6800 [3209]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
7000 [3303]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
7200 [3398]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
7400 [3492]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
7600 [3586]	682	2566	704	2727	724	2889	745	3051	765	3214	785	3378	805	3543	824	3708	843	3874	862	4041	880	4209	899	4377	917	4546	934	4716	951	4886	968	5057	985	5229	1002	5402	—	—	—	—	—	—	—	—	—	—	—			
7800 [3681]	697	2768	718	2931	739	3094	759	3258	779	3423	798	3588	818	3754	837	3921	856	4089	874	4257	892	4426	910	4596	928	4766	945	4937	962	5109	979	5282	995	5456	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8000 [3775]	712	2979	733	3143	753	3308	773	3473	793	3640	812	3806	831	3974	850	4142	868	4312	886	4481	904	4652	921	4823	939	4995	956	5168	972	5342	989	5516	1005	5691	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8200 [3869]	728	3199	748	3365	768	3531	787	3698	806	3865	825	4034	844	4203	862	4373	881	4543	898	4715	916	4887	933	5060	950	5233	967	5407	983	5583	999	5758	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8400 [3964]	743	3428	763	3595	782	3762	802	3931	820	4100	839	4270	857	4441	875	4612	893	4784	911	4957	928	5131	945	5305	961	5480	978	5656	994	5832	1009	6010	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8600 [4058]	758	3665	778	3834	797	4003	816	4173	835	4343	853	4515	871	4687	889	4860	906	5034	923	5208	940	5383	956	5559	973	5735	989	5913	1004	6091	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
8800 [4153]	774	3911	793	4081	812	4252	830	4423	849	4596	867	4769	884	4942	902	5117	919	5292	936	5468	952	5644	968	5822	984	6000	1000	6179	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
9000 [4247]	790	4166	808	4338	827	4510	845	4683	863	4857	881	5031	898	5206	915	5382	932	5559	948	5736	964	5915	980	6093	996	6273	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
9200 [4341]	805	4430	824	4603	842	4777	860	4949	877	5127	895	5303	912	5479	929	5657	945	5835	961	6014	977	6194	992	6374	1008	6555	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
9400 [4436]	821	4703	839	4877	857	5052	875	5229	892	5405	909	5583	926	5761	942	5940	959	6120	974	6300	989	6481	1005	6663	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9600 [4530]	837	4984	855	5160	872	5337	890	5514	907	5693	923	5872	940	6052	956	6232	971	6413	987	6595	1002	6778	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

NOTE: L—Drive left of bold line, M—Drive right of bold line, N—Drive right of double line.

Drive Package	L				M				N (field installed only)			
Motor H.P. [W]	5.0 [3728.5]				7.5 [5592.7]				7.5 [5592.7]			
Blower Sheave	BK120H				BK130H				BK120H			
Motor Sheave	1VP-56				1VP-71				1VP-71			
Turns Open	1	2	3	4	5	6	1	2	3	4	5	6
RPM	822	798	771	742	712	684	932	905	878	851	824	797

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

[] Designates Metric Conversions



Air

Indoor Airflow Performance
RLNL-B Series



INTEGRATED AIR & WATER



COMPONENT AIRFLOW RESISTANCE—20 TON [70.3 kW] (B241)

Airflow CFM [L/s]	Airflow Correction Factors*			Component Airflow Resistance								
				Wet Coil	Downflow	Downflow Economizer RA Damper Open	Horizontal Economizer RA Damper Open	Concentric Grill RXRN-AD80 or RXRN-AD81 & Transition RXMC-CJ07	Concentric Grill RXRN-AD86 & Transition RXMC-CK08	Concentric Grill RXRN-AD88 & Transition RXMC-CL09	Pressure Drop MERV 8	Pressure Drop MERV 13
	Total MBH	Sensible MBH	Power kW	Resistance — Inches of Water [kPa]								
	6400 [3020]	0.97	0.88	0.98	0.01 [0.00]	0.06 [0.01]	0.15 [0.04]	0.04 [0.01]	0.50 [0.12]	—	—	0.100 [0.02]
6600 [3114]	0.97	0.90	0.99	0.02 [0.00]	0.06 [0.01]	0.16 [0.04]	0.05 [0.01]	0.54 [0.13]	—	—	0.104 [0.02]	0.065 [0.02]
6800 [3209]	0.98	0.92	0.99	0.03 [0.01]	0.07 [0.02]	0.16 [0.04]	0.05 [0.01]	—	—	—	0.108 [0.03]	0.071 [0.02]
7000 [3303]	0.98	0.94	0.99	0.03 [0.01]	0.08 [0.02]	0.17 [0.04]	0.06 [0.01]	—	—	—	0.112 [0.03]	0.077 [0.02]
7200 [3398]	0.99	0.96	0.99	0.04 [0.01]	0.08 [0.02]	0.18 [0.04]	0.06 [0.01]	—	0.38 [0.09]	—	0.116 [0.03]	0.083 [0.02]
7400 [3492]	0.99	0.97	1.00	0.05 [0.01]	0.09 [0.02]	0.19 [0.05]	0.07 [0.02]	—	0.41 [0.10]	—	0.120 [0.03]	0.089 [0.02]
7600 [3586]	1.00	0.99	1.00	0.06 [0.01]	0.10 [0.02]	0.20 [0.05]	0.07 [0.02]	—	0.44 [0.11]	—	0.124 [0.03]	0.095 [0.02]
7800 [3681]	1.00	1.01	1.00	0.06 [0.01]	0.11 [0.03]	0.21 [0.05]	0.08 [0.02]	—	0.47 [0.12]	—	0.128 [0.03]	0.102 [0.02]
8000 [3775]	1.01	1.03	1.00	0.07 [0.02]	0.12 [0.03]	0.22 [0.05]	0.09 [0.02]	—	0.50 [0.12]	—	0.132 [0.03]	0.108 [0.03]
8200 [3869]	1.01	1.05	1.01	0.08 [0.02]	0.13 [0.03]	0.23 [0.06]	0.09 [0.02]	—	0.53 [0.13]	—	0.136 [0.03]	0.114 [0.03]
8400 [3964]	1.02	1.07	1.01	0.09 [0.02]	0.14 [0.03]	0.24 [0.06]	0.10 [0.02]	—	0.56 [0.14]	—	0.140 [0.03]	0.120 [0.03]
8600 [4058]	1.02	1.09	1.01	0.09 [0.02]	0.15 [0.04]	0.25 [0.06]	0.10 [0.02]	—	0.59 [0.15]	—	0.144 [0.03]	0.126 [0.03]
8800 [4153]	1.03	1.10	1.01	0.10 [0.02]	0.16 [0.04]	0.26 [0.06]	0.11 [0.03]	—	0.62 [0.15]	—	0.148 [0.04]	0.132 [0.03]
9000 [4247]	1.03	1.12	1.01	0.11 [0.03]	0.18 [0.04]	0.27 [0.07]	0.11 [0.03]	—	—	—	0.152 [0.04]	0.138 [0.03]
9200 [4341]	1.03	1.14	1.02	0.12 [0.03]	0.19 [0.05]	0.28 [0.07]	0.12 [0.03]	—	—	—	0.156 [0.04]	0.145 [0.04]
9400 [4436]	1.04	1.16	1.02	0.12 [0.03]	0.20 [0.05]	0.29 [0.07]	0.12 [0.03]	—	—	—	0.160 [0.04]	0.151 [0.04]
9600 [4530]	1.04	1.18	1.02	0.13 [0.03]	0.22 [0.05]	0.30 [0.07]	0.13 [0.03]	—	—	—	0.164 [0.04]	0.160 [0.04]

* Multiply correction factor times gross performance data—resulting sensible capacity cannot exceed total capacity.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE — 25 TON [87.9 kW]—SIDEFLOW

Air Flow CFM [L/s]	Model RLNL-B300										Voltage 208/230, 460, 575 — 3 Phase										External Static Pressure—Inches of Water [kPa]																						
	0.1 [0.02]		0.2 [0.05]		0.3 [0.07]		0.4 [0.10]		0.5 [0.12]		0.6 [0.15]		0.7 [0.17]		0.8 [0.20]		0.9 [0.22]		1.0 [0.25]		1.1 [0.27]		1.2 [0.30]		1.3 [0.32]		1.4 [0.35]		1.5 [0.37]		1.6 [0.40]		1.7 [0.42]		1.8 [0.45]		1.9 [0.47]		2.0 [0.50]				
	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W			
8000 [3775]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	794 [3720]	814	3870	833	4024	851	4182	869	4344	886	4510	903	4680	920	4854	948	5256	963	5410	979	5565	994	5720	1009	5877				
8200 [3869]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	807 [3908]	826	4065	845	4226	863	4392	880	4561	897	4735	914	4912	943	5296	958	5455	973	5614	988	5774	1003	5935	1018	6097				
8400 [3964]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	801 [3947]	820	4108	838	4273	856	4442	874	4614	891	4791	908	4972	924	5157	952	5503	967	5667	982	5832	997	5997	1012	6164	1028	6331		
8600 [4058]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	794 [3989]	813	4153	832	4321	850	4493	868	4670	886	4850	902	5034	919	5223	947	5557	962	5725	977	5894	992	6064	1007	6235	1022	6407	1037	6579
8800 [4153]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	807 [4200]	826	4242	845	4547	862	4727	880	4910	907	5098	924	5290	942	5614	957	5787	972	5960	987	6134	1002	6310	1017	6486	1032	6663	1047	6841
9000 [4247]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	801 [4249]	820	4424	839	4603	857	4786	874	4973	892	5164	908	5359	924	5558	952	5853	967	6031	982	6209	997	6389	1022	6752	1042	6934	1057	7118
9200 [4341]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	804 [4458]	823	4478	843	4660	851	4847	869	5037	886	5232	903	5430	919	5633	947	5923	962	6105	977	6289	992	6473	1007	6658	1022	6844	1037	7031
9400 [4436]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	795 [4300]	815	4478	835	4660	851	4847	869	5037	886	5232	903	5430	919	5633	947	5923	962	6105	977	6289	992	6473	1007	6658	1022	6844	1037	7031
9600 [4530]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	804 [4592]	823	4781	842	4975	859	5172	876	5373	893	5579	910	5788	926	6005	953	6267	968	6460	983	6653	998	6847	1013	7042	1028	7238	1043	7434
9800 [4624]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	798 [4652]	817	4845	836	5042	852	5247	870	5447	889	5656	922	6085	949	6355	964	6551	979	6749	994	6947	1009	7147	1024	7347	1039	7548	1054	7751
10000 [4719]	793	4714	813	4910	831	5110	849	5315	867	5523	884	5735	901	5951	917	6171	945	6446	960	6647	975	6849	990	7052	1005	7256	1019	7461	1034	7667	1050	7873	1065	8081	—	—	—	—	—	—			
10200 [4813]	808	4978	827	5181	845	5389	863	5600	880	5816	897	6035	913	6259	941	6542	956	6748	971	6954	986	7162	1001	7370	1016	7579	1031	7789	1046	8000	1061	8212	—	—	—	—	—	—	—				
10400 [4908]	822	5254	840	5465	858	5680	876	5899	893	6122	909	6349	926	6580	953	6852	967	7063	982	7275	997	7488	1012	7701	1027	7916	1042	8131	1057	8348	1072	8565	—	—	—	—	—	—	—				
10600 [5002]	836	5543	854	5761	872	5984	889	6210	906	6441	922	6675	949	6961	964	7176	979	7393	993	7610	1008	7828	1023	8047	1038	8267	1053	8488	1068	8710	—	—	—	—	—	—	—	—	—				
10800 [5096]	850	5845	868	6071	885	6301	902	6534	918	6772	946	7074	961	7294	975	7514	990	7736	1005	7959	1020	8182	1035	8407	1050	8632	1065	8858	—	—	—	—	—	—	—	—	—	—	—				
11000 [5191]	864	6160	882	6393	899	6630	915	6871	943	7191	958	7415	972	7640	987	7867	1002	8094	1017	8321	1032	8550	1046	8780	1061	9011	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
11200 [5285]	878	6487	895	6728	912	6972	940	7313	955	7541	969	7771	984	8001	999	8233	1014	8465	1029	8698	1043	8933	1058	9168	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
11400 [5379]	892	6827	909	7075	925	7328	952	7671	967	7905	981	8140	996	8376	1011	8613	1026	8851	1041	9089	1055	9329	1070	9570	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
11600 [5474]	906	7180	922	7436	950	7806	964	8044	979	8283	994	8524	1008	8765	1023	9007	1038	9250	1053	9494	1068	9739	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
11800 [5568]	920	7546	948	7944	962	8187	977	8431	991	8676	1006	8921	1021	9168	1035	9416	1050	9664	1065	9913	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
12000 [5663]	946	8087	960	8334	975	8583	989	8832	1004	9082	1019	9333	1033	9585	1048	9838	1063	10092	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			

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

Drive Package	L						M					
Motor H.P. [W]	7.5 [5592.7]						10 [7457.0]					
Blower Sheave	BK130H						BK120H					
Motor Sheave	1VP-71						1VP-75					
Turns Open	1	2	3	4	5	6	1	2	3	4	5	6
RPM	919	894	869	844	817	790	1067	1039	1012	982	953	925

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



Air

Indoor Airflow Performance
RLNL-B Series



INTEGRATED AIR & WATER

COMPONENT AIR RESISTANCE — 25 TON [87.9 kW]

CFM [L/s]	8000	8400	8800	9200	9600	10000	10400	10800	11200	11600	12000
	[3775]	[3964]	[4153]	[4341]	[4530]	[4719]	[4908]	[5096]	[5285]	[5474]	[5663]
	Resistance — Inches of Water [kPa]										
Wet Coil	0.07 [.02]	0.09 [.02]	0.10 [.02]	0.12 [.03]	0.13 [.03]	0.15 [.04]	0.16 [.04]	0.18 [.04]	0.19 [.05]	0.21 [.05]	0.22 [.05]
Downflow	0.12 [.03]	0.14 [.03]	0.16 [.04]	0.19 [.05]	0.22 [.05]	0.25 [.06]	0.29 [.07]	0.33 [.08]	0.37 [.09]	0.42 [.10]	0.46 [.11]
Downflow Economizer R.A. Damper Open	0.22 [.05]	0.24 [.06]	0.26 [.06]	0.28 [.07]	0.30 [.07]	0.32 [.08]	0.34 [.08]	0.37 [.09]	0.39 [.10]	0.41 [.10]	0.44 [.11]
Horizontal Economizer R.A. Damper Open	0.09 [.02]	0.10 [.02]	0.11 [.03]	0.12 [.03]	0.13 [.03]	0.14 [.03]	0.15 [.04]	0.16 [.04]	0.17 [.04]	0.18 [.04]	0.19 [.05]
Concentric Grill RXRN-AD88 & Transition RXMC-CL09	0.17 [.04]	0.23 [.06]	0.30 [.07]	0.36 [.09]	0.43 [.11]	0.50 [.12]	0.56 [.14]	0.63 [.16]	0.69 [.17]	0.76 [.19]	0.82 [.20]
Pressure Drop MERV 8	0.132 [.03]	0.14 [.03]	0.148 [.04]	0.156 [.04]	0.164 [.04]	0.172 [.04]	0.18 [.04]	0.188 [.05]	0.196 [.05]	0.204 [.05]	0.212 [.05]
Pressure Drop MERV 13	0.108 [.03]	0.12 [.03]	0.132 [.03]	0.145 [.04]	0.157 [.04]	0.169 [.04]	0.182 [.04]	0.194 [.05]	0.206 [.05]	0.219 [.05]	0.231 [.06]

AIRFLOW CORRECTION FACTORS — 25 TON [87.9 kW]

ACTUAL—CFM [L/s]	8000 [3775]	8400 [3964]	8800 [4153]	9200 [4341]	9600 [4530]	10000 [4719]	10400 [4908]	10800 [5096]	11200 [5285]	11600 [5474]	12000 [5663]
TOTAL MBTUH	0.97	0.98	0.99	0.99	1.00	1.01	1.02	1.03	1.03	1.04	1.05
SENSIBLE MBTUH	0.89	0.92	0.95	0.98	1.01	1.04	1.08	1.11	1.14	1.17	1.20
POWER kW	0.99	0.99	1.00	1.00	1.00	1.01	1.01	1.01	1.02	1.02	1.02

NOTES: Multiply correction factor times gross performance data—resulting sensible capacity cannot exceed total capacity.

[] Designates Metric Conversions

ELECTRICAL DATA – RLNL- SERIES										
		B180CL	B180CM	B180DL	B180DM	B180YL	B180YM	B210CL	B210CM	B210DL
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	518-632	518-632	187-253	187-253	414-506
	Volts	208/230	208/230	460	460	575	575	208/230	208/230	460
	Minimum Circuit Ampacity	78/78	81/81	38	40	28	30	88/88	91/91	44
	Minimum Overcurrent Protection Device Size	90/90	90/90	45	45	30	35	100/100	100/100	50
	Maximum Overcurrent Protection Device Size	100/100	100/100	45	50	35	35	110/110	110/110	50
Compressor Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	200/230	200/230	460	460	575	575	200/230	200/230	460
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	7	7	7	7	7	7	7 1/2	7 1/2	7 1/2
	Amps (RLA), Comp. 1	25/25	25/25	12.2	12.2	9	9	29.5/29.5	29.5/29.5	14.7
	Amps (LRA), Comp. 1	164/164	164/164	100	100	78	78	195/195	195/195	95
	HP, Compressor 2	7	7	7	7	7	7	7 1/2	7 1/2	7 1/2
	Amps (RLA), Comp. 2	25/25	25/25	12.2	12.2	9	9	29.5/29.5	29.5/29.5	14.7
	Amps (LRA), Comp. 2	164/164	164/164	100	100	78	78	195/195	195/195	95
Condenser Motor	No.	4	4	4	4	4	4	4	4	4
	Volts	208/230	208/230	460	460	575	575	208/230	208/230	460
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA, each)	2.4/2.4	2.4/2.4	1.4	1.4	1	1	2.4/2.4	2.4/2.4	1.4
	Amps (LRA, each)	4.7/4.7	4.7/4.7	2.4	2.4	1.8	1.8	4.7/4.7	4.7/4.7	2.4
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	208/230	208/230	460	460	575	575	208/230	208/230	460
	Phase	3	3	3	3	3	3	3	3	3
	HP	3	5	3	5	3	5	3	5	3
	Amps (FLA, each)	11.5/11.5	14.9/14.9	4.6	6.6	3.5	5.3	11.5/11.5	14.9/14.9	4.6
	Amps (LRA, each)	74.5/74.5	82.6/82.6	38.1	46.3	20	39.4	74.5/74.5	82.6/82.6	38.1

ELECTRICAL DATA – RLNL- SERIES

		B210DM	B210YL	B210YM	B240CL	B240CM	B240CN	B240DL	B240DM	B240DN
Unit Information	Unit Operating Voltage Range	414-506	518-632	518-632	187-253	187-253	187-253	414-506	414-506	414-506
	Volts	460	575	575	208/230	208/230	208/230	460	460	460
	Minimum Circuit Ampacity	46	35	37	101/101	109/109	109/109	52	56	56
	Minimum Overcurrent Protection Device Size	50	40	40	110/110	125/125	125/125	60	60	60
	Maximum Overcurrent Protection Device Size	50	45	45	125/125	125/125	125/125	60	70	70
Compressor Motor	No.	2	2	2	2	2	2	2	2	2
	Volts	460	575	575	200/230	200/230	200/230	460	460	460
	Phase	3	3	3	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	7 1/2	7 1/2	7 1/2	10	10	10	10	10	10
	Amps (RLA), Comp. 1	14.7	12.2	12.2	33.3/33.3	33.3/33.3	33.3/33.3	17.9	17.9	17.9
	Amps (LRA), Comp. 1	95	80	80	239/239	239/239	239/239	125	125	125
	HP, Compressor 2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2
	Amps (RLA), Comp. 2	14.7	12.2	12.2	29.5/29.5	29.5/29.5	29.5/29.5	14.7	14.7	14.7
	Amps (LRA), Comp. 2	95	80	80	195/195	195/195	195/195	95	95	95
Condenser Motor	No.	4	4	4	6	6	6	6	6	6
	Volts	460	575	575	208/230	208/230	208/230	460	460	460
	Phase	1	1	1	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA, each)	1.4	1	1	2.4/2.4	2.4/2.4	2.4/2.4	1.4	1.4	1.4
	Amps (LRA, each)	2.4	1.8	1.8	4.7/4.7	4.7/4.7	4.7/4.7	2.4	2.4	2.4
Evaporator Fan	No.	1	1	1	1	1	1	1	1	1
	Volts	460	575	575	208/230	208/230	208/230	460	460	460
	Phase	3	3	3	3	3	3	3	3	3
	HP	5	3	5	5	7 1/2	7 1/2	5	7 1/2	7 1/2
	Amps (FLA, each)	6.6	3.5	5.3	14.9/14.9	23.1/23.1	23.1/23.1	6.6	9.6	9.6
	Amps (LRA, each)	46.3	20	39.4	82.6/82.6	136/136	136/136	46.3	67	67

ELECTRICAL DATA – RLNL- SERIES				
		B240YL	B240YM	B240YN
Unit Information	Unit Operating Voltage Range	518-632	518-632	518-632
	Volts	575	575	575
	Minimum Circuit Ampacity	40	42	42
	Minimum Overcurrent Protection Device Size	45	50	50
	Maximum Overcurrent Protection Device Size	50	50	50
Compressor Motor	No.	2	2	2
	Volts	575	575	575
	Phase	3	3	3
	RPM	3450	3450	3450
	HP, Compressor 1	10	10	10
	Amps (RLA), Comp. 1	12.8	12.8	12.8
	Amps (LRA), Comp. 1	80	80	80
	HP, Compressor 2	7 1/2	7 1/2	7 1/2
	Amps (RLA), Comp. 2	12.2	12.2	12.2
	Amps (LRA), Comp. 2	80	80	80
Condenser Motor	No.	6	6	6
	Volts	575	575	575
	Phase	1	1	1
	HP	1/3	1/3	1/3
	Amps (FLA, each)	1	1	1
	Amps (LRA, each)	1.8	1.8	1.8
Evaporator Fan	No.	1	1	1
	Volts	575	575	575
	Phase	3	3	3
	HP	5	7 1/2	7 1/2
	Amps (FLA, each)	5.3	7.8	7.8
	Amps (LRA, each)	39.4	53.8	53.8

ELECTRICAL DATA – RLNL- SERIES							
		B241CL	B241CM	B241DL	B241DM	B241YL	B241YM
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	518-632	518-632
	Volts	208/230	208/230	460	460	575	575
	Minimum Circuit Ampacity	95/95	103/103	49	52	37	39
	Minimum Overcurrent Protection Device Size	110/110	125/125	60	60	40	45
	Maximum Overcurrent Protection Device Size	110/110	125/125	60	60	45	50
Compressor Motor	No.	2	2	2	2	2	2
	Volts	200/230	200/230	460	460	575	575
	Phase	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	10	10	10	10	10	10
	Amps (RLA), Comp. 1	30.1/30.1	30.1/30.1	16.7	16.7	12.2	12.2
	Amps (LRA), Comp. 1	225/225	225/225	114	114	80	80
	HP, Compressor 2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2	7 1/2
	Amps (RLA), Comp. 2	27.6/27.6	27.6/27.6	12.8	12.8	9.6	9.6
	Amps (LRA), Comp. 2	191/191	191/191	100	100	78	78
Compressor Motor	No.	6	6	6	6	6	6
	Volts	208/230	208/230	460	460	575	575
	Phase	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA, each)	2.4/2.4	2.4/2.4	1.4	1.4	1	1
	Amps (LRA, each)	4.7/4.7	4.7/4.7	2.4	2.4	1.8	1.8
Evaporator Fan	No.	1	1	1	1	1	1
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	HP	5	7 1/2	5	7 1/2	5	7 1/2
	Amps (FLA, each)	14.7/14.7	23.1/23.1	6.6	9.6	5.3	7.8
	Amps (LRA, each)	82.6/82.6	136/136	46.3	67	39.4	53.8

ELECTRICAL DATA – RLNL- SERIES							
		B300CL	B300CM	B300DL	B300DM	B300YL	B300YM
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	518-632	518-632
	Volts	208/230	208/230	460	460	575	575
	Minimum Circuit Ampacity	147/147	149/149	60	63	47	50
	Minimum Overcurrent Protection Device Size	175/175	175/175	70	70	60	60
	Maximum Overcurrent Protection Device Size	175/175	175/175	70	80	60	60
Compressor Motor	No.	2	2	2	2	2	2
	Volts	200/240	200/240	460	460	575	575
	Phase	3	3	3	3	3	3
	RPM	3450	3450	3450	3450	3450	3450
	HP, Compressor 1	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2
	Amps (RLA), Comp. 1	48.1/48.1	48.1/48.1	18.6	18.6	14.7	14.7
	Amps (LRA), Comp. 1	245/245	245/245	125	125	100	100
	HP, Compressor 2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2	11 1/2
	Amps (RLA), Comp. 2	48.1/48.1	48.1/48.1	18.6	18.6	14.7	14.7
	Amps (LRA), Comp. 2	245/245	245/245	125	125	100	100
Condenser Motor	No.	6	6	6	6	6	6
	Volts	208/230	208/230	460	460	575	575
	Phase	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA, each)	2.4/2.4	2/2	1.4	1.4	1	1
	Amps (LRA, each)	4.7/4.7	3.9/3.9	2.4	2.4	1.8	1.8
Evaporator Fan	No.	1	1	1	1	1	1
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	HP	7 1/2	10	7 1/2	10	7 1/2	10
	Amps (FLA, each)	24.2/24.2	28.5/28.5	9.6	12.5	7.8	10
	Amps (LRA, each)	136/136	178/178	67	74.6	53.8	59.2



Air

Electric Heater Kits
RLNL-B Series

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					
Model No. RLNL-	Heater Kit				Air Conditioner				Air Conditioner						
	RXJJ-Heater Kit Nominal kW	No. of Sequence Steps	Rated Heater kW @ 208/240V	Heater kBTU/Hr @ 208/240V	Heater Amps @ 208/240V	Unit Min. Ckt. Ampacity @ 208/240V	Over Current Protective Device Size		Min. Circuit Ampacity 208/240V	Max. Fuse Size 208/240V	Over Current Protective Device Size				
							Min./Max. 208V	240V			Min./Max. 208V	240V			
B180CL	No Heat	—	—	—	—	78/78	90/100	90/100	78/78	—	90/100	90/100			
	CE20C	1	14.4/19.2	49.13/65.5	40/46.2	78/78	90/100	90/100	50/58	50/60	—	—			
	CE40C	2	28.8/38.3	98.25/130.66	79.9/92.2	115/130	125/125	150/150	100/116	100/125	—	—			
	CE60C	2	43.2/57.5	147.38/196.16	119.9/138.3	165/188	175/175	200/200	150/173	150/175	—	—			
	CE75C	2	54/71.9	184.22/245.29	149.8/172.8	202/231	225/225	250/250	188/217	200/225	—	—			
B210CL	No Heat	—	—	—	—	88/88	100/110	100/110	—	—	100/110	100/110			
	CE20C	1	14.4/19.2	49.13/65.5	40/46.2	88/88	100/110	100/110	50/58	50/60	—	—			
	CE40C	2	28.8/38.3	98.25/130.66	79.9/92.2	115/130	125/125	150/150	100/116	100/125	—	—			
	CE60C	2	43.2/57.5	147.38/196.16	119.9/138.3	165/188	175/175	200/200	150/173	150/175	—	—			
	CE75C	2	54/71.9	184.22/245.29	149.8/172.8	202/231	225/225	250/250	188/217	200/225	—	—			
B240CL	No Heat	—	—	—	—	101/101	110/125	110/125	—	—	110/125	110/125			
	CE20C	1	14.4/19.2	49.13/65.5	40/46.2	101/101	110/125	110/125	50/58	50/60	—	—			
	CE40C	2	28.8/38.3	98.25/130.66	79.9/92.2	119/134	125/125	150/150	100/116	100/125	—	—			
	CE60C	2	43.2/57.5	147.38/196.16	119.9/138.3	169/192	175/175	200/200	150/173	150/175	—	—			
	CE75C	2	54/71.9	184.22/245.29	149.8/172.8	206/235	225/225	250/250	188/217	200/225	—	—			
B180CM	No Heat	—	—	—	—	81/81	90/100	90/100	—	—	90/100	90/100			
	CE20C	1	14.4/19.2	49.13/65.5	40/46.2	81/81	90/100	90/100	50/58	50/60	—	—			
	CE40C	2	28.8/38.3	98.25/130.66	79.9/92.2	119/134	125/125	150/150	100/116	100/125	—	—			
	CE60C	2	43.2/57.5	147.38/196.16	119.9/138.3	169/192	175/175	200/200	150/173	150/175	—	—			
	CE75C	2	54/71.9	184.22/245.29	149.8/172.8	206/235	225/225	250/250	188/217	200/225	—	—			
B210CM	No Heat	—	—	—	—	91/91	100/110	100/110	—	—	100/110	100/110			
	CE20C	1	14.4/19.2	49.13/65.5	40/46.2	91/91	100/110	100/110	50/58	50/60	—	—			
	CE40C	2	28.8/38.3	98.25/130.66	79.9/92.2	119/134	125/125	150/150	100/116	100/125	—	—			
	CE60C	2	43.2/57.5	147.38/196.16	119.9/138.3	169/192	175/175	200/200	150/173	150/175	—	—			
	CE75C	2	54/71.9	184.22/245.29	149.8/172.8	206/235	225/225	250/250	188/217	200/225	—	—			
B240CM	No Heat	—	—	—	—	109/109	125/125	125/125	—	—	125/125	125/125			
	CE20C	1	14.4/19.2	49.13/65.5	40/46.2	109/109	125/125	125/125	50/58	50/60	—	—			
	CE40C	2	28.8/38.3	98.25/130.66	79.9/92.2	129/145	150/150	150/150	100/116	100/125	—	—			
	CE60C	2	43.2/57.5	147.38/196.16	119.9/138.3	179/202	200/200	225/225	150/173	150/175	—	—			
	CE75C	2	54/71.9	184.22/245.29	149.8/172.8	217/245	225/225	250/250	188/217	200/225	—	—			
B240CN	No Heat	—	—	—	—	109/109	125/125	125/125	—	—	125/125	125/125			
	CE20C	1	14.4/19.2	49.13/65.5	40/46.2	109/109	125/125	125/125	50/58	50/60	—	—			
	CE40C	2	28.8/38.3	98.25/130.66	79.9/92.2	129/145	150/150	150/150	100/116	100/125	—	—			
	CE60C	2	43.2/57.5	147.38/196.16	119.9/138.3	179/202	200/200	225/225	150/173	150/175	—	—			
	CE75C	2	54/71.9	184.22/245.29	149.8/172.8	217/245	225/225	250/250	188/217	200/225	—	—			

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

+ = Field installed only.





Air

Electric Heater Kits
RLNL-B Series

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										
Model No. RLNL-	Heater Kit					Air Conditioner					Heater Kit					Air Conditioner				
	RXJJ-Heater Kit Nominal kW	No. of Sequence Steps	Rated Heater kW @ 208/240V	Heater kBtu/Hr @ 208/240V	Heater Amps @ 208/240V	Unit Min. Ckt. Ampacity @ 208/240V	Over Current Protective Device Size		Min. Ckt. Ampacity 208/240V	Max. Fuse Size 208/240V	Min. Circuit Ampacity 208/240V	Over Current Protective Device Size								
							Min./Max. 208V	Min./Max. 240V				Min./Max. 208V	Min./Max. 240V							
B300CL	No Heat	—	—	—	—	147/147	175/175	175/175	—	—	147/147	175/175	175/175	—						
	CE20C	1	14.4/19.2	49.13/65.5	40/46.2	147/147	175/175	175/175	50/58	50/60	—	—	—	—						
	CE40C	2	28.8/38.3	98.25/130.66	79.9/92.2	147/147	175/175	175/175	100/116	100/125	—	—	—	—						
	CE60C	2	43.2/57.5	147.38/196.16	119.9/138.3	181/204	200/200	225/225	150/173	150/175	—	—	—	—						
	CE75C	2	54/71.9	184.22/245.29	149.8/172.8	218/247	225/225	250/250	188/217	200/225	—	—	—	—						
B300CM	No Heat	—	—	—	—	149/149	175/175	175/175	—	—	149/149	175/175	175/175	—						
	CE20C	1	14.4/19.2	49.13/65.5	40/46.2	149/149	175/175	175/175	50/58	50/60	—	—	—	—						
	CE40C	2	28.8/38.3	98.25/130.66	79.9/92.2	149/151	175/175	175/175	100/116	100/125	—	—	—	—						
	CE60C	2	43.2/57.5	147.38/196.16	119.9/138.3	186/209	200/200	225/225	150/173	150/175	—	—	—	—						
	CE75C	2	54/71.9	184.22/245.29	149.8/172.8	223/252	225/225	300/300	188/217	200/225	—	—	—	—						

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



INTEGRATED AIR & WATER



Air

Electric Heater Kits
RLNL-B Series

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

Separate Power Supply for Both Unit and Heater Kit									
Model No. RLNL -	Heater Kit					Air Conditioner			
	RXJJ- Heater Kit Nominal kW	No. of Sequence Steps	Rated Heater kW @ 480V	Heater kBTU/Hr @ 480V	Heater Amps @ 480V	Unit Min. Ckt. Ampacity @ 480V	Over Current Protective Device Size		Min. Circuit Ampacity 480V
							Min./Max. 480V	Max. 480V	
B180DL	No Heat	—	—	—	—	38	45/45	—	38
	CE20D	1	19.2	65.5	23.1	38	45/45	30	—
	CE40D	2	38.4	131	46.2	64	70/70	60	—
	CE60D	2	57.6	196.5	69.3	93	100/100	90	—
	CE75D	2	72	245.63	86.6	114	125/125	110	—
B210DL	No Heat	—	—	—	—	44	50/50	—	44
	CE20D	1	19.2	65.5	23.1	44	50/50	30	—
	CE40D	2	38.4	131	46.2	64	70/70	60	—
	CE60D	2	57.6	196.5	69.3	93	100/100	90	—
	CE75D	2	72	245.63	86.6	114	125/125	110	—
B240DL	No Heat	—	—	—	—	52	60/60	—	52
	CE20D	1	19.2	65.5	23.1	52	60/60	30	—
	CE40D	2	38.4	131	46.2	67	70/70	60	—
	CE60D	2	57.6	196.5	69.3	95	100/100	90	—
	CE75D	2	72	245.63	86.6	117	125/125	110	—
B180DM	No Heat	—	—	—	—	40	45/50	—	40
	CE20D	1	19.2	65.5	23.1	40	45/50	30	—
	CE40D	2	38.4	131	46.2	67	70/70	60	—
	CE60D	2	57.6	196.5	69.3	95	100/100	90	—
	CE75D	2	72	245.63	86.6	117	125/125	110	—
B210DM	No Heat	—	—	—	—	46	50/50	—	46
	CE20D	1	19.2	65.5	23.1	46	50/50	30	—
	CE40D	2	38.4	131	46.2	67	70/70	60	—
	CE60D	2	57.6	196.5	69.3	95	100/100	90	—
	CE75D	2	72	245.63	86.6	117	125/125	110	—
B240DM	No Heat	—	—	—	—	56	60/70	—	56
	CE20D	1	19.2	65.5	23.1	56	60/70	30	—
	CE40D	2	38.4	131	46.2	70	70/70	60	—
	CE60D	2	57.6	196.5	69.3	99	100/100	90	—
	CE75D	2	72	245.63	86.6	121	125/125	110	—
B240DN	No Heat	—	—	—	—	56	60/70	—	56
	CE20D	1	19.2	65.5	23.1	56	60/70	30	—
	CE40D	2	38.4	131	46.2	70	70/70	60	—
	CE60D	2	57.6	196.5	69.3	99	100/100	90	—
	CE75D	2	72	245.63	86.6	121	125/125	110	—

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

+ = Field installed only.





Air

Electric Heater Kits
RLNL-B Series

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													
Model No. RLNL-	Heater Kit					Air Conditioner				Air Conditioner			
	RXJJ-Heater Kit Nominal kW	No. of Sequence Steps	Rated Heater kW @ 480V	Heater kBTU/Hr @ 480V	Heater Amps @ 480V	Unit Min. Ckt. Ampacity @ 480V	Over Current Protective Device Size		Min. Ckt Ampacity 480V	Max. Fuse Size 480V	Min. Circuit Ampacity 480V	Over Current Protective Device Size	
							Min./Max. 480V	Min./Max. 480V				Min./Max. 480V	Min./Max. 480V
B300DL	No Heat	—	—	—	—	60	70/70	—	—	—	60	70/70	—
	CE20D	1	19.2	65.5	23.1	60	70/70	—	29	30	—	—	—
	CE40D	2	38.4	131	46.2	70	70/70	—	58	60	—	—	—
	CE60D	2	57.6	196.5	69.3	99	100/100	—	87	90	—	—	—
	CE75D	2	72	245.63	86.6	121	125/125	—	109	110	—	—	—
B300DM	No Heat	—	—	—	—	63	70/80	—	—	—	63	70/80	—
	CE20D	1	19.2	65.5	23.1	63	70/80	—	29	30	—	—	—
	CE40D	2	38.4	131	46.2	74	80/80	—	58	60	—	—	—
	CE60D	2	57.6	196.5	69.3	103	110/110	—	87	90	—	—	—
	CE75D	2	72	245.63	86.6	124	125/125	—	109	110	—	—	—

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



INTEGRATED AIR & WATER



Air

Electric Heater Kits
RLNL-B Series

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

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						
Model No. RLNL-	Heater Kit				Air Conditioner			Heater Kit			Air Conditioner		
	RXJJ-Heater Kit Nominal kW	No. of Sequence Steps	Rated Heater kW @ 600V	Heater kBTU/Hr @ 600V	Heater Amps @ 600V	Unit Min. Ckt. Ampacity @ 600V	Over Current Protective Device Size 600V		Min. Ckt. Ampacity 600V	Max. Fuse Size 600V	Min. Circuit Ampacity 600V	Over Current Protective Device Size Min./Max. 600V	
							Min./Max.	Min./Max.					
B180YL	No Heat	—	—	—	—	28	30/35	—	—	—	28	30/35	
	CE20Y	1	19.2	65.5	18.5	28	30/35	—	24	25	—	—	
	CE40Y	2	38.4	131	37	51	60/60	—	47	50	—	—	
	CE60Y	2	57.6	196.5	55.4	74	80/80	—	70	70	—	—	
B210YL	CE75Y	2	72	245.63	69.3	92	100/100	—	87	90	—	—	
	No Heat	—	—	—	—	35	40/45	—	—	—	35	40/45	
	CE20Y	1	19.2	65.5	18.5	35	40/45	—	24	25	—	—	
	CE40Y	2	38.4	131	37	51	60/60	—	47	50	—	—	
B240YL	CE60Y	2	57.6	196.5	55.4	74	80/80	—	70	70	—	—	
	CE75Y	2	72	245.63	69.3	92	100/100	—	87	90	—	—	
	No Heat	—	—	—	—	40	45/50	—	—	—	40	45/50	
	CE20Y	1	19.2	65.5	18.5	40	45/50	—	24	25	—	—	
B180YM	CE40Y	2	38.4	131	37	53	60/60	—	47	50	—	—	
	CE60Y	2	57.6	196.5	55.4	76	80/80	—	70	70	—	—	
	CE75Y	2	72	245.63	69.3	94	100/100	—	87	90	—	—	
	No Heat	—	—	—	—	30	35/35	—	—	—	30	35/35	
B210YM	CE20Y	1	19.2	65.5	18.5	30	35/35	—	24	25	—	—	
	CE40Y	2	38.4	131	37	53	60/60	—	47	50	—	—	
	CE60Y	2	57.6	196.5	55.4	76	80/80	—	70	70	—	—	
	CE75Y	2	72	245.63	69.3	94	100/100	—	87	90	—	—	
B240YM	No Heat	—	—	—	—	37	40/45	—	—	—	37	40/45	
	CE20Y	1	19.2	65.5	18.5	37	40/45	—	24	25	—	—	
	CE40Y	2	38.4	131	37	53	60/60	—	47	50	—	—	
	CE60Y	2	57.6	196.5	55.4	76	80/80	—	70	70	—	—	
B240YN	CE75Y	2	72	245.63	69.3	94	100/100	—	87	90	—	—	
	No Heat	—	—	—	—	42	50/50	—	—	—	42	50/50	
	CE20Y	1	19.2	65.5	18.5	42	50/50	—	24	25	—	—	
	CE40Y	2	38.4	131	37	56	60/60	—	47	50	—	—	
B240YN	CE60Y	2	57.6	196.5	55.4	80	80/80	—	70	70	—	—	
	CE75Y	2	72	245.63	69.3	97	100/100	—	87	90	—	—	
	No Heat	—	—	—	—	42	50/50	—	—	—	42	50/50	
	CE20Y	1	19.2	65.5	18.5	42	50/50	—	24	25	—	—	
B240YN	CE40Y	2	38.4	131	37	56	60/60	—	47	50	—	—	
	CE60Y	2	57.6	196.5	55.4	80	80/80	—	70	70	—	—	
	CE75Y	2	72	245.63	69.3	97	100/100	—	87	90	—	—	
	No Heat	—	—	—	—	42	50/50	—	—	—	42	50/50	

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

+ = Field installed only.





Air

Electric Heater Kits
RLNL-B Series

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						
Model No. RLNL-	Heater Kit			Air Conditioner			Heater Kit			Air Conditioner		
	RXJJ-Heater Kit Nominal kW	No. of Sequence Steps	Rated Heater kW @ 600V	Heater kBTU/Hr @ 600V	Heater Amps @ 600V	Unit Min. Ckt. Ampacity @ 600V	Min. Ckt. Ampacity 600V	Max. Fuse Size 600V	Min. Circuit Ampacity 600V	Over Current Protective Device Size		Min./Max. 600V
										Min./Max. 600V	Min./Max. 600V	
B300YL	No Heat	—	—	—	—	47	—	—	47	60/60	60/60	—
	CE20Y	1	19.2	65.5	18.5	47	24	25	—	—	—	—
	CE40Y	2	38.4	131	37	56	47	50	—	—	—	—
	CE60Y	2	57.6	196.5	55.4	80	70	70	—	—	—	—
B300YM	CE75Y	2	72	245.63	69.3	97	87	90	—	—	—	—
	No Heat	—	—	—	—	50	—	—	50	60/60	60/60	—
	CE20Y	1	19.2	65.5	18.5	50	24	25	—	—	—	—
	CE40Y	2	38.4	131	37	59	47	50	—	—	—	—
	CE60Y	2	57.6	196.5	55.4	82	70	70	—	—	—	—
	CE75Y	2	72	245.63	69.3	100	87	90	—	—	—	—

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

+ = Field installed only.



INTEGRATED AIR & WATER



Air

Electric Heater Kits

RLNL-B Series

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

Separate Power Supply for Both Unit and Heater Kit												
Single Power Supply for Both Unit and Heater Kit							Air Conditioner					
		Heater Kit			Heater Kit		Air Conditioner					
Model No. RLRL-	RXJJ-Heater Kit Nominal kW	No. of Sequence Steps	Rated Heater kW @ 208/240V	Heater kBTU/HR @ 208/240V	Heater Amps @ 208/240V	Unit Min. Ckt. Ampacity @ 208/240V	Over Current Protective Device Size		Min. Circuit Ampacity 208/240V	Protective Device Size		
							Min./Max 208V	Min./Max. 240V		Min./Max. 208V	Min./Max. 240V	
C241CL	No Heat	—	—	—	—	95/95	110/110	110/110	—	95/95	110/110	110/110
	CE20C	1	14.4/19.2	49.13/65.5	40/46.2	95/95	110/110	110/110	50/58	95/95	110/110	110/110
	CE40C	2	28.8/38.3	98.25/130.66	79.9/92.2	119/134	125/125	150/150	100/116	95/95	110/110	110/110
	CE60C	2	43.2/57.5	147.38/196.16	119.9/138.3	169/192	175/175	200/200	150/173	95/95	110/110	110/110
	CE75C	2	54/71.9	184.22/245.29	149.8/172.8	206/235	225/225	250/250	188/217	95/95	110/110	110/110
C241CM	No Heat	—	—	—	—	103/103	125/125	125/125	—	103/103	125/125	125/125
	CE20C	1	14.4/19.2	49.13/65.5	40/46.2	103/103	125/125	125/125	50/58	103/103	125/125	125/125
	CE40C	2	28.8/38.3	98.25/130.66	79.9/92.2	129/145	150/150	150/150	100/116	103/103	125/125	125/125
	CE60C	2	43.2/57.5	147.38/196.16	119.9/138.3	179/202	200/200	225/225	150/173	103/103	125/125	125/125
	CE75C	2	54/71.9	184.22/245.29	149.8/172.8	217/245	225/225	250/250	188/217	103/103	125/125	125/125





Air

Electric Heater Kits
RLNL-B Series

480 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION														
Single Power Supply for Both Unit and Heater Kit														
Model No. RLRL-	RXJJ-Heater Kit Nominal kW	No. of Sequence Steps	Heater Kit			Air Conditioner				Heater Kit			Air Conditioner	
			Rated Heater kW @ 480V	Heater kBtu/Hr @ 480V	Heater Amps @ 480V	Unit Min. Ckt. Ampacity @ 480V	Over Current Protective Device Size		Min. Ckt. Ampacity 480V	Max. Fuse Size 480V	Min. Circuit Ampacity 480V	Over Current Protective Device Size Min./Max. 480V		
							Min./Max 480V	Min./Max. 480V						
C241DL	No Heat	—	—	—	—	49	60/60	—	—	—	49	60/60	—	
	CE20D	1	19.2	65.5	23.1	49	60/60	—	29	30	—	—	—	
	CE40D	2	38.4	131	46.2	67	70/70	—	58	60	—	—	—	
	CE60D	2	57.6	196.5	69.3	95	100/100	—	87	90	—	—	—	
	CE75D	2	72	245.63	86.6	117	125/125	—	109	110	—	—	—	
C241DM	No Heat	—	—	—	—	52	60/60	—	—	—	52	60/60	—	
	CE20D	1	19.2	65.5	23.1	52	60/60	—	29	30	—	—	—	
	CE40D	2	38.4	131	46.2	70	70/70	—	58	60	—	—	—	
	CE60D	2	57.6	196.5	69.3	99	100/100	—	87	90	—	—	—	
	CE75D	2	72	245.63	86.6	121	125/125	—	109	110	—	—	—	

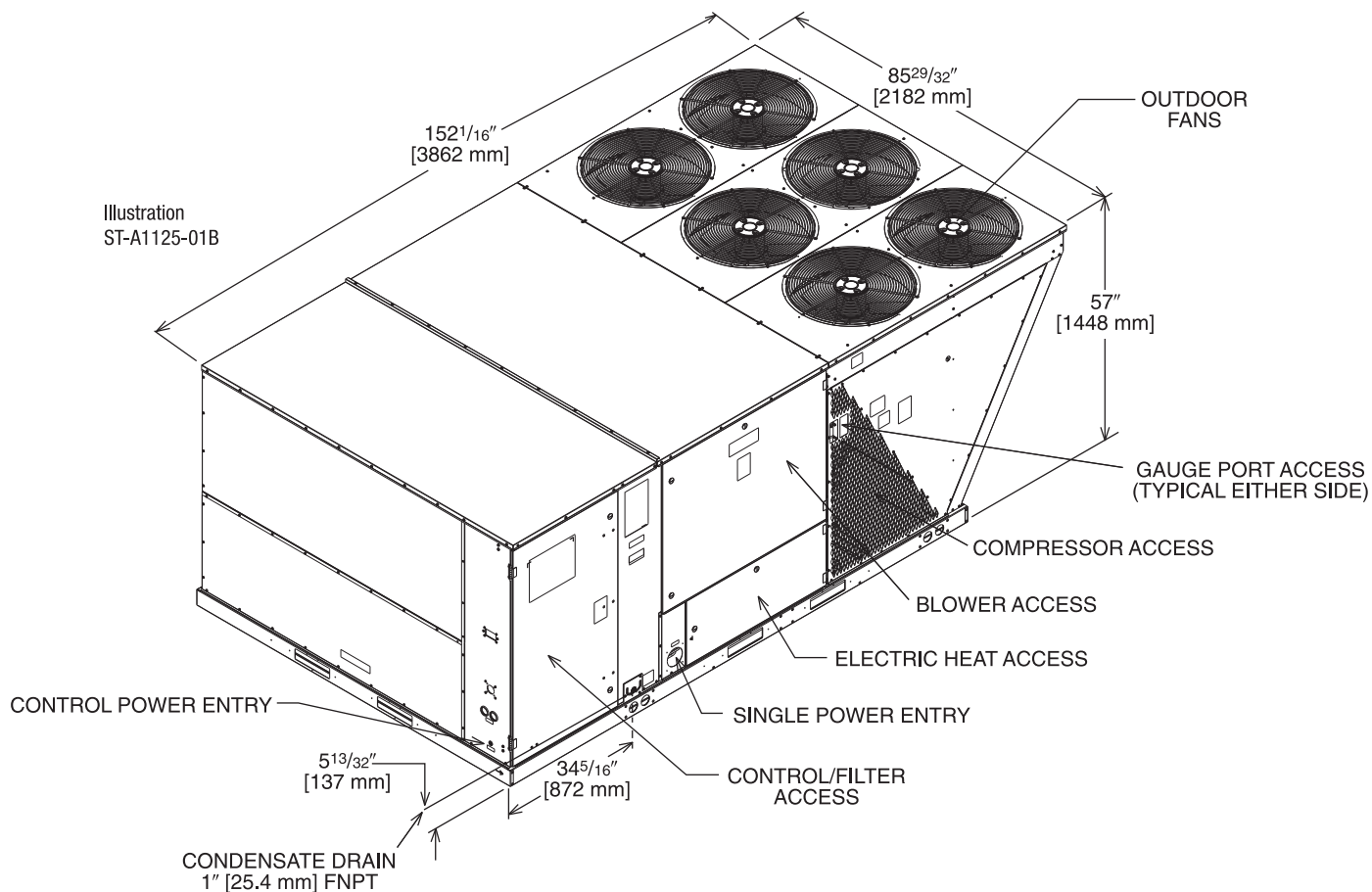


INTEGRATED AIR & WATER

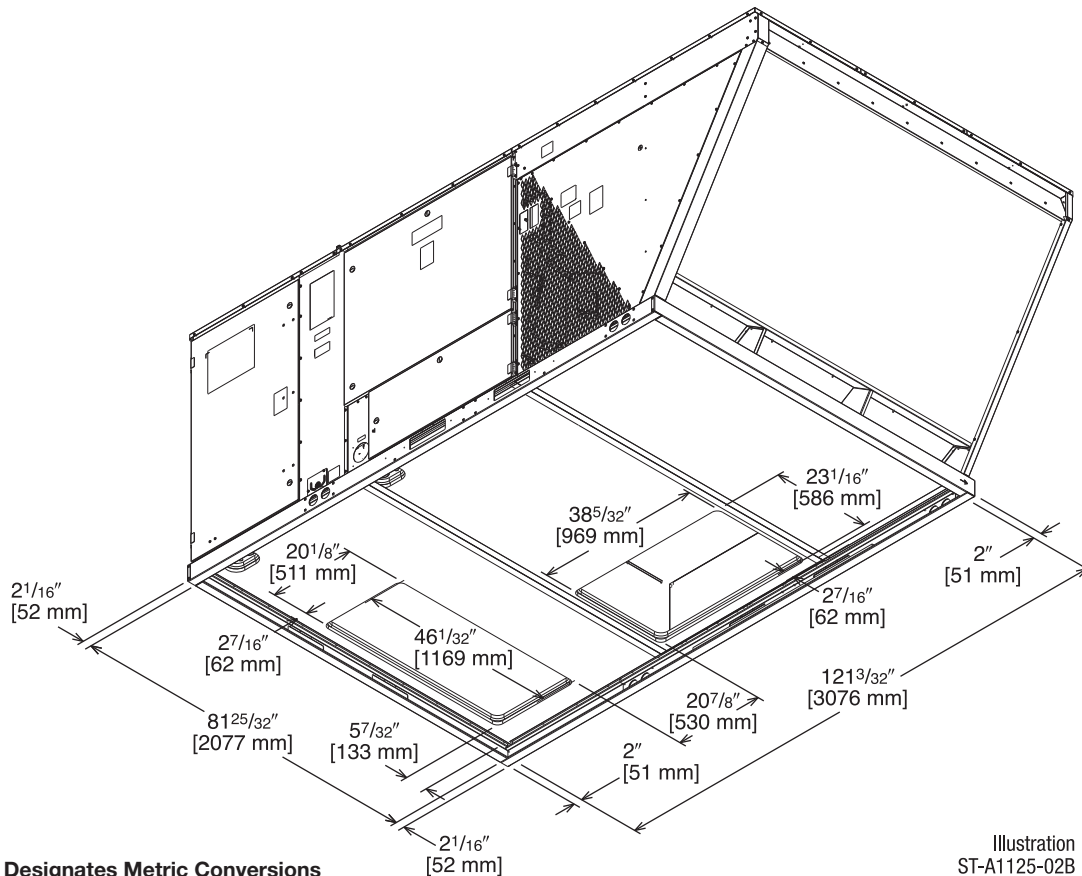
600 VOLT, THREE PHASE, 60 HZ, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION													
Single Power Supply for Both Unit and Heater Kit							Separate Power Supply for Both Unit and Heater Kit						
Model No. RLRL-	Heater Kit			Air Conditioner				Heater Kit			Air Conditioner		
	RXJJ-Heater Kit Nominal kW	No. of Sequence Steps	Rated Heater kW @ 600V	Heater kBTU/Hr @ 600V	Heater Amps @ 600V	Unit Min. Ckt. Ampacity @ 600V	Over Current Protective Device Size		Min. Ckt. Ampacity 600V	Max. Fuse Size 600V	Min. Circuit Ampacity 600V	Over Current Protective Device Size	
							Min./Max 600V	Min./Max. 600V				Min./Max. 600V	Min./Max. 600V
C241YL	No Heat	—	—	—	—	37	40/45	—	—	—	37	40/45	—
	CE20Y	1	19.2	65.5	18.5	37	40/45	—	24	25	—	—	—
	CE40Y	2	38.4	131	37	53	60/60	—	47	50	—	—	—
	CE60Y	2	57.6	196.5	55.4	76	80/80	—	70	70	—	—	—
	CE75Y	2	72	245.63	69.3	94	100/100	—	87	90	—	—	—
C241YM	No Heat	—	—	—	—	39	45/50	—	—	—	39	45/50	—
	CE20Y	1	19.2	65.5	18.5	39	45/50	—	24	25	—	—	—
	CE40Y	2	38.4	131	37	57	60/60	—	47	50	—	—	—
	CE60Y	2	57.6	196.5	55.4	80	80/80	—	70	70	—	—	—
	CE75Y	2	72	245.63	69.3	97	100/100	—	87	90	—	—	—



Air

Dimensional Data
RLNL-B Series

BOTTOM VIEW

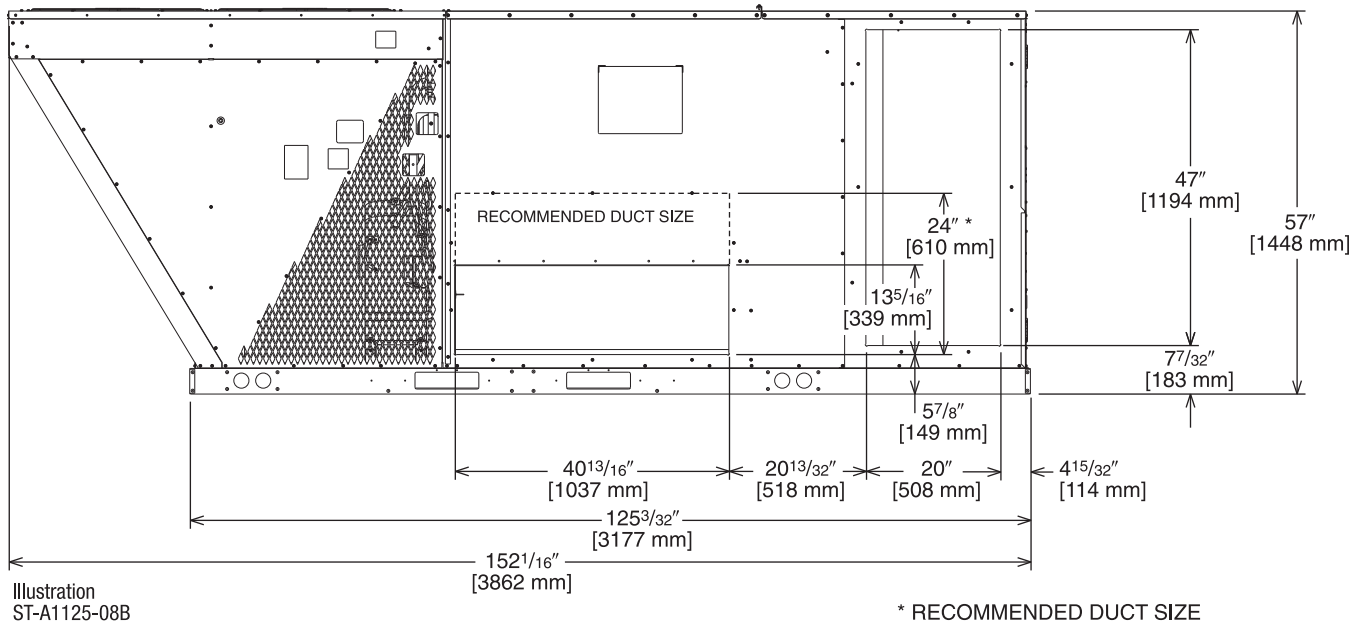
Illustration
ST-A1125-02B

[] Designates Metric Conversions



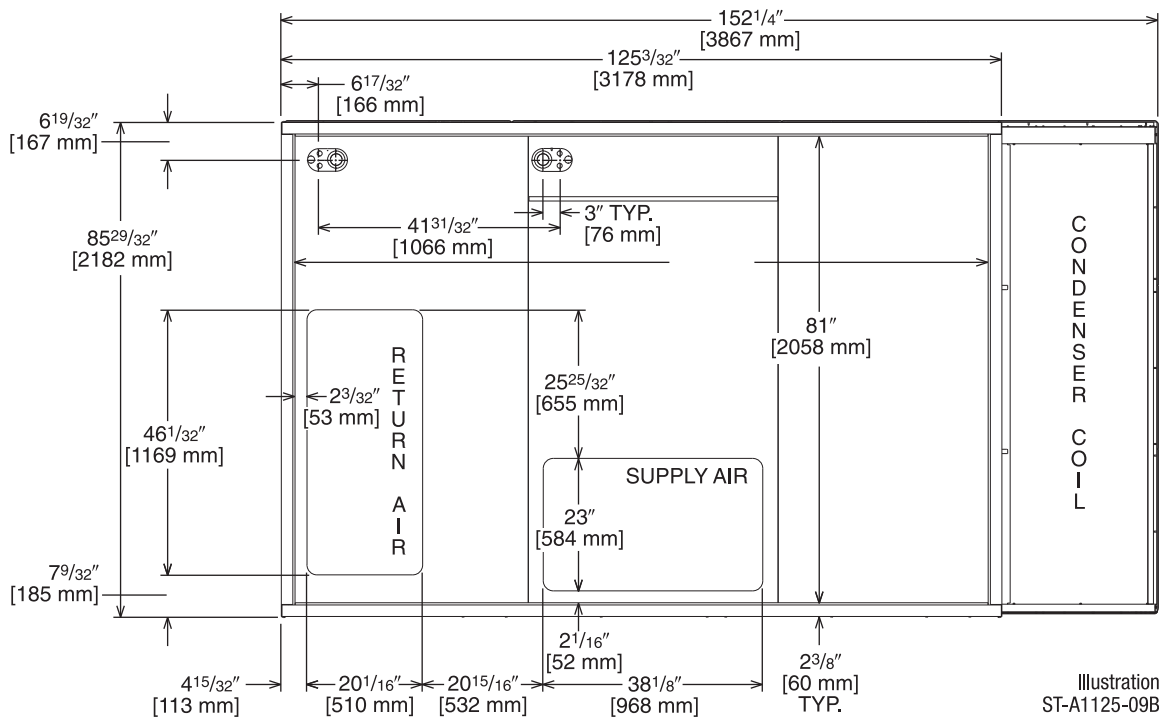
INTEGRATED AIR & WATER

SUPPLY AND RETURN DIMENSIONS FOR HORIZONTAL APPLICATIONS



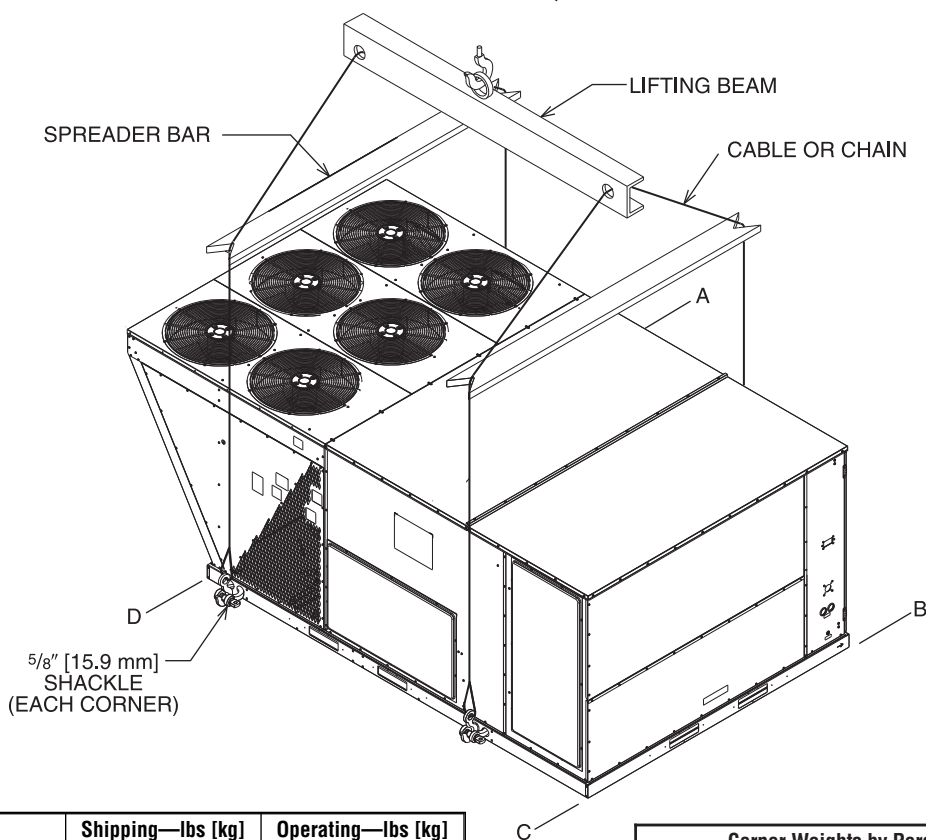
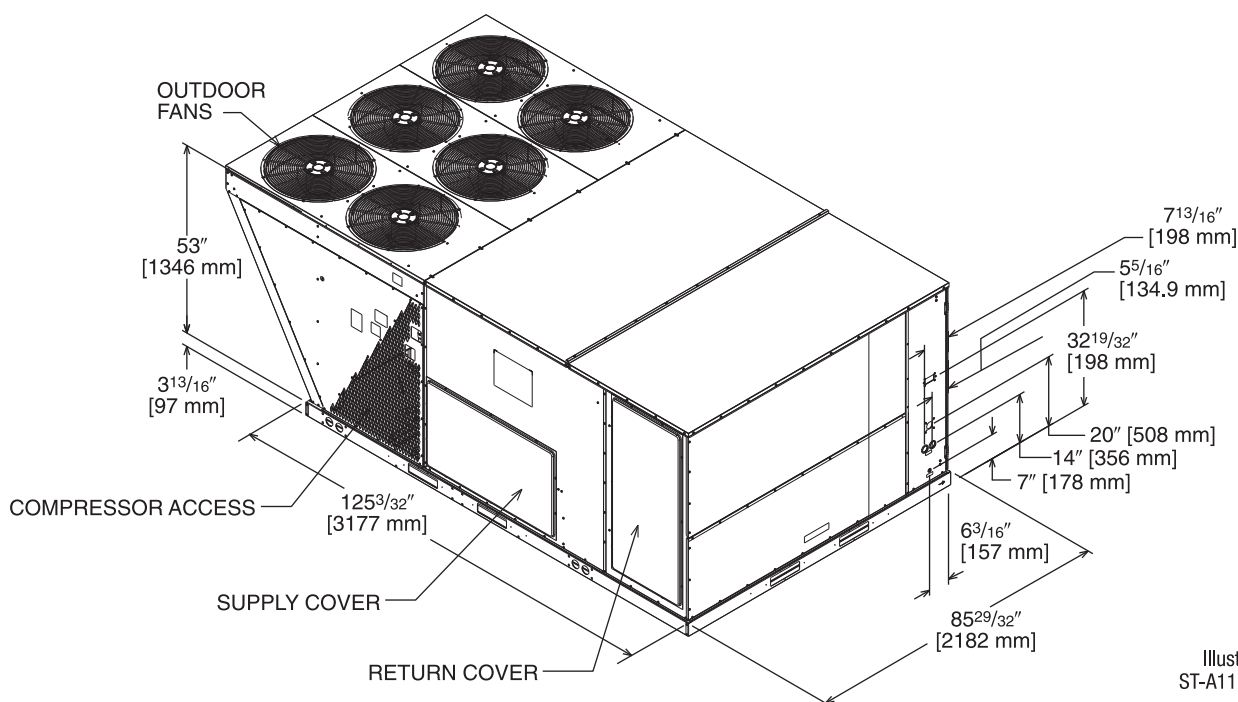
DUCT SIDE VIEW (REAR)

SUPPLY AND RETURN DIMENSIONS FOR DOWNFLOW APPLICATIONS



BOTTOM VIEW

[] Designates Metric Conversions



WEIGHTS*

Accessory	Shipping—lbs [kg]	Operating—lbs [kg]
Downflow Economizer w/Single Enthalpy	324 [149.6]	184 [83.4]
Downflow Economizer w/Smoke Detector	328 [148.7]	188 [85.2]
Horizontal Economizer w/Single Enthalpy	367 [166.4]	258 [117.0]
Power Exhaust	119 [54.0]	59 [26.8]
Manual Fresh Air Damper**	61 [27.7]	52 [23.6]
Motor Kit for Fresh Air Damper**	42 [19.1]	35 [15.9]
Roof Curb 14"	184 [83.5]	176 [79.8]

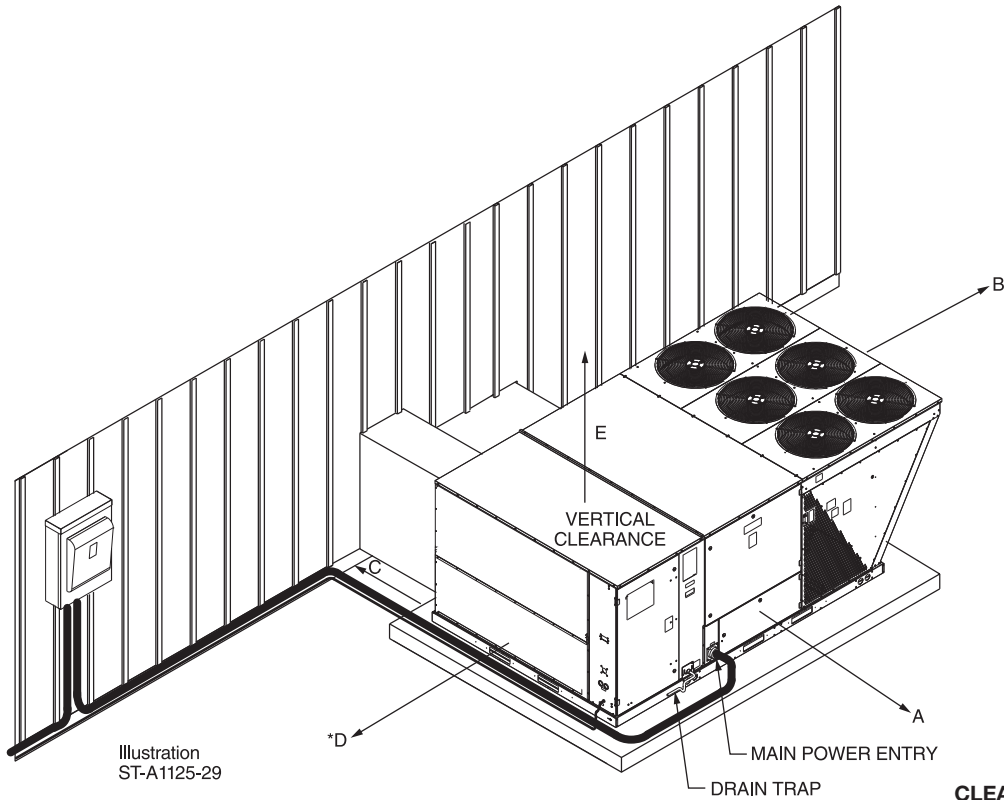
NOTES: *Include options from accessory table page to obtain total unit weight.

**Motorized Kit and Manual Fresh Air Damper must be combined for a complete Motorized Outside Air Damper Selection

Corner Weights by Percentage			
A	B	C	D
32%	27%	16%	24%

*Note: Corner weights measured at base of unit.

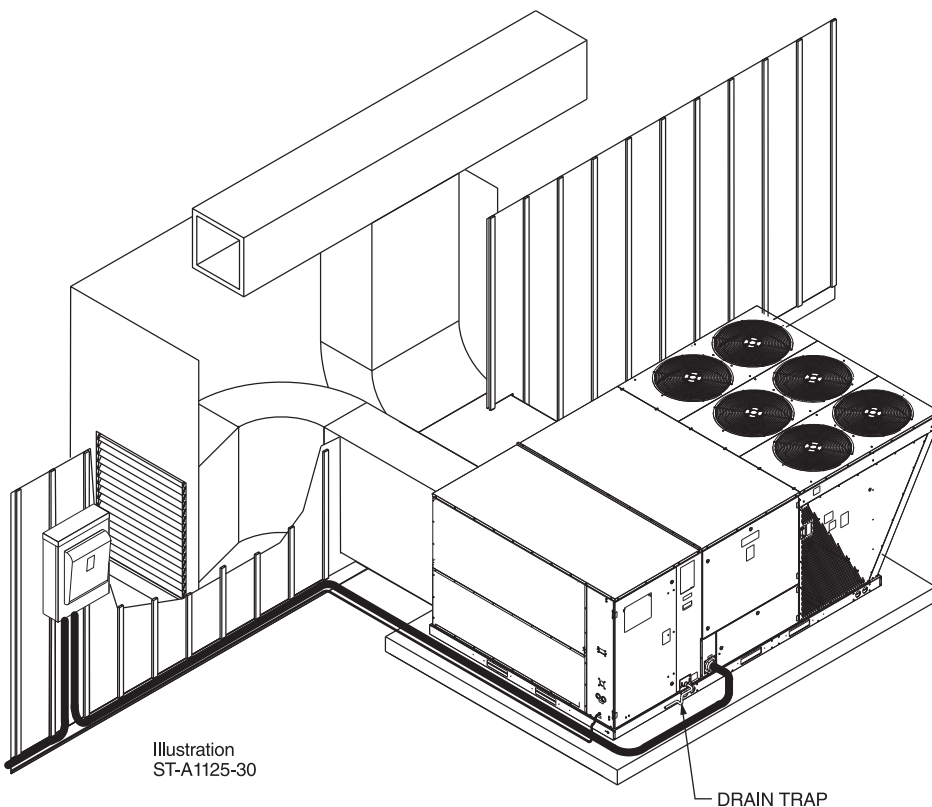
[] Designates Metric Conversions



CLEARANCES

The following minimum clearances are recommended for proper unit performance and serviceability.

Recommended Clearance In. [mm]	Location
80 [2032]	A - Front
18 [457]	B - Condenser Coil
18 [457]	+C - Duct Side
18 [457]	*D - Evaporator End
60 [1524]	E - Above
*Without Economizer 18" [457 mm]. With Economizer 48" [1219 mm]. +Without Horizontal Economizer 18" [457 mm]. With Horizontal Economizer 42" [1067 mm].	



[] Designates Metric Conversions

FIELD INSTALLED ACCESSORY EQUIPMENT—SELF CONTAINED AIR CONDITIONER

Accessory Description	Model Number	Shipping Weight Lbs. [kg]	Installed Weight Lbs. [kg]	Factory Installation Available?
Electric Heaters	RXJJ-CE20 (C,D,Y)	41 [18.6]	31 [14.1]	Yes
	RXJJ-CE40 (C,D,Y)	44 [20.0]	34 [15.4]	Yes
	RXJJ-CE60 (C,D,Y)	45 [20.4]	35 [15.9]	Yes
	RXJJ-CE75 (C,D,Y)	46 [20.9]	36 [16.3]	Yes
Downflow Economizer w/ Single Enthalpy	AXRD-01RGDAM3	324 [149.6]	184 [83.4]	Yes
Downflow Economizer w/ Smoke Detector	AXRD-01RGDBM3	328 [148.7]	188 [85.2]	Yes
Dual Enthalpy Kit	RXR-AR04	1 [0.5]	0.5 [0.2]	No
Horizontal Economizer w/ Single Enthalpy	AXRD-01RGHAM3	367 [166.4]	258 [117.0]	No
Carbon Dioxide Sensor (Wall Mount)	RXR-AR02	3 [1.4]	2 [0.9]	No
Power Exhaust (208/230V)	RXR-BGF05C	119 [54.0]	59 [26.8]	No
Power Exhaust (460V)	RXR-BGF05D	119 [54.0]	59 [26.8]	No
Power Exhaust (575V)	RXR-BGF05Y	119 [54.0]	59 [26.8]	No
Manual Fresh Air Damper*	AXRF-KFA1	61 [27.7]	52 [23.6]	No
Motorized Kit for Manual Fresh Air Damper*	RXR-AW03	42 [19.1]	35 [15.9]	No
Roofcurb, 14"	RXKG-CBH14	184 [83.5]	176 [79.8]	No
Roofcurb Adapter to RXRK-E56	RXR-CJCE56	465 [210.9]	415 [188.2]	No
Roofcurb Adapter to RXKG-CAF14	RXR-CJCF14	555 [251.7]	505 [229.1]	No
Concentric Diffuser (Step-Down 18" x 36")	RXRN-AD81	310 [140.6]	157 [71.2]	No
Concentric Diffuser (Step-Down 24" x 48")	RXRN-AD86	367 [166.5]	212 [96.2]	No
Concentric Diffuser (Step-Down 28" x 60")	RXRN-AD88	410 [186.0]	370 [167.8]	No
Concentric Diffuser (Flush, 18" x 36")	RXRN-AD80	213 [96.6]	115 [52.2]	No
Downflow Transition (Rect. To Rect. 18" x 36")	RXMC-CJ07 ¹	81 [36.7]	74 [33.6]	No
Downflow Transition (Rect. To Rect. 24" x 48")	RXMC-CK08 ²	81 [36.7]	74 [33.6]	No
Downflow Transition (Rect. To Rect. 28" x 60")	RXMC-CL09 ³	81 [36.7]	74 [33.6]	No
Compressor Time-Delay Relay Kit	RXMD-A04	2 [0.9]	1 [0.5]	No
Low-Ambient Control Kit (1 Per Compressor)	RXR-C02	3 [1.4]	2 [0.9]	Yes
Freeze Stat	RXR-AM03	1 [0.5]	0.5 [0.2]	Yes
Non-Powered Convenience Outlet	RXR-AN01	2 [0.9]	1.5 [0.7]	Yes
Hail Guard Louvers	AXRX-AAD01L	55 [24.8]	45 [20.3]	Yes
MERV 8 Filter	RXMF-M08A22520	2 [0.9]	1 [0.45]	No
MERV 13 Filter	RXMF-M13A22520	2 [0.9]	1 [0.45]	No

*NOTES: *Motorized Kit and Manual Fresh Air Damper must be combined for a complete Motorized Outside Air Damper Selection

¹ Used with RXRN-AD81 and RXRN-AD80 concentric diffusers

² Used with RXRN-AD86 concentric diffusers

³ Used with RXRN-AD88 concentric diffusers

[] Designates Metric Conversions

ECONOMIZERS—DOWNFLOW ONLY

Use to Select Field Installed Options Only

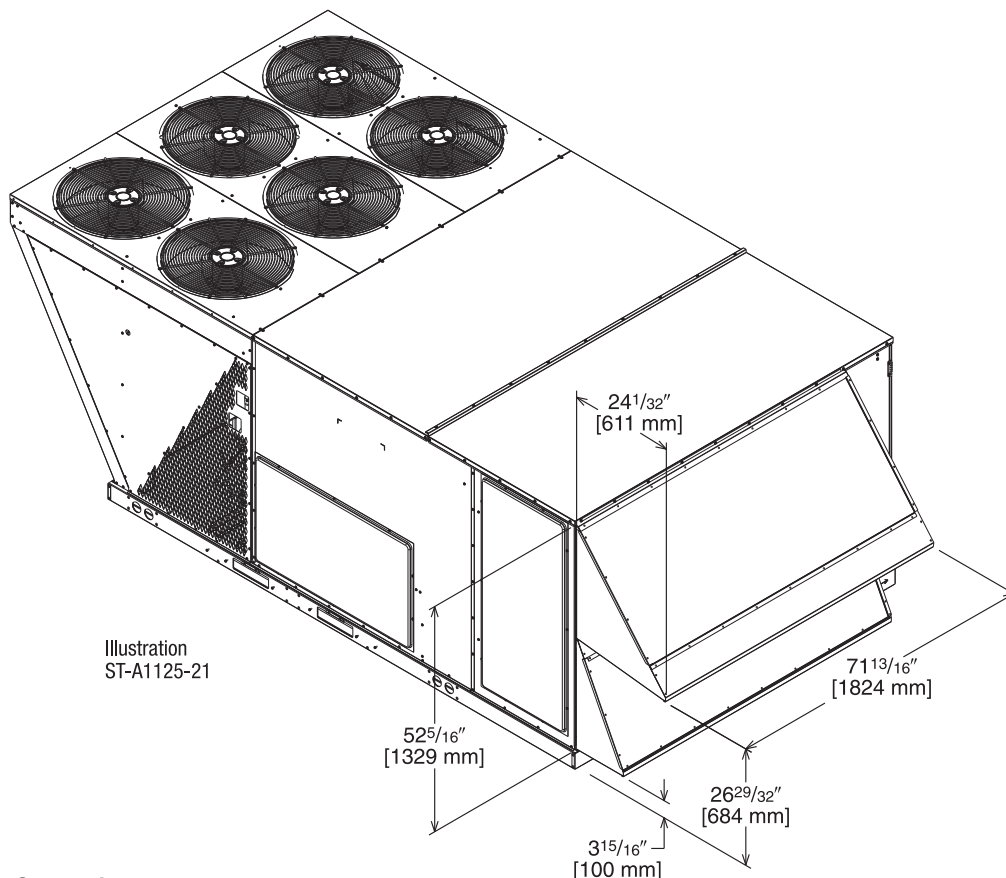
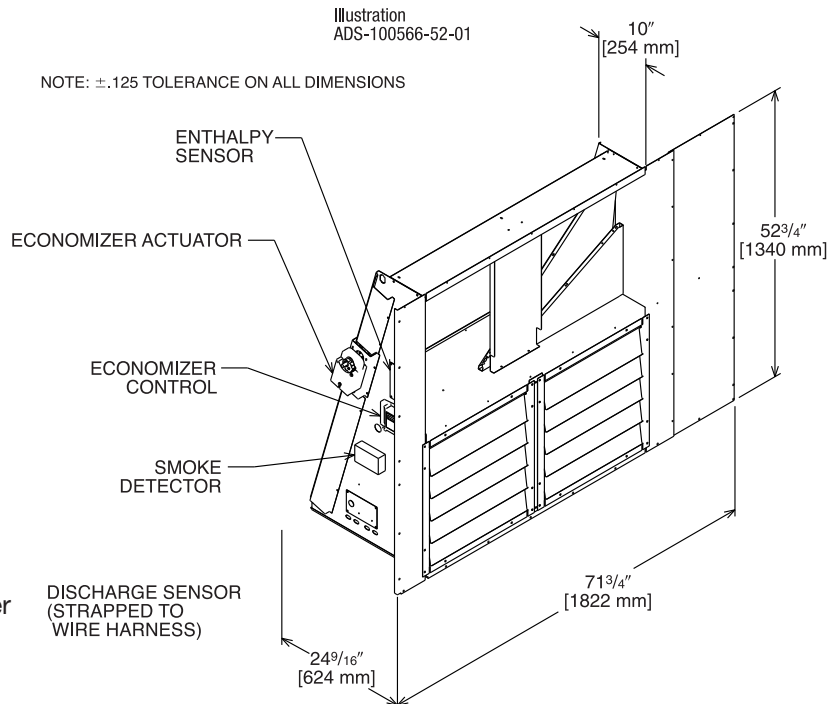
AXRD-01RGDAM3—Single Enthalpy (Outdoor)

AXRD-01RGDBM3—Single Enthalpy (Outdoor) w/Smoke Detector

RXXR-AR02—Optional Wall-Mounted CO₂ Sensor

RXXR-AV04—Dual Enthalpy Upgrade Kit

- Features **Honeywell JADE™** Digital Controls
- Available Factory Installed or Field Accessory
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Ultra Low Leak Dampers meet California Title 24 requirements
- 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



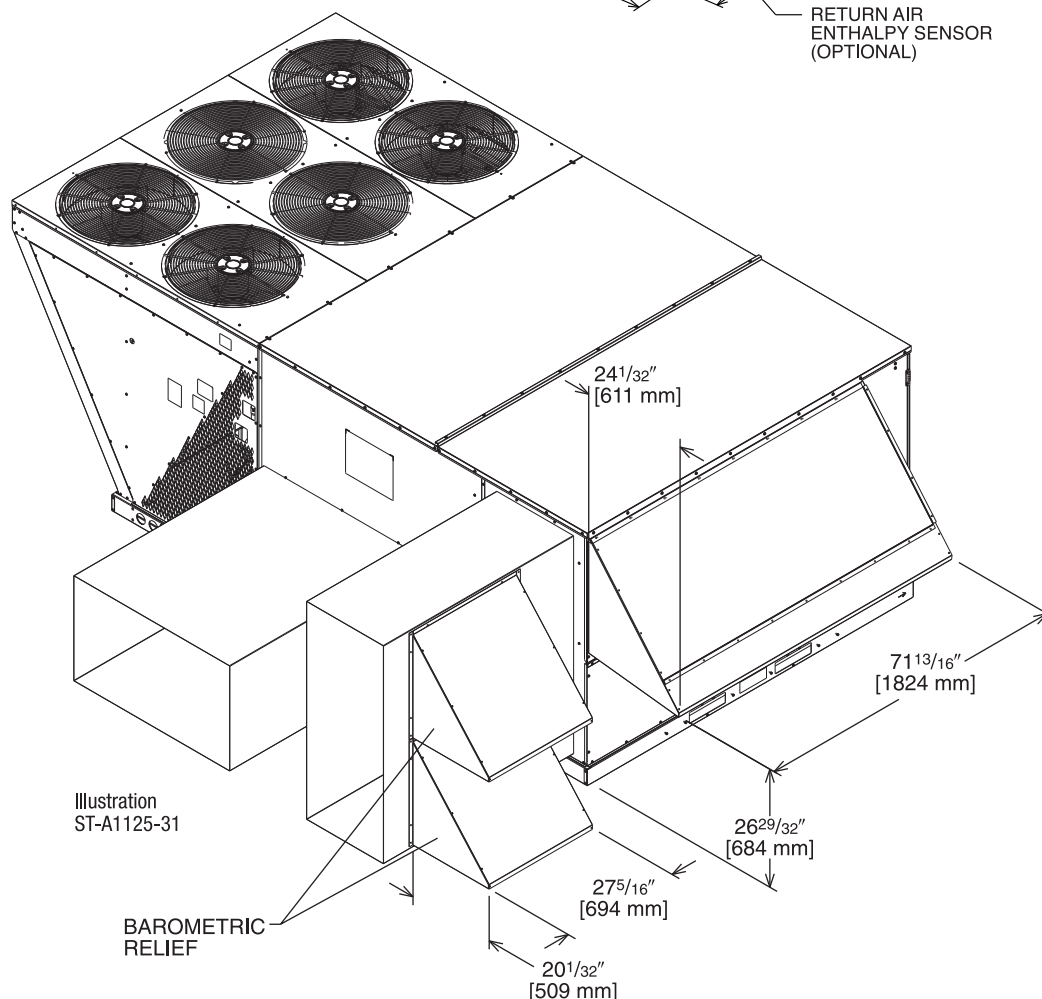
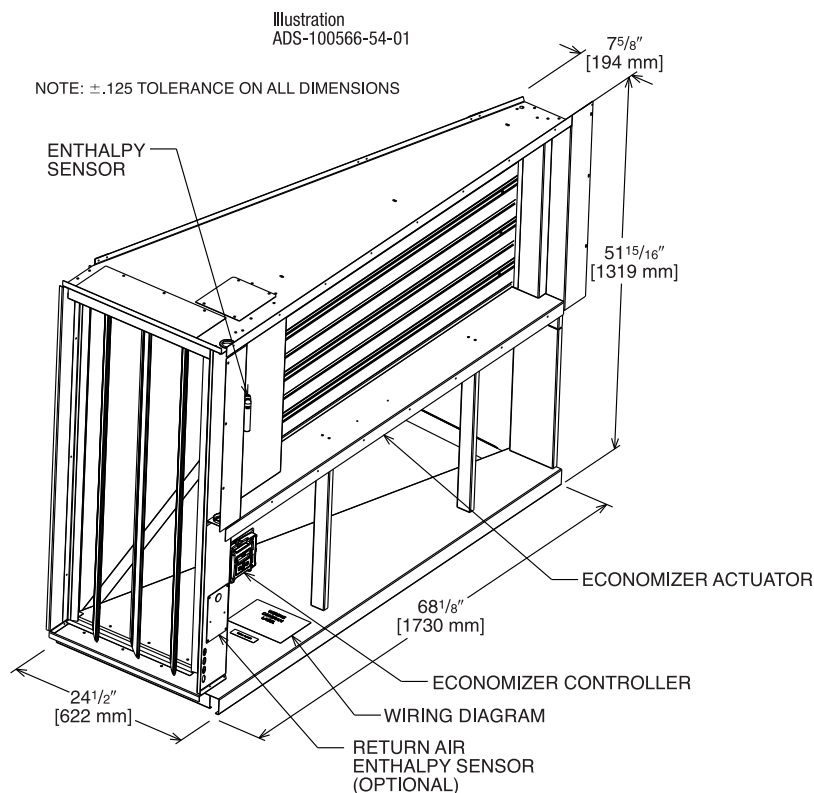
[] Designates Metric Conversions

ECONOMIZER FOR HORIZONTAL DUCT INSTALLATION

Field Installed Only

AXRD-01RGHAM3—Single Enthalpy (Outdoor)
RXXR-AV04—Dual Enthalpy Upgrade Kit
RXXR-AR02—Optional Wall-Mounted CO₂ Sensor

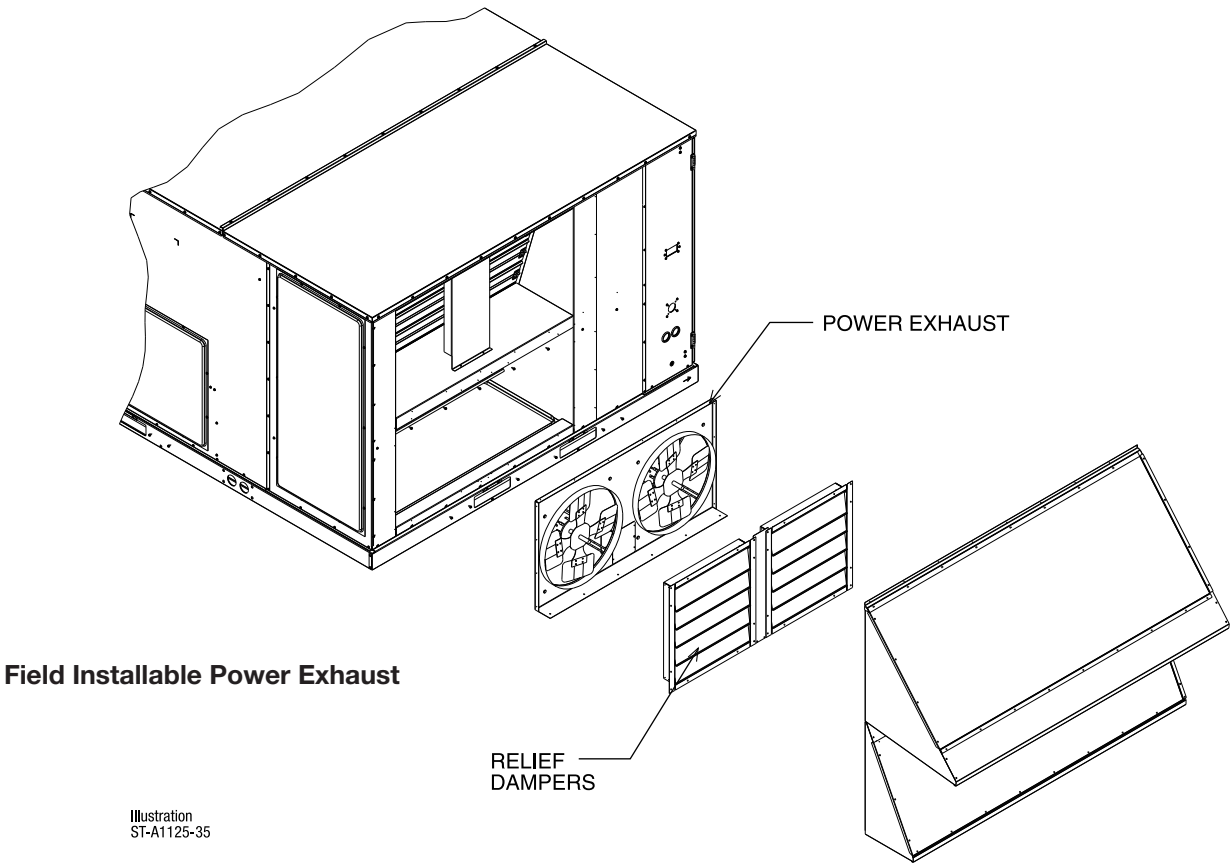
- Features **Honeywell JADE™** Digital Controls
- Available as a Field Installed Accessory Only
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Ultra Low Leak Dampers meet California Title 24 requirements
- Slip-In Design for Easy Installation
- Plug-In Polarized 12-pin Electrical Connections
- 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
- Field Installed Power Exhaust Available



[] Designates Metric Conversions

INTEGRAL POWER EXHAUST KIT FOR AXRD-01RGDAM3 OR AXRD-01RGDBM3 ECONOMIZERS (C, D, or Y*)

*Voltage Code



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		
RXXR-BGF05C	2	208-230	1	0.75	4100 [1935]	850	5200 [2454]	1050	5	4.97
RXXR-BGF05D	2	460	1	0.75	4100 [1935]	850	5200 [2454]	1050	2.2	3.4
RXXR-BGF05Y	2	575	1	0.75	4100 [1935]	850	5200 [2454]	1050	1.5	2.84

NOTES: ① Power exhaust is factory set on high speed motor tap.
 ② CFM is per fan at 0" w.c. external static pressure.

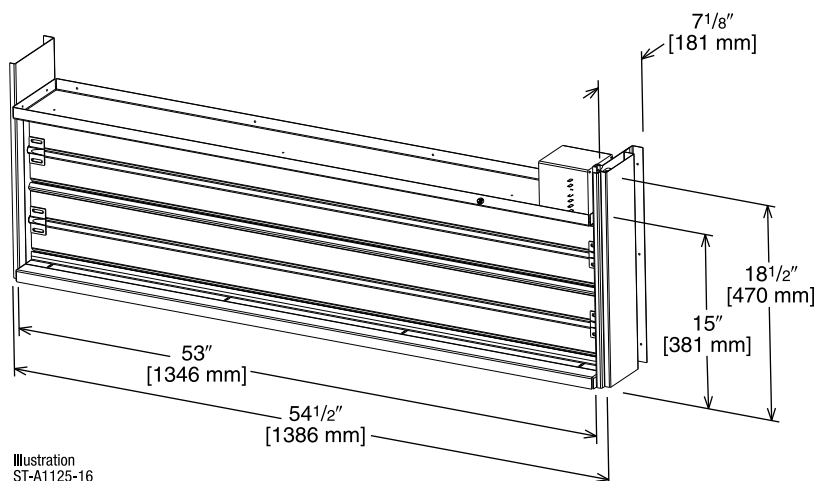
[] Designates Metric Conversions

FRESH AIR DAMPER

MOTORIZED DAMPER KIT

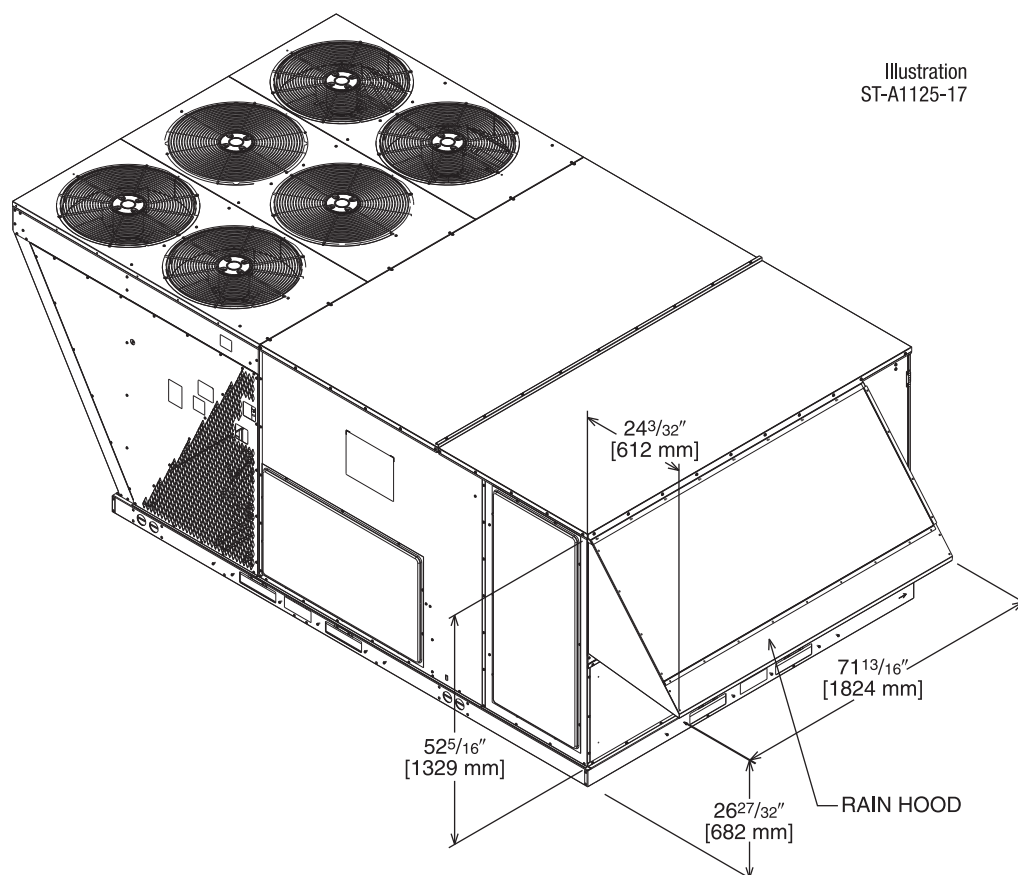
RXRX-AW03

(Motor Kit for RXRF-KFA1)



AXRF-KFA1 (Manual)

RXRX-AW03 (Motorized damper kit for manual fresh air damper)

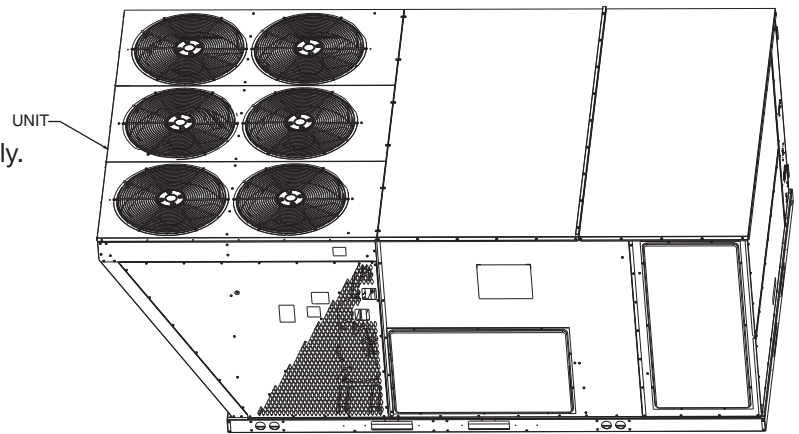


[] Designates Metric Conversions

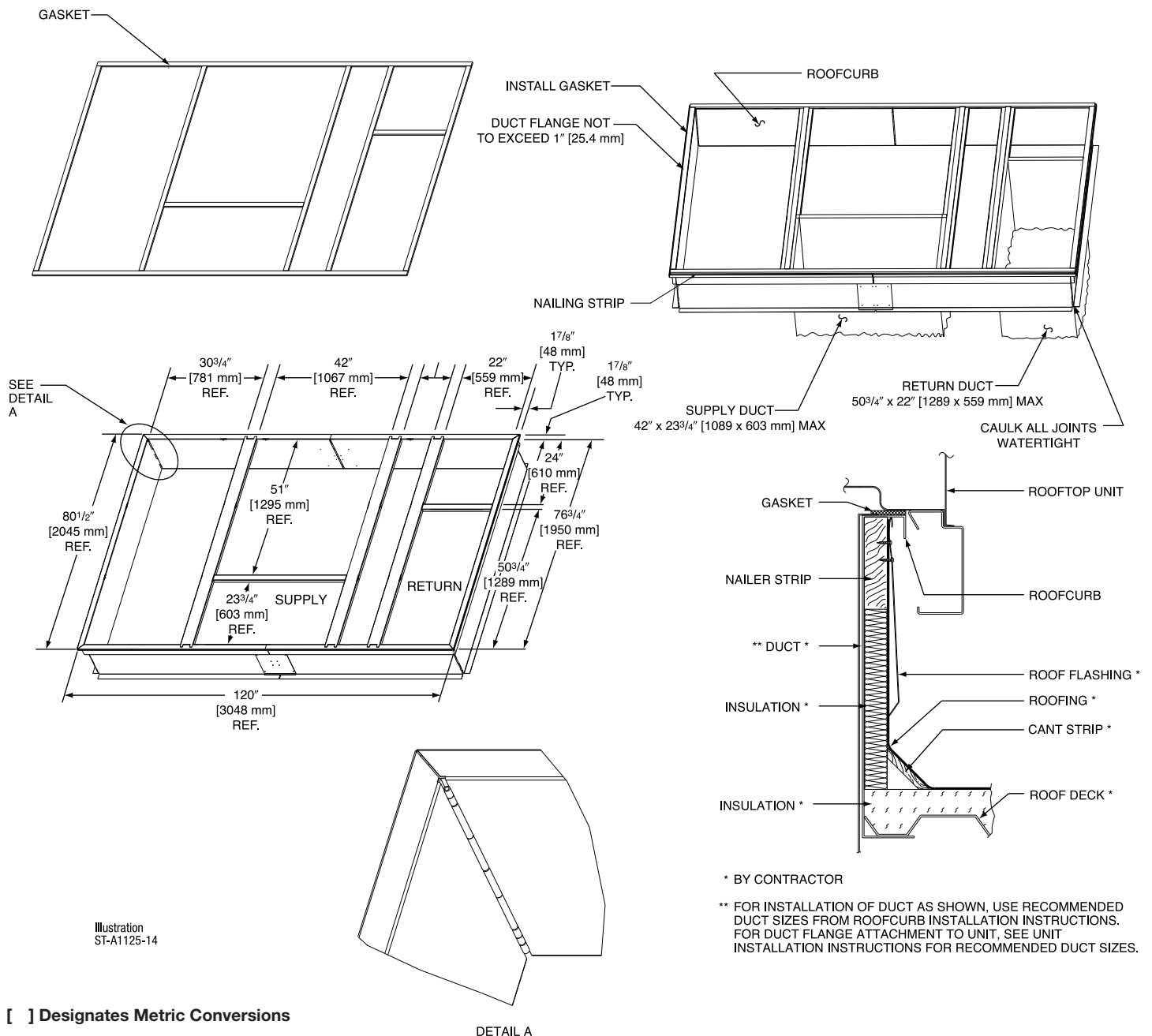
ROOFCURBS (Full Perimeter)

- Rheem's roofcurb design can be utilized on 15 and 20 ton [52.8 and 70.3 kW] models.
- One available height (14" [356 mm]).
- Quick assembly corners for simple and fast assembly.
- 1" [25.4 mm] x 4" [102 mm] Nailers provided.
- Insulating panels not required because of insulated outdoor base pan.
- Sealing gasket (28" [711 mm]) provided with Roofcurb.
- Packaged for easy field assembly.

TYPICAL INSTALLATION



ROOFCURB ASSEMBLY



[] Designates Metric Conversions

ROOFCURB ADAPTERS

OLD MODELS
COMMERCIAL CABINET
(15 & 20 TON)
([52.8 & 70.3 kW])
(-)RGF, (-)REF

OLD CURB MODEL

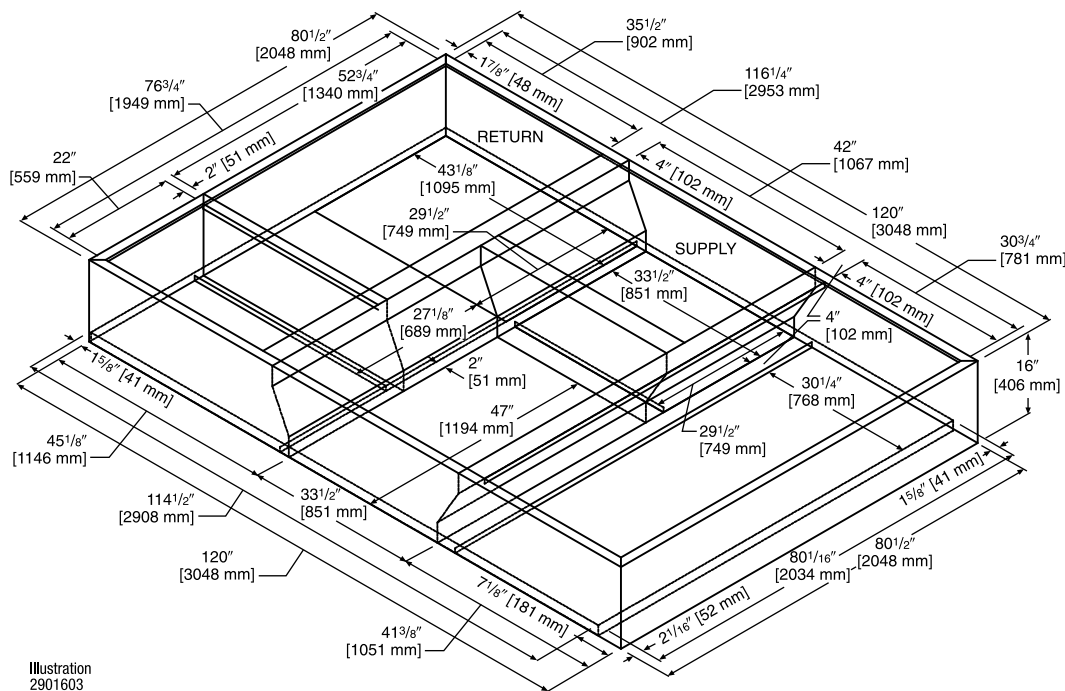
RXRK-E56

ROOFCURB ADAPTER

RXRX-CJCE56

NEW MODEL

(-)LNL
(15 & 20 TON)
([52.8 & 70.3 kW])

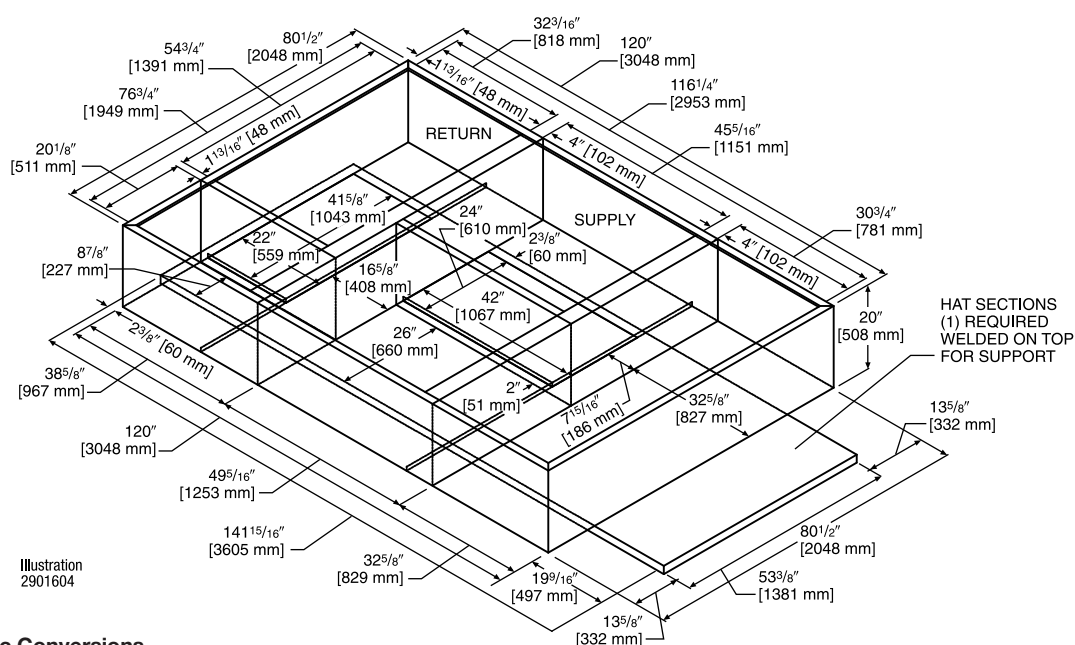


COMMERCIAL CABINET
(15 & 20 TON)
([52.8 & 70.3 kW])
(-)LKB, LMB

RXKG-CAF14

RXRX-CJCF14

(-)LNL
(15 & 20 TON)
([52.8 & 70.3 kW])



[] Designates Metric Conversions

CONCENTRIC DIFFUSER APPLICATION

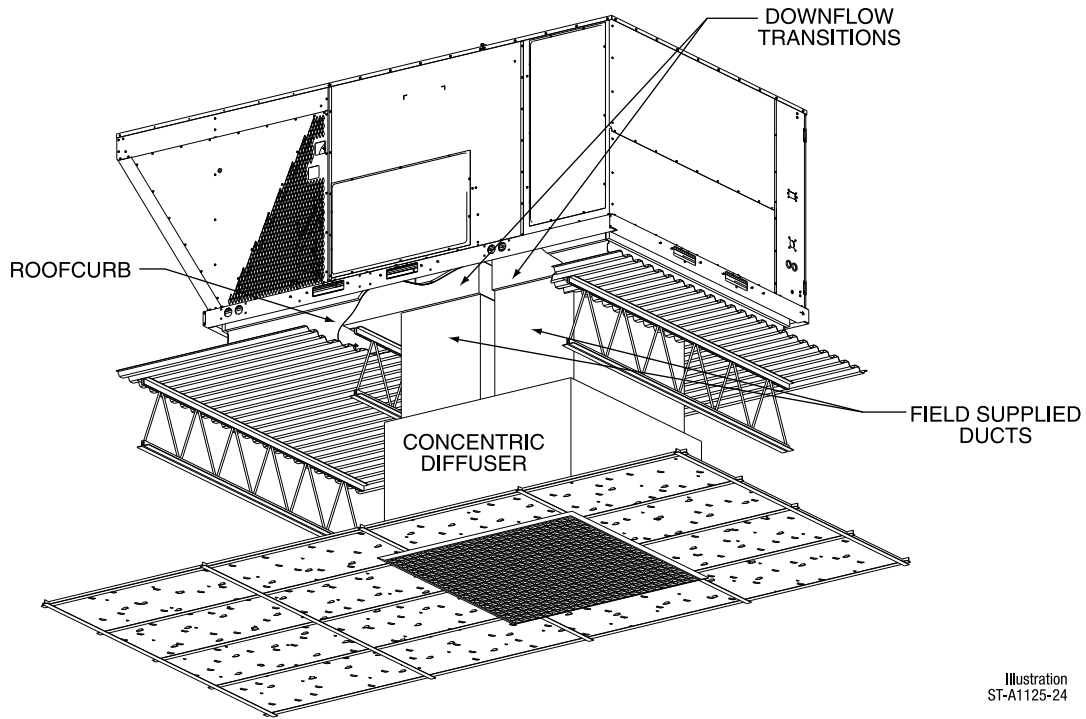


Illustration
ST-A1125-24

DOWNFLOW TRANSITION DRAWINGS

RXMC-CJ07 (15 Ton) [52.8 kW]

- Used with RXRN-AD80 and RXRN-AD81 Concentric Diffusers.

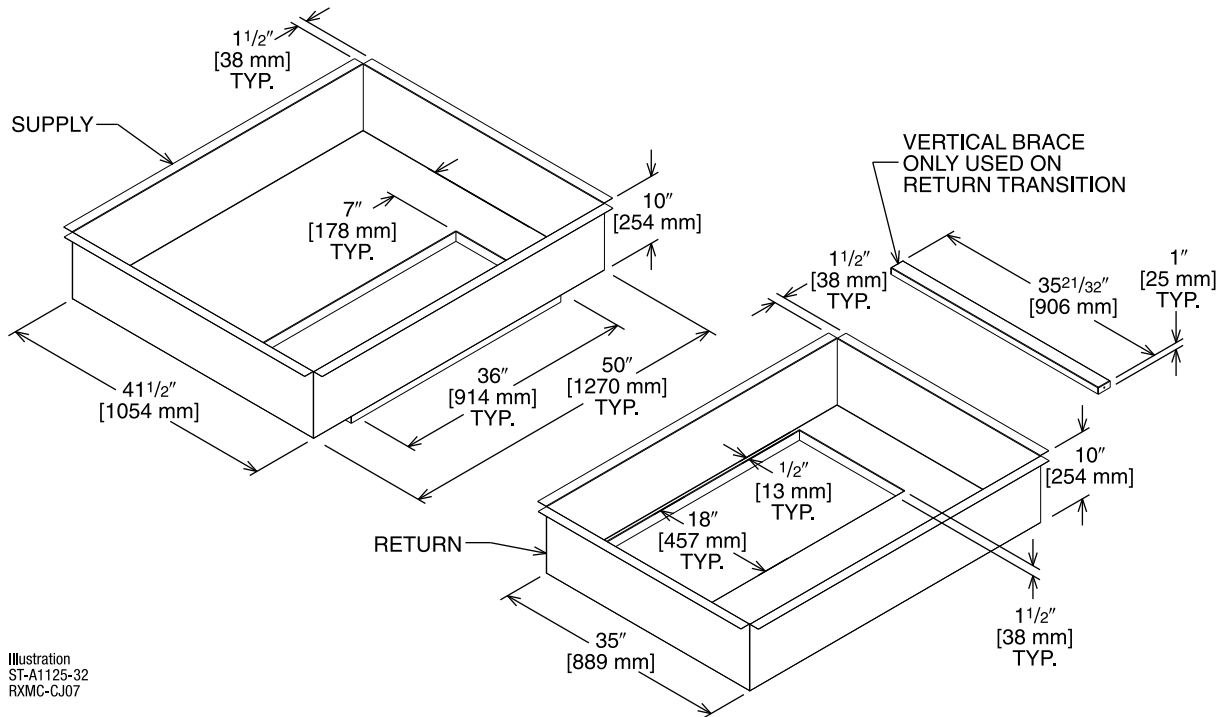


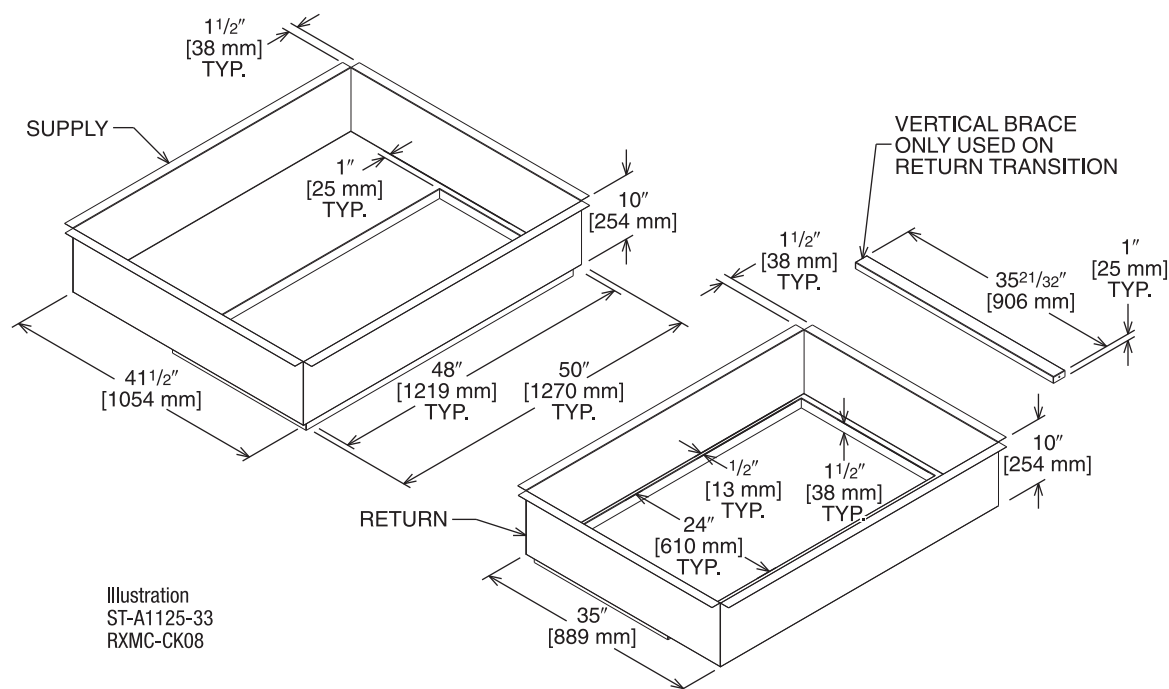
Illustration
ST-A1125-32
RXMC-CJ07

[] Designates Metric Conversions

DOWNFLOW TRANSITION DRAWINGS (Cont.)

RXMC-CK08 (20 Ton) [70.3 kW]

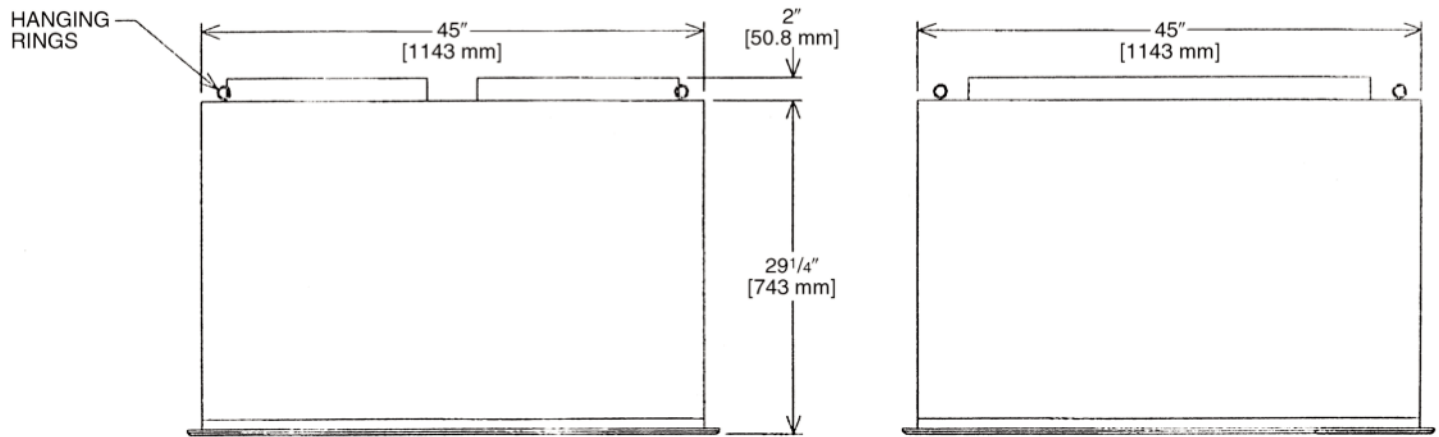
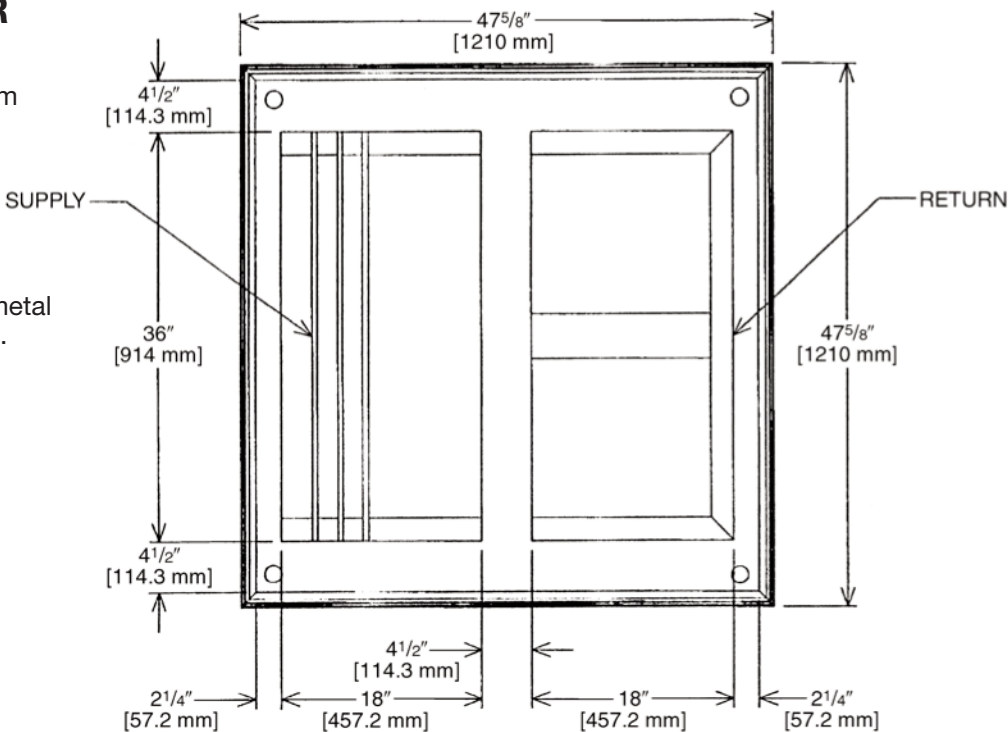
- Used with RXRN-AD86 Concentric Diffusers.



[] Designates Metric Conversions

CONCENTRIC DIFFUSER **15 TON [52.8 kW] FLUSH**

- 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.



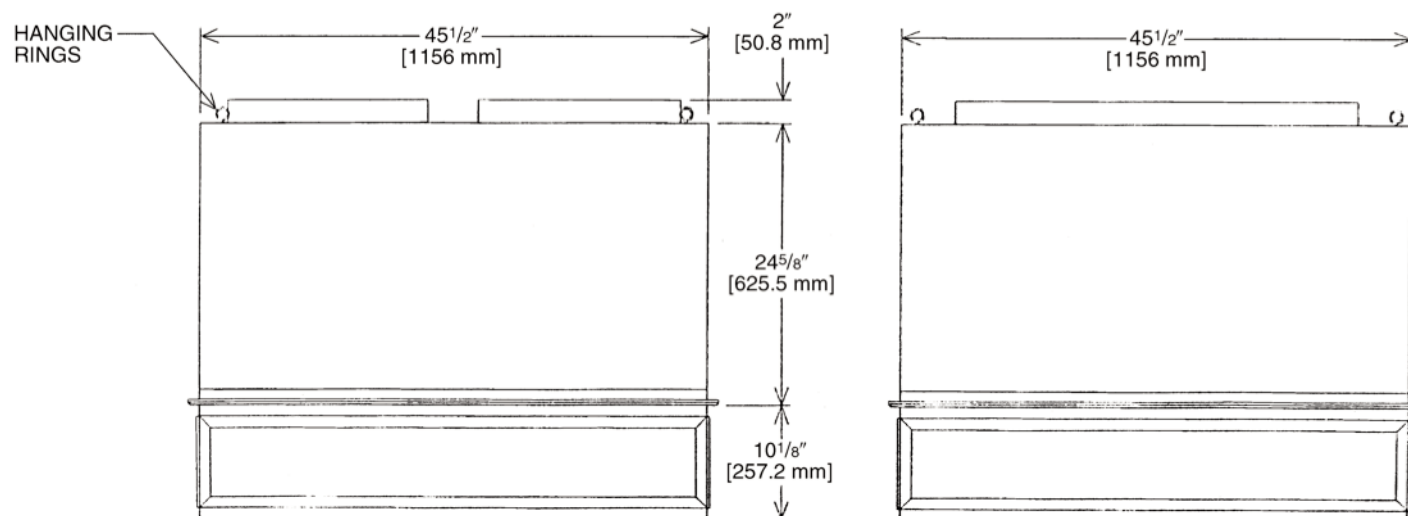
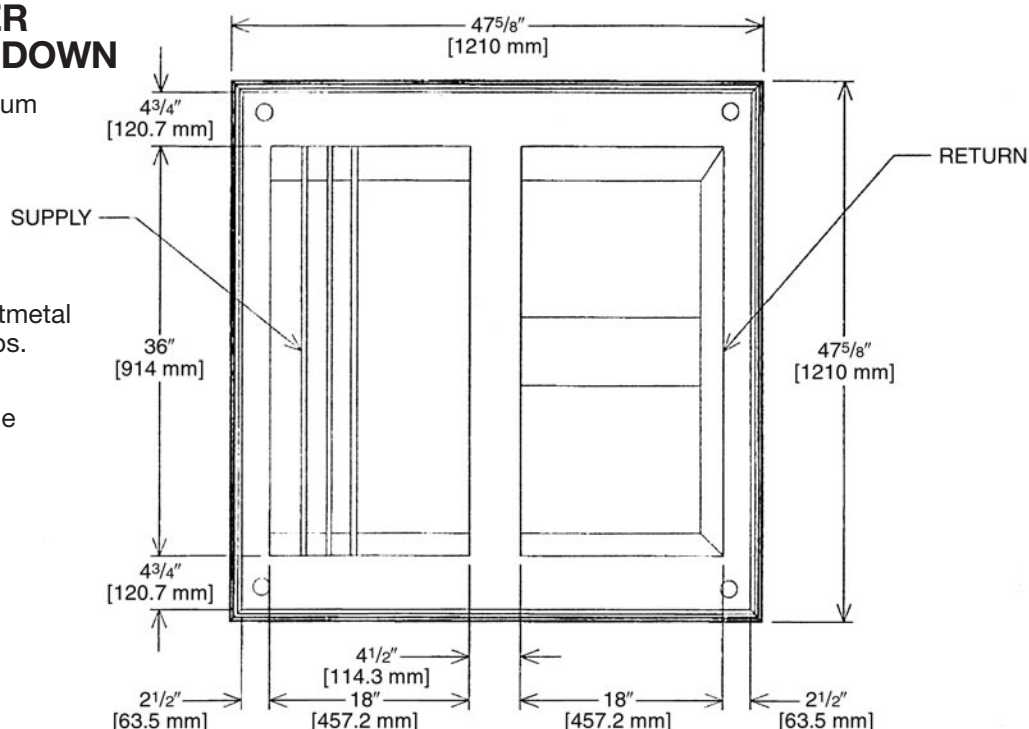
CONCENTRIC DIFFUSER SPECIFICATIONS

PART NUMBER	CFM [L/s]	STATIC PRESSURE	THROW FEET	NECK VELOCITY	JET VELOCITY
RXRN-AD80	5600 [2643]	0.36	28-37	1000	2082
	5800 [2737]	0.39	29-38	1036	2156
	6000 [2832]	0.42	40-50	1071	2230
	6200 [2926]	0.46	42-51	1107	2308
	6400 [3020]	0.50	43-52	1143	2379
	6600 [3115]	0.54	45-56	1179	2454

[] Designates Metric Conversions

CONCENTRIC DIFFUSER 15 TON [52.8 kW] STEP DOWN

- 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.



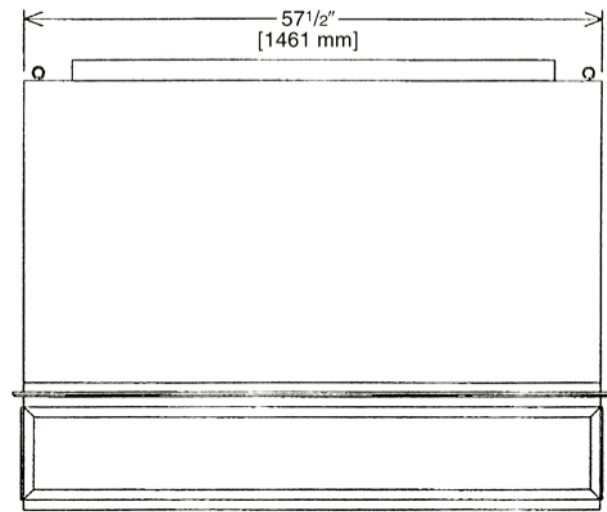
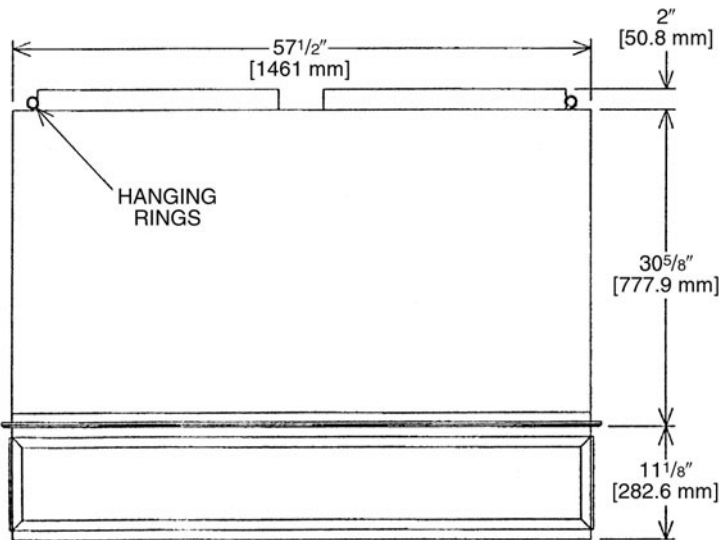
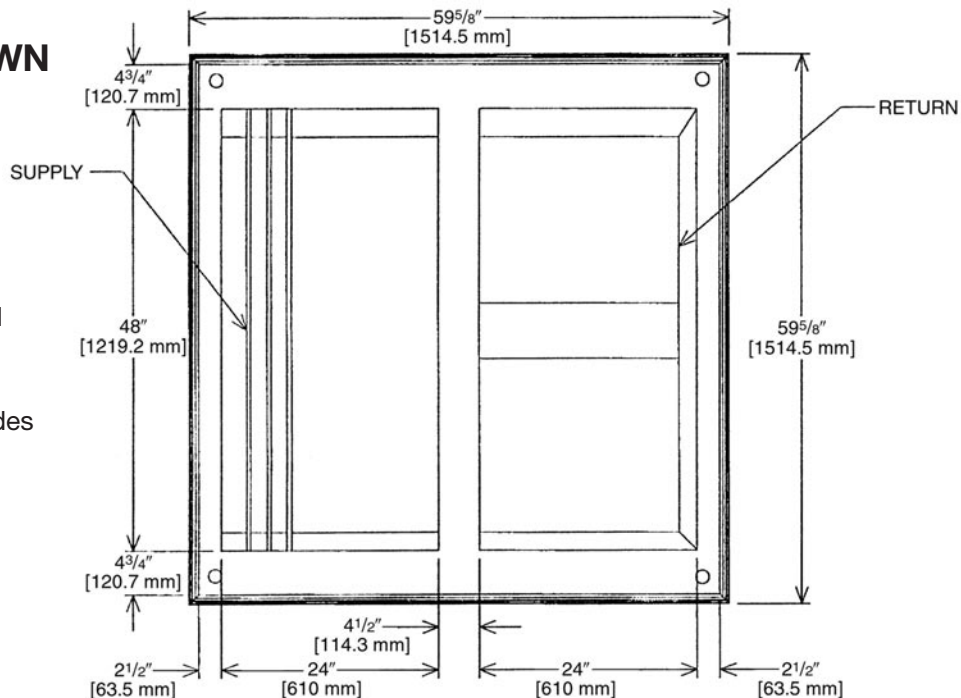
CONCENTRIC DIFFUSER SPECIFICATIONS

PART NUMBER	CFM [L/s]	STATIC PRESSURE	THROW FEET	NECK VELOCITY	JET VELOCITY
RXRN-AD81	5600 [2643]	0.36	39-49	920	920
	5800 [2737]	0.39	42-51	954	954
	6000 [2832]	0.42	44-54	1022	1022
	6200 [2926]	0.46	45-55	1056	1056
	6400 [3020]	0.50	46-55	1090	1090
	6600 [3115]	0.54	47-56	1124	1124

[] Designates Metric Conversions

CONCENTRIC DIFFUSER **RXRN-AD86 SERIES** **20 TON [70.3 kW] STEP DOWN**

- 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.



CONCENTRIC DIFFUSER SPECIFICATIONS

PART NUMBER	CFM [L/s]	STATIC PRESSURE	THROW FEET	NECK VELOCITY	JET VELOCITY
RXRN-AD86	7200 [3398]	0.39	33-38	827	827
	7400 [3492]	0.41	35-40	850	850
	7600 [3587]	0.43	36-41	873	873
	7800 [3681]	0.47	38-43	896	896
	8000 [3776]	0.50	39-44	918	918
	8200 [3870]	0.53	41-46	941	941
	8400 [3964]	0.56	43-49	964	964
	8600 [4059]	0.59	44-50	987	987
	8800 [4153]	0.63	47-55	1010	1010

[] Designates Metric Conversions

Guide Specifications RLNL-B180 thru B241

Note about this specification: Please feel free to copy this specification directly into your building spec. This specification is written to comply with the 2004 version of the "master format" as published by the Construction Specification Institute www.csinet.org.

ELECTRIC HEAT PACKAGED ROOFTOP

HVAC Guide Specifications

Size Range: 15-20 Nominal Tons

Section	Description
---------	-------------

23 06 80	Schedules for Decentralized HVAC Equipment
----------	--

23 06 80.13	Decentralized Unitary HVAC Equipment Schedule
-------------	---

23 06 80.13.A.	Rooftop unit schedule
----------------	-----------------------

1. Schedule is per the project specification requirements.

23 07 16	HVAC Equipment Insulation
----------	---------------------------

23 07 16.13	Decentralized, Rooftop Units:
-------------	-------------------------------

1. Interior cabinet surfaces shall be insulated with a minimum 3/4-in. thick, minimum 1-1/2 lb density, flexible fiberglass insulation bonded with a phenolic binder, with aluminum foil facing on the air side.
2. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.

23 09 13	Instrumentation and Control Devices for HVAC
----------	--

23 09 13.23	Sensors and Transmitters:
-------------	---------------------------

23 09 13.23.A.	Thermostats
----------------	-------------

1. Thermostat must
 - a. energize both "W" and "G" when calling for heat.
 - b. have capability to energize 2 different stages of cooling, and 2 different stages of heating.
 - c. must include capability for occupancy scheduling.

23 09 33	Electric and Electronic Control System for HVAC
----------	---

23 09 33.13	Decentralized, Rooftop Units:
-------------	-------------------------------

23 09 33.13.A.	General:
----------------	----------

1. Shall be complete with self-contained low-voltage control circuit protected by a resettable circuit breaker on the 24-v transformer side.
2. Shall utilize color-coded wiring.
3. Unit shall include a minimum of one 9-pin screw terminal connection board for connection of control wiring.

23 09 33.23.B.	Safeties:
----------------	-----------

1. Compressor over-temperature, over current.
2. Low-pressure switch.
3. High-pressure switch.
4. Automatic reset, motor thermal overload protector.

23 09 93	Sequence of Operations for HVAC Controls
----------	--

23 09 93.13	Decentralized, Rooftop Units:
-------------	-------------------------------

23 09 93.13	INSERT SEQUENCE OF OPERATION
-------------	------------------------------

23 40 13	Panel Air Filters
----------	-------------------

23 40 13.13	Decentralized, Rooftop Units:
-------------	-------------------------------

23 40 13.13.A.	Standard filter section shall
----------------	-------------------------------

1. Shall consist of factory-installed, low velocity, throwaway 2-in. thick fiberglass filters of commercially available sizes.
2. Unit shall use only one filter size. Multiple sizes are not acceptable.
3. Filter face velocity shall not exceed 365 fpm at nominal airflows.
4. Filters shall be accessible through an access panel as described in the unit cabinet section of the specification (23 81 19.13.H).

23 81 19	Self-Contained Air Conditioners
----------	---------------------------------

23 81 19.13	Small-Capacity Self-Contained Air Conditioners
-------------	--

23 81 19.13.A.	General
----------------	---------

1. Outdoor, rooftop mounted, electrically controlled, heating and cooling unit utilizing a(n) hermetic scroll compressor(s) for cooling duty and electric resistance heat for heating duty.

2. Factory assembled, single-piece heating and cooling rooftop unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, and special features required prior to field start-up.
3. Unit shall use environmentally safe, R410A refrigerant.
4. Unit shall be installed in accordance with the manufacturer's instructions.
5. Unit must be selected and installed in compliance with local, state, and federal codes.

23 81 19.13.B. Quality Assurance

1. Unit meets ASHRAE 90.1-2004 minimum efficiency requirements.
2. 3 phase units are Energy Star qualified.
3. Unit shall be rated in accordance with AHRI Standards 210 and 360.
4. Unit shall be designed to conform to ASHRAE 15, 2001.
5. Unit shall be UL-tested and certified in accordance with ANSI Z21.47 Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
6. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
7. Unit casing shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (scribed specimen).
8. Unit casing shall be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 5000-hour salt spray.
9. Unit shall be designed in accordance with ISO 9001:2000, and shall be manufactured in a facility registered by ISO 9001:2000.
10. Roof curb shall be designed to conform to NRCA Standards.
11. Unit shall be subjected to a completely automated run test on the assembly line. The data for each unit will be stored at the factory, and must be available upon request.
12. Unit shall be designed in accordance with UL Standard 1995, including tested to withstand rain.
13. Unit shall be constructed to prevent intrusion of snow and tested to prevent snow intrusion into the control box up to 40 mph.

23 81 19.13.C. Delivery, Storage, and Handling

1. Unit shall be stored and handled per manufacturer's recommendations.
2. Lifted by crane requires either shipping top panel or spreader bars.
3. Unit shall only be stored or positioned in the upright position.

23 81 19.13.E. Project Conditions

1. As specified in the contract.

23 81 19.13.F. Operating Characteristics

1. Unit shall be capable of starting and running at 115°F (46°C) ambient outdoor temperature, meeting maximum load criteria of AHRI Standard 210/240 or 360 at $\pm 10\%$ voltage.
2. Compressor with standard controls shall be capable of operation down to 40°F (4°C), ambient outdoor temperatures. Accessory low ambient kit is necessary if mechanically cooling at ambient temperatures below 40°F (4°C).
3. Unit shall discharge supply air vertically or horizontally as shown on contract drawings.
4. Unit shall be factory configured for vertical supply & return configurations.
5. Unit shall be field convertible from vertical to horizontal configuration.

23 81 19.13.G. Electrical Requirements

1. Main power supply voltage, phase, and frequency must match those required by the manufacturer.

23 81 19.13.H. Unit Cabinet

1. Unit cabinet shall be constructed of galvanized steel, and shall be bonderized and coated with a baked enamel finish on all externally exposed surfaces.
2. Unit cabinet exterior paint shall be: film thickness, (dry) 0.003 inches minimum, gloss (per ASTM D523, 60°F / 16°C): 60, Hardness: H-2H Pencil hardness.
3. Evaporator fan compartment interior cabinet insulation shall conform to AHRI Standards 210 or 360 minimum exterior sweat criteria. Interior surfaces shall be insulated with a minimum 3/4-in. thick, 1 lb. density, flexible fiberglass insulation, aluminum foil-faced coated on the air side.
4. Base of unit shall have locations for thru-the-base gas and electrical connections (factory installed or field installed), standard.
5. Base Rail
 - a. Unit shall have base rails on all sides.
 - b. Holes shall be provided in the base rails for rigging shackles to facilitate maneuvering and overhead rigging.
 - c. Holes shall be provided in the base rail for moving the rooftop by fork truck.
 - d. Base rail shall be a minimum of 14 gauge thickness.

6. Condensate pan and connections:
 - a. Shall be a sloped condensate drain pan made of a non-corrosive material.
 - b. Shall comply with ASHRAE Standard 62.
 - c. Shall use a 1" x 11 1/2 NPT drain connection through the side of the drain pan. Connection shall be made per manufacturer's recommendations.
7. Electrical Connections
 - a. All unit power wiring shall enter unit cabinet at a single, factory-prepared, knockout location.
 - b. Thru-the-base capability
 - i. Standard unit shall have a thru-the-base electrical location(s) using a raised, embossed portion of the unit basepan.
 - ii. No basepan penetration, other than those authorized by the manufacturer, is permitted.
8. Component access panels (standard)
 - a. Cabinet panels shall be easily removable for servicing.
 - b. Stainless steel metal hinges are standard on all doors.
 - c. Panels covering control box, indoor fan, indoor fan motor, and electric or gas heater components (where applicable), shall have 1/4 turn latches.

23 81 19.13.J. Coils

1. Standard Aluminum/Copper Coils:
 - a. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internally grooved copper tubes with all joints brazed.
 - b. Evaporator and condenser coils shall be leak tested to 150 psig, pressure tested to 550 psig, and qualified to UL 1995 burst test at 2,200 psi.

23 81 19.13.K. Refrigerant Components

1. Refrigerant circuit shall include the following control, safety, and maintenance features:
 - a. Thermal Expansion Valve (TXV) with orifice type distributor.
 - b. Refrigerant filter drier.
 - c. Service gauge connections on suction and discharge lines.
 - d. Pressure gauge access through an access port in the front and rear panel of the unit.
2. Compressors
 - a. Unit shall use one fully hermetic, scroll compressor for each independent refrigeration circuit.
 - b. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
 - c. Compressors shall be internally protected from high discharge temperature conditions. Advanced Scroll Temperature Protection on 240-300 sizes.
 - d. Compressors shall be protected from an over-temperature and over-amperage conditions by an internal, motor overload device.
 - e. Compressor shall be factory mounted on rubber grommets.
 - f. Compressor motors shall have internal line break thermal and current overload protection.
 - g. Crankcase heaters shall not be required for normal operating range.

23 81 19.13.L. Filter Section

1. Filters access is specified in the unit cabinet section of this specification.
2. Filters shall be held in place by sliding filter tray, facilitating easy removal and installation.
3. Shall consist of factory-installed, low velocity, throw-away 2-in. thick fiberglass filters.
4. Filter face velocity shall not exceed 365 fpm at nominal airflows.
5. Filters shall be standard, commercially available sizes.
6. Only one size filter per unit is allowed.

23 81 19.13.M. Evaporator Fan and Motor

1. Evaporator fan motor:
 - a. Shall have permanently lubricated bearings.
 - b. Shall have inherent automatic-reset thermal overload protection.
 - c. Shall have a maximum continuous bhp rating for continuous duty operation; no safety factors above that rating shall be required.

2. Belt-driven Evaporator Fan:

- a. Belt drive shall include an adjustable-pitch motor pulley.
- b. Shall use sealed, permanently lubricated ball-bearing type.
- c. Blower fan shall be double-inlet type with forward-curved blades.
- d. Shall be constructed from steel with a corrosion resistant finish and dynamically balanced.

23 81 19.13.N. Condenser Fans and Motors**1. Condenser fan motors:**

- a. Shall be a totally enclosed motor.
- b. Shall use permanently lubricated bearings.
- c. Shall have inherent thermal overload protection with an automatic reset feature.
- d. Shall use a shaft-down design. Shaft-up designs including those with "rain-slinger devices" shall not be allowed.

2. Condenser Fans shall:

- a. Shall be a direct-driven propeller type fan
- b. Shall have aluminum blades riveted to corrosion-resistant steel spiders and shall be dynamically balanced.

23 81 19.13.O. Special Features**1. Integrated Economizers:**

- a. Integrated, gear-driven parallel modulating blade design type capable of simultaneous economizer and compressor operation.
- b. Independent modules for vertical or horizontal return configurations shall be available. Vertical return modules shall be available as a factory installed option.
- c. Damper blades shall be galvanized steel with metal gears. Plastic or composite blades on intake or return shall not be acceptable.
- d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
- e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
- f. Shall be capable of introducing up to 100% outdoor air.
- g. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air.
- h. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
- i. An outdoor single enthalpy sensor shall be provided as standard. Outdoor air enthalpy set point shall be adjustable and shall range from the enthalpy equivalent of 63°F @ 50% rh to 73°F @ 50% rh. Additional sensor options shall be available as accessories.
- j. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 70%, with a range of 0% to 100%.
- k. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy. A remote potentiometer may be used to override the damper set point.
- l. Economizer controller shall accept a 2-10Vdc CO₂ sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor-air damper to provide ventilation based on the sensor input.
- m. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
- n. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.

2. Two-Position Damper

- a. Damper shall be a Two-Position Damper. Damper travel shall be from the full closed position to the field adjustable %-open setpoint.
- b. Damper shall include adjustable damper travel from 25% to 100% (full open).
- c. Damper shall include single or dual blade, gear driven damper and actuator motor.
- d. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
- e. Damper will admit up to 100% outdoor air for applicable rooftop units.
- f. Damper shall close upon indoor (evaporator) fan shutoff and/or loss of power.
- g. The damper actuator shall plug into the rooftop unit's wiring harness plug. No hard wiring shall be required.
- h. Outside air hood shall include aluminum water entrainment filter.

3. Manual damper

- a. Manual damper package shall consist of damper, air inlet screen, and rain hood which can be preset to admit up to 50% outdoor air for year round ventilation.

4. Head Pressure Control Package
 - a. Controller shall control coil head pressure by condenser-fan cycling.
5. Convenience Outlet:
 - a. Non-Powered convenience outlet.
 - b. Outlet shall be powered from a separate 115-120v power source.
 - c. A transformer shall not be included.
 - d. Outlet shall be field-installed and internally mounted with easily accessible 115-v female receptacle.
 - e. Outlet shall include 15 amp GFI receptacles.
 - f. Outlet shall be accessible from outside the unit.
6. Thru-the-Base Connectors:
 - a. Kits shall provide connectors to permit electrical connections to be brought to the unit through the unit basepan.
7. Propeller Power Exhaust:
 - a. Power exhaust shall be used in conjunction with an integrated economizer.
 - b. Independent modules for vertical or horizontal return configurations shall be available.
 - c. Horizontal power exhaust is shall be mounted in return ductwork.
 - d. Power exhaust shall be controlled by economizer controller operation. Exhaust fans shall be energized when dampers open past the 0-100% adjustable setpoint on the economizer control.
8. Roof Curbs (Vertical):
 - a. Full perimeter roof curb with exhaust capability providing separate airstreams for energy recovery from the exhaust air without supply air contamination.
 - b. Formed galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight.
 - c. Permits installation and securing of ductwork to curb prior to mounting unit on the curb.
9. Outdoor Air Enthalpy Sensor:
 - a. The outdoor air enthalpy sensor shall be used to provide single enthalpy control. When used in conjunction with a return air enthalpy sensor, the unit will provide differential enthalpy control. The sensor allows the unit to determine if outside air is suitable for free cooling.
10. Return Air Enthalpy Sensor:
 - a. The return air enthalpy sensor shall be used in conjunction with an outdoor air enthalpy sensor to provide differential enthalpy control.
11. Indoor Air Quality (CO₂) Sensor:
 - a. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
 - b. The IAQ sensor shall be available in wall mount with LED display. The set point shall have adjustment capability.
12. Smoke detectors:
 - a. Shall be a Four-Wire Controller and Detector.
 - b. Shall be environmental compensated with differential sensing for reliable, stable, and drift-free sensitivity.
 - c. Shall use magnet-activated test/reset sensor switches.
 - d. Shall have tool-less connection terminal access.
 - e. Shall have a recessed momentary switch for testing and resetting the detector.
 - f. Controller shall include:
 - i. One set of normally open alarm initiation contacts for connection to an initiating device circuit on a fire alarm control panel
 - ii. Two Form-C auxiliary alarm relays for interface with rooftop unit or other equipment.
 - iii. One Form-C supervision (trouble) relay to control the operation of the Trouble LED on a remote test/reset station.
 - iv. Capable of direct connection to two individual detector modules.
 - v. Can be wired to up to 14 other duct smoke detectors for multiple fan shutdown applications.

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

GENERAL TERMS OF LIMITED WARRANTY*

Rheem 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 Applications.....	Five (5) Years
Parts	
3 Phase, Commercial Applications.....	One (1) Year



The new degree of comfort.™

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

Rheem Heating, Cooling & Water Heating • 5600 Old Greenwood Road
Fort Smith, Arkansas 72908 • www.rheem.com

Rheem Canada Ltd./Ltée • 125 Edgeware Road, Unit 1
Brampton, Ontario • L6Y 0P5



INTEGRATED AIR & WATER

PRINTED IN U.S.A. 12/21 QG FORM NO. S11-957 REV. 7