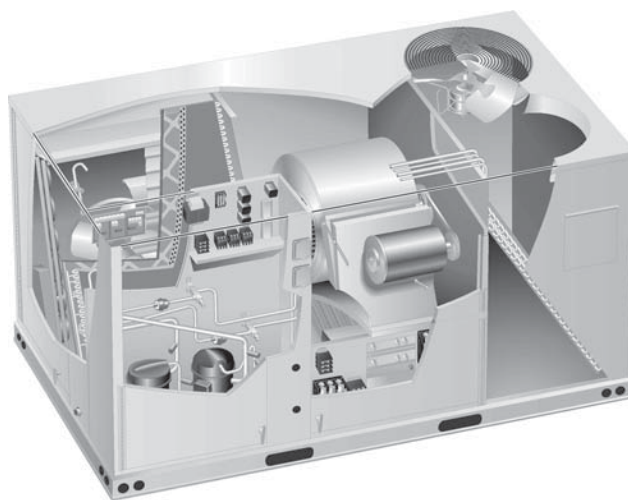


**090, 102, 120 & 150 Models**

**7 1/2 to 12 Tons Cooling Capacity**

**7.5 to 60 kW Optional Electric Heat**



## FEATURES

- ◆ Down flow or horizontal supply and return air configuration
- ◆ E.T.L. and CSA listed, efficiency rating verified by CSA, components bonded for grounding to meet safety standards for servicing required by U.L., CSA and National and Canadian Electrical Codes
- ◆ Certified in accordance with ULE certification program, which is based on ARI Standard 340/360-2000
- ◆ Electrical lines can be brought through base or through horizontal access knockouts
- ◆ Heavy gauge steel cabinet with a two layer enamel paint finish, fully insulated where conditioned air is handled, tool-less access panels for compressor, controls, blower and air filter/economizer compartment, full perimeter base rail with rigging holes, unit base fully insulated eliminating the need to add sealants when used with roof curbs
- ◆ Coil constructed of ripple-edged enhanced aluminum fins on copper tubing, evaporator coil face split with separate circuits, indoor coil drain connection extends outside of unit cabinet
- ◆ Copeland® Compliant Scroll® compressor for high efficiency, resiliently mounted
- ◆ Compressor crankcase heaters
- ◆ Integrated Modular Control (IMC) - solid state board contains all controls and control relays to operate unit with unit diagnostics
- ◆ Color coded and labeled wiring
- ◆ Outdoor coil fans - PVC coated fan guard furnished
- ◆ Outdoor coil fan motors overload protected, permanently lubricated, equipped with ball bearings, shaft up, wire basket mount
- ◆ Disposable 2" pleated filters furnished
- ◆ Refrigeration system has discharge, suction, and liquid line gauge ports, high pressure switches, low pressure switches, driers, freezestats, expansion valves, and full refrigerant charge
- ◆ Supply air blower - belt drive, forward curved blades, blower wheel statically and dynamically balanced, ball bearings, adjustable pulley (allows speed change), blower assembly slides out of unit for servicing
- ◆ System operates from 0°F (-18°C) to 125°F (52°C)
- ◆ Supply air motor overload protected, equipped with ball bearings
- ◆ 70VA transformer with built-in circuit breaker
- ◆ 1 Year warranty on parts
- ◆ 5 Year warranty on compressor

## Model Number Guide

|                                         | L | C | C | 102 | S | 2 | B | N | 1 | Y |                                                                    |
|-----------------------------------------|---|---|---|-----|---|---|---|---|---|---|--------------------------------------------------------------------|
| Commercial Package Unit                 |   |   |   |     |   |   |   |   |   |   | Voltage                                                            |
| C - Cooling Only (w/opt. Electric Heat) |   |   |   |     |   |   |   |   |   |   | Y = 208/230v-3 ph-60 hz<br>G = 460v-3 ph-60hz<br>J = 575v-3ph-60hz |
| Major Design Sequence                   |   |   |   |     |   |   |   |   |   |   | Revision Level                                                     |
| Cooling Capacity                        |   |   |   |     |   |   |   |   |   |   | N = Position not used on LC units                                  |
| 090 = 7.5 (25.3)                        |   |   |   |     |   |   |   |   |   |   |                                                                    |
| 102 = 8.5 (29.9)                        |   |   |   |     |   |   |   |   |   |   |                                                                    |
| 120 = 10.0 (35.2)                       |   |   |   |     |   |   |   |   |   |   | B = Belt Drive<br>D = Direct Drive                                 |
| 150 = 12.0 (42.2)                       |   |   |   |     |   |   |   |   |   |   |                                                                    |
| Cooling Efficiency                      |   |   |   |     |   |   |   |   |   |   | 2 = R22                                                            |
| S = Standard                            |   |   |   |     |   |   |   |   |   |   |                                                                    |

## Required Options - Items Must be Ordered and Factory Installed

|                                                                               |
|-------------------------------------------------------------------------------|
| Cooling Capacity - Specify the nominal cooling capacity of the unit.          |
| Cooling Efficiency - Specify standard efficiency.                             |
| Specify Voltage                                                               |
| Air Flow Configuration - Specify horizontal or down-flow.                     |
| Supply Air Blower                                                             |
| Select motor horsepower and one drive kit, see Drive Kit Specifications Table |

## Optional Accessories

| Item                                                                                                   |         |
|--------------------------------------------------------------------------------------------------------|---------|
| <b>Disconnect Switch</b> - Accessible from outside of unit, spring loaded weatherproof cover furnished | Factory |
| <b>Service Outlets (2)</b> - 115v ground fault circuit interrupter (GFCI) type                         | Factory |

## Optional Accessories Field Installed

| Item                                                                                                                                                                                                                                                                                                                                |                         | LCA090                                                                                                               | LCC102 | LCC120 | LCC150 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------|--------|--------|--------|
| Blower Proving Switch - Monitors blower operation, shuts down unit if blower fails                                                                                                                                                                                                                                                  |                         | <b>18L89</b>                                                                                                         |        |        |        |
| Dirty Filter Switch - Senses static pressure increase indicating a dirty filter condition                                                                                                                                                                                                                                           |                         | <b>30K48</b>                                                                                                         |        |        |        |
| Economizer Differential Enthalpy Control - Two solid-state enthalpy sensors allow selection between outdoor air and return air (whichever has lowest )                                                                                                                                                                              |                         | <b>16K97</b>                                                                                                         |        |        |        |
| Economizer Enthalpy Control - Adjustable enthalpy sensor, senses outdoor air enthalpy for economizer control, 0 to 100% outdoor air                                                                                                                                                                                                 |                         | <b>16K96</b>                                                                                                         |        |        |        |
| Photoelectric type for field installation in supply air section, return air section or both sections                                                                                                                                                                                                                                | Smoke Detector - Supply | <b>16M24</b>                                                                                                         |        |        |        |
|                                                                                                                                                                                                                                                                                                                                     | Smoke Detector - Return | <b>16M23</b>                                                                                                         |        |        |        |
| Condensate Drain Trap - field installed only, may be factory enclosed to ship with unit                                                                                                                                                                                                                                             | PVC                     | <b>37K70</b>                                                                                                         |        |        |        |
|                                                                                                                                                                                                                                                                                                                                     | Copper                  | <b>48K14</b>                                                                                                         |        |        |        |
| Economizer - Opposing gear driven recirculated air and outdoor air dampers, plug-in connections to unit, nylon bearings, neoprene seals, 24 volt fully modulating spring return motor, adjustable minimum damper position, damper assembly slides in unit.<br><b>NOTE:</b> Required optional Outdoor Air Hood (bottom of next page) |                         | LAREMD10/15 <b>(53K51)</b><br>47 lbs. (21 kg)                                                                        |        |        |        |
| Down-Flow Gravity Exhaust Dampers - Aluminum blade dampers prevent blow back and outdoor air infiltration during off cycle, bird screen furnished - Net weight                                                                                                                                                                      |                         | LAGED10/15 <b>(53K03)</b><br>8 lbs/ (4 kg)                                                                           |        |        |        |
| Hood For Down Flow Gravity Exhaust Damper                                                                                                                                                                                                                                                                                           |                         | LAGEH09/15 <b>(88K79)</b>                                                                                            |        |        |        |
| Horizontal Gravity Exhaust Dampers - Aluminum blade dampers prevent blow back and outdoor air infiltration during off cycle, field installed in return air duct, bird screen \and hoodfurnished - 2 dampers per order - Net Weight                                                                                                  |                         | LAGEDH03/15 <b>(53K04)</b> 8 lbs. (4 kg)                                                                             |        |        |        |
| Power Exhaust Fan - Installs external to unit for down-flow applications only with economizer option, provides exhaust air pressure relief, interlocked to run when supply air blower is operating and outdoor air dampers are 50% open (adjustable), motor is overload protected, steel cabinet and hood painted to match unit     |                         | LAPEF10/15<br>208/230V-3 Ph <b>(53K06)</b><br>460V-3 Ph <b>(53K07)</b><br>575V-3Ph <b>(53K08)</b><br>28 lbs. (13 kg) |        |        |        |
| Electric Heat (EHA) - helix wound nichrome elements, time delay for element staging, individual element limit controls (45, 60, 90 and 120 kW), may be two-stage controlled, wiring harness furnished, requires Electric Heat Control Module, Fuse Block and Terminal Block                                                         |                         | See Electric Heat Data Tables                                                                                        |        |        |        |
| Electric Heat LTB2 Terminal Block - Required with electric heat                                                                                                                                                                                                                                                                     |                         | See Electric Heat Data Tables                                                                                        |        |        |        |
| Electric Heat Fuse Block - Required with electric heat, mounting screws furnished                                                                                                                                                                                                                                                   |                         | See Electric Heat Data Tables                                                                                        |        |        |        |
| Fresh Air Tempering                                                                                                                                                                                                                                                                                                                 |                         | <b>45L78</b>                                                                                                         |        |        |        |

## Optional Accessories - Field Installed

| Item                                                                                                                                                                                                                                                             |                                                                                                                            | LCA090                                    | LCC102 | LCC120 | LCC150                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--------|--------|----------------------------------------|
| Coil Guards - Galvanized steel wire guards to protect outdoor coil. Not used with Hail Guards.                                                                                                                                                                   |                                                                                                                            | 88K51                                     |        |        |                                        |
| Grille Guards - Protects the space between outdoor coils and main cabinet.                                                                                                                                                                                       |                                                                                                                            | 86K29                                     |        |        |                                        |
| Hail Guards - Constructed of heavy gauge steel, painted to match cabinet, helps protect outdoor coils from hail damage. Not used with Coil Guards.                                                                                                               |                                                                                                                            | 88K24                                     |        |        |                                        |
| Horizontal Conversion Kit - Two piece duct cover in kit blocks off unit down flow supply air opening, horizontal return air opening panel (on unit) is moved to block off down flow return air opening for horizontal applications                               |                                                                                                                            | 56K53                                     |        |        |                                        |
| Diffusers - Aluminum grilles, large center grille, insulated diffuser box with flanges, hanging rings furnished, interior transition (even air flow), internally sealed (prevents recirculation), adapts to T-bar ceiling grids or plaster ceilings - Net Weight | Step Down - Net Weight                                                                                                     | RTD11-135 (29G05)<br>205 lbs. (93 kg)     |        |        | RTD11-185 (29G06)<br>392 lbs. (178 kg) |
|                                                                                                                                                                                                                                                                  | Flush - Net Weight                                                                                                         | FD11-135 (29G09)<br>174 lbs. (79 kg)      |        |        | FD11-185 (29G10)<br>289 lbs. (131 kg)  |
|                                                                                                                                                                                                                                                                  | Transitions - Supply & Return - Net Weight                                                                                 | LASRT 10/12 (49K55)<br>32 lbs. (15 kg)    |        |        | LASRT15 (49K56)<br>36 lbs. (16 kg)     |
| Indoor Air Quality (CO2) Sensor Monitors CO2 levels, reports - to Integrated Modular Control (IMC) board which adjusts economizer dampers as needed                                                                                                              | CO2 Sensor Duct Mounting Kit                                                                                               | 85L23                                     |        |        |                                        |
|                                                                                                                                                                                                                                                                  | Sensor - white case CO2 display                                                                                            | 77N39                                     |        |        |                                        |
|                                                                                                                                                                                                                                                                  | Sensor - white case no display                                                                                             | 87N53                                     |        |        |                                        |
|                                                                                                                                                                                                                                                                  | Sensor - black case CO2 display                                                                                            | 87N52                                     |        |        |                                        |
|                                                                                                                                                                                                                                                                  | Sensor - duct mount, black, no display                                                                                     | 87N54                                     |        |        |                                        |
|                                                                                                                                                                                                                                                                  | Aspiration Box for duct mounting                                                                                           | 90N43                                     |        |        |                                        |
|                                                                                                                                                                                                                                                                  | Handheld CO2 Monitor                                                                                                       | 70N93                                     |        |        |                                        |
| Roof Mounting Frame - Nailer strip furnished, mates to unit, U.S. National Roofing Contractors Approved, shipped knocked down - Net Weight                                                                                                                       | 14 in. (356 mm) height - Net Weight                                                                                        | LARMF10/15-14 (53K50)<br>126 lbs. (57 kg) |        |        |                                        |
|                                                                                                                                                                                                                                                                  | 24 in. (610 m) height- Net Weight                                                                                          | LARMF10/15-24 (49K54)<br>174 lbs. (79 kg) |        |        |                                        |
| Outdoor Air Damper Section - mechanical dampers, 0 to 25% outdoor air, installs in unit cabinet, outdoor air hood must be ordered separately (see below) - Net Weight                                                                                            | Automatic Operation - Gear driven, adjustable outdoor air, fully modulating spring return damper motor, plug-in connection | LAOADM10/15 (53K53)<br>31 lbs. (14 kg)    |        |        |                                        |
|                                                                                                                                                                                                                                                                  | Manual Operation - Linked dampers, adjustable fixed position outdoor air                                                   | LAOAD10/15 (66K69)<br>26 lbs. (12 kg)     |        |        |                                        |
| Outdoor Air Hood - Net Weight                                                                                                                                                                                                                                    |                                                                                                                            | LAOAH10/15 (53K05) 11 lbs. (5 kg)         |        |        |                                        |
| Number and Size of Filters                                                                                                                                                                                                                                       |                                                                                                                            | (2) 16 x 25 x 1 in. (406 x 635 x 25 mm)   |        |        |                                        |

## Specifications

| Model No.                              |                                                     |                      |                                | LCA090                                                                               | LCC102                 | LCC120                  | LCC150                  |
|----------------------------------------|-----------------------------------------------------|----------------------|--------------------------------|--------------------------------------------------------------------------------------|------------------------|-------------------------|-------------------------|
| Cooling Ratings                        | Nominal Tonnage                                     |                      |                                | 7.5                                                                                  | 8.5                    | 10                      | 12                      |
|                                        | Number and Type of Compressors                      |                      |                                | (2) Scroll                                                                           | (2) Scroll             | (2) Scroll              | (2) Scroll              |
|                                        | Gross Cooling Capacity - Btuh (kW)                  |                      |                                | 93,800 (27.5)                                                                        | 106,000 (31.1)         | 126,000 (36.6)          | 145,000 (42.5)          |
|                                        | <sup>1</sup> Net Cooling Capacity - Btuh (kW)       |                      |                                | 90,000 (26.4)                                                                        | 102,000 (29.9)         | 120,000 (35.2)          | 140,000 (41.0)          |
|                                        | Total Unit Power (kW)                               |                      |                                | 8.0                                                                                  | 9.9                    | 11.6                    | 14.4                    |
|                                        | <sup>1</sup> EER (Btuh/Watt)                        |                      |                                | 11.3                                                                                 | 10.3                   | 10.3                    | 9.7                     |
|                                        | <sup>2</sup> Integrated Part Load Value (Btuh/Watt) |                      |                                | 12.0                                                                                 | 10.4                   | 10.5                    | 9.4                     |
| <sup>3</sup> Sound Rating Number (db)  |                                                     |                      |                                | 88                                                                                   |                        |                         |                         |
| Refrigerant Charge Furnished (HCFC-22) |                                                     | Circuit 1            |                                | 10 lbs. 0 oz. (4.54 kg)                                                              | 6 lbs. 0 oz. (2.72 kg) | 10 lbs. 0 oz. (4.54 kg) | 14 lbs. 0 oz. (6.35 kg) |
|                                        |                                                     | Circuit 2            |                                | 10 lbs. 0 oz. (4.54 kg)                                                              | 6 lbs. 0 oz. (2.72 kg) | 10 lbs. 0 oz. (4.54 kg) | 14 lbs. 0 oz. (6.35 kg) |
| Evaporator Blower and Drive Selection  | Blower wheel nominal dia. x width - in. (mm)        |                      |                                | (1) 15 x 15 (381 x 381)                                                              |                        |                         |                         |
|                                        | 2 hp (1.5 kW)<br><sup>4</sup> Motor & Drives        | Motor Output hp (kW) | Nominal                        | 2 hp (1.5 kW)                                                                        |                        |                         |                         |
|                                        |                                                     |                      | Max. usable                    | 2.3 hp (1.7 kW)                                                                      |                        |                         |                         |
|                                        | (Drive kit #) RPM range                             |                      |                                | (1) 680 - 925 (3) 895 - 1120                                                         |                        |                         |                         |
|                                        | 3 hp (2.2 kW)<br><sup>4</sup> Motor & Drives        | Motor Output hp (kW) | Nominal                        | 3 hp (2.2 kW)                                                                        |                        |                         |                         |
|                                        |                                                     |                      | Max. usable                    | 3.45 hp (2.6 kW)                                                                     |                        |                         |                         |
|                                        | (Drive kit #) RPM range                             |                      |                                | (1) 680-925 (2) 680-925 (3) 895 -1120<br>(4) 895-1120 (5) 1110-1395 (6) 1110-1395    |                        |                         |                         |
|                                        | 5 hp (3.7 kW)<br><sup>4</sup> Motor & Drives        | Motor Output hp (kW) | Nominal                        | 5 hp (3.7 kW)                                                                        |                        |                         |                         |
|                                        |                                                     |                      | Max. usable                    | 5.75 hp (4.3 kW)                                                                     |                        |                         |                         |
| (Drive kit #) RPM range                |                                                     |                      | (4) 895 - 1120 (6) 1110 - 1395 |                                                                                      |                        |                         |                         |
| Evaporator Coil                        | Net face area - sq. ft. (m²)                        |                      |                                | 10.5 (.98) total                                                                     |                        | 10.5 (.98) total        |                         |
|                                        | Tube diameter - in. (mm) & No. of rows              |                      |                                | 3/8 (9.5) - 3                                                                        |                        | 3/8 (9.5) - 4           |                         |
|                                        | Fins per inch (m)                                   |                      |                                | 14 (551)                                                                             |                        | 14 (551)                |                         |
|                                        | Drain connection no. & size - in. (mm) fpt          |                      |                                | (1) 1 in. NPT coupling                                                               |                        |                         |                         |
|                                        | Expansion device type                               |                      |                                | Balanced Port Thermostatic Expansion Valve, removeable power head                    |                        |                         |                         |
| Condenser Coil                         | Net face area - sq. ft. (m²)                        |                      |                                | 29.3 (2.72) total                                                                    | 29.3 (2.72) total      | 29.3 (2.72) total       | 26.6 (2.47) total       |
|                                        | Tube diameter - in. (mm) & No. of rows              |                      |                                | 3/8 (9.5) - 2                                                                        | 3/8 (9.5) - 1          | 3/8 (9.5) - 2           | 3/8 (9.5) - 3           |
|                                        | Fins per inch (m)                                   |                      |                                | 20 (787)                                                                             | 20 (787)               | 20 (787)                | 20 (787)                |
| Condenser Fans                         | Diameter - in. (mm) & No. of blades                 |                      |                                | (2) 24 (610) - 3                                                                     | (2) 24 (610) - 3       | (2) 24 (610) - 3        | (2) 24 (610) - 3        |
|                                        | Total Air Volume - cfm (L/s)                        |                      |                                | 8,000 (3775)                                                                         | 8,000 (3775)           | 8,000 (3775)            | 9,000 (4245)            |
|                                        | Motor horsepower (W)                                |                      |                                | (2) 1/3 (249)                                                                        | (2) 1/3 (249)          | (2) 1/3 (249)           | (2) 1/2 (373)           |
|                                        | Motor rpm                                           |                      |                                | 1075                                                                                 | 1075                   | 1075                    | 1075                    |
|                                        | Total Motor watts                                   |                      |                                | 700                                                                                  | 700                    | 700                     | 1150                    |
| Filters (furnished)                    | Type of filter                                      |                      |                                | Disposable, pleated MERV 7 (Minimum Efficiency Reporting Value based on ASHRAE 52.2) |                        |                         |                         |
|                                        | No. and size - in (mm)                              |                      |                                | (4) 18 x 24 x 2 (457 x 610 x 51)                                                     |                        |                         |                         |
| Electrical characteristics             |                                                     |                      |                                | 208/230V, 460V or 575V - 60 hertz - 3 phase                                          |                        |                         |                         |

<sup>1</sup>Certified in accordance with the ULE certification program, which is based on ARI Standard 340/360, 95oF (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19°C) wb entering evaporator air, minimum external duct static pressure

<sup>2</sup>Integrated Part Load Value rated at 80°F (27°C) outdoor air temperature.

<sup>3</sup>Sound Rating Number rated in accordance with test conditions included in ARI Standard 270.

<sup>4</sup>Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor output required. Maximum usable output of motors furnished are shown. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

**NOTE** - Net capacity includes evaporator blower motor heat deduction. Gross capacity does not include evaporator blower motor heat deduction.

## Weight Data

| Model No.                                                 | Net                             |     | Shipping |      |
|-----------------------------------------------------------|---------------------------------|-----|----------|------|
|                                                           | lbs.                            | kg  | lbs.     | kg   |
| 090 Base Unit                                             | 1220                            | 553 | 1305     | 592  |
| 090 Max. Unit                                             | 1450                            | 658 | 1535     | 696  |
| 102 Base Unit                                             | 1220                            | 553 | 1305     | 592  |
| 102 Max. Unit                                             | 1450                            | 658 | 1535     | 696  |
| 120 Base Unit                                             | 1275                            | 578 | 2895     | 1313 |
| 120 Max. Unit                                             | 1495                            | 678 | 1580     | 717  |
| 150 Base Unit                                             | 1310                            | 594 | 2975     | 1349 |
| 150 Max. Unit                                             | 1530                            | 694 | 1615     | 733  |
| Optional Accessory Ship Weights - Add to base unit weight |                                 |     |          |      |
| Electric Heat                                             | See Electric Heat Rating Tables |     |          |      |
| Economizer                                                | 66                              | 30  |          |      |
| Outdoor Air Damper                                        | 40                              | 18  |          |      |
| Power Exhaust                                             | 28                              | 13  |          |      |
| LTL Packaging (less than truck load)                      | 105                             | 48  |          |      |

Base Unit - The standard unit with NO OPTIONS.

Max. Unit - The standard unit with ALL OPTIONS installed. (Economizer, Power Exhaust Fans, High Input Heating and Controls).

## Optional Electric Heat Accessories

| Unit Model No.           |                            |                        | LCA090                                                         | LCC102 | LCC120           | LCC150 |
|--------------------------|----------------------------|------------------------|----------------------------------------------------------------|--------|------------------|--------|
| Electric Heat            |                            | Model No.              | EHA (see Electric Heat Data tables for additional information) |        |                  |        |
|                          |                            | kW Input Range         | 7.5-15-22.5-30-45                                              |        | 15-22.5-30-45-60 |        |
| Unit Fuse Block (3phase) | With Power Exhaust Fans    | 2 hp (1.5 kW) 208/230V | 56K93                                                          | 56K94  | 56K94            | 56K95  |
|                          |                            | 2 hp (1.5 kW) 460V     | 56K52                                                          | 25K08  | 25K08            | 25K09  |
|                          |                            | 2 hp (1.5 kW) 575V     | 56K51                                                          | 56K51  | 56K51            | 25K08  |
|                          |                            | 3 hp (2.2 kW) 208/230V | 56K93                                                          | 56K94  | 56K94            | 56K95  |
|                          |                            | 3 hp (2.2 kW) 460V     | 56K52                                                          | 25K08  | 25K08            | 25K09  |
|                          |                            | 3 hp (2.2 kW) 575V     | 56K51                                                          | 56K52  | 56K52            | 25K08  |
|                          |                            | 5 hp (3.7 kW) 208/230V | 56K94                                                          | 56K95  | 56K95            | 56K96  |
|                          |                            | 5 hp (3.7 kW) 460V     | 25K08                                                          | 25K09  | 25K09            | 25K10  |
|                          |                            | 5 hp (3.7 kW) 575V     | 56K52                                                          | 56K52  | 56K52            | 25K08  |
|                          | Without Power Exhaust Fans | 2 hp (1.5 kW) 208/230V | 56K93                                                          | 56K94  | 56K94            | 56K95  |
|                          |                            | 2 hp (1.5 kW) 460V     | 56K52                                                          | 56K52  | 25K08            | 25K09  |
|                          |                            | 2 hp (1.5 kW) 575V     | 56K51                                                          | 56K51  | 56K51            | 56K52  |
|                          |                            | 3 hp (2.2 kW) 208/230V | 56K93                                                          | 56K94  | 56K94            | 56K95  |
|                          |                            | 3 hp (2.2 kW) 460V     | 56K52                                                          | 25K08  | 25K08            | 25K09  |
|                          |                            | 3 hp (2.2 kW) 575V     | 56K51                                                          | 56K51  | 56K52            | 25K08  |
|                          |                            | 5 hp (3.7 kW) 208/230V | 56K94                                                          | 56K95  | 56K95            | 56K96  |
|                          |                            | 5 hp (3.7 kW) 460V     | 25K08                                                          | 25K08  | 25K08            | 25K09  |
|                          |                            | 5 hp (3.7 kW) 575V     | 56K52                                                          | 56K52  | 56K52            | 25K08  |

### LTB2 Electric Heat Terminal Block - LTB2-175 (30K75) 175 amps.

### LTB2-335 (30K76) 335 amps

**(Required for Units Without Disconnect/Circuit Breaker but With Single Point Power Source)**

| Unit Model No.                |         |               |              | LCA0090 | LCC102 | LCC120 | LCC150 |
|-------------------------------|---------|---------------|--------------|---------|--------|--------|--------|
| LTB2 Terminal Block (3 phase) | 7.5 kW  | 2 hp (1.5 kW) | All voltages | 30K75   |        |        |        |
|                               |         | 3 hp (2.2 kW) | All voltages | 30K75   |        |        |        |
|                               |         | 5 hp (3.7 kW) | All voltages | 30K75   |        |        |        |
|                               | 15 kW   | 2 hp (1.5 kW) | All voltages | 30K75   |        |        |        |
|                               |         | 3 hp (2.2 kW) | All voltages | 30K75   |        |        |        |
|                               |         | 5 hp (3.7 kW) | All voltages | 30K75   |        |        |        |
|                               | 22.5 kW | 2 hp (1.5 kW) | All voltages | 30K75   |        |        |        |
|                               |         | 3 hp (2.2 kW) | All voltages | 30K75   |        |        |        |
|                               |         | 5 hp (3.7 kW) | All voltages | 30K75   |        |        |        |
|                               | 30 kW   | 2 hp (1.5 kW) | All voltages | 30K75   |        |        |        |
|                               |         | 3 hp (2.2 kW) | All voltages | 30K75   |        |        |        |
|                               |         | 5 hp (3.7 kW) | All voltages | 30K75   |        |        |        |
|                               | 45 kW   | 2 hp (1.5 kW) | All voltages | 30K75   |        |        |        |
|                               |         | 3 hp (2.2 kW) | 460V, 575V   | 30K75   |        |        |        |
|                               |         | 5 hp (3.7 kW) | 460V, 575V   | 30K75   |        |        |        |
|                               | 60 kW   | 2 hp (1.5 kW) | 460V, 575V   | ---     | ---    | 30K76  |        |
|                               |         | 3 hp (2.2 kW) | 460V, 575V   | ---     | ---    | 30K76  |        |
|                               |         | 5 hp (3.7 kW) | 460V, 575V   | ---     | ---    | 30K76  |        |

## Electric Data - LCA090

| Model No.                                     |                                |    | LCA090        |      |      |               |      |      |               |      |      |
|-----------------------------------------------|--------------------------------|----|---------------|------|------|---------------|------|------|---------------|------|------|
| Line voltage data - 60 hz - 3 ph              |                                |    | 208/230V      |      |      | 460V          |      |      | 575V          |      |      |
| Compressors (2)                               | Rated load amps each (total)   |    | 12.4 (24.9)   |      |      | 6.4 (12.8)    |      |      | 4.8 (9.6)     |      |      |
|                                               | Locked rotor amps each (total) |    | 88 (176)      |      |      | 44 (88)       |      |      | 34 (68)       |      |      |
| Condenser Fan Motors (2)                      | Full load amps (total)         |    | 2.4 (4.8)     |      |      | 1.3 (2.6)     |      |      | 1.0 (2.0)     |      |      |
|                                               | Locked rotor amps (total)      |    | 4.7 (9.4)     |      |      | 2.4 (4.8)     |      |      | 1.9 (3.8)     |      |      |
| Evaporator Blower Motor                       | Motor Output                   | hp | 2             | 3    | 5    | 2             | 3    | 5    | 2             | 3    | 5    |
|                                               |                                | kW | 1.5           | 2.2  | 3.7  | 1.5           | 2.2  | 3.7  | 1.5           | 2.2  | 3.7  |
|                                               | Full load amps                 |    | 7.5           | 10.6 | 16.7 | 3.4           | 4.8  | 7.6  | 2.7           | 3.9  | 6.1  |
|                                               | Locked rotor amps              |    | 46.9          | 66   | 105  | 20.4          | 26.8 | 45.6 | 16.2          | 23.4 | 36.6 |
| Rec. max. fuse size (amps)                    | With Exhaust Fan               |    | 50            | 50   | 60   | 25            | 25   | 30   | 20            | 20   | 25   |
|                                               | Less Exhaust Fan               |    | 50            | 50   | 60   | 25            | 25   | 30   | 20            | 20   | 25   |
| *Minimum Circuit Ampacity                     | With Exhaust Fan               |    | 43            | 46   | 52   | 22            | 24   | 26   | 17            | 18   | 20   |
|                                               | Less Exhaust Fan               |    | 41            | 44   | 50   | 21            | 22   | 25   | 16            | 17   | 19   |
| Optional Power Exhaust Fan                    | (No.) Horsepower (W)           |    | (1) 1/3 (249) |      |      | (1) 1/3 (249) |      |      | (1) 1/3 (249) |      |      |
|                                               | Full load amps                 |    | 2.4           |      |      | 1.3           |      |      | 1.0           |      |      |
|                                               | Locked rotor amps              |    | 4.7           |      |      | 2.4           |      |      | 1.9           |      |      |
| Service Outlet (2) 115 volt GFCI (amp rating) |                                |    | 15            |      |      |               |      |      |               |      |      |

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE - Extremes of operating range are plus and minus 10% of line voltage.

## Electric Data - LCC102

| Model No.                                     |                                |    | LCC102        |      |      |               |      |      |               |      |      |
|-----------------------------------------------|--------------------------------|----|---------------|------|------|---------------|------|------|---------------|------|------|
| Line voltage data - 60 hz - 3 ph              |                                |    | 208/230V      |      |      | 460V          |      |      | 575V          |      |      |
| Compressors (2)                               | Rated load amps each (total)   |    | 14.7 (29.4)   |      |      | 7.1 (14.2)    |      |      | 5.8 (11.6)    |      |      |
|                                               | Locked rotor amps each (total) |    | 91 (182)      |      |      | 50 (100)      |      |      | 37 (74)       |      |      |
| Condenser Fan Motors (2)                      | Full load amps (total)         |    | 2.4 (4.8)     |      |      | 1.3 (2.6)     |      |      | 1.0 (2.0)     |      |      |
|                                               | Locked rotor amps (total)      |    | 4.7 (9.4)     |      |      | 2.4 (4.8)     |      |      | 1.9 (3.8)     |      |      |
| Evaporator Blower Motor                       | Motor Output                   | hp | 2             | 3    | 5    | 2             | 3    | 5    | 2             | 3    | 5    |
|                                               |                                | kW | 1.5           | 2.2  | 3.7  | 1.5           | 2.2  | 3.7  | 1.5           | 2.2  | 3.7  |
|                                               | Full load amps                 |    | 7.5           | 10.6 | 16.7 | 3.4           | 4.8  | 7.6  | 2.7           | 3.9  | 6.1  |
|                                               | Locked rotor amps              |    | 46.9          | 66   | 105  | 20.4          | 26.8 | 45.6 | 16.2          | 23.4 | 36.6 |
| Rec. max. fuse size (amps)                    | With Exhaust Fan               |    | 60            | 60   | 70   | 30            | 30   | 35   | 20            | 25   | 25   |
|                                               | Less Exhaust Fan               |    | 60            | 60   | 70   | 25            | 30   | 30   | 20            | 20   | 25   |
| *Minimum Circuit Ampacity                     | With Exhaust Fan               |    | 48            | 51   | 57   | 24            | 25   | 28   | 19            | 20   | 23   |
|                                               | Less Exhaust Fan               |    | 46            | 49   | 56   | 22            | 24   | 27   | 18            | 19   | 22   |
| Optional Power Exhaust Fan                    | (No.) Horsepower (W)           |    | (1) 1/3 (249) |      |      | (1) 1/3 (249) |      |      | (1) 1/3 (249) |      |      |
|                                               | Full load amps                 |    | 2.4           |      |      | 1.3           |      |      | 1.0           |      |      |
|                                               | Locked rotor amps              |    | 4.7           |      |      | 2.4           |      |      | 1.9           |      |      |
| Service Outlet (2) 115 volt GFCI (amp rating) |                                |    | 15            |      |      |               |      |      |               |      |      |

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE - Extremes of operating range are plus and minus 10% of line voltage.



## Electric Data - LCC120

| Model No.                                     |                                |    | LCC120        |      |      |               |      |      |               |      |      |
|-----------------------------------------------|--------------------------------|----|---------------|------|------|---------------|------|------|---------------|------|------|
| Line voltage data - 60 hz - 3 ph              |                                |    | 208/230V      |      |      | 460V          |      |      | 575V          |      |      |
| Compressors (2)                               | Rated load amps each (total)   |    | 15.4 (30.8)   |      |      | 7.4 (14.8)    |      |      | 5.9 (11.8)    |      |      |
|                                               | Locked rotor amps each (total) |    | 124 (248)     |      |      | 59.6 (119.2)  |      |      | 49.4 (98.8)   |      |      |
| Condenser Fan                                 | Full load amps (total)         |    | 2.4 (4.8)     |      |      | 1.3 (2.6)     |      |      | 1.0 (2.0)     |      |      |
| Motors (2)                                    | Locked rotor amps (total)      |    | 4.7 (9.4)     |      |      | 2.4 (4.8)     |      |      | 1.9 (3.8)     |      |      |
| Evaporator Blower Motor                       | Motor Output                   | hp | 2             | 3    | 5    | 2             | 3    | 5    | 2             | 3    | 5    |
|                                               |                                | kW | 1.5           | 2.2  | 3.7  | 1.5           | 2.2  | 3.7  | 1.5           | 2.2  | 3.7  |
|                                               | Full load amps                 |    | 7.5           | 10.6 | 16.7 | 3.4           | 4.8  | 7.6  | 2.7           | 3.9  | 6.1  |
|                                               | Locked rotor amps              |    | 46.9          | 66   | 105  | 20.4          | 26.8 | 45.6 | 16.2          | 23.4 | 36.6 |
| Rec. max. fuse size (amps)                    | With Exhaust Fan               |    | 60            | 60   | 70   | 30            | 30   | 35   | 20            | 25   | 25   |
|                                               | Less Exhaust Fan               |    | 60            | 60   | 70   | 30            | 30   | 30   | 20            | 25   | 25   |
| *Minimum Circuit Ampacity                     | With Exhaust Fan               |    | 50            | 53   | 59   | 24            | 26   | 29   | 19            | 21   | 23   |
|                                               | Less Exhaust Fan               |    | 47            | 51   | 57   | 23            | 25   | 27   | 18            | 20   | 22   |
| Optional Power Exhaust Fan                    | (No.) Horsepower (W)           |    | (1) 1/3 (249) |      |      | (1) 1/3 (249) |      |      | (1) 1/3 (249) |      |      |
|                                               | Full load amps                 |    | 2.4           |      |      | 1.3           |      |      | 1             |      |      |
|                                               | Locked rotor amps              |    | 4.7           |      |      | 2.4           |      |      | 1.9           |      |      |
| Service Outlet (2) 115 volt GFCI (amp rating) |                                |    | 15            |      |      |               |      |      |               |      |      |

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE - Extremes of operating range are plus and minus 10% of line voltage.

## Electric Data - LCC150

| Model No.                                     |                                |    | LCC150        |      |      |               |      |      |               |      |      |
|-----------------------------------------------|--------------------------------|----|---------------|------|------|---------------|------|------|---------------|------|------|
| Line voltage data - 60 hz - 3 ph              |                                |    | 208/230V      |      |      | 460V          |      |      | 575V          |      |      |
| Compressors (2)                               | Rated load amps each (total)   |    | 18.6 (37.2)   |      |      | 9 (18)        |      |      | 7.4 (14.8)    |      |      |
|                                               | Locked rotor amps each (total) |    | 156 (312)     |      |      | 75 (150)      |      |      | 54 (108)      |      |      |
| Condenser Fan Motors (2)                      | Full load amps (total)         |    | 3 (6)         |      |      | 1.5 (3)       |      |      | 1.2 (2.4)     |      |      |
|                                               | Locked rotor amps (total)      |    | 6 (12)        |      |      | 3 (6)         |      |      | 2.9 (5.8)     |      |      |
| Evaporator Blower Motor                       | Motor Output                   | hp | 2             | 3    | 5    | 2             | 3    | 5    | 2             | 3    | 5    |
|                                               |                                | kW | 1.5           | 2.2  | 3.7  | 1.5           | 2.2  | 3.7  | 1.5           | 2.2  | 3.7  |
|                                               | Full load amps                 |    | 7.5           | 10.6 | 16.7 | 3.4           | 4.8  | 7.6  | 2.7           | 3.9  | 6.1  |
|                                               | Locked rotor amps              |    | 46.9          | 66   | 105  | 20.4          | 26.8 | 45.6 | 16.2          | 23.4 | 36.6 |
| Rec. max. fuse size (amps)                    | With Exhaust Fan               |    | 70            | 70   | 80   | 35            | 35   | 40   | 30            | 30   | 30   |
|                                               | Less Exhaust Fan               |    | 70            | 70   | 80   | 35            | 35   | 35   | 25            | 30   | 30   |
| *Minimum Circuit Ampacity                     | With Exhaust Fan               |    | 58            | 61   | 67   | 28            | 30   | 33   | 23            | 24   | 27   |
|                                               | Less Exhaust Fan               |    | 56            | 59   | 65   | 27            | 29   | 31   | 22            | 23   | 26   |
| Optional Power Exhaust Fan                    | (No.) Horsepower (W)           |    | (1) 1/3 (249) |      |      | (1) 1/3 (249) |      |      | (1) 1/3 (249) |      |      |
|                                               | Full load amps                 |    | 2.4           |      |      | 1.3           |      |      | 1             |      |      |
|                                               | Locked rotor amps              |    | 4.7           |      |      | 2.4           |      |      | 1.9           |      |      |
| Service Outlet (2) 115 volt GFCI (amp rating) |                                |    | 15            |      |      |               |      |      |               |      |      |

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

NOTE - Extremes of operating range are plus and minus 10% of line voltage.

## Optional Electric Heat Data - LCA090

(Requires Unit Fuse Block and Terminal Block)

| kW Size Required | Electric Heat Model No. & Net Weight                                            | No. of Steps | Volts Input | kW Input | Btuh Output | *Total Unit + Electric Heat Minimum Circuit Ampacity (with Power Exhaust Fan) |               |               | Total Unit + Electric Heat Maximum Fuse Size (with Power Exhaust Fans) |               |               |
|------------------|---------------------------------------------------------------------------------|--------------|-------------|----------|-------------|-------------------------------------------------------------------------------|---------------|---------------|------------------------------------------------------------------------|---------------|---------------|
|                  |                                                                                 |              |             |          |             | 2 hp (1.5 kW)                                                                 | 3 hp (2.2 kW) | 5 hp (3.7 kW) | 2 hp (1.5 kW)                                                          | 3 hp (2.2 kW) | 5 hp (3.7 kW) |
| 7.5 kW           | EHA102-7.5 208/230V (99J01)<br>460V (99J02)<br>575V (99J03)<br>31 lbs. (14 kg)  | 1            | 208         | 5.6      | 19,100      | 43                                                                            | 46            | 52            | 50                                                                     | 50            | 60            |
|                  |                                                                                 | 1            | 220         | 6.3      | 21,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 230         | 6.9      | 23,600      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 240         | 7.5      | 25,600      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 440         | 6.3      | 21,500      | 22                                                                            | 24            | 26            | 25                                                                     | 25            | 30            |
|                  |                                                                                 | 1            | 460         | 6.9      | 23,600      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 480         | 7.5      | 25,600      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 550         | 6.3      | 21,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 575         | 6.9      | 23,600      | 17                                                                            | 18            | 20            | 20                                                                     | 20            | 20            |
|                  |                                                                                 | 1            | 600         | 7.5      | 25,600      |                                                                               |               |               |                                                                        |               |               |
| 15 kW            | EHA150-15 208/230V (99J04)<br>460V (99J05)<br>575V (99J06)<br>31 lbs. (14 kg)   | 1            | 208         | 11.3     | 38,600      | 58                                                                            | 62            | 69            | 60                                                                     | 70            | 70            |
|                  |                                                                                 | 1            | 220         | 12.6     | 43,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 230         | 13.8     | 47,100      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 240         | 15.0     | 51,200      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 440         | 12.6     | 43,000      | 29                                                                            | 31            | 34            | 30                                                                     | 35            | 35            |
|                  |                                                                                 | 1            | 460         | 13.8     | 47,100      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 480         | 15.0     | 51,200      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 550         | 12.6     | 43,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 575         | 13.8     | 47,100      | 23                                                                            | 25            | 27            | 25                                                                     | 25            | 30            |
|                  |                                                                                 | 1            | 600         | 15.0     | 51,200      |                                                                               |               |               |                                                                        |               |               |
| 22.5 kW          | EHA360-22.5 208/230V (99J28)<br>460V (99J29)<br>575V (99J30)<br>38 lbs. (17 kg) | **2          | 208         | 16.9     | 57,700      | 80                                                                            | 84            | 92            | 80                                                                     | 90            | 100           |
|                  |                                                                                 | **2          | 220         | 18.9     | 64,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | **2          | 230         | 20.6     | 70,700      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | **2          | 240         | 22.5     | 76,800      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | **2          | 440         | 18.9     | 64,500      | 40                                                                            | 42            | 45            | 40                                                                     | 45            | 45            |
|                  |                                                                                 | **2          | 460         | 20.7     | 70,700      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | **2          | 480         | 22.5     | 76,800      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | **2          | 550         | 19.0     | 64,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | **2          | 575         | 20.7     | 70,700      | 32                                                                            | 34            | 36            | 35                                                                     | 35            | 40            |
|                  |                                                                                 | **2          | 600         | 22.5     | 76,800      |                                                                               |               |               |                                                                        |               |               |

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

\*\*May be used with two stage control.

NOTE - Fuse block must be ordered extra. Fuse block must be installed in unit with field installed heaters. Also requires LTB2 Terminal Block.

## Optional Electric Heat Data - LCA090

(Requires Unit Fuse Block and Terminal Block)

| kW Size<br>Required | Electric Heat<br>Model No. &<br>Net Weight                                          | No. of<br>Steps | Volts<br>Input | kW<br>Input | Btuh<br>Output | *Total Unit + Electric Heat<br>Minimum Circuit Ampacity<br>(with Power Exhaust Fan) |                  |                  | Total Unit + Electric Heat<br>Maximum<br>Fuse Size<br>(with Power Exhaust Fans) |                  |                  |
|---------------------|-------------------------------------------------------------------------------------|-----------------|----------------|-------------|----------------|-------------------------------------------------------------------------------------|------------------|------------------|---------------------------------------------------------------------------------|------------------|------------------|
|                     |                                                                                     |                 |                |             |                | 2 hp<br>(1.5 kW)                                                                    | 3 hp<br>(2.2 kW) | 5 hp<br>(3.7 kW) | 2 hp<br>(1.5 kW)                                                                | 3 hp<br>(2.2 kW) | 5 hp<br>(3.7 kW) |
| 30 kW<br>Heat       | EHA150-30<br>208/230V<br>(99J07)<br>460V (99J08)<br>575V (99J09)<br>38 lbs. (17 kg) | **2             | 208            | 22.5        | 76,800         | 103                                                                                 | 107              | 115              | 110                                                                             | 110              | 125              |
|                     |                                                                                     | **2             | 220            | 25.2        | 86,000         |                                                                                     |                  |                  |                                                                                 |                  |                  |
|                     |                                                                                     | **2             | 230            | 27.6        | 93,900         |                                                                                     |                  |                  |                                                                                 |                  |                  |
|                     |                                                                                     | **2             | 240            | 30.0        | 102,400        |                                                                                     |                  |                  |                                                                                 |                  |                  |
|                     |                                                                                     | **2             | 440            | 25.2        | 86,000         | 51                                                                                  | 53               | 57               | 60                                                                              | 60               | 60               |
|                     |                                                                                     | **2             | 460            | 27.6        | 93,900         |                                                                                     |                  |                  |                                                                                 |                  |                  |
|                     |                                                                                     | **2             | 480            | 30.0        | 102,400        |                                                                                     |                  |                  |                                                                                 |                  |                  |
|                     |                                                                                     | **2             | 550            | 25.2        | 86,000         | 41                                                                                  | 43               | 45               | 45                                                                              | 45               | 45               |
|                     |                                                                                     | **2             | 575            | 27.6        | 93,900         |                                                                                     |                  |                  |                                                                                 |                  |                  |
| 45 kW<br>Heat       | EHA150-45<br>208/230V<br>(99J10)<br>460V (99J11)<br>575V (99J12)<br>42 lbs. (19 kg) | **2             | 600            | 30.0        | 102,400        | 148                                                                                 | 152              | 160              | 150                                                                             | 175              | 175              |
|                     |                                                                                     | **2             | 208            | 33.8        | 115,300        |                                                                                     |                  |                  |                                                                                 |                  |                  |
|                     |                                                                                     | **2             | 220            | 37.8        | 129,000        |                                                                                     |                  |                  |                                                                                 |                  |                  |
|                     |                                                                                     | **2             | 230            | 41.3        | 141,000        |                                                                                     |                  |                  |                                                                                 |                  |                  |
|                     |                                                                                     | **2             | 240            | 45.0        | 153,600        | 74                                                                                  | 76               | 79               | 80                                                                              | 80               | 80               |
|                     |                                                                                     | **2             | 440            | 37.8        | 129,000        |                                                                                     |                  |                  |                                                                                 |                  |                  |
|                     |                                                                                     | **2             | 460            | 41.3        | 141,000        |                                                                                     |                  |                  |                                                                                 |                  |                  |
|                     |                                                                                     | **2             | 480            | 45.0        | 153,600        | 59                                                                                  | 61               | 63               | 60                                                                              | 70               | 70               |
|                     |                                                                                     | **2             | 550            | 37.8        | 129,000        |                                                                                     |                  |                  |                                                                                 |                  |                  |
|                     |                                                                                     | **2             | 575            | 41.3        | 141,000        |                                                                                     |                  |                  |                                                                                 |                  |                  |
|                     |                                                                                     | **2             | 600            | 45.0        | 153,600        |                                                                                     |                  |                  |                                                                                 |                  |                  |

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

\*\*May be used with two stage control.

NOTE - Fuse block must be ordered extra. Fuse block must be installed in unit with field installed heaters. Also requires LTB2 Terminal Block.

## Optional Electric Heat Data - LCC102

(Requires Unit Fuse Block and Terminal Block)

| kW Size Required | Electric Heat Model No. & Net Weight                                            | No. of Steps | Volts Input | kW Input | Btuh Output | *Total Unit + Electric Heat Minimum Circuit Ampacity (with Power Exhaust Fan) |               |               | Total Unit + Electric Heat Maximum Fuse Size (with Power Exhaust Fans) |               |               |
|------------------|---------------------------------------------------------------------------------|--------------|-------------|----------|-------------|-------------------------------------------------------------------------------|---------------|---------------|------------------------------------------------------------------------|---------------|---------------|
|                  |                                                                                 |              |             |          |             | 2 hp (1.5 kW)                                                                 | 3 hp (2.2 kW) | 5 hp (3.7 kW) | 2 hp (1.5 kW)                                                          | 3 hp (2.2 kW) | 5 hp (3.7 kW) |
| 7.5 kW           | EHA102-7.5 208/230V (99J01)<br>460V (99J02)<br>575V (99J03)<br>31 lbs. (14 kg)  | 1            | 208         | 5.6      | 19,100      | 48                                                                            | 51            | 57            | 60                                                                     | 60            | 70            |
|                  |                                                                                 | 1            | 220         | 6.3      | 21,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 230         | 6.9      | 23,600      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 240         | 7.5      | 25,600      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 440         | 6.9      | 21,500      | 24                                                                            | 25            | 28            | 30                                                                     | 30            | 35            |
|                  |                                                                                 | 1            | 460         | 6.9      | 23,600      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 480         | 7.5      | 25,600      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 550         | 6.3      | 21,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 575         | 6.9      | 23,600      | 19                                                                            | 20            | 23            | 20                                                                     | 25            | 25            |
|                  |                                                                                 | 1            | 600         | 7.5      | 25,600      |                                                                               |               |               |                                                                        |               |               |
| 15 kW            | EHA150-15 208/230V (99J04)<br>460V (99J05)<br>575V (99J06)<br>31 lbs. (14 kg)   | 1            | 208         | 11.3     | 38,600      | 58                                                                            | 62            | 69            | 60                                                                     | 70            | 70            |
|                  |                                                                                 | 1            | 220         | 12.6     | 43,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 230         | 13.8     | 47,100      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 240         | 15.0     | 51,200      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 440         | 12.6     | 43,000      | 29                                                                            | 31            | 34            | 30                                                                     | 35            | 35            |
|                  |                                                                                 | 1            | 460         | 13.8     | 47,100      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 480         | 15.0     | 51,200      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 550         | 12.6     | 43,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | 1            | 575         | 13.8     | 47,100      | 23                                                                            | 25            | 27            | 25                                                                     | 25            | 30            |
|                  |                                                                                 | 1            | 600         | 15.0     | 51,200      |                                                                               |               |               |                                                                        |               |               |
| 22.5 kW          | EHA360-22.5 208/230V (99J28)<br>460V (99J29)<br>575V (99J30)<br>38 lbs. (17 kg) | **2          | 208         | 16.9     | 57,700      | 80                                                                            | 84            | 92            | 80                                                                     | 90            | 100           |
|                  |                                                                                 | **2          | 220         | 18.9     | 64,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | **2          | 230         | 20.7     | 70,700      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | **2          | 240         | 22.5     | 76,800      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | **2          | 440         | 18.9     | 64,500      | 40                                                                            | 42            | 45            | 40                                                                     | 45            | 45            |
|                  |                                                                                 | **2          | 460         | 20.7     | 70,700      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | **2          | 480         | 22.5     | 76,800      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | **2          | 550         | 18.9     | 64,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                 | **2          | 575         | 20.7     | 70,700      | 32                                                                            | 34            | 36            | 35                                                                     | 35            | 40            |
|                  |                                                                                 | **2          | 600         | 22.5     | 76,800      |                                                                               |               |               |                                                                        |               |               |

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

\*\*May be used with two stage control.

NOTE - Fuse block must be ordered extra. Fuse block must be installed in unit with field installed heaters. Also requires LTB2 Terminal Block.

## Optional Electric Heat Data - LCC102

(Requires Unit Fuse Block and Terminal Block)

| +kW<br>Size<br>Required | Electric Heat<br>Model No. &<br>Net Weight                                          | No. of<br>Steps | Volts<br>Input | kW<br>Input | Btuh<br>Output | *Total Unit + Electric Heat<br>Minimum Circuit Ampacity<br>(with Power Exhaust Fan) |                  |                  | Total Unit + Electric Heat<br>Maximum Fuse Size<br>(with Power Exhaust Fans) |                  |                  |
|-------------------------|-------------------------------------------------------------------------------------|-----------------|----------------|-------------|----------------|-------------------------------------------------------------------------------------|------------------|------------------|------------------------------------------------------------------------------|------------------|------------------|
|                         |                                                                                     |                 |                |             |                | 2 hp<br>(1.5 kW)                                                                    | 3 hp<br>(2.2 kW) | 5 hp<br>(3.7 kW) | 2 hp<br>(1.5 kW)                                                             | 3 hp<br>(2.2 kW) | 5 hp<br>(3.7 kW) |
| 30 kW                   | EHA150-30<br>208/230V<br>(99J07)<br>460V (99J08)<br>575V (99J09)<br>38 lbs. (17 kg) | **2             | 208            | 22.5        | 76,800         | 103                                                                                 | 107              | 115              | 110                                                                          | 110              | 125              |
|                         |                                                                                     | **2             | 220            | 25.2        | 86,000         |                                                                                     |                  |                  |                                                                              |                  |                  |
|                         |                                                                                     | **2             | 230            | 27.5        | 93,900         |                                                                                     |                  |                  |                                                                              |                  |                  |
|                         |                                                                                     | **2             | 240            | 30.0        | 102,400        |                                                                                     |                  |                  |                                                                              |                  |                  |
|                         |                                                                                     | **2             | 440            | 25.2        | 86,000         | 51                                                                                  | 53               | 57               | 60                                                                           | 60               | 60               |
|                         |                                                                                     | **2             | 460            | 27.5        | 93,900         |                                                                                     |                  |                  |                                                                              |                  |                  |
|                         |                                                                                     | **2             | 480            | 30.0        | 102,400        |                                                                                     |                  |                  |                                                                              |                  |                  |
|                         |                                                                                     | **2             | 550            | 25.2        | 86,000         | 41                                                                                  | 43               | 45               | 45                                                                           | 45               | 45               |
|                         |                                                                                     | **2             | 575            | 27.5        | 93,900         |                                                                                     |                  |                  |                                                                              |                  |                  |
| 45 kW                   | EHA150-45<br>208/230V<br>(99J10)<br>460V (99J11)<br>575V (99J12)<br>42 lbs. (19 kg) | **2             | 600            | 30.0        | 102,400        | 148                                                                                 | 152              | 160              | 150                                                                          | 175              | 175              |
|                         |                                                                                     | **2             | 208            | 33.8        | 115,300        |                                                                                     |                  |                  |                                                                              |                  |                  |
|                         |                                                                                     | **2             | 220            | 37.8        | 129,000        |                                                                                     |                  |                  |                                                                              |                  |                  |
|                         |                                                                                     | **2             | 230            | 41.3        | 141,000        |                                                                                     |                  |                  |                                                                              |                  |                  |
|                         |                                                                                     | **2             | 240            | 45.0        | 153,600        | 74                                                                                  | 76               | 79               | 80                                                                           | 80               | 80               |
|                         |                                                                                     | **2             | 440            | 37.8        | 129,000        |                                                                                     |                  |                  |                                                                              |                  |                  |
|                         |                                                                                     | **2             | 460            | 41.3        | 141,000        |                                                                                     |                  |                  |                                                                              |                  |                  |
|                         |                                                                                     | **2             | 480            | 45.0        | 153,600        | 59                                                                                  | 61               | 63               | 60                                                                           | 70               | 70               |
|                         |                                                                                     | **2             | 550            | 37.8        | 129,000        |                                                                                     |                  |                  |                                                                              |                  |                  |
|                         |                                                                                     | **2             | 575            | 41.3        | 141,000        |                                                                                     |                  |                  |                                                                              |                  |                  |
|                         |                                                                                     | **2             | 600            | 45.0        | 153,600        |                                                                                     |                  |                  |                                                                              |                  |                  |

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

\*\*May be used with two stage control.

NOTE - Fuse block must be ordered extra. Fuse block must be installed in unit with field installed heaters. Also requires LTB2 Terminal Block.

## Optional Electric Heat Data - LCC120

(Requires Unit Fuse Block and Terminal Block)

| kW Size Required | Electric Heat Model No. & Net Weight                                                              | No. of Steps | Volts Input | kW Input | Btuh Output | *Total Unit + Electric Heat Minimum Circuit Ampacity (with Power Exhaust Fan) |               |               | Total Unit + Electric Heat Maximum Fuse Size (with Power Exhaust Fans) |               |               |
|------------------|---------------------------------------------------------------------------------------------------|--------------|-------------|----------|-------------|-------------------------------------------------------------------------------|---------------|---------------|------------------------------------------------------------------------|---------------|---------------|
|                  |                                                                                                   |              |             |          |             | 2 hp (1.5 kW)                                                                 | 3 hp (2.2 kW) | 5 hp (3.7 kW) | 2 hp (1.5 kW)                                                          | 3 hp (2.2 kW) | 5 hp (3.7 kW) |
| 15 kW            | EHA150-15<br>208/230V <b>99J04</b><br>460V <b>99J05</b><br>575V <b>99J06</b><br>31 lbs. (14 kg)   | 1            | 208         | 11.3     | 38,600      | 58                                                                            | 62            | 69            | 60                                                                     | 60            | 70            |
|                  |                                                                                                   | 1            | 220         | 12.6     | 43,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | 1            | 230         | 13.8     | 47,100      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | 1            | 240         | 15.0     | 51,200      | 29                                                                            | 31            | 34            | 30                                                                     | 30            | 35            |
|                  |                                                                                                   | 1            | 440         | 12.6     | 43,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | 1            | 460         | 13.8     | 47,100      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | 1            | 480         | 15.0     | 51,200      | 23                                                                            | 25            | 27            | 20                                                                     | 25            | 25            |
|                  |                                                                                                   | 1            | 550         | 12.6     | 43,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | 1            | 575         | 13.8     | 47,100      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | 1            | 600         | 15.0     | 51,200      |                                                                               |               |               |                                                                        |               |               |
| 22.5 kW          | EHA360-22.5<br>208/230V <b>99J28</b><br>460V <b>99J29</b><br>575V <b>99J30</b><br>38 lbs. (17 kg) | **2          | 208         | 16.9     | 57,700      | 80                                                                            | 84            | 92            | 80                                                                     | 90            | 100           |
|                  |                                                                                                   | **2          | 220         | 18.9     | 64,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | **2          | 230         | 20.7     | 70,700      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | **2          | 240         | 22.5     | 76,800      | 40                                                                            | 42            | 45            | 40                                                                     | 45            | 45            |
|                  |                                                                                                   | **2          | 440         | 18.9     | 64,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | **2          | 460         | 20.7     | 70,700      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | **2          | 480         | 22.5     | 76,800      | 32                                                                            | 34            | 36            | 35                                                                     | 35            | 40            |
|                  |                                                                                                   | **2          | 550         | 18.9     | 64,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | **2          | 575         | 20.7     | 70,700      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | **2          | 600         | 22.5     | 76,800      |                                                                               |               |               |                                                                        |               |               |
| 30 kW            | EHA150-30<br>208/230V <b>99J07</b><br>460V <b>99J08</b><br>575V <b>99J09</b><br>38 lbs. (17 kg)   | **2          | 208         | 22.5     | 76,800      | 103                                                                           | 107           | 115           | 110                                                                    | 110           | 125           |
|                  |                                                                                                   | **2          | 220         | 25.2     | 86,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | **2          | 230         | 27.5     | 93,900      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | **2          | 240         | 30.0     | 102,400     | 51                                                                            | 53            | 57            | 60                                                                     | 60            | 60            |
|                  |                                                                                                   | **2          | 440         | 25.2     | 86,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | **2          | 460         | 27.5     | 93,900      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | **2          | 480         | 30.0     | 102,400     | 41                                                                            | 43            | 45            | 45                                                                     | 45            | 45            |
|                  |                                                                                                   | **2          | 550         | 25.2     | 86,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | **2          | 575         | 27.5     | 93,900      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                                   | **2          | 600         | 30.0     | 102,400     |                                                                               |               |               |                                                                        |               |               |

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

\*\*May be used with two stage control.

NOTE - Fuse block must be ordered extra. Fuse block must be installed in unit with field installed heaters. Also requires LTB2 Terminal Block.

## Optional Electric Heat Data - LCC120

(Requires Unit Fuse Block and Terminal Block)

| kW Size Required | Electric Heat Model No. & Net Weight                                                | No. of Steps | Volts Input | kW Input | Btuh Output | *Total Unit + Electric Heat Minimum Circuit Ampacity (with Power Exhaust Fan) |               |               | Total Unit + Electric Heat Maximum Fuse Size (with Power Exhaust Fans) |               |               |
|------------------|-------------------------------------------------------------------------------------|--------------|-------------|----------|-------------|-------------------------------------------------------------------------------|---------------|---------------|------------------------------------------------------------------------|---------------|---------------|
|                  |                                                                                     |              |             |          |             | 2 hp (1.5 kW)                                                                 | 3 hp (2.2 kW) | 5 hp (3.7 kW) | 2 hp (1.5 kW)                                                          | 3 hp (2.2 kW) | 5 hp (3.7 kW) |
| 30 kW            | EHA150-30<br>208/230V<br>(99J07)<br>460V (99J08)<br>575V (99J09)<br>38 lbs. (17 kg) | **2          | 208         | 22.5     | 76.8        | 103                                                                           | 107           | 115           | 110                                                                    | 110           | 125           |
|                  |                                                                                     | **2          | 220         | 25.2     | 86.0        |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 230         | 27.5     | 93.9        |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 240         | 30.0     | 102.4       |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 440         | 25.2     | 86.0        | 51                                                                            | 53            | 57            | 60                                                                     | 60            | 60            |
|                  |                                                                                     | **2          | 460         | 27.5     | 93.9        |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 480         | 30.0     | 102.4       |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 550         | 25.2     | 86.0        | 41                                                                            | 43            | 45            | 45                                                                     | 45            | 45            |
|                  |                                                                                     | **2          | 575         | 27.5     | 93.9        |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 600         | 30.0     | 102.4       |                                                                               |               |               |                                                                        |               |               |
| 45 kW            | EHA150-45<br>208/230V<br>(99J10)<br>460V (99J11)<br>575V (99J12)<br>42 lbs. (19 kg) | **2          | 208         | 33.8     | 115.3       | 148                                                                           | 152           | 160           | 150                                                                    | 175           | 175           |
|                  |                                                                                     | **2          | 220         | 37.8     | 129.0       |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 230         | 41.3     | 141.0       |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 240         | 45.0     | 153.6       |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 440         | 37.8     | 129.0       | 74                                                                            | 76            | 79            | 80                                                                     | 80            | 80            |
|                  |                                                                                     | **2          | 460         | 41.3     | 141.0       |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 480         | 45.0     | 153.6       |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 550         | 37.8     | 129.0       | 59                                                                            | 61            | 63            | 60                                                                     | 70            | 70            |
|                  |                                                                                     | **2          | 575         | 41.3     | 141.0       |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 600         | 45.0     | 153.6       |                                                                               |               |               |                                                                        |               |               |

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

\*\*May be used with two stage control.

NOTE - Fuse block must be ordered extra. Fuse block must be installed in unit with field installed heaters. Also requires LTB2 Terminal Block.

## Optional Electric Heat Data - LCC150

(Requires Unit Fuse Block and Terminal Block)

| kW Size Required | Electric Heat Model No. & Net Weight                                                  | No. of Steps | Volts Input | kW Input | Btuh Output | *Total Unit + Electric Heat Minimum Circuit Ampacity (with Power Exhaust Fan) |               |               | Total Unit + Electric Heat Maximum Fuse Size (with Power Exhaust Fans) |               |               |
|------------------|---------------------------------------------------------------------------------------|--------------|-------------|----------|-------------|-------------------------------------------------------------------------------|---------------|---------------|------------------------------------------------------------------------|---------------|---------------|
|                  |                                                                                       |              |             |          |             | 2 hp (1.5 kW)                                                                 | 3 hp (2.2 kW) | 5 hp (3.7 kW) | 2 hp (1.5 kW)                                                          | 3 hp (2.2 kW) | 5 hp (3.7 kW) |
| 15 kW            | EHA150-15<br>208/230V<br>(99J04)<br>460V (99J05)<br>575V (99J06)<br>31 lbs. (14 kg)   | 1            | 208         | 11.3     | 38,600      | 58                                                                            | 62            | 69            | 70                                                                     | 70            | 80            |
|                  |                                                                                       | 1            | 220         | 12.6     | 43,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | 1            | 230         | 13.8     | 47,100      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | 1            | 240         | 15.0     | 51,200      | 29                                                                            | 31            | 34            | 35                                                                     | 35            | 40            |
|                  |                                                                                       | 1            | 440         | 12.6     | 43,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | 1            | 460         | 13.8     | 47,100      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | 1            | 480         | 15.0     | 51,200      | 23                                                                            | 25            | 27            | 30                                                                     | 30            | 30            |
|                  |                                                                                       | 1            | 550         | 12.6     | 43,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | 1            | 575         | 13.8     | 47,100      |                                                                               |               |               |                                                                        |               |               |
| 22.5 kW          | EHA360-22.5<br>208/230V<br>(99J28)<br>460V (99J29)<br>575V (99J30)<br>38 lbs. (17 kg) | **2          | 208         | 16.9     | 57,700      | 80                                                                            | 84            | 92            | 80                                                                     | 90            | 100           |
|                  |                                                                                       | **2          | 220         | 18.9     | 64,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | **2          | 230         | 20.7     | 70,700      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | **2          | 240         | 22.5     | 76,800      | 40                                                                            | 42            | 45            | 40                                                                     | 45            | 45            |
|                  |                                                                                       | **2          | 440         | 18.9     | 64,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | **2          | 460         | 20.7     | 70,700      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | **2          | 480         | 22.5     | 76,800      | 32                                                                            | 34            | 36            | 35                                                                     | 35            | 40            |
|                  |                                                                                       | **2          | 550         | 18.9     | 64,500      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | **2          | 575         | 20.7     | 70,700      |                                                                               |               |               |                                                                        |               |               |
| 30 kW            | EHA150-30<br>208/230V<br>(99J07)<br>460V (99J08)<br>575V (99J09)<br>38 lbs. (17 kg)   | **2          | 600         | 22.5     | 76,800      | 103                                                                           | 107           | 115           | 110                                                                    | 110           | 125           |
|                  |                                                                                       | **2          | 208         | 22.5     | 76,800      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | **2          | 220         | 25.2     | 86,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | **2          | 230         | 27.5     | 93,900      | 51                                                                            | 53            | 57            | 60                                                                     | 60            | 60            |
|                  |                                                                                       | **2          | 240         | 30.0     | 102,400     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | **2          | 440         | 25.2     | 86,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | **2          | 460         | 27.5     | 93,900      | 41                                                                            | 43            | 45            | 45                                                                     | 45            | 45            |
|                  |                                                                                       | **2          | 480         | 30.0     | 102,400     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | **2          | 550         | 25.2     | 86,000      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | **2          | 575         | 27.5     | 93,900      |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                       | **2          | 600         | 30.0     | 102,400     |                                                                               |               |               |                                                                        |               |               |

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

\*\*May be used with two stage control.

NOTE - Fuse block must be ordered extra. Fuse block must be installed in unit with field installed heaters. Also requires LTB2 Terminal Block.



## Optional Electric Heat Data - LCC150

(Requires Unit Fuse Block and Terminal Block)

| kW Size Required | Electric Heat Model No. & Net Weight                                                | No. of Steps | Volts Input | kW Input | Btuh Output | *Total Unit + Electric Heat Minimum Circuit Ampacity (with Power Exhaust Fan) |               |               | Total Unit + Electric Heat Maximum Fuse Size (with Power Exhaust Fans) |               |               |
|------------------|-------------------------------------------------------------------------------------|--------------|-------------|----------|-------------|-------------------------------------------------------------------------------|---------------|---------------|------------------------------------------------------------------------|---------------|---------------|
|                  |                                                                                     |              |             |          |             | 2 hp (1.5 kW)                                                                 | 3 hp (2.2 kW) | 5 hp (3.7 kW) | 2 hp (1.5 kW)                                                          | 3 hp (2.2 kW) | 5 hp (3.7 kW) |
| 45 kW            | EHA150-45<br>208/230V<br>(99J10)<br>460V (99J11)<br>575V (99J12)<br>42 lbs. (19 kg) | **2          | 208         | 33.8     | 115,300     | 148                                                                           | 152           | 160           | 150                                                                    | 175           | 175           |
|                  |                                                                                     | **2          | 220         | 37.8     | 129,000     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 230         | 41.3     | 141,000     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 240         | 45.0     | 153,600     | 74                                                                            | 76            | 79            | 80                                                                     | 80            | 80            |
|                  |                                                                                     | **2          | 440         | 37.8     | 129,000     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 460         | 41.3     | 141,000     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 480         | 45.0     | 153,600     | 59                                                                            | 61            | 63            | 60                                                                     | 70            | 70            |
|                  |                                                                                     | **2          | 550         | 37.8     | 129,000     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 575         | 41.3     | 141,000     |                                                                               |               |               |                                                                        |               |               |
| 60 kW            | EHA150-60<br>208/230V<br>(99J13)<br>460V (99J14)<br>575V (99J15)<br>49 lbs. (22 kg) | **2          | 208         | 45.0     | 153,600     | 157                                                                           | 161           | 169           | 175                                                                    | 175           | 175           |
|                  |                                                                                     | **2          | 220         | 50.4     | 172,000     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 230         | 55.1     | 188,000     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 240         | 60.0     | 204,800     | 79                                                                            | 80            | 84            | 80                                                                     | 80            | 90            |
|                  |                                                                                     | **2          | 440         | 50.4     | 172,000     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 460         | 55.1     | 188,000     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 480         | 60.0     | 204,800     | 63                                                                            | 64            | 67            | 70                                                                     | 70            | 70            |
|                  |                                                                                     | **2          | 550         | 50.4     | 172,000     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 575         | 55.1     | 188,000     |                                                                               |               |               |                                                                        |               |               |
|                  |                                                                                     | **2          | 600         | 60.0     | 204,800     |                                                                               |               |               |                                                                        |               |               |

\*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

\*\*May be used with two stage control.

NOTE - Fuse block must be ordered extra. Fuse block must be installed in unit with field installed heaters. Also requires LTB2 Terminal Block.

## Cooling Ratings

### LCA090 - One Compressor Operating

| Entering<br>Wet<br>Bulb<br>Temp. | Total Air<br>Volume |      | Outdoor Air Temperature Entering Condenser Coil |      |                         |                                     |              |              |                              |       |                         |                                     |       |              |                              |              |                         |                                     |     |       |                              |              |                         |                                     |       |      |       |              |              |              |
|----------------------------------|---------------------|------|-------------------------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|-------|-------------------------|-------------------------------------|-------|--------------|------------------------------|--------------|-------------------------|-------------------------------------|-----|-------|------------------------------|--------------|-------------------------|-------------------------------------|-------|------|-------|--------------|--------------|--------------|
|                                  |                     |      | 65°F (18°C)                                     |      |                         |                                     |              |              | 75°F (24°C)                  |       |                         |                                     |       |              | 85°F (29°C)                  |              |                         |                                     |     |       | 95°F (35°C)                  |              |                         |                                     |       |      |       |              |              |              |
|                                  |                     |      | Total<br>Cooling<br>Capacity                    |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |       | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |       |              | Total<br>Cooling<br>Capacity |              | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |     |       | Total<br>Cooling<br>Capacity |              | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |       |      |       |              |              |              |
|                                  |                     |      |                                                 |      |                         | Dry Bulb                            |              |              |                              |       |                         | Dry Bulb                            |       |              |                              |              |                         | Dry Bulb                            |     |       |                              |              |                         | Dry Bulb                            |       |      |       |              |              |              |
|                                  | cfm                 | L/s  | kBtuh                                           | kW   |                         | Input                               | 75°F<br>24°C | 80°F<br>27°C | 85°F<br>29°C                 | kBtuh |                         | kW                                  | Input | 75°F<br>24°C | 80°F<br>27°C                 | 85°F<br>29°C |                         | kBtuh                               | kW  | Input | 75°F<br>24°C                 | 80°F<br>27°C |                         | 85°F<br>29°C                        | kBtuh | kW   | Input | 75°F<br>24°C | 80°F<br>27°C | 85°F<br>29°C |
| 63°F<br>(17°C)                   | 2400                | 1135 | 48.6                                            | 14.2 | 2.09                    | .63                                 | .78          | .94          | 47.2                         | 13.8  | 2.36                    | .63                                 | .80   | .96          | 45.7                         | 13.4         | 2.67                    | .64                                 | .81 | .98   | 44.1                         | 12.9         | 3.02                    | .65                                 | .83   | .99  |       |              |              |              |
|                                  | 3000                | 1415 | 50.5                                            | 14.8 | 2.10                    | .68                                 | .87          | 1.00         | 49.0                         | 14.4  | 2.37                    | .69                                 | .89   | 1.00         | 47.5                         | 13.9         | 2.68                    | .70                                 | .91 | 1.00  | 45.8                         | 13.4         | 3.02                    | .72                                 | .93   | 1.00 |       |              |              |              |
|                                  | 3600                | 1700 | 52.1                                            | 15.3 | 2.10                    | .74                                 | .95          | 1.00         | 50.6                         | 14.8  | 2.38                    | .75                                 | .96   | 1.00         | 49.0                         | 14.4         | 2.68                    | .77                                 | .98 | 1.00  | 47.4                         | 13.9         | 3.03                    | .79                                 | 1.00  | 1.00 |       |              |              |              |
| 67°F<br>(19°C)                   | 2400                | 1135 | 51.8                                            | 15.2 | 2.10                    | .49                                 | .61          | .74          | 50.2                         | 14.7  | 2.38                    | .50                                 | .61   | .75          | 48.6                         | 14.2         | 2.68                    | .50                                 | .62 | .77   | 46.9                         | 13.7         | 3.03                    | .51                                 | .63   | .79  |       |              |              |              |
|                                  | 3000                | 1415 | 53.5                                            | 15.7 | 2.12                    | .52                                 | .65          | .83          | 51.8                         | 15.2  | 2.39                    | .52                                 | .66   | .85          | 50.1                         | 14.7         | 2.69                    | .53                                 | .67 | .87   | 48.3                         | 14.2         | 3.04                    | .54                                 | .69   | .89  |       |              |              |              |
|                                  | 3600                | 1700 | 54.7                                            | 16.0 | 2.12                    | .55                                 | .71          | .91          | 53.0                         | 15.5  | 2.39                    | .55                                 | .73   | .93          | 51.2                         | 15.0         | 2.70                    | .56                                 | .75 | .95   | 49.3                         | 14.4         | 3.04                    | .57                                 | .77   | .97  |       |              |              |              |
| 71°F<br>(22°C)                   | 2400                | 1135 | 55.2                                            | 16.2 | 2.12                    | .37                                 | .48          | .58          | 53.6                         | 15.7  | 2.39                    | .37                                 | .48   | .59          | 51.9                         | 15.2         | 2.70                    | .38                                 | .49 | .60   | 50.0                         | 14.7         | 3.05                    | .38                                 | .49   | .61  |       |              |              |              |
|                                  | 3000                | 1415 | 56.9                                            | 16.7 | 2.13                    | .38                                 | .50          | .63          | 55.2                         | 16.2  | 2.40                    | .38                                 | .51   | .64          | 53.4                         | 15.6         | 2.71                    | .38                                 | .52 | .65   | 51.4                         | 15.1         | 3.05                    | .39                                 | .53   | .66  |       |              |              |              |
|                                  | 3600                | 1700 | 58.0                                            | 17.0 | 2.14                    | .39                                 | .53          | .68          | 56.3                         | 16.5  | 2.41                    | .39                                 | .54   | .70          | 54.4                         | 15.9         | 2.71                    | .40                                 | .55 | .72   | 52.4                         | 15.4         | 3.06                    | .40                                 | .56   | .74  |       |              |              |              |

### LCA090 - All Compressors Operating

| Entering<br>Wet<br>Bulb<br>Temp. | Total Air<br>Volume |      | Outdoor Air Temperature Entering Condenser Coil |      |                                  |                                     |              |              |                              |      |                                  |                                     |              |              |                              |      |                                  |                                     |              |              |                              |      |                                  |                                     |              |              |
|----------------------------------|---------------------|------|-------------------------------------------------|------|----------------------------------|-------------------------------------|--------------|--------------|------------------------------|------|----------------------------------|-------------------------------------|--------------|--------------|------------------------------|------|----------------------------------|-------------------------------------|--------------|--------------|------------------------------|------|----------------------------------|-------------------------------------|--------------|--------------|
|                                  |                     |      | 65°F (18°C)                                     |      |                                  |                                     |              |              | 75°F (24°C)                  |      |                                  |                                     |              |              | 85°F (29°C)                  |      |                                  |                                     |              |              | 95°F (35°C)                  |      |                                  |                                     |              |              |
|                                  |                     |      | Total<br>Cooling<br>Capacity                    |      | Comp.<br>Motor<br>Watts<br>Input | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts<br>Input | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts<br>Input | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts<br>Input | Sensible to<br>Total Ratio<br>(S/T) |              |              |
|                                  |                     |      |                                                 |      |                                  |                                     |              |              |                              |      |                                  |                                     |              |              |                              |      |                                  |                                     |              |              |                              |      |                                  |                                     |              |              |
|                                  | cfm                 | L/s  | kBtuh                                           | kW   |                                  | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   |                                  | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   |                                  | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   |                                  | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C |
| 63°F<br>(17°C)                   | 2400                | 1135 | 88.6                                            | 26.0 | 5.41                             | .68                                 | .83          | .97          | 85.5                         | 25.1 | 6.12                             | .69                                 | .84          | .98          | 82.2                         | 24.1 | 6.91                             | .70                                 | .86          | 1.00         | 78.7                         | 23.1 | 7.80                             | .71                                 | .89          | 1.00         |
|                                  | 3000                | 1415 | 92.1                                            | 27.0 | 5.43                             | .73                                 | .91          | 1.00         | 88.8                         | 26.0 | 6.13                             | .74                                 | .93          | 1.00         | 85.5                         | 25.1 | 6.93                             | .76                                 | .95          | 1.00         | 81.8                         | 24.0 | 7.83                             | .78                                 | .97          | 1.00         |
|                                  | 3600                | 1700 | 94.9                                            | 27.8 | 5.44                             | .79                                 | .98          | 1.00         | 91.8                         | 26.9 | 6.15                             | .81                                 | .99          | 1.00         | 88.5                         | 25.9 | 6.94                             | .83                                 | 1.00         | 1.00         | 85.0                         | 24.9 | 7.85                             | .85                                 | 1.00         | 1.00         |
| 67°F<br>(19°C)                   | 2400                | 1135 | 94.3                                            | 27.6 | 5.44                             | .53                                 | .65          | .79          | 91.0                         | 26.7 | 6.14                             | .54                                 | .66          | .80          | 87.3                         | 25.6 | 6.94                             | .54                                 | .68          | .82          | 83.6                         | 24.5 | 7.85                             | .55                                 | .69          | .85          |
|                                  | 3000                | 1415 | 97.3                                            | 28.5 | 5.46                             | .56                                 | .70          | .87          | 93.8                         | 27.5 | 6.17                             | .57                                 | .72          | .89          | 90.1                         | 26.4 | 6.96                             | .57                                 | .74          | .92          | 86.1                         | 25.2 | 7.87                             | .59                                 | .76          | .94          |
|                                  | 3600                | 1700 | 99.4                                            | 29.1 | 5.48                             | .59                                 | .77          | .95          | 95.8                         | 28.1 | 6.17                             | .60                                 | .78          | .96          | 92.0                         | 27.0 | 6.98                             | .61                                 | .80          | .98          | 88.0                         | 25.8 | 7.89                             | .62                                 | .83          | .99          |
| 71°F<br>(22°C)                   | 2400                | 1135 | 100.6                                           | 29.5 | 5.48                             | .40                                 | .51          | .63          | 97.0                         | 28.4 | 6.18                             | .40                                 | .52          | .64          | 93.3                         | 27.3 | 6.98                             | .40                                 | .53          | .65          | 89.3                         | 26.2 | 7.88                             | .41                                 | .54          | .66          |
|                                  | 3000                | 1415 | 103.6                                           | 30.4 | 5.50                             | .41                                 | .55          | .66          | 99.8                         | 29.2 | 6.20                             | .41                                 | .55          | .70          | 95.9                         | 28.1 | 7.00                             | .42                                 | .56          | .71          | 91.7                         | 26.9 | 7.91                             | .42                                 | .57          | .73          |
|                                  | 3600                | 1700 | 105.6                                           | 30.9 | 5.51                             | .42                                 | .58          | .74          | 101.8                        | 29.8 | 6.21                             | .42                                 | .59          | .76          | 97.6                         | 28.6 | 7.02                             | .43                                 | .60          | .78          | 93.4                         | 27.4 | 7.92                             | .43                                 | .61          | .80          |

## Cooling Ratings

### LCC102 - One Compressor Operating

| Entering<br>Wet<br>Bulb<br>Temp. | Total Air<br>Volume |      | Outdoor Air Temperature Entering Condenser Coil |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |
|----------------------------------|---------------------|------|-------------------------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|
|                                  |                     |      | 65°F (18°C)                                     |      |                         |                                     |              |              | 75°F (24°C)                  |      |                         |                                     |              |              | 85°F (29°C)                  |      |                         |                                     |              |              | 95°F (35°C)                  |      |                         |                                     |              |              |
|                                  |                     |      | Total<br>Cooling<br>Capacity                    |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              |
|                                  |                     |      |                                                 |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |
|                                  | cfm                 | L/s  | kBtuh                                           | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C |
| 63°F<br>(17°C)                   | 2720                | 1285 | 52.9                                            | 15.5 | 2.72                    | .64                                 | .79          | .95          | 51.2                         | 15.0 | 3.01                    | .65                                 | .81          | .96          | 49.4                         | 14.5 | 3.36                    | .66                                 | .83          | .98          | 47.5                         | 13.9 | 3.74                    | .67                                 | .85          | 1.00         |
|                                  | 3400                | 1605 | 54.8                                            | 16.1 | 2.76                    | .69                                 | .88          | 1.00         | 53.1                         | 15.6 | 3.05                    | .70                                 | .90          | 1.00         | 51.2                         | 15.0 | 3.39                    | .72                                 | .92          | 1.00         | 49.3                         | 14.4 | 3.78                    | .74                                 | .94          | 1.00         |
|                                  | 4080                | 1925 | 56.4                                            | 16.5 | 2.78                    | .75                                 | .95          | 1.00         | 54.6                         | 16.0 | 3.09                    | .77                                 | .97          | 1.00         | 52.8                         | 15.5 | 3.43                    | .79                                 | .99          | 1.00         | 50.9                         | 14.9 | 3.82                    | .81                                 | 1.00         | 1.00         |
| 67°F<br>(19°C)                   | 2720                | 1285 | 56.1                                            | 16.4 | 2.78                    | .51                                 | .62          | .76          | 54.3                         | 15.9 | 3.08                    | .51                                 | .63          | .77          | 52.4                         | 15.4 | 3.42                    | .52                                 | .64          | .79          | 50.4                         | 14.8 | 3.81                    | .52                                 | .65          | .81          |
|                                  | 3400                | 1605 | 57.8                                            | 16.9 | 2.81                    | .53                                 | .67          | .84          | 55.9                         | 16.4 | 3.12                    | .54                                 | .68          | .86          | 53.9                         | 15.8 | 3.46                    | .55                                 | .70          | .88          | 51.8                         | 15.2 | 3.84                    | .55                                 | .71          | .91          |
|                                  | 4080                | 1925 | 59.0                                            | 17.3 | 2.84                    | .56                                 | .73          | .92          | 57.1                         | 16.7 | 3.14                    | .57                                 | .74          | .94          | 55.1                         | 16.1 | 3.48                    | .58                                 | .76          | .96          | 52.9                         | 15.5 | 3.87                    | .59                                 | .78          | .98          |
| 71°F<br>(22°C)                   | 2720                | 1285 | 59.7                                            | 17.5 | 2.85                    | .38                                 | .49          | .60          | 57.8                         | 16.9 | 3.15                    | .38                                 | .50          | .61          | 55.8                         | 16.4 | 3.50                    | .39                                 | .50          | .62          | 53.6                         | 15.7 | 3.89                    | .39                                 | .51          | .63          |
|                                  | 3400                | 1605 | 61.4                                            | 18.0 | 2.89                    | .39                                 | .52          | .65          | 59.4                         | 17.4 | 3.19                    | .39                                 | .53          | .66          | 57.2                         | 16.8 | 3.53                    | .40                                 | .53          | .67          | 55.0                         | 16.1 | 3.92                    | .40                                 | .54          | .69          |
|                                  | 4080                | 1925 | 62.5                                            | 18.3 | 2.91                    | .40                                 | .55          | .70          | 60.4                         | 17.7 | 3.22                    | .41                                 | .56          | .72          | 58.3                         | 17.1 | 3.56                    | .41                                 | .57          | .74          | 56.0                         | 16.4 | 3.95                    | .41                                 | .58          | .76          |

### LCC102 - All Compressors Operating

| Entering<br>Wet<br>Bulb<br>Temp. | Total Air<br>Volume |      | Outdoor Air Temperature Entering Condenser Coil |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |
|----------------------------------|---------------------|------|-------------------------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|
|                                  |                     |      | 65°F (18°C)                                     |      |                         |                                     |              |              | 75°F (24°C)                  |      |                         |                                     |              |              | 85°F (29°C)                  |      |                         |                                     |              |              | 95°F (35°C)                  |      |                         |                                     |              |              |
|                                  |                     |      | Total<br>Cooling<br>Capacity                    |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              |
|                                  |                     |      |                                                 |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |
|                                  | cfm                 | L/s  | kBtuh                                           | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C |
| 63°F<br>(17°C)                   | 2720                | 1285 | 97.2                                            | 28.5 | 7.01                    | .67                                 | .83          | .97          | 93.5                         | 27.4 | 7.82                    | .68                                 | .84          | .99          | 89.6                         | 26.3 | 8.74                    | .70                                 | .87          | 1.00         | 85.3                         | 25.0 | 9.79                    | .71                                 | .89          | 1.00         |
|                                  | 3400                | 1605 | 100.8                                           | 29.5 | 7.09                    | .72                                 | .91          | 1.00         | 97.0                         | 28.4 | 7.90                    | .74                                 | .93          | 1.00         | 93.0                         | 27.3 | 8.82                    | .76                                 | .95          | 1.00         | 88.6                         | 26.0 | 9.89                    | .79                                 | .98          | 1.00         |
|                                  | 4080                | 1925 | 103.8                                           | 30.4 | 7.16                    | .78                                 | .98          | 1.00         | 100.0                        | 29.3 | 7.98                    | .81                                 | .99          | 1.00         | 96.2                         | 28.2 | 8.92                    | .83                                 | 1.00         | 1.00         | 92.0                         | 27.0 | 9.98                    | .86                                 | 1.00         | 1.00         |
| 67°F<br>(19°C)                   | 2720                | 1285 | 103.1                                           | 30.2 | 7.14                    | .53                                 | .65          | .79          | 99.2                         | 29.1 | 7.96                    | .53                                 | .66          | .81          | 94.8                         | 27.8 | 8.89                    | .54                                 | .67          | .83          | 90.3                         | 26.5 | 9.94                    | .55                                 | .69          | .86          |
|                                  | 3400                | 1605 | 106.2                                           | 31.1 | 7.23                    | .56                                 | .70          | .87          | 102.0                        | 29.9 | 8.03                    | .56                                 | .71          | .90          | 97.6                         | 28.6 | 8.97                    | .57                                 | .73          | .92          | 92.7                         | 27.2 | 10.02                   | .58                                 | .76          | .95          |
|                                  | 4080                | 1925 | 108.5                                           | 31.8 | 7.28                    | .59                                 | .76          | .95          | 104.2                        | 30.5 | 8.09                    | .60                                 | .78          | .97          | 99.6                         | 29.2 | 9.03                    | .61                                 | .81          | .99          | 94.6                         | 27.7 | 10.09                   | .62                                 | .84          | 1.00         |
| 71°F<br>(22°C)                   | 2720                | 1285 | 109.8                                           | 32.2 | 7.31                    | .39                                 | .51          | .63          | 105.5                        | 30.9 | 8.13                    | .40                                 | .52          | .64          | 100.9                        | 29.6 | 9.07                    | .40                                 | .53          | .65          | 96.2                         | 28.2 | 10.13                   | .40                                 | .53          | .67          |
|                                  | 3400                | 1605 | 112.7                                           | 33.0 | 7.38                    | .41                                 | .54          | .68          | 108.3                        | 31.7 | 8.21                    | .41                                 | .55          | .69          | 103.6                        | 30.4 | 9.14                    | .41                                 | .56          | .71          | 98.4                         | 28.8 | 10.21                   | .42                                 | .57          | .73          |
|                                  | 4080                | 1925 | 114.8                                           | 33.6 | 7.44                    | .42                                 | .58          | .74          | 110.3                        | 32.3 | 8.26                    | .42                                 | .59          | .76          | 105.4                        | 30.9 | 9.19                    | .43                                 | .60          | .78          | 100.0                        | 29.3 | 10.26                   | .43                                 | .61          | .81          |

## Cooling Ratings

### LCC120 - One Compressor Operating

| Entering<br>Wet<br>Bulb<br>Temp. | Total Air<br>Volume |      | Outdoor Air Temperature Entering Condenser Coil |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |
|----------------------------------|---------------------|------|-------------------------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|
|                                  |                     |      | 65°F (18°C)                                     |      |                         |                                     |              |              | 75°F (24°C)                  |      |                         |                                     |              |              | 85°F (29°C)                  |      |                         |                                     |              |              | 95°F (35°C)                  |      |                         |                                     |              |              |
|                                  |                     |      | Total<br>Cooling<br>Capacity                    |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              |
|                                  |                     |      |                                                 |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |
|                                  | cfm                 | L/s  | kBtuh                                           | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C |
| 63°F<br>(17°C)                   | 3200                | 1510 | 64.5                                            | 18.9 | 3.37                    | .70                                 | .83          | .96          | 62.9                         | 18.4 | 3.68                    | .70                                 | .84          | .97          | 61.1                         | 17.9 | 4.05                    | .71                                 | .86          | .98          | 58.9                         | 17.3 | 4.48                    | .72                                 | .87          | .99          |
|                                  | 4000                | 1890 | 66.8                                            | 19.6 | 3.41                    | .75                                 | .91          | 1.00         | 65.3                         | 19.1 | 3.72                    | .76                                 | .92          | 1.00         | 63.4                         | 18.6 | 4.10                    | .77                                 | .93          | 1.00         | 61.2                         | 17.9 | 4.52                    | .78                                 | .95          | 1.00         |
|                                  | 4800                | 2265 | 68.8                                            | 20.2 | 3.45                    | .80                                 | .97          | 1.00         | 67.3                         | 19.7 | 3.76                    | .81                                 | .98          | 1.00         | 65.5                         | 19.2 | 4.13                    | .83                                 | .99          | 1.00         | 63.3                         | 18.6 | 4.56                    | .84                                 | 1.00         | 1.00         |
| 67°F<br>(19°C)                   | 3200                | 1510 | 68.2                                            | 20.0 | 3.44                    | .55                                 | .67          | .80          | 66.7                         | 19.5 | 3.75                    | .55                                 | .68          | .81          | 64.7                         | 19.0 | 4.12                    | .55                                 | .69          | .82          | 62.5                         | 18.3 | 4.54                    | .56                                 | .70          | .84          |
|                                  | 4000                | 1890 | 70.3                                            | 20.6 | 3.48                    | .58                                 | .73          | .88          | 68.7                         | 20.1 | 3.79                    | .58                                 | .73          | .89          | 66.7                         | 19.5 | 4.16                    | .59                                 | .74          | .90          | 64.4                         | 18.9 | 4.59                    | .60                                 | .76          | .92          |
|                                  | 4800                | 2265 | 71.8                                            | 21.0 | 3.51                    | .61                                 | .78          | .95          | 70.2                         | 20.6 | 3.82                    | .61                                 | .79          | .96          | 68.1                         | 20.0 | 4.19                    | .62                                 | .81          | .97          | 65.7                         | 19.3 | 4.62                    | .63                                 | .82          | .98          |
| 71°F<br>(22°C)                   | 3200                | 1510 | 72.4                                            | 21.2 | 3.52                    | .41                                 | .53          | .65          | 70.9                         | 20.8 | 3.83                    | .41                                 | .53          | .65          | 68.8                         | 20.2 | 4.20                    | .42                                 | .54          | .66          | 66.5                         | 19.5 | 4.63                    | .42                                 | .55          | .67          |
|                                  | 4000                | 1890 | 74.4                                            | 21.8 | 3.56                    | .42                                 | .56          | .70          | 72.8                         | 21.3 | 3.87                    | .42                                 | .57          | .71          | 70.7                         | 20.7 | 4.23                    | .43                                 | .58          | .72          | 68.3                         | 20.0 | 4.66                    | .43                                 | .58          | .74          |
|                                  | 4800                | 2265 | 75.8                                            | 22.2 | 3.59                    | .44                                 | .60          | .76          | 74.1                         | 21.7 | 3.90                    | .44                                 | .60          | .77          | 72.0                         | 21.1 | 4.26                    | .44                                 | .61          | .78          | 69.5                         | 20.4 | 4.69                    | .45                                 | .62          | .80          |

### LCC120 - All Compressors Operating

| Entering<br>Wet<br>Bulb<br>Temp. | Total Air<br>Volume |      | Outdoor Air Temperature Entering Condenser Coil |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |
|----------------------------------|---------------------|------|-------------------------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|
|                                  |                     |      | 65°F (18°C)                                     |      |                         |                                     |              |              | 75°F (24°C)                  |      |                         |                                     |              |              | 85°F (29°C)                  |      |                         |                                     |              |              | 95°F (35°C)                  |      |                         |                                     |              |              |
|                                  |                     |      | Total<br>Cooling<br>Capacity                    |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              |
|                                  |                     |      |                                                 |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |
|                                  | cfm                 | L/s  | kBtuh                                           | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C |
| 63°F<br>(17°C)                   | 3200                | 1510 | 120.2                                           | 35.2 | 8.27                    | .71                                 | .85          | .98          | 115.9                        | 34.0 | 9.15                    | .72                                 | .87          | .99          | 111.5                        | 32.7 | 10.13                   | .74                                 | .89          | 1.00         | 106.8                        | 31.3 | 11.27                   | .75                                 | .91          | 1.00         |
|                                  | 4000                | 1890 | 124.8                                           | 36.6 | 8.36                    | .77                                 | .93          | 1.00         | 120.4                        | 35.3 | 9.23                    | .78                                 | .94          | 1.00         | 115.8                        | 33.9 | 10.24                   | .80                                 | .96          | 1.00         | 111.2                        | 32.6 | 11.38                   | .82                                 | .98          | 1.00         |
|                                  | 4800                | 2265 | 128.8                                           | 37.7 | 8.43                    | .82                                 | .98          | 1.00         | 124.4                        | 36.5 | 9.31                    | .84                                 | .99          | 1.00         | 120.0                        | 35.2 | 10.33                   | .86                                 | 1.00         | 1.00         | 115.5                        | 33.8 | 11.48                   | .88                                 | 1.00         | 1.00         |
| 67°F<br>(19°C)                   | 3200                | 1510 | 127.4                                           | 37.3 | 8.41                    | .56                                 | .69          | .82          | 123.0                        | 36.0 | 9.28                    | .57                                 | .70          | .83          | 118.2                        | 34.6 | 10.30                   | .57                                 | .71          | .85          | 113.1                        | 33.1 | 11.44                   | .58                                 | .73          | .87          |
|                                  | 4000                | 1890 | 131.4                                           | 38.5 | 8.49                    | .59                                 | .75          | .90          | 126.8                        | 37.2 | 9.37                    | .60                                 | .76          | .91          | 121.7                        | 35.7 | 10.38                   | .61                                 | .78          | .93          | 116.5                        | 34.1 | 11.53                   | .62                                 | .79          | .95          |
|                                  | 4800                | 2265 | 134.2                                           | 39.3 | 8.55                    | .63                                 | .80          | .96          | 129.4                        | 37.9 | 9.44                    | .64                                 | .82          | .98          | 124.3                        | 36.4 | 10.45                   | .65                                 | .84          | .99          | 118.9                        | 34.8 | 11.60                   | .66                                 | .86          | 1.00         |
| 71°F<br>(22°C)                   | 3200                | 1510 | 135.5                                           | 39.7 | 8.57                    | .42                                 | .54          | .67          | 130.9                        | 38.4 | 9.46                    | .42                                 | .55          | .68          | 125.9                        | 36.9 | 10.47                   | .42                                 | .56          | .69          | 120.6                        | 35.3 | 11.62                   | .43                                 | .56          | .70          |
|                                  | 4000                | 1890 | 139.3                                           | 40.8 | 8.65                    | .43                                 | .58          | .72          | 134.5                        | 39.4 | 9.52                    | .43                                 | .59          | .74          | 129.2                        | 37.9 | 10.55                   | .44                                 | .60          | .75          | 123.6                        | 36.2 | 11.72                   | .44                                 | .61          | .77          |
|                                  | 4800                | 2265 | 141.9                                           | 41.6 | 8.70                    | .44                                 | .62          | .78          | 136.9                        | 40.1 | 9.59                    | .45                                 | .63          | .80          | 131.5                        | 38.5 | 10.60                   | .45                                 | .64          | .82          | 125.8                        | 36.9 | 11.76                   | .46                                 | .65          | .84          |

## Cooling Ratings

### LCC150 - One Compressor Operating

| Entering<br>Wet<br>Bulb<br>Temp. | Total Air<br>Volume |      | Outdoor Air Temperature Entering Condenser Coil |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |
|----------------------------------|---------------------|------|-------------------------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|
|                                  |                     |      | 65°F (18°C)                                     |      |                         |                                     |              |              | 75°F (24°C)                  |      |                         |                                     |              |              | 85°F (29°C)                  |      |                         |                                     |              |              | 95°F (35°C)                  |      |                         |                                     |              |              |
|                                  |                     |      | Total<br>Cooling<br>Capacity                    |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              |
|                                  |                     |      |                                                 |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |
|                                  | cfm                 | L/s  | kBtuh                                           | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C |
| 63°F<br>(17°C)                   | 3800                | 1795 | 71.4                                            | 20.9 | 3.93                    | .60                                 | .76          | .93          | 69.4                         | 20.3 | 4.38                    | .61                                 | .78          | .94          | 67.3                         | 19.7 | 4.89                    | .62                                 | .79          | .96          | 65.0                         | 19.0 | 5.47                    | .63                                 | .81          | .98          |
|                                  | 4400                | 2075 | 73.2                                            | 21.5 | 3.97                    | .64                                 | .82          | .98          | 71.1                         | 20.8 | 4.41                    | .65                                 | .84          | .99          | 68.9                         | 20.2 | 4.92                    | .66                                 | .86          | 1.00         | 66.6                         | 19.5 | 5.50                    | .67                                 | .88          | 1.00         |
|                                  | 5000                | 2360 | 74.7                                            | 21.9 | 4.00                    | .67                                 | .88          | 1.00         | 72.6                         | 21.3 | 4.45                    | .69                                 | .89          | 1.00         | 70.4                         | 20.6 | 4.95                    | .70                                 | .91          | 1.00         | 68.1                         | 20.0 | 5.53                    | .72                                 | .94          | 1.00         |
| 67°F<br>(19°C)                   | 3800                | 1795 | 75.7                                            | 22.2 | 4.02                    | .48                                 | .58          | .72          | 73.5                         | 21.5 | 4.46                    | .48                                 | .59          | .74          | 71.3                         | 20.9 | 4.97                    | .48                                 | .59          | .75          | 68.8                         | 20.2 | 5.55                    | .49                                 | .60          | .77          |
|                                  | 4400                | 2075 | 77.3                                            | 22.7 | 4.05                    | .49                                 | .61          | .78          | 75.1                         | 22.0 | 4.50                    | .50                                 | .62          | .79          | 72.7                         | 21.3 | 5.01                    | .50                                 | .63          | .81          | 70.2                         | 20.6 | 5.59                    | .51                                 | .65          | .83          |
|                                  | 5000                | 2360 | 78.6                                            | 23.0 | 4.08                    | .51                                 | .65          | .84          | 76.3                         | 22.4 | 4.53                    | .51                                 | .66          | .85          | 73.8                         | 21.6 | 5.04                    | .52                                 | .67          | .88          | 71.3                         | 20.9 | 5.61                    | .52                                 | .69          | .90          |
| 71°F<br>(22°C)                   | 3800                | 1795 | 80.5                                            | 23.6 | 4.13                    | .36                                 | .46          | .56          | 78.2                         | 22.9 | 4.57                    | .36                                 | .46          | .57          | 75.8                         | 22.2 | 5.08                    | .36                                 | .47          | .57          | 73.2                         | 21.5 | 5.66                    | .36                                 | .47          | .58          |
|                                  | 4400                | 2075 | 82.1                                            | 24.1 | 4.16                    | .36                                 | .48          | .59          | 79.7                         | 23.4 | 4.60                    | .37                                 | .48          | .60          | 77.2                         | 22.6 | 5.11                    | .37                                 | .49          | .61          | 74.5                         | 21.8 | 5.69                    | .37                                 | .49          | .62          |
|                                  | 5000                | 2360 | 83.3                                            | 24.4 | 4.19                    | .37                                 | .49          | .62          | 80.9                         | 23.7 | 4.63                    | .37                                 | .50          | .63          | 78.2                         | 22.9 | 5.14                    | .38                                 | .51          | .65          | 75.5                         | 22.1 | 5.72                    | .38                                 | .51          | .67          |

### LCC150 -All Compressors Operating

| Entering<br>Wet<br>Bulb<br>Temp. | Total Air<br>Volume |      | Outdoor Air Temperature Entering Condenser Coil |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |       |    |       |              |              |              |
|----------------------------------|---------------------|------|-------------------------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|------------------------------|------|-------------------------|-------------------------------------|--------------|--------------|-------|----|-------|--------------|--------------|--------------|
|                                  |                     |      | 65°F (18°C)                                     |      |                         |                                     |              |              | 75°F (24°C)                  |      |                         |                                     |              |              | 85°F (29°C)                  |      |                         |                                     |              |              | 95°F (35°C)                  |      |                         |                                     |              |              |       |    |       |              |              |              |
|                                  |                     |      | Total<br>Cooling<br>Capacity                    |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              | Total<br>Cooling<br>Capacity |      | Comp.<br>Motor<br>Watts | Sensible to<br>Total Ratio<br>(S/T) |              |              |       |    |       |              |              |              |
|                                  |                     |      |                                                 |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |                              |      |                         | Dry Bulb                            |              |              |       |    |       |              |              |              |
|                                  | cfm                 | L/s  | kBtuh                                           | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh                        | kW   | Input                   | 75°F<br>24°C                        | 80°F<br>27°C | 85°F<br>29°C | kBtuh | kW | Input | 75°F<br>24°C | 80°F<br>27°C | 85°F<br>29°C |
|                                  |                     |      |                                                 |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |                              |      |                         |                                     |              |              |       |    |       |              |              |              |
| 63°F<br>(17°C)                   | 3800                | 1795 | 139.5                                           | 40.9 | 10.03                   | .67                                 | .82          | .96          | 134.7                        | 39.5 | 11.22                   | .67                                 | .83          | .97          | 129.7                        | 38.0 | 12.59                   | .69                                 | .85          | .99          | 124.3                        | 36.4 | 14.13                   | .70                                 | .87          | 1.00         |       |    |       |              |              |              |
|                                  | 4400                | 2075 | 142.9                                           | 41.9 | 10.10                   | .70                                 | .87          | 1.00         | 138.1                        | 40.5 | 11.29                   | .71                                 | .89          | 1.00         | 132.9                        | 38.9 | 12.66                   | .73                                 | .91          | 1.00         | 127.5                        | 37.4 | 14.20                   | .75                                 | .93          | 1.00         |       |    |       |              |              |              |
|                                  | 5000                | 2360 | 145.9                                           | 42.8 | 10.16                   | .74                                 | .92          | 1.00         | 141.1                        | 41.4 | 11.36                   | .75                                 | .94          | 1.00         | 135.8                        | 39.8 | 12.73                   | .77                                 | .96          | 1.00         | 130.4                        | 38.2 | 14.27                   | .79                                 | .98          | 1.00         |       |    |       |              |              |              |
| 67°F<br>(19°C)                   | 3800                | 1795 | 147.8                                           | 43.3 | 10.20                   | .52                                 | .64          | .78          | 142.7                        | 41.8 | 11.39                   | .53                                 | .65          | .79          | 137.3                        | 40.2 | 12.77                   | .53                                 | .66          | .81          | 131.6                        | 38.6 | 14.32                   | .54                                 | .67          | .83          |       |    |       |              |              |              |
|                                  | 4400                | 2075 | 150.8                                           | 44.2 | 10.27                   | .54                                 | .67          | .83          | 145.6                        | 42.7 | 11.47                   | .55                                 | .68          | .85          | 140.1                        | 41.1 | 12.84                   | .55                                 | .70          | .87          | 134.2                        | 39.3 | 14.39                   | .56                                 | .72          | .89          |       |    |       |              |              |              |
|                                  | 5000                | 2360 | 153.2                                           | 44.9 | 10.33                   | .56                                 | .71          | .88          | 148.0                        | 43.4 | 11.52                   | .57                                 | .73          | .90          | 142.3                        | 41.7 | 12.89                   | .57                                 | .74          | .92          | 136.2                        | 39.9 | 14.45                   | .59                                 | .77          | .95          |       |    |       |              |              |              |
| 71°F<br>(22°C)                   | 3800                | 1795 | 157.2                                           | 46.1 | 10.41                   | .39                                 | .51          | .62          | 151.9                        | 44.5 | 11.62                   | .40                                 | .51          | .63          | 146.1                        | 42.8 | 12.98                   | .40                                 | .52          | .64          | 140.1                        | 41.1 | 14.55                   | .40                                 | .53          | .65          |       |    |       |              |              |              |
|                                  | 4400                | 2075 | 160.2                                           | 46.9 | 10.49                   | .40                                 | .53          | .65          | 154.6                        | 45.3 | 11.68                   | .40                                 | .53          | .66          | 148.8                        | 43.6 | 13.06                   | .41                                 | .54          | .68          | 142.4                        | 41.7 | 14.62                   | .41                                 | .55          | .69          |       |    |       |              |              |              |
|                                  | 5000                | 2360 | 162.4                                           | 47.6 | 10.55                   | .41                                 | .55          | .69          | 156.8                        | 46.0 | 11.74                   | .41                                 | .56          | .70          | 150.8                        | 44.2 | 13.11                   | .41                                 | .56          | .72          | 144.3                        | 42.3 | 14.67                   | .42                                 | .57          | .74          |       |    |       |              |              |              |

### ***Blower Data - Base Unit***

*Blower table includes resistance for LCA102 Base Unit only with dry indoor coil and air filters in place.*

**FOR ALL UNITS ADD:**

- 1 - Wet indoor coil air resistance of selected unit
- 2 - Any installed options air resistance (heat section, economizer, ect.)
- 3 - Any field installed accessories air resistance (duct resistance, diffuser, etc.)

***Then determine from blower table blower motor output and drive required.***

**See page 23 for wet coil and option/accessory air resistance data and blower motors and drives.**

**MINIMUM AIR VOLUME REQUIRED FOR USE WITH OPTIONAL ELECTRIC HEAT**

*\*Bold Italics indicate field furnished drive*

## ***LCC090, 102, 120 and 150***

### MINIMUM AIR VOLUME REQUIRED FOR USE WITH OPTIONAL ELECTRIC HEAT

**102 models require 3000 cfm (1415 L/s) minimum air with electric heat**

**120 & 150 models require 4000 cfm (1890 L/s) minimum air with electric heat**

| Air<br>Volume<br>cfm<br>(L/s) | Total Static Pressure = in. w.g. (Pa) |                |           |                |           |                |                        |             |                |             |                |             |                |             |                |             |                |             |                |             |                |             |                |             |                |             |
|-------------------------------|---------------------------------------|----------------|-----------|----------------|-----------|----------------|------------------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|
|                               | .20 (50)                              |                | .40 (100) |                | .60 (150) |                | .80 (200)              |             | 1.00 (250)     |             | 1.20 (300)     |             | 1.40 (350)     |             | 1.60 (400)     |             | 1.80 (450)     |             | 2.00 (495)     |             | 2.20 (545)     |             | 2.05 (595)     |             | 2.60 (645)     |             |
|                               | RPM                                   | BHP<br>(kW)    | RPM       | BHP<br>(kW)    | RPM       | BHP<br>(kW)    | RP-<br>M               | BHP<br>(kW) | RP-<br>M       | BHP<br>(kW) | RP-<br>M       | BHP<br>(kW) | RP-<br>M       | BHP<br>(kW) | RPM            | BHP<br>(kW) | RP-<br>M       | BHP<br>(kW) | RP-<br>M       | BHP<br>(kW) | RPM            | BHP<br>(kW) | RP-<br>M       | BHP<br>(kW) | RP-<br>M       | BHP<br>(kW) |
| 2250<br>(1060)                | 455                                   | .30<br>(.22)   | 555       | .45<br>(.34)   | 640       | .60<br>(.45)   | 720<br>.80<br>(.60)    | 790         | 1.00<br>(.75)  | 855         | 1.20<br>(.90)  | 915         | 1.40<br>(1.04) | 975         | 1.60<br>(1.19) | 1030        | 1.85<br>(1.38) | 1080        | 2.05<br>(1.53) | 1130        | 2.30<br>(1.72) | 1175        | 2.55<br>(1.90) | 1220        | 2.80<br>(2.09) |             |
| 2500<br>(1180)                | 475                                   | .40<br>(.30)   | 575       | .55<br>(.41)   | 660       | .70<br>(.52)   | 735<br>.90<br>(.67)    | 805         | 1.10<br>(.82)  | 870         | 1.30<br>(.97)  | 930         | 1.55<br>(1.16) | 985         | 1.75<br>(1.31) | 1040        | 2.00<br>(1.49) | 1090        | 2.25<br>(1.68) | 1140        | 2.50<br>(1.87) | 1185        | 2.75<br>(2.05) | 1230        | 3.00<br>(2.24) |             |
| 2750<br>(1300)                | 495                                   | .45<br>(.34)   | 595       | .65<br>(.48)   | 675       | .85<br>(.63)   | 750<br>1.05<br>(.78)   | 820         | 1.25<br>(.93)  | 885         | 1.45<br>(1.08) | 940         | 1.70<br>(1.27) | 995         | 1.90<br>(1.42) | 1050        | 2.20<br>(1.64) | 1100        | 2.45<br>(1.83) | 1145        | 2.65<br>(1.98) | 1195        | 2.95<br>(2.20) | 1240        | 3.25<br>(2.42) |             |
| 3000<br>(1415)                | 525                                   | .55<br>(.41)   | 615       | .75<br>(.56)   | 695       | .95<br>(.71)   | 770<br>1.20<br>(.90)   | 835         | 1.40<br>(1.04) | 895         | 1.60<br>(1.19) | 955         | 1.85<br>(1.38) | 1010        | 2.10<br>(1.57) | 1060        | 2.35<br>(1.75) | 1110        | 2.65<br>(1.98) | 1160        | 2.90<br>(2.16) | 1205        | 3.20<br>(2.39) | 1250        | 3.45<br>(2.57) |             |
| 3250<br>(1535)                | 550                                   | .65<br>(.48)   | 640       | .90<br>(.67)   | 715       | 1.10<br>(.82)  | 790<br>1.35<br>(1.01)  | 855         | 1.60<br>(1.19) | 915         | 1.80<br>(1.34) | 970         | 2.05<br>(1.53) | 1025        | 2.35<br>(1.75) | 1075        | 2.60<br>(1.94) | 1125        | 2.85<br>(2.13) | 1170        | 3.15<br>(2.35) | 1215        | 3.40<br>(2.54) | 1260        | 3.70<br>(2.76) |             |
| 3500<br>(1650)                | 580                                   | .80<br>(.60)   | 665       | 1.05<br>(.78)  | 740       | 1.25<br>(.93)  | 810<br>1.50<br>(1.12)  | 870         | 1.75<br>(1.31) | 930         | 2.00<br>(1.49) | 985         | 2.25<br>(1.68) | 1040        | 2.55<br>(1.90) | 1090        | 2.85<br>(2.13) | 1135        | 3.10<br>(2.31) | 1185        | 3.40<br>(2.54) | 1230        | 3.70<br>(2.76) | 1270        | 4.00<br>(2.98) |             |
| 3750<br>(1770)                | 605                                   | .95<br>(.71)   | 690       | 1.20<br>(.90)  | 760       | 1.45<br>(1.08) | 830<br>1.70<br>(1.27)  | 890         | 1.95<br>(1.45) | 950         | 2.25<br>(1.68) | 1005        | 2.50<br>(1.87) | 1055        | 2.80<br>(2.09) | 1105        | 3.10<br>(2.31) | 1150        | 3.35<br>(2.50) | 1195        | 3.65<br>(2.72) | 1240        | 3.95<br>(2.95) | 1285        | 4.30<br>(3.21) |             |
| 4000<br>(1890)                | 635                                   | 1.10<br>(.82)  | 715       | 1.40<br>(1.04) | 785       | 1.65<br>(1.23) | 850<br>1.90<br>(1.42)  | 910         | 2.20<br>(1.64) | 965         | 2.45<br>(1.83) | 1020        | 2.75<br>(2.05) | 1070        | 3.05<br>(2.28) | 1120        | 3.35<br>(2.50) | 1165        | 3.65<br>(2.72) | 1210        | 3.95<br>(2.95) | 1255        | 4.30<br>(3.21) | 1295        | 4.60<br>(3.43) |             |
| 4250<br>(2005)                | 665                                   | 1.30<br>(.97)  | 740       | 1.60<br>(1.19) | 810       | 1.85<br>(1.38) | 870<br>2.15<br>(1.60)  | 930         | 2.45<br>(1.83) | 985         | 2.75<br>(2.05) | 1040        | 3.05<br>(2.28) | 1090        | 3.35<br>(2.50) | 1135        | 3.65<br>(2.72) | 1185        | 4.00<br>(2.98) | 1225        | 4.30<br>(3.21) | 1270        | 4.65<br>(3.47) | 1310        | 4.95<br>(3.69) |             |
| 4500<br>(2125)                | 695                                   | 1.50<br>(1.12) | 770       | 1.80<br>(1.34) | 835       | 2.10<br>(1.57) | 895<br>2.40<br>(1.79)  | 955         | 2.70<br>(2.01) | 1005        | 3.00<br>(2.24) | 1060        | 3.35<br>(2.50) | 1105        | 3.65<br>(2.72) | 1155        | 4.00<br>(2.98) | 1200        | 4.30<br>(3.21) | 1245        | 4.65<br>(3.47) | 1285        | 5.00<br>(3.73) | 1325        | 5.30<br>(3.95) |             |
| 4750<br>(2240)                | 725                                   | 1.75<br>(1.31) | 795       | 2.05<br>(1.53) | 860       | 2.40<br>(1.79) | 920<br>2.70<br>(2.01)  | 975         | 3.00<br>(2.24) | 1030        | 3.35<br>(2.50) | 1080        | 3.65<br>(2.72) | 1125        | 3.95<br>(2.95) | 1175        | 4.35<br>(3.25) | 1215        | 4.65<br>(3.47) | 1260        | 5.00<br>(3.73) | 1300        | 5.35<br>(3.99) | 1340        | 5.70<br>(4.25) |             |
| 5000<br>(2360)                | 760                                   | 2.05<br>(1.53) | 825       | 2.35<br>(1.75) | 885       | 2.65<br>(1.98) | 945<br>3.00<br>(2.24)  | 1000        | 3.35<br>(2.50) | 1050        | 3.65<br>(2.72) | 1100        | 4.00<br>(2.98) | 1145        | 4.35<br>(3.25) | 1190        | 4.70<br>(3.51) | 1235        | 5.05<br>(3.77) | 1280        | 5.45<br>(4.07) | --          | --             | --          | --             |             |
| 5250<br>(2475)                | 790                                   | 2.30<br>(1.72) | 855       | 2.65<br>(1.98) | 910       | 2.95<br>(2.20) | 970<br>3.35<br>(2.50)  | 1020        | 3.65<br>(2.72) | 1070        | 4.00<br>(2.98) | 1120        | 4.35<br>(3.25) | 1165        | 4.70<br>(3.51) | 1210        | 5.10<br>(3.80) | 1255        | 5.45<br>(4.07) | --          | --             | --          | --             | --          | --             |             |
| 5500<br>(2595)                | 820                                   | 2.60<br>(1.94) | 880       | 2.95<br>(2.20) | 940       | 3.30<br>(2.46) | 995<br>3.70<br>(2.76)  | 1045        | 4.05<br>(3.02) | 1095        | 4.40<br>(3.28) | 1145        | 4.80<br>(3.58) | 1190        | 5.15<br>(3.84) | 1230        | 5.50<br>(4.10) | --          | --             | --          | --             | --          | --             | --          | --             |             |
| 5750<br>(2715)                | 850                                   | 2.95<br>(2.20) | 910       | 3.30<br>(2.46) | 965       | 3.70<br>(2.76) | 1020<br>4.05<br>(3.02) | 1070        | 4.45<br>(3.32) | 1120        | 4.80<br>(3.28) | 1165        | 5.20<br>(3.88) | 1210        | 5.50<br>(4.10) | --          | --             | --          | --             | --          | --             | --          | --             | --          | --             |             |
| 6000<br>(2830)                | 885                                   | 3.35<br>(2.50) | 940       | 3.70<br>(2.76) | 995       | 4.10<br>(3.06) | 1045<br>4.45<br>(3.32) | 1095        | 4.85<br>(3.62) | 1145        | 5.25<br>(3.92) | 1190        | 5.65<br>(4.21) | --          | --             | --          | --             | --          | --             | --          | --             | --          | --             | --          | --             |             |

## Factory Installed Drive Kit Specifications

| Motor Outputs |            |            |            | RPM Range |         |           |            |           |             |
|---------------|------------|------------|------------|-----------|---------|-----------|------------|-----------|-------------|
| Nominal hp    | Maximum hp | Nominal kW | Maximum kW | Drive 1   | Drive 2 | Drive 3   | Drive 4    | Drive 5   | Drive 6     |
| 2             | 2.3        | 1.5        | 1.7        | 680-925   | --      | 895-1120  | --         | --        | --          |
| *3            | 3.45       | 2.2        | 2.6        | 680-925   | --      | *895-1120 | --         | 1110-1395 | --          |
| 5             | 5.75       | 3.7        | 4.3        | --        | --      | --        | 895 - 1120 | --        | 1110 - 1395 |

NOTE - Using total air volume and system static pressure requirements determine from nblower performance tables rpm and motor output required.

Maximum usable output of motors furnished are shown. If Canada, nominal motor output is also maximum usable motor output. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

\*Base Unit

## Field Installed Accessory Air Resistance

| Air Volume |      | Total Resistance - Inches water gauge (Pa) |    |          |     |                    |    |                    |    |
|------------|------|--------------------------------------------|----|----------|-----|--------------------|----|--------------------|----|
|            |      | Wet Indoor Coil                            |    |          |     | Electric Heat      |    | Economizer         |    |
|            |      | 090, 102                                   |    | 120,150  |     | 090, 102, 120, 150 |    | 090, 102, 120, 150 |    |
| cfm        | L/s  | in. w.g.                                   | Pa | in. w.g. | Pa  | in. w.g.           | Pa | in. w.g.           | Pa |
| 2250       | 1060 | .06                                        | 15 | .10      | 25  | .01                | 2  | .35                | 9  |
| 2500       | 1180 | .08                                        | 20 | .12      | 30  | .01                | 2  | .04                | 10 |
| 2750       | 1325 | .09                                        | 22 | .14      | 35  | .01                | 2  | .045               | 11 |
| 3000       | 1420 | .10                                        | 25 | .16      | 40  | .02                | 5  | .05                | 12 |
| 3250       | 1535 | .11                                        | 27 | .19      | 47  | .02                | 5  | .06                | 15 |
| 3500       | 1650 | .13                                        | 32 | .21      | 52  | .03                | 7  | .07                | 17 |
| 3750       | 1770 | .14                                        | 35 | .23      | 57  | .03                | 7  | .075               | 19 |
| 4000       | 1890 | .16                                        | 40 | .26      | 65  | .04                | 10 | .08                | 20 |
| 4250       | 2005 | .17                                        | 42 | .28      | 70  | .04                | 10 | .09                | 22 |
| 4500       | 2125 | .18                                        | 45 | .31      | 77  | .05                | 12 | .10                | 25 |
| 4750       | 2240 | .20                                        | 50 | .33      | 82  | .05                | 12 | .11                | 27 |
| 5000       | 2360 | .22                                        | 55 | .36      | 90  | .06                | 15 | .12                | 30 |
| 5250       | 2475 | .24                                        | 60 | .39      | 97  | .06                | 15 | .13                | 32 |
| 5500       | 2595 | .26                                        | 65 | .42      | 104 | .07                | 17 | .14                | 35 |
| 5750       | 2715 | .28                                        | 70 | .45      | 112 | .07                | 17 | .15                | 37 |
| 6000       | 2830 | .30                                        | 75 | .48      | 119 | .08                | 20 | .16                | 40 |

## Ceiling Diffuser Air Resistance

| Unit Size            | Air Volume |      | Total Resistance - inches water gauge (Pa) |     |                     |     |                       |     |                     |     |
|----------------------|------------|------|--------------------------------------------|-----|---------------------|-----|-----------------------|-----|---------------------|-----|
|                      |            |      | RTD11 Step-Down Diffuser                   |     |                     |     |                       |     | FD11 Flush Diffuser |     |
|                      |            |      | 2 Ends Open                                |     | 1 Side, 2 Ends Open |     | All Ends & Sides Open |     |                     |     |
|                      | cfm        | L/s  | in. w.g.                                   | Pa  | in. w.g.            | Pa  | in. w.g.              | Pa  | in. w.g.            | Pa  |
| 090,<br>102 &<br>120 | 3600       | 1700 | .36                                        | 90  | .28                 | 70  | .23                   | 57  | .15                 | 37  |
|                      | 3800       | 1795 | .40                                        | 99  | .32                 | 80  | .26                   | 65  | .18                 | 45  |
|                      | 4000       | 1890 | .44                                        | 109 | .36                 | 90  | .29                   | 72  | .21                 | 52  |
|                      | 4200       | 1980 | .49                                        | 122 | .40                 | 99  | .33                   | 82  | .24                 | 60  |
|                      | 4400       | 2075 | .54                                        | 134 | .44                 | 109 | .37                   | 92  | .27                 | 67  |
|                      | 4600       | 2170 | .60                                        | 149 | .49                 | 122 | .42                   | 104 | .31                 | 77  |
|                      | 4800       | 2265 | .65                                        | 162 | .53                 | 132 | .46                   | 114 | .35                 | 87  |
|                      | 5000       | 2360 | .69                                        | 172 | .58                 | 144 | .50                   | 124 | .39                 | 97  |
|                      | 5200       | 2455 | .75                                        | 186 | .62                 | 154 | .54                   | 134 | .43                 | 107 |
| 150                  | 4200       | 1980 | .22                                        | 55  | .19                 | 47  | .16                   | 40  | .10                 | 25  |
|                      | 4400       | 2075 | .28                                        | 70  | .24                 | 60  | .20                   | 50  | .12                 | 30  |
|                      | 4600       | 2170 | .34                                        | 85  | .29                 | 72  | .24                   | 60  | .15                 | 37  |
|                      | 4800       | 2265 | .40                                        | 99  | .34                 | 85  | .29                   | 72  | .19                 | 47  |
|                      | 5000       | 2360 | .46                                        | 114 | .39                 | 97  | .34                   | 85  | .23                 | 57  |
|                      | 5200       | 2455 | .52                                        | 129 | .44                 | 109 | .39                   | 97  | .27                 | 67  |
|                      | 5400       | 2550 | .58                                        | 144 | .49                 | 122 | .43                   | 107 | .31                 | 77  |
|                      | 5600       | 2645 | .64                                        | 159 | .54                 | 134 | .47                   | 117 | .35                 | 87  |
|                      | 5800       | 2735 | .70                                        | 174 | .59                 | 147 | .51                   | 127 | .39                 | 97  |

## Power Exhaust Fans Performance

| Return Air System Static Pressure |    | Air Volume Exhausted |      |
|-----------------------------------|----|----------------------|------|
| in. w.g.                          | Pa | cfm                  | L/s  |
| .00                               | 0  | 4200                 | 1980 |
| .05                               | 12 | 3970                 | 1875 |
| .10                               | 25 | 3750                 | 1770 |
| .15                               | 37 | 3520                 | 1660 |
| .20                               | 50 | 3300                 | 1560 |
| .25                               | 62 | 3080                 | 1455 |
| .30                               | 75 | 2860                 | 1350 |
| .35                               | 87 | 2640                 | 1245 |



## Ceiling Diffuser Air Throw Data

| Model No.            | Air Volume |      | *Effective Throw Range |         |            |         |
|----------------------|------------|------|------------------------|---------|------------|---------|
|                      |            |      | RTD11 Step-Down        |         | FD11 Flush |         |
|                      | cfm        | L/s  | ft.                    | m       | ft.        | m       |
| 090,<br>102 &<br>120 | 3600       | 1700 | 25 - 33                | 8 - 10  | 22 - 29    | 7 - 9   |
|                      | 3800       | 1795 | 27 - 35                | 8 - 11  | 22 - 30    | 7 - 9   |
|                      | 4000       | 1885 | 29 - 37                | 9 - 11  | 24 - 33    | 7 - 10  |
|                      | 4200       | 1980 | 32 - 40                | 10 - 12 | 26 - 35    | 8 - 11  |
|                      | 4400       | 2075 | 34 - 42                | 10 - 13 | 28 - 37    | 9 - 11  |
| 150                  | 5600       | 2645 | 39 - 49                | 12 - 15 | 28 - 37    | 9 - 11  |
|                      | 5800       | 2740 | 42 - 51                | 13 - 16 | 29 - 38    | 9 - 12  |
|                      | 6000       | 2830 | 44 - 54                | 13 - 17 | 40 - 50    | 12 - 15 |
|                      | 6200       | 2925 | 45 - 55                | 14 - 17 | 42 - 51    | 13 - 16 |
|                      | 6400       | 3020 | 46 - 55                | 14 - 17 | 43 - 52    | 13 - 16 |
|                      | 6600       | 3115 | 47 - 56                | 14 - 17 | 45 - 56    | 14 - 17 |

\*Throw is horizontal or vertical distance an airstream travels on leaving the outlet or diffuser before the maximum velocity is reduced to 50 ft. (15 m) per minute. Four sides open.

## ***Guide Specifications***

**General** - Furnish and install single package air to air DX mechanical cooling system or cooling and gas fired heating system, complete with automatic controls. The single package unit shall be a standard product of a firm regularly engaged in the manufacture of heating-cooling equipment. The manufacturer shall have parts and service available throughout the U.S. and Canada. The equipment shall be shipped completely factory assembled, precharged, piped and wired internally ready for field connections. The manufacturer shall test operate system at the factory before shipment.

**Air Distribution** - Equipment shall be capable of bottom (down-flow) or side (horizontal) handling of conditioned air. Horizontal air shall require optional horizontal conversion kit.

**Approvals** - All electrical components shall have E.T.L. and CSA listing. All wiring shall be in compliance with NEC and CEC. All models shall be certified in accordance with the ULE certification program, which is based on ARI Standard 340/360.

**Equipment Warranty** - Compressors have a limited warranty for a full five years. All other components have a limited warranty for one year.

**Cooling System** - The coils shall be nonferrous construction with aluminum fins mechanically bonded to durable copper tubes. Coils shall be pressure leak tested. Compressor shall be resiliently mounted, have overload protection and crankcase heater(s). The refrigeration system shall have discharge, suction and liquid line service gauge ports, high pressure switch(es), low pressure switch(es) driers, freezestats, and full refrigerant charge. All models shall have low ambient operation down to 0°F (-17.7°C).

**Cabinet** - Shall be galvanized steel with a powdered enamel paint finish. Cabinet panels where conditioned air is handled shall be fully insulated to prevent sweating and minimize sound. Openings shall be provided for power connection entry. Indoor coil condensate drain extended outside cabinet shall be provided. Lifting holes shall be provided for rigging. Bottom power entry shall be provided.

**Service Access** - Cabinet panels shall be hinged with tool-less access for compressor/heating/controls, blower and air filter/economizer compartments.

**Integrated Modular Control (IMC)** - Solid state control board shall be provided to operate unit. Built-in functions shall include: blower on/off delay, built-in control parameter defaults, service relay output, dirty filter switch input, economizer control, unit diagnosis, diagnostics code storage, indoor air quality input, low ambient controls, minimum run time, night setback mode, smoke alarm mode, low pressure control, thermostat bounce delay, three digit display, °F or °C display, 2 stage heat/3 stage cool thermostat compatible and warm up mode.

**Supply Air Blowers** - Centrifugal supply air blower shall be driven by a belt drive motor with ball bearings and adjustable drive. Blower assembly shall be accessible for servicing. Motor mount base shall permit ease of motor changeover and belt tension adjustment. Blower wheel shall be statically and dynamically balanced.

**Outdoor Coil Fan** - Direct drive propeller type outdoor coil fan shall discharge vertically and be direct driven. Fan motor shall have ball bearings and be permanently lubricated and inherently protected. Fan shall have a safety guard.

**Air Filters** - Disposable 2 inch (51 mm) thick pleated filters shall be furnished.

### ***Optional Accessories (Field Installed)***

**Blower Proving Switch** - Furnish and factory install air pressure switch to monitor blower operation.

**Condensate Drain Traps** - Furnish and install PVC or copper traps for condensate drain.

**Ceiling Diffusers** - Furnish and install a (flush or stepdown) optional combination ceiling supply and return air diffuser. Supply and return transitions shall be available, for field installation in the roof mounting frame, to provide duct connections to the diffuser.

**Coil Guards** - Furnish and install galvanized steel coil guards.

**Dirty Filter Switch** - Furnish and install pressure switch that indicates dirty filter.

**Disconnect** - Furnish and factory install unit disconnect switch.

**Economizer Section** - Furnish and install economizer complete with recirculated air dampers, outside air dampers and controls. Low leakage dampers shall ride in nylon bearings. The economizer section shall provide for the introduction of outdoor air for minimum ventilation and free cooling. Integrated economizer control shall allow compressors to cycle for additional cooling, as needed. Damper actuator shall be opposing gear driven, 24 volt, fully modulating design. Plug-in control board (IMC) shall consist of adjustable minimum positioner, enthalpy setpoint and DIP switches for setting type of control log used. Economizer control options shall consist of sensible temperature, global, outdoor enthalpy, and differential enthalpy (outdoor and return air). Optional outdoor air hood (required) with filters shall be galvanized steel with a powdered enamel paint finish electrostatically bonded to the metal.

**Downflow Gravity Exhaust Dampers** - Pressure operated dampers shall be available for field installation. Extruded aluminum dampers shall prevent blow-back and outdoor air infiltration during off cycle. Hood shall be furnished.

**Horizontal Gravity Exhaust Dampers** - Pressure operated dampers shall be available for field installation in the return air duct. Extruded aluminum dampers shall prevent blow-back and outdoor air infiltration during off cycle.

**Electric Heaters** - Heating elements shall be nichrome bare wire exposed directly to the air stream. Time delays shall bring the elements on and off in sequence with a time delay between each element. Limit controls shall provide overload and short circuit protection.

**Electric Heat Terminal Block** - Shall be required for units without disconnect switch or circuit breaker but with single point power supply and electric heat.

**Electric Heat/Unit Fuse Block** - Shall be required for units with single point power supply and electric heat.

**GFI Service Outlets** - Furnish and factory install dual 115 volt, 15 amp GFCI type service outlets. Wiring shall be field provided

**Hail Guards** - Furnish and install heavy gauge, painted steel hail guards.

**Indoor Air Quality Sensor** - Furnish and field install sensor to monitor CO2 levels, relays information to Integrated Module Control

## **Guide Specifications**

(IMC) which adjusts economizer dampers proportionately to the CO<sub>2</sub> level.

**Outdoor Air Damper Section** - Optional outdoor dampers shall be available to provide outdoor air requirements of up to 25%. Models shall be available for manual or automatic operation. Dampers shall be opposing gear driven design. Motorized damper section shall install internal to the unit. Optional outdoor air hood (required) with filters shall be galvanized steel with a powdered enamel paint finish electrostatically bonded to the metal. Dampers shall be available for field installation.

**Power Exhaust Fan** - Shall be available for all models with economizer (down-flow applications only). Direct drive propeller type fan shall exhaust air through optional gravity exhaust damper (required). Motor shall be overload protected. Fan shall be field installed between economizer and gravity exhaust dampers.

**Roof Mounting Frame** - Furnish and install a steel roof mounting frame for bottom discharge and return air duct connection. It shall mate to the bottom perimeter of the equipment. When flashed into the roof it shall make a unit mounting curb and provide weatherproof duct connection and entry into the conditioned air. Flashing shall be the responsibility of the roofing contractor. Frame shall be approved by U.S. National Roofing Contractors Association.

**Smoke Detectors** - Furnish and field install photoelectric type smoke detector in either or both return air section and supply air section.

## Dimensions - LCA/LCC090/102/120/150 - inches (mm)

Shown with Optional Economizer Dampers, Power Exhaust Fans, Convenience Outlet, Unit Disconnect

### Corner Weights - lbs. (kg)

| Model No.         | AA   |     | BB   |     | CC   |     | DD   |     |
|-------------------|------|-----|------|-----|------|-----|------|-----|
|                   | lbs. | kg  | lbs. | kg  | lbs. | kg  | lbs. | kg  |
| 090/102 Base Unit | 295  | 134 | 271  | 123 | 308  | 140 | 346  | 160 |
| 090/102 Max. Unit | 364  | 165 | 320  | 145 | 352  | 160 | 413  | 187 |
| 120 Base Unit     | 308  | 140 | 283  | 128 | 322  | 146 | 361  | 164 |
| 120 Max. Unit     | 375  | 170 | 330  | 150 | 363  | 165 | 426  | 193 |
| 150 Base Unit     | 314  | 142 | 299  | 136 | 337  | 153 | 359  | 163 |
| 150 Max. Unit     | 382  | 173 | 344  | 156 | 377  | 171 | 427  | 194 |

Base Unit - The standard unit with NO OPTIONS.

Max. Unit - The standard unit with ALL OPTIONS installed.

(Economizer, Power Exhaust Fans, High Input Heating and Controls)

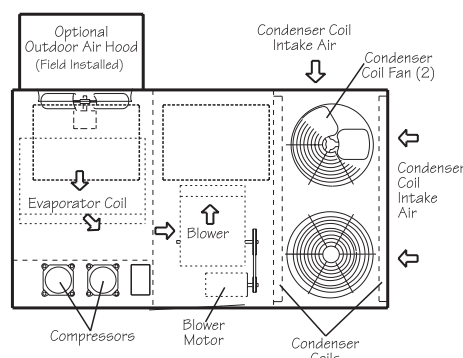
### Center of Gravity - inches (mm)

| Model No.         | EE     |      | FF     |     |
|-------------------|--------|------|--------|-----|
|                   | in.    | mm   | in.    | mm  |
| 090/102 Base Unit | 47     | 1194 | 21 1/2 | 546 |
| 090/102 Max. Unit | 45 1/2 | 1156 | 23 1/2 | 597 |
| 120 Base Unit     | 47     | 1194 | 21 1/2 | 546 |
| 120 Max. Unit     | 45 1/2 | 1156 | 23 1/2 | 597 |
| 150 Base Unit     | 48 1/2 | 1232 | 22 1/2 | 572 |
| 150 Max. Unit     | 46 1/2 | 1181 | 24     | 610 |

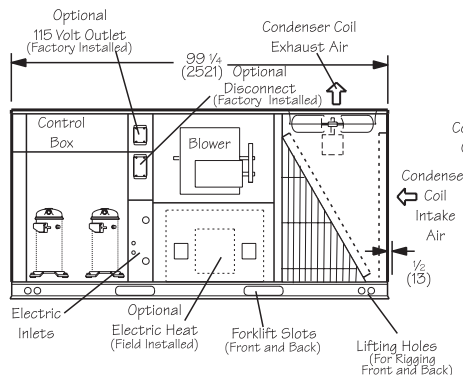
Base Unit - The standard unit with NO OPTIONS.

Max. Unit - The standard unit with ALL OPTIONS installed.

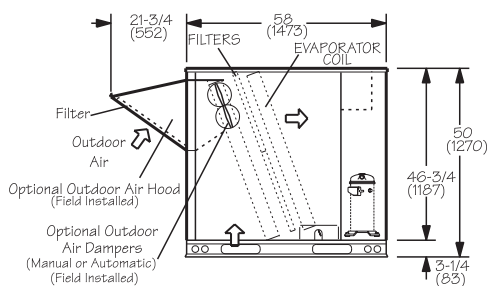
(Economizer, Power Exhaust Fans, High Input Heating and Controls)



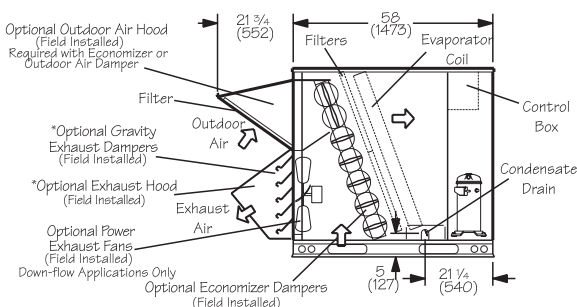
TOP VIEW



FRONT VIEW

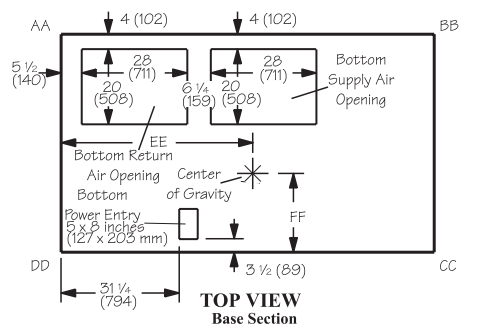


LEFT SIDE  
(Outdoor Air Dampers)

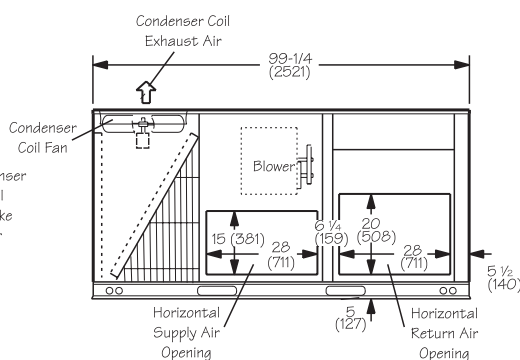


LEFT SIDE  
(Economizer)

\*NOTE \* Field Installed in Return Air Duct for Horizontal Applications.



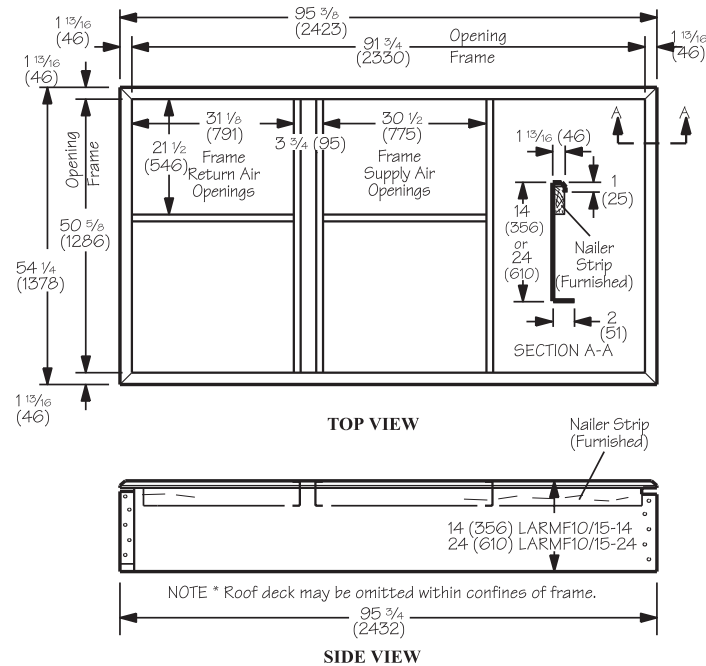
TOP VIEW  
Base Section



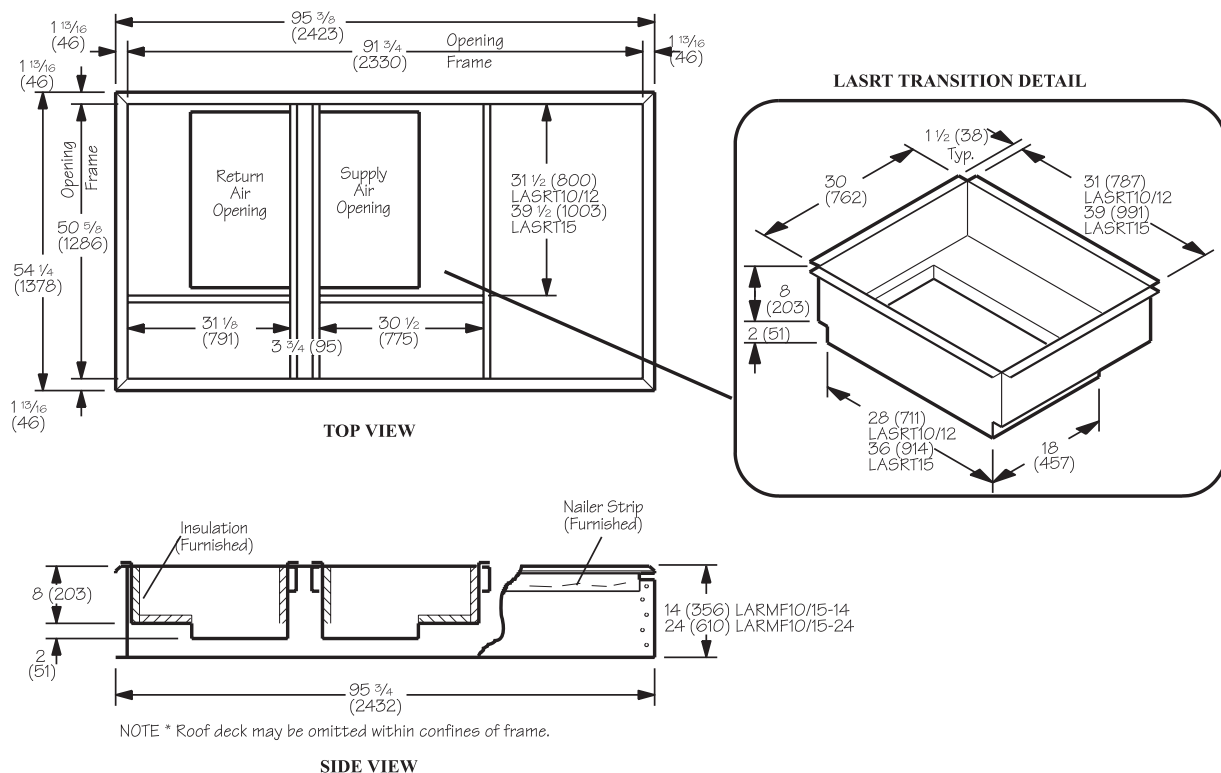
BACK VIEW

### ***Accessory Dimensions - inches (mm)***

**LARMF10/15-14 and LARMF10/15-24 - Roof Mounting Frame (Double Duct Opening)**

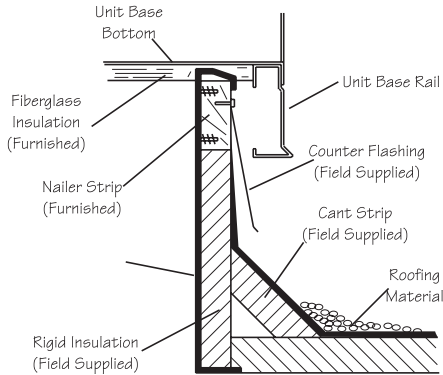


***LARMF10/15-14 and LARMF10/15-24 - Roof Mounting Frame  
With LASRT Supply & Return Air Transitions for FD11 & RTD11 Ceiling Diffusers***



## Roof Mounting Frame Specifications

**TYPICAL FLASHING DETAIL**



Roof Mounting frame is rigid enough to be spanned over its entire length or cantilevered if supported on both sides of center of gravity

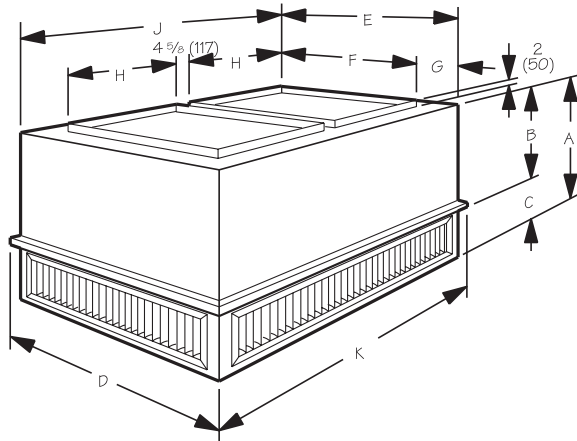
| Roof Mounting Frame                                           | LARMF10/15-14    | LARMF10/15-24 |
|---------------------------------------------------------------|------------------|---------------|
| *Moment of inertia (I) (in. <sup>4</sup> ) (cm <sup>4</sup> ) | 39 (1634)        | 160 (6639)    |
| *Section modulus I/C (in. <sup>3</sup> ) (cm <sup>3</sup> )   | 5.5 (90)         | 13.1 (512)    |
| Frame weight (lb/ft) (kg/m) of length                         | 5.5 (8.2)        | 8.5 (12.7)    |
| Design strength (psi) (kPa)                                   | 20,000 (137,900) |               |

\*Includes both sides of frame

## Accessory Dimensions - inches (mm)

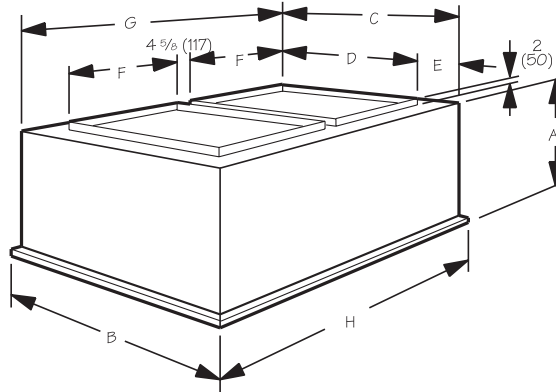
### RTD11-135 & RTD11-185

#### Step-Down Ceiling Diffusers



### FD11-135 & FD11-185

#### Flush Ceiling Diffusers



| Model No. | A   |     | B      |     | C      |     | D      |      | E      |      |
|-----------|-----|-----|--------|-----|--------|-----|--------|------|--------|------|
|           | in. | mm  | in.    | mm  | in.    | mm  | in.    | mm   | in.    | mm   |
| RTD11-135 | 28  | 711 | 18 7/8 | 479 | 9 1/8  | 232 | 35 5/8 | 905  | 33 5/8 | 854  |
| RTD11-185 | 34  | 864 | 23 7/8 | 606 | 10 1/8 | 257 | 47 5/8 | 1210 | 45 5/8 | 1159 |

| Model No. | A      |     | B      |      | C      |      | D   |     |
|-----------|--------|-----|--------|------|--------|------|-----|-----|
|           | in.    | mm  | in.    | mm   | in.    | mm   | in. | mm  |
| FD11-135  | 24 1/8 | 613 | 35 5/8 | 905  | 33 5/8 | 854  | 28  | 711 |
| FD11-185  | 30 1/8 | 613 | 47 5/8 | 1210 | 45 5/8 | 1159 | 36  | 914 |

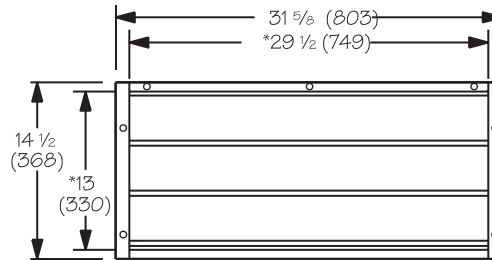
| Model No. | F   |     | G       |     | H   |     | J      |      | K      |      |
|-----------|-----|-----|---------|-----|-----|-----|--------|------|--------|------|
|           | in. | mm  | in.     | mm  | in. | mm  | in.    | mm   | in.    | mm   |
| RTD11-135 | 28  | 711 | 2 13/16 | 71  | 18  | 457 | 45 5/8 | 1159 | 47 5/8 | 1210 |
| RTD11-185 | 36  | 915 | 4 13/16 | 122 | 18  | 457 | 45 5/8 | 1159 | 47 5/8 | 1210 |

| Model No. | E       |     | F   |     | G      |      | H      |      |
|-----------|---------|-----|-----|-----|--------|------|--------|------|
|           | in.     | mm  | in. | mm  | in.    | mm   | in.    | mm   |
| FD11-135  | 2 13/16 | 71  | 18  | 457 | 45 5/8 | 1159 | 47 5/8 | 1210 |
| FD11-185  | 4 13/16 | 122 | 18  | 457 | 45 5/8 | 1159 | 47 5/8 | 1210 |

## Accessory Dimensions - inches (mm)

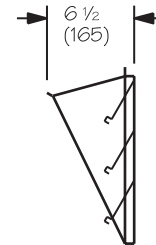
### LAGEDH03/15 Horizontal Gravity Exhaust Dampers

(Field installed in return air duct)



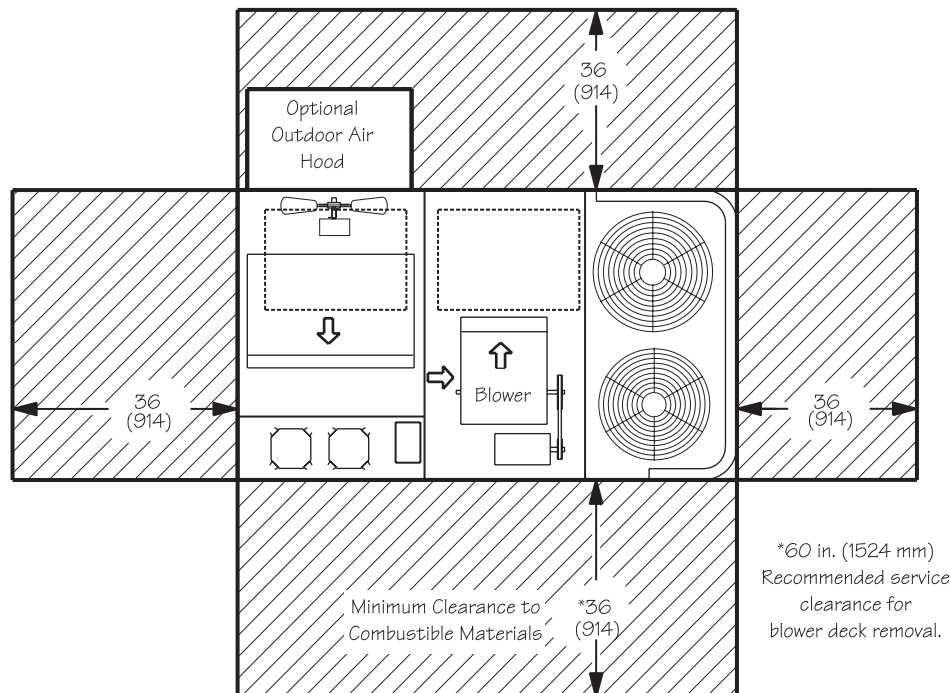
**FRONT VIEW**

\*NOTE - Opening size required in return air duct.



**SIDE VIEW**

## Installation Clearances - inches (mm)



NOTE - Top Clearance Unobstructed.

NOTE - Entire perimeter of unit base require support when elevated above mounting surface.

All specifications are subject to change  
without notice.



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