



**RESIDENTIAL  
PRODUCT SPECIFICATIONS**

**CBA38MV**  
**DAVE LENNOX SIGNATURE® COLLECTION**  
**R-410A Ready - Multi-Position - Variable Speed - 60 Hz**

Bulletin No. 210803  
March 2025  
Supersedes all previous versions



DAVE LENNOX  
*signature*  
COLLECTION



**Nominal Capacity - 1.5 to 5 Tons**  
**Optional Electric Heat - 4 to 25 kW**

**MODEL NUMBER IDENTIFICATION**

**CB A 38 MV- 018/024 - 230 - 6 - 01**

**Unit Type**  
CB = Air Handler

**Refrigerant Type**  
A = Aluminum Coil / R-410A

**Series**

**Configuration**  
MV = Multi-Position, Variable  
Speed Blower Motor

**Minor Revision Number**

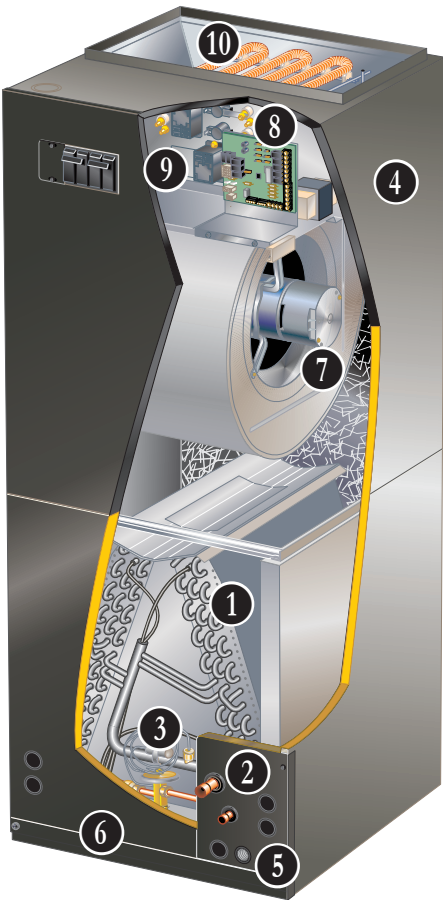
**Refrigerant Metering Device**  
6 = TXV - R-410A Non-bleedport (indoor unit)

**Voltage**  
230 = 208/230V-60hz-1ph

**Nominal Cooling Capacity - Tons**  
018/024 = 1.5 to 2 tons  
030 = 2.5 tons  
036 = 3 tons  
042 = 3.5 tons  
048 = 4 tons  
060 = 5 tons

FEATURE HIGHLIGHTS

- 1. Quantum™ Coil
- 2. Refrigerant Line Connections
- 3. Check and Expansion Valve
- 4. Heavy Gauge Steel Two-Piece Cabinet
- 5. Dual Position Drain Pans
- 6. Air Filter
- 7. Variable Blower Motor
- 8. Lennox® Communicating Control
- 9. Transformer
- 10. Electric Heat (option)



CONTENTS

|                                                      |    |
|------------------------------------------------------|----|
| Approvals And Warranty . . . . .                     | 3  |
| Blower Data . . . . .                                | 10 |
| Dimensions - Accessories . . . . .                   | 28 |
| Dimensions - Unit . . . . .                          | 24 |
| Electrical Data . . . . .                            | 8  |
| Electric Heat Data . . . . .                         | 16 |
| Features . . . . .                                   | 3  |
| Installation Clearances With Electric Heat . . . . . | 8  |
| Optional Accessories - Order Separately . . . . .    | 8  |
| Replacement Circuit Breakers . . . . .               | 9  |
| Specifications . . . . .                             | 8  |

## APPROVALS AND WARRANTY

### **APPROVALS**

- Tested with matching air conditioners and heat pump units in the Lennox Research Laboratory environmental test room in accordance with AHRI Standard 210/240
- AHRI Certified system match-ups and expanded ratings, visit [www.LennoxPros.com](http://www.LennoxPros.com)
- ETL Listed to US and Canadian safety standards and components within are bonded for grounding to meet safety standards for servicing required by NEC and CEC
- Optional electric heaters are ETL listed and rated in accordance with US Department of Energy (DOE) test procedures and Federal Trade Commission (FTC) labeling regulations
- Blower performance data according to unit tests conducted in Lennox air test chamber
- Approved for installation in manufactured housing and mobile homes
- ISO 9001 Registered Manufacturing Quality System

### **WARRANTY**

- All covered components
  - Limited ten years in residential applications
  - Limited one year in non-residential applications

**NOTE** - Refer to Lennox® Basic Limited Warranty at [www.Lennox.com](http://www.Lennox.com) for additional details.

## FEATURES

### **APPLICATIONS**

- 1.5 to 5 ton nominal sizes
- Multi-position (upflow, downflow or horizontal) applications
- Applicable to expansion valve systems in R-410A cooling applications and check and expansion valve systems in R-410A heat pump applications
- Wide-range check and expansion valve is factory installed
- Applicable to Lennox® Smart Zoning System
- Optional field installed electric heaters available in several sizes for additive heating capacity

### **ZONING APPLICATIONS**

- Units can be used with certain zoning systems. Zone control panel MUST be able to interface and communicate with the variable speed motor in the unit.
- Lennox® Smart Zoning System has this capability

### **REFRIGERANT SYSTEM**

- 1 Quantum™ Coil**
  - Lennox designed and fabricated coil
  - Enhanced aluminum alloy tube/enhanced fin coil for superior corrosion resistance
  - Aluminum tubing, hairpins, distributor and header tubes.
  - Ripple-edged aluminum fins
  - Twin coil construction assembled in a "A" configuration for large surface area
  - Provides excellent heat transfer and low air resistance for maximum efficiency
  - Precise circuiting for uniform refrigerant distribution
  - Lanced fins provide maximum exposure of fin surface to air stream
  - Rifled tubing provides superior heat transfer

- Coil thoroughly factory tested under high pressure to ensure leakproof construction

- 2 Refrigerant Line Connections**

- Copper refrigerant sweat connections on both liquid and suction lines for easy brazing.
- Lines extend outside of the cabinet for ease of connection.
- See dimension drawings for locations

- 3 Check and Expansion Valve Furnished**

- For use with R-410A systems
- Wide range valve with Chatleff style fitting
- Factory installed on all models, internal to cabinet

### **CABINET**

- 4**
  - Constructed of heavy-gauge galvanized steel
  - Completely insulated with thick fiberglass insulation
  - Pre-painted steel cabinets have mildly textured enamel finish with primer coat on unpainted side of all panels
  - Units are shipped in one piece but may be disassembled into two separate sections for ease of installation in tight applications
  - Thick rubber gasket between sections of the two piece cabinets provides an air tight seal
  - No external screw heads on sides of cabinet for tight installations without damage to walls or woodwork
  - Removable panels provide complete service access
  - Electrical inlets provided in sides and top of cabinet
  - See dimension drawings for locations

### **Low Leakage Cabinet**

- All models have less than 2% air leakage and meet ANSI/ASHRAE Standard 193-2010 "Method of Test for Determining the Air Tightness of HVAC Equipment"

## FEATURES

### **CABINET (continued)**

#### **Multi-Position Capability**

- Shipped for upflow and horizontal right-hand discharge
- Quickly converted to downflow or left-hand, horizontal air discharge
- Easily converts to downflow position with furnished coil support rails and filter support rack

#### **5 Dual Position Microbial Drain Pans**

- Designed for upflow, downflow or horizontal applications
- Deep, corrosion resistant plastic drain pans have dual pipe drains
- Anti-Microbial additive resists growth of mold and mildew on drain pan which improves indoor air quality and reduces drain line blockage
- See dimension drawings

### **Optional Accessories**

#### **Downflow Combustible Flooring Base**

- Base is required for models with electric heat installed in downflow position on combustible floors

#### **Horizontal Support Frame Kit**

- Provides support of unit in horizontal applications
- Consists of (2) 1 x 1-1/2 x 32-5/8 in. and (2) 1 x 3 x 53-7/8 in. painted heavy gauge cold rolled steel support channels with assembly and suspending holes
- Bolts and nuts furnished for field assembly
- Suspending rods must be field provided

#### **Side Return Unit Stand (Upflow Only)**

- Raises unit 16 in. above floor for side return air duct connection
- Eliminates need for wooden platform construction
- All aluminum construction
- Two adjustable frames fit all sizes

#### **Wall Hanging Bracket Kit (Upflow Only)**

- Allows unit to be hung on wall at any height
- Consists of heavy-gauge steel support brackets (one for air handler, one for wall mount)
- Screws furnished for fastening one bracket to unit
- Bolts for fastening one bracket to wall are field provided

### **High Performance Economizer (Commercial Applications Only)**

- Designed for applications requiring outdoor air to be utilized in a commercial HVAC system
- Allows the entry of fresh outdoor air for free cooling, reducing the requirement for mechanical cooling
- Heavy gauge galvanized steel cabinet lined with thick fiberglass insulation
- Mixed air sensor, outdoor air sensor and 24VAC transformer furnished
- Approved for California Title 24 building standards
- ASHRAE 90.1-2010 compliant
- See separate Product Specifications bulletin for additional information and available control and sensor options

**NOTE** - Economizer is not compatible with a Lennox® Communicating system.

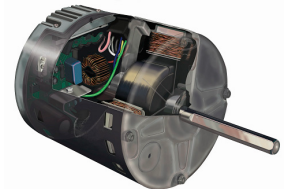
### **FILTER**

- 6**
- Disposable 1 inch filter is furnished
  - Filter rack furnished in cabinet for easy filter installation
  - See Specifications tables for filter sizes

### **BLOWER**

#### **7 Variable-Speed Blower Motor**

- High efficiency multi-speed blower motor maintains specified air volumes up to a maximum of 0.8 in. w.g. total external static
- Multi-speed operation is achieved by the use of an ECM (Electronically Commutated Motor) motor
- Allows cooling ramping profiles (field selectable) for enhanced dehumidification
- Motor accelerates and decelerates gradually, reducing start-up and shut-down sound
- Leadless blower motor features simple plug-in connections
- Motor is controlled by the Lennox® Communicating Control that allows blower to operate at two of eight air volumes or speeds available
- Speeds may be field selected on Lennox® Communicating Control depending on size of air handler and air volume desired
- See blower performance tables



### **Blower Assembly**

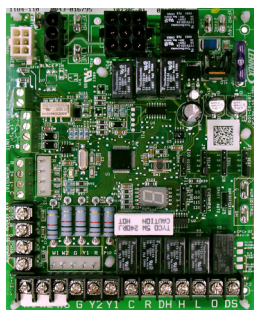
- Lennox designed and built, direct drive blower
- Each blower is statically and dynamically balanced as an assembly before installation in the unit
- Blower motor is resiliently mounted to blower assembly
- Blower slides out of cabinet for servicing

## FEATURES

### CONTROLS

#### 8 Lennox® Communicating Control

- Advanced control communicates information about various operating parameters in the air handler to the optional Lennox® Communicating Thermostat to constantly maintain the highest level of comfort, performance and efficiency available
- **Auto Configuration** - On start-up the control board automatically sends a description of the unit to the optional Lennox® Communicating Thermostat to automatically configure the number of stages and features available
- Connections for connecting a conventional heating/cooling thermostat are also provided on the board
- **Control also features:**
  - Lennox Humiditrol® Whole Home Dehumidification System (EDA) compatible
  - EEPROM storage of all local configurations
  - Non-volatile memory storage of 100 alarm codes with display of last 10 codes for troubleshooting
  - Connections for optional outdoor temperature sensor (communicates temperature on RSBUS to thermostat)
  - Controls evaporator humidity by controlling blower and compressor staging on two-stage outdoor units
  - **Two Stages** - HEAT and COOL (with four different air volume selections for each) are made by simple jumper pins on board
  - ADJUST jumper pin allows approximately 10% higher, normal or 10% lower motor speed selection within HEAT and COOL speeds selected for fine tuning air volume
  - DELAY jumper pin allows selection of blower motor dehumidification profiles during cooling mode
  - **Option 1** - Motor runs at 100% of capacity until demand met. Once demand is met, motor ramps down to stop.
  - **Option 2 Cooling** - When cool demand is initiated, motor ramps up to 100% and runs at 100% until demand is satisfied. Once demand is met, motor runs at 100% for 45 seconds, then ramps down to stop.
  - **Option 2 Heat Pump**: When heat pump demand is initiated, 30 second motor on delay starts. After the motor on delays expires, motor ramps up to 100% and runs at 100% until demand is satisfied. Once demand is met, motor runs at 100% for 45 seconds, then ramps down to stop.
  - **Option 3** - Motor runs at 82% of capacity for approximately 7.5 minutes, then 100% capacity (if needed) until demand is satisfied. Once demand is met, motor ramps down to stop.



- **Option 4** - Motor runs at 50% capacity for 30 seconds, then 82% capacity for approximately 7.5 minutes. If demand is not satisfied, motor runs at 100% capacity until demand is met. Once demand is met, motor runs at 50% capacity for 30 seconds, then ramps down to stop.

- **Display LED** - Seven segment LED displays alphanumeric information related to diagnostics as well as system operation and status
    - Diagnostic codes are held in non-volatile memory, immune from power interruptions
    - Holds up to ten diagnostic codes in order of occurrence for recall on demand
    - Port on blower door allows for easy viewing
  - **Dehumidification (Active or Humiditrol® Option)** - A jumper on the control board must be clipped to enable active dehumidification and/or operation with a Humiditrol Whole-Home Dehumidification System
    - During a call for cooling, air volume is automatically reduced, forcing humidity removal by the air conditioner or heat pump system
    - After the humidity has reached the desired set-point the cooling air volume returns to its designed rate
    - A dehumidification signal from the thermostat reduces the cooling cfm to 70% of the requested cooling cfm
- NOTE** - A humidity controlling thermostat or device is also required.
- **Electric Heat Operation** - Control for up to three electric heat stages
  - **EvenHeater® Electric Heat Control** - Up to four electric heat stages are available when utilizing the EvenHeater® control feature furnished on the Lennox® Communicating Control
    - EVENHEAT jumper position on control board determines target discharge air temperature of 85°F, 100°F, 115°F or 130°F
    - Default setting is 85°F

**NOTE** - Optional Discharge Air Sensor is required.

- **Heat Pump Operation** - A jumper on the control board must be clipped to enable operation with a single or two-stage heat pump
    - The indoor blower is started without delay when a call for heat is received
  - **Two-Stage Cooling Operation** - A jumper on the control board must be clipped to enable operation with a two-stage air conditioner
    - The cooling blower speeds for first and second stage cooling will be dictated by the applicable DIP switch settings
  - **Lennox System Operations Monitor Connection** - Monitors outdoor unit operation. (communicating mode)
  - **Continuous Blower Speed** - Adjustable continuous blower speed is a percentage of the high cooling speed selection. There are four selectable options (via DIP switch settings) of 28%, 38% (default setting), 70% and 100%
- 9 • **Transformer** - 70VA transformer furnished as standard. Factory installed in the unit control box

## FEATURES

### CONTROLS (continued)

#### Lennox® Communicating Control (continued)

- **Accessory Terminal** - One 24 volt humidifier output is furnished for non-powered humidifiers
- Control board is factory installed in the unit control box

#### Optional Accessories

#### S40 Smart Wi-Fi Thermostat (part of the Lennox® Residential Communicating Control System)

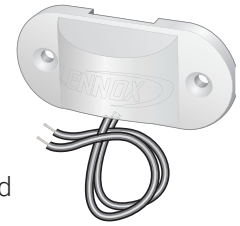
- Recognizes and connects to all Lennox® Communicating products to automatically configure and control the heating/cooling system (based on user-specified settings) for the highest level of comfort, performance and efficiency
- Recognizes model and serial number information for Lennox® Communicating products to simplify system setup
- Lennox Smart Room Sensors, Lennox Wireless Extenders and Lennox Smart Air Quality Monitor can be added to the system
- Smart home automation compatible with Amazon Alexa®, Google Assistant, Control4® and Building36®
- Sends service alerts and reminders
- Lennox Smart Thermostat App features Wi-Fi remote temperature monitoring and adjustment through a home wireless network apps for smartphones or tablets
- Lennox Smart Technician App allows installer to manage systems in the home
- Service Dashboard features online real-time monitoring and advanced diagnostics of installed Lennox® Communicating systems
- Simple easy-to-use touchscreen allows complete system configuration
- Scheduled maintenance alerts, system warnings and troubleshooting are also displayed on thermostat screen
- Easy to read 7 inch high definition color display (measured diagonally)
- Conventional outdoor units (not Lennox® Communicating) can easily be added and controlled by the S40 Thermostat
- Installer setup screens allow quick and simple system configuration without a manual, Installer can also run tests on complete system or individual components for easy maintenance and troubleshooting
- Serial communications bus (RSBus), with less wiring than a conventional heating/cooling system, allows system communication
- Uses standard 4-wire unshielded thermostat wiring
- High Definition Color Display with Subbase and wallplate furnished for easy installation



#### Remote Outdoor Temperature Sensor

- Allows thermostat to display outdoor temperature
- Automatically detected when connected to thermostat

**NOTE** - Sensor is required for the Enhanced Dehumidification Accessory (EDA).



NOTE - Sensor is furnished as standard with Lennox® Communicating outdoor units, optional for conventional units.

#### Thermostat

- Thermostat is not furnished with unit
- See Lennox Price Book for selection

#### Hot Water Heat Kit

- Controls a third-party hot water boiler with a hot water heating coil installed downstream from the air handler
- Kit contains all necessary relays and plug-in wiring harness to control boiler

**NOTE** - This kit is only approved for use in systems using a Lennox® Communicating thermostat or a CS7500 thermostat.

## FEATURES

### 10 **OPTIONAL ELECTRIC HEAT**

- ETL listed
- Field install internal to unit cabinet
- Available in several voltages and kW sizes
- See Electric Heat tables
- Helix wound nichrome heating elements exposed directly in air stream resulting in instant heat transfer, low element temperatures and long service life
- Each element equipped with accurately located limit control with fixed temperature off setting and automatic reset
- Supplemental thermal cutoff limit control, provides positive protection in case of excessive temperatures
- Thermal sequencer relay brings elements on and off line, in sequence and equal increments, with time delay between each
- Initiates and terminates blower operation
- Heating control relay(s) furnished as standard
- Control box and access cover constructed of heavy gauge galvanized steel
- Factory assembled with controls installed and wired
- Electric heat low voltage controls plug-in to air handler

#### **Circuit Breaker (CB) Models**

- All "CB" model heaters are equipped with circuit breakers for overload and short circuit protection
- Factory wired and mounted on electric heat unit
- Current sensitive and temperature actuated
- Manual reset
- Circuit breakers qualify as disconnect means at unit in many areas, eliminate the need for field provided disconnect
- Consult local electrical code in your area

### Optional Accessories

#### **Circuit Breaker Cover Kit**

- Flexible plastic cover protects circuit breaker
- Recommended in areas with high humidity or unconditioned areas to prevent nuisance tripping

#### **Single-Point Power Source Control Box**

- Control Box may be used with optional electric heat when single power supply is connected to multi-circuit electric heat
- Field installs external to the unit cabinet on either side or top
- Constructed of heavy gauge steel, baked enamel finish, pre-punched mounting holes, electrical inlet knockouts, and terminal strip
- Removable cover provides easy access
- Dimensions (H x W x D) - 7 x 7 x 4 in.

## SPECIFICATIONS

| General Data                     |                                      | Model Number | CBA38MV-018/024 | CBA38MV-030     | CBA38MV-036     |
|----------------------------------|--------------------------------------|--------------|-----------------|-----------------|-----------------|
|                                  | Nominal tonnage                      |              | 1.5 to 2        | 2.5             | 3               |
|                                  | Factory Installed Expansion Valve    |              | <b>12J18</b>    | <b>12J18</b>    | <b>12J19</b>    |
|                                  | Refrigerant                          |              | R-410A          | R-410A          | R-410A          |
| Connections in.                  | Suction / vapor (o.d.) line - sweat  |              | 3/4             | 3/4             | 3/4             |
|                                  | Liquid line (o.d.) - sweat           |              | 3/8             | 3/8             | 3/8             |
|                                  | Condensate drain - in. (fpt)         |              | (2) 3/4         | (2) 3/4         | (2) 3/4         |
| Indoor Coil                      | Net face area - ft. <sup>2</sup>     |              | 4.4             | 5.0             | 5.0             |
|                                  | Tube outside diameter - in.          |              | 3/8             | 3/8             | 3/8             |
|                                  | Number of rows                       |              | 3               | 3               | 3               |
|                                  | Fins per inch                        |              | 14              | 14              | 14              |
| Blower Data                      | Wheel nominal diameter x width - in. |              | 10 x 8          | 11 x 8          | 11 x 8          |
|                                  | Motor output - hp                    |              | 1/2             | 1/2             | 3/4             |
| Filters                          | <sup>1</sup> Number and size - in.   |              | (1) 20 x 20 x 1 | (1) 20 x 20 x 1 | (1) 20 x 20 x 1 |
| Shipping Data - 1 Package - lbs. |                                      |              | 141             | 154             | 159             |

## ELECTRICAL DATA

|                                                         |              |              |              |
|---------------------------------------------------------|--------------|--------------|--------------|
| Voltage - phase - 60hz                                  | 208/230V-1ph | 208/230V-1ph | 208/230V-1ph |
| <sup>2</sup> Maximum overcurrent protection (unit only) | 15           | 15           | 15           |
| <sup>3</sup> Minimum circuit ampacity (unit only)       | 5            | 5            | 5            |

## CONTROLS

|                                                                                      |              |              |              |
|--------------------------------------------------------------------------------------|--------------|--------------|--------------|
| <b>S40 Smart Wi-Fi Thermostat</b>                                                    | <b>22V24</b> | <b>22V24</b> | <b>22V24</b> |
| <b><sup>4</sup> Remote Outdoor Air Temperature Sensor</b><br>(for dual fuel and EDA) | <b>X2658</b> | <b>X2658</b> | <b>X2658</b> |
| <b><sup>5</sup> Discharge Air Temperature Sensor</b>                                 | <b>88K38</b> | <b>88K38</b> | <b>88K38</b> |

## OPTIONAL ACCESSORIES - ORDER SEPARATELY

|                                                      |                               |              |              |
|------------------------------------------------------|-------------------------------|--------------|--------------|
| <b>Circuit Breaker Cover Kit</b>                     | <b>82W01</b>                  | <b>82W01</b> | <b>82W01</b> |
| <b>Downflow Combustible Flooring Base</b>            | <b>44K15</b>                  | <b>44K15</b> | <b>44K15</b> |
| <b>Electric Heat</b>                                 | See Electric Heat Data tables |              |              |
| <b>Horizontal Support Frame Kit</b>                  | <b>56J18</b>                  | <b>56J18</b> | <b>56J18</b> |
| <b>Hot Water Heat Kit</b>                            | <b>90W84</b>                  | <b>90W84</b> | <b>90W84</b> |
| <b>Side Return Unit Stand (Upflow)</b>               | <b>45K32</b>                  | <b>45K32</b> | <b>45K32</b> |
| <b>Single-Point Power Source Control Box</b>         | <b>21H39</b>                  | <b>21H39</b> | <b>21H39</b> |
| <b>Wall Hanging Bracket Kit (Upflow)</b>             | <b>45K30</b>                  | <b>45K30</b> | <b>45K30</b> |
| <b>High Performance Economizer (Commercial Only)</b> | <b>10U53</b>                  | <b>10U53</b> | <b>10U53</b> |

<sup>1</sup> Disposable frame type filter.

<sup>2</sup> HACR type circuit breaker or fuse.

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

<sup>4</sup> Remote Outdoor Temperature Sensor is used with conventional (non-Lennox® Communicating) outdoor units (sensor is furnished with Lennox® Communicating outdoor units). Allows the thermostat to display outdoor temperature. Required in dual-fuel and Humiditrol® applications.

<sup>5</sup> Optional for EvenHeater® electric heat operation and service diagnostics.

## INSTALLATION CLEARANCES WITH ELECTRIC HEAT

|                                       |               |
|---------------------------------------|---------------|
| Cabinet                               | 0 inch (0 mm) |
| To Plenum                             | 0 inch (0 mm) |
| To Outlet Duct within 3 feet (914 mm) | 0 inch (0 mm) |
| Floor                                 | See Note #1   |
| Service / Maintenance                 | See Note #2   |

<sup>1</sup> Units installed on combustible floors in the downflow position with electric heat require optional downflow combustible flooring base.

<sup>2</sup> Front service access - 24 inches (610 mm) minimum.

NOTE - If cabinet depth is more than 24 inches (610 mm), allow a minimum of the cabinet depth plus 2 inches (51 mm).

## SPECIFICATIONS

| General Data                     |                                      | Model Number | CBA38MV-042     | CBA38MV-048     | CBA38MV-060     |
|----------------------------------|--------------------------------------|--------------|-----------------|-----------------|-----------------|
|                                  | Nominal tonnage                      |              | 3.5             | 4               | 5               |
|                                  | Factory Installed Expansion Valve    |              | <b>12J20</b>    | <b>12J20</b>    | <b>12J20</b>    |
|                                  | Refrigerant                          |              | R-410A          | R-410A          | R-410A          |
| Connections in.                  | Suction / vapor (o.d.) line - sweat  |              | 7/8             | 7/8             | 7/8             |
|                                  | Liquid line (o.d.) - sweat           |              | 3/8             | 3/8             | 3/8             |
|                                  | Condensate drain - in. (fpt)         |              | (2) 3/4         | (2) 3/4         | (2) 3/4         |
| Indoor Coil                      | Net face area - ft. <sup>2</sup>     |              | 7.22            | 7.22            | 8.33            |
|                                  | Tube outside diameter - in.          |              | 3/8             | 3/8             | 3/8             |
|                                  | Number of rows                       |              | 3               | 3               | 3               |
|                                  | Fins per inch                        |              | 14              | 14              | 14              |
| Blower Data                      | Wheel nominal diameter x width - in. |              | 12 x 9          | 12 x 9          | 12 x 9          |
|                                  | Motor output - hp                    |              | 1               | 1               | 1               |
| Filters                          | <sup>1</sup> Number and size - in.   |              | (1) 20 x 24 x 1 | (1) 20 x 24 x 1 | (1) 20 x 24 x 1 |
| Shipping Data - 1 Package - lbs. |                                      |              | 189             | 189             | 199             |

## ELECTRICAL DATA

|  |                                                         |              |              |              |
|--|---------------------------------------------------------|--------------|--------------|--------------|
|  | Voltage - phase - 60hz                                  | 208/230V-1ph | 208/230V-1ph | 208/230V-1ph |
|  | <sup>2</sup> Maximum overcurrent protection (unit only) | 15           | 15           | 15           |
|  | <sup>3</sup> Minimum circuit ampacity (unit only)       | 10           | 10           | 10           |

## CONTROLS

|                                                                               |              |              |              |
|-------------------------------------------------------------------------------|--------------|--------------|--------------|
| S40 Smart Wi-Fi Thermostat                                                    | <b>22V24</b> | <b>22V24</b> | <b>22V24</b> |
| <sup>4</sup> Remote Outdoor Air Temperature Sensor<br>(for dual fuel and EDA) | <b>X2658</b> | <b>X2658</b> | <b>X2658</b> |
| <sup>5</sup> Discharge Temperature Sensor                                     | <b>88K38</b> | <b>88K38</b> | <b>88K38</b> |

## OPTIONAL ACCESSORIES - ORDER SEPARATELY

|                                               |                               |              |              |
|-----------------------------------------------|-------------------------------|--------------|--------------|
| Circuit Breaker Cover Kit                     | <b>82W01</b>                  | <b>82W01</b> | <b>82W01</b> |
| Downflow Combustible Flooring Base            | <b>44K15</b>                  | <b>44K15</b> | <b>44K15</b> |
| Electric Heat                                 | See Electric Heat Data tables |              |              |
| Horizontal Support Frame Kit                  | <b>56J18</b>                  | <b>56J18</b> | <b>56J18</b> |
| Hot Water Heat Kit                            | <b>90W84</b>                  | <b>90W84</b> | <b>90W84</b> |
| Side Return Unit Stand (Upflow)               | <b>45K32</b>                  | <b>45K32</b> | <b>45K32</b> |
| Single-Point Power Source Control Box         | <b>21H39</b>                  | <b>21H39</b> | <b>21H39</b> |
| Wall Hanging Bracket Kit (Upflow)             | <b>45K30</b>                  | <b>45K30</b> | <b>45K30</b> |
| High Performance Economizer (Commercial Only) | <b>10U53</b>                  | <b>10U53</b> | <b>10U53</b> |

<sup>1</sup> Disposable frame type filter.

<sup>2</sup> HACR type circuit breaker or fuse.

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

<sup>4</sup> Remote Outdoor Temperature Sensor is used with conventional (non-Lennox® Communicating) outdoor units (sensor is furnished with Lennox® Communicating outdoor units). Allows the thermostat to display outdoor temperature. Required in dual-fuel and Humiditrol® applications.

<sup>5</sup> Optional for EvenHeater® electric heat operation and service diagnostics.

## REPLACEMENT CIRCUIT BREAKERS

| Voltage            | Description    | Catalog No.  |
|--------------------|----------------|--------------|
| 208/240V - 1 Phase | 25 amp, 2 pole | <b>41K13</b> |
|                    | 30 amp, 2 pole | <b>17K70</b> |
|                    | 35 amp, 2 pole | <b>72K07</b> |
|                    | 40 amp, 2 pole | <b>49K14</b> |
|                    | 45 amp, 2 pole | <b>17K71</b> |
|                    | 50 amp, 2 pole | <b>41K12</b> |
|                    | 60 amp, 2 pole | <b>17K72</b> |
| 208/240V - 3 Phase | 30 amp, 3 pole | <b>64W47</b> |
|                    | 35 amp, 3 pole | <b>41K14</b> |
|                    | 40 amp, 3 pole | <b>41K16</b> |
|                    | 45 amp, 3 pole | <b>18M86</b> |
|                    | 50 amp, 3 pole | <b>41K15</b> |
|                    | 60 amp, 3 pole | <b>41K17</b> |

## BLOWER DATA

### CBA38MV-018/024 BLOWER PERFORMANCE

0 through 0.80 in. w.g. External Static Pressure Range

| “ADJUST”<br>Jumper<br>Setting | Jumper Speed Positions |          |          |          |              |          |          |          |
|-------------------------------|------------------------|----------|----------|----------|--------------|----------|----------|----------|
|                               | “HEAT” Speed           |          |          |          | “COOL” Speed |          |          |          |
|                               | 1<br>cfm               | 2<br>cfm | 3<br>cfm | 4<br>cfm | 1<br>cfm     | 2<br>cfm | 3<br>cfm | 4<br>cfm |
| <b>+</b>                      | 460                    | 685      | 885      | 1050     | 460          | 685      | 885      | 1050     |
| <b>NORM</b>                   | 400                    | 575      | 795      | 940      | 400          | 575      | 795      | 940      |
| <b>–</b>                      | 365                    | 515      | 715      | 830      | 365          | 515      | 715      | 830      |

NOTES - The effect of static pressure, filter and electric heater resistance is included in the air volumes listed.

First stage cooling air volume is 70% of COOL speed setting. Continuous fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 250 cfm.

Lennox® Smart Zoning System applications - minimum blower speed is 250 cfm.

### CBA38MV-018/024 BLOWER MOTOR WATTS

#### AT “+” (Plus) SETTING (“Adjust” Jumper at “+” Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 32  | 44  | 58  | 71  | 90  | 104 | 131 | 145 |
|                           | Tap 2 | NA                                                        | 56  | 85  | 103 | 121 | 139 | 165 | 190 | 207 |
|                           | Tap 3 | NA                                                        | 105 | 131 | 161 | 183 | 202 | 241 | 263 | 292 |
|                           | Tap 4 | NA                                                        | 164 | 194 | 220 | 253 | 277 | 310 | 330 | 360 |
| “COOL” Speed              | Tap 1 | NA                                                        | 32  | 44  | 58  | 71  | 90  | 104 | 131 | 145 |
|                           | Tap 2 | NA                                                        | 56  | 85  | 103 | 121 | 139 | 165 | 190 | 207 |
|                           | Tap 3 | NA                                                        | 105 | 131 | 161 | 183 | 202 | 241 | 263 | 292 |
|                           | Tap 4 | NA                                                        | 164 | 194 | 220 | 253 | 277 | 310 | 330 | 360 |

#### AT “NORM” SETTING (“Adjust” Jumper at NORM Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 27  | 42  | 52  | 69  | 79  | 99  | 114 | 133 |
|                           | Tap 2 | NA                                                        | 44  | 59  | 77  | 95  | 117 | 137 | 152 | 183 |
|                           | Tap 3 | NA                                                        | 79  | 108 | 126 | 159 | 181 | 199 | 231 | 252 |
|                           | Tap 4 | NA                                                        | 117 | 145 | 167 | 197 | 228 | 254 | 273 | 313 |
| “COOL” Speed              | Tap 1 | NA                                                        | 27  | 42  | 52  | 69  | 79  | 99  | 114 | 133 |
|                           | Tap 2 | NA                                                        | 44  | 59  | 77  | 95  | 117 | 137 | 152 | 183 |
|                           | Tap 3 | NA                                                        | 79  | 108 | 126 | 159 | 181 | 199 | 231 | 252 |
|                           | Tap 4 | NA                                                        | 117 | 145 | 167 | 197 | 228 | 254 | 273 | 313 |

#### AT “–” (Minus) SETTING (“Adjust” Jumper at “–” Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 24  | 40  | 48  | 60  | 76  | 94  | 106 | 117 |
|                           | Tap 2 | NA                                                        | 37  | 48  | 68  | 93  | 106 | 129 | 145 | 157 |
|                           | Tap 3 | NA                                                        | 70  | 85  | 106 | 129 | 153 | 181 | 203 | 222 |
|                           | Tap 4 | NA                                                        | 90  | 117 | 138 | 162 | 190 | 216 | 236 | 265 |
| “COOL” Speed              | Tap 1 | NA                                                        | 24  | 40  | 48  | 60  | 76  | 94  | 106 | 117 |
|                           | Tap 2 | NA                                                        | 37  | 48  | 68  | 93  | 106 | 129 | 145 | 157 |
|                           | Tap 3 | NA                                                        | 70  | 85  | 106 | 129 | 153 | 181 | 203 | 222 |
|                           | Tap 4 | NA                                                        | 90  | 117 | 138 | 162 | 190 | 216 | 236 | 265 |

## BLOWER DATA

### CBA38MV-030 BLOWER PERFORMANCE

0 through 0.80 in. w.g. External Static Pressure Range

| “ADJUST”<br>Jumper<br>Setting | Jumper Speed Positions |          |          |          |              |          |          |          |
|-------------------------------|------------------------|----------|----------|----------|--------------|----------|----------|----------|
|                               | “HEAT” Speed           |          |          |          | “COOL” Speed |          |          |          |
|                               | 1<br>cfm               | 2<br>cfm | 3<br>cfm | 4<br>cfm | 1<br>cfm     | 2<br>cfm | 3<br>cfm | 4<br>cfm |
| +<br><br>NORM<br><br>-        | 630                    | 875      | 1095     | 1315     | 630          | 875      | 1095     | 1315     |
|                               | 545                    | 785      | 995      | 1195     | 545          | 785      | 995      | 1195     |
|                               | 510                    | 700      | 890      | 1075     | 510          | 700      | 890      | 1075     |

NOTES - The effect of static pressure, filter and electric heater resistance is included in the air volumes listed.

First stage cooling air volume is 70% of COOL speed setting. Continuous fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 250 cfm.

Lennox® Smart Zoning System applications - minimum blower speed is 250 cfm.

### CBA38MV-030 BLOWER MOTOR WATTS

#### AT “+” (Plus) SETTING (“Adjust” Jumper at “+” Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 35  | 55  | 76  | 95  | 116 | 138 | 164 | 179 |
|                           | Tap 2 | NA                                                        | 80  | 100 | 122 | 148 | 171 | 194 | 214 | 239 |
|                           | Tap 3 | NA                                                        | 140 | 167 | 189 | 216 | 237 | 273 | 291 | 322 |
|                           | Tap 4 | NA                                                        | 231 | 262 | 295 | 328 | 355 | 377 | 412 | 441 |
| “COOL” Speed              | Tap 1 | NA                                                        | 35  | 55  | 76  | 95  | 116 | 138 | 164 | 179 |
|                           | Tap 2 | NA                                                        | 80  | 100 | 122 | 148 | 171 | 194 | 214 | 239 |
|                           | Tap 3 | NA                                                        | 140 | 167 | 189 | 216 | 237 | 273 | 291 | 322 |
|                           | Tap 4 | NA                                                        | 231 | 262 | 295 | 328 | 355 | 377 | 412 | 441 |

#### AT “NORM” SETTING (“Adjust” Jumper at NORM Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 36  | 48  | 61  | 80  | 92  | 114 | 124 | 139 |
|                           | Tap 2 | NA                                                        | 61  | 84  | 104 | 122 | 143 | 169 | 186 | 210 |
|                           | Tap 3 | NA                                                        | 109 | 134 | 153 | 178 | 203 | 231 | 254 | 281 |
|                           | Tap 4 | NA                                                        | 174 | 205 | 238 | 264 | 284 | 310 | 338 | 372 |
| “COOL” Speed              | Tap 1 | NA                                                        | 36  | 48  | 61  | 80  | 92  | 114 | 124 | 139 |
|                           | Tap 2 | NA                                                        | 61  | 84  | 104 | 122 | 143 | 169 | 186 | 210 |
|                           | Tap 3 | NA                                                        | 109 | 134 | 153 | 178 | 203 | 231 | 254 | 281 |
|                           | Tap 4 | NA                                                        | 174 | 205 | 238 | 264 | 284 | 310 | 338 | 372 |

#### AT “-” (Minus) SETTING (“Adjust” Jumper at “-” Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 29  | 43  | 58  | 77  | 88  | 102 | 119 | 134 |
|                           | Tap 2 | NA                                                        | 44  | 64  | 89  | 106 | 125 | 157 | 174 | 202 |
|                           | Tap 3 | NA                                                        | 85  | 104 | 129 | 152 | 176 | 199 | 219 | 239 |
|                           | Tap 4 | NA                                                        | 133 | 157 | 185 | 207 | 231 | 258 | 285 | 317 |
| “COOL” Speed              | Tap 1 | NA                                                        | 29  | 43  | 58  | 77  | 88  | 102 | 119 | 134 |
|                           | Tap 2 | NA                                                        | 44  | 64  | 89  | 106 | 125 | 157 | 174 | 202 |
|                           | Tap 3 | NA                                                        | 85  | 104 | 129 | 152 | 176 | 199 | 219 | 239 |
|                           | Tap 4 | NA                                                        | 133 | 157 | 185 | 207 | 231 | 258 | 285 | 317 |

## BLOWER DATA

### CBA38MV-036 BLOWER PERFORMANCE

0 through 0.80 in. w.g. External Static Pressure Range

| “ADJUST”<br>Jumper<br>Setting | Jumper Speed Positions |          |          |          |              |          |          |          |
|-------------------------------|------------------------|----------|----------|----------|--------------|----------|----------|----------|
|                               | “HEAT” Speed           |          |          |          | “COOL” Speed |          |          |          |
|                               | 1<br>cfm               | 2<br>cfm | 3<br>cfm | 4<br>cfm | 1<br>cfm     | 2<br>cfm | 3<br>cfm | 4<br>cfm |
| +<br><br>NORM<br><br>–        | 920                    | 1255     | 1410     | 1580     | 920          | 1255     | 1410     | 1580     |
|                               | 815                    | 1165     | 1315     | 1435     | 815          | 1165     | 1315     | 1435     |
|                               | 720                    | 1010     | 1155     | 1285     | 720          | 1010     | 1155     | 1285     |

NOTES - The effect of static pressure, filter and electric heater resistance is included in the air volumes listed.

First stage cooling air volume is 70% of COOL speed setting. Continuous fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 250 cfm.

Lennox® Smart Zoning System applications - minimum blower speed is 250 cfm.

### CBA38MV-036 BLOWER MOTOR WATTS

#### AT “+” (Plus) SETTING (“Adjust” Jumper at “+” Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | n/a                                                       | 88  | 108 | 132 | 161 | 190 | 208 | 234 | 248 |
|                           | Tap 2 | n/a                                                       | 174 | 212 | 237 | 269 | 304 | 328 | 370 | 385 |
|                           | Tap 3 | n/a                                                       | 232 | 282 | 314 | 341 | 374 | 410 | 434 | 473 |
|                           | Tap 4 | n/a                                                       | 332 | 365 | 409 | 438 | 480 | 520 | 546 | 576 |
| “COOL” Speed              | Tap 1 | n/a                                                       | 88  | 108 | 132 | 161 | 190 | 208 | 234 | 248 |
|                           | Tap 2 | n/a                                                       | 174 | 212 | 237 | 269 | 304 | 328 | 370 | 385 |
|                           | Tap 3 | n/a                                                       | 232 | 282 | 314 | 341 | 374 | 410 | 434 | 473 |
|                           | Tap 4 | n/a                                                       | 332 | 365 | 409 | 438 | 480 | 520 | 546 | 576 |

#### AT “NORM” SETTING (“Adjust” Jumper at NORM Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | n/a                                                       | 70  | 89  | 113 | 137 | 155 | 188 | 199 | 233 |
|                           | Tap 2 | n/a                                                       | 145 | 168 | 201 | 221 | 258 | 279 | 316 | 348 |
|                           | Tap 3 | n/a                                                       | 200 | 223 | 265 | 293 | 316 | 359 | 374 | 403 |
|                           | Tap 4 | n/a                                                       | 259 | 291 | 309 | 351 | 390 | 429 | 447 | 488 |
| “COOL” Speed              | Tap 1 | n/a                                                       | 70  | 89  | 113 | 137 | 155 | 188 | 199 | 233 |
|                           | Tap 2 | n/a                                                       | 145 | 168 | 201 | 221 | 258 | 279 | 316 | 348 |
|                           | Tap 3 | n/a                                                       | 200 | 223 | 265 | 293 | 316 | 359 | 374 | 403 |
|                           | Tap 4 | n/a                                                       | 259 | 291 | 309 | 351 | 390 | 429 | 447 | 488 |

#### AT “–” (Minus) SETTING (“Adjust” Jumper at “–” Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | n/a                                                       | 50  | 78  | 97  | 119 | 144 | 163 | 185 | 199 |
|                           | Tap 2 | n/a                                                       | 105 | 130 | 156 | 177 | 212 | 239 | 264 | 280 |
|                           | Tap 3 | n/a                                                       | 144 | 167 | 197 | 224 | 255 | 281 | 316 | 340 |
|                           | Tap 4 | n/a                                                       | 191 | 229 | 253 | 283 | 310 | 339 | 366 | 398 |
| “COOL” Speed              | Tap 1 | n/a                                                       | 50  | 78  | 97  | 119 | 144 | 163 | 185 | 199 |
|                           | Tap 2 | n/a                                                       | 105 | 130 | 156 | 177 | 212 | 239 | 264 | 280 |
|                           | Tap 3 | n/a                                                       | 144 | 167 | 197 | 224 | 255 | 281 | 316 | 340 |
|                           | Tap 4 | n/a                                                       | 191 | 229 | 253 | 283 | 310 | 339 | 366 | 398 |

## BLOWER DATA

### CBA38MV-042 BLOWER PERFORMANCE

0 through 0.80 in. w.g. External Static Pressure Range

| “ADJUST”<br>Jumper<br>Setting | Jumper Speed Positions |          |          |          |              |          |          |          |
|-------------------------------|------------------------|----------|----------|----------|--------------|----------|----------|----------|
|                               | “HEAT” Speed           |          |          |          | “COOL” Speed |          |          |          |
|                               | 1<br>cfm               | 2<br>cfm | 3<br>cfm | 4<br>cfm | 1<br>cfm     | 2<br>cfm | 3<br>cfm | 4<br>cfm |
| +<br><br>NORM<br><br>-        | 1100                   | 1320     | 1540     | 1760     | 1100         | 1320     | 1540     | 1760     |
|                               | 1000                   | 1200     | 1400     | 1600     | 1000         | 1200     | 1400     | 1600     |
|                               | 900                    | 1080     | 1260     | 1440     | 900          | 1080     | 1260     | 1440     |

NOTES - The effect of static pressure, filter and electric heater resistance is included in the air volumes listed.

First stage cooling air volume is 70% of COOL speed setting. Continuous fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 450 cfm.

Lennox® Smart Zoning System applications - minimum blower speed is 450 cfm.

### CBA38MV-042 BLOWER MOTOR WATTS

#### AT “+” (Plus) SETTING (“Adjust” Jumper at “+” Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 121 | 154 | 177 | 199 | 233 | 252 | 283 | 315 |
|                           | Tap 2 | NA                                                        | 189 | 221 | 247 | 282 | 310 | 344 | 370 | 403 |
|                           | Tap 3 | NA                                                        | 283 | 312 | 341 | 382 | 422 | 454 | 481 | 515 |
|                           | Tap 4 | NA                                                        | 407 | 446 | 488 | 528 | 567 | 583 | 646 | 671 |
| “COOL” Speed              | Tap 1 | NA                                                        | 121 | 154 | 177 | 199 | 233 | 252 | 283 | 315 |
|                           | Tap 2 | NA                                                        | 189 | 221 | 247 | 282 | 310 | 344 | 370 | 403 |
|                           | Tap 3 | NA                                                        | 283 | 312 | 341 | 382 | 422 | 454 | 481 | 515 |
|                           | Tap 4 | NA                                                        | 407 | 446 | 488 | 528 | 567 | 583 | 646 | 671 |

#### AT “NORM” SETTING (“Adjust” Jumper at NORM Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 104 | 134 | 153 | 184 | 207 | 236 | 257 | 286 |
|                           | Tap 2 | NA                                                        | 142 | 171 | 203 | 234 | 253 | 298 | 327 | 351 |
|                           | Tap 3 | NA                                                        | 212 | 240 | 269 | 308 | 337 | 371 | 408 | 429 |
|                           | Tap 4 | NA                                                        | 309 | 341 | 367 | 406 | 441 | 476 | 516 | 559 |
| “COOL” Speed              | Tap 1 | NA                                                        | 104 | 134 | 153 | 184 | 207 | 236 | 257 | 286 |
|                           | Tap 2 | NA                                                        | 142 | 171 | 203 | 234 | 253 | 298 | 327 | 351 |
|                           | Tap 3 | NA                                                        | 212 | 240 | 269 | 308 | 337 | 371 | 408 | 429 |
|                           | Tap 4 | NA                                                        | 309 | 341 | 367 | 406 | 441 | 476 | 516 | 559 |

#### AT “-” (Minus) SETTING (“Adjust” Jumper at “-” Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 78  | 104 | 126 | 155 | 175 | 199 | 209 | 247 |
|                           | Tap 2 | NA                                                        | 115 | 139 | 168 | 196 | 218 | 247 | 274 | 309 |
|                           | Tap 3 | NA                                                        | 165 | 192 | 220 | 247 | 290 | 316 | 360 | 376 |
|                           | Tap 4 | NA                                                        | 237 | 269 | 301 | 327 | 356 | 407 | 430 | 481 |
| “COOL” Speed              | Tap 1 | NA                                                        | 78  | 104 | 126 | 155 | 175 | 199 | 209 | 247 |
|                           | Tap 2 | NA                                                        | 115 | 139 | 168 | 196 | 218 | 247 | 274 | 309 |
|                           | Tap 3 | NA                                                        | 165 | 192 | 220 | 247 | 290 | 316 | 360 | 376 |
|                           | Tap 4 | NA                                                        | 237 | 269 | 301 | 327 | 356 | 407 | 430 | 481 |

## BLOWER DATA

### CBA38MV-048 BLOWER PERFORMANCE

0 through 0.80 in. w.g. External Static Pressure Range

| “ADJUST”<br>Jumper<br>Setting | Jumper Speed Positions |      |      |      |              |      |      |      |
|-------------------------------|------------------------|------|------|------|--------------|------|------|------|
|                               | “HEAT” Speed           |      |      |      | “COOL” Speed |      |      |      |
|                               | 1                      | 2    | 3    | 4    | 1            | 2    | 3    | 4    |
|                               | cfm                    | cfm  | cfm  | cfm  | cfm          | cfm  | cfm  | cfm  |
| +                             | 1670                   | 1870 | 2100 | 2200 | 1670         | 1870 | 2100 | 2200 |
| NORM                          | 1460                   | 1670 | 1870 | 2100 | 1460         | 1670 | 1870 | 2100 |
| –                             | 1230                   | 1410 | 1600 | 1800 | 1230         | 1410 | 1600 | 1800 |

NOTES - The effect of static pressure, filter and electric heater resistance is included in the air volumes listed.

First stage cooling air volume is 70% of COOL speed setting. Continuous fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 450 cfm.

Lennox® Smart Zoning System applications - minimum blower speed is 450 cfm.

### CBA38MV-048 BLOWER MOTOR WATTS

#### AT “+” (Plus) SETTING (“Adjust” Jumper at “+” Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |      |      |      |      |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|------|------|------|------|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5  | 0.6  | 0.7  | 0.8  |
| “HEAT” Speed              | Tap 1 | NA                                                        | 335 | 374 | 399 | 436 | 495  | 518  | 572  | 611  |
|                           | Tap 2 | NA                                                        | 459 | 502 | 537 | 586 | 644  | 689  | 724  | 759  |
|                           | Tap 3 | NA                                                        | 668 | 738 | 778 | 845 | 881  | 957  | 996  | 1019 |
|                           | Tap 4 | NA                                                        | 808 | 865 | 922 | 975 | 1003 | 1025 | 1017 | 987  |
| “COOL” Speed              | Tap 1 | NA                                                        | 335 | 374 | 399 | 436 | 495  | 518  | 572  | 611  |
|                           | Tap 2 | NA                                                        | 459 | 502 | 537 | 586 | 644  | 689  | 724  | 759  |
|                           | Tap 3 | NA                                                        | 668 | 738 | 778 | 845 | 881  | 957  | 996  | 1019 |
|                           | Tap 4 | NA                                                        | 808 | 865 | 922 | 975 | 1003 | 1025 | 1017 | 987  |

#### AT “NORM” SETTING (“Adjust” Jumper at NORM Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 225 | 264 | 289 | 336 | 358 | 396 | 432 | 464 |
|                           | Tap 2 | NA                                                        | 320 | 374 | 398 | 434 | 484 | 523 | 558 | 610 |
|                           | Tap 3 | NA                                                        | 451 | 498 | 529 | 583 | 619 | 682 | 721 | 768 |
|                           | Tap 4 | NA                                                        | 643 | 699 | 731 | 795 | 848 | 919 | 966 | 998 |
| “COOL” Speed              | Tap 1 | NA                                                        | 225 | 264 | 289 | 336 | 358 | 396 | 432 | 464 |
|                           | Tap 2 | NA                                                        | 320 | 374 | 398 | 434 | 484 | 523 | 558 | 610 |
|                           | Tap 3 | NA                                                        | 451 | 498 | 529 | 583 | 619 | 682 | 721 | 768 |
|                           | Tap 4 | NA                                                        | 643 | 699 | 731 | 795 | 848 | 919 | 966 | 998 |

#### AT “–” (Minus) SETTING (“Adjust” Jumper at “–” Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 146 | 178 | 207 | 227 | 265 | 299 | 317 | 359 |
|                           | Tap 2 | NA                                                        | 207 | 243 | 272 | 305 | 345 | 371 | 419 | 438 |
|                           | Tap 3 | NA                                                        | 290 | 347 | 383 | 412 | 447 | 486 | 525 | 548 |
|                           | Tap 4 | NA                                                        | 410 | 440 | 491 | 528 | 572 | 613 | 651 | 694 |
| “COOL” Speed              | Tap 1 | NA                                                        | 146 | 178 | 207 | 227 | 265 | 299 | 317 | 359 |
|                           | Tap 2 | NA                                                        | 207 | 243 | 272 | 305 | 345 | 371 | 419 | 438 |
|                           | Tap 3 | NA                                                        | 290 | 347 | 383 | 412 | 447 | 486 | 525 | 548 |
|                           | Tap 4 | NA                                                        | 410 | 440 | 491 | 528 | 572 | 613 | 651 | 694 |

## BLOWER DATA

### CBA38MV-060 BLOWER PERFORMANCE

0 through 0.80 in. w.g. External Static Pressure Range

| “ADJUST”<br>Jumper<br>Setting | Jumper Speed Positions |          |          |          |              |          |          |          |
|-------------------------------|------------------------|----------|----------|----------|--------------|----------|----------|----------|
|                               | “HEAT” Speed           |          |          |          | “COOL” Speed |          |          |          |
|                               | 1<br>cfm               | 2<br>cfm | 3<br>cfm | 4<br>cfm | 1<br>cfm     | 2<br>cfm | 3<br>cfm | 4<br>cfm |
| +<br><br>NORM<br><br>-        | 1695                   | 1890     | 2140     | 2210     | 1695         | 1890     | 2140     | 2210     |
|                               | 1525                   | 1680     | 1850     | 2075     | 1525         | 1680     | 1850     | 2075     |
|                               | 1300                   | 1450     | 1630     | 1800     | 1300         | 1450     | 1630     | 1800     |

NOTES - The effect of static pressure, filter and electric heater resistance is included in the air volumes listed.

First stage cooling air volume is 70% of COOL speed setting. Continuous fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 450 cfm.

Lennox® Smart Zoning System applications - minimum blower speed is 450 cfm.

### CBA38MV-060 BLOWER MOTOR WATTS

#### AT “+” (Plus) SETTING (“Adjust” Jumper at “+” Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |      |      |      |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|------|------|------|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6  | 0.7  | 0.8  |
| “HEAT” Speed              | Tap 1 | NA                                                        | 334 | 368 | 412 | 449 | 491 | 532  | 557  | 603  |
|                           | Tap 2 | NA                                                        | 462 | 511 | 549 | 601 | 640 | 681  | 720  | 762  |
|                           | Tap 3 | NA                                                        | 670 | 710 | 765 | 820 | 868 | 921  | 963  | 1005 |
|                           | Tap 4 | NA                                                        | 757 | 810 | 853 | 909 | 961 | 1001 | 1034 | 1026 |
| “COOL” Speed              | Tap 1 | NA                                                        | 334 | 368 | 412 | 449 | 491 | 532  | 557  | 603  |
|                           | Tap 2 | NA                                                        | 462 | 511 | 549 | 601 | 640 | 681  | 720  | 762  |
|                           | Tap 3 | NA                                                        | 670 | 710 | 765 | 820 | 868 | 921  | 963  | 1005 |
|                           | Tap 4 | NA                                                        | 757 | 810 | 853 | 909 | 961 | 1001 | 1034 | 1026 |

#### AT “NORM” SETTING (“Adjust” Jumper at NORM Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 245 | 285 | 319 | 350 | 398 | 425 | 462 | 497 |
|                           | Tap 2 | NA                                                        | 330 | 368 | 414 | 443 | 469 | 505 | 558 | 600 |
|                           | Tap 3 | NA                                                        | 442 | 497 | 515 | 554 | 603 | 643 | 685 | 735 |
|                           | Tap 4 | NA                                                        | 600 | 653 | 701 | 752 | 798 | 842 | 889 | 935 |
| “COOL” Speed              | Tap 1 | NA                                                        | 245 | 285 | 319 | 350 | 398 | 425 | 462 | 497 |
|                           | Tap 2 | NA                                                        | 330 | 368 | 414 | 443 | 469 | 505 | 558 | 600 |
|                           | Tap 3 | NA                                                        | 442 | 497 | 515 | 554 | 603 | 643 | 685 | 735 |
|                           | Tap 4 | NA                                                        | 600 | 653 | 701 | 752 | 798 | 842 | 889 | 935 |

#### AT “-” (Minus) SETTING (“Adjust” Jumper at “-” Setting)

| Jumper<br>Speed Positions |       | Motor Watts @ Various External Static Pressures - in. wg. |     |     |     |     |     |     |     |     |
|---------------------------|-------|-----------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
|                           |       | 0                                                         | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| “HEAT” Speed              | Tap 1 | NA                                                        | 181 | 204 | 235 | 261 | 304 | 323 | 357 | 383 |
|                           | Tap 2 | NA                                                        | 218 | 259 | 283 | 315 | 357 | 390 | 422 | 457 |
|                           | Tap 3 | NA                                                        | 300 | 333 | 365 | 395 | 443 | 476 | 527 | 559 |
|                           | Tap 4 | NA                                                        | 400 | 430 | 470 | 515 | 543 | 592 | 639 | 678 |
| “COOL” Speed              | Tap 1 | NA                                                        | 181 | 204 | 235 | 261 | 304 | 323 | 357 | 383 |
|                           | Tap 2 | NA                                                        | 218 | 259 | 283 | 315 | 357 | 390 | 422 | 457 |
|                           | Tap 3 | NA                                                        | 300 | 333 | 365 | 395 | 443 | 476 | 527 | 559 |
|                           | Tap 4 | NA                                                        | 400 | 430 | 470 | 515 | 543 | 592 | 639 | 678 |

## ELECTRIC HEAT DATA

## CBA38MV-018/024 | SINGLE PHASE

|                       | Model Number                                                                                    | No. of Stages | Volts Input | kW Input | <sup>1</sup> Btuh Input | <sup>2</sup> Blower Motor Full Load Amps | <sup>3</sup> Minimum Circuit Ampacity | <sup>5</sup> Maximum Overcurrent Protection |
|-----------------------|-------------------------------------------------------------------------------------------------|---------------|-------------|----------|-------------------------|------------------------------------------|---------------------------------------|---------------------------------------------|
| <b>4 kW</b><br>4 lbs. | ECB38-4 ( <b>16V86</b> )<br>Terminal Block<br>ECB38-4CB ( <b>16V87</b> )<br>30A Circuit breaker | 1             | 208         | 3.0      | 10,250                  | 4.0                                      | 23                                    | <sup>4</sup> <b>25</b>                      |
|                       |                                                                                                 |               | 220         | 3.4      | 11,450                  | 4.0                                      | 24                                    | <sup>4</sup> <b>25</b>                      |
|                       |                                                                                                 |               | 230         | 3.7      | 12,550                  | 4.0                                      | 25                                    | <sup>4</sup> <b>25</b>                      |
|                       |                                                                                                 |               | 240         | 4.0      | 13,650                  | 4.0                                      | 26                                    | 30                                          |
| <b>5 kW</b><br>4 lbs. | ECB38-5 ( <b>16V88</b> )<br>Terminal Block<br>ECB38-5CB ( <b>16V89</b> )<br>35A Circuit breaker | 1             | 208         | 3.8      | 12,800                  | 4.0                                      | 28                                    | <sup>4</sup> <b>30</b>                      |
|                       |                                                                                                 |               | 220         | 4.2      | 14,300                  | 4.0                                      | 29                                    | <sup>4</sup> <b>30</b>                      |
|                       |                                                                                                 |               | 230         | 4.6      | 15,700                  | 4.0                                      | 30                                    | <sup>4</sup> <b>30</b>                      |
|                       |                                                                                                 |               | 240         | 5.0      | 17,100                  | 4.0                                      | 31                                    | 35                                          |
| <b>6 kW</b><br>4 lbs. | ECB38-6 ( <b>16V90</b> )<br>Terminal Block<br>ECB38-6CB ( <b>16V91</b> )<br>40A Circuit breaker | 1             | 208         | 4.5      | 15,400                  | 4.0                                      | 32                                    | <sup>4</sup> <b>35</b>                      |
|                       |                                                                                                 |               | 220         | 5.0      | 17,100                  | 4.0                                      | 33                                    | <sup>4</sup> <b>35</b>                      |
|                       |                                                                                                 |               | 230         | 5.5      | 18,800                  | 4.0                                      | 35                                    | <sup>4</sup> <b>35</b>                      |
|                       |                                                                                                 |               | 240         | 6.0      | 20,500                  | 4.0                                      | 36                                    | 40                                          |
| <b>8 kW</b><br>5 lbs. | ECB38-8 ( <b>16V92</b> )<br>Terminal Block<br>ECB38-8CB ( <b>16V93</b> )<br>50A Circuit breaker | 2             | 208         | 6.0      | 20,500                  | 4.0                                      | 41                                    | <sup>4</sup> <b>45</b>                      |
|                       |                                                                                                 |               | 220         | 6.7      | 22,900                  | 4.0                                      | 43                                    | <sup>4</sup> <b>45</b>                      |
|                       |                                                                                                 |               | 230         | 7.3      | 25,100                  | 4.0                                      | 45                                    | <sup>4</sup> <b>45</b>                      |
|                       |                                                                                                 |               | 240         | 8.0      | 27,300                  | 4.0                                      | 47                                    | 50                                          |
| <b>9 kW</b><br>5 lbs. | ECB38-9CB ( <b>16V94</b> )<br>60A Circuit breaker                                               | 2             | 208         | 6.8      | 23,100                  | 4.0                                      | 46                                    | <sup>4</sup> <b>50</b>                      |
|                       |                                                                                                 |               | 220         | 7.6      | 25,800                  | 4.0                                      | 48                                    | <sup>4</sup> <b>50</b>                      |
|                       |                                                                                                 |               | 230         | 8.3      | 28,200                  | 4.0                                      | 50                                    | <sup>4</sup> <b>50</b>                      |
|                       |                                                                                                 |               | 240         | 9.0      | 30,700                  | 4.0                                      | 52                                    | 60                                          |

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

<sup>1</sup> Electric heater capacity only - does not include additional blower motor heat capacity.

<sup>2</sup> Amps shown are for blower motor only.

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

<sup>4</sup> Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Replacement Circuit Breakers on page 9.

<sup>5</sup> HACR type circuit breaker or fuse.

## ELECTRIC HEAT DATA

## CBA38MV-030 | SINGLE PHASE

| Model Number                                                                                           | No. of Stages | Volts Input | kW Input | <sup>1</sup> Btuh Input | <sup>2</sup> Blower Motor Full Load Amps | <sup>3</sup> Minimum Circuit Ampacity |       | <sup>5</sup> Maximum Overcurrent Protection |                 | Single Point Power Source             |                                             |
|--------------------------------------------------------------------------------------------------------|---------------|-------------|----------|-------------------------|------------------------------------------|---------------------------------------|-------|---------------------------------------------|-----------------|---------------------------------------|---------------------------------------------|
|                                                                                                        |               |             |          |                         |                                          | Ckt 1                                 | Ckt 2 | Ckt 1                                       | Ckt 2           | <sup>3</sup> Minimum Circuit Ampacity | <sup>5</sup> Maximum Overcurrent Protection |
| <b>4 kW</b><br>4 lbs.<br>ECB38-4 (16V86)<br>Terminal Block<br>ECB38-4CB (16V87)<br>30A Circuit breaker | 1             | 208         | 3.0      | 10,250                  | 4.0                                      | 23                                    | ---   | <sup>4</sup> 25                             | ---             | 23                                    | 25                                          |
|                                                                                                        |               | 220         | 3.4      | 11,450                  | 4.0                                      | 24                                    | ---   | <sup>4</sup> 25                             | ---             | 24                                    | 25                                          |
|                                                                                                        |               | 230         | 3.7      | 12,550                  | 4.0                                      | 25                                    | ---   | <sup>4</sup> 25                             | ---             | 25                                    | 25                                          |
|                                                                                                        |               | 240         | 4.0      | 13,650                  | 4.0                                      | 26                                    | ---   | 30                                          | ---             | 26                                    | 30                                          |
| <b>5 kW</b><br>4 lbs.<br>ECB38-5 (16V88)<br>Terminal Block<br>ECB38-5CB (16V89)<br>35A Circuit breaker | 1             | 208         | 3.8      | 12,800                  | 4.0                                      | 28                                    | ---   | <sup>4</sup> 30                             | ---             | 28                                    | 30                                          |
|                                                                                                        |               | 220         | 4.2      | 14,300                  | 4.0                                      | 29                                    | ---   | <sup>4</sup> 30                             | ---             | 29                                    | 30                                          |
|                                                                                                        |               | 230         | 4.6      | 15,700                  | 4.0                                      | 30                                    | ---   | <sup>4</sup> 30                             | ---             | 30                                    | 30                                          |
|                                                                                                        |               | 240         | 5.0      | 17,100                  | 4.0                                      | 31                                    | ---   | 35                                          | ---             | 31                                    | 35                                          |
| <b>6 kW</b><br>4 lbs.<br>ECB38-6 (16V90)<br>Terminal Block<br>ECB38-6CB (16V91)<br>40A Circuit breaker | 1             | 208         | 4.5      | 15,400                  | 4.0                                      | 32                                    | ---   | <sup>4</sup> 35                             | ---             | 32                                    | 35                                          |
|                                                                                                        |               | 220         | 5.0      | 17,100                  | 4.0                                      | 33                                    | ---   | <sup>4</sup> 35                             | ---             | 33                                    | 35                                          |
|                                                                                                        |               | 230         | 5.5      | 18,800                  | 4.0                                      | 35                                    | ---   | <sup>4</sup> 35                             | ---             | 35                                    | 35                                          |
|                                                                                                        |               | 240         | 6.0      | 20,500                  | 4.0                                      | 36                                    | ---   | 40                                          | ---             | 36                                    | 40                                          |
| <b>8 kW</b><br>5 lbs.<br>ECB38-8 (16V92)<br>Terminal Block<br>ECB38-8CB (16V93)<br>50A Circuit breaker | 2             | 208         | 6.0      | 20,500                  | 4.0                                      | 41                                    | ---   | <sup>4</sup> 45                             | ---             | 41                                    | 45                                          |
|                                                                                                        |               | 220         | 6.7      | 22,900                  | 4.0                                      | 43                                    | ---   | <sup>4</sup> 45                             | ---             | 43                                    | 45                                          |
|                                                                                                        |               | 230         | 7.3      | 25,100                  | 4.0                                      | 45                                    | ---   | <sup>4</sup> 45                             | ---             | 45                                    | 45                                          |
|                                                                                                        |               | 240         | 8.0      | 27,300                  | 4.0                                      | 47                                    | ---   | 50                                          | ---             | 47                                    | 50                                          |
| <b>9 kW</b><br>5 lbs.<br>ECB38-9CB (16V94)<br>60A Circuit breaker                                      | 2             | 208         | 6.8      | 23,100                  | 4.0                                      | 46                                    | ---   | <sup>4</sup> 50                             | ---             | 46                                    | 50                                          |
|                                                                                                        |               | 220         | 7.6      | 25,800                  | 4.0                                      | 48                                    | ---   | <sup>4</sup> 50                             | ---             | 48                                    | 50                                          |
|                                                                                                        |               | 230         | 8.3      | 28,200                  | 4.0                                      | 50                                    | ---   | <sup>4</sup> 50                             | ---             | 50                                    | 50                                          |
|                                                                                                        |               | 240         | 9.0      | 30,700                  | 4.0                                      | 52                                    | ---   | 60                                          | ---             | 52                                    | 60                                          |
| <b>12.5 kW</b><br>10 lbs.<br>ECB38-12.5CB (16V95)<br>(1) 30A and<br>(1) 45A Circuit breaker            | 2             | 208         | 9.4      | 32,000                  | 4.0                                      | 24                                    | 38    | <sup>4</sup> 25                             | <sup>4</sup> 40 | 61                                    | 70                                          |
|                                                                                                        |               | 220         | 10.5     | 35,800                  | 4.0                                      | 25                                    | 40    | <sup>4</sup> 25                             | <sup>4</sup> 40 | 65                                    | 70                                          |
|                                                                                                        |               | 230         | 11.5     | 39,200                  | 4.0                                      | 26                                    | 42    | 30                                          | 45              | 67                                    | 70                                          |
|                                                                                                        |               | 240         | 12.5     | 42,600                  | 4.0                                      | 27                                    | 44    | 30                                          | 45              | 71                                    | 80                                          |
| <b>15 kW</b><br>12 lbs.<br>ECB38-15CB (16V96)<br>(1) 35A and<br>(1) 60A Circuit breaker                | 2             | 208         | 11.3     | 38,400                  | 4.0                                      | 28                                    | 45    | <sup>4</sup> 30                             | <sup>4</sup> 45 | 73                                    | 80                                          |
|                                                                                                        |               | 220         | 12.6     | 43,000                  | 4.0                                      | 29                                    | 48    | <sup>4</sup> 30                             | <sup>4</sup> 50 | 77                                    | 80                                          |
|                                                                                                        |               | 230         | 13.8     | 47,000                  | 4.0                                      | 30                                    | 50    | <sup>4</sup> 30                             | <sup>4</sup> 50 | 80                                    | 80                                          |
|                                                                                                        |               | 240         | 15.0     | 51,200                  | 4.0                                      | 31                                    | 52    | 35                                          | 60              | 83                                    | 90                                          |

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

<sup>1</sup> Electric heater capacity only - does not include additional blower motor heat capacity.<sup>2</sup> Amps shown are for blower motor only.<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.<sup>4</sup> Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Replacement Circuit Breakers on page 9.<sup>5</sup> HACR type circuit breaker or fuse.

## ELECTRIC HEAT DATA

## CBA38MV-036 | SINGLE PHASE

| Model Number                                                                                           | No. of Stages | Volts Input | kW Input | <sup>1</sup> Btuh Input | <sup>2</sup> Blower Motor Full Load Amps | <sup>3</sup> Minimum Circuit Ampacity |       | <sup>5</sup> Maximum Overcurrent Protection |                 | Single Point Power Source             |                                             |
|--------------------------------------------------------------------------------------------------------|---------------|-------------|----------|-------------------------|------------------------------------------|---------------------------------------|-------|---------------------------------------------|-----------------|---------------------------------------|---------------------------------------------|
|                                                                                                        |               |             |          |                         |                                          | Ckt 1                                 | Ckt 2 | Ckt 1                                       | Ckt 2           | <sup>3</sup> Minimum Circuit Ampacity | <sup>5</sup> Maximum Overcurrent Protection |
| <b>5 kW</b><br>4 lbs.<br>ECB38-5 (16V88)<br>Terminal Block<br>ECB38-5CB (16V89)<br>35A Circuit breaker | 1             | 208         | 3.8      | 12,800                  | 5.9                                      | 30                                    | ---   | <sup>4</sup> 30                             | ---             | 30                                    | 30                                          |
|                                                                                                        |               | 220         | 4.2      | 14,300                  | 5.9                                      | 31                                    | ---   | 35                                          | ---             | 31                                    | 35                                          |
|                                                                                                        |               | 230         | 4.6      | 15,700                  | 5.9                                      | 32                                    | ---   | 35                                          | ---             | 32                                    | 35                                          |
|                                                                                                        |               | 240         | 5.0      | 17,100                  | 5.9                                      | 33                                    | ---   | 35                                          | ---             | 33                                    | 35                                          |
| <b>6 kW</b><br>4 lbs.<br>ECB38-6 (16V90)<br>Terminal Block<br>ECB38-6CB (16V91)<br>40A Circuit breaker | 1             | 208         | 4.5      | 15,400                  | 5.9                                      | 34                                    | ---   | <sup>4</sup> 35                             | ---             | 34                                    | 35                                          |
|                                                                                                        |               | 220         | 5.0      | 17,100                  | 5.9                                      | 36                                    | ---   | 40                                          | ---             | 36                                    | 40                                          |
|                                                                                                        |               | 230         | 5.5      | 18,800                  | 5.9                                      | 37                                    | ---   | 40                                          | ---             | 37                                    | 40                                          |
|                                                                                                        |               | 240         | 6.0      | 20,500                  | 5.9                                      | 39                                    | ---   | 40                                          | ---             | 39                                    | 40                                          |
| <b>8 kW</b><br>5 lbs.<br>ECB38-8 (16V92)<br>Terminal Block<br>ECB38-8CB (16V93)<br>50A Circuit breaker | 2             | 208         | 6.0      | 20,500                  | 5.9                                      | 43                                    | ---   | <sup>4</sup> 45                             | ---             | 43                                    | 45                                          |
|                                                                                                        |               | 220         | 6.7      | 22,900                  | 5.9                                      | 46                                    | ---   | 50                                          | ---             | 46                                    | 50                                          |
|                                                                                                        |               | 230         | 7.3      | 25,100                  | 5.9                                      | 47                                    | ---   | 50                                          | ---             | 47                                    | 50                                          |
|                                                                                                        |               | 240         | 8.0      | 27,300                  | 5.9                                      | 49                                    | ---   | 50                                          | ---             | 49                                    | 50                                          |
| <b>9 kW</b><br>5 lbs.<br>ECB38-9CB (16V94)<br>60A Circuit breaker                                      | 2             | 208         | 6.8      | 23,100                  | 5.9                                      | 48                                    | ---   | <sup>4</sup> 50                             | ---             | 48                                    | 50                                          |
|                                                                                                        |               | 220         | 7.6      | 25,800                  | 5.9                                      | 50                                    | ---   | <sup>4</sup> 50                             | ---             | 50                                    | 60                                          |
|                                                                                                        |               | 230         | 8.3      | 28,200                  | 5.9                                      | 52                                    | ---   | 60                                          | ---             | 52                                    | 60                                          |
|                                                                                                        |               | 240         | 9.0      | 30,700                  | 5.9                                      | 54                                    | ---   | 60                                          | ---             | 54                                    | 60                                          |
| <b>12.5 kW</b><br>10 lbs.<br>ECB38-12.5CB (16V95)<br>(1) 30A and<br>(1) 45A Circuit breaker            | 2             | 208         | 9.4      | 32,000                  | 5.9                                      | 26                                    | 38    | 30                                          | <sup>4</sup> 40 | 64                                    | 70                                          |
|                                                                                                        |               | 220         | 10.5     | 35,800                  | 5.9                                      | 27                                    | 40    | 30                                          | <sup>4</sup> 40 | 67                                    | 70                                          |
|                                                                                                        |               | 230         | 11.5     | 39,200                  | 5.9                                      | 28                                    | 42    | 30                                          | 45              | 70                                    | 70                                          |
|                                                                                                        |               | 240         | 12.5     | 42,600                  | 5.9                                      | 29                                    | 44    | 30                                          | 45              | 72                                    | 80                                          |
| <b>15 kW</b><br>12 lbs.<br>ECB38-15CB (16V96)<br>(1) 35A and<br>(1) 60A Circuit breaker                | 2             | 208         | 11.3     | 38,400                  | 5.9                                      | 30                                    | 45    | <sup>4</sup> 30                             | <sup>4</sup> 50 | 75                                    | 80                                          |
|                                                                                                        |               | 220         | 12.6     | 43,000                  | 5.9                                      | 31                                    | 48    | 35                                          | <sup>4</sup> 50 | 79                                    | 80                                          |
|                                                                                                        |               | 230         | 13.8     | 47,000                  | 5.9                                      | 32                                    | 50    | 35                                          | <sup>4</sup> 50 | 82                                    | 90                                          |
|                                                                                                        |               | 240         | 15.0     | 51,200                  | 5.9                                      | 33                                    | 52    | 35                                          | 60              | 86                                    | 90                                          |
| <b>20 kW</b><br>19 lbs.<br>ECB38-20CB (16V97)<br>(2) 60A Circuit breaker                               | 2             | 208         | 15.0     | 51,200                  | 5.9                                      | 48                                    | 50    | <sup>4</sup> 50                             | <sup>4</sup> 50 | 98                                    | 100                                         |
|                                                                                                        |               | 220         | 16.8     | 57,300                  | 5.9                                      | 50                                    | 53    | <sup>4</sup> 50                             | 60              | 103                                   | 110                                         |
|                                                                                                        |               | 230         | 18.4     | 62,700                  | 5.9                                      | 52                                    | 55    | 60                                          | 60              | 107                                   | 110                                         |
|                                                                                                        |               | 240         | 20.0     | 68,200                  | 5.9                                      | 54                                    | 57    | 60                                          | 60              | 112                                   | 125                                         |

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

<sup>1</sup> Electric heater capacity only - does not include additional blower motor heat capacity.<sup>2</sup> Amps shown are for blower motor only.<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.<sup>4</sup> Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Replacement Circuit Breakers on page 9.<sup>5</sup> HACR type circuit breaker or fuse.

## ELECTRIC HEAT DATA

## CBA38MV-036 | THREE PHASE

| Model Number                                                          | No. of Stages | Volts Input | kW Input | <sup>1</sup> Btuh Input | <sup>2</sup> Blower Motor Full Load Amps | <sup>3</sup> Minimum Circuit Ampacity |       | <sup>5</sup> Maximum Overcurrent Protection |                       | Single Point Power Source             |                                             |
|-----------------------------------------------------------------------|---------------|-------------|----------|-------------------------|------------------------------------------|---------------------------------------|-------|---------------------------------------------|-----------------------|---------------------------------------|---------------------------------------------|
|                                                                       |               |             |          |                         |                                          | Ckt 1                                 | Ckt 2 | Ckt 1                                       | Ckt 2                 | <sup>3</sup> Minimum Circuit Ampacity | <sup>5</sup> Maximum Overcurrent Protection |
| <b>8 kW</b><br>5 lbs. ECB38-8 (16V99)<br>Terminal Block               | 1             | 208         | 6.0      | 20,500                  | 5.9                                      | 28                                    | ---   | 30                                          | ---                   | 28                                    | 30                                          |
|                                                                       |               | 220         | 6.7      | 22,900                  | 5.9                                      | 29                                    | ---   | 30                                          | ---                   | 29                                    | 30                                          |
|                                                                       |               | 230         | 7.3      | 25,100                  | 5.9                                      | 30                                    | ---   | 30                                          | ---                   | 30                                    | 35                                          |
|                                                                       |               | 240         | 8.0      | 27,300                  | 5.9                                      | 31                                    | ---   | 35                                          | ---                   | 31                                    | 35                                          |
| <b>10 kW</b><br>6 lbs. ECB38-10 (16W67)<br>Terminal Block             | 1             | 208         | 7.5      | 25,600                  | 5.9                                      | 33                                    | ---   | 35                                          | ---                   | 33                                    | 35                                          |
|                                                                       |               | 220         | 8.4      | 28,700                  | 5.9                                      | 35                                    | ---   | 35                                          | ---                   | 35                                    | 35                                          |
|                                                                       |               | 230         | 9.2      | 31,400                  | 5.9                                      | 36                                    | ---   | 40                                          | ---                   | 36                                    | 40                                          |
|                                                                       |               | 240         | 10.0     | 34,100                  | 5.9                                      | 37                                    | ---   | 40                                          | ---                   | 37                                    | 40                                          |
| <b>15 kW</b><br>12 lbs. ECB48-15CB (27A63)<br>50A Circuit breaker     | 1             | 208         | 11.3     | 38,400                  | 5.9                                      | 46                                    | ---   | 50                                          | ---                   | 46                                    | 50                                          |
|                                                                       |               | 220         | 12.6     | 43,000                  | 5.9                                      | 49                                    | ---   | 50                                          | ---                   | 49                                    | 50                                          |
|                                                                       |               | 230         | 13.5     | 47,000                  | 5.9                                      | 51                                    | ---   | <b><sup>4</sup>60</b>                       | ---                   | 51                                    | 60                                          |
|                                                                       |               | 240         | 15.0     | 51,200                  | 5.9                                      | 52                                    | ---   | <b><sup>4</sup>60</b>                       | ---                   | 52                                    | 60                                          |
| <b>20 kW</b><br>19 lbs. ECB38-20CB (16W69)<br>(2) 35A Circuit breaker | 2             | 208         | 15.0     | 51,200                  | 5.9                                      | 33                                    | 26    | 35                                          | <b><sup>4</sup>30</b> | 59                                    | 60                                          |
|                                                                       |               | 220         | 16.8     | 57,300                  | 5.9                                      | 35                                    | 28    | 35                                          | <b><sup>4</sup>30</b> | 62                                    | 70                                          |
|                                                                       |               | 230         | 18.4     | 62,700                  | 5.9                                      | 36                                    | 29    | <b><sup>4</sup>40</b>                       | <b><sup>4</sup>30</b> | 65                                    | 70                                          |
|                                                                       |               | 240         | 20.0     | 68,200                  | 5.9                                      | 37                                    | 30    | <b><sup>4</sup>40</b>                       | 35                    | 67                                    | 70                                          |

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

<sup>1</sup> Electric heater capacity only - does not include additional blower motor heat capacity.

<sup>2</sup> Amps shown are for blower motor only.

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

<sup>4</sup> Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Replacement Circuit Breakers on page 9.

<sup>5</sup> HACR type circuit breaker or fuse.

## ELECTRIC HEAT DATA

## CBA38MV-042 | SINGLE PHASE

| Model Number                                                                                           | No. of Stages | Volts Input | kW Input | <sup>1</sup> Btuh Input | <sup>2</sup> Blower Motor Full Load Amps | <sup>3</sup> Minimum Circuit Ampacity |       | <sup>5</sup> Maximum Overcurrent Protection |                 | Single Point Power Source             |                                             |
|--------------------------------------------------------------------------------------------------------|---------------|-------------|----------|-------------------------|------------------------------------------|---------------------------------------|-------|---------------------------------------------|-----------------|---------------------------------------|---------------------------------------------|
|                                                                                                        |               |             |          |                         |                                          | Ckt 1                                 | Ckt 2 | Ckt 1                                       | Ckt 2           | <sup>3</sup> Minimum Circuit Ampacity | <sup>5</sup> Maximum Overcurrent Protection |
| <b>4 kW</b><br>4 lbs.<br>ECB38-4 (16V86)<br>Terminal Block<br>ECB38-4CB (16V87)<br>35A Circuit breaker | 1             | 208         | 3.0      | 10,250                  | 7.4                                      | 27                                    | ---   | <sup>4</sup> 30                             | ---             | 27                                    | 30                                          |
|                                                                                                        |               | 220         | 3.4      | 11,450                  | 7.4                                      | 28                                    | ---   | <sup>4</sup> 30                             | ---             | 28                                    | 30                                          |
|                                                                                                        |               | 230         | 3.7      | 12,550                  | 7.4                                      | 29                                    | ---   | <sup>4</sup> 30                             | ---             | 29                                    | 30                                          |
|                                                                                                        |               | 240         | 4.0      | 13,650                  | 7.4                                      | 30                                    | ---   | <sup>4</sup> 30                             | ---             | 30                                    | 35                                          |
| <b>5 kW</b><br>4 lbs.<br>ECB38-5 (16V88)<br>Terminal Block<br>ECB38-5CB (16V89)<br>35A Circuit breaker | 1             | 208         | 3.8      | 12,800                  | 7.4                                      | 32                                    | ---   | 35                                          | ---             | 32                                    | 35                                          |
|                                                                                                        |               | 220         | 4.2      | 14,300                  | 7.4                                      | 33                                    | ---   | 35                                          | ---             | 33                                    | 35                                          |
|                                                                                                        |               | 230         | 4.6      | 15,700                  | 7.4                                      | 34                                    | ---   | 35                                          | ---             | 34                                    | 35                                          |
|                                                                                                        |               | 240         | 5.0      | 17,100                  | 7.4                                      | 35                                    | ---   | 35                                          | ---             | 35                                    | 40                                          |
| <b>6 kW</b><br>4 lbs.<br>ECB38-6 (16V90)<br>Terminal Block<br>ECB38-6CB (16V91)<br>40A Circuit breaker | 1             | 208         | 4.5      | 15,400                  | 7.4                                      | 36                                    | ---   | 40                                          | ---             | 36                                    | 40                                          |
|                                                                                                        |               | 220         | 5.0      | 17,100                  | 7.4                                      | 38                                    | ---   | 40                                          | ---             | 38                                    | 40                                          |
|                                                                                                        |               | 230         | 5.5      | 18,800                  | 7.4                                      | 39                                    | ---   | 40                                          | ---             | 39                                    | 40                                          |
|                                                                                                        |               | 240         | 6.0      | 20,500                  | 7.4                                      | 41                                    | ---   | <sup>4</sup> 45                             | ---             | 41                                    | 45                                          |
| <b>8 kW</b><br>5 lbs.<br>ECB38-8 (16V92)<br>Terminal Block<br>ECB38-8CB (16V93)<br>50A Circuit breaker | 2             | 208         | 6.0      | 20,500                  | 7.4                                      | 45                                    | ---   | <sup>4</sup> 45                             | ---             | 45                                    | 50                                          |
|                                                                                                        |               | 220         | 6.7      | 22,900                  | 7.4                                      | 47                                    | ---   | 50                                          | ---             | 47                                    | 50                                          |
|                                                                                                        |               | 230         | 7.3      | 25,100                  | 7.4                                      | 49                                    | ---   | 50                                          | ---             | 49                                    | 50                                          |
|                                                                                                        |               | 240         | 8.0      | 27,300                  | 7.4                                      | 51                                    | ---   | <sup>4</sup> 60                             | ---             | 51                                    | 60                                          |
| <b>9 kW</b><br>5 lbs.<br>ECB38-9CB (16V94)<br>60A Circuit breaker                                      | 2             | 208         | 6.8      | 23,100                  | 7.4                                      | 50                                    | ---   | <sup>4</sup> 45                             | ---             | 50                                    | 50                                          |
|                                                                                                        |               | 220         | 7.6      | 25,800                  | 7.4                                      | 52                                    | ---   | 60                                          | ---             | 52                                    | 60                                          |
|                                                                                                        |               | 230         | 8.3      | 28,200                  | 7.4                                      | 54                                    | ---   | 60                                          | ---             | 54                                    | 60                                          |
|                                                                                                        |               | 240         | 9.0      | 30,700                  | 7.4                                      | 56                                    | ---   | 60                                          | ---             | 56                                    | 60                                          |
| <b>12.5 kW</b><br>10 lbs.<br>ECB38-12.5CB (16V95)<br>(1) 30A and<br>(1) 45A Circuit breaker            | 2             | 208         | 9.4      | 32,000                  | 7.4                                      | 28                                    | 38    | 30                                          | <sup>4</sup> 40 | 66                                    | 70                                          |
|                                                                                                        |               | 220         | 10.5     | 35,800                  | 7.4                                      | 29                                    | 40    | 30                                          | <sup>4</sup> 40 | 69                                    | 70                                          |
|                                                                                                        |               | 230         | 11.5     | 39,200                  | 7.4                                      | 30                                    | 42    | 30                                          | 45              | 72                                    | 80                                          |
|                                                                                                        |               | 240         | 12.5     | 42,600                  | 7.4                                      | 31                                    | 44    | <sup>4</sup> 35                             | 45              | 74                                    | 80                                          |
| <b>15 kW</b><br>12 lbs.<br>ECB38-15CB (16V96)<br>(1) 35A and<br>(1) 60A Circuit breaker                | 2             | 208         | 11.3     | 38,400                  | 7.4                                      | 32                                    | 45    | 35                                          | <sup>4</sup> 50 | 77                                    | 80                                          |
|                                                                                                        |               | 220         | 12.6     | 43,000                  | 7.4                                      | 33                                    | 48    | 35                                          | <sup>4</sup> 50 | 81                                    | 90                                          |
|                                                                                                        |               | 230         | 13.5     | 47,000                  | 7.4                                      | 34                                    | 50    | 35                                          | <sup>4</sup> 50 | 84                                    | 90                                          |
|                                                                                                        |               | 240         | 15.0     | 51,200                  | 7.4                                      | 35                                    | 52    | 35                                          | 60              | 87                                    | 90                                          |
| <b>20 kW</b><br>19 lbs.<br>ECB38-20CB (16V97)<br>(2) 60A Circuit breaker                               | 2             | 208         | 15.0     | 51,200                  | 7.4                                      | 50                                    | 50    | <sup>4</sup> 50                             | <sup>4</sup> 50 | 100                                   | 100                                         |
|                                                                                                        |               | 220         | 16.8     | 57,300                  | 7.4                                      | 52                                    | 53    | 60                                          | 60              | 105                                   | 110                                         |
|                                                                                                        |               | 230         | 18.4     | 62,700                  | 7.4                                      | 54                                    | 55    | 60                                          | 60              | 109                                   | 110                                         |
|                                                                                                        |               | 240         | 20.0     | 68,200                  | 7.4                                      | 56                                    | 57    | 60                                          | 60              | 113                                   | 125                                         |

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

<sup>1</sup> Electric heater capacity only - does not include additional blower motor heat capacity.<sup>2</sup> Amps shown are for blower motor only.<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.<sup>4</sup> Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Replacement Circuit Breakers on page 9.<sup>5</sup> HACR type circuit breaker or fuse.

## ELECTRIC HEAT DATA

## CBA38MV-042 | THREE PHASE

| Model Number                                                             | No. of Stages | Volts Input | kW Input | <sup>1</sup> Btuh Input | <sup>2</sup> Blower Motor Full Load Amps | <sup>3</sup> Minimum Circuit Ampacity |       | <sup>5</sup> Maximum Overcurrent Protection |            | Single Point Power Source             |                                             |
|--------------------------------------------------------------------------|---------------|-------------|----------|-------------------------|------------------------------------------|---------------------------------------|-------|---------------------------------------------|------------|---------------------------------------|---------------------------------------------|
|                                                                          |               |             |          |                         |                                          | Ckt 1                                 | Ckt 2 | Ckt 1                                       | Ckt 2      | <sup>3</sup> Minimum Circuit Ampacity | <sup>5</sup> Maximum Overcurrent Protection |
| <b>8 kW</b><br>5 lbs.<br>ECB38-8 (16V99)<br>Terminal block               | 1             | 208         | 6.0      | 20,500                  | 7.4                                      | 30                                    | ---   | 35                                          | ---        | 30                                    | 35                                          |
|                                                                          |               | 220         | 6.7      | 22,900                  | 7.4                                      | 31                                    | ---   | 35                                          | ---        | 31                                    | 35                                          |
|                                                                          |               | 230         | 7.3      | 25,100                  | 7.4                                      | 32                                    | ---   | 35                                          | ---        | 32                                    | 35                                          |
|                                                                          |               | 240         | 8.0      | 27,300                  | 7.4                                      | 33                                    | ---   | 35                                          | ---        | 33                                    | 35                                          |
| <b>10 kW</b><br>6 lbs.<br>ECB38-10 (16W67)<br>Terminal block             | 1             | 208         | 7.5      | 25,600                  | 7.4                                      | 35                                    | ---   | 40                                          | ---        | 35                                    | 40                                          |
|                                                                          |               | 220         | 8.4      | 28,700                  | 7.4                                      | 37                                    | ---   | 40                                          | ---        | 37                                    | 40                                          |
|                                                                          |               | 230         | 9.2      | 31,400                  | 7.4                                      | 38                                    | ---   | 40                                          | ---        | 38                                    | 40                                          |
|                                                                          |               | 240         | 10.0     | 34,100                  | 7.4                                      | 39                                    | ---   | 40                                          | ---        | 39                                    | 40                                          |
| <b>15 kW</b><br>12 lbs.<br>ECB48-15CB (27A63)<br>50A Circuit breaker     | 1             | 208         | 11.3     | 38,400                  | 7.4                                      | 48                                    | ---   | 50                                          | ---        | 48                                    | 50                                          |
|                                                                          |               | 220         | 12.6     | 43,000                  | 7.4                                      | 51                                    | ---   | <b>460</b>                                  | ---        | 51                                    | 60                                          |
|                                                                          |               | 230         | 13.5     | 47,000                  | 7.4                                      | 52                                    | ---   | <b>460</b>                                  | ---        | 52                                    | 60                                          |
|                                                                          |               | 240         | 15.0     | 51,200                  | 7.4                                      | 54                                    | ---   | <b>460</b>                                  | ---        | 54                                    | 60                                          |
| <b>20 kW</b><br>19 lbs.<br>ECB38-20CB (16W69)<br>(2) 35A Circuit breaker | 2             | 208         | 15.0     | 51,200                  | 7.4                                      | 35                                    | 26    | <b>440</b>                                  | <b>430</b> | 61                                    | 70                                          |
|                                                                          |               | 220         | 16.8     | 57,300                  | 7.4                                      | 37                                    | 28    | <b>440</b>                                  | <b>430</b> | 64                                    | 70                                          |
|                                                                          |               | 230         | 18.4     | 62,700                  | 7.4                                      | 38                                    | 29    | <b>440</b>                                  | <b>430</b> | 67                                    | 70                                          |
|                                                                          |               | 240         | 20.0     | 68,200                  | 7.4                                      | 39                                    | 30    | <b>440</b>                                  | 35         | 69                                    | 70                                          |

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

<sup>1</sup> Electric heater capacity only - does not include additional blower motor heat capacity.

<sup>2</sup> Amps shown are for blower motor only.

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

<sup>4</sup> Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Replacement Circuit Breakers on page 9.

<sup>5</sup> HACR type circuit breaker or fuse.

## ELECTRIC HEAT DATA

## CBA38MV-048 AND CBA38MV-060 | SINGLE PHASE

| Model Number                                                                                           | No. of Stages | Volts Input | kW Input | <sup>1</sup> Btuh Input | <sup>2</sup> Blower Motor Full Load Amps | <sup>3</sup> Minimum Circuit Ampacity |       |       | <sup>5</sup> Maximum Overcurrent Protection |                        |                        | Single Point Power Source             |                                             |
|--------------------------------------------------------------------------------------------------------|---------------|-------------|----------|-------------------------|------------------------------------------|---------------------------------------|-------|-------|---------------------------------------------|------------------------|------------------------|---------------------------------------|---------------------------------------------|
|                                                                                                        |               |             |          |                         |                                          | Ckt 1                                 | Ckt 2 | Ckt 3 | Ckt 1                                       | Ckt 2                  | Ckt 3                  | <sup>3</sup> Minimum Circuit Ampacity | <sup>5</sup> Maximum Overcurrent Protection |
| <b>4 kW</b><br>4 lbs.<br>ECB38-4 (16V86)<br>Terminal Block<br>ECB38-4CB (16V87)<br>35A Circuit breaker | 1             | 208         | 3.0      | 10,250                  | 7.4                                      | 27                                    | ---   | ---   | <sup>4</sup> <b>30</b>                      | ---                    | ---                    | 27                                    | 30                                          |
|                                                                                                        |               | 220         | 3.4      | 11,450                  | 7.4                                      | 28                                    | ---   | ---   | <sup>4</sup> <b>30</b>                      | ---                    | ---                    | 28                                    | 30                                          |
|                                                                                                        |               | 230         | 3.7      | 12,550                  | 7.4                                      | 29                                    | ---   | ---   | <sup>4</sup> <b>30</b>                      | ---                    | ---                    | 29                                    | 30                                          |
|                                                                                                        |               | 240         | 4.0      | 13,650                  | 7.4                                      | 30                                    | ---   | ---   | <sup>4</sup> <b>30</b>                      | ---                    | ---                    | 30                                    | 35                                          |
| <b>5 kW</b><br>4 lbs.<br>ECB38-5 (16V88)<br>Terminal Block<br>ECB38-5CB (16V89)<br>35A Circuit breaker | 1             | 208         | 3.8      | 12,800                  | 7.4                                      | 32                                    | ---   | ---   | 35                                          | ---                    | ---                    | 32                                    | 35                                          |
|                                                                                                        |               | 220         | 4.2      | 14,300                  | 7.4                                      | 33                                    | ---   | ---   | 35                                          | ---                    | ---                    | 33                                    | 35                                          |
|                                                                                                        |               | 230         | 4.6      | 15,700                  | 7.4                                      | 34                                    | ---   | ---   | 35                                          | ---                    | ---                    | 34                                    | 35                                          |
|                                                                                                        |               | 240         | 5.0      | 17,100                  | 7.4                                      | 35                                    | ---   | ---   | 35                                          | ---                    | ---                    | 35                                    | 40                                          |
| <b>6 kW</b><br>4 lbs.<br>ECB38-6 (16V90)<br>Terminal Block<br>ECB38-6CB (16V91)<br>40A Circuit breaker | 1             | 208         | 4.5      | 15,400                  | 7.4                                      | 36                                    | ---   | ---   | 40                                          | ---                    | ---                    | 36                                    | 40                                          |
|                                                                                                        |               | 220         | 5.0      | 17,100                  | 7.4                                      | 38                                    | ---   | ---   | 40                                          | ---                    | ---                    | 38                                    | 40                                          |
|                                                                                                        |               | 230         | 5.5      | 18,800                  | 7.4                                      | 39                                    | ---   | ---   | 40                                          | ---                    | ---                    | 39                                    | 40                                          |
|                                                                                                        |               | 240         | 6.0      | 20,500                  | 7.4                                      | 41                                    | ---   | ---   | <sup>4</sup> <b>45</b>                      | ---                    | ---                    | 41                                    | 45                                          |
| <b>8 kW</b><br>5 lbs.<br>ECB38-8 (16V92)<br>Terminal Block<br>ECB38-8CB (16V93)<br>50A Circuit breaker | 2             | 208         | 6.0      | 20,500                  | 7.4                                      | 45                                    | ---   | ---   | <sup>4</sup> <b>45</b>                      | ---                    | ---                    | 45                                    | 50                                          |
|                                                                                                        |               | 220         | 6.7      | 22,900                  | 7.4                                      | 47                                    | ---   | ---   | 50                                          | ---                    | ---                    | 47                                    | 50                                          |
|                                                                                                        |               | 230         | 7.3      | 25,100                  | 7.4                                      | 49                                    | ---   | ---   | 50                                          | ---                    | ---                    | 49                                    | 50                                          |
|                                                                                                        |               | 240         | 8.0      | 27,300                  | 7.4                                      | 51                                    | ---   | ---   | <sup>4</sup> <b>60</b>                      | ---                    | ---                    | 51                                    | 60                                          |
| <b>9 kW</b><br>5 lbs.<br>ECB38-9CB (16V94)<br>60A Circuit breaker                                      | 2             | 208         | 6.8      | 23,100                  | 7.4                                      | 50                                    | ---   | ---   | <sup>4</sup> <b>50</b>                      | ---                    | ---                    | 50                                    | 50                                          |
|                                                                                                        |               | 220         | 7.6      | 25,800                  | 7.4                                      | 52                                    | ---   | ---   | 60                                          | ---                    | ---                    | 52                                    | 60                                          |
|                                                                                                        |               | 230         | 8.3      | 28,200                  | 7.4                                      | 54                                    | ---   | ---   | 60                                          | ---                    | ---                    | 54                                    | 60                                          |
|                                                                                                        |               | 240         | 9.0      | 30,700                  | 7.4                                      | 56                                    | ---   | ---   | 60                                          | ---                    | ---                    | 56                                    | 60                                          |
| <b>12.5 kW</b><br>10 lbs.<br>ECB38-12.5CB (16V95)<br>(1) 30A and<br>(1) 45A Circuit breaker            | 2             | 208         | 9.4      | 32,000                  | 7.4                                      | 28                                    | 38    | ---   | 30                                          | <sup>4</sup> <b>40</b> | ---                    | 66                                    | 70                                          |
|                                                                                                        |               | 220         | 10.5     | 35,800                  | 7.4                                      | 29                                    | 40    | ---   | 30                                          | <sup>4</sup> <b>40</b> | ---                    | 69                                    | 70                                          |
|                                                                                                        |               | 230         | 11.5     | 39,200                  | 7.4                                      | 30                                    | 42    | ---   | 30                                          | 45                     | ---                    | 72                                    | 80                                          |
|                                                                                                        |               | 240         | 12.5     | 42,600                  | 7.4                                      | 31                                    | 44    | ---   | <sup>4</sup> <b>35</b>                      | 45                     | ---                    | 74                                    | 80                                          |
| <b>15 kW</b><br>12 lbs.<br>ECB38-15CB (16V96)<br>(1) 35A and<br>(1) 60A Circuit breaker                | 2             | 208         | 11.3     | 38,400                  | 7.4                                      | 32                                    | 45    | ---   | 35                                          | <sup>4</sup> <b>50</b> | ---                    | 77                                    | 80                                          |
|                                                                                                        |               | 220         | 12.6     | 43,000                  | 7.4                                      | 33                                    | 48    | ---   | 35                                          | <sup>4</sup> <b>50</b> | ---                    | 81                                    | 90                                          |
|                                                                                                        |               | 230         | 13.5     | 47,000                  | 7.4                                      | 34                                    | 50    | ---   | 35                                          | <sup>4</sup> <b>50</b> | ---                    | 84                                    | 90                                          |
|                                                                                                        |               | 240         | 15.0     | 51,200                  | 7.4                                      | 35                                    | 52    | ---   | 35                                          | 60                     | ---                    | 87                                    | 90                                          |
| <b>20 kW</b><br>19 lbs.<br>ECB38-20CB (16V97)<br>(2) 60A Circuit breaker                               | 2             | 208         | 15.0     | 51,200                  | 7.4                                      | 50                                    | 50    | ---   | <sup>4</sup> <b>50</b>                      | <sup>4</sup> <b>50</b> | ---                    | 100                                   | 100                                         |
|                                                                                                        |               | 220         | 16.8     | 57,300                  | 7.4                                      | 52                                    | 53    | ---   | 60                                          | 60                     | ---                    | 105                                   | 110                                         |
|                                                                                                        |               | 230         | 18.4     | 62,700                  | 7.4                                      | 54                                    | 55    | ---   | 60                                          | 60                     | ---                    | 109                                   | 110                                         |
|                                                                                                        |               | 240         | 20.0     | 68,200                  | 7.4                                      | 56                                    | 57    | ---   | 60                                          | 60                     | ---                    | 113                                   | 125                                         |
| <b>25 kW</b><br>19 lbs.<br>ECB38-25CB (16V98)<br>(1) 60A and<br>(2) 45A Circuit breaker                | 3             | 208         | 18.8     | 64,100                  | 7.4                                      | 47                                    | 38    | 38    | <sup>4</sup> <b>50</b>                      | <sup>4</sup> <b>40</b> | <sup>4</sup> <b>40</b> | 122                                   | 125                                         |
|                                                                                                        |               | 220         | 21.0     | 71,700                  | 7.4                                      | 49                                    | 40    | 40    | <sup>4</sup> <b>50</b>                      | <sup>4</sup> <b>40</b> | <sup>4</sup> <b>40</b> | 129                                   | 150                                         |
|                                                                                                        |               | 230         | 23.0     | 78,300                  | 7.4                                      | 51                                    | 42    | 42    | 60                                          | 45                     | 45                     | 134                                   | 150                                         |
|                                                                                                        |               | 240         | 25.0     | 85,300                  | 7.4                                      | 53                                    | 44    | 44    | 60                                          | 45                     | 45                     | 140                                   | 150                                         |

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

<sup>1</sup> Electric heater capacity only - does not include additional blower motor heat capacity.<sup>2</sup> Amps shown are for blower motor only.<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.<sup>4</sup> Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Replacement Circuit Breakers on page 9.<sup>5</sup> HACR type circuit breaker or fuse.

## ELECTRIC HEAT DATA

## CBA38MV-048 AND CBA38MV-060 | THREE PHASE

| Model Number                                                                            | No. of Stages | Volts Input | kW Input | <sup>1</sup> Btuh Input | <sup>2</sup> Blower Motor Full Load Amps | <sup>3</sup> Minimum Circuit Ampacity |       | <sup>5</sup> Maximum Overcurrent Protection |            | Single Point Power Source             |                                             |
|-----------------------------------------------------------------------------------------|---------------|-------------|----------|-------------------------|------------------------------------------|---------------------------------------|-------|---------------------------------------------|------------|---------------------------------------|---------------------------------------------|
|                                                                                         |               |             |          |                         |                                          | Ckt 1                                 | Ckt 2 | Ckt 1                                       | Ckt 2      | <sup>3</sup> Minimum Circuit Ampacity | <sup>5</sup> Maximum Overcurrent Protection |
| <b>8 kW</b><br>5 lbs.<br>ECB38-8 (16V99)<br>Terminal block                              | 1             | 208         | 6.0      | 20,500                  | 7.4                                      | 30                                    | ---   | 35                                          | ---        | 30                                    | 35                                          |
|                                                                                         |               | 220         | 6.7      | 22,900                  | 7.4                                      | 31                                    | ---   | 35                                          | ---        | 31                                    | 35                                          |
|                                                                                         |               | 230         | 7.3      | 25,100                  | 7.4                                      | 32                                    | ---   | 35                                          | ---        | 32                                    | 35                                          |
|                                                                                         |               | 240         | 8.0      | 27,300                  | 7.4                                      | 33                                    | ---   | 35                                          | ---        | 33                                    | 35                                          |
| <b>10 kW</b><br>6 lbs.<br>ECB38-10 (16W67)<br>Terminal block                            | 1             | 208         | 7.5      | 25,600                  | 7.4                                      | 35                                    | ---   | 40                                          | ---        | 35                                    | 40                                          |
|                                                                                         |               | 220         | 8.4      | 28,700                  | 7.4                                      | 37                                    | ---   | 40                                          | ---        | 37                                    | 40                                          |
|                                                                                         |               | 230         | 9.2      | 31,400                  | 7.4                                      | 38                                    | ---   | 40                                          | ---        | 38                                    | 40                                          |
|                                                                                         |               | 240         | 10.0     | 34,100                  | 7.4                                      | 39                                    | ---   | 40                                          | ---        | 39                                    | 40                                          |
| <b>15 kW</b><br>12 lbs.<br>ECB48-15CB (27A63)<br>50A Circuit breaker                    | 1             | 208         | 11.3     | 38,400                  | 7.4                                      | 48                                    | ---   | 50                                          | ---        | 48                                    | 50                                          |
|                                                                                         |               | 220         | 12.6     | 43,000                  | 7.4                                      | 51                                    | ---   | <b>460</b>                                  | ---        | 51                                    | 60                                          |
|                                                                                         |               | 230         | 13.5     | 47,000                  | 7.4                                      | 52                                    | ---   | <b>460</b>                                  | ---        | 52                                    | 60                                          |
|                                                                                         |               | 240         | 15.0     | 51,200                  | 7.4                                      | 54                                    | ---   | <b>460</b>                                  | ---        | 54                                    | 60                                          |
| <b>20 kW</b><br>19 lbs.<br>ECB38-20CB (16W69)<br>(2) 35A Circuit breaker                | 2             | 208         | 15.0     | 51,200                  | 7.4                                      | 35                                    | 26    | <b>440</b>                                  | <b>430</b> | 61                                    | 70                                          |
|                                                                                         |               | 220         | 16.8     | 57,300                  | 7.4                                      | 37                                    | 28    | <b>440</b>                                  | <b>430</b> | 64                                    | 70                                          |
|                                                                                         |               | 230         | 18.4     | 62,700                  | 7.4                                      | 38                                    | 29    | <b>440</b>                                  | <b>430</b> | 67                                    | 70                                          |
|                                                                                         |               | 240         | 20.0     | 68,200                  | 7.4                                      | 39                                    | 30    | <b>440</b>                                  | 35         | 69                                    | 70                                          |
| <b>25 kW</b><br>19 lbs.<br>ECB38-25CB (16W70)<br>(1) 50A and<br>(1) 40A Circuit breaker | 2             | 208         | 18.8     | 64,100                  | 7.4                                      | 42                                    | 33    | <b>445</b>                                  | <b>435</b> | 74                                    | 80                                          |
|                                                                                         |               | 220         | 21.0     | 71,700                  | 7.4                                      | 44                                    | 34    | <b>445</b>                                  | <b>435</b> | 78                                    | 80                                          |
|                                                                                         |               | 230         | 23.0     | 78,300                  | 7.4                                      | 45                                    | 36    | 50                                          | 40         | 81                                    | 90                                          |
|                                                                                         |               | 240         | 25.0     | 85,300                  | 7.4                                      | 47                                    | 38    | 50                                          | 40         | 84                                    | 90                                          |

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

<sup>1</sup> Electric heater capacity only - does not include additional blower motor heat capacity.

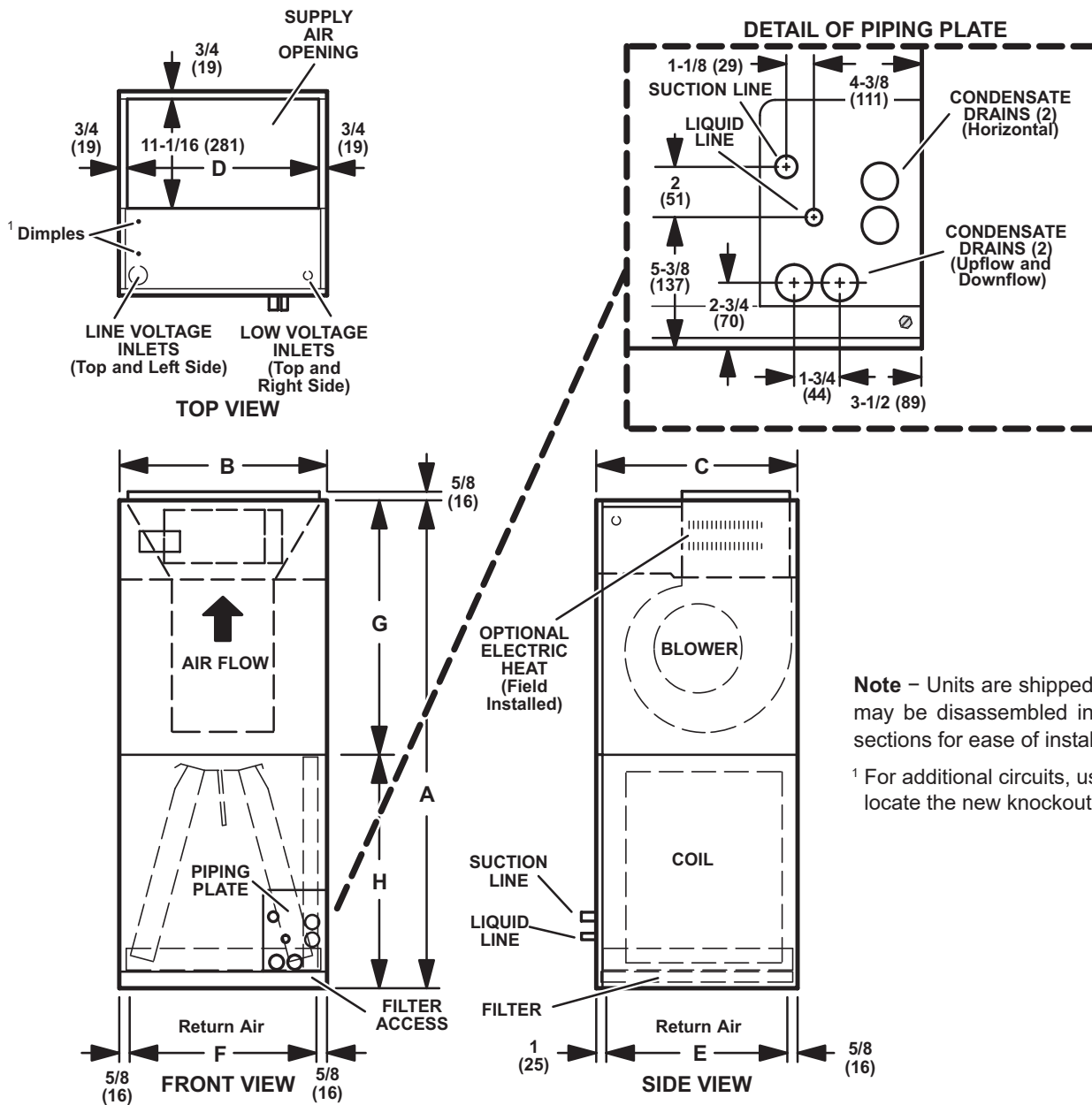
<sup>2</sup> Amps shown are for blower motor only.

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

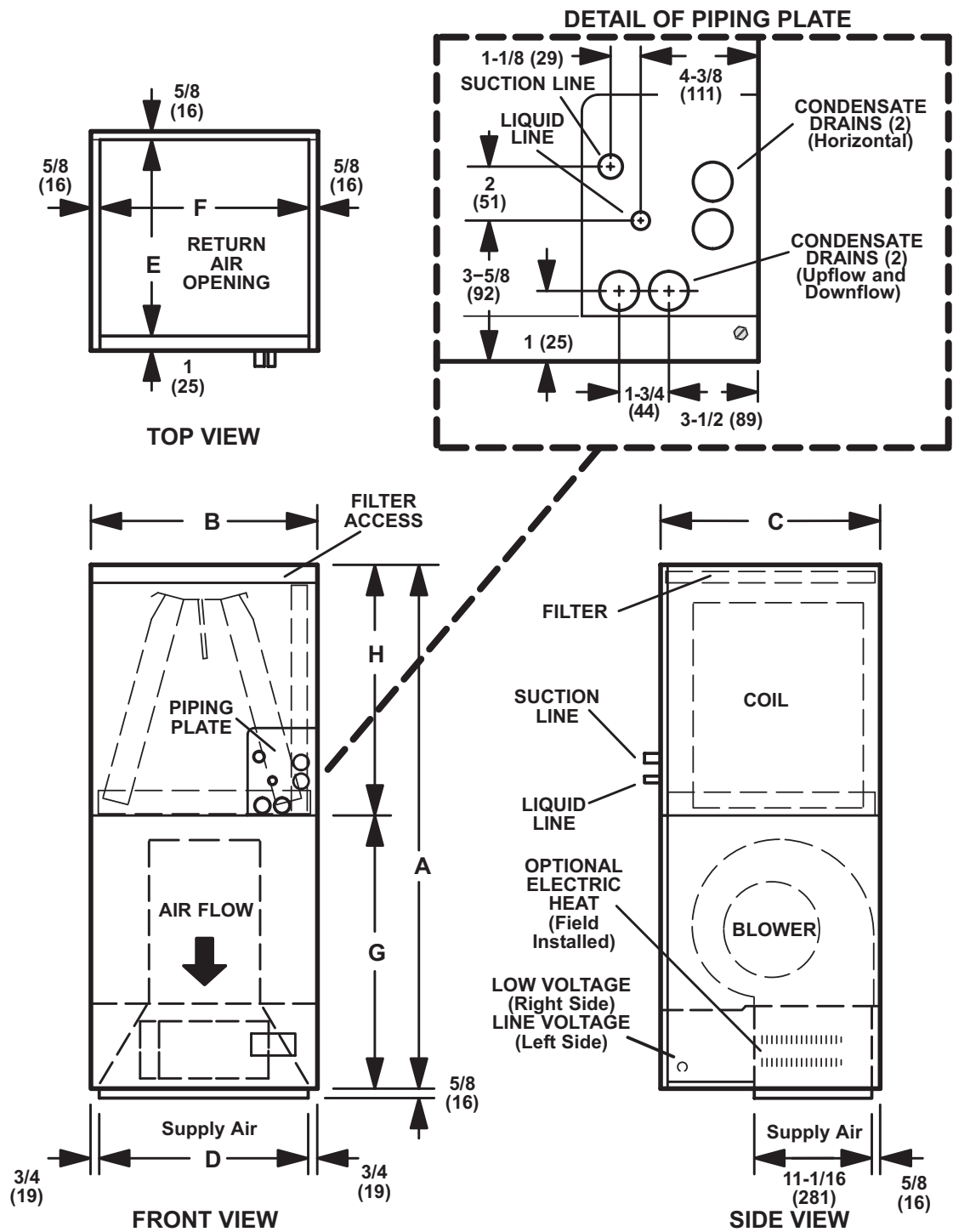
<sup>4</sup> Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Replacement Circuit Breakers on page 9.

<sup>5</sup> HACR type circuit breaker or fuse.

UPFLOW POSITION



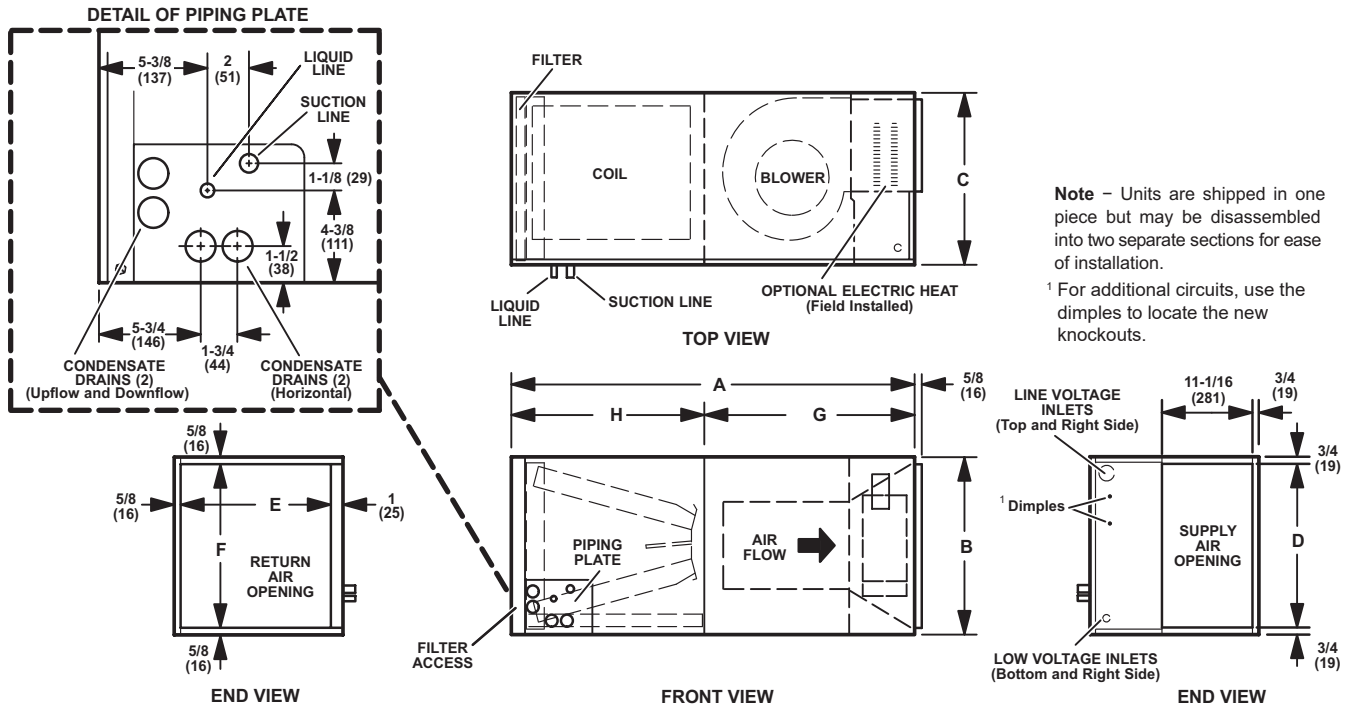
| Model No.                  | A      |      | B      |     | C      |     | D      |     | E  |     | F  |     | G      |     | H      |     |
|----------------------------|--------|------|--------|-----|--------|-----|--------|-----|----|-----|----|-----|--------|-----|--------|-----|
|                            | in     | mm   | in     | mm  | in     | mm  | in     | mm  | in | mm  | in | mm  | in     | mm  | in     | mm  |
| CBA38MV-018/024            | 49-1/4 | 1251 | 21-1/4 | 540 | 20-5/8 | 524 | 19-3/4 | 502 | 19 | 483 | 20 | 508 | 24-5/8 | 625 | 24-5/8 | 625 |
| CBA38MV-030<br>CBA38MV-036 | 51     | 1295 | 21-1/4 | 540 | 22-5/8 | 575 | 19-3/4 | 502 | 21 | 533 | 20 | 508 | 26-3/8 | 670 | 24-5/8 | 625 |
| CBA38MV-042<br>CBA38MV-048 | 58-1/2 | 1486 | 21-1/4 | 540 | 24-5/8 | 625 | 19-3/4 | 502 | 23 | 584 | 20 | 508 | 27-7/8 | 708 | 30-5/8 | 778 |
| CBA38MV-060                | 62-1/2 | 1588 | 21-1/4 | 540 | 24-5/8 | 625 | 19-3/4 | 502 | 23 | 584 | 20 | 508 | 27-7/8 | 708 | 34-5/8 | 879 |



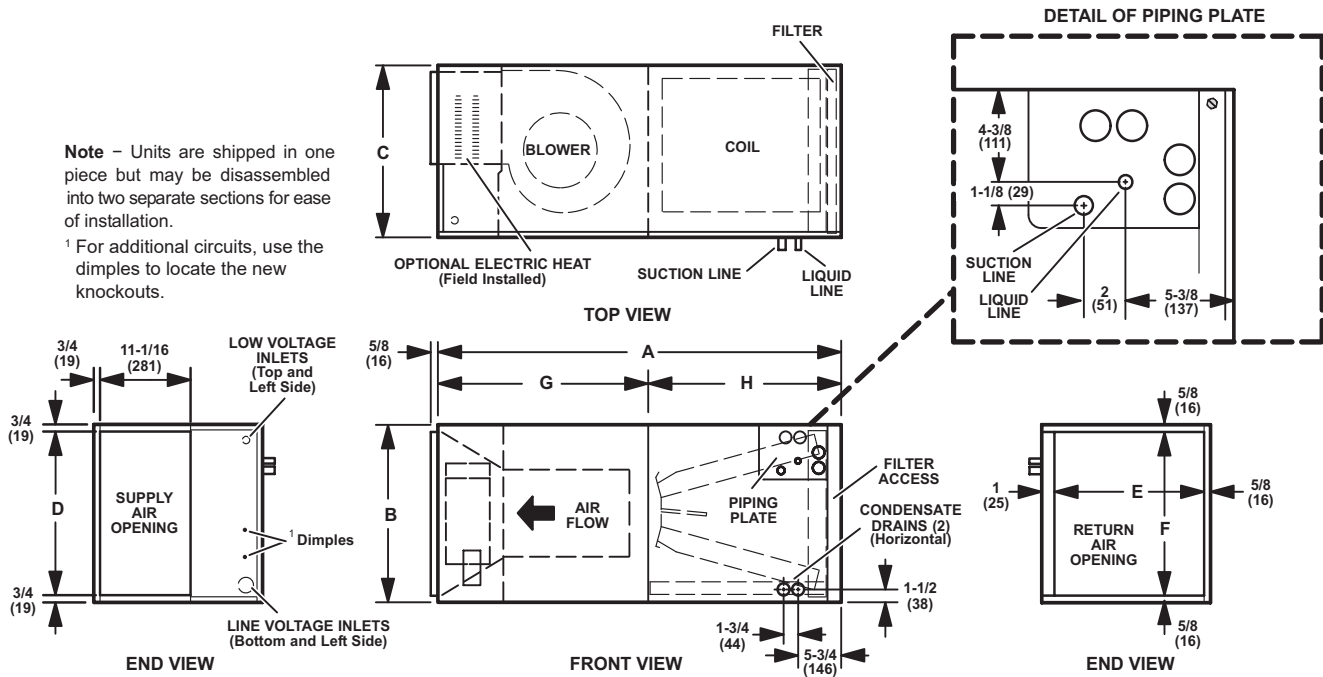
**Note** – Units are shipped in one piece but may be disassembled into two separate sections for ease of installation.

| Model No.                  | A      |      | B      |     | C      |     | D      |     | E  |     | F  |     | G      |     | H      |     |
|----------------------------|--------|------|--------|-----|--------|-----|--------|-----|----|-----|----|-----|--------|-----|--------|-----|
|                            | in     | mm   | in     | mm  | in     | mm  | in     | mm  | in | mm  | in | mm  | in     | mm  | in     | mm  |
| CBA38MV-018/024            | 49-1/4 | 1251 | 21-1/4 | 540 | 20-5/8 | 524 | 19-3/4 | 502 | 19 | 483 | 20 | 508 | 24-5/8 | 625 | 24-5/8 | 625 |
| CBA38MV-030<br>CBA38MV-036 | 51     | 1295 | 21-1/4 | 540 | 22-5/8 | 575 | 19-3/4 | 502 | 21 | 533 | 20 | 508 | 26-3/8 | 670 | 24-5/8 | 625 |
| CBA38MV-042<br>CBA38MV-048 | 58-1/2 | 1486 | 21-1/4 | 540 | 24-5/8 | 625 | 19-3/4 | 502 | 23 | 584 | 20 | 508 | 27-7/8 | 708 | 30-5/8 | 778 |
| CBA38MV-060                | 62-1/2 | 1588 | 21-1/4 | 540 | 24-5/8 | 625 | 19-3/4 | 502 | 23 | 584 | 20 | 508 | 27-7/8 | 708 | 34-5/8 | 879 |

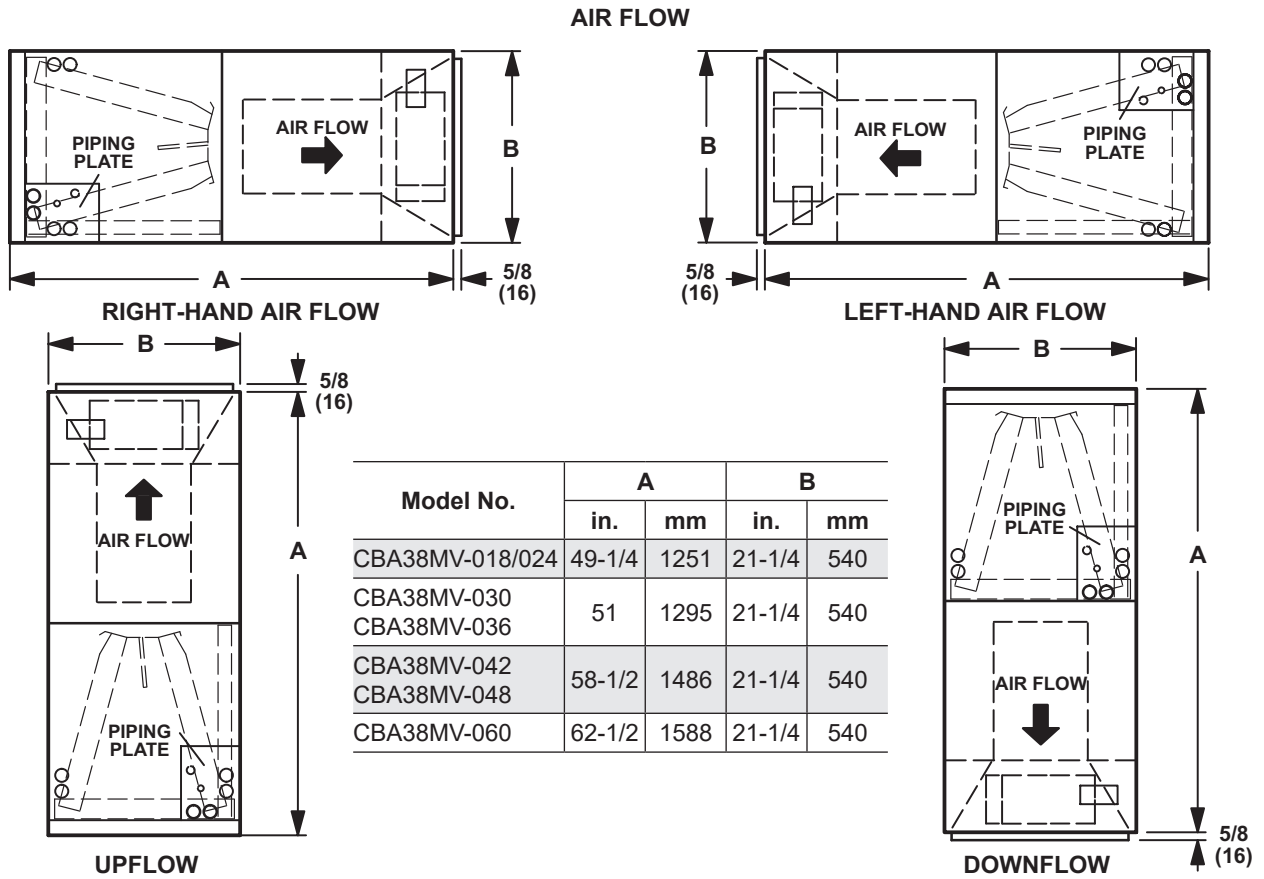
RIGHT-HAND AIR DISCHARGE



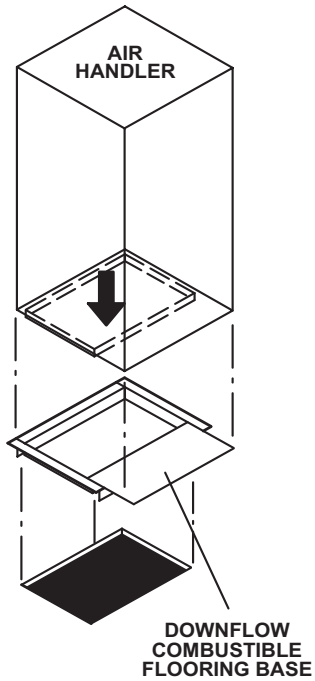
LEFT-HAND AIR DISCHARGE



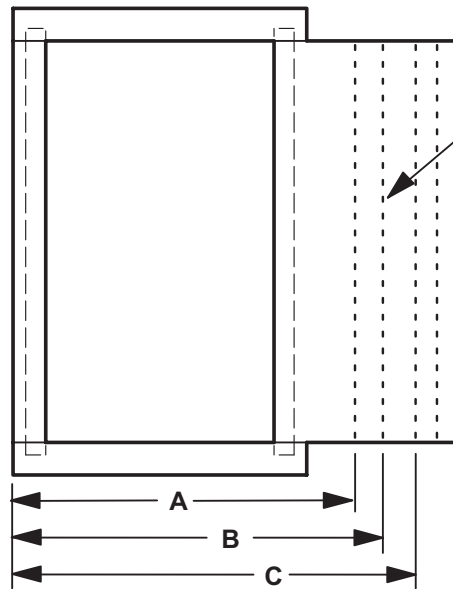
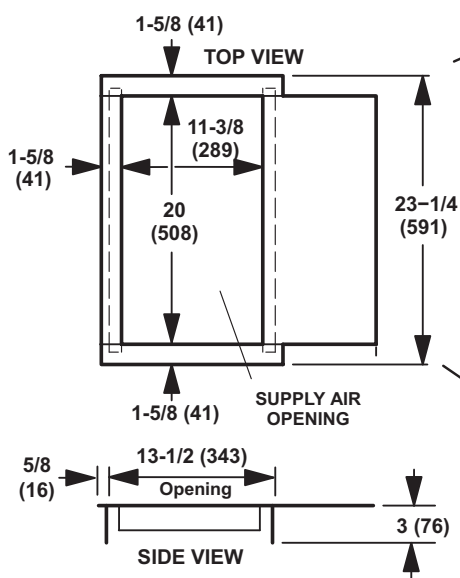
| Model No.       | A      |      | B      |     | C      |     | D      |     | E  |     | F  |     | G      |     | H      |     |
|-----------------|--------|------|--------|-----|--------|-----|--------|-----|----|-----|----|-----|--------|-----|--------|-----|
|                 | in     | mm   | in     | mm  | in     | mm  | in     | mm  | in | mm  | in | mm  | in     | mm  | in     | mm  |
| CBA38MV-018/024 | 49-1/4 | 1251 | 21-1/4 | 540 | 20-5/8 | 524 | 19-3/4 | 502 | 19 | 483 | 20 | 508 | 24-5/8 | 625 | 24-5/8 | 625 |
| CBA38MV-030     | 51     | 1295 | 21-1/4 | 540 | 22-5/8 | 575 | 19-3/4 | 502 | 21 | 533 | 20 | 508 | 26-3/8 | 670 | 24-5/8 | 625 |
| CBA38MV-036     |        |      |        |     |        |     |        |     |    |     |    |     |        |     |        |     |
| CBA38MV-042     | 58-1/2 | 1486 | 21-1/4 | 540 | 24-5/8 | 625 | 19-3/4 | 502 | 23 | 584 | 20 | 508 | 27-7/8 | 708 | 30-5/8 | 778 |
| CBA38MV-048     |        |      |        |     |        |     |        |     |    |     |    |     |        |     |        |     |
| CBA38MV-060     | 62-1/2 | 1588 | 21-1/4 | 540 | 24-5/8 | 625 | 19-3/4 | 502 | 23 | 584 | 20 | 508 | 27-7/8 | 708 | 34-5/8 | 879 |



## DOWNFLOW COMBUSTIBLE FLOORING BASE



Catalog No. – 44K15



Break off extended width at pre-perforated line to fit specific air handler application.  
NOTE - Width of base includes an additional 2 in. (51 mm) for air handler positioning adjustment.

| Model No. | 018/024 |     | 030, 036 |     | 042, 048, 060 |     |
|-----------|---------|-----|----------|-----|---------------|-----|
|           | in.     | mm  | in.      | mm  | in.           | mm  |
| A         | 22-5/8  | 575 | ---      | --- | ---           | --- |
| B         | ---     | --- | 24-5/8   | 625 | ---           | --- |
| C         | ---     | --- | ---      | --- | 26-5/8        | 676 |



# REVISIONS

| Sections           | Description of Change                             |
|--------------------|---------------------------------------------------|
| Electric Heat Data | Updated ECB38-15CB (16W68) to ECB48-15CB (27A63). |



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