



# LHX

## K-Series™ ROOFTOP UNITS

Standard Efficiency | Intelli-Guide™ Controller | **R-454B** | 60Hz

COMMERCIAL  
PRODUCT SPECIFICATIONS (EHB)

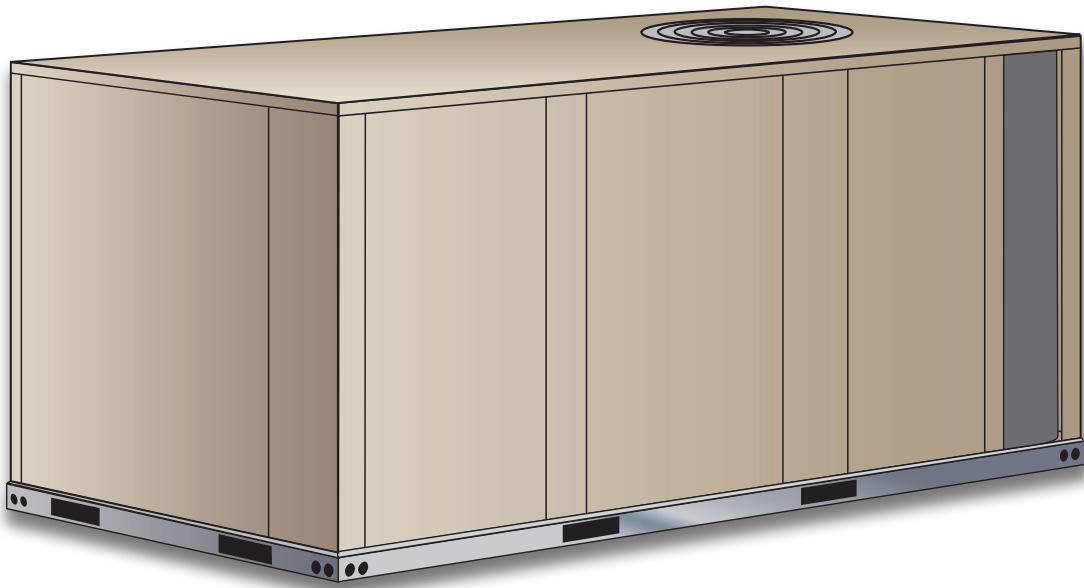
2 to 5 Tons

Net Cooling Capacity - 22,600 to 57,000 Btuh

Net Heating Capacity - 23,000 to 58,000 Btuh

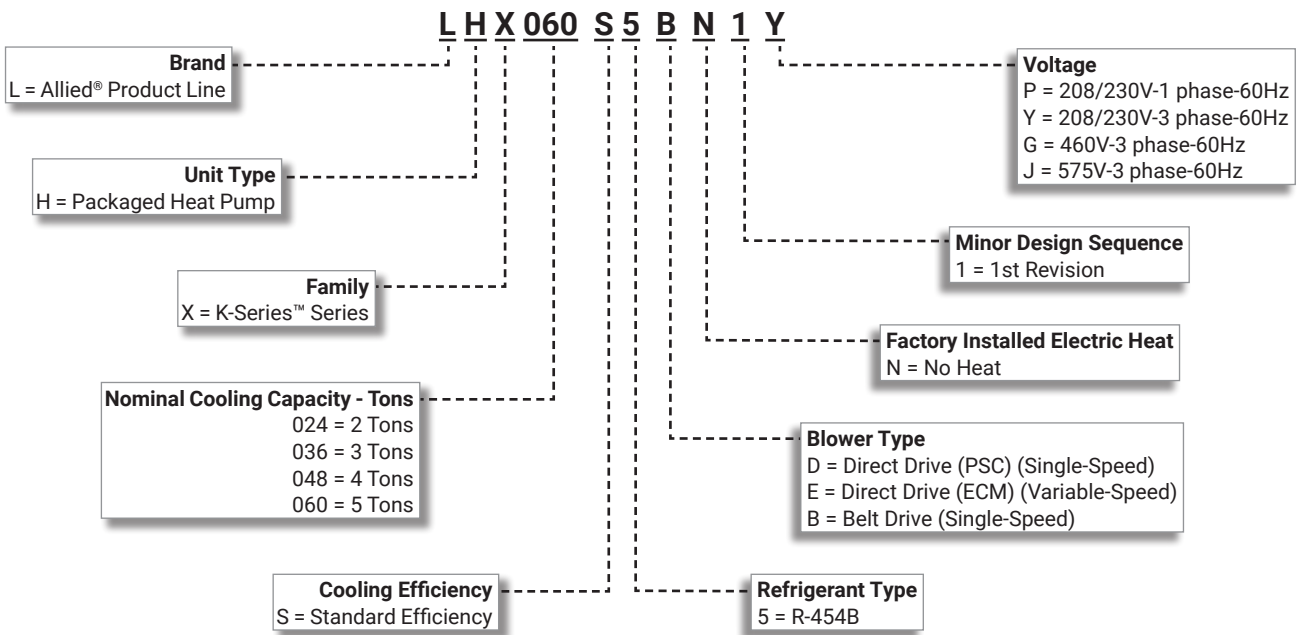
Optional Electric Heat - 5 to 22.5 kW

# K-SERIES™



ASHRAE  
Standard  
**90.1**

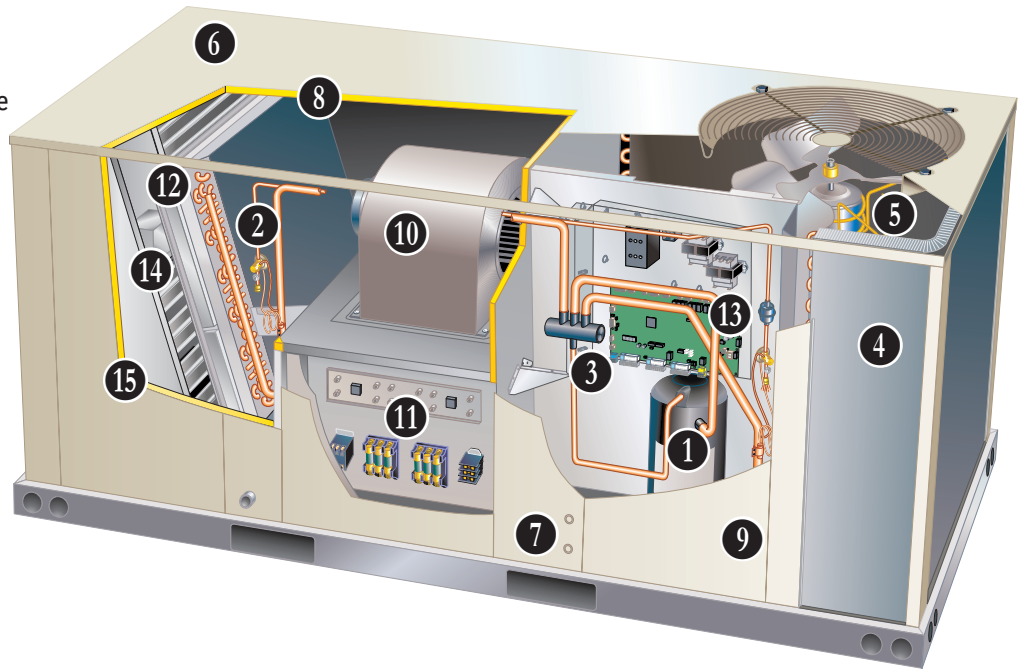
### MODEL NUMBER IDENTIFICATION



## FEATURE HIGHLIGHTS

K-Series rooftop units are engineered with the right technologies and options to meet standard efficiency requirements while delivering reliable performance and year-round comfort.

1. Scroll Compressor
2. Check/Thermal Expansion Valve
3. Reversing Valve
4. Copper Tube Outdoor Coil
5. Outdoor Coil Fan Motor
6. Heavy Gauge Steel Cabinet
7. Power Entry
8. Fully Insulated Cabinet
9. Hinged Access Panels (option)
10. Supply Air Blower
11. Electric Heat (option)
12. Air Filters
13. Intelli-Guide™ Control System
14. Economizer (option)
15. Power Exhaust Fans (option)



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## APPROVALS AND WARRANTY

### APPROVALS

- AHRI Standard 210/240-2023 certified
- ETL and CSA listed
- Unit and components ETL, NEC and CEC bonded for grounding to meet safety standards for servicing
- All models are ASHRAE 90.1 compliant
- All models meet DOE 2023 energy efficiency standards and UL 60335-2-40 Refrigerant Detector Requirements
- All models have HCAI (formerly OSHPD) OSP and Special Seismic Certification ([Number: OSP-0596](#)), and meet 2021 International Building Code (IBC), 2022 California Building Code (CBC) ASCE 7, and ICC-ES AC156
- ISO 9001 Registered Manufacturing Quality System

### WARRANTY

- Compressors - Limited five years
- Intelli-Guide™2.0 Lite Unit Controller - Limited three years
- High Performance Economizers (optional) - Limited five years
- All other covered components - Limited one year

## FEATURES AND BENEFITS

### COOLING / HEATING SYSTEM

- Designed to maximize sensible and latent cooling performance at design conditions
- System can operate mechanical cooling from 30°F to 125°F without any additional controls

#### R-454B Refrigerant

- Low GWP (Global Warming Potential)
- Zero ODP (Ozone Depletion Potential)
- Low Toxicity/Lower Flammability - A2L
- Unit is factory pre-charged

#### 1 Single Speed Scroll Compressor

- Scroll compressors for high performance, reliability and quiet operation
- Resiliently mounted on rubber grommets for quiet operation

#### Compressor Crankcase Heater

- Protects against refrigerant migration that can occur during low ambient operation or during extended off cycles

#### High Pressure Switch

- Protects the system from high pressure conditions

#### Low Pressure Switch

- Protects the compressors from low pressure conditions such as low refrigerant charge or low/no airflow

#### 2 Check/Thermal Expansion Valves

- Assures optimal performance throughout the application range.

#### 3 Reversing Valve

- 4-way interchange reversing valve effects a rapid change in direction of refrigerant flow resulting in quick changeover from cooling to heating and vice versa

#### Filter/Drier

- High capacity filter/drier protects the system from dirt and moisture

#### Indoor Coil Freeze Protection

- Protects the evaporator coil from damaging ice build-up due to conditions such as low/no air flow, or low refrigerant charge

#### 4 Coil Construction

- Copper tube construction
- Enhanced rippled-edge aluminum fins
- Flared shoulder tubing connections
- Silver soldered construction
- Factory leak tested

#### Indoor Coil

- Cross row circuiting
- Rifled copper tubing optimizes both sensible and latent cooling capacity

#### Antimicrobial Condensate Drain Pan

- Composite pan, sloped to meet drainage requirements of ASHRAE 62.1
- Antimicrobial additive resists growth of mold and mildew on drain pan, which improves indoor air quality and reduces drain line blockage
- Side or bottom drain connections
- Reversible to allow connection at back of unit

#### 5 Outdoor Fan Motor

- Thermal overload protected
- Totally enclosed
- Permanently lubricated sleeve bearing
- Shaft up
- Wire basket mount

#### Outdoor Coil Fan

- PVC coated fan guard furnished

## FEATURES AND BENEFITS

### COOLING / HEATING SYSTEM (continued)

#### Required Selections

##### Cooling Capacity

- Specify nominal cooling capacity

#### Options/Accessories

##### Field Installed

##### Condensate Drain Trap

- Available in copper or PVC

##### Drain Pan Overflow Switch

- Monitors condensate level in drain pan
- Shuts down unit if drain becomes clogged

### LOW GWP REFRIGERANT DETECTION SYSTEM (RDS)

- Complies with UL 60335-2-40 approved standard
- Required for all systems using R-454B refrigerant
- Factory installed on all units
- Consists of a refrigerant detection sensor(s) and a mitigation control
- Ensures safe operation for systems equipped with R-454B refrigerant
- Sensor(s) monitors indoor coil area for R-454B refrigerant
- If R-454B refrigerant is detected the refrigerant detection system will prevent compressor and heating operation until R-454B refrigerant is no longer detected
- Refrigeration detection system energizes blower if any R-454B refrigerant is detected to mitigate any concentrations of refrigerant from the unit and the system

### CABINET

#### 6 Construction

- Heavy-gauge steel panels
- Full perimeter heavy-gauge galvanized steel base rail
- Base rails have rigging holes
- Three sides of the base rail have fork slots
- Raised edges around duct and power entry openings in the bottom of the unit for water protection

#### Airflow Choice

- Units are shipped in downflow (vertical) configuration

**NOTE** - Can be field converted to horizontal airflow configuration without any optional kits.

#### 7 Power Entry

- Electrical lines can be brought through the unit base or through horizontal access knock-outs

#### Exterior Panels

- Constructed of heavy-gauge, galvanized steel
- Textured pre-paint with polyurethane finish
- Cyclic salt fog and UV exposure up to 1,680 hours per ASTM D5894

#### 8 Insulation

- Fully insulated with non-hygroscopic fiberglass insulation (conditioned areas)
- Unit base is fully insulated
- Base insulation serves as an air seal to the roof curb, eliminating the need to add a seal during installation

#### Access Panels

- Economizer/Filter section
- Heating/Blower section
- Compressor/Controls section

**NOTE** - Optional Economizers, Power Exhaust, Outdoor Air Dampers and Barometric Relief Dampers include a filler panel for proper cabinet fit.

#### Options/Accessories

##### Factory Installed

#### 9 Hinged Access Panels

- Tool-Less Access
- Economizer/Filter section
- Heating/Blower section
- Compressor/Controls section
- Panel seals and quarter-turn latching handles provide a tight air and water seal

##### Factory or Field Installed

##### Combination Coil/Hail Guards

- Heavy gauge steel frame
- Painted to match cabinet
- Expanded metal mesh protects outdoor coil

## FEATURES AND BENEFITS

### **BLOWER**

- A wide selection of supply air blower options are available to meet a variety of air flow requirements

#### **10 Motor**

- Overload protected
- Ball bearings (ECM and belt drive)
- Sleeve bearings (PSC direct drive).
- Multi-tap direct drive PSC motors are available on 024, 036 and 048 models
- Variable-speed ECM direct drive motors are available on 036, 048 and 060 models
- Single-speed belt drive motor available 060 models to maximize air performance at higher statics
- For ECM motors the amount of airflow for each stage can be set according to a parameter in the Intelli-Guide™ Unit Controller

#### **Supply Air Blower**

- Forward curved blades
- Blower wheel is statically and dynamically balanced
- Belt drive motors have adjustable pulley for speed change

#### **Blower Proving Switch**

- Monitors blower operation, shuts down unit if blower stops

#### **Required Selections**

- Order direct drive or belt drive blower. (See Blower Data Table for specifications)
- Belt Drive - Order drive kit, see Drive Kit Specifications Table

### **ELECTRICAL**

#### **Marked & Color-Coded Wiring**

- All electrical wiring is color-coded and marked to identify which components it is connecting

#### **Electrical Plugs**

- Positive connection electrical plugs are used to connect common accessories or maintenance parts for easy removal or installation

#### **Required Selections**

#### **Voltage Choice**

- Specify when ordering base unit

#### **Options/Accessories**

#### **Factory or Field Installed**

#### **Disconnect Switch up to 150 Amp**

- Accessible from outside of unit
- Spring loaded weatherproof cover furnished

#### **GFI Service Outlets (2)**

- 115V ground fault circuit interrupter (GFCI) type options:
  - Field installed, non-powered, field wired

#### **Field Installed**

#### **11 Electric Heat**

- Helix wound nichrome elements
- Individual element limit controls
- Wiring harness
- Unit fuse block
- See Options / Accessories tables for ordering information

#### **GFI Weatherproof Cover**

- Single-gang cover
- Heavy-duty UV-resistant polycarbonate case construction
- Hinged base cover with gasket

## FEATURES AND BENEFITS

### **INDOOR AIR QUALITY**

12

#### **Air Filters**

- Disposable 2 inch MERV 4 filters furnished as standard

#### **Options/Accessories**

#### **Field Installed**

#### **High Efficiency Air Filters**

- Disposable MERV 8, MERV 13 (Minimum Efficiency Reporting Value based on ASHRAE 52.2) efficiency 2 inch pleated filters

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- Disposable MERV 8, MERV 13 (Minimum Efficiency Reporting Value based on ASHRAE 52.2) efficiency 2 inch pleated filters

#### **Replacement Filter Media Kit With Frame (048-060 Models)**

- Replaces existing pleated filter media
- Includes washable metal mesh screen and metal frame with clip for holding replaceable non-pleated filter

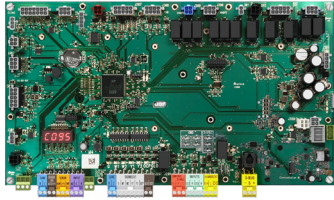
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#### **Indoor Air Quality (CO<sub>2</sub>) Sensors**

- Monitors CO<sub>2</sub> levels
- Reports to the Unit Controller which adjusts economizer dampers as needed

## CONTROL SYSTEM

### INTELLI-GUIDE™ CONTROL SYSTEM



- 13** The Intelli-Guide™ Control system is designed to accelerate equipment install and service. Standard with all K-Series™ rooftop units, control system integrates key technologies that lower installation costs, drive system efficiency, and protect your investments.

The Intelli-Guide™ Unit Controller is a microprocessor-based controller that provides flexible control of all unit functions.

#### Mobile Service App

- Guided Setup with progress indicators, detailed help, and exportable summaries to manage simple, trouble-free setup, reducing commissioning times
- Enhanced Test Functionality provides real-time sensor readings, trending, and reports that enable easy troubleshooting
- Ability to set and configure parameters of the Control System to manage sequence of operation
- Economizer test function ensures economizer is operating correctly

#### Additional Features:

- Built-In 7-Segment Display shows Unit Status and active alarms for easy troubleshooting
- Buttons for test and clearing delays
- WireRight™ System with keyed and removable screw terminals ensure correct field wiring
- Profile setup copies key settings between units with the same configuration to reduce setup time
- USB port allows a technician to download and transfer unit information to help verify service was performed
- USB software updates on the Intelli-Guide™ Unit Controller enhance functionality without the need to change components

#### Configurable Built-In Functions

- Up to three distinct Cooling Airflows in Thermostat Mode
- Programmable independent heating, ventilation and cooling blower speeds
- Economizer Control Options (See Economizer / Exhaust Air / Outdoor Air sections)
- Exhaust Fan Control Modes for fresh air damper position
- Configurable Morning Warm-up
- Night Setback Mode
- Demand Control Ventilation
- Dehumidification Operation

#### Component Protection / Unit Safeguards:

- Compressor Time-Off Delay
- Adjustable Blower On/Off Delay
- Return Air Temperature Limit Control
- Safety Switch Input allows Controller to respond to a external safety switch trip
- Service Relay Output
- Thermostat Bounce Delay
- Smoke Alarm Mode has four choices (unit off, positive pressure, negative pressure, purge)
- “Strike Three” Protection
- Gas Valve Time Delay Between First and Second Stage
- Minimum Compressor Run Time

#### Control Methods / Interfaces:

- DDC and 24V Thermostat
- BACnet MS/TP (Field Option)
- Zone Temperature Sensor Input
- Dehumidistat and Humidity Sensor Inputs
- Indoor Air Quality Inputs (2)
- Built-in Control Parameter Defaults
- Permanent Diagnostic Code Storage
- Field Adjustable Control Parameters (Over 100 settings)
- Multiple Configurable Digital Inputs
- LED Indicators

Intelli-Guide™ Control System features vary with the type of rooftop unit in which the control is installed.

## CONTROL SYSTEM

### INTELLI-GUIDE™ CONTROL SYSTEM (CONTINUED)

#### Controls Options

##### **Field Installed**

##### Dirty Filter Switch

- Senses static pressure increase and issues alarm if necessary

##### **Commercial Control Systems**

##### **Field Installed**

##### Thermostats and Room Sensors

- Control system and thermostat options, see page 11

## OPTIONS / ACCESSORIES

### ECONOMIZER

- 14 • Economizer operation is set and controlled by the Intelli-Guide™ Unit Controller

- Simple plug-in connections from economizer to unit controller for easy installation
- All K-Series™ rooftop units are equipped with factory installed CEC Title 24 approved sensors for outside, return and discharge air temperature monitoring

**NOTE** - Optional sensors may be used instead of unit sensors to determine whether outdoor air is suitable for free cooling. See Options/Accessories table.

#### **Factory or Field Installed**

##### High Performance Economizer

- Approved for California Title 24 building standards
- Low leakage dampers are Air Movement and Control Association International (AMCA) Class 1A Certified - Maximum 3 CFM per sq. ft. leakage at 1 in. w.g.
- ASHRAE 90.1 compliant
- Combination Outdoor Air Hood is furnished
- Factory installed Economizer can be ordered with three exhaust options:
  - Barometric Relief Dampers
  - Power Exhaust Fan

**NOTE** - See Power Exhaust Fan section for additional requirements.

- No Exhaust
- Field installed Economizer includes Barometric Relief Dampers with Combination Hood
- Barometric Relief Dampers allow relief of excess air
- Dampers prevent blow back and outdoor air infiltration during off cycle
- Bird screen furnished

**NOTE** - Barometric Relief Dampers are required when Economizer is factory installed with factory installed Power Exhaust Fan option. See Power Exhaust Fan section and Options/Accessories table.

- Demand Control Ventilation (DCV) ready using optional CO<sub>2</sub> sensors
- Horizontal Barometric Dampers are required for horizontal Economizer applications and must be ordered separately
- Linked damper action
- High torque 24-volt fully-modulating spring return damper motor
- Return air and outdoor air dampers
- Plug-in connections to unit



## OPTIONS/ACCESSORIES

### ECONOMIZER (continued)

#### Factory or Field Installed (continued)

**NOTE** - High Performance Economizers are not approved for use with enthalpy controls in Title 24 applications.

**NOTE** - The Free Cooling setpoint for Title 24 applications must be set based on the Climate Zone where the system is installed. See Section 140.4 "Prescriptive Requirements for Space Conditioning Systems" of the California Energy Commission's 2022 Building Energy Efficiency Standards.

**NOTE** - Refer to Installation Instructions for complete setup information.

#### Single Enthalpy Temperature Control (Not for Title 24)

- Outdoor air enthalpy sensor enables Economizer if the outdoor enthalpy is less than the setpoint of the control

#### Field Installed

##### Differential Enthalpy Control (Not for Title 24)

- Order two Single Enthalpy Controls:
  - One is field installed in the return air section
  - One in the outdoor air section
- Allows the economizer control to select between outdoor air or return air, whichever has lower enthalpy

##### Horizontal Barometric Relief Dampers

- For use when unit is configured for horizontal applications with an economizer
- Allows relief of excess air
- Blade type dampers prevent blow back and outdoor air infiltration during off cycle
- Field installed in return air duct
- Exhaust hood with bird screen furnished
- Requires Horizontal Economizer Conversion Kit

##### Horizontal Economizer Conversion Kit

- Insulated panel covers the bottom return air opening on the unit base to convert downflow economizer to horizontal air flow

### EXHAUST

#### Field Installed

##### **15** Power Exhaust Fan

- Installs internal to unit for downflow applications only with economizer option
- Provides exhaust air pressure relief
- Interlocked to run when supply air blower is operating
- Fan runs when outdoor air dampers are 50% open (adjustable)
- Motor is overload protected
- Fan is 16 in. diameter
- Four blades
- One 1/3 HP motor

**NOTE** - If Power Exhaust is field installed with a factory installed Economizer, the Economizer must be ordered with No Exhaust option. Barometric Relief Dampers must also be ordered separately for field installation.

**NOTE** - If Power Exhaust is factory installed with a factory installed Economizer, Barometric Relief Dampers must also be ordered separately for field installation.

### OUTDOOR AIR

#### Field Installed

##### Outdoor Air Damper

- Downflow or Horizontal
- Linked mechanical dampers
- 0 to 25% (fixed) outdoor air adjustable
- Installs in unit
- Includes outdoor air hood
- Motorized model features fully modulating spring return damper motor with plug-in connection
- Manual model features parallel blade, gear-driven dampers with adjustable fixed position

## OPTIONS/ACCESSORIES

### **ROOF CURBS**

#### **Field Installed**

- Nailer strip furnished (downflow only)
- Mates to unit
- US National Roofing Contractors Approved
- Shipped knocked down

#### **Hybrid Roof Curbs, Downflow**

- Interlocking tabs fasten corners together
- No tools required for assembly
- Can also be fastened together with furnished hardware
- Available in 8, 14, 18, and 24 inch heights

#### **Adjustable Pitch Curb**

- Fully adjustable pitch curbs (3/4 in. per foot in any direction) provide a level platform for rooftop units allowing flexible installations on roofs with uneven or sloped angles
- Interlocking tabs fasten corners together
- No tools required for assembly
- Hardware is furnished to connect upper curb with lower curb
- Available in 14 inch height

#### **Adaptor Curbs (not shown)**

- Curbs are regionally sourced
- Dimensions vary based upon the source

**NOTE** - Contact your local sales representative for a detailed cut sheet with applicable dimensions.

### **CEILING DIFFUSERS**

#### **Field Installed**

##### **Ceiling Diffusers**

##### **(Flush or Step-Down)**

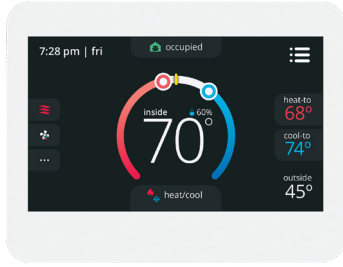
- White powder coat finish on diffuser face and grilles
- Insulated UL listed duct liner
- Diffuser box has collars for duct connection
- Step-down diffusers have double deflection blades
- Flush diffusers have fixed blades
- Provisions for suspending
- Internally sealed to prevent recirculation
- Removable return air grille
- Adapts to T-bar ceiling grids or plaster ceilings

##### **Transitions (Supply and Return)**

- Used with diffusers
- Installs in roof curb
- Galvanized steel construction
- Flanges furnished for duct connection to diffusers
- Fully insulated

## OPTIONAL CONVENTIONAL TEMPERATURE CONTROL SYSTEMS

### CS8500 Commercial 7-Day Programmable Thermostat



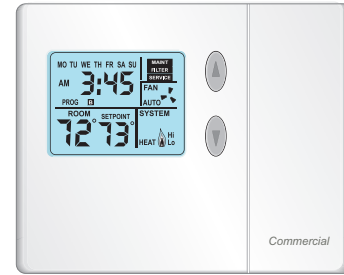
- Fully Communicating Sensor
- Full Color Touchscreen Interface
- Variable Speed System Control (On Compatible Units)
- Up To 4 Heat / 4 Cool
- Built-In Sensors For Temperature, Humidity And Optional CO<sub>2</sub>
- Remote Sensor Options For Occupancy, Temperature
- BACnet Capable Options
- 5-2 or 7-Day Scheduling
- Smooth Setback Recovery
- Heat/Cool Auto-Changeover
- Four-Wire Installation
- FDD, ASHRAE, IECC Compliant

### CS7500 Commercial 7-Day Programmable Thermostat



- Premium Universal Thermostat
- Full Color Touchscreen Interface
- Up To 4 Heat / 3 Cool
- Built-In Sensors For Temperature and Humidity
- Remote Sensors Options For Temperature, Discharge Air, Outdoor Air
- 5-2 or 7-Day Scheduling
- Smooth Setback Recovery
- Heat/Cool Auto-Changeover
- FDD, ASHRAE, IECC Compliant

### CS3000 Commercial 5-2 Day Programmable Thermostat



- Conventional Multi-Stage Thermostat
- Intuitive Display
- Push-Button Operation
- Up To 2 Heat / 2 Cool
- Built-In Temperature Sensor
- Remote Temperature Sensing
- Up to 5-2 Day Scheduling
- Smooth Setback Recovery
- Heat/Cool Auto-changeover

## OPTIONAL CONVENTIONAL TEMPERATURE CONTROL SYSTEMS

Description	Order Number
<b>CS8500 Commercial 7 Day Programmable Thermostat</b>	
CS8500 7-Day Thermostat	No CO <sub>2</sub> Sensing <b>24K55</b>
	With CO <sub>2</sub> Sensing <b>24K53</b>
Sensors/Accessories	<sup>1</sup> Remote non-adjustable wall-mount 10k <b>47W37</b>
	<sup>1</sup> Remote non-adjustable wall-mount 11k <b>94L61</b>
<b>Sysbus Network Cable (Yellow) for CS8500 and LCS-5030 Wired Room Sensor</b>	
Twisted pair 100% shielded communication cable, Red and Black	500 ft. box <b>27M19</b>
22 AWG, yellow jacket, rated at 75°C, 300V, Plenum rated	1000 ft. box <b>94L63</b>
Insulation - Low smoke PVC, NEC, CMP	2500 ft. roll <b>68M25</b>
<b>CS7500 Commercial 7-Day Programmable Thermostat</b>	
CS7500 7-Day Thermostat	<b>24K41</b>
Sensors/Accessories	<sup>2</sup> Remote non-adjustable wall-mount 20k <b>47W36</b>
	<sup>2</sup> Remote non-adjustable wall-mount 10k <b>47W37</b>
	Remote non-adjustable discharge air (duct mount) <b>19L22</b>
	Outdoor temperature sensor <b>X2658</b>
<b>CS3000 Commercial 5-2 Day Programmable Thermostat</b>	
CS3000 5-2 Day Thermostat	<b>11Y05</b>
Sensors/Accessories	Remote non-adjustable wall mount 10k averaging <b>47W37</b>
	Thermostat wall mounting plate <b>X2659</b>
<b>Universal Thermostat Guard with Lock (clear)</b>	
	Inside Dimensions (H x W x D) 5-7/8 x 8-3/8 x 3 in. <b>39P21</b>

<sup>1</sup> Up to nine of the same type remote temperature sensors can be connected in parallel.

<sup>2</sup> Remote wall-mount sensors can be applied in any of the following combinations:

One Sensor - (1) 47W36, Two Sensors - (2) 47W37, Three Sensors - (2) 47W36 and (1) 47W37  
 Four Sensors - (4) 47W36, Five Sensors - (3) 47W36 and (2) 47W37

## OPTIONS / ACCESSORIES

Item	Order Number	Size				
		024	036	048	060	
<b>COOLING SYSTEM</b>						
Condensate Drain Trap	PVC	<b>22H54</b>	X	X	X	X
	Copper	<b>76W27</b>	X	X	X	X
Drain Pan Overflow Switch		<b>21Z07</b>	X	X	X	X
<b>BLOWER - SUPPLY AIR</b>						
Motors	Direct Drive (PSC) - 0.25 HP (208/230V-1ph)	Factory	O			
	Direct Drive (PSC) - 0.50 HP (All Voltages)	Factory		O	O	
	Direct Drive (ECM) - 1 HP (All Voltages)	Factory		O	O	O
	Single-Speed Belt Drive - 2 HP (208/230V, 460V, 575V-3ph)	Factory				O
Drive Kit	Kit A07 - 1212-1548 rpm	Factory				O
<b>CABINET</b>						
Combination Coil/Hail Guards		<b>13R98</b>	OX	OX		
		<b>13T03</b>			OX	OX
Hinged Access Panels			O	O	O	O
<b>CONTROLS</b>						
BACnet® Module		<b>38B35</b>	X	X	X	X
Dirty Filter Switch		<b>53W66</b>	X	X	X	X
<b>NOTE - Also see Conventional Thermostat Control Systems on page 12 for Additional Options.</b>						
Smoke Detector - Supply or Return (Power board and one sensor)		<b>21Z11</b>	X	X	X	X
Smoke Detector - Supply and Return (Power board and two sensors)		<b>21Z12</b>	X	X	X	X

NOTE - The order and model numbers that appear here are for ordering field installed accessories only.

OX - Field Installed or Configure to Order (factory installed)

O - Configure to Order (Factory Installed)

X - Field Installed

## OPTIONS / ACCESSORIES

Item	Order Number	Size				
		024	036	048	060	
<b>ECONOMIZER</b>						
<b>High Performance Economizer With Combination Outdoor Air Hood (Sensible Control) (Approved for California Title 24 Building Standards / AMCA Class 1A Certified)</b>						
Includes Barometric Relief Dampers and Combination Hood	<b>20H48</b>	OX	OX	OX	OX	
<b>Economizer Accessories</b>						
Horizontal Economizer Conversion Kit	<b>17W45</b>	X	X	X	X	
<b>Economizer Controls</b>						
Single Enthalpy Control	<b>21Z09</b>	OX	OX	OX	OX	
Differential Enthalpy Control (order 2) (Not for Title 24)	<b>21Z09</b>	X	X	X	X	
<b>POWER EXHAUST FAN</b>						
Standard Static	208/230V-1 or 3ph	<b>21Z13</b>	X	X	X	X
<i>NOTE - Field installed Power Exhaust Fan requires "Barometric Relief Dampers for Power Exhaust Kit" for field installation. See below.</i>	460V-3ph	<b>21Z14</b>		X	X	X
	575V-3ph	<b>21Z15</b>		X	X	X
<b>BAROMETRIC RELIEF</b>						
<sup>1</sup> Barometric Relief Dampers for Power Exhaust Kit		<b>21Z21</b>		X	X	X
<sup>2</sup> Horizontal Barometric Relief Dampers With Exhaust Hood		<b>19F01</b>	X	X	X	X
<b>OUTDOOR AIR</b>						
<b>Outdoor Air Dampers - Includes Outdoor Air Hood</b>						
Motorized		<b>15D17</b>	X	X	X	X
Manual		<b>15D18</b>	X	X	X	X

<sup>1</sup> Required when Economizer is factory installed with field installed Power Exhaust Fan option.

<sup>2</sup> Required when Economizer is configured for horizontal airflow.

NOTE - The order and model numbers that appear here are for ordering field installed accessories only.

OX - Field Installed or Configure to Order (factory installed)

O - Configure to Order (Factory Installed)

X - Field Installed

## OPTIONS / ACCESSORIES

Item	Order Number	Size				
		024	036	048	060	
<b>ELECTRICAL</b>						
Disconnect	See Electrical/Electric Heat Tables for selection	OX	OX	OX	OX	
Voltage 60 Hz	208/230V - 1 phase	O	O	O	O	
	208/230V - 3 phase		O	O	O	
	460V - 3 phase		O	O	O	
	575V - 3 phase		O	O	O	
GFI Service Outlets	15 amp non-powered, field-wired (208/230V, 460V only)	<b>74M70</b>	X	X	X	X
	<sup>3</sup> 20 amp non-powered, field-wired (208/230V, 460V, 575V)	<b>67E01</b>	X	X	X	X
Weatherproof Cover for GFI		<b>10C89</b>	X	X	X	X
<b>ELECTRIC HEAT</b>						
5 kW	208/240V- 1ph	<b>31B27</b>	X			
7.5 kW	208/240V-1ph	<b>24U10</b>	X	X	X	X
	208/240V-3ph	<b>24U11</b>		X	X	X
	460V-3ph	<b>24U12</b>		X	X	X
	575V-3ph	<b>24U13</b>		X	X	X
10 kW	208/240V-1ph	<b>24U14</b>	X			
15 kW	208/230V-1ph	<b>24U15</b>		X	X	X
	208/240V-3ph	<b>24U16</b>		X	X	X
	460V-3ph	<b>24U17</b>		X	X	X
	575V-3ph	<b>24U18</b>		X	X	X
22.5 kW	208/240V-1ph	<b>24U19</b>				X
	208/240V-3ph	<b>24U20</b>				X
	460V-3ph	<b>24U21</b>				X
	575V-3ph	<b>24U22</b>				X

<sup>3</sup> Canada requires a minimum 20 amp circuit. Select 20 amp, non-powered, field wired GFI.

NOTE - The order and model numbers that appear here are for ordering field installed accessories only.

OX - Field Installed or Configure to Order (factory installed)

O - Configure to Order (Factory Installed)

X - Field Installed





SPECIFICATIONS - DIRECT DRIVE BLOWER		2 TON   3 TON		
Model		LHX024S5D	LHX036S5D	LHX036S5E
Nominal Tonnage		2	3	3
Efficiency Type		Standard	Standard	Standard
Blower Type		Multi-Tap Direct Drive	Multi-Tap Direct Drive	Variable-Speed Direct Drive
Cooling Performance	Gross Cooling Capacity (Btuh)	24,600	36,300	36,300
	<sup>1</sup> Net Cooling Capacity (Btuh)	22,600	34,600	34,600
	<sup>1</sup> AHRI Rated Air Flow (cfm)	900	1200	1200
	<sup>1</sup> SEER2 (Btuh/Watt)	13.4	13.4	13.4
	<sup>1</sup> EER2 (Btuh/Watt)	10.6	10.6	10.6
	Total Unit Power (kW)	2.1	3.3	3.3
Heating Performance	<sup>1</sup> Total High Heating Capacity (Btuh)	23,000	35,000	35,000
	<sup>1</sup> AHRI Rated Air Flow (cfm)	900	1200	1200
	<sup>1</sup> HSPF2 (Region IV)	6.7	6.7	6.7
	<sup>1</sup> HSPF2 (Region V)	5.70	5.90	5.90
	<sup>1</sup> COP	3.50	3.64	3.64
	Total Unit Power (kW)	2.2	2.9	2.9
	<sup>1</sup> Total Low Heating Capacity (Btuh)	13,000	20,400	20,400
	<sup>1</sup> COP	2.28	2.32	2.32
	Total Unit Power (kW)	1.8	2.7	2.7
	Sound Rating Number	dBA	75	75
Refrigerant Charge	Refrigerant Type	R-454B	R-454B	R-454B
		12 lbs. 8 oz.	12 lbs. 0 oz.	12 lbs. 0 oz.
Electric Heat Available		See page 15		
Compressor Type (Number)		Scroll (1)	Scroll (1)	Scroll (1)
Outdoor Coil	Net face area - ft. <sup>2</sup>	14.5	14.5	14.5
	Rows	2	2	2
	Fins - in.	23 (20)	23 (20)	23 (20)
Outdoor Coil Fan	Motor HP (number and type)	1/4 (1 PSC)	1/4 (1 PSC)	1/4 (1 PSC)
	Rpm	825	825	825
	Watts	325	325	325
	Diameter (Number) - in.	(1) 24	(1) 24	(1) 24
	Blades	3	3	3
	Total air volume - cfm	3300	3300	3300
	Indoor Coil	Net face area - ft. <sup>2</sup>	7.8	7.8
Rows		3	3	3
Fins - in.		14	14	14
Condensate drain size (NPT) - in.		(1) 1	(1) 1	(1) 1
Expansion device type		Balanced Port Thermostatic Expansion Valve		
	Blower Type	PSC	PSC	ECM
Indoor Blower	Nominal Motor HP	0.25	0.5	1
	Wheel (Number) diameter x width - in.	(1) 10 x 10	(1) 10 x 10	(1) 11 x 10
Filters	Type	Disposable		
	Number and size - in.	(4) 16 x 20 x 2		
Line voltage data (Volts-Phase-Hz)		208/230V-1-60	208/230V-1-60 208/230-3-60 460-3-60 575-3-60	

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

<sup>1</sup> AHRI Certified to AHRI Standard 210/240:

**Cooling Ratings** - 95°F outdoor air temperature and 80°F db/67°F wb entering indoor coil air.

**High Temperature Heating Ratings** - 47°F db/43°F wb outdoor air temperature and 70°F entering indoor coil air.

**Low Temperature Heating Ratings** - 17°F db/15°F wb outdoor air temperature and 70°F entering indoor coil air.

SPECIFICATIONS - DIRECT DRIVE BLOWER			4 TON   5 TON		
Model		LHX048S5D	LHX048S5E	LHX060S5E	
Nominal Tonnage		4	4	5	
Efficiency Type		Standard	Standard	Standard	
Blower Type		Multi-Tap Direct Drive	Variable-Speed Direct Drive	Variable-Speed Direct Drive	
Cooling Performance	Gross Cooling Capacity (Btuh)	48,700	48,700	60,600	
	<sup>1</sup> Net Cooling Capacity (Btuh)	46,000	46,000	57,000	
	<sup>1</sup> AHRI Rated Air Flow (cfm)	1620	1620	1800	
	<sup>1</sup> SEER2 (Btuh/Watt)	13.4	13.4	13.4	
	<sup>1</sup> EER2 (Btuh/Watt)	10.6	10.6	10.6	
	Total Unit Power (kW)	4.4	4.4	5.4	
Heating Performance	<sup>1</sup> Total High Heating Capacity (Btuh)	47,500	47,500	58,000	
	<sup>1</sup> AHRI Rated Air Flow (cfm)	1620	1620	1800	
	<sup>1</sup> HSPF2 (Region IV)	6.7	6.7	6.7	
	<sup>1</sup> HSPF2 (Region V)	6.2	6.20	6.36	
	<sup>1</sup> COP	3.72	3.72	3.7	
	Total Unit Power (kW)	3.9	3.9	4.5	
	<sup>1</sup> Total Low Heating Capacity (Btuh)	27,400	27,400	33,000	
	<sup>1</sup> COP	2.4	2.4	2.4	
	Total Unit Power (kW)	3.7	3.7	4.2	
Sound Rating Number	dBA	75	75	80	
Refrigerant Charge	Refrigerant Type	R-454B	R-454B	R-454B	
		16 lbs. 12 oz.	16 lbs. 12 oz.	15 lbs. 10 oz.	
Electric Heat Available		See page 15			
Compressor Type (Number)		Scroll (1)	Scroll (1)	Scroll (1)	
Outdoor Coil	Net face area - ft. <sup>2</sup>	17.8	17.8	17.8	
	Rows	2	3	3	
	Fins - in.	20	20	20	
Outdoor Coil Fan	Motor HP (number and type)	1/4 (1 PSC)	1/3 (1 PSC)	1/3 (1 PSC)	
	Rpm	875	1075	1075	
	Watts	325	325	325	
	Diameter (Number) - in.	(1) 24	(1) 24	(1) 24	
	Blades	3	3	3	
	Total air volume - cfm	3300	3900	3900	
Indoor Coil	Net face area - ft. <sup>2</sup>	9.7	9.7	9.7	
	Rows	4	4	4	
	Fins - in.	14	14	14	
	Condensate drain size (NPT) - in.	(1) 1	(1) 1	(1) 1	
	Expansion device type	Balanced Port Thermostatic Expansion Valve			
	Blower Type	PSC	ECM	ECM	
Indoor Blower	Nominal Motor HP	0.5	1	1	
	Wheel (Number) diameter x width - in.	(1) 10 x 10	(1) 11 x 10	(1) 11 x 10	
Filters	Type	Disposable			
	Number and size - in.	(4) 16 x 20 x 2			
Line voltage data (Volts-Phase-Hz)		208/230V-1-60 208/230-3-60 460-3-60 575-3-60			

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

<sup>1</sup> AHRI Certified to AHRI Standard 210/240:

**Cooling Ratings** - 95°F outdoor air temperature and 80°F db/67°F wb entering indoor coil air.

**High Temperature Heating Ratings** - 47°F db/43°F wb outdoor air temperature and 70°F entering indoor coil air.

**Low Temperature Heating Ratings** - 17°F db/15°F wb outdoor air temperature and 70°F entering indoor coil air.

**SPECIFICATIONS - BELT DRIVE BLOWER** **5 TON**

<b>Model</b>	<b>LHX060S5B</b>	
<b>Nominal Tonnage</b>	5	
<b>Efficiency Type</b>	Standard	
<b>Blower Type</b>	Single Speed Belt Drive	
<b>Cooling Performance</b>	Gross Cooling Capacity (Btuh)	60,600
	<sup>1</sup> Net Cooling Capacity (Btuh)	57,000
	<sup>1</sup> AHRI Rated Air Flow (cfm)	1800
	<sup>1</sup> SEER2 (Btuh/Watt)	13.4
	<sup>1</sup> EER2 (Btuh/Watt)	10.6
	Total Unit Power (kW)	5.4
<b>Heating Performance</b>	<sup>1</sup> Total High Heating Capacity (Btuh)	58,000
	<sup>1</sup> AHRI Rated Air Flow (cfm)	1800
	<sup>1</sup> HSPF2 (Region IV)	6.7
	<sup>1</sup> COP	3.7
	Total Unit Power (kW)	4.5
	<sup>1</sup> Total Low Heating Capacity (Btuh)	33,000
	<sup>1</sup> COP	2.4
	Total Unit Power (kW)	4.2
<b>Sound Rating Number</b>	dBA	80
<b>Refrigerant Charge</b>	Refrigerant Type	R-454B
		15 lbs. 0 oz.
<b>Electric Heat Available</b>	See page 15	
<b>Compressor Type (Number)</b>	Scroll (1)	
<b>Outdoor Coil</b>	Net face area - sq. ft.	17.8
	Rows	3
	Fins - in.	20
<b>Outdoor Coil Fan</b>	Motor HP (number and type)	1/3 (1 PSC)
	Rpm	1075
	Watts	375
	Diameter (Number) - in.	(1) 24
	Blades	4
	Total air volume - cfm	3900
<b>Indoor Coil</b>	Net face area - sq. ft.	8.7
	Rows	4
	Fins - in.	14
	Condensate drain size (NPT) - in.	(1) 1
	Expansion device type	Balanced Port Thermostatic Expansion Valve
<sup>3</sup> <b>Indoor Blower &amp; Drive Selection</b>	Nominal Motor HP	2
	Maximum Usable Motor HP (US)	2.3
	Available Drive Kits	A07 1212 - 1548 rpm
	Wheel (Number) diameter x width - in.	(1) 10 x 10
<b>Filters</b>	Type	Disposable
	Number and size - in.	(4) 20 x 20 x 2
<b>Line voltage data (Volts-Phase-Hz)</b>	208/230-3-60	
	460-3-60	
	575-3-60	

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

<sup>1</sup> AHRI Certified to AHRI Standard 210/240:

**Cooling Ratings** - 95°F outdoor air temperature and 80°F db/67°F wb entering indoor coil air.

**High Temperature Heating Ratings** - 47°F db/43°F wb outdoor air temperature and 70°F entering indoor coil air.

**Low Temperature Heating Ratings** - 17°F db/15°F wb outdoor air temperature and 70°F entering indoor coil air.

<sup>2</sup> Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor HP required. Maximum usable HP of motors furnished are shown. In Canada, nominal motor HP is also maximum usable motor HP. If motors of comparable HP are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

## COOLING / HEATING RATINGS

NOTE – For Temperatures and Capacities not shown in tables, see bulletin – Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

### 2 TON COOLING - LHX024S5

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		85°F						95°F						105°F						115°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
		cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F			
63°F	640	23.1	1.27	0.72	0.86	1	21.2	1.46	0.73	0.89	1	19.4	1.68	0.74	0.91	1	17.7	1.93	0.75	0.94	1				
	800	24.5	1.26	0.78	0.95	1	22.6	1.46	0.8	0.98	1	20.8	1.68	0.81	1	1	19.1	1.93	0.84	1	1				
	960	25.8	1.26	0.84	1	1	24.1	1.45	0.86	1	1	22.4	1.67	0.88	1	1	20.6	1.92	0.92	1	1				
67°F	640	24.6	1.26	0.56	0.7	0.83	22.9	1.46	0.56	0.71	0.85	21	1.68	0.56	0.72	0.88	19.1	1.93	0.55	0.73	0.91				
	800	26.2	1.26	0.6	0.76	0.92	24.3	1.45	0.6	0.78	0.94	22.4	1.67	0.61	0.79	0.97	20.4	1.92	0.61	0.82	1				
	960	27.3	1.25	0.64	0.83	1	25.3	1.45	0.65	0.84	1	23.3	1.67	0.66	0.87	1	21.2	1.92	0.67	0.9	1				
71°F	640	26.4	1.26	0.42	0.56	0.68	24.6	1.45	0.41	0.55	0.69	22.8	1.67	0.39	0.55	0.7	20.8	1.92	0.38	0.55	0.71				
	800	28.1	1.25	0.45	0.6	0.74	26.2	1.44	0.44	0.6	0.76	24.2	1.66	0.43	0.6	0.77	22.1	1.92	0.42	0.61	0.79				
	960	29.3	1.24	0.47	0.64	0.81	27.3	1.44	0.47	0.65	0.83	25.2	1.66	0.46	0.65	0.85	22.8	1.91	0.45	0.67	0.88				

### 2 TON HEATING - LHX024S5

Indoor Coil Air Volume 70°F Dry Bulb cfm	Air Temperature Entering Outdoor Coil									
	65°F		45°F		25°F		5°F		-15°F	
	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input
	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW
640	26.0	1.88	20.5	1.66	14.9	1.46	9.9	1.19	4.8	0.92
800	26.5	1.75	21.0	1.53	15.4	1.32	10.4	1.06	5.3	0.79
960	26.9	1.67	21.4	1.45	15.8	1.24	10.7	0.98	5.7	0.71

# COOLING / HEATING RATINGS

NOTE – For Temperatures and Capacities not shown in tables, see bulletin – Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

## 3 TON COOLING - LHX036S5

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F						95°F					105°F					115°F			
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	960	34.7	2.11	0.73	0.88	1	32.3	2.4	0.75	0.9	1	30	2.72	0.76	0.93	1	27.2	3.09	0.78	0.97	1
	1200	36.8	2.12	0.79	0.97	1	34.2	2.4	0.82	1	1	31.7	2.72	0.84	1	1	29.2	3.08	0.87	1	1
	1440	38.5	2.12	0.86	1	1	36.1	2.4	0.89	1	1	33.8	2.71	0.92	1	1	31	3.07	0.97	1	1
67°F	960	37.1	2.12	0.58	0.71	0.84	34.6	2.4	0.58	0.73	0.87	32.1	2.72	0.59	0.74	0.9	29.2	3.08	0.6	0.76	0.92
	1200	39	2.12	0.62	0.78	0.94	36.4	2.4	0.63	0.8	0.96	33.8	2.71	0.64	0.82	1	30.8	3.07	0.65	0.86	1
	1440	40.5	2.12	0.67	0.84	1	37.8	2.39	0.67	0.87	1	35	2.71	0.69	0.9	1	31.8	3.07	0.71	0.95	1
71°F	960	39.5	2.12	0.44	0.57	0.69	37.1	2.4	0.44	0.58	0.71	34.2	2.71	0.43	0.58	0.72	31.5	3.07	0.43	0.59	0.72
	1200	41.6	2.12	0.47	0.61	0.76	39	2.39	0.47	0.62	0.78	35.9	2.7	0.47	0.64	0.8	33	3.06	0.47	0.65	0.8
	1440	43	2.12	0.49	0.66	0.82	40.3	2.39	0.5	0.67	0.85	37.1	2.7	0.5	0.69	0.89	34	3.05	0.5	0.71	0.88

## 3 TON HEATING - LHX036S5

Indoor Coil Air Volume 70°F Dry Bulb cfm	Air Temperature Entering Outdoor Coil									
	65°F		45°F		25°F		5°F		-15°F	
	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input
cfm	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW
960	41.9	2.97	32.2	2.73	22.5	22.5	14.2	2.23	7.1	1.68
1200	42.5	2.78	32.9	2.54	23.2	2.29	14.9	2.04	7.8	1.49
1440	43.1	2.78	33.5	2.43	23.7	2.19	15.4	1.93	8.3	1.38

## 4 TON COOLING - LHX048S5

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F						95°F					105°F					115°F			
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	1280	50.5	2.82	0.71	0.86	1	46.3	3.22	0.72	0.88	1	42.6	3.64	0.73	0.9	1	38.5	4.12	0.74	0.94	1
	1600	53.4	2.81	0.77	0.96	1	49.4	3.22	0.79	0.98	1	45.4	3.65	0.81	1	1	41.5	4.13	0.84	1	1
	1920	56.7	2.81	0.84	1	1	52.5	3.21	0.86	1	1	48.8	3.65	0.89	1	1	44.6	4.13	0.92	1	1
67°F	1280	54	2.81	0.55	0.69	0.83	49.8	3.22	0.54	0.7	0.85	45.8	3.65	0.54	0.71	0.88	41.6	4.13	0.54	0.72	0.9
	1600	57.2	2.81	0.6	0.75	0.92	53.2	3.21	0.59	0.77	0.95	48.8	3.65	0.6	0.79	0.98	44.4	4.13	0.6	0.81	1
	1920	59.8	2.8	0.63	0.82	1	55.4	3.2	0.64	0.84	1	51	3.65	0.65	0.87	1	46.1	4.13	0.66	0.9	1
71°F	1280	57.8	2.8	0.41	0.54	0.67	53.7	3.21	0.4	0.54	0.68	49.5	3.65	0.38	0.54	0.69	45.2	4.13	0.37	0.54	0.7
	1600	61.4	2.79	0.43	0.59	0.74	56.6	3.2	0.42	0.59	0.75	52.3	3.64	0.41	0.6	0.77	47.8	4.13	0.4	0.6	0.79
	1920	63.6	2.78	0.46	0.63	0.8	59.1	3.19	0.45	0.64	0.83	54.5	3.64	0.44	0.65	0.84	49.7	4.12	0.43	0.66	0.88

## 4 TON HEATING - LHX048S5

Indoor Coil Air Volume 70°F Dry Bulb cfm	Air Temperature Entering Outdoor Coil									
	65°F		45°F		25°F		5°F		-15°F	
	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input
cfm	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW
1280	58.9	3.42	45.4	3.15	32	32	19.3	2.52	9.5	1.91
1600	60.2	3.2	46.7	2.92	33.3	2.64	20.6	2.3	10.8	1.68
1920	60.7	3.2	47.2	2.77	33.8	2.49	21.1	2.14	11.3	1.53

## COOLING / HEATING RATINGS

NOTE – For Temperatures and Capacities not shown in tables, see bulletin – Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

### 5 TON COOLING - LHX060S5

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
		cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F
63°F	1600	59.2	3.37	0.7	0.87	1	55.1	3.82	0.71	0.9	1	50.9	4.35	0.72	0.94	1	46.3	4.95	0.74	0.97	1
	2000	62.6	3.38	0.77	0.98	1	58.4	3.84	0.79	1	1	54.5	4.37	0.82	1	1	50.3	4.96	0.85	1	1
	2400	66	3.39	0.84	1	1	62	3.85	0.87	1	1	57.9	4.38	0.91	1	1	53.5	4.98	0.95	1	1
67°F	1600	63.8	3.38	0.55	0.69	0.83	59.6	3.84	0.55	0.69	0.85	55.3	4.37	0.55	0.7	0.88	50.5	4.96	0.55	0.72	0.93
	2000	67.1	3.39	0.59	0.75	0.94	62.6	3.85	0.59	0.76	0.97	57.9	4.38	0.6	0.79	1	52.9	4.98	0.61	0.82	1
	2400	69.6	3.39	0.63	0.83	1	64.9	3.85	0.64	0.85	1	59.8	4.38	0.65	0.89	1	54.9	4.99	0.66	0.94	1
71°F	1600	68.2	3.39	0.41	0.54	0.66	63.8	3.85	0.41	0.54	0.67	59.1	4.38	0.4	0.54	0.69	54.6	4.98	0.39	0.55	0.7
	2000	71.8	3.4	0.44	0.57	0.73	66.7	3.86	0.43	0.6	0.74	61.9	4.39	0.43	0.6	0.77	56.9	4.99	0.42	0.61	0.8
	2400	74.3	3.4	0.46	0.63	0.8	69.2	3.86	0.46	0.64	0.83	64.3	4.4	0.45	0.65	0.86	59.1	5	0.46	0.66	0.91

### 5 TON HEATING - LHX060S5

Indoor Coil Air Volume 70°F Dry Bulb cfm	Air Temperature Entering Outdoor Coil									
	65°F		45°F		25°F		5°F		-15°F	
	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input	Total Heating Capacity	Comp. Motor Input
	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW	kBtuh	kW
1600	72.3	3.95	56.4	3.69	40.8	40.8	24	3.06	12.2	2.3
2000	73.1	3.69	57.1	3.43	41.5	3.17	24.8	2.8	13	2.04
2400	74.3	3.69	58.3	3.28	42.7	3.02	26	2.64	14.2	1.88

**BLOWER DATA**

**DIRECT DRIVE - 2 TON [PSC]**

**BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.**

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (economizer, wet coil, etc.) See page 31.

2 - Any field installed accessories air resistance (electric heat, duct resistance, diffuser, etc.) See page 31.

External Static Pressure (in. w.g.)	Air Volume (cfm) at Various Blower Speeds					
	208 VOLTS			230 VOLTS		
	High	Medium	Low	High	Medium	Low
<b>DOWNFLOW</b>	<b>LHX024S5D</b>					
0.0	1199	928	838	1379	1085	877
0.1	1229	926	813	1409	1086	872
0.2	1206	928	782	1367	1094	850
0.3	1183	881	742	1350	1047	820
0.4	1159	843	686	1321	1009	783
0.5	1136	812	643	1282	981	762
0.6	1103	766	569	1242	921	705
0.7	1046	728	496	1195	888	625
0.8	953	648	432	1134	792	583
0.9	909	584	335	1037	738	492
1.0	783	465	247	926	592	411
<b>HORIZONTAL</b>	<b>LHX024S5D</b>					
0.0	1152	909	801	1325	1063	838
0.1	1152	893	770	1321	1048	826
0.2	1136	866	734	1288	1021	798
0.3	1104	826	697	1260	982	771
0.4	1072	787	643	1222	942	734
0.5	1041	747	589	1175	903	698
0.6	1009	707	534	1137	850	662
0.7	946	654	467	1081	797	588
0.8	861	588	396	1024	718	535
0.9	798	508	319	911	642	468
1.0	715	443	237	846	564	394

**BLOWER DATA**

**DIRECT DRIVE - 3 TON | 4 TON [PSC]**

**LHX036S5D | LHX048S5D**

**BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.**

FOR ALL UNITS ADD:

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (heat section, economizer, etc.).

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See page 30 for wet coil and options/accessory air resistance data. See page 30 for minimum air volume with electric heat.

External Static Pressure (in. w.g.)	Air Volume (cfm) at Various Blower Speeds								
	208 VOLTS			230 VOLTS			460/575 VOLTS		
	High	Medium	Low	High	Medium	Low	High	Medium	Low
<b>DOWNFLOW</b>									<b>LHX036S5D</b>
0.0	1938	1552	1119	2167	1772	1317	2136	1716	1212
0.1	1992	1586	1128	2167	1780	1315	2104	1728	1208
0.2	1915	1592	1137	2100	1792	1307	2052	1684	1197
0.3	1865	1536	1083	2043	1735	1266	1994	1647	1172
0.4	1813	1495	1033	1986	1678	1204	1918	1597	1134
0.5	1762	1444	976	1909	1621	1164	1861	1534	1096
0.6	1694	1391	899	1814	1535	1082	1765	1485	1059
0.7	1609	1331	817	1718	1478	1000	1689	1410	996
0.8	1471	1220	730	1603	1364	918	1613	1335	920
0.9	1368	1066	522	1488	1250	755	1498	1235	848
1.0	1108	869	402	1259	1021	640	1345	1036	763
<b>HORIZONTAL</b>									<b>LHX036S5D</b>
0.0	1862	1520	1070	2082	1736	1259	2085	1745	1247
0.1	1867	1530	1069	2031	1717	1246	2070	1744	1257
0.2	1804	1485	1067	1978	1672	1227	2016	1690	1225
0.3	1741	1440	1018	1907	1627	1190	1944	1643	1192
0.4	1677	1396	968	1837	1567	1128	1890	1596	1160
0.5	1614	1329	894	1749	1492	1066	1800	1533	1111
0.6	1550	1284	844	1660	1417	1016	1727	1455	1062
0.7	1455	1195	769	1554	1327	941	1655	1377	996
0.8	1329	1106	670	1448	1237	842	1511	1283	865
0.9	1202	927	496	1307	1087	718	1403	1190	784
1.0	1012	828	385	1150	973	613	1222	1002	670



**BLOWER DATA**

**BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.**

**DIRECT DRIVE - 3 TON [ECM]**

FOR ALL UNITS ADD:

- 1 - Any factory installed options air resistance (heat section, economizer, etc.).
- 2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See page 30 for wet coil and options/accessory air resistance data. See page 30 for minimum air volume with electric heat.

**DOWNFLOW**

External Static Press. in. w.g.	Percentage of Total Motor Torque																											
	20%			30%			40%			50%			60%			70%			80%			90%			100%			
	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	
0	1101	120	494	1328	196	578	1555	272	662	1728	374	731	1901	475	800	2023	580	852	2145	684	903	2292	854	970	2348	942	998	
0.1	1002	99	541	1241	180	620	1479	260	698	1662	366	763	1845	471	827	1976	579	876	2106	687	924	2268	865	987	2334	958	1013	
0.2	918	88	589	1167	173	663	1416	257	736	1608	366	796	1800	475	856	1938	586	902	2076	697	947	2249	880	1006	2324	978	1031	
0.3	848	86	638	1106	174	706	1364	261	774	1564	373	830	1763	485	886	1907	599	929	2051	712	972	2234	899	1028	2316	1000	1052	
0.4	790	92	688	1056	183	751	1321	273	814	1527	387	866	1733	501	918	1882	617	958	2031	732	998	2221	921	1051	2307	1024	1074	
0.5	742	105	738	1015	197	796	1287	289	854	1498	405	902	1709	520	950	1862	637	988	2014	754	1025	2208	944	1076	2296	1048	1099	
0.6	703	124	788	981	217	841	1258	310	894	1473	427	939	1688	543	984	1843	660	1019	1998	777	1053	2194	968	1101	2281	1071	1124	
0.7	670	146	838	952	240	887	1233	334	935	1451	451	976	1669	568	1017	1826	685	1050	1982	801	1082	2177	991	1128	2260	1092	1151	
0.8	642	172	888	927	266	932	1211	360	975	1431	477	1013	1650	593	1051	1807	709	1081	1963	825	1111	2155	1012	1155	2233	1109	1178	
0.9	618	200	937	904	294	976	1190	387	1015	1410	502	1050	1629	617	1084	1785	732	1112	1940	846	1140	2127	1029	1182	---	---	---	
1.0	595	229	985	882	321	1020	1168	413	1054	1387	526	1086	1605	639	1117	1758	752	1143	1911	864	1169	2090	1042	1209	---	---	---	
1.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**HORIZONTAL**

External Static Press. in. w.g.	Percentage of Total Motor Torque																											
	20%			30%			40%			50%			60%			70%			80%			90%			100%			
	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	Cfm	RPM	Watts	
0	1077	113	502	1282	175	585	1486	237	668	1670	363	746	1854	489	823	1993	623	884	2131	757	944	2216	882	995	2268	926	1009	
0.1	1016	109	546	1227	172	624	1437	234	701	1626	361	775	1814	488	848	1956	623	906	2098	757	964	2194	887	1011	2242	928	1026	
0.2	962	111	591	1177	174	663	1392	236	735	1585	364	805	1777	492	874	1923	627	930	2069	762	985	2175	895	1029	2218	935	1044	
0.3	913	118	636	1133	181	703	1352	244	770	1548	372	836	1744	500	902	1893	636	955	2042	772	1007	2157	907	1048	2196	945	1063	
0.4	868	130	682	1092	193	744	1315	256	806	1515	384	868	1714	512	930	1866	648	980	2018	784	1030	2139	922	1069	---	---	---	
0.5	827	146	728	1054	209	785	1281	271	842	1484	399	901	1687	526	959	1841	663	1007	1995	799	1054	2121	938	1090	---	---	---	
0.6	789	165	775	1019	227	827	1249	288	879	1455	416	934	1660	543	988	1816	679	1034	1972	815	1079	2102	955	1113	---	---	---	
0.7	752	185	821	986	247	869	1219	308	916	1427	435	967	1634	562	1018	1792	698	1061	1949	833	1104	2081	972	1136	---	---	---	
0.8	718	208	867	954	268	910	1189	328	953	1399	455	1000	1608	581	1047	1767	716	1088	1925	851	1129	2058	989	1160	---	---	---	
0.9	684	231	913	922	290	951	1160	349	989	1371	475	1033	1581	600	1077	1741	734	1116	1900	868	1154	2031	1004	1185	---	---	---	
1.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1.2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1.3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**BLOWER DATA** **DIRECT DRIVE - 4 TON | 5 TON [ECM]**

**BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.**

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (heat section, economizer, etc.).

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See page 30 for wet coil and options/accessory air resistance data. See page 30 for minimum air volume with electric heat.

**DOWNFLOW**

External Static Press. in. w.g.	Percentage of Total Motor Torque																										
	20%		30%		40%		50%		60%		70%		80%		90%		100%										
	Cfm	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM							
0	1067	112	488	1325	196	573	1583	279	657	1759	381	726	1934	482	794	2046	579	845	2157	676	896	2285	816	956	2358	925	989
0.1	984	97	537	1249	184	616	1513	270	695	1697	376	760	1881	481	825	2002	584	873	2123	686	921	2273	838	978	2352	947	1008
0.2	912	91	587	1183	180	661	1453	268	735	1644	377	796	1835	486	856	1964	593	902	2093	700	947	2264	863	1001	2349	973	1030
0.3	851	92	636	1126	183	706	1400	273	775	1597	385	832	1794	497	889	1931	607	932	2067	717	974	2256	891	1026	2348	1001	1053
0.4	797	100	687	1075	192	751	1353	283	815	1555	397	869	1757	511	922	1901	625	962	2044	738	1002	2248	919	1051	2347	1031	1077
0.5	752	114	737	1032	206	796	1312	298	855	1518	413	905	1724	528	955	1873	644	993	2021	760	1030	2239	948	1078	2345	1061	1102
0.6	712	132	787	994	224	842	1275	316	896	1484	432	942	1692	548	988	1845	666	1024	1998	783	1059	2228	977	1104	---	---	---
0.7	678	155	836	960	246	886	1242	336	936	1452	452	979	1662	568	1021	1818	687	1055	1974	806	1088	2214	1004	1131	---	---	---
0.8	648	180	885	929	269	931	1210	358	976	1421	474	1016	1632	589	1055	1790	709	1086	1948	828	1117	2195	1028	1158	---	---	---
0.9	621	207	933	900	294	974	1179	381	1015	1390	495	1051	1600	609	1087	1760	728	1117	1919	847	1146	2170	1049	1185	---	---	---
1.0	596	235	981	872	319	1017	1148	403	1053	1357	516	1086	1566	628	1119	1725	746	1147	1884	864	1174	2139	1066	1212	---	---	---
1.1	---	---	---	---	---	---	1115	424	1090	1322	534	1120	1528	643	1150	1686	760	1176	1844	876	1201	2100	1078	1238	---	---	---
1.2	---	---	---	---	---	---	1080	443	1126	1283	549	1153	1485	655	1180	1641	770	1204	1797	884	1228	2052	1083	1264	---	---	---
1.3	---	---	---	---	---	---	1040	458	1161	1238	561	1185	1436	663	1209	1589	775	1231	1742	886	1253	1993	1081	1288	---	---	---
1.4	---	---	---	---	---	---	996	469	1194	1189	567	1215	1381	665	1236	1530	773	1257	1678	881	1277	1923	1071	1311	---	---	---
1.5	---	---	---	---	---	---	946	475	1225	1132	568	1244	1317	661	1262	1460	765	1281	1603	868	1299	1841	1051	1333	---	---	---
1.6	---	---	---	---	---	---	889	476	1254	1066	563	1270	1243	649	1285	1380	748	1303	1517	846	1320	1745	1022	1354	---	---	---

**BLOWER DATA** DIRECT DRIVE - 4 TON | 5 TON [ECM]

**BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.**

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (heat section, economizer, etc.).

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.).

See page 30 for wet coil and options/accessory air resistance data. See page 30 for minimum air volume with electric heat.

**HORIZONTAL**

External Static Press. in. w.g.	Percentage of Total Motor Torque																										
	20%		30%		40%		50%		60%		70%		80%		90%		100%										
	Cfm	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM							
0	1088	114	495	1295	176	577	1501	238	659	1686	365	736	1871	491	813	2010	625	874	2148	758	935	2226	879	987	2283	925	1000
0.1	1026	109	539	1238	172	616	1449	234	692	1639	361	765	1829	488	838	1972	622	896	2114	756	954	2204	883	1002	2255	926	1017
0.2	969	110	584	1186	173	655	1403	235	726	1597	363	795	1791	490	864	1937	625	920	2083	760	975	2185	890	1020	2231	932	1034
0.3	918	117	630	1140	180	696	1361	242	762	1559	370	827	1756	497	892	1906	633	945	2055	768	997	2167	902	1038	2209	941	1053
0.4	872	128	676	1098	191	737	1323	253	798	1524	381	859	1725	508	920	1878	644	970	2030	779	1020	2149	916	1059	2149	916	1059
0.5	830	143	723	1059	205	779	1288	267	834	1493	395	892	1697	522	949	1852	658	997	2006	793	1044	2132	931	1080	2132	931	1080
0.6	791	162	770	1024	223	821	1256	284	871	1463	411	925	1670	538	978	1827	674	1023	1983	810	1068	2113	949	1103	2113	949	1103
0.7	755	183	817	990	243	863	1225	303	908	1434	430	958	1643	556	1008	1802	692	1051	1960	827	1093	2093	966	1126	2093	966	1126
0.8	720	205	863	958	265	904	1195	324	945	1406	450	992	1617	575	1038	1777	710	1079	1937	845	1119	2071	983	1150	2071	983	1150
0.9	686	229	909	926	287	946	1165	345	982	1378	470	1025	1590	594	1068	1751	728	1106	1911	862	1144	2046	999	1174	2046	999	1174
1.0	---	---	---	---	---	---	1135	365	1018	1349	489	1058	1562	612	1097	1723	745	1133	1884	878	1169	2017	1013	1198	2017	1013	1198
1.1	---	---	---	---	---	---	1103	385	1054	1317	507	1090	1531	629	1126	1693	761	1160	1854	893	1194	1983	1024	1223	1983	1024	1223
1.2	---	---	---	---	---	---	1069	403	1089	1284	524	1122	1498	644	1155	1659	775	1187	1820	905	1219	1944	1032	1247	1944	1032	1247
1.3	---	---	---	---	---	---	1032	418	1123	1247	537	1153	1461	655	1183	1621	784	1213	1781	913	1243	1899	1036	1271	1899	1036	1271
1.4	---	---	---	---	---	---	992	430	1155	1206	547	1182	1419	663	1209	1578	791	1238	1737	918	1266	1847	1035	1295	1847	1035	1295
1.5	---	---	---	---	---	---	947	437	1187	1160	552	1211	1373	666	1235	1531	792	1262	1688	917	1288	1688	1035	1295	1688	917	1288
1.6	---	---	---	---	---	---	897	440	1217	1109	552	1238	1320	664	1259	1476	788	1284	1631	911	1309	1631	1035	1295	1631	911	1309

**BLOWER DATA**

**BELT DRIVE - 5 TON**

**BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.**

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (economizer, wet coil, etc.).

2 - Any field installed accessories air resistance (electric heat, duct resistance, diffuser, etc.).

See page 30 for wet coil and options/accessory air resistance data. See page 30 for minimum air volume with electric heat.

**DOWNFLOW**

**LHX060S5B**

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	615	0.29	671	0.33	726	0.36	782	0.41	850	0.41	917	0.42	970	0.44	1009	0.47
1600	665	0.30	716	0.34	768	0.38	819	0.44	879	0.44	937	0.46	985	0.49	1022	0.52
1700	723	0.31	768	0.35	814	0.39	860	0.47	910	0.47	959	0.50	1001	0.54	1037	0.58
1800	779	0.32	818	0.37	857	0.41	897	0.50	939	0.50	980	0.55	1018	0.59	1054	0.64
1900	826	0.36	859	0.41	894	0.45	928	0.56	964	0.56	1000	0.61	1036	0.66	1072	0.70
2000	857	0.42	889	0.47	920	0.52	952	0.62	986	0.62	1020	0.68	1055	0.73	1091	0.77
2100	878	0.49	909	0.54	940	0.59	973	0.70	1006	0.70	1041	0.75	1076	0.80	1112	0.85
2200	897	0.55	929	0.61	961	0.66	994	0.78	1028	0.78	1063	0.83	1099	0.89	1134	0.93
2300	918	0.62	950	0.68	983	0.74	1017	0.86	1052	0.86	1087	0.92	1122	0.97	1157	1.02
2400	941	0.70	974	0.77	1008	0.83	1042	0.96	1077	0.96	1111	1.01	1146	1.06	1181	1.11

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1045	0.52	1085	0.56	1125	0.60	1165	0.63	1208	0.66	1248	0.69	1281	0.73	1311	0.77
1600	1059	0.57	1098	0.61	1138	0.65	1177	0.68	1218	0.71	1257	0.75	1290	0.79	1319	0.83
1700	1074	0.62	1113	0.66	1152	0.70	1190	0.74	1231	0.77	1268	0.80	1299	0.84	1328	0.89
1800	1091	0.68	1129	0.72	1167	0.76	1205	0.80	1244	0.83	1280	0.87	1310	0.91	1338	0.95
1900	1109	0.75	1146	0.79	1183	0.82	1221	0.86	1260	0.90	1294	0.94	1323	0.98	1349	1.02
2000	1128	0.82	1164	0.86	1201	0.89	1239	0.93	1276	0.97	1310	1.01	1336	1.06	1362	1.10
2100	1148	0.89	1185	0.93	1221	0.97	1258	1.01	1294	1.05	1325	1.09	1351	1.14	1376	1.19
2200	1170	0.97	1206	1.01	1242	1.05	1277	1.09	1311	1.14	1341	1.18	1365	1.23	1390	1.28
2300	1193	1.06	1228	1.09	1262	1.14	1295	1.19	1327	1.24	1355	1.29	1380	1.33	1406	1.37
2400	1216	1.15	1250	1.19	1282	1.24	1313	1.30	1343	1.36	1371	1.40	1396	1.44	1423	1.48

**BLOWER DATA**

**BELT DRIVE - 5 TON**

**BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL AND AIR FILTERS IN PLACE.**

FOR ALL UNITS ADD:

1 - Any factory installed options air resistance (economizer, wet coil, etc.).

2 - Any field installed accessories air resistance (electric heat, duct resistance, diffuser, etc.).

See page 30 for wet coil and options/accessory air resistance data. See page 30 for minimum air volume with electric heat.

**HORIZONTAL**

**LHX060S5B**

Air Volume cfm	External Static - in. w.g.															
	0.10		0.20		0.30		0.40		0.50		0.60		0.70		0.80	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	656	0.26	706	0.30	760	0.33	814	0.36	874	0.39	931	0.41	979	0.45	1019	0.48
1600	712	0.29	758	0.32	807	0.36	855	0.39	906	0.43	955	0.46	997	0.50	1035	0.54
1700	766	0.32	808	0.36	850	0.40	892	0.44	936	0.47	978	0.51	1016	0.56	1052	0.60
1800	814	0.36	851	0.40	888	0.44	925	0.49	963	0.53	1000	0.57	1035	0.62	1071	0.66
1900	853	0.41	886	0.46	919	0.50	952	0.55	986	0.60	1021	0.64	1056	0.69	1091	0.73
2000	883	0.48	913	0.53	944	0.57	976	0.62	1009	0.67	1043	0.71	1078	0.76	1112	0.80
2100	906	0.56	936	0.60	967	0.65	999	0.70	1033	0.75	1067	0.79	1101	0.84	1135	0.88
2200	930	0.64	960	0.68	991	0.73	1024	0.78	1058	0.83	1092	0.88	1126	0.92	1160	0.96
2300	954	0.72	985	0.77	1017	0.82	1051	0.87	1085	0.92	1119	0.96	1152	1.00	1186	1.04
2400	981	0.81	1013	0.86	1046	0.91	1079	0.96	1113	1.00	1180	1.05	1180	1.09	1213	1.13

Air Volume cfm	External Static - in. w.g.															
	0.90		1.00		1.10		1.20		1.30		1.40		1.50		1.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	1056	0.53	1094	0.57	1133	0.60	1172	0.63	1212	0.67	250	0.70	1288	0.74	1324	0.77
1600	1071	0.58	1109	0.62	1147	0.66	1186	0.69	1225	0.72	1263	0.76	1299	0.80	1334	0.83
1700	1088	0.64	1126	0.68	1164	0.72	1202	0.75	1240	0.78	1276	0.82	1311	0.86	1345	0.90
1800	1107	0.70	1143	0.74	1181	0.78	1219	0.81	1256	0.85	1290	0.89	1324	0.93	1357	0.97
1900	1126	0.77	1163	0.81	1200	0.85	1237	0.88	1273	0.92	1306	0.96	1339	1.00	1371	1.04
2000	1148	0.84	1183	0.88	1220	0.92	1257	0.96	1291	1.00	1323	1.04	1354	1.08	1385	1.12
2100	1170	0.92	1206	0.96	1242	1.00	1277	1.04	1310	1.08	1340	1.13	1370	1.17	1401	1.21
2200	1195	1.00	1230	1.04	1265	1.08	1299	1.13	1330	1.18	1359	1.23	1388	1.27	1418	1.31
2300	1220	1.08	1254	1.13	1288	1.17	1320	1.23	1350	1.28	1378	1.34	1406	1.38	1435	1.42
2400	1245	1.18	1278	1.22	1311	1.28	1341	1.33	1370	1.40	1397	1.45	1425	1.50	1454	1.54

## BLOWER DATA

### BELT DRIVE KIT SPECIFICATIONS

Size	Motor HP		Speeds	Drive Kits and RPM Range
	Nominal	Maximum		A07
060	2	2.3	1	1212-1548

NOTE - Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor HP required. Maximum usable HP of motors furnished are shown. In Canada, nominal motor HP is also maximum usable motor HP. If motors of comparable HP are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

### OPTIONS / ACCESSORIES AIR RESISTANCE - in. w.g.

Air Volume cfm	Wet Indoor Coil		Economizer	Electric Heat	Filters	
	024, 036, 048	060			MERV 8	MERV 13
800	0.01	0.01	0.04	0.01	0.04	0.05
1000	0.02	0.01	0.04	0.03	0.04	0.07
1200	0.02	0.01	0.04	0.06	0.04	0.07
1400	0.03	0.02	0.04	0.09	0.04	0.07
1600	0.04	0.03	0.04	0.12	0.04	0.07
1800	0.05	0.04	0.05	0.15	0.05	0.07
2000	0.06	0.05	0.05	0.18	0.05	0.08
2200	0.08	0.06	0.05	0.20	0.05	0.08
2400	0.09	0.07	0.05	0.22	0.05	0.08

### MINIMUM AIR VOLUME REQUIRED FOR ELECTRIC HEAT

Size	kW Size	Minimum CFM		
		Direct Drive	Belt Drive Downflow	Belt Drive Horizontal
All Models	5	600	N/A	N/A
	7.5	600	1,050	1200
	10	600	N/A	N/A
	15	1100	1250	1350
	22.5	1600	1750	1800

## BLOWER DATA

### CEILING DIFFUSERS AIR RESISTANCE (in. w.g.)

Air Volume cfm	RTD9-65S Step-Down Diffuser			FD9-65S Flush Diffuser	RTD11-95S Step-Down Diffuser			FD11-95S Flush Diffuser
	2 Ends Open	1 Side & 2 Ends Open	All Ends & Sides Open		2 Ends Open	1 Side & 2 Ends Open	All Ends & Sides Open	
800	0.15	0.13	0.11	0.11	---	---	---	---
1000	0.19	0.16	0.14	0.14	---	---	---	---
1200	0.25	0.20	0.17	0.17	---	---	---	---
1400	0.33	0.26	0.20	0.20	---	---	---	---
1600	0.43	0.32	0.20	0.24	---	---	---	---
1800	0.56	0.40	0.30	0.30	0.13	0.11	0.09	0.09
2000	0.73	0.50	0.36	0.36	0.15	0.13	0.11	0.10
2200	0.95	0.63	0.44	0.44	0.18	0.15	0.12	0.12
2400	---	----	---	---	0.21	0.18	0.15	0.14

### CEILING DIFFUSER AIR THROW DATA

Air Volume - cfm	1 Effective Throw - ft.	
	RTD9-65S	FD9-65S
800	10 - 17	14 - 18
1000	10 - 17	15 - 20
1200	11 - 18	16 - 22
1400	12 - 19	17 - 24
1600	12 - 20	18 - 25
1800	13 - 21	20 - 28
2000	14 - 23	21 - 29
2200	16 - 25	22 - 30

<sup>1</sup> Effective throw based on terminal velocities of 75 ft. per minute.

### POWER EXHAUST FAN PERFORMANCE

Return Air System Static Pressure - in. w.g.	Air Volume Exhausted cfm
0.00	2000
0.05	1990
0.10	1924
0.15	1810
0.20	1664
0.25	1507
0.30	1350
0.35	1210

**ELECTRICAL/ELECTRIC HEAT DATA** **DIRECT DRIVE - 2 TON [PSC]**

Model		LHX024S5D
<sup>1</sup> Voltage - 60Hz		208/230V - 1 Ph
Compressor (Non-Inverter)	Rated Load Amps	10.3
	Locked Rotor Amps	60.2
Outdoor Fan Motors (1)	Full Load Amps (1 Non-ECM)	1.7
Service Outlet 115V GFI (amps)		15
Indoor Blower Motor	HP	0.25
	Type	Direct
	Full Load Amps	1.7
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit Only	25
	with (1) 0.33 HP Power Exhaust	25
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit Only	17
	with (1) 0.33 HP Power Exhaust	19

**ELECTRIC HEAT DATA**

Electric Heat Voltage			208V	240V
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat	5 kW	40	45
		7.5 kW	60	60
		10 kW	70	70
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit + Electric Heat	5 kW	39	43
		7.5 kW	51	56
		10 kW	62	69
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat + Power Exhaust	5 kW	45	45
		7.5 kW	60	60
		10 kW	70	80
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit + Electric Heat + Power Exhaust	5 kW	42	45
		7.5 kW	53	58
		10 kW	64	71

**ELECTRICAL ACCESSORIES**

<b>Disconnect</b>	<b>0-10 kW</b>	<b>20W21</b>	<b>20W21</b>
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Disconnects - 20W21 - 80A

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.

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

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.



**ELECTRICAL/ELECTRIC HEAT**

**DIRECT DRIVE - 3 TON [PSC]**

Model		LHX036S5D			
<sup>1</sup> Voltage - 60Hz		208/230V - 1 Ph	208/230V - 3 Ph	460V - 3 Ph	575V - 3 Ph
Compressor (Non-Inverter)	Rated Load Amps	14.4	9	4.1	3.3
	Locked Rotor Amps	86	70	39	29
Outdoor Fan Motors (1)	Full Load Amps (1 Non-ECM)	1.7	1.7	1.1	0.7
Power Exhaust (1) 0.33 HP	Full Load Amps (total)	2.4	2.4	1.3	1
Service Outlet 115V GFI (amps)		15	15	15	20
Indoor Blower Motor	HP	0.5	0.5	0.5	0.5
	Type	Direct	Direct	Direct	Direct
	Full Load Amps	3.1	3.1	1.5	1.5
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit Only	35	25	15	15
	with (1) 0.33 HP Power Exhaust	35	25	15	15
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit Only	23	17	8	7
	with (1) 0.33 HP Power Exhaust	26	19	10	8

**ELECTRIC HEAT DATA**

Electric Heat Voltage			208V	240V	208V	240V	480V	600V
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat	7.5 kW 15 kW	60 100	70 110	40 60	40 70	20 35	20 25
	<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit + Electric Heat	57 91	62 101	36 56	39 62	20 31	16 25
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat + Power Exhaust	7.5 kW 15 kW	60 100	70 110	40 60	45 70	25 35	20 30
	<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit + Electric Heat + Power Exhaust	60 93	65 104	38 58	42 64	21 32	17 26

**ELECTRICAL ACCESSORIES**

Disconnect	0-7.5 kW	20W21	20W21	20W21	20W21
	15 kW	20W22	20W21	20W21	20W21

Disconnects - 20W21 - 80A  
20W22 - 150A

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.

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

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

**ELECTRICAL/ELECTRIC HEAT DATA**
**DIRECT DRIVE - 4 TON [PSC]**

Model		LHX048S5D			
<sup>1</sup> Voltage - 60Hz		208/230V - 1 Ph	208/230V - 3 Ph	460V - 3 Ph	575V - 3 Ph
Compressor (Non-Inverter)	Rated Load Amps	19.4	12	6.3	4.4
	Locked Rotor Amps	102	123	60	41
Outdoor Fan Motors (1)	Full Load Amps (1 Non-ECM)	1.7	1.7	1.1	0.7
Power Exhaust (1) 0.33 HP	Full Load Amps (total)	2.4	2.4	1.3	1
Service Outlet 115V GFI (amps)		15	15	15	20
Indoor Blower Motor	HP	0.5	0.5	0.5	0.5
	Type	Direct	Direct	Direct	Direct
	Full Load Amps	3.1	3.1	1.5	1.5
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit Only	45	30	15	15
	with (1) 0.33 HP Power Exhaust	50	30	15	15
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit Only	30	21	11	8
	with (1) 0.33 HP Power Exhaust	33	23	12	9

**ELECTRIC HEAT DATA**

Electric Heat Voltage			208V	240V	208V	240V	480V	600V
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat	<b>7.5 kW</b> <b>15 kW</b>	70	80	45	50	25	20
			100	110	60	70	35	30
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit + Electric Heat	<b>7.5 kW</b> <b>15 kW</b>	64	69	41	44	22	18
			98	108	60	66	34	27
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat + Power Exhaust	<b>7.5 kW</b> <b>15 kW</b>	70	80	50	50	25	20
			100	125	70	70	35	30
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit + Electric Heat + Power Exhaust	<b>7.5 kW</b> <b>15 kW</b>	67	72	43	46	24	19
			100	111	62	69	35	28

**ELECTRICAL ACCESSORIES**

Disconnect	0-7.5 kW	22A23	22A23	22A23	22A23
	15 kW	22A24	22A23	22A23	22A23

Disconnects - 22A23 - 80A  
22A24 - 150A

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.

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

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

**ELECTRICAL/ELECTRIC HEAT DATA**
**DIRECT DRIVE - 3 TON [ECM]**

Model		LHX036S5E			
		208/230V - 1 Ph	208/230V - 3 Ph	460V - 3 Ph	575V - 3 Ph
<sup>1</sup> Voltage - 60Hz					
Compressor 1 (Non-Inverter)	Rated Load Amps	14.4	9	4.1	3.3
	Locked Rotor Amps	86	70	39	29
Outdoor Fan Motor	Full Load Amps (1 Non-ECM)	1.7	1.7	1.1	0.7
Power Exhaust (1) 0.33 HP	Full Load Amps	2.4	2.4	1.3	1
Service Outlet 115V GFI (amps)		15	15	15	20
Indoor Blower Motor	HP	1	1	1	1
	Type	Direct	Direct	Direct	Direct
	Full Load Amps	7.4	7.4	3.7	3
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit Only	40	25	15	15
	with (1) 0.33 HP Power Exhaust	40	30	15	15
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit Only	28	21	10	8
	with (1) 0.33 HP Power Exhaust	30	23	12	9

**ELECTRIC HEAT DATA**

Electric Heat Voltage			208V	240V	208V	240V	480V	600V
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat	7.5 kW 15 kW	70 100	70 110	40 60	45 70	25 35	20 30
	Unit + Electric Heat	7.5 kW 15 kW	61 95	67 106	40 60	43 66	22 33	17 26
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat + Power Exhaust	7.5 kW 15 kW	70 100	70 110	45 70	50 70	25 35	20 30
	Unit + Electric Heat + Power Exhaust	7.5 kW 15 kW	64 98	69 108	43 62	46 68	23 34	18 27

**ELECTRICAL ACCESSORIES**

Disconnect	0-7.5 kW	20W21	20W21	20W21	20W21	20W21	20W21
	15 kW	20W22	20W22	20W21	20W21	20W21	20W21

Disconnects - 20W21 - 80A  
20W22 - 150A

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.

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

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

**ELECTRICAL/ELECTRIC HEAT DATA** **DIRECT DRIVE - 4 TON [ECM]**

<b>Model</b>		<b>LHX048S5E</b>			
<b><sup>1</sup> Voltage - 60Hz</b>		<b>208/230V - 1 Ph</b>	<b>208/230V - 3 Ph</b>	<b>460V - 3 Ph</b>	<b>575V - 3 Ph</b>
Compressor 1 (Non-Inverter)	Rated Load Amps	19.4	12	6.3	4.4
	Locked Rotor Amps	102	123	60	41
Outdoor Fan Motor	Full Load Amps (1 Non-ECM)	1.7	1.7	1.1	0.7
Power Exhaust (1) 0.33 HP	Full Load Amps	2.4	2.4	1.3	1
Service Outlet 115V GFI (amps)		15	15	15	20
Indoor Blower Motor	HP	1	1	1	1
	Type	Direct	Direct	Direct	Direct
	Full Load Amps	7.4	7.4	3.7	3
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit Only	50	35	15	15
	with (1) 0.33 HP Power Exhaust	50	35	20	15
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit Only	35	25	13	10
	with (1) 0.33 HP Power Exhaust	37	28	15	11

**ELECTRIC HEAT DATA**

<b>Electric Heat Voltage</b>			<b>208V</b>	<b>240V</b>	<b>208V</b>	<b>240V</b>	<b>480V</b>	<b>600V</b>
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat	<b>7.5 kW</b> <b>15 kW</b>	80	80	50	50	25	20
			110	125	70	70	40	30
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit + Electric Heat	<b>7.5 kW</b> <b>15 kW</b>	68	74	45	48	25	19
			102	113	64	70	36	28
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat + Power Exhaust	<b>7.5 kW</b> <b>15 kW</b>	80	80	50	50	30	20
			110	125	70	80	40	30
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit + Electric Heat + Power Exhaust	<b>7.5 kW</b> <b>15 kW</b>	71	76	47	50	26	20
			105	115	67	73	37	29

**ELECTRICAL ACCESSORIES**

<b>Disconnect</b>	<b>0-7.5 kW</b>	<b>22A23</b>	<b>22A23</b>	<b>22A23</b>	<b>22A23</b>	<b>22A23</b>	<b>22A23</b>
	<b>15 kW</b>	<b>22A24</b>	<b>22A24</b>	<b>22A23</b>	<b>22A23</b>	<b>22A23</b>	<b>22A23</b>

Disconnects - **22A23** - 80A  
**22A24** - 150A

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.

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

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

**ELECTRICAL/ELECTRIC HEAT DATA**
**DIRECT DRIVE - 5 TON [ECM]**

Model		LHX060S5E			
<sup>1</sup> Voltage - 60Hz		208/230V - 1 Ph	208/230V - 3 Ph	460V - 3 Ph	575V - 3 Ph
Compressor 1 (Non-Inverter)	Rated Load Amps	23.7	16	7.1	6.4
	Locked Rotor Amps	157	156.4	69	47.8
Outdoor Fan Motor	Full Load Amps (1 Non-ECM)	2.4	2.4	1.3	1
Power Exhaust (1) 0.33 HP	Full Load Amps	2.4	2.4	1.3	1
Service Outlet 115V GFI (amps)		15	15	15	20
Indoor Blower Motor	HP	1	1	1	1
	Type	Direct	Direct	Direct	Direct
	Full Load Amps	7.4	7.4	3.7	3
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit Only	60	45	20	15
	with (1) 0.33 HP Power Exhaust	60	45	20	15
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit Only	40	30	14	12
	with (1) 0.33 HP Power Exhaust	42	33	16	13

**ELECTRIC HEAT DATA**

Electric Heat Voltage			208V	240V	208V	240V	480V	600V
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit +	7.5 kW	90	90	60	60	30	25
	Electric Heat	15 kW	110	125	70	80	40	35
		22.5 kW	150	175	90	100	50	40
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit +	7.5 kW	74	79	50	53	26	22
	Electric Heat	15 kW	108	118	69	75	37	31
		22.5 kW	141	157	89	98	48	40
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit +	7.5 kW	90	90	60	60	30	25
	Electric Heat + Power Exhaust	15 kW	110	125	80	80	40	35
		22.5 kW	150	175	100	100	50	45
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit +	7.5 kW	76	81	52	55	27	23
	Electric Heat + Power Exhaust	15 kW	110	120	72	78	38	32
		22.5 kW	144	160	91	100	50	41

**ELECTRICAL ACCESSORIES**

Disconnect	0 kW	22A23	22A23	22A23	22A23	22A23	22A23
	7.5 kW	22A23	<sup>4</sup> 22A23 <sup>5</sup> 22A24	22A23	22A23	22A23	22A23
	15 kW	22A24	22A24	22A23	22A23	22A23	22A23
	22.5 kW	22A24	22A24	22A24	22A24	22A23	22A23

Disconnects - 22A23 - 80A  
22A24 - 150A

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.

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

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

<sup>4</sup> Without Power Exhaust.

<sup>5</sup> With Power Exhaust.

**ELECTRICAL/ELECTRIC HEAT DATA**

**BELT DRIVE - 5 TON**

Model		LHX060S5B		
<sup>1</sup> Voltage - 60Hz		208/230V - 3 Ph	460V - 3 Ph	575V - 3 Ph
Compressor (Non-Inverter)	Rated Load Amps	16	7.1	6.4
	Locked Rotor Amps	156.4	69	47.8
Outdoor Fan Motors (1)	Full Load Amps (1 Non-ECM)	2.4	1.3	1
Power Exhaust (1) 0.33 HP	Full Load Amps (total)	2.4	1.3	1
Service Outlet 115V GFI (amps)		15	15	20
Indoor Blower Motor	HP	2	2	2
	Type	Belt	Belt	Belt
	Full Load Amps	7.5	3.4	2.7
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit Only	45	20	15
	with (1) 0.33 HP Power Exhaust	45	20	15
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit Only	30	14	12
	with (1) 0.33 HP Power Exhaust	33	15	13

**ELECTRIC HEAT DATA**

Electric Heat Voltage			208V	240V	480V	600V
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit +	7.5 kW	60	60	25	25
	Electric Heat	15 kW	70	80	40	30
		22.5 kW	90	100	50	40
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit +	7.5 kW	50	53	25	21
	Electric Heat	15 kW	69	76	37	30
		22.5 kW	89	98	48	39
<sup>2</sup> Maximum Overcurrent Protection (MOCP)	Unit +	7.5 kW	60	60	30	25
	Electric Heat + Power Exhaust	15 kW	80	80	40	35
		22.5 kW	100	100	50	40
<sup>3</sup> Minimum Circuit Ampacity (MCA)	Unit +	7.5 kW	52	55	27	22
	Electric Heat + Power Exhaust	15 kW	72	78	38	31
		22.5 kW	91	100	49	40

**ELECTRICAL ACCESSORIES**

Disconnect	0-7.5 kW	22A23	22A23	22A23	22A23
	15 kW	22A23	22A23	22A23	22A23
	22.5 kW	22A24	22A24	22A23	22A23

Disconnects - 22A23 - 80A  
22A24 - 150A

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.

<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.

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

<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

## ELECTRIC HEAT CAPACITIES

Input Voltage	5 kW			7.5 kW			10 kW		
	No of Stages	kW input	Btuh Output	No of Stages	kW input	Btuh Output	No of Stages	kW input	Btuh Output
208	1	3.8	12,800	1	5.6	19,200	1	7.5	25,600
220	1	4.2	14,300	1	6.3	21,500	1	8.4	28,700
230	1	4.6	15,700	1	6.9	23,500	1	9.2	31,400
240	1	5.0	17,100	1	7.5	25,600	1	10.0	34,200
440	---	---	---	1	6.3	21,500	---	---	---
460	---	---	---	1	6.9	23,500	---	---	---
480	---	---	---	1	7.5	25,600	---	---	---
550	---	---	---	1	6.3	21,500	---	---	---
575	---	---	---	1	6.9	23,500	---	---	---
600	---	---	---	1	7.5	25,600	---	---	---
Input Voltage	15 kW			22.5 kW					
	No of Stages	kW input	Btuh Output	No of Stages	kW input	Btuh Output			
208	1	11.2	38,400	1	16.9	57,700			
220	1	12.6	43,000	1	18.9	64,500			
230	1	13.8	47,000	1	20.7	70,700			
240	1	15.0	51,200	1	22.5	76,800			
440	1	12.6	43,000	1	18.9	64,500			
460	1	13.8	47,000	1	20.7	70,700			
480	1	15.0	51,200	1	22.5	76,800			
550	1	12.6	43,000	1	18.9	64,500			
575	1	13.8	47,000	1	20.7	70,700			
600	1	15.0	51,200	1	22.5	76,800			

### FIELD WIRING NOTES

- For use with copper wiring only
- Field wiring not furnished
- All wiring must conform to NEC or CEC and local electrical codes
- For specific wiring information, please refer to the installation instructions

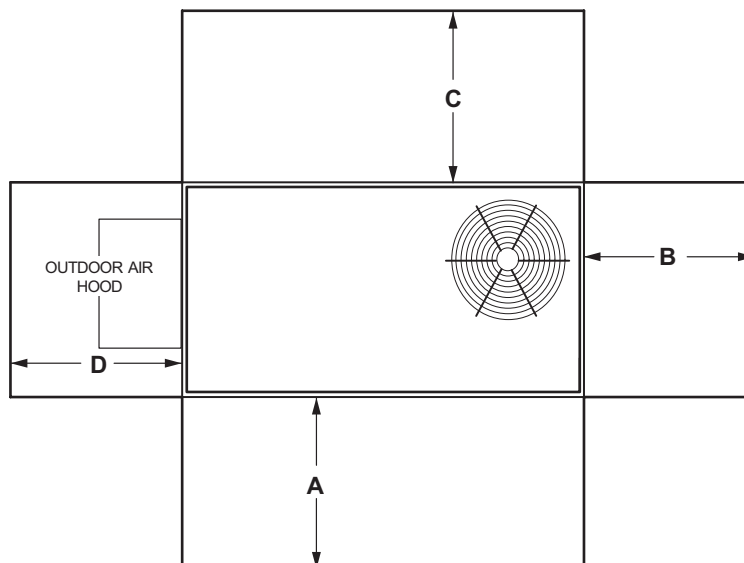
## OUTDOOR SOUND DATA

Size	Octave Band Sound Power Levels dBA, re 10 <sup>-12</sup> Watts - Center Frequency - Hz							<sup>1</sup> Sound Rating Number (dBA)
	125	250	500	1000	2000	4000	8000	
024, 036	62	67	72	69	66	61	56	75
048	61	67	70	70	68	63	56	75
060	69	72	75	74	70	65	55	80

NOTE - The octave sound power data does not include tonal corrections.

<sup>1</sup> Sound Rating Number according to AHRI Standard 270-95 (includes pure tone penalty). Sound Rating Number is the overall A-Weighted Sound Power Level, (LWA), dBA (100 Hz to 10,000 Hz).

## UNIT CLEARANCES



<sup>1</sup> Unit Clearance	A		B		C		D		Top Clearance
	in.	mm	in.	mm	in.	mm	in.	mm	
<b>Service Clearance</b>	36	914	36	914	36	914	36	914	<b>Unobstructed</b>
<b>Minimum Operation Clearance</b>	36	914	36	914	36	914	36	914	

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

<sup>1</sup> Service Clearance - Required for removal of serviceable parts.

Minimum Operation Clearance - Required clearance for proper unit operation.



## WEIGHT DATA

Size	Net				Shipping			
	Base		Max.		Base		Max.	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
LHX024S	566	257	664	301	607	275	705	320
LHX036S	566	257	664	301	607	275	705	320
LHX048S	641	291	767	348	682	309	808	367
LHX060S	686	311	792	359	727	330	833	378

Base Unit - The unit with NO OPTIONS.

Max. Unit - The unit with ALL OPTIONS Installed (Economizer, etc.)

## FACTORY / FIELD INSTALLED OPTIONS AND ACCESSORIES - NET WEIGHTS

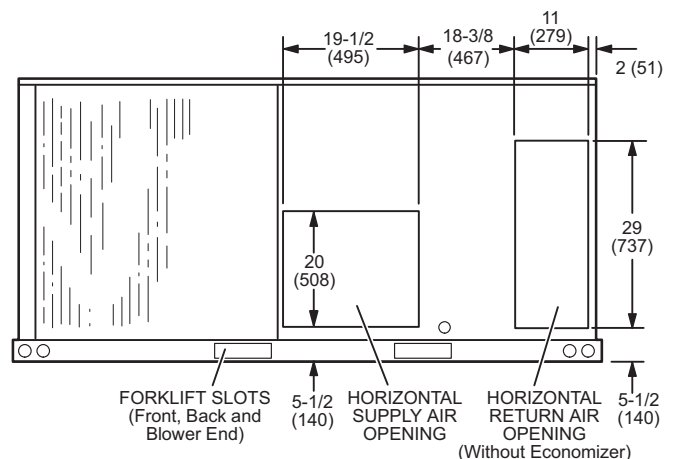
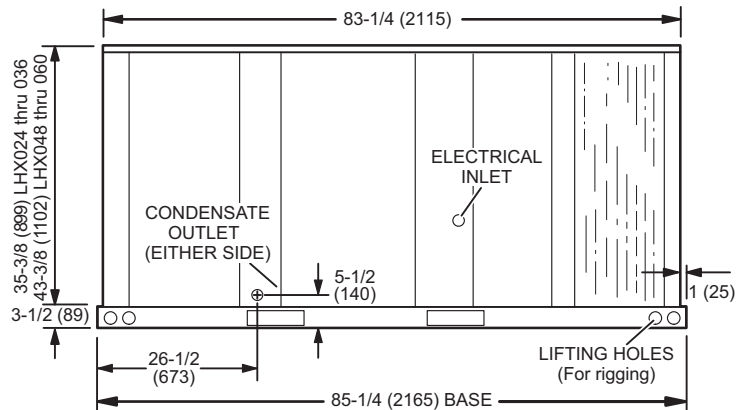
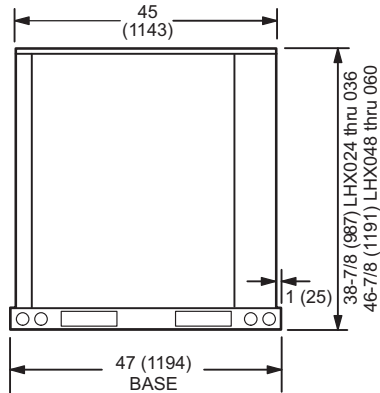
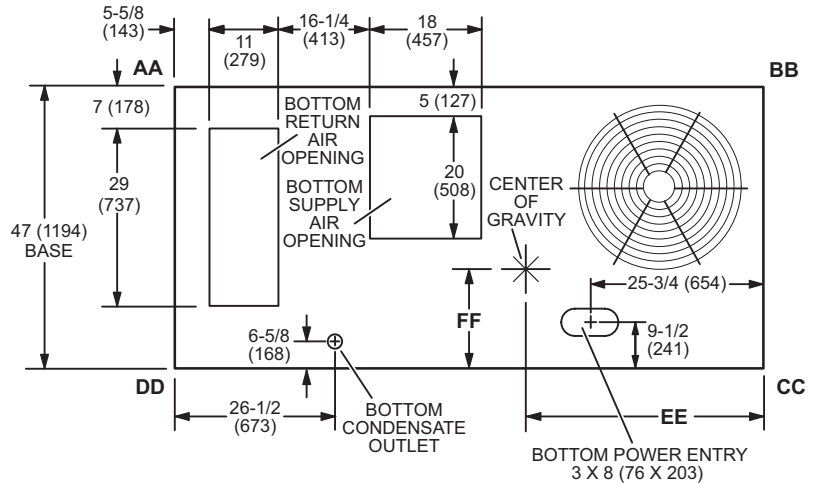
Description	lbs.	kg	
<b>ECONOMIZER / OUTDOOR AIR / POWER EXHAUST</b>			
<b>Economizer</b>			
Standard Economizer only	125	57	
Standard Economizer with Barometric Relief Dampers and Combination Hood	148	67	
Barometric Relief Dampers, Combination Hood and Harness for Standard Economizer	23	10	
High Performance Economizer - Includes Barometric Relief Dampers and Combination Hood	131	59	
<b>Outdoor Air Dampers</b>			
Motorized	40	18	
Manual	30	14	
<b>Power Exhaust</b>	35	16	
<b>ELECTRIC HEAT</b>			
5 kW	31	14	
7.5 kW	31	14	
10 kW	31	14	
15 kW	31	14	
22.5 kW	35	16	
<b>COIL/HAIL GUARDS</b>			
All models	30	14	
<b>ROOF CURBS</b>			
<b>Hybrid Roof Curbs, Downflow</b>			
8 in. height	86	39	
14 in. height	108	49	
18 in. height	125	57	
24 in. height	147	67	
<b>Adjustable Pitch Curb, Downflow</b>			
14 in. height	147	67	
<b>CEILING DIFFUSERS</b>			
Step-Down	RTD9-65S	80	36
	RTD11-95S	118	54
Flush	FD9-65S	80	36
	FD11-95S	118	54
Transitions (Supply and Return)	T1TRAN10AN1	22	10
	T1TRAN20N-1	21	10

# DIMENSIONS

# UNIT

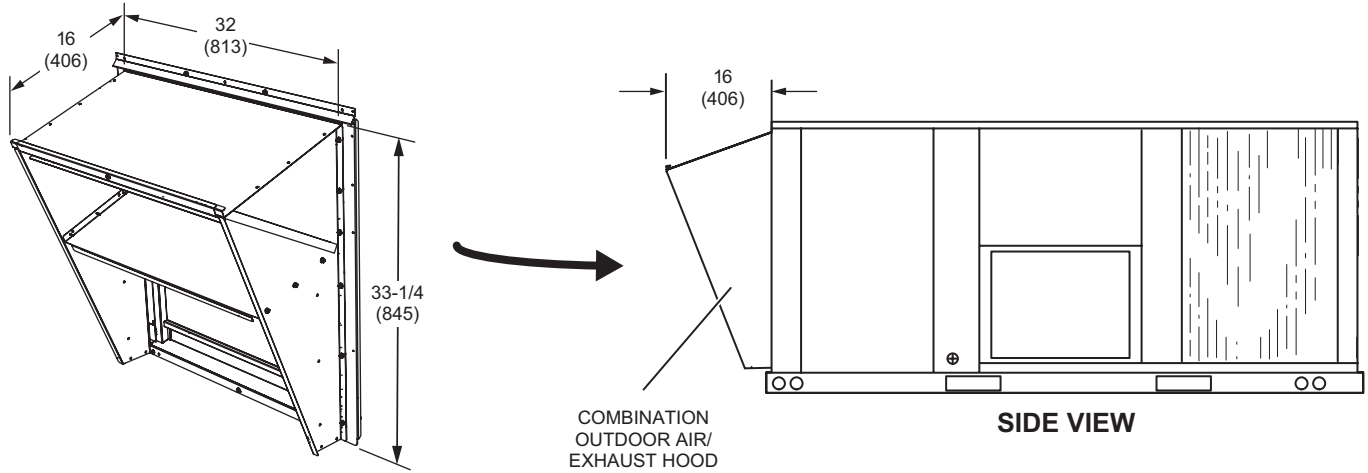
Size	CORNER WEIGHTS														CENTER OF GRAVITY									
	AA		BB		CC		DD		EE		FF		Base		Max.		Base		Max.					
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm	in.	mm	in.	mm				
024	119	54	140	64	149	67	153	69	165	75	170	77	133	60	201	91	38	965	43-3/4	1111	22-1/4	565	22-1/4	565
036	119	54	140	64	149	67	153	70	165	75	170	77	133	60	201	91	38	965	43-3/4	1111	22-1/4	565	22-1/4	565
048	128	58	153	69	159	72	177	80	197	89	239	109	158	72	198	90	38	965	39	991	21	533	20	508
060	137	62	158	72	170	77	175	79	210	95	236	107	169	77	223	101	38	965	41	1041	21	533	20	508

Base Unit - The unit with standard heat exchanger NO OPTIONS.  
 Max. Unit - The unit with ALL OPTIONS Installed (Economizer, etc.).

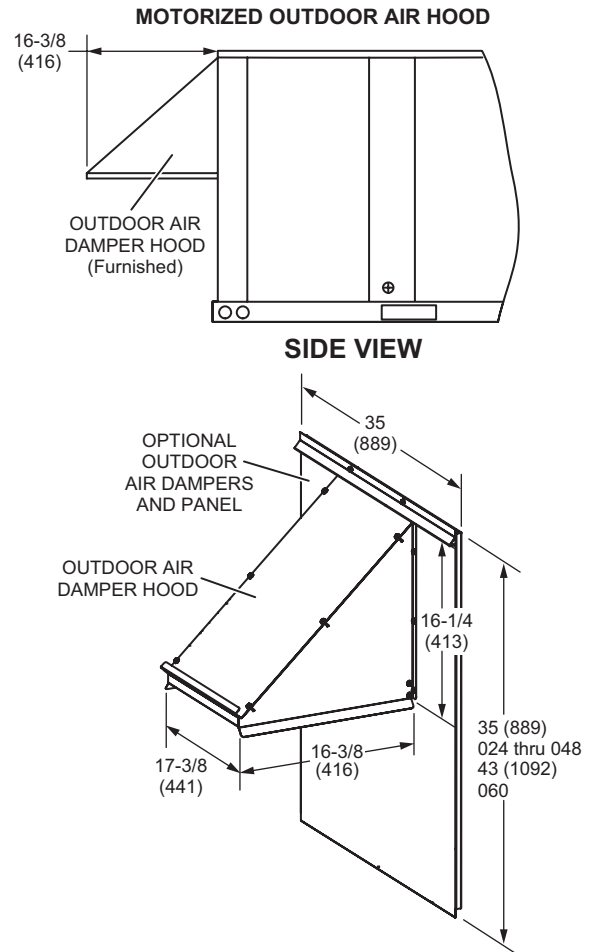
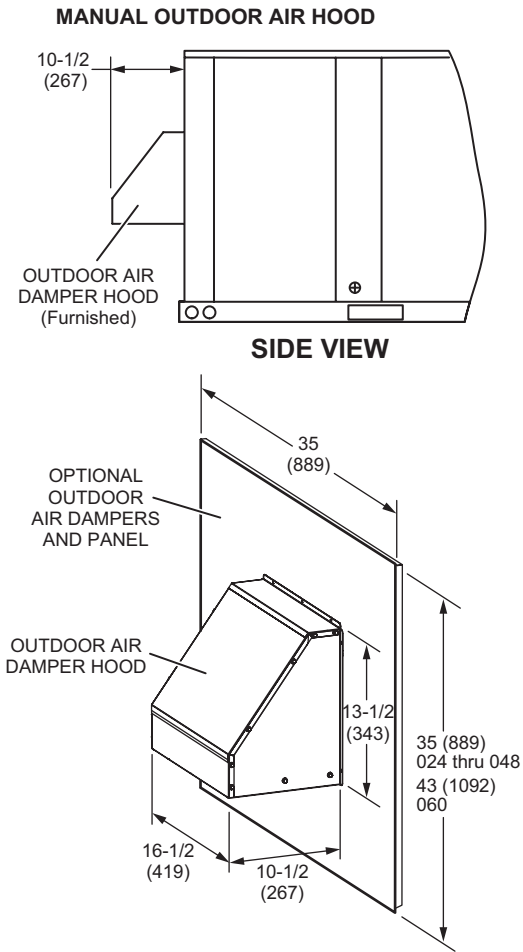


**COMBINATION OUTDOOR AIR HOOD DETAIL FOR OPTIONAL ECONOMIZER AND BAROMETRIC RELIEF DAMPERS - DOWNFLOW APPLICATIONS**

- Furnished with Factory Installed Standard Economizer
- Optional for Field Installed Standard Economizer - Order Separately
- Furnished with Factory and Field Installed High Performance Economizer

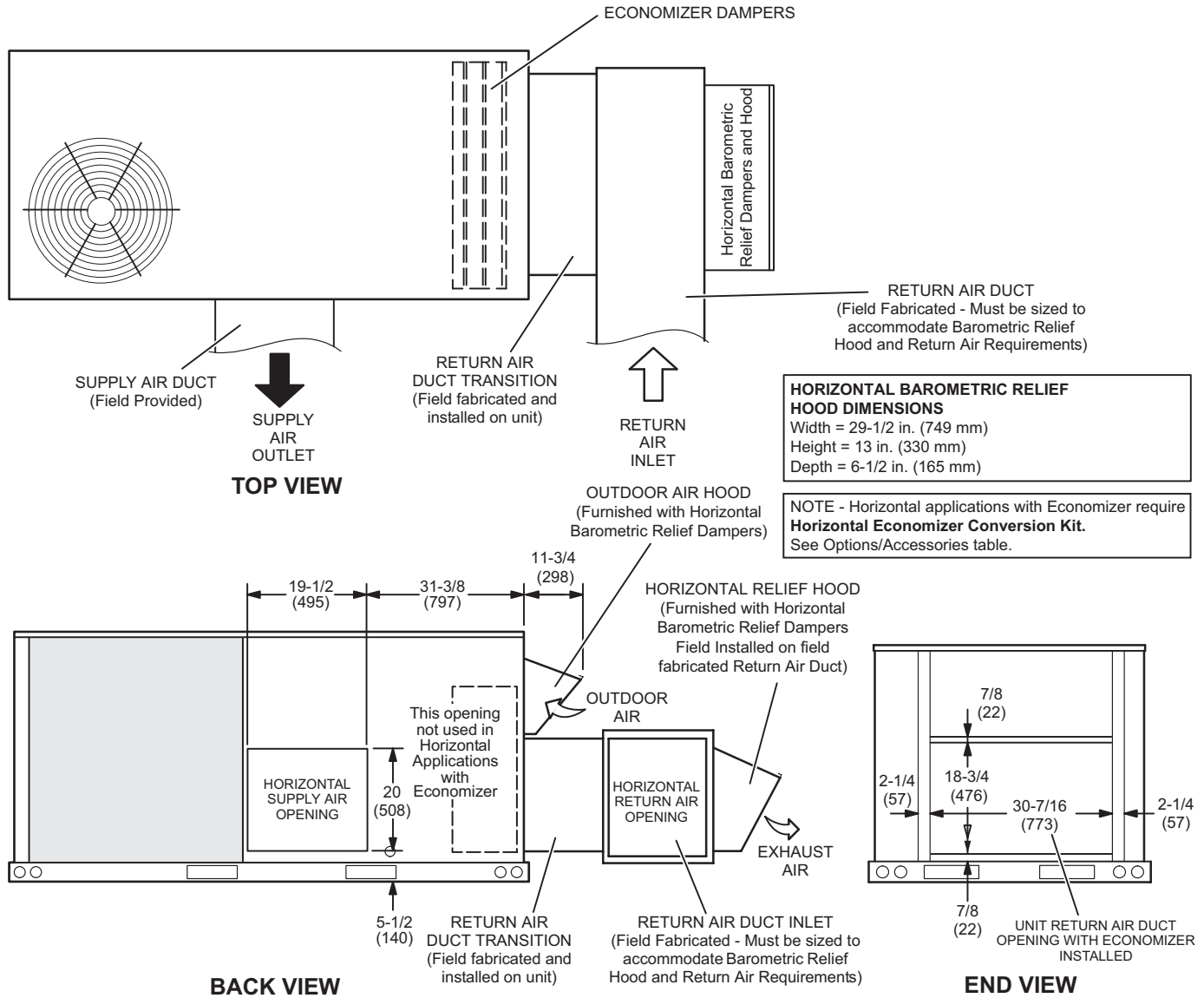


**OUTDOOR AIR DAMPER HOOD DETAIL (Downflow or Horizontal Applications)**



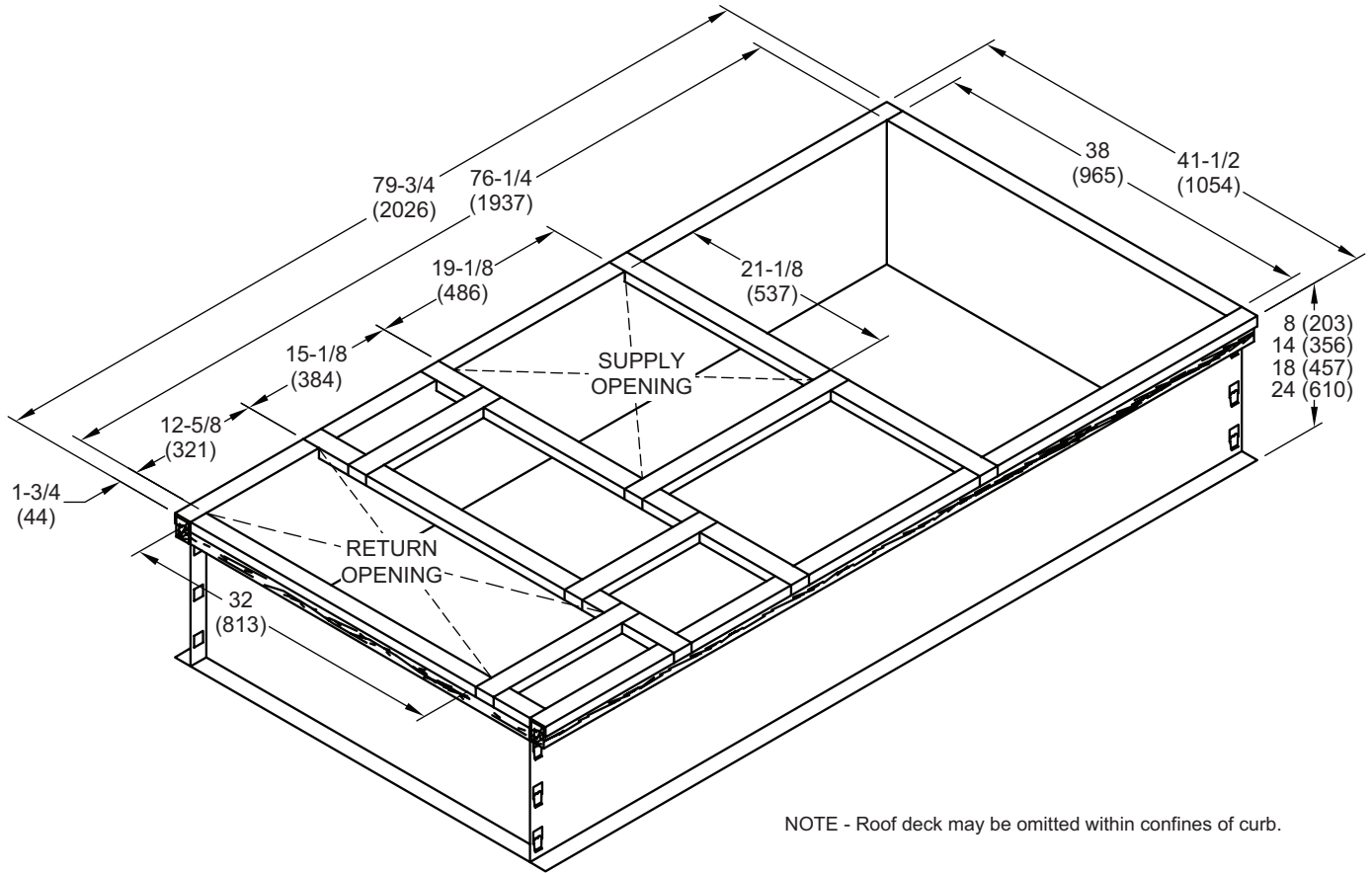
# DIMENSIONS - ACCESSORIES

## HORIZONTAL ECONOMIZER APPLICATIONS - OUTDOOR AIR HOOD DETAIL WITH OPTIONAL ECONOMIZER DAMPERS AND OPTIONAL HORIZONTAL BAROMETRIC RELIEF DAMPERS AND HOOD

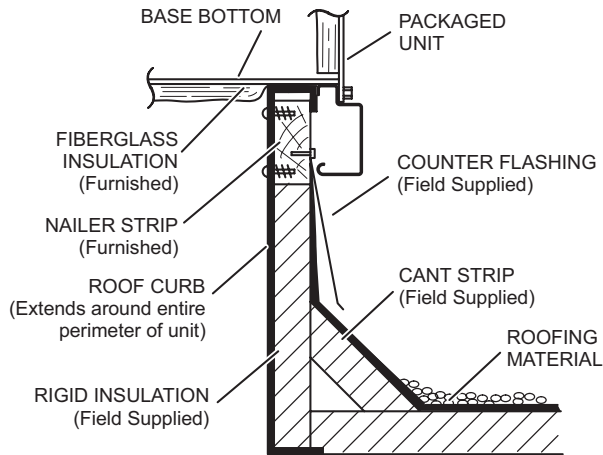


# DIMENSIONS - ACCESSORIES

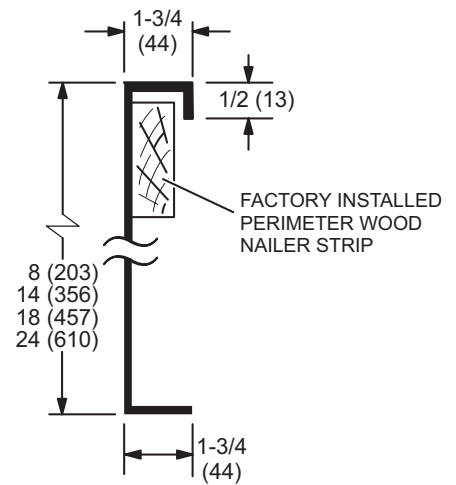
## HYBRID ROOF CURBS - DOUBLE DUCT OPENING



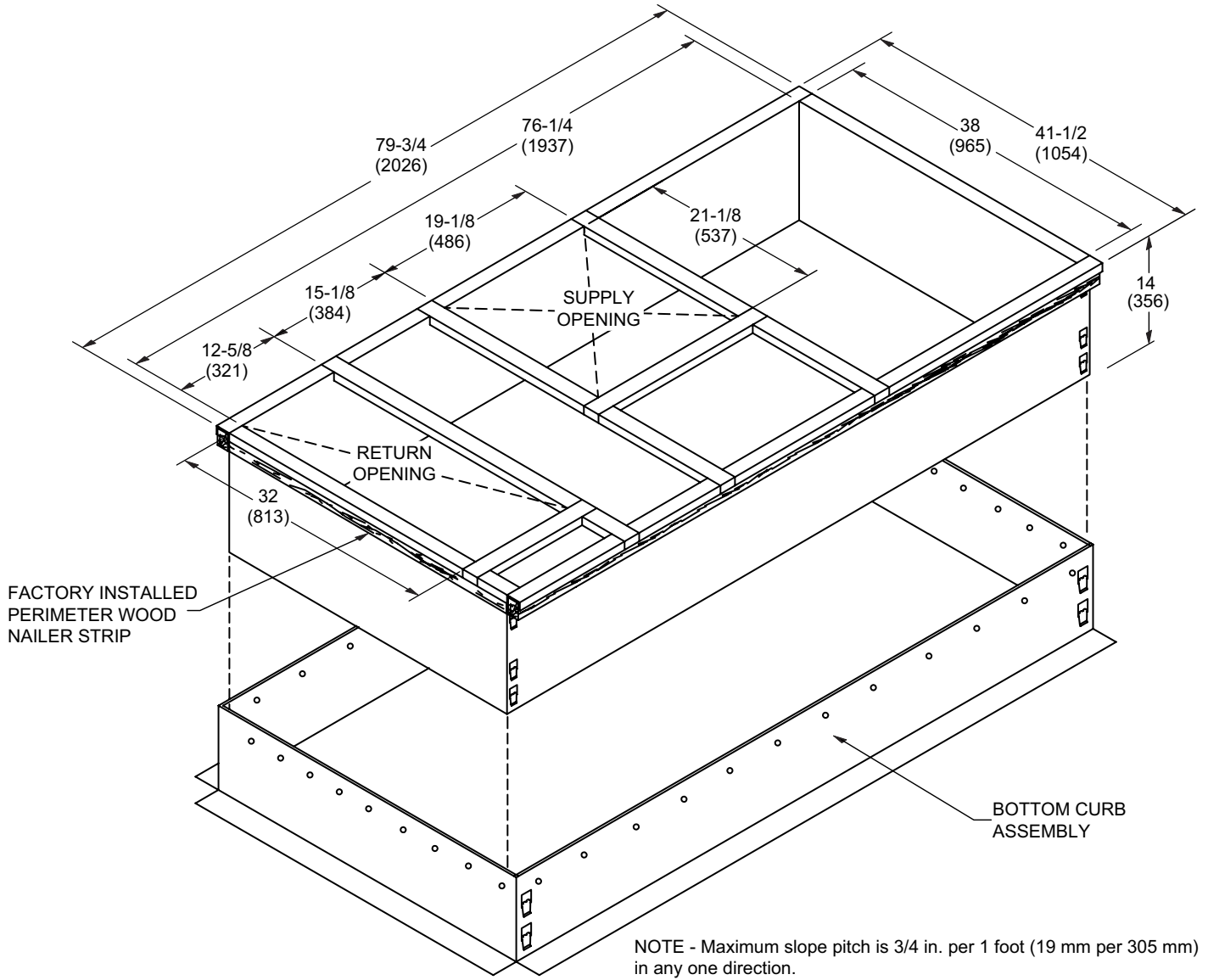
### TYPICAL FLASHING DETAIL FOR ROOF CURB



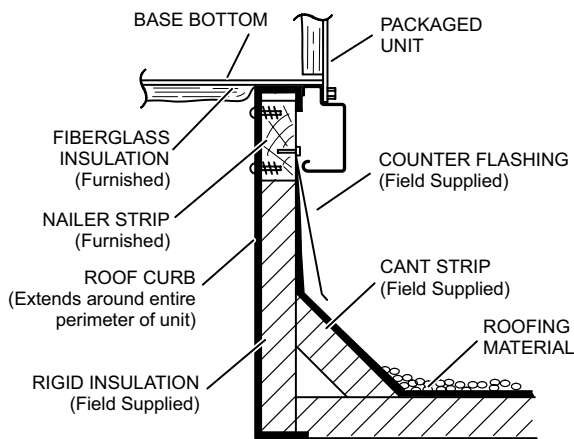
### DETAIL ROOF CURB



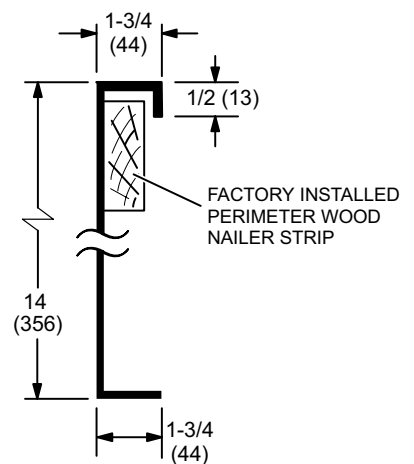
**ADJUSTABLE PITCH CURBS - DOUBLE DUCT OPENING**



**TYPICAL FLASHING DETAIL FOR ROOF CURB**

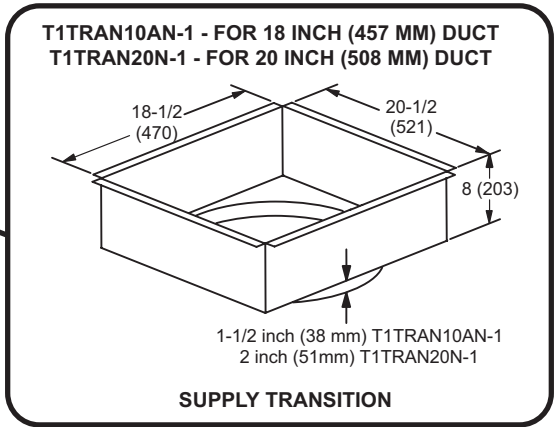
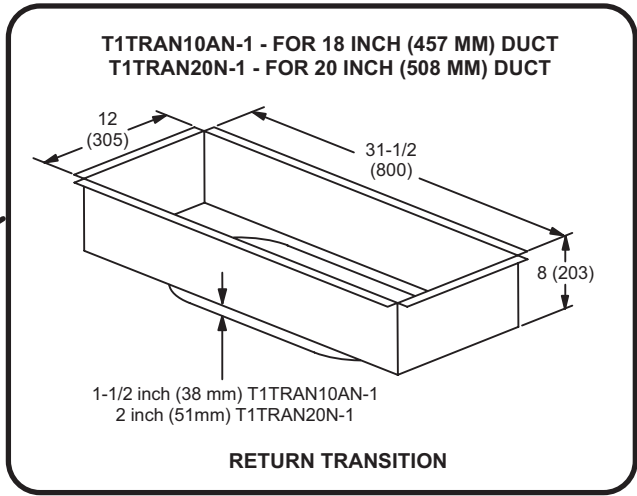
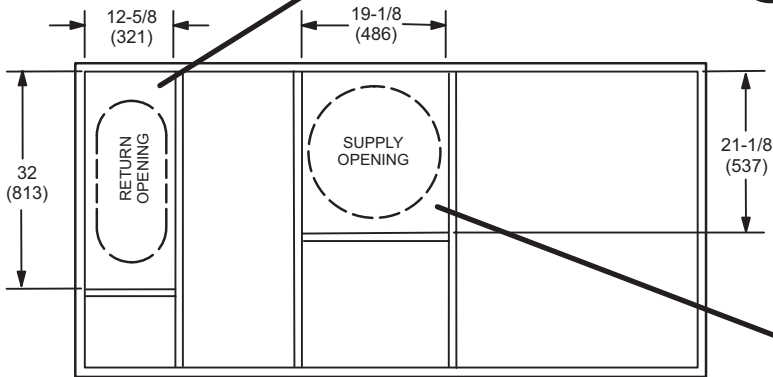


**DETAIL ROOF CURB**



# DIMENSIONS - ACCESSORIES

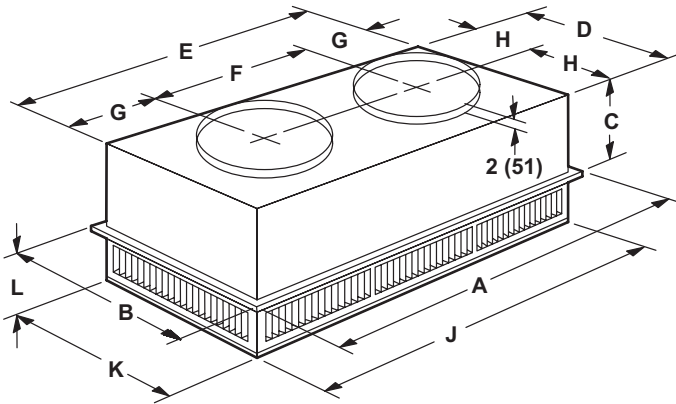
## TRANSITIONS



## DIMENSIONS - ACCESSORIES

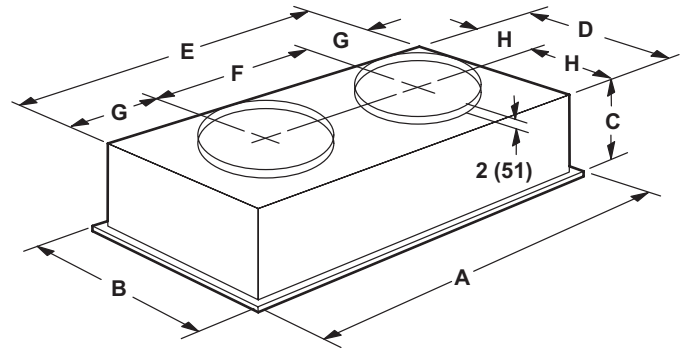
### COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

#### STEP-DOWN CEILING DIFFUSER



Model		RTD9-65S	RTD11-95S
A	in.	47-5/8	47-5/8
	mm	1159	1159
B	in.	23-5/8	29-5/8
	mm	600	752
C	in.	11-3/8	14-3/8
	mm	289	365
D	in.	21-1/2	27-1/2
	mm	546	699
E	in.	45-1/2	45-1/2
	mm	1156	1158
F	in.	22-1/2	22-1/2
	mm	572	572
G	in.	11-1/2	11-1/2
	mm	292	292
H	in.	10-3/4	13-3/4
	mm	273	349
J	in.	45-1/2	45-1/2
	mm	1156	1156
K	in.	21-1/2	27-1/2
	mm	546	699
L	in.	7-1/8	8-1/8
	mm	181	206
Duct Size	in.	18 round	20 round
	mm	457 round	508 round

#### FLUSH CEILING DIFFUSER



Model		FD9-65S	FD11-95S
A	in.	47-5/8	47-5/8
	mm	1159	1159
B	in.	23-5/8	29-5/8
	mm	600	752
C	in.	13-1/2	16-5/8
	mm	343	422
D	in.	21	27
	mm	533	686
E	in.	45	45
	mm	1143	1143
F	in.	22-1/2	22-1/2
	mm	572	572
G	in.	11-1/4	11-1/4
	mm	286	286
H	in.	10-1/2	13-1/2
	mm	267	343
Duct Size	in.	18 round	20 round
	mm	457 round	508 round







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