

PACKAGED HEAT PUMP



LHX

K-Series™ ROOFTOP UNITS

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

COMMERCIAL

PRODUCT SPECIFICATIONS (EHB)

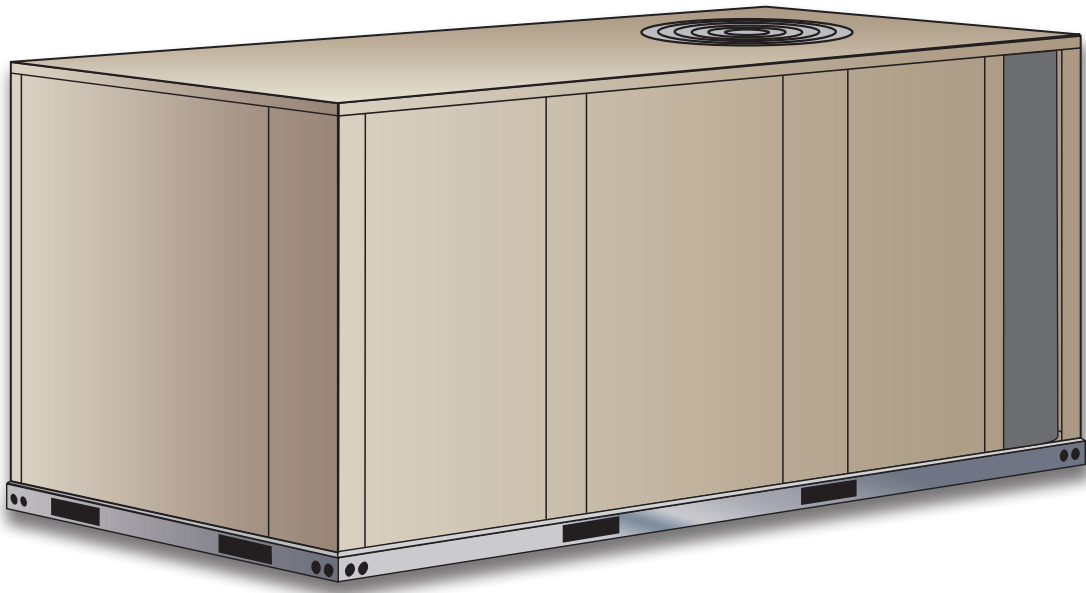
2 to 5 Tons

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

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

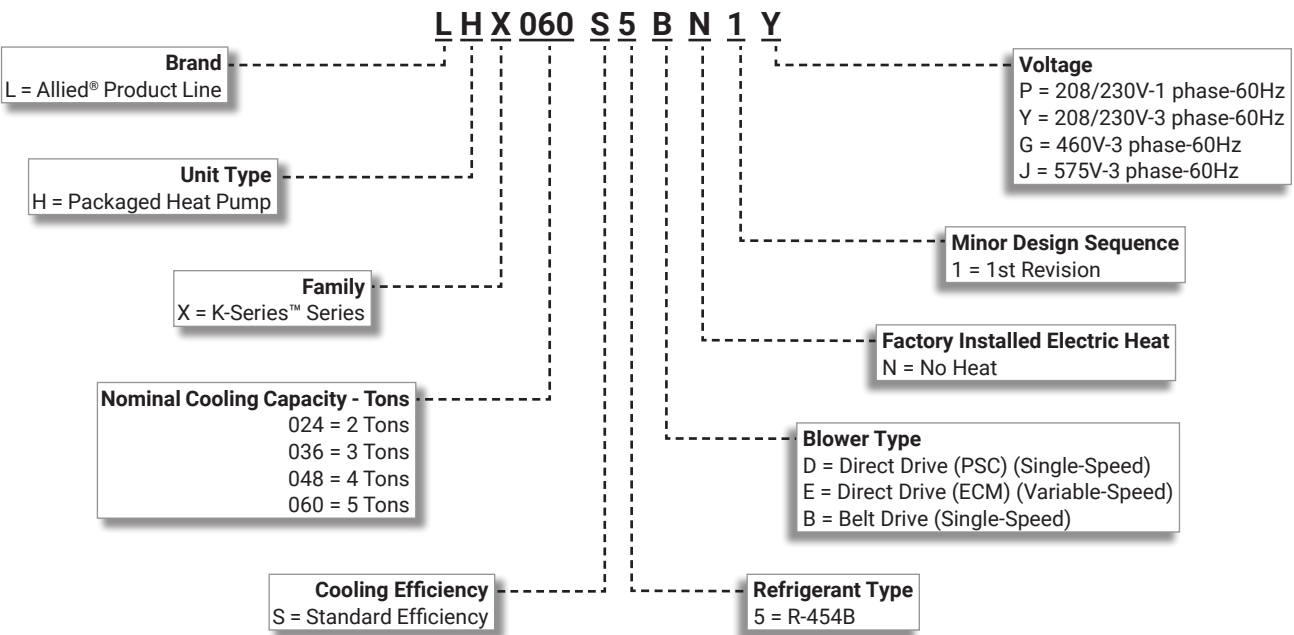
Optional Electric Heat - 5 to 22.5 kW

K-SERIES™



**ASHRAE
Standard
90.1**

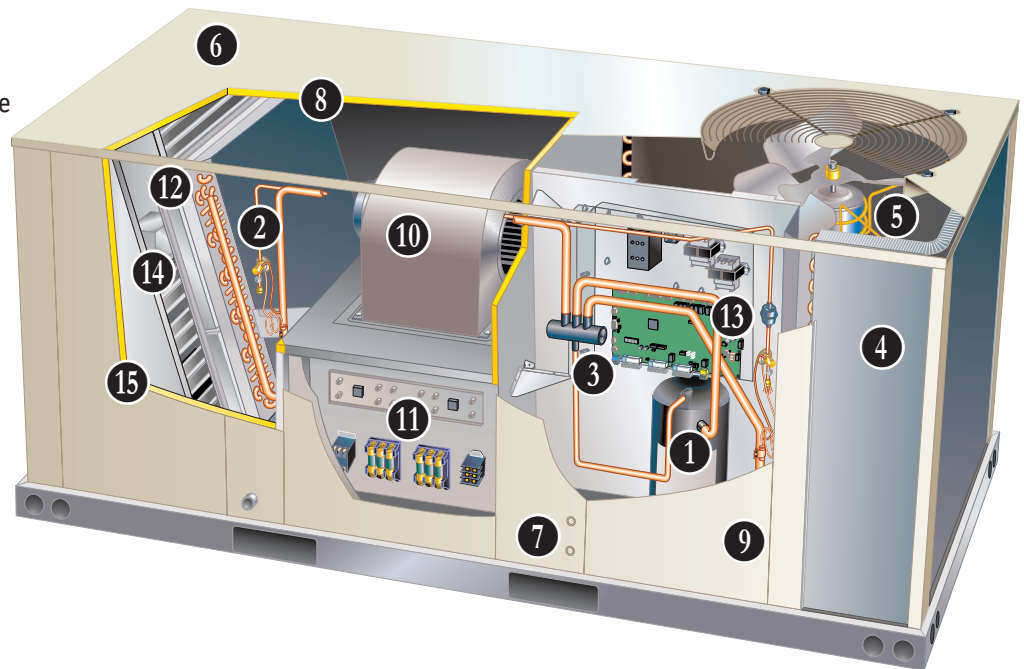
MODEL NUMBER IDENTIFICATION



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

Field Installed

Burglar Bars

- Heavy gauge galvanized frame
- Fully welded
- 3/4 in. bar meets ASTM specification
- Frame meets ASTM A446, A525, A526 and A527 specification
- Burglar bars designed to fit ductwork

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

- All units include terminal block and fuse block in power entry junction box for single power entry application

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

High Efficiency Air Filters

- 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

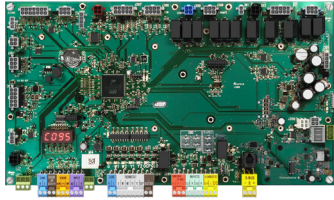
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Indoor Air Quality (CO₂) Sensors

- Monitors CO₂ 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

NOTE - 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 CO₂ 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)

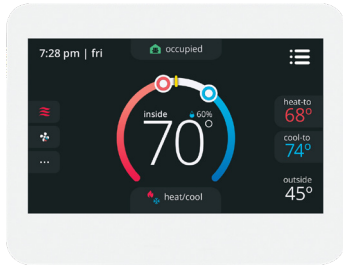
- White powder coat finish on diffuser face and grilles
- Insulated UL listed duct liner
- Diffuser box has collars for duct connection
- Step-down diffusers have double deflection blades
- Flush diffusers have fixed blades
- Provisions for suspending
- Internally sealed to prevent recirculation
- Removable 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



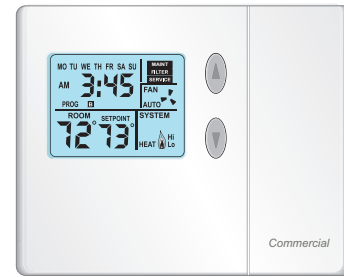
- Fully Communicating Sensor
- Full Color Touchscreen Interface
- Variable Speed System Control (On Compatible Units)
- Up To 4 Heat / 4 Cool
- Built-In Sensors For Temperature, Humidity And Optional CO₂
- Remote Sensor Options For Occupancy, Temperature
- BACnet Capable Options
- 5-2 or 7-Day Scheduling
- 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
CS8500 Commercial 7 Day Programmable Thermostat		
CS8500 7-Day Thermostat	No CO ₂ Sensing	24K55
	With CO ₂ Sensing	24K53
Sensors/Accessories	¹ Remote non-adjustable wall-mount 10k	47W37
	¹ Remote non-adjustable wall-mount 11k	94L61
Sysbus Network Cable (Yellow) for CS8500 and LCS-5030 Wired Room Sensor		
Twisted pair 100% shielded communication cable, Red and Black 22 AWG, yellow jacket, rated at 75°C, 300V, Plenum rated Insulation - Low smoke PVC, NEC, CMP	500 ft. box	27M19
	1000 ft. box	94L63
	2500 ft. roll	68M25
CS7500 Commercial 7-Day Programmable Thermostat		
CS7500 7-Day Thermostat		24K41
Sensors/Accessories	² Remote non-adjustable wall-mount 20k	47W36
	² Remote non-adjustable wall-mount 10k	47W37
	Remote non-adjustable discharge air (duct mount)	19L22
	Outdoor temperature sensor	X2658
CS3000 Commercial 5-2 Day Programmable Thermostat		
CS3000 5-2 Day Thermostat		11Y05
Sensors/Accessories	Remote non-adjustable wall mount 10k averaging	47W37
	Thermostat wall mounting plate	X2659
Universal Thermostat Guard with Lock (clear)		
	Inside Dimensions (H x W x D) 5-7/8 x 8-3/8 x 3 in.	39P21

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

² 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	
COOLING SYSTEM						
Condensate Drain Trap	PVC	22H54	X	X	X	X
	Copper	76W27	X	X	X	X
Drain Pan Overflow Switch		21Z07	X	X	X	X
BLOWER - SUPPLY AIR						
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
CABINET						
Burglar Bars		Y1037	X	X	X	X
Combination Coil/Hail Guards		13R98	OX	OX		
		13T03			OX	OX
Hinged Access Panels			O	O	O	O
CONTROLS						
BACnet® Module		38B35	X	X	X	X
Dirty Filter Switch		53W66	X	X	X	X
NOTE - Also see Conventional Thermostat Control Systems on page 12 for Additional Options.						
Smoke Detector - Supply or Return (Power board and one sensor)		21Z11	X	X	X	X
Smoke Detector - Supply and Return (Power board and two sensors)		21Z12	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	
ECONOMIZER						
High Performance Economizer With Combination Outdoor Air Hood (Sensible Control) (Approved for California Title 24 Building Standards / AMCA Class 1A Certified)						
Includes Barometric Relief Dampers and Combination Hood	20H48	OX	OX	OX	OX	
Economizer Accessories						
Horizontal Economizer Conversion Kit	17W45	X	X	X	X	
Economizer Controls						
Single Enthalpy Control	21Z09	OX	OX	OX	OX	
Differential Enthalpy Control (order 2) (Not for Title 24)	21Z09	X	X	X	X	
POWER EXHAUST FAN						
Standard Static	208/230V-1 or 3ph	21Z13	X	X	X	X
NOTE - Field installed Power Exhaust Fan requires “Barometric Relief Dampers for Power Exhaust Kit” for field installation. See below.	460V-3ph	21Z14		X	X	X
	575V-3ph	21Z15		X	X	X
BAROMETRIC RELIEF						
¹ Barometric Relief Dampers for Power Exhaust Kit	21Z21		X	X	X	
² Horizontal Barometric Relief Dampers With Exhaust Hood	19F01	X	X	X	X	
OUTDOOR AIR						
Outdoor Air Dampers - Includes Outdoor Air Hood						
Motorized	15D17	X	X	X	X	
Manual	15D18	X	X	X	X	

¹ Required when Economizer is factory installed with field installed Power Exhaust Fan option.

² Required when Economizer is configured for horizontal airflow.

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

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OPTIONS / ACCESSORIES

Item	Order Number	Size			
		024	036	048	060
ELECTRICAL					
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)	74M70	X	X	X
	³ 20 amp non-powered, field-wired (208/230V, 460V, 575V)	67E01	X	X	X
Weatherproof Cover for GFI	10C89	X	X	X	X
ELECTRIC HEAT					
5 kW	208/240V- 1ph	31B27	X		
7.5 kW	208/240V-1ph	24U10	X	X	X
	208/240V-3ph	24U11		X	X
	460V-3ph	24U12		X	X
	575V-3ph	24U13		X	X
10 kW	208/240V-1ph	24U14	X		
15 kW	208/230V-1ph	24U15		X	X
	208/240V-3ph	24U16		X	X
	460V-3ph	24U17		X	X
	575V-3ph	24U18		X	X
22.5 kW	208/240V-1ph	24U19			X
	208/240V-3ph	24U20			X
	460V-3ph	24U21			X
	575V-3ph	24U22			X

³ 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.

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O - Configure to Order (Factory Installed)

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OPTIONS / ACCESSORIES

Item		Order Number	Size			
			024	036	048	060
INDOOR AIR QUALITY						
Air Filters						
High Efficiency Air Filters Order 4 per unit	MERV 8 (16 x 20 x 2)	54W20	X	X		
	MERV 13 (16 x 20 x 2)	52W37	X	X		
	MERV 8 (20 x 20 x 2)	54W21			X	X
	MERV 13 (20 x 20 x 2)	52W39			X	X
Replaceable Media Filter With Metal Mesh Frame (includes non-pleated filter media) (Order 4 per unit)	(20 x 20 x 2)	44N60				
Indoor Air Quality (CO ₂) Sensors						
Sensor - Wall-mount, off-white plastic cover with LCD display		77N39	X	X	X	X
Sensor - Wall-mount, off-white plastic cover, no display		23V86	X	X	X	X
Sensor - Black plastic case, LCD display, rated for plenum mounting		87N52	X	X	X	X
Sensor - Black plastic case, no display, rated for plenum mounting		23V87	X	X	X	X
CO ₂ Sensor Duct Mounting Kit - for downflow applications		23Y47	X	X	X	X
Aspiration Box - for duct mounting non-plenum rated CO ₂ sensor (77N39)		90N43	X	X	X	X
UVC Germicidal Lamps						
¹ UVC Light Kit (110/230V-1ph)		21A92	X	X	X	X
Step-Down Transformers	460V primary, 230V secondary	10H20	X	X	X	X
	575V primary, 230V secondary	10H21	X	X	X	X
ROOF CURBS						
Hybrid Roof Curbs, Downflow						
8 in. height		11F50	X	X	X	X
14 in. height		11F51	X	X	X	X
18 in. height		11F52	X	X	X	X
24 in. height		11F53	X	X	X	X
Adjustable Pitch Curb, Downflow						
14 in. height		43W27	X	X	X	X
CEILING DIFFUSERS						
Step-Down - Order one	RTD9-65S	13K60	X	X	X	
	RTD11-95S	13K61				X
Flush - Order one	FD9-65S	13K55	X	X	X	
	FD11-95S	13K56				X
Transitions (Supply and Return) - Order one	T1TRAN10AN1	17W53	X	X	X	
	T1TRAN20N-1	17W54				X

⁴ 1 Lamps operate on 110-230V single-phase power supply. Step-down transformer may be ordered separately for 460V and 575V units. Alternately, 110V power supply may be used to directly power the UVC ballast(s).

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
	¹ Net Cooling Capacity (Btuh)	22,600	34,600	34,600
	¹ AHRI Rated Air Flow (cfm)	900	1400	1400
	¹ SEER2 (Btuh/Watt)	13.4	13.4	13.4
	¹ EER2 (Btuh/Watt)	10.6	10.6	10.6
	Total Unit Power (kW)	2.1	3.3	3.3
Heating Performance	¹ Total High Heating Capacity (Btuh)	23,000	35,000	35,000
	¹ AHRI Rated Air Flow (cfm)	900	1400	1400
	¹ HSPF2 (Region IV)	6.7	6.7	6.7
	¹ HSPF2 (Region V)	5.70	5.90	5.90
	¹ COP	3.50	3.64	3.64
	Total Unit Power (kW)	2.2	2.9	2.9
	¹ Total Low Heating Capacity (Btuh)	13,000	20,400	20,400
	¹ 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
		13 lbs. 2 oz.	13 lbs. 0 oz.	13 lbs. 0 oz.
Electric Heat Available		See page 15		
Compressor Type (Number)		Scroll (1)	Scroll (1)	Scroll (1)
Outdoor Coil	Net face area - ft. ²	15.6	15.6	15.6
	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. ²	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.

¹ 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
	¹ Net Cooling Capacity (Btuh)	46,000	46,000	57,000
	¹ AHRI Rated Air Flow (cfm)	1450	1450	1800
	¹ SEER2 (Btuh/Watt)	13.4	13.4	13.4
	¹ EER2 (Btuh/Watt)	10.6	10.6	10.6
	Total Unit Power (kW)	4.4	4.4	5.4
Heating Performance	¹ Total High Heating Capacity (Btuh)	47,500	47,500	58,000
	¹ AHRI Rated Air Flow (cfm)	1450	1450	1800
	¹ HSPF2 (Region IV)	6.7	6.7	6.7
	¹ HSPF2 (Region V)	6.2	6.20	6.36
	¹ COP	3.72	3.72	3.7
	Total Unit Power (kW)	3.9	3.9	4.5
	¹ Total Low Heating Capacity (Btuh)	27,400	27,400	33,000
	¹ COP	2.4	2.4	2.4
	Total Unit Power (kW)	3.7	3.7	4.2
	Sound Rating Number	dBA	75	75
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. ²	19.3	19.3	19.3
	Rows	3	3	3
	Fins - in.	20	20	20
Outdoor Coil Fan	Motor HP (number and type)	1/3 (1 PSC)	1/3 (1 PSC)	1/3 (1 PSC)
	Rpm	1075	1075	1075
	Watts	325	325	325
	Diameter (Number) - in.	(1) 24	(1) 24	(1) 24
	Blades	3	3	3
	Total air volume - cfm	3900	3900	3900
Indoor Coil	Net face area - ft. ²	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.

¹ 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
Model		LHX060S5B	
Nominal Tonnage		5	
Efficiency Type		Standard	
Blower Type		Single Speed Belt Drive	
Cooling Performance	Gross Cooling Capacity (Btuh)	60,600	
	¹ Net Cooling Capacity (Btuh)	57,000	
	¹ AHRI Rated Air Flow (cfm)	1800	
	¹ SEER2 (Btuh/Watt)	13.4	
	¹ EER2 (Btuh/Watt)	10.6	
	Total Unit Power (kW)	5.4	
	Heating Performance	¹ Total High Heating Capacity (Btuh)	58,000
¹ AHRI Rated Air Flow (cfm)		1800	
¹ HSPF2 (Region IV)		6.7	
¹ COP		3.7	
Total Unit Power (kW)		4.5	
¹ Total Low Heating Capacity (Btuh)		33,000	
¹ COP		2.4	
Total Unit Power (kW)		4.2	
Sound Rating Number		dBA	80
Refrigerant Charge	Refrigerant Type	R-454B	
		15 lbs. 0 oz.	
Electric Heat Available		See page 15	
Compressor Type (Number)		Scroll (1)	
Outdoor Coil	Net face area - sq. ft.	19.3	
	Rows	3	
	Fins - in.	20	
Outdoor Coil Fan	Motor HP (number and type)	1/3 (1 PSC)	
	Rpm	1075	
	Watts	375	
	Diameter (Number) - in.	(1) 24	
	Blades	3	
	Total air volume - cfm	3900	
	Indoor Coil	Net face area - sq. ft.	9.7
Rows		4	
Fins - in.		14	
Condensate drain size (NPT) - in.		(1) 1	
Expansion device type		Balanced Port Thermostatic Expansion Valve	
³ Indoor Blower & Drive Selection	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	
	Filters	Type	Disposable
	Number and size - in.	(4) 20 x 20 x 2	
Line voltage data (Volts-Phase-Hz)		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.

¹ 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.

² 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 Tem- perature	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						
				75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F				
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 Tem- perature	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
	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		
				75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F
cfm	kBtu/h	kW	75°F	80°F	85°F	kBtu/h	kW	75°F	80°F	85°F	kBtu/h	kW	75°F	80°F	85°F	kBtu/h	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
	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		
				75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F			75°F	80°F	85°F
cfm	kBtuh	kW				kBtuh	kW				kBtuh	kW				kBtuh	kW				
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
DOWNFLOW	LHX024S5D					
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
HORIZONTAL	LHX024S5D					
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
DOWNFLOW					LHX036S5D				
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
HORIZONTAL					LHX036S5D				
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**DIRECT DRIVE - 3 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	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM
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	---	---	---	---	---	---	1144	437	1092	1360	548	1120	1576	659	1148	1725	769	1173	1874	878	1197	2043	1049	1236	---	---	---
1.2	---	---	---	---	---	---	1115	458	1129	1328	566	1154	1540	674	1179	1685	780	1202	1829	886	1225	1985	1049	1262	---	---	---
1.3	---	---	---	---	---	---	1080	475	1163	1288	579	1186	1496	683	1208	1634	785	1230	1772	887	1251	1913	1042	1288	---	---	---
1.4	---	---	---	---	---	---	1037	487	1196	1239	587	1216	1441	686	1236	1572	783	1256	1703	880	1275	1826	1024	1312	---	---	---

HORIZONTAL

External Static Press. in. w.g.	Percentage of Total Motor Torque																										
	20%			30%			40%			50%			60%			70%			80%			90%			100%		
	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM
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	---	---	---	---	---	---	1129	369	1025	1341	494	1066	1553	618	1106	1713	751	1143	1872	884	1179	2001	1017	1209	---	---	---
1.1	---	---	---	---	---	---	1097	388	1060	1310	511	1098	1522	634	1135	1682	766	1170	1841	898	1204	1966	1028	1233	---	---	---
1.2	---	---	---	---	---	---	1063	405	1095	1276	527	1129	1488	648	1163	1647	779	1196	1806	909	1228	1925	1034	1257	---	---	---
1.3	---	---	---	---	---	---	1026	420	1128	1239	540	1159	1451	659	1190	1609	788	1221	1767	917	1252	1879	1036	1281	---	---	---
1.4	---	---	---	---	---	---	985	431	1160	1197	548	1188	1409	665	1216	1566	793	1245	1723	920	1274	1825	1033	1304	---	---	---

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%		
	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
0.1	984	97	537	1249	184	616	1513	270	695	1697	376	760	1881	481	825	2002	584	873
0.2	912	91	587	1183	180	661	1453	268	735	1644	377	796	1835	486	856	1964	593	902
0.3	851	92	636	1126	183	706	1400	273	775	1597	385	832	1794	497	889	1931	607	932
0.4	797	100	687	1075	192	751	1353	283	815	1555	397	869	1757	511	922	1901	625	962
0.5	752	114	737	1032	206	796	1312	298	855	1518	413	905	1724	528	955	1873	644	993
0.6	712	132	787	994	224	842	1275	316	896	1484	432	942	1692	548	988	1845	666	1024
0.7	678	155	836	960	246	886	1242	336	936	1452	452	979	1662	568	1021	1818	687	1055
0.8	648	180	885	929	269	931	1210	358	976	1421	474	1016	1632	589	1055	1790	709	1086
0.9	621	207	933	900	294	974	1179	381	1015	1390	495	1051	1600	609	1087	1760	728	1117
1.0	596	235	981	872	319	1017	1148	403	1053	1357	516	1086	1566	628	1119	1725	746	1147
1.1	---	---	---	---	---	---	1115	424	1090	1322	534	1120	1528	643	1150	1686	760	1176
1.2	---	---	---	---	---	---	1080	443	1126	1283	549	1153	1485	655	1180	1641	770	1204
1.3	---	---	---	---	---	---	1040	458	1161	1238	561	1185	1436	663	1209	1589	775	1231
1.4	---	---	---	---	---	---	996	469	1194	1189	567	1215	1381	665	1236	1530	773	1257
1.5	---	---	---	---	---	---	946	475	1225	1132	568	1244	1317	661	1262	1460	765	1281
1.6	---	---	---	---	---	---	889	476	1254	1066	563	1270	1243	649	1285	1380	748	1303

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	Watts	RPM	Cfm	Watts	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	---	---	---
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	---	---	---
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	---	---	---
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	---	---	---
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	---	---	---
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	---	---	---
1.0	---	---	---	---	---	---	1135	365	1018	1349	489	1058	1562	612	1097	1723	745	1133	1884	878	1169	2017	1013	1198	---	---	---
1.1	---	---	---	---	---	---	1103	385	1054	1317	507	1090	1531	629	1126	1693	761	1160	1854	893	1194	1983	1024	1223	---	---	---
1.2	---	---	---	---	---	---	1069	403	1089	1284	524	1122	1498	644	1155	1659	775	1187	1820	905	1219	1944	1032	1247	---	---	---
1.3	---	---	---	---	---	---	1032	418	1123	1247	537	1153	1461	655	1183	1621	784	1213	1781	913	1243	1899	1036	1271	---	---	---
1.4	---	---	---	---	---	---	992	430	1155	1206	547	1182	1419	663	1209	1578	791	1238	1737	918	1266	1847	1035	1295	---	---	---
1.5	---	---	---	---	---	---	947	437	1187	1160	552	1211	1373	666	1235	1531	792	1262	1688	917	1288	---	---	---	---	---	---
1.6	---	---	---	---	---	---	897	440	1217	1109	552	1238	1320	664	1259	1476	788	1284	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	1250	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

¹ 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	
¹ 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	
² Maximum Overcurrent Protection (MOCP)	Unit Only		25	
	with (1) 0.33 HP Power Exhaust		25	
³ Minimum Circuit Ampacity (MCA)	Unit Only		17	
	with (1) 0.33 HP Power Exhaust		19	
ELECTRIC HEAT DATA				
Electric Heat Voltage			208V	240V
² Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat	5 kW	40	45
		7.5 kW	60	60
		10 kW	70	70
³ Minimum Circuit Ampacity (MCA)	Unit + Electric Heat	5 kW	39	43
		7.5 kW	51	56
		10 kW	62	69
² Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat + Power Exhaust	5 kW	45	45
		7.5 kW	60	60
		10 kW	70	80
³ Minimum Circuit Ampacity (MCA)	Unit + Electric Heat + Power Exhaust	5 kW	42	45
		7.5 kW	53	58
		10 kW	64	71
ELECTRICAL ACCESSORIES				
Disconnect		0-10 kW	20W21	20W21

Disconnects - 20W21 - 80A

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

¹ Extremes of operating range are plus and minus 10% of line voltage.

² HACR type breaker or fuse.

³ 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			
¹ 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
² Maximum Overcurrent Protection (MOCP)	Unit Only	35	25	15	15
	with (1) 0.33 HP Power Exhaust	35	25	15	15
³ 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
² Maximum Overcurrent Protection (MOCP)	Unit +	7.5 kW	60	70	40	40	20	20
	Electric Heat	15 kW	100	110	60	70	35	25
³ Minimum Circuit Ampacity (MCA)	Unit +	7.5 kW	57	62	36	39	20	16
	Electric Heat	15 kW	91	101	56	62	31	25
² Maximum Overcurrent Protection (MOCP)	Unit +	7.5 kW	60	70	40	45	25	20
	Electric Heat + Power Exhaust	15 kW	100	110	60	70	35	30
³ Minimum Circuit Ampacity (MCA)	Unit +	7.5 kW	60	65	38	42	21	17
	Electric Heat + Power Exhaust	15 kW	93	104	58	64	32	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.

¹ Extremes of operating range are plus and minus 10% of line voltage.

² HACR type breaker or fuse.

³ 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			
¹ 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
² Maximum Overcurrent Protection (MOCP)	Unit Only	45	30	15	15
	with (1) 0.33 HP Power Exhaust	50	30	15	15
³ 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
² Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat	7.5 kW	70	80	45	50	25	20
		15 kW	100	110	60	70	35	30
³ Minimum Circuit Ampacity (MCA)	Unit + Electric Heat	7.5 kW	64	69	41	44	22	18
		15 kW	98	108	60	66	34	27
² Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat + Power Exhaust	7.5 kW	70	80	50	50	25	20
		15 kW	100	125	70	70	35	30
³ Minimum Circuit Ampacity (MCA)	Unit + Electric Heat + Power Exhaust	7.5 kW	67	72	43	46	24	19
		15 kW	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.

¹ Extremes of operating range are plus and minus 10% of line voltage.

² HACR type breaker or fuse.

³ 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			
¹ Voltage - 60Hz		208/230V - 1 Ph	208/230V - 3 Ph	460V - 3 Ph	575V - 3 Ph
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
² Maximum Overcurrent Protection (MOCP)	Unit Only	40	25	15	15
	with (1) 0.33 HP Power Exhaust	40	30	15	15
³ 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
² Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat	7.5 kW	70	70	40	45	25	20
		15 kW	100	110	60	70	35	30
³ Minimum Circuit Ampacity (MCA)	Unit + Electric Heat	7.5 kW	61	67	40	43	22	17
		15 kW	95	106	60	66	33	26
² Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat + Power Exhaust	7.5 kW	70	70	45	50	25	20
		15 kW	100	110	70	70	35	30
³ Minimum Circuit Ampacity (MCA)	Unit + Electric Heat + Power Exhaust	7.5 kW	64	69	43	46	23	18
		15 kW	98	108	62	68	34	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.

¹ Extremes of operating range are plus and minus 10% of line voltage.

² HACR type breaker or fuse.

³ 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]

Model		LHX048S5E			
¹ Voltage - 60Hz		208/230V - 1 Ph	208/230V - 3 Ph	460V - 3 Ph	575V - 3 Ph
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
² Maximum Overcurrent Protection (MOCP)	Unit Only	50	35	15	15
	with (1) 0.33 HP Power Exhaust	50	35	20	15
³ Minimum Circuit Ampacity (MCA)	Unit Only	35	25	13	10
	with (1) 0.33 HP Power Exhaust	37	28	15	11

ELECTRIC HEAT DATA

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

ELECTRICAL ACCESSORIES

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

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

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

¹ Extremes of operating range are plus and minus 10% of line voltage.

² HACR type breaker or fuse.

³ 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					
¹ 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	
² Maximum Overcurrent Protection (MOCP)	Unit Only		60		45	20	15	
	with (1) 0.33 HP Power Exhaust		60		45	20	15	
³ 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
² Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat	7.5 kW	90	90	60	60	30	25
		15 kW	110	125	70	80	40	35
		22.5 kW	150	175	90	100	50	40
³ Minimum Circuit Ampacity (MCA)	Unit + Electric Heat	7.5 kW	74	79	50	53	26	22
		15 kW	108	118	69	75	37	31
		22.5 kW	141	157	89	98	48	40
² Maximum Overcurrent Protection (MOCP)	Unit + Electric Heat + Power Exhaust	7.5 kW	90	90	60	60	30	25
		15 kW	110	125	80	80	40	35
		22.5 kW	150	175	100	100	50	45
³ Minimum Circuit Ampacity (MCA)	Unit + Electric Heat + Power Exhaust	7.5 kW	76	81	52	55	27	23
		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	⁴ 22A23 ⁵ 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.

¹ Extremes of operating range are plus and minus 10% of line voltage.

² HACR type breaker or fuse.

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

⁴ Without Power Exhaust.

⁵ With Power Exhaust.

ELECTRICAL/ELECTRIC HEAT DATA

BELT DRIVE - 5 TON

Model		LHX060S5B		
¹ 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
² Maximum Overcurrent Protection (MOCP)	Unit Only	45	20	15
	with (1) 0.33 HP Power Exhaust	45	20	15
³ 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
² 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
³ 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
² 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
³ 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.

¹ Extremes of operating range are plus and minus 10% of line voltage.

² HACR type breaker or fuse.

³ 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

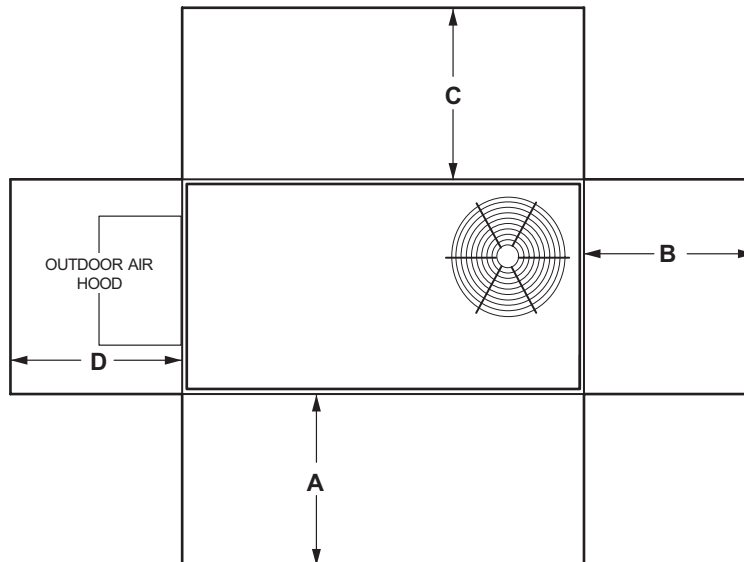
OUTDOOR SOUND DATA

Size	Octave Band Sound Power Levels dBA, re 10 ⁻¹² Watts - Center Frequency - Hz							¹ 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.

¹ 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



¹ Unit Clearance	A		B		C		D		Top Clearance
	in.	mm	in.	mm	in.	mm	in.	mm	
Service Clearance	36	914	36	914	36	914	36	914	Unobstructed
Minimum Operation Clearance	36	914	36	914	36	914	36	914	

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

¹ 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	
ECONOMIZER / OUTDOOR AIR / POWER EXHAUST			
Economizer			
High Performance Economizer - Includes Barometric Relief Dampers and Combination Hood	84	38	
Outdoor Air Dampers			
Motorized	40	18	
Manual	30	14	
Power Exhaust	35	16	
ELECTRIC HEAT			
5 kW	31	14	
7.5 kW	31	14	
10 kW	31	14	
15 kW	31	14	
22.5 kW	35	16	
COIL/HAIL GUARDS			
All models	30	14	
ROOF CURBS			
Hybrid Roof Curbs, Downflow			
8 in. height	86	39	
14 in. height	108	49	
18 in. height	125	57	
24 in. height	147	67	
Adjustable Pitch Curb, Downflow			
14 in. height	147	67	
CEILING DIFFUSERS			
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

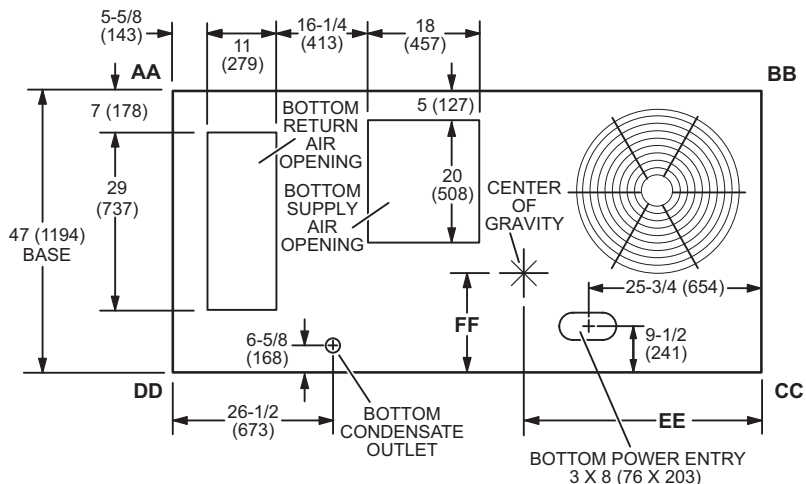
DIMENSIONS

UNIT

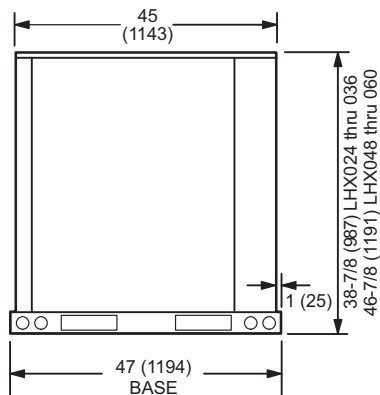
Size	CORNER WEIGHTS																CENTER OF GRAVITY							
	AA				BB				CC				DD				EE				FF			
	Base		Max.		Base		Max.		Base		Max.		Base		Max.		Base		Max.		Base		Max.	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm	in.	mm	in.	mm
024	119	54	140	64	149	67	153	69	165	75	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.

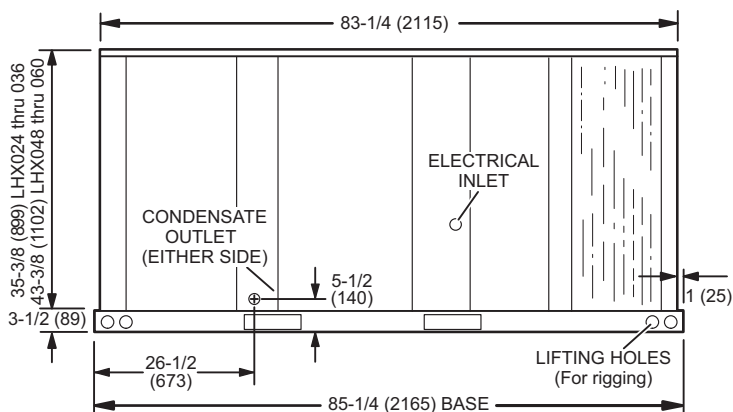
Max. Unit - The unit with ALL OPTIONS Installed (Economizer, etc.).



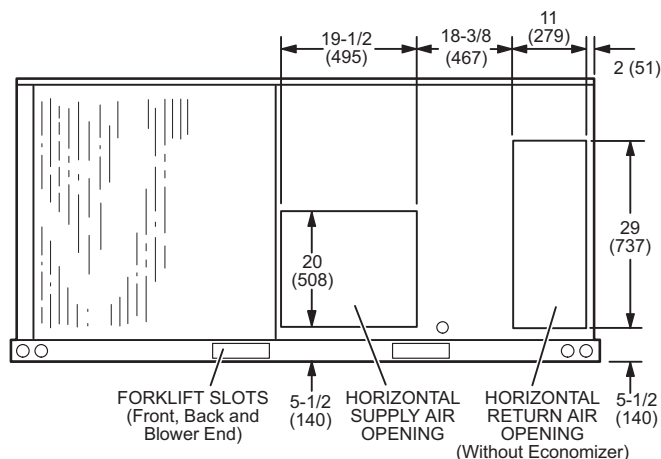
TOP VIEW (Base)



END VIEW



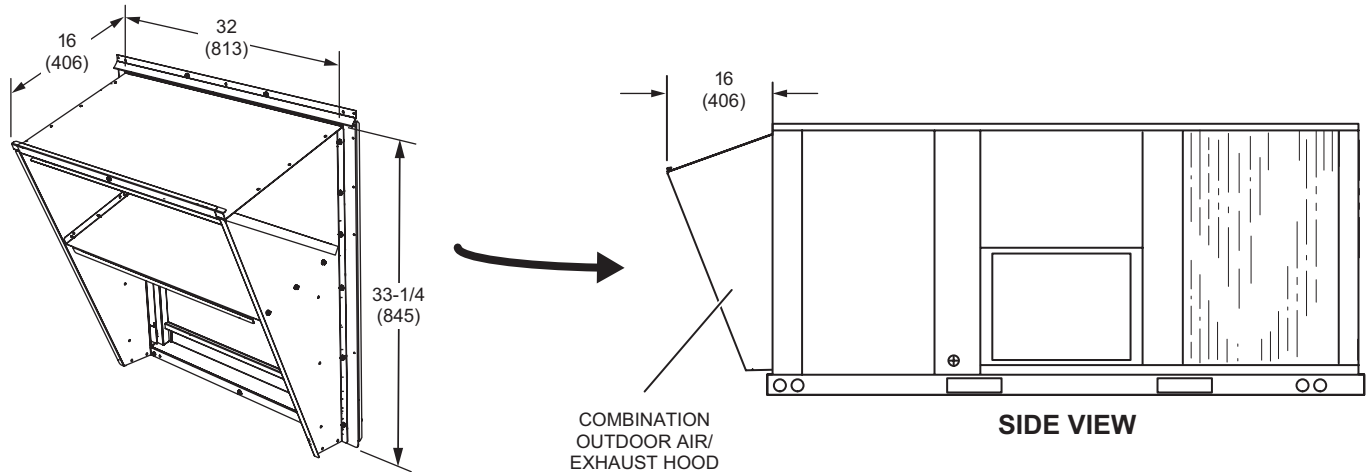
SIDE VIEW



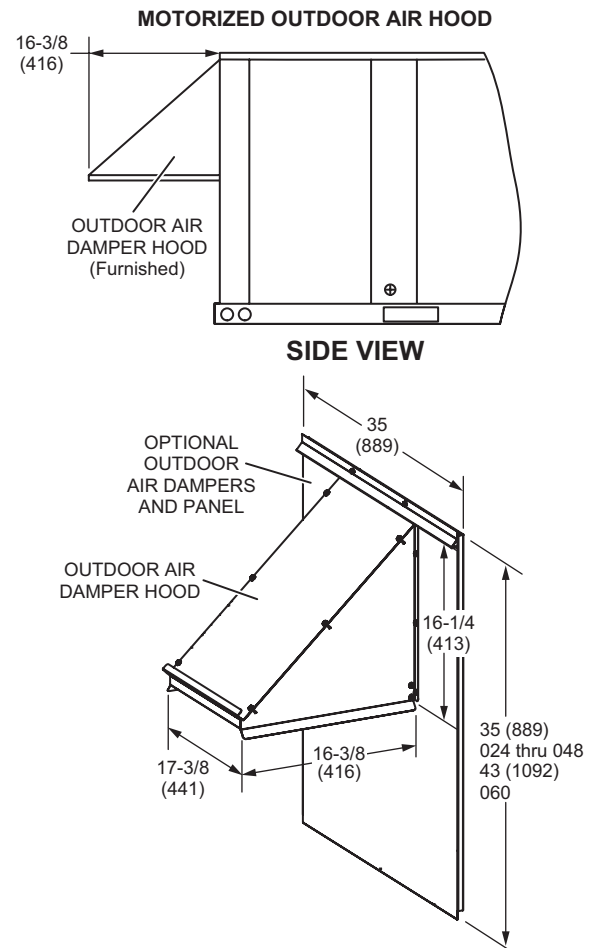
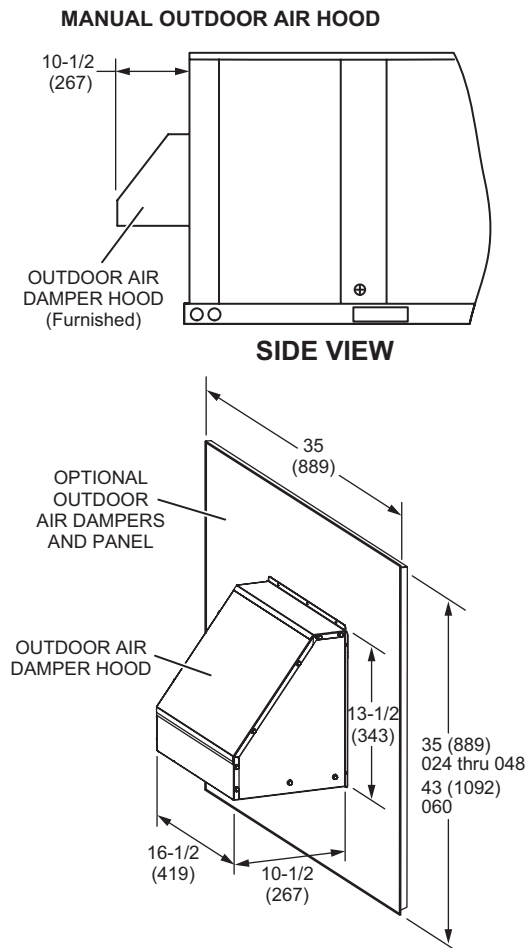
BACK VIEW

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

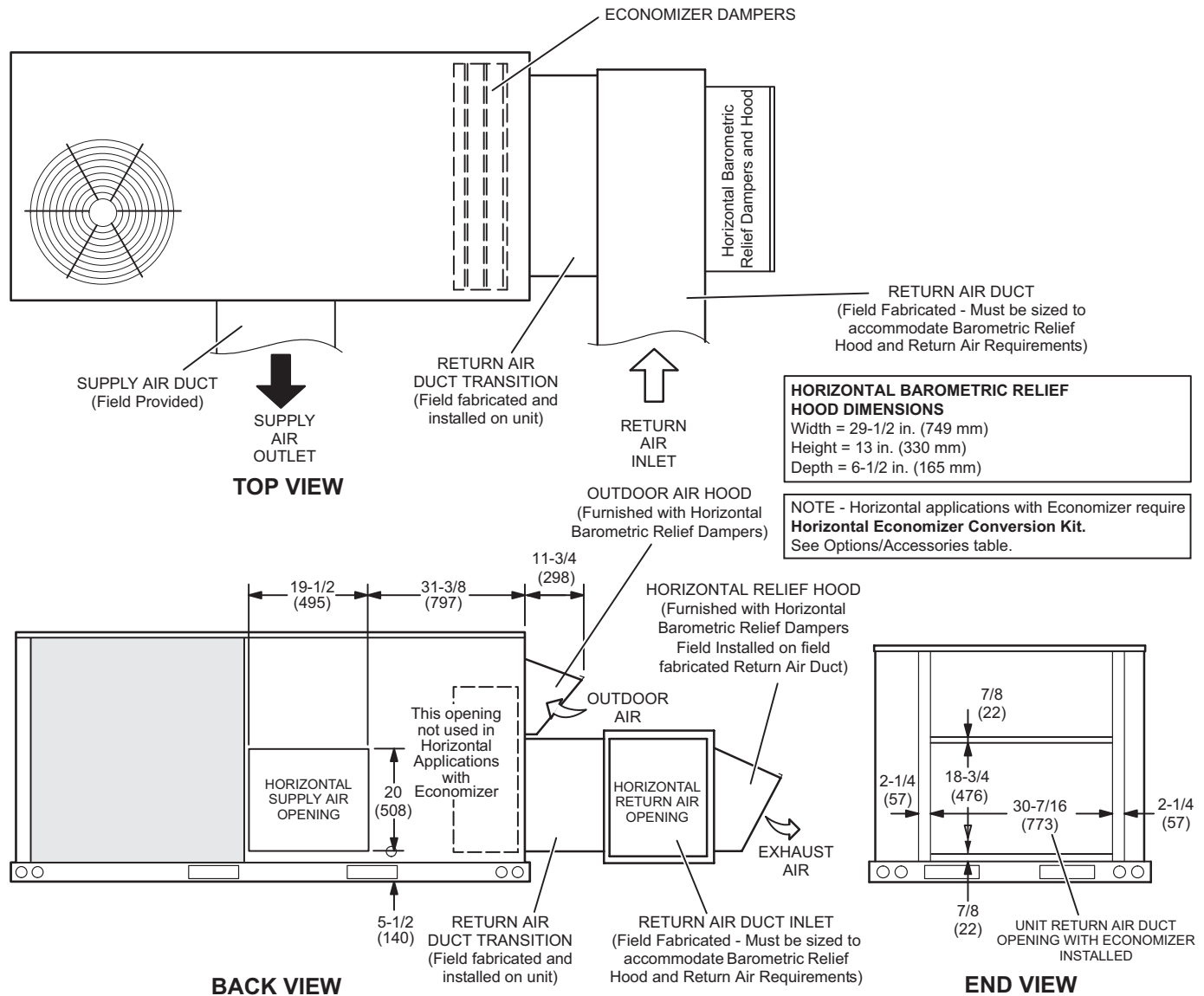


OUTDOOR AIR DAMPER HOOD DETAIL (Downflow or Horizontal Applications)



DIMENSIONS - ACCESSORIES

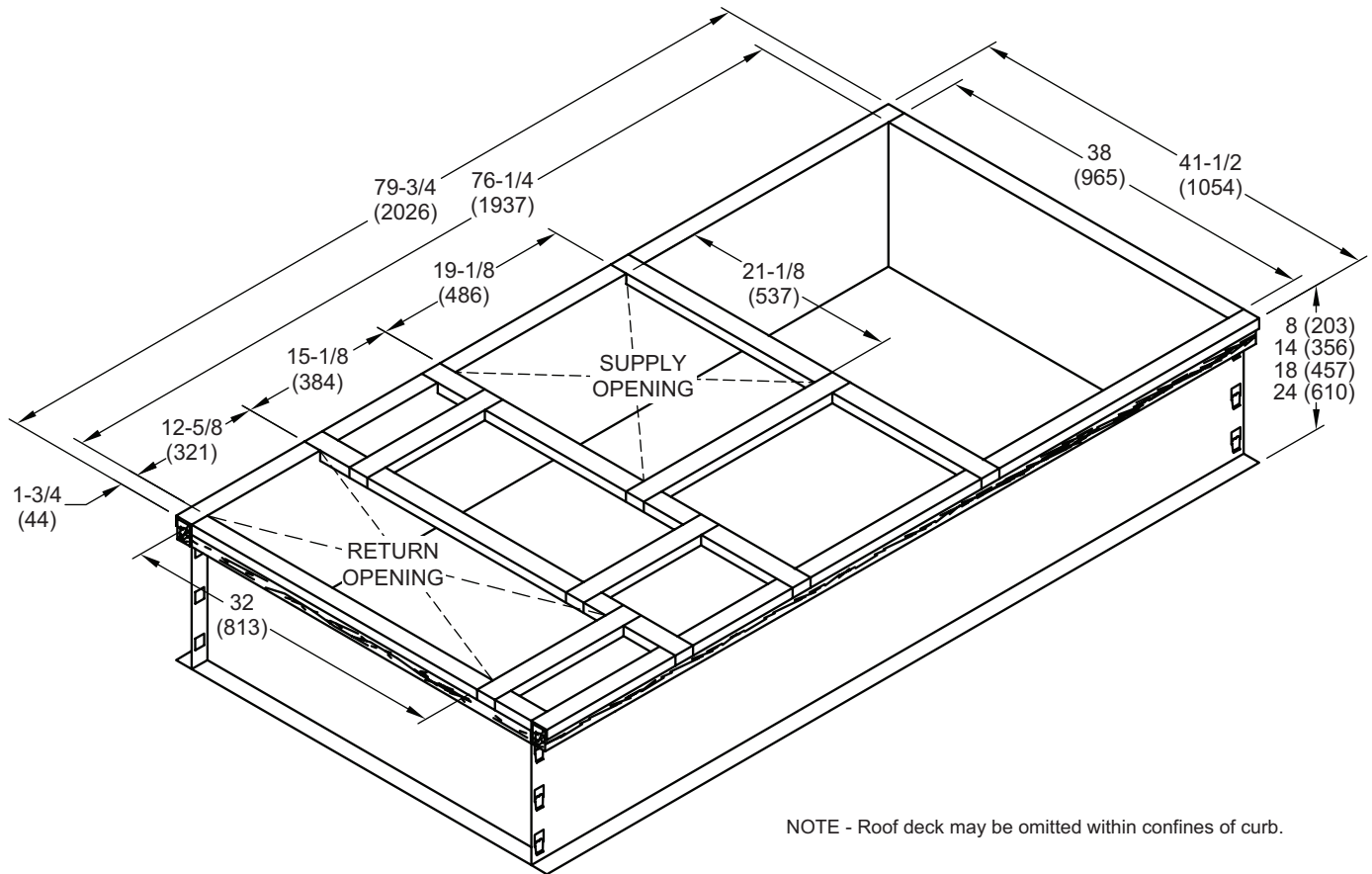
HORIZONTAL ECONOMIZER APPLICATIONS - OUTDOOR AIR HOOD DETAIL WITH OPTIONAL ECONOMIZER DAMPERS AND OPTIONAL HORIZONTAL BAROMETRIC RELIEF DAMPERS AND HOOD



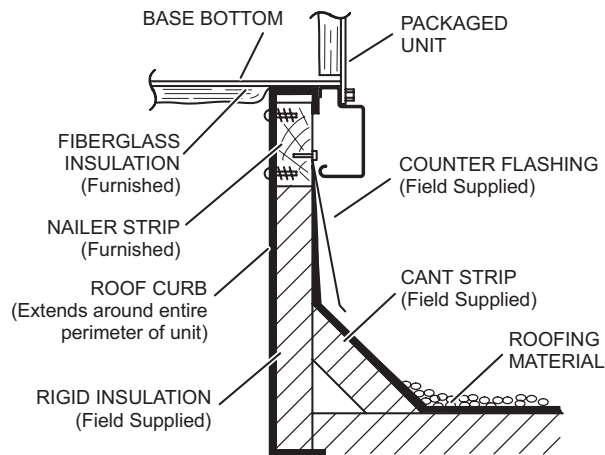
NOTE - Return Air Duct and Transition must be supported.

DIMENSIONS - ACCESSORIES

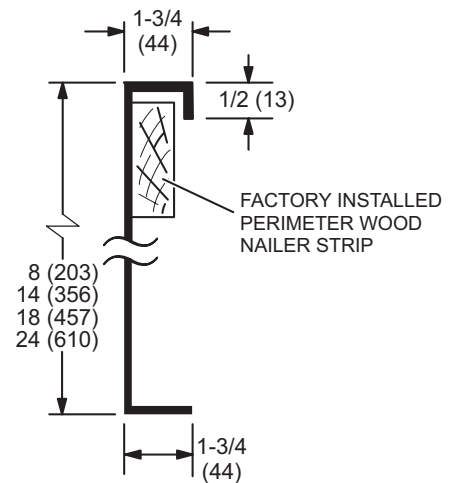
HYBRID ROOF CURBS - DOUBLE DUCT OPENING



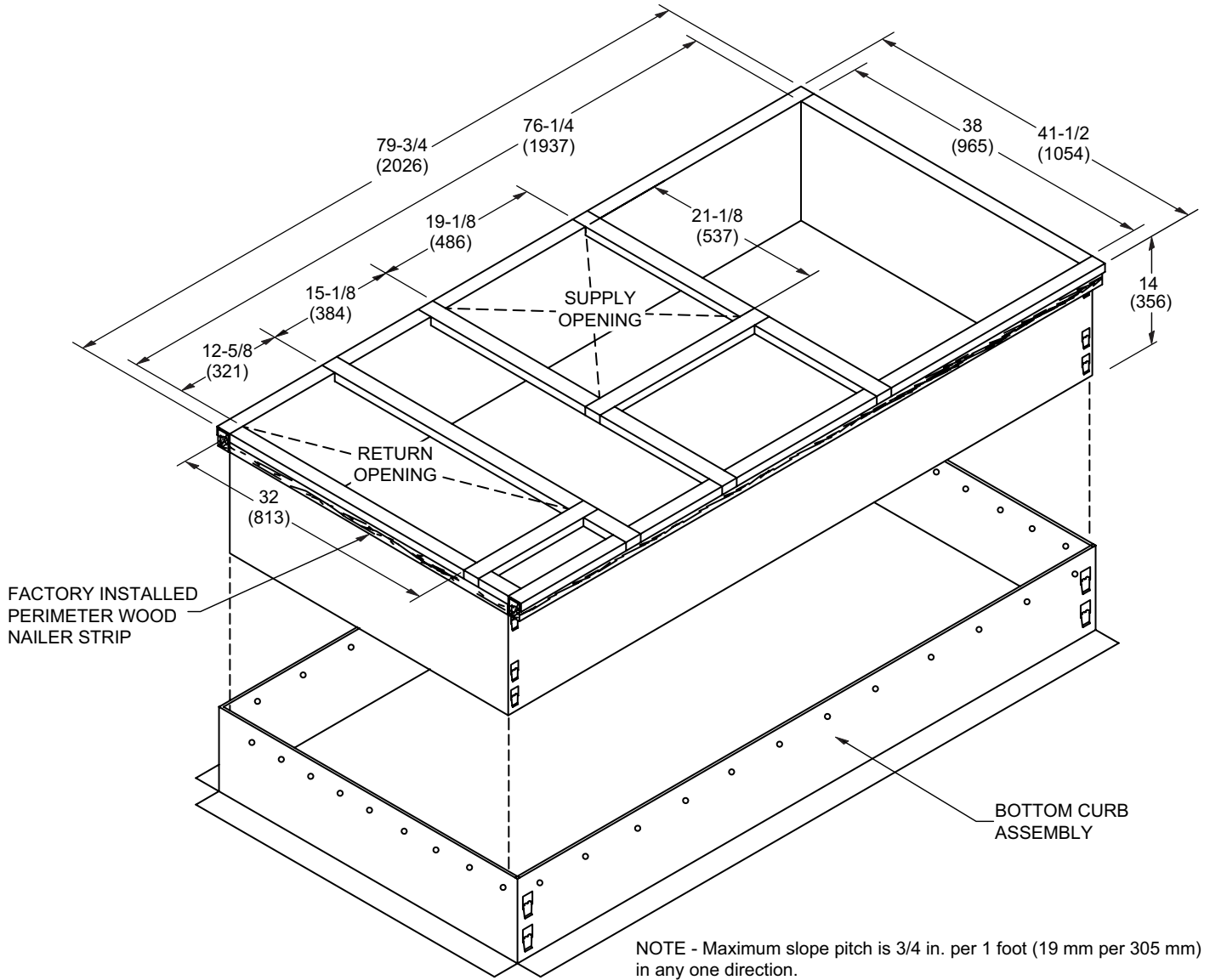
TYPICAL FLASHING DETAIL FOR ROOF CURB



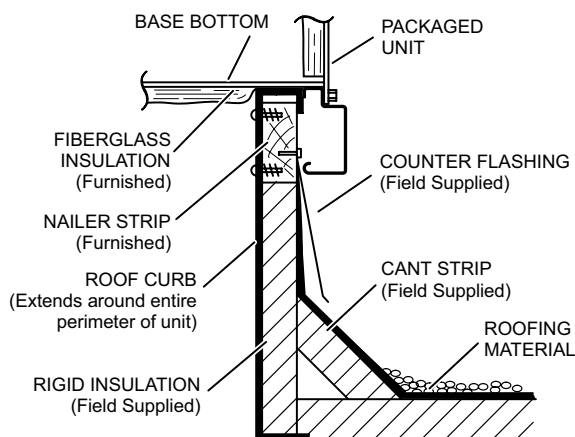
DETAIL ROOF CURB



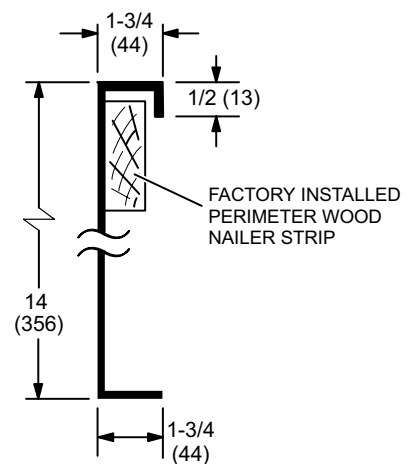
ADJUSTABLE PITCH CURBS - DOUBLE DUCT OPENING



TYPICAL FLASHING DETAIL FOR ROOF CURB

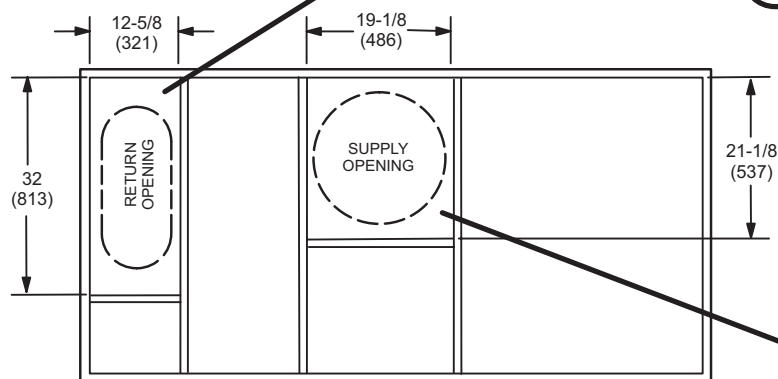


DETAIL ROOF CURB

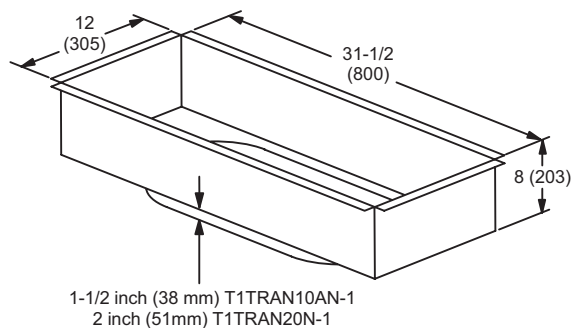


DIMENSIONS - ACCESSORIES

TRANSITIONS

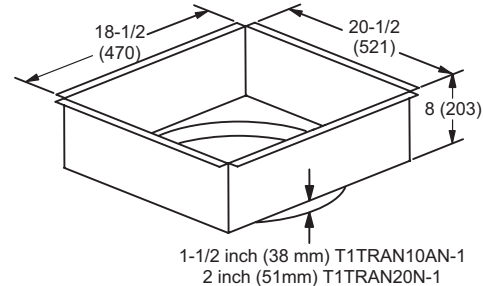


T1TRAN10AN-1 - FOR 18 INCH (457 MM) DUCT
T1TRAN20N-1 - FOR 20 INCH (508 MM) DUCT



RETURN TRANSITION

T1TRAN10AN-1 - FOR 18 INCH (457 MM) DUCT
T1TRAN20N-1 - FOR 20 INCH (508 MM) DUCT

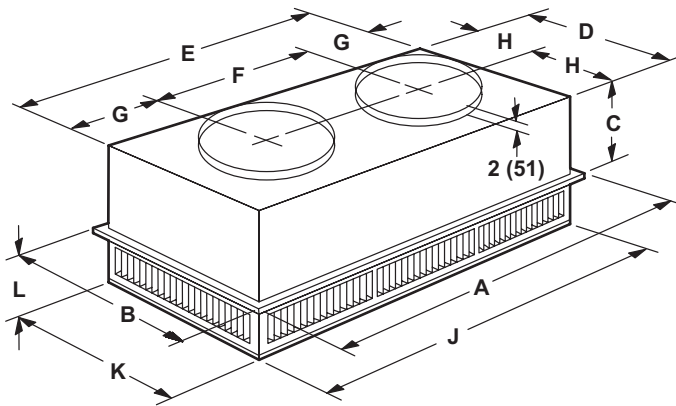


SUPPLY TRANSITION

DIMENSIONS - ACCESSORIES

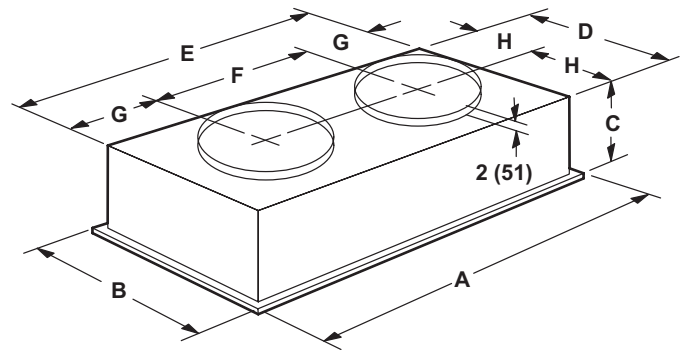
COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

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

REVISIONS

Sections	Description of Change
Options / Accessories	Added Burglar Bars.



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