LGX

XION™ ROOFTOP UNITS

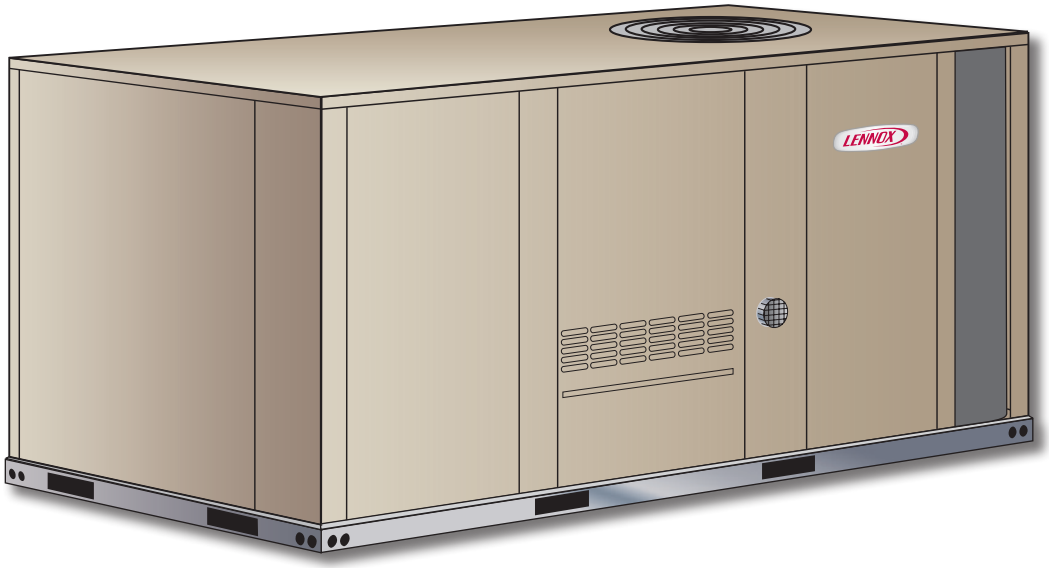
Standard Efficiency | Lennox® CORE Lite Controller | Environ™ Coil | R-454B | 60Hz

COMMERCIAL
PRODUCT SPECIFICATIONS (EHB)

2 to 6 Tons
Net Cooling Capacity - 23,600 to 68,000 Btuh
Gas Input Heat Capacity - 65,000 to 150,000 Btuh

XION

CORE LITE



Environ™ Coil System

Humiditrol

ASHRAE Standard 90.1

MODEL NUMBER IDENTIFICATION

L G X 060 S 5 B M 1 Y

Brand
L = Lennox® Product Line

Unit Type
G = Packaged Gas Heat w/ Electric Cooling

Family
X = Xion™ Series

Nominal Cooling Capacity - Tons
024 = 2 Tons
036 = 3 Tons
048 = 4 Tons
060 = 5 Tons
072 = 6 Tons

Cooling Efficiency
S = Standard Efficiency

Refrigerant Type
5 = R-454B

Blower Type
D = Direct Drive (PSC)
E = Direct Drive (ECM)
B = Belt Drive (Single-Speed)
T = Belt Drive (Two- Speed)

Heating Type
W = Standard Gas Heat, 1 Stage, Low NOx
Q = Medium Gas Heat, 2 Stage, Low NOx
X = High Gas Heat, 2 Stage, Low NOx

Minor Design Sequence
1 = 1st Revision

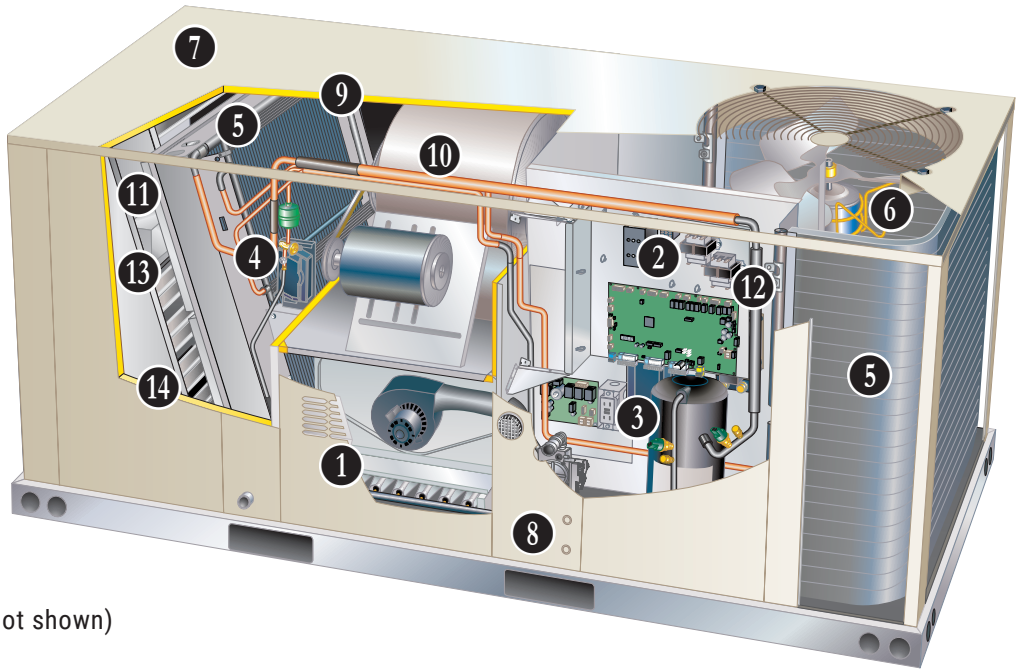
Voltage
P = 208/230V-1 phase-60Hz
Y = 208/230V-3 phase-60Hz
G = 460V-3 phase-60Hz
J = 575V-3 phase-60Hz

Form Number 211125 | October 2024
Supersedes all previous versions

FEATURE HIGHLIGHTS

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

1. Heat Exchanger
2. Electronic Pilot Ignition
3. Scroll Compressor
4. Thermal Expansion Valve
5. Environ™ Coil System
6. Outdoor Coil Fan Motor
7. Heavy Gauge Steel Cabinet
8. Power Entry
9. Fully Insulated Cabnet
10. Supply Air Blower
11. Air Filters
12. Lennox® CORE Lite Control System
13. Economizer (option)
14. Power Exhaust Fans (option, not shown)



CONTENTS

APPROVALS AND WARRANTY

APPROVALS

- AHRI Standard 210/240-2023 certified (2 - 5 ton models)
- AHRI Standard 340/360-2023 certified (6 ton models)
- ETL and CSA listed
- Unit and components are 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

California Only

- These gas units do not meet the South Coast Air Quality Management District (SCAQMD) Rule 1111 and San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4905 NOx emission limit (14 ng/J) and cannot be installed within the SCAQMD and SJVAPCD areas
- These gas units are approved by the California Energy Commission and meets California Nitrogen Oxides Standard (NOx) limits of 40 ng/J

WARRANTY

- Aluminized steel heat exchanger - Limited ten years
- Stainless steel heat exchanger (optional) - Limited fifteen years
- Compressors - Limited five years
- Environ™ Coil System - Limited three years
- Lennox® CORE Lite Unit Controller - Limited three years
- High Performance Economizers (optional) - Limited five years
- All other covered components - Limited one year

FEATURES AND BENEFITS

HEATING SYSTEM

- Aluminized steel inshot burners
- Direct spark ignition
- Electronic flame sensor
- Combustion air inducer
- Redundant automatic single or dual stage gas valve with manual shut-off

1 Heat Exchanger

- Tubular construction
- Aluminized steel
- Life cycle tested

NOTE - Optional Stainless Steel Heat Exchanger is required if mixed air temperature is below 45°F.

2 Electronic Pilot Ignition

- Electronic spark igniter provides positive direct ignition of burners on each operating cycle
- System permits main gas valve to stay open only when the burners are proven to be lit
- Should a loss of flame occur, the gas valve closes, shutting off the gas to the burners
- Ignition module has LED to indicate status and aid in troubleshooting
- Ignition control is factory installed in the controls section

Limit Controls

- Factory installed
- Redundant limit controls with fixed temperature setting
- Protect heat exchanger and other components from overheating

Safety Switches

- Flame roll-out switch
- Flame sensor and combustion air inducer proving switch protect system operation
- All safety switches are monitored by the Lennox® CORE Lite Unit Controller and diagnostic information is reported and stored in memory

HEATING SYSTEM (continued)

Required Selections

Gas Input Choice - Order one:
- Standard Gas Heat (1 Stage) 65,000 Btuh
- Medium Gas Heat (2 Stage) 81,000/108,000 Btuh
- High Gas Heat (2 Stage) 113,000/150,000 Btuh

NOTE - All models are furnished with Low NOx (40 ng/J) gas heat.

Options/Accessories

Factory Installed

Stainless Steel Heat Exchanger
- Required if mixed air temperature is below 45°F

Field Installed

Combustion Air Intake Extensions
- Recommended for use with existing flue extension kits in areas where high snow areas can block intake air

Low Temperature Vestibule Heater
- Electric heater automatically controls minimum temperature in gas burner compartment when temperature is below -40°F
- C.S.A.certified to allow operation of unit down to -60°F

LPG/Propane Kits
- Conversion kit to field change over units from Natural Gas to LPG/Propane

Vertical Vent Extension Kit
- Use to exhaust flue gases vertically above unit
- Required when unit vent is too close to fresh air intakes per building codes
- Also prevents ice formation on intake louvers
- Kit contains vent transition, drain cap, and installation hardware

NOTE - Straight vent pipe (3 in. B-Vent), vent tee and vent cap are not furnished and must be field supplied. Refer to kit instructions for additional information.

COOLING SYSTEM

- Designed to maximize sensible and latent cooling performance at design conditions
- System can operate 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

3 Single-Stage Scroll Compressor (024 through 060 Models)
- High performance, reliability and quiet operation
- Resiliently mounted on rubber grommets for quiet operation

Two-Stage Scroll Compressor (072 Models)
- Two-stage scroll compressors on all models for high performance, reliability, quiet operation, and increased part-load efficiency
- 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

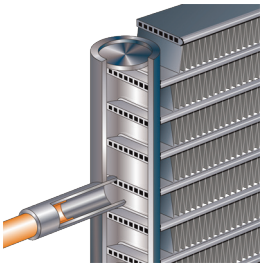
4 Thermal Expansion Valve
- Ensures optimal performance throughout the application range
- Removeable element head

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

High Pressure Switch
- Protects the compressor from overload conditions such as dirty condenser coils, blocked refrigerant flow or loss of outdoor fan operation

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

5 Environ™ Coil System
- Condenser and evaporator coil
- Lightweight, all aluminum brazed fin construction
- Constructed of three components:
  - A flat extrusion tube
  - Fins in-between the flat extrusion tube
  - Two refrigerant manifolds



Environ™ Coil System Features:
- Improved heat transfer performance due to high primary surface area (flat tubes) versus secondary surface (fins)
- Smaller internal volume (reduced refrigerant charge)
- High durability
- All aluminum construction
- Fewer brazed joints
- Compact design
- Reduced unit weight
- Easy maintenance/cleaning
- Mounting brackets with rubber inserts secure coil to unit providing vibration dampening and corrosion protection

COOLING SYSTEM (continued)

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

6 Outdoor Coil Fan Motor
- Thermal overload protected
- Totally enclosed
- Permanently lubricated sleeve bearings
- Shaft up
- Wire basket mount

Outdoor Coil Fan
- PVC coated fan guard furnished

Required Selections

Cooling Capacity
- Specify nominal cooling capacity

Options/Accessories

Field Installed

Condensate Drain Trap
- Field installed only
- Available in copper or PVC

Drain Pan Overflow Switch
- Monitors condensate level in drain pan, shuts down unit if drain becomes clogged

Low Ambient Kit (0°F)
- Cycles the outdoor fans while allowing compressor operation in the cooling cycle
- Intermittent fan operation allows the system to operate without icing the evaporator coil and losing capacity
- Designed for use in ambient temperatures no lower than 0°F

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

7 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 forklift 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) return air configuration

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

8 Power/Gas Entry
- Electrical and gas lines can be routed through the unit base or through horizontal access knock-outs

NOTE - Optional Bottom Gas Entry Kit is available.

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

9 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.

CABINET (continued)

Options/Accessories

Factory Installed

Hinged Access Panels
- Tool-Less Access
- Economizer/Filter section
- Heating/Blower section
- Compressor/Controls section
- Panels seal 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

Bottom Gas Entry Kit
- Field installed piping kit to facilitate bottom gas entry

BLOWER

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

Motor
- Overload protected
- Ball bearings (ECM and belt drive)
- Sleeve bearings PSC (direct drive).
- Multi-tap direct drive PSC motors are available on 036 and 048 3-phase models
- Variable-speed ECM direct drive motors are available on 024, 036, 048 and 060 models
  - For ECM motors the amount of airflow for each stage can be set according to a parameter in the Lennox® CORE Lite Unit Controller
- Single-speed belt drive motor available on 060 models to maximize air performance at higher statics
- Two-speed belt drive motor furnished on 072 model

10 Supply Air Blower
- Forward curved blades
- Blower wheel 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

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

FEATURES AND BENEFITS

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

GFI Service Outlets (2)
- 115V ground fault circuit interrupter (GFCI) type options:
  - Factory installed, non-powered, field wired
  - Field installed, non-powered, field wired

Field Installed

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

INDOOR AIR QUALITY

11 Air Filters
- Disposable 2 inch MERV 4 filters furnished as standard

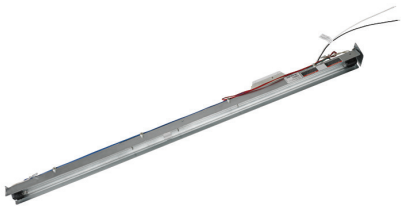
Options/Accessories

Field Installed

Healthy Climate® High Efficiency Air Filters
- Disposable MERV 8, MERV 13, or MERV 16 (Minimum Efficiency Reporting Value based on ASHRAE 52.2) efficiency 2 inch pleated filters

Replacement Filter Media Kit With Frame (072 Models)
- Replaces existing pleated filter media
- Includes washable metal mesh screen and metal frame with clip for holding replaceable non-pleated filter

Healthy Climate® UVC Germicidal Lamps



- Germicidal lamps emit ultra-violet (UV-C) energy, which has been proven to be effective in reducing microbes such as viruses, bacteria, yeasts, and molds
- UV-C energy greatly reduces the growth and proliferation of mold and other bioaerosols (bacteria and viruses) on illuminated surfaces (particularly coil and drain pan)
- Destroys the organism or controls its ability to reproduce
- Field installed in the blower/evaporator coil section
- Magnetic safety interlock terminates power when access panels are removed
- All necessary hardware for installation is included
- Lamps operate on 110/230V-1ph power supply

NOTE - Step-down transformer may be ordered separately for 460V and 575V units.

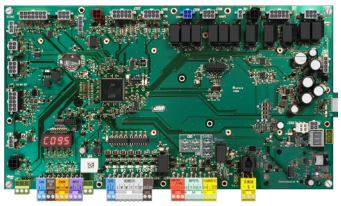
- Approved by ETL

Needlepoint Bipolar Ionization (NPBI) Kit
- NPBI technology has been shown to effectively reduce harmful pathogens, pollutants, and odors
- Brush-type ionizer introduces a high concentration of both positive and negative ions into the air stream
- These bipolar ions are then dispersed into the occupied space through the duct system proactively reducing the airborne contaminants
- Ions travel within the building air stream and attach to particles, pathogens, and gas molecules, making them larger and easier to capture in the filtration system
- UL 2998 certified for zero ozone emission

Indoor Air Quality (CO_2) Sensors
- Monitors CO_2 levels
- Reports to the Lennox® CORE Lite Unit Controller, which adjusts economizer dampers as needed

CONTROL SYSTEM

LENNOX® CORE LITE CONTROL SYSTEM



12 The Lennox® CORE Lite Control system is designed to accelerate equipment install and service. Standard with all Xion™ rooftop units, control system integrates key technologies that lower installation costs, drive system efficiency, and protect your investments.

The Lennox® CORE Lite Unit Controller is a microprocessor-based controller that provides flexible control of all unit functions.

CORE 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 CORE Control System to manage sequence of operation
- Economizer test function ensures economizer is operating correctly

Download on the App Store | ANDROID APP ON Google play

Additional Features:

- Built-In 7-Segment Display shows Unit Status and active alarms for easy troubleshooting
- Buttons for test and clearing delays
- SmartWire™ 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 Lennox® CORE Lite 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
- Humiditrol® 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 - Lennox® CORE Lite Control System features vary with the type of rooftop unit in which the control is installed.

CONTROL SYSTEM

LENNOX® CORE LITE CONTROL SYSTEM (CONTINUED)

Controls Options

Field Installed

Dirty Filter Switch
- Senses static pressure increase and issues alarm if necessary

Smoke Detector
- Photoelectric type
- Installed in supply air section, return air section or both sections
- Available with power board and single sensor (supply or return) or power board and two sensors (supply and return)
- Power board located in unit control compartment

Commercial Control Systems

Field Installed

Interoperability via BACnet® Protocols
- Communication compatible with third-party automation systems that support the BACnet Application Specific Controller device profile

Thermostats and Room Sensors
- Control system and thermostat options, see page 12

OPTIONS / ACCESSORIES

ECONOMIZER

13
- Economizer operation is set and controlled by the Lennox® CORE Lite Unit Controller
- Simple plug-in connections from economizer to unit controller for easy installation
- All Xion™ 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_2 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

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
- Outdoor air hood with filter bracket included
- 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

14 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)

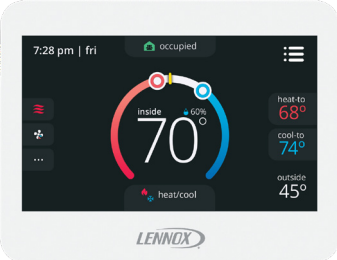
- White powder coat finish on diffuser face and grilles
- Insulated UL listed duct liner
- Diffuser box has collars for duct connection
- Step-down diffusers have double deflection blades
- Flush diffusers have fixed blades
- Provisions for suspending
- Internally sealed to prevent recirculation
- Removable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

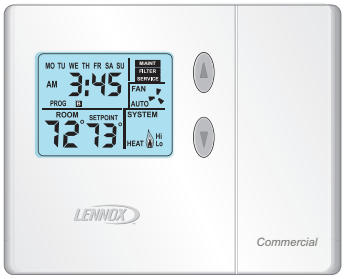


- Fully Communicating Sensor
- Full Color Touchscreen Interface
- Variable Speed System Control (On Compatible Units)
- Up To 4 Heat / 4 Cool
- Built-In Sensors For Temperature, Humidity And Optional CO_2
- Remote Sensor Options For Occupancy, Temperature
- BACnet Capable Options
- 5-2 or 7-Day Scheduling
- 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

Wired Temperature/Humidity Room Sensor (Non-Communicating)

- Terminal blocks for wiring connections
- Five-wire sensor connection
- Off-white plastic enclosure
- Non-adjustable
- Relative humidity range: 0 -100%
- +/- 3% Accuracy

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		
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**
Temperature/Humidity Room Sensor		
A335MT13AE1 Wired Temperature/Humidity Room Sensor (Non-Communicating)		**21W06**

[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

SEQUENCE OF OPERATION

Objective: Outline the unit functions as a result of room thermostat (Y1/Y2) or zone sensor (C1/C2/[1]C3) demands.

Given: When economizer is present, it will function as initial part of the unit cooling system. When not present, unit will function as if outdoor ambient is high and sensed as not suitable.

[1] C3 Demand only applies to 6 Ton units in room sensor mode.

Modulating Outdoor Air Damper:

Damper minimum positions #1 and 2 are adjusted during unit setup to provide minimum fresh air requirements at the indicated supply fan speeds per ASHRAE 62.1.

- Supply fan is off and the outdoor air damper is closed
- Supply fan is on low speed and the outdoor air damper is at minimum position 1
- Supply fan is on high speed and the outdoor air damper is at minimum position 2

[2] Unit Features an Economizer and Outdoor Air is Suitable

Cooling - Thermostat or Zone Sensor Mode (Up to 2 stages Y1, Y2)

Y1 Demand:

Compressor is off, supply fan is on low speed, economizer modulates (minimum to maximum open position) to maintain 55°F supply air temperature (default unit controller setting)

After 5 minutes (default unit controller setting), supply fan switches to high speed. Economizer continues modulating with supply fan on high speed to maintain 55°F supply air temperature

Y2 Demand:

Compressor is off, supply fan is on high speed, and economizer modulates to maintain 55°F supply air temperature

Economizer opens to maximum. If economizer stays at maximum open for 3 minutes (default unit controller setting) compressor is energized and operates at first stage while supply fan stays on high speed

[2] Outdoor air suitability is determined by the energy state of outdoor ambient (enthalpy or sensible) and its ability to achieve the desired free cooling effects. Outdoor air suitability can also be determined by a third party controller and provided to the RTU via a network connection.

Y3 Demand:

Economizer is at maximum open and compressor operates at first stage. If economizer stays at maximum open for 3 minutes (default unit controller setting) compressor switches to second stage operation while supply fan stays on high speed

Unit <u>Does Not</u> Feature an Economizer (or Outdoor Air Is Not Suitable)

Cooling - Thermostat or Zone Sensor (Up to 2 stages Y1, Y2)

Y1 Demand:

Compressor operates at first stage and supply fan operates at low speed

Y2 Demand:

Compressor operates at second stage and supply fan operates at high speed

(Continued on Next Page)

SEQUENCE OF OPERATION

Dehumidification Mode (economizer free cooling is locked out):

Unit Features the Humiditrol® Dehumidification option.

No Y1, Y2 Demand but a call for dehumidification:

Compressor operates at second stage, supply fan operates at low speed, and the reheat valve is energized

Y1 Demand:

Compressor operates at second stage, supply fan operates at low speed and the reheat valve is de-energized

Y2 Demand:

Compressor operates at second stage, supply fan operates at high speed, and the reheat valve is de-energized

Heating Mode: Thermostat or Zone Sensor (Up to 2 stages W1, W2)

W1 Demand:

Gas valve is open (stage 1 on units with 2 stage gas valve) and the supply fan operates at high speed

W2 Demand:

Gas valve is open (stage 2 on units with 2 stage gas valve) and the supply fan operates at high speed

HUMIDITROL® DEHUMIDIFICATION SYSTEM OPTION

OVERVIEW

- Factory installed option designed to control humidity
- Provides dehumidification on demand using ASHRAE 90.1 recommended method for comfort conditioning humidity control
- Unit comes equipped with one row reheat coil, solenoid valve and humidity controller

BENEFITS

- Improves indoor air quality
- Helps prevents damage due to high humidity levels
- Improves comfort levels by reducing space humidity levels

OPERATION

No Dehumidification Demand

- The unit will operate conventionally whenever there is a demand for cooling or heating and no dehumidification demand
- Free cooling is only permitted when there is no demand for dehumidification

Dehumidification Demand Only

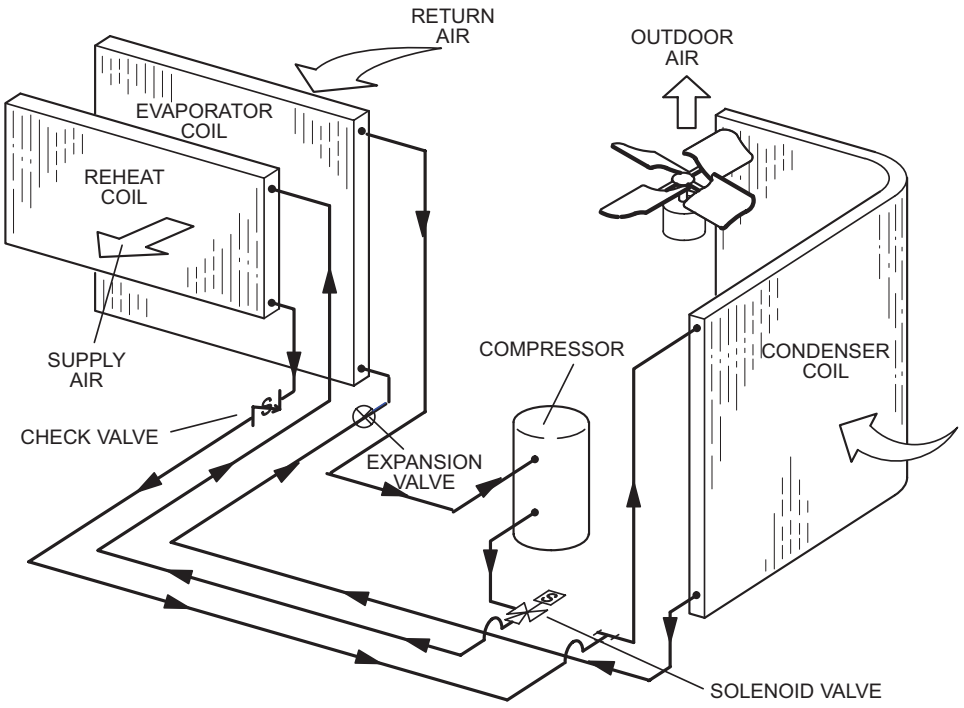
- Reheat operation will initiate on a dehumidification demand and does not require a cooling demand
- Unit will operate in the dehumidification mode until the relative humidity of the conditioned space is below the setpoint
- Reheat coil is sized to provide 68°F to 75°F supply air during reheat operation
- This reduces sensible cooling capacity and extends compressor run time to control humidity when the cooling load is low
- A solenoid valve diverts hot gas from the compressor to the reheat coil
- Cooled and dehumidified air from the evaporator is reheated as it passes through the reheat coil
- De-superheated and partially condensed refrigerant continues to the outdoor condenser coil where condensing is completed
- Unit will continue to operate in this mode until the dehumidification demand is satisfied

NOTE - See Sequence of Operation for additional information.

Dehumidification and Cooling Demand (Thermostat/ Room Sensor Application)

- If both a dehumidification and a 1st stage cooling demand occur, the system will operate in the full cooling mode at first stage indoor air flow
- If a 2nd stages cooling demand occurs along with a dehumidification demand, the system operates in full cooling mode at full cooling airflow until the 2nd stage cooling demand is satisfied
- Then the system will revert to the dehumidification mode if a dehumidification mode demand is present

TYPICAL DEHUMIDIFICATION SCHEMATIC



OPTIONS / ACCESSORIES

Item		Order Number	Size 024	036	048	060	072
COOLING SYSTEM							
Condensate Drain Trap	PVC	**22H54**	X	X	X	X	X
	Copper	**76W27**	X	X	X	X	X
Drain Pan Overflow Switch		**21Z07**	X	X	X	X	X
Low Ambient Kit (0°F)		**14D89**	X	X	X	X	X
HEATING SYSTEM							
Bottom Gas Piping Kit		**19W50**	X	X	X	X	X
Combustion Air Intake Extensions		**19W51**	X	X	X	X	X
Gas Heat Input	Standard One-Stage (Low NOx only) - 65 kBtuh input	Factory	O	O	O	O	O
	Medium Two Stage (Low NOx only) - 81/108 kBtuh input	Factory		O	O	O	O
	High Two-Stage (Low NOx only) - 113/150 kBtuh input	Factory			O	O	O
LPG/Propane Conversion Kits	For One-Stage Models	**21Z22**	X	X	X	X	X
	For Two-Stage Models	**21Z23**		X	X	X	X
Gas Heat Type	Low NOx (40 ng/J) Gas Heat	Factory	O	O	O	O	O
Low Temperature Vestibule Heater	208/230V-1 or 3 ph	**21Z17**	X	X	X	X	X
	460V-3ph	**21Z18**		X	X	X	X
	575V-3ph	**21Z19**		X	X	X	X
Stainless Steel Heat Exchanger		Factory	O	O	O	O	O
Vertical Vent Extension		**31W62**	X	X	X	X	X

NOTE - The order 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	072
BLOWER - SUPPLY AIR							
Motors	Direct Drive (ECM) - 0.50 HP (208/230V-1ph)	Factory	O	O			
	Direct Drive (ECM) - 1.0 HP (All Voltages)	Factory		O	O	O	
	Direct Drive (PSC) - 0.5 HP (208/230V-3ph, 460V-3ph, 575V-3ph)	Factory		O	O		
	Single-Speed Belt Drive - 2 HP (208/230V, 460V, 575V-3ph)	Factory				O	
	Two-Speed Belt Drive - 2 HP (208/230V, 460V, 575V-3ph)	Factory					O
Drive Kits See Blower Data Tables for selection	Kit A03 - 833-1250 rpm	Factory				O	
	Kit A04 - 968-1340 rpm	Factory					O
	Kit A07 - 1212-1548 rpm	Factory				O	
	Kit A08 - 1193-1591 rpm	Factory					O
CABINET							
Combination Coil/Hail Guards		**13R98**	OX	OX	OX	OX	
		13T03					OX
Hinged Access Panels		Factory	O	O	O	O	O
CONTROLS							
BACnet® Module		**38B35**	X	X	X	X	X
Dirty Filter Switch		**53W66**	X	X	X	X	X
Smoke Detector - Supply or Return (Power board and one sensor)		**21Z11**	X	X	X	X	X
Smoke Detector - Supply and Return (Power board and two sensors)		**21Z12**	X	X	X	X	X
ELECTRICAL							
Voltage 60 hz	208/230V - 1 phase		O	O	O	O	
	208/230V - 3 phase			O	O	O	O
	460V - 3 phase			O	O	O	O
	575V - 3 phase			O	O	O	O
Disconnect	See Electrical Data Tables for selection		OX	OX	OX	OX	OX
GFI Service Outlets	15 amp non-powered, field-wired (208/230V, 460V only)	**74M70**	OX	OX	OX	OX	OX
	[3] 20 amp non-powered, field-wired (208/230V, 460V, 575V)	**67E01**	X	X	X	X	X
	[1] 20 amp non-powered, field-wired (575V)	Factory	O	O	O	O	O
Weatherproof Cover for GFI		**10C89**	X	X	X	X	X

[1] Canada requires a minimum 20 amp circuit. Select 20 amp, non-powered, field wired GFI.

NOTE - The order 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	072
ECONOMIZER							
High Performance Economizer (Approved for California Title 24 Building Standards / AMCA Class 1A Certified)							
Includes Barometric Relief Dampers and Combination Hood		**20H48**	OX	OX	OX	OX	OX
Economizer Accessories							
Horizontal Economizer Conversion Kit		**17W45**	X	X	X	X	X
Economizer Controls							
Single Enthalpy Control		**21Z09**	OX	OX	OX	OX	OX
Differential Enthalpy Control (order 2) (Not for Title 24)		**21Z09**	X	X	X	X	X
POWER EXHAUST FAN							
Standard Static	208/230V-1 or 3ph	**21Z13**	X	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	X
	575V-3ph	**21Z15**		X	X	X	X
BAROMETRIC RELIEF							
[4] Barometric Relief Dampers for Power Exhaust Kit		**21Z21**		X	X	X	X
[5] Horizontal Barometric Relief Dampers With Outdoor Air and Exhaust Hood		**19F01**	X	X	X	X	X
OUTDOOR AIR							
Outdoor Air Dampers With Outdoor Air Hood							
Motorized		**15D17**	X	X	X	X	X
Manual		**15D18**	X	X	X	X	X
HUMIDITROL® DEHUMIDIFICATION REHEAT OPTION							
Humiditrol Dehumidification Option		Factory	O	O	O	O	O

[2] Required when Economizer is factory installed with field installed Power Exhaust Fan option.
[3] Required when Economizer is configured for horizontal airflow.

NOTE - The order 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	072
INDOOR AIR QUALITY							
Air Filters							
Healthy Climate® High Efficiency Air Filters	MERV 8 (16 x 20 x 2)	**54W20**	X	X	X	X	
Order 4 per unit	MERV 13 (16 x 20 x 2)	**52W37**	X	X	X	X	
	MERV 16 (16 x 20 x 2)	**22H13**	X	X	X	X	
	MERV 8 (20 x 20 x 2)	**54W21**					X
	MERV 13 (20 x 20 x 2)	**52W39**					X
	MERV 16 (20 x 20 x 2)	**21U40**					X
Replaceable Media Filter With Metal Mesh Frame (includes non-pleated filter media) (Order 4 per unit)	20 x 20 x 2 in.	**44N60**					X
Indoor Air Quality (CO_2) Sensors							
Sensor - Wall-mount, off-white plastic cover with LCD display		**24C58**	X	X	X	X	X
Sensor - Wall-mount, off-white plastic cover, no display		**23V86**	X	X	X	X	X
Sensor - Wall-mount, black plastic case, no display, rated for plenum mounting		**23V87**	X	X	X	X	X
CO_2 Sensor Duct Mounting Kit - for downflow applications		**23Y47**	X	X	X	X	X
Aspiration Box - for duct mounting non-plenum rated CO_2 sensor (**24C58**)		**90N43**	X	X	X	X	X
Needlepoint Bipolar Ionization (NPBI)							
Needlepoint Bipolar Ionization Kit		**22U14**	X	X	X	X	X
UVC Germicidal Lamps							
[6] Healthy Climate® UVC Light Kit (110/230V-1ph)		**21A92**	X	X	X	X	X
Step-Down Transformers	460V primary, 230V secondary	**10H20**	X	X	X	X	X
	575V primary, 230V secondary	**10H21**	X	X	X	X	X
ROOF CURBS							
Hybrid Roof Curbs, Downflow							
8 in. height		**11F50**	X	X	X	X	X
14 in. height		**11F51**	X	X	X	X	X
18 in. height		**11F52**	X	X	X	X	X
24 in. height		**11F53**	X	X	X	X	X
Adjustable Pitch Curb							
14 in. height		**43W27**	X	X	X	X	X
CEILING DIFFUSERS							
Step-Down - Order one	RTD9-65S	**13K60**	X	X	X	X	
	RTD11-95S	**13K61**					X
Flush - Order one	FD9-65S	**13K55**	X	X	X	X	
	FD11-95S	**13K56**					X
Transitions (Supply and Return) - Order one	T1TRAN10AN1	**17W53**	X	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 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		LGX024S5E	LGX036S5D	LGX036S5E
Nominal Tonnage		2	3	3
Efficiency Type		Standard	Standard	Standard
Blower Type		Multi-Tap Direct Drive	Multi-Tap Direct Drive	Varible-Speed Direct Drive
Cooling Performance	Gross Cooling Capacity (Btuh)	24,600	37,300	37,300
	[1] Net Cooling Capacity (Btuh)	23,600	35,600	35,600
	[1] AHRI Rated Air Flow (cfm)	850	1200	1200
	[1] SEER2 (Btuh/Watt)	14.0	14.0	14.0
	[1] EER2 (Btuh/Watt)	11.5	11.5	11.5
	Total Unit Power (kW)	1.9	3.0	3.0
Sound Rating Number	dBA	74	74	74
Refrigerant Charge	Refrigerant Type	R-454B	R-454B	R-454B
	Without Reheat Option	3 lbs. 15 oz.	3 lbs. 10 oz.	3 lbs. 10 oz.
	With Reheat Option	3 lbs. 15 oz.	3 lbs. 10 oz.	3 lbs. 10 oz.
Gas Heat Available		See page 24		
Compressor Type (Number)		Scroll (1)	Scroll (1)	Scroll (1)
Outdoor Coil	Net face area - ft.^{2}	11.7	11.7	11.7
	Rows	1	1	1
	Fins - in.	23	23	23
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	4	4	4
	Total air volume - cfm	3950	3950	3950
Indoor Coil	Net face area - ft.^{2}	7.0	7.0	7.0
	Rows	1	1	1
	Fins - in.	20	20	20
	Condensate drain size (NPT) - in.	(1) 1	(1) 1	(1) 1
	Expansion device type	Balanced Port Thermostatic Expansion Valve removable power head		
Indoor Blower	Blower Type	ECM	PSC	ECM
	Nominal Motor HP	0.5	0.5	0.5 or 1
	Wheel (Number) diameter x width - in.	(1) 10 x 10	(1) 10 x 10	(1) 10 x 10 (0.5 HP) (1) 11 x 10 (1 HP)
Filters	Type	MERV 4, 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	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] 1 AHRI Certified to AHRI Standard 210/240: 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

SPECIFICATIONS - DIRECT DRIVE BLOWER — 4 TON | 5 TON

Model		LGX048S5D	LGX048S5E	LGX060S5E
Nominal Tonnage		4	4	5
Efficiency Type		Standard	Standard	Standard
Blower Type		Multi-Tap Direct Drive	Varible-Speed Direct Drive	Varible-Speed Direct Drive
Cooling Performance	Gross Cooling Capacity (Btuh)	49,700	49,700	60,900
	[1] Net Cooling Capacity (Btuh)	47,000	47,000	58,000
	[1] AHRI Rated Air Flow (cfm)	1700	1700	1900
	[1] SEER2 (Btuh/Watt)	14.0	14.0	14.0
	[1] EER2 (Btuh/Watt)	11.5	11.5	11.5
	Total Unit Power (kW)	4.1	4.1	5.0
Sound Rating Number	dBA	74	74	74
Refrigerant Charge	Refrigerant Type	R-454B	R-454B	R-454B
	Without Reheat Option	3 lbs. 8 oz.	3 lbs. 8 oz.	3 lbs. 12 oz.
	With Reheat Option	3 lbs. 8 oz.	3 lbs. 8 oz.	3 lbs. 12 oz.
Gas Heat Available		See page 24		
Compressor Type (Number)		Scroll (1)	Scroll (1)	Scroll (1)
Outdoor Coil	Net face area - ft.^{2}	14.5	14.5	14.5
	Rows	1	1	1
	Fins - in.	23	23	23
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	4	4	4
	Total air volume - cfm	3950	3950	3950
Indoor Coil	Net face area - ft.^{2}	7.0	7.0	7.0
	Rows	1	1	1
	Fins - in.	20	20	20
	Condensate drain size (NPT) - in.	(1) 1	(1) 1	(1) 1
	Expansion device type	Balanced Port Thermostatic Expansion Valve removable power head		
Indoor Blower	Blower Type	PSC	ECM	ECM
	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	MERV 4, Disposable		
	Number and size - in.	(4) 16 x 20 x 2		
Line voltage data (Volts-Phase-Hz)		208/230-3-60 460-3-60 575-3-60	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] 1 AHRI Certified to AHRI Standard 210/240: 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

SPECIFICATIONS - BELT DRIVE BLOWER — 5 TON | 6 TON

Model		LGX060S5B	LGX072S5T
Nominal Tonnage		5	6
Efficiency Type		Standard	Standard
Blower Type		Single Speed Belt Drive	Two Speed Belt Drive
Cooling Performance	Gross Cooling Capacity (Btuh)	60,900	72,000
	[1] Net Cooling Capacity (Btuh)	58,000	68,000
	[1] AHRI Rated Air Flow (cfm)	1900	2200
	[1] SEER2 (Btuh/Watt)	14.0	- - -
	[1] EER2 (Btuh/Watt)	11.5	- - -
	[1] IEER (Btuh/Watt)	- - -	15.0
	[1] EER (Btuh/Watt)	- - -	11.0
	Total Unit Power (kW)	5.0	5.6
Sound Rating Number	dBA	74	79
Refrigerant Charge	Refrigerant Type	R-454B	R-454B
	Without Reheat Option	3 lbs. 12 oz.	5 lbs. 6 oz.
	With Reheat Option	3 lbs. 12 oz.	5 lbs. 14 oz.
Gas Heat Available		See page 24	
Compressor Type (Number)		Scroll (1)	Two-Stage Scroll (1)
Outdoor Coil	Net face area - sq. ft.	14.5	17.8
	Rows	1	1
	Fins - in.	23	23
Outdoor Coil Fan	Motor HP (number and type)	1/4 (1 PSC)	1/3 (1 PSC)
	Rpm	825	1075
	Watts	325	375
	Diameter (Number) - in.	(1) 24	(1) 24
	Blades	4	3
	Total air volume - cfm	3950	4700
Indoor Coil	Net face area - sq. ft.	7.0	8.7
	Rows	1	1
	Fins - in.	20	20
	Condensate drain size (NPT) - in.	(1) 1	(1) 1 in.
	Expansion device type	Balanced Port Thermostatic Expansion Valve removable power head	
[3] **Indoor Blower & Drive Selection**	Nominal Motor HP	2	2
	Maximum Usable Motor HP (US)	2.3	2.3
	Available Drive Kits	A03 833 - 1250 rpm A07 1212 - 1548 rpm	A04 968 - 1340 rpm A08 1193-1591 rpm
	Wheel (Number) diameter x width - in.	(1) 10 x 10	(1) 10 x 10
Filters	Type	Disposable	
	Number and size - in.	(4) 16 x 20 x 2	(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 (2-5 ton) or 340/360 (6 ton): 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

[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 output. If motors of comparable HP are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

SPECIFICATIONS - GAS HEAT — LOW NOX (ALL MODELS)

Unit Size		024, 036	048, 060, 072	036, 048, 060, 072	048, 060, 072
Heat Input Type		**Standard (1 Stage)**		**Medium (2 Stage)**	**High (2 Stage)**
Input Btuh	1st Stage	65,000		81,000	113,000
	2nd Stage	- - -		108,000	150,000
Output Btuh	1st Stage	52,000		66,000	92,000
	2nd Stage	- - -		87,000	121,000
Temperature Rise Range - °F	1st stage	35 - 65	15 - 45	25 - 55	30 - 60
	2nd Stage	- - -	- - -	30 - 70	45 - 75
Minimum air volume - cfm		1075		1150	1500
[1] AFUE (single phase)		81%		81%	81%
[2] Thermal Efficiency (three phase)		81%		81%	81%
Gas Supply Connections		1/2 in. NPT			
Recommended Gas Supply Pressure - Nat. / LPG		7 in. w.g. / 11 in. w.g.			
Gas Supply Pressure Range	Min./Max. (Natural)	4.5 - 10.5 in. w.g.			
	Min./Max. (LPG)	10.8 - 13.5 in. w.g.			

[1] Annual Fuel Utilization Efficiency based on U.S. DOE test procedures and FTC labeling regulations - 1 phase models only.

[2] Thermal Efficiency at full input.

HIGH ALTITUDE DERATE

NOTE - Units may be installed at altitudes up to 2000 feet above sea level without any modifications.
At altitudes above 2000 feet units must be derated to match gas manifold pressures shown in table below.
At altitudes above 4500 feet unit must be derated 2% for each 1000 feet above sea level.

NOTE - This is the only permissible derate for these units.

Refer to the Installation Instructions for more detailed information.

Heat Input Type	Altitude Feet	Gas Manifold Pressure in. w.g.		Input Rate (Btuh)
		Natural Gas	LPG/ Propane	
Standard (1 stage)	2001 - 4500	1.7 / 3.0	5.9 / 9.0	62,000
Medium (2 stage)	2001 - 4500	1.7 / 3.0	5.9 / 9.0	81,000 /104,000
High (2 stage)	2001 - 4500	1.7 / 3.0	5.9 / 9.0	113,000 / 144,000

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 - LGX024S5

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) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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	23.3	1.29	0.7	0.84	0.99	22.3	1.48	0.72	0.86	1	21.4	1.7	0.73	0.88	1	20.4	1.96	0.75	0.91	1
	800	24.6	1.28	0.76	0.94	1	23.6	1.47	0.78	0.96	1	22.6	1.69	0.8	0.99	1	21.7	1.95	0.82	1	1
	960	25.9	1.27	0.82	1	1	25	1.46	0.85	1	1	24.1	1.69	0.87	1	1	23	1.94	0.9	1	1
67°F	640	24.9	1.28	0.56	0.68	0.8	23.9	1.47	0.57	0.69	0.82	22.9	1.69	0.58	0.7	0.84	21.7	1.95	0.59	0.72	0.87
	800	26.2	1.27	0.59	0.73	0.89	25.1	1.46	0.6	0.75	0.92	24.1	1.69	0.61	0.77	0.95	22.8	1.94	0.63	0.79	0.98
	960	27.2	1.26	0.63	0.8	0.98	26	1.46	0.64	0.82	1	24.9	1.69	0.65	0.84	1	23.5	1.94	0.67	0.88	1
71°F	640	26.7	1.27	0.43	0.54	0.65	25.6	1.46	0.44	0.55	0.66	24.6	1.69	0.44	0.56	0.68	23.3	1.94	0.44	0.57	0.69
	800	28	1.26	0.45	0.58	0.71	26.8	1.45	0.45	0.59	0.72	25.6	1.68	0.46	0.6	0.74	24.4	1.94	0.46	0.61	0.77
	960	29	1.25	0.46	0.61	0.77	27.8	1.45	0.47	0.63	0.79	26.4	1.67	0.47	0.64	0.82	25.2	1.93	0.48	0.66	0.85

3 TON - LGX036S5

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) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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	35.6	2	0.66	0.82	0.99	34.2	2.28	0.67	0.84	1	32.6	2.67	0.69	0.87	1	30.9	3.15	0.71	0.91	1
	1200	37.5	2	0.72	0.93	1	36.2	2.28	0.74	0.95	1	34.6	2.61	0.76	0.99	1	32.9	3.12	0.79	1	1
	1440	39.5	2.01	0.8	1	1	38.2	2.28	0.82	1	1	36.6	2.59	0.85	1	1	34.9	3.08	0.89	1	1
67°F	960	37.9	2.01	0.53	0.64	0.77	36.6	2.29	0.53	0.65	0.79	34.8	2.61	0.54	0.66	0.82	32.9	3.12	0.55	0.68	0.86
	1200	39.8	2.01	0.56	0.69	0.88	38.2	2.28	0.57	0.71	0.91	36.4	2.6	0.58	0.73	0.94	34.5	3.09	0.59	0.76	0.98
	1440	41.2	2.01	0.59	0.76	0.99	39.5	2.27	0.6	0.79	1	37.6	2.59	0.61	0.82	1	35.6	3.07	0.63	0.86	1
71°F	960	40.5	2.01	0.41	0.51	0.62	38.9	2.27	0.41	0.52	0.63	37.2	2.59	0.41	0.53	0.64	35.3	3.07	0.42	0.54	0.66
	1200	42.4	2.01	0.42	0.54	0.67	40.6	2.27	0.42	0.55	0.68	38.8	2.58	0.43	0.56	0.7	36.7	3.04	0.43	0.58	0.73
	1440	43.7	2.01	0.43	0.58	0.73	41.8	2.27	0.44	0.59	0.76	39.9	2.58	0.44	0.6	0.79	37.9	3.03	0.45	0.62	0.82

4 TON - LGX048S5

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) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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	47.3	2.81	0.69	0.84	1	45.4	3.19	0.71	0.86	1	43.3	3.61	0.72	0.89	1	41.2	4.08	0.74	0.92	1
	1600	49.9	2.81	0.75	0.94	1	47.8	3.2	0.77	0.97	1	45.7	3.62	0.79	1	1	43.8	4.09	0.82	1	1
	1920	52.4	2.8	0.82	1	1	50.4	3.2	0.85	1	1	48.4	3.62	0.88	1	1	46.3	4.1	0.91	1	1
67°F	1280	50.3	2.81	0.55	0.67	0.8	48.1	3.2	0.56	0.68	0.82	45.9	3.62	0.57	0.7	0.85	43.7	4.09	0.58	0.71	0.88
	1600	52.7	2.8	0.58	0.73	0.9	50.3	3.2	0.59	0.74	0.93	48.1	3.63	0.61	0.76	0.96	45.7	4.1	0.62	0.79	1
	1920	54.4	2.8	0.62	0.79	0.99	51.9	3.19	0.63	0.82	1	49.5	3.62	0.65	0.85	1	47.1	4.1	0.66	0.88	1
71°F	1280	53.7	2.8	0.42	0.53	0.65	51.3	3.19	0.43	0.54	0.66	49	3.62	0.43	0.55	0.67	46.7	4.1	0.43	0.56	0.69
	1600	56	2.79	0.44	0.57	0.7	53.6	3.19	0.44	0.58	0.72	51	3.62	0.45	0.59	0.74	48.5	4.09	0.45	0.6	0.76
	1920	57.8	2.78	0.45	0.61	0.76	55.1	3.18	0.46	0.62	0.79	52.4	3.61	0.46	0.63	0.82	49.9	4.09	0.47	0.65	0.85

5 TON - LGX060S5

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) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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	1600	56.7	3.6	0.71	0.86	1	54.3	4.07	0.72	0.89	1	51.8	4.6	0.74	0.81	0.95	47.6	5.13	0.69	0.83	0.98
	2000	59.7	3.63	0.77	0.97	1	57.3	4.1	0.79	1	1	54.9	4.64	0.81	0.9	1	50.2	5.17	0.75	0.92	1
	2400	62.9	3.65	0.85	1	1	60.4	4.13	0.87	1	1	58	4.68	0.91	0.98	1	52.6	5.21	0.81	1	1
67°F	1600	60.1	3.63	0.56	0.68	0.82	57.5	4.1	0.57	0.7	0.85	54.8	4.64	0.58	0.65	0.77	50.7	5.18	0.55	0.66	0.79
	2000	62.8	3.65	0.6	0.74	0.93	60	4.13	0.61	0.76	0.96	57.3	4.67	0.62	0.7	0.85	53.2	5.22	0.58	0.72	0.88
	2400	64.9	3.67	0.63	0.82	1	61.8	4.14	0.65	0.85	1	59	4.69	0.66	0.76	0.94	55.2	5.25	0.61	0.78	0.97
71°F	1600	64.1	3.66	0.43	0.54	0.66	61.3	4.14	0.43	0.55	0.67	58.5	4.68	0.43	0.52	0.62	54.1	5.23	0.42	0.53	0.64
	2000	66.8	3.68	0.44	0.58	0.72	63.8	4.16	0.45	0.59	0.74	60.8	4.71	0.45	0.55	0.67	56.4	5.26	0.43	0.56	0.69
	2400	68.7	3.69	0.46	0.62	0.79	65.5	4.17	0.46	0.64	0.82	62.4	4.72	0.47	0.58	0.73	58.4	5.29	0.45	0.6	0.76

RATINGS

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

6 TON - LGX072S5T (PART LOAD)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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	1200	49.8	2.79	0.72	0.85	0.97	47.3	3.23	0.74	0.87	0.99	44.5	3.72	0.75	1	1	48.4	4.23	0.93	1	1
	1600	53.9	2.77	0.79	0.94	1	51.1	3.22	0.81	0.97	1	48.2	3.71	0.83	1	1	51.9	4.22	1	1	1
	2000	57.4	2.75	0.86	1	1	54.9	3.2	0.88	1	1	52	3.69	0.91	1	1	54.3	4.21	1	1	1
67°F	1200	53.4	2.77	0.58	0.69	0.81	50.7	3.22	0.59	0.71	0.83	47.7	3.71	0.6	0.87	1	49.4	4.23	0.71	0.91	1
	1600	57.3	2.75	0.62	0.76	0.9	54.3	3.2	0.63	0.78	0.93	51	3.69	0.64	0.96	1	51.9	4.22	0.77	1	1
	2000	60	2.74	0.66	0.83	0.99	56.8	3.19	0.67	0.86	1	53.4	3.68	0.69	1	1	54.4	4.21	0.84	1	1
71°F	1200	57.4	2.75	0.45	0.56	0.66	54.6	3.2	0.45	0.56	0.68	51.5	3.69	0.46	0.67	0.84	52.9	4.21	0.5	0.69	0.88
	1600	61.5	2.73	0.46	0.6	0.73	58.3	3.18	0.47	0.61	0.75	54.9	3.68	0.47	0.73	0.94	54.7	4.2	0.53	0.76	0.98
	2000	64.3	2.72	0.48	0.64	0.8	60.8	3.17	0.49	0.66	0.83	57.2	3.67	0.5	0.8	1	56.1	4.2	0.56	0.83	1

6 TON - LGX072S5T (FULL LOAD)

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) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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	1920	71.5	4.07	0.75	0.89	1	68.2	4.61	0.77	0.91	1	64.9	5.23	0.78	0.93	1	61.3	5.91	0.81	0.96	1
	2400	75.3	4.11	0.81	0.97	1	72	4.66	0.83	0.99	1	68.8	5.27	0.85	1	1	65.2	5.95	0.88	1	1
	2880	79.3	4.16	0.87	1	1	76	4.7	0.9	1	1	72.5	5.32	0.92	1	1	68.7	6	0.95	1	1
67°F	1920	75.8	4.12	0.6	0.73	0.85	72.3	4.66	0.61	0.74	0.88	68.7	5.27	0.62	0.76	0.9	64.6	5.94	0.63	0.78	0.93
	2400	79.4	4.16	0.63	0.79	0.94	75.6	4.7	0.64	0.81	0.96	71.7	5.31	0.66	0.83	0.99	67.4	5.98	0.67	0.86	1
	2880	82.1	4.19	0.67	0.85	1	77.9	4.72	0.69	0.88	1	73.7	5.34	0.7	0.9	1	69.5	6.01	0.72	0.93	1
71°F	1920	81	4.17	0.46	0.58	0.7	77.1	4.72	0.46	0.59	0.72	73.2	5.33	0.46	0.6	0.73	68.9	6	0.47	0.61	0.76
	2400	84.5	4.21	0.47	0.62	0.76	80.4	4.75	0.48	0.63	0.78	76.1	5.36	0.48	0.64	0.81	71.6	6.03	0.49	0.66	0.83
	2880	87	4.24	0.49	0.66	0.83	82.8	4.78	0.49	0.67	0.85	78.1	5.39	0.5	0.69	0.88	73.5	6.06	0.51	0.71	0.91

HUMIDITROL® DEHUMIDIFICATION SYSTEM RATINGS

2 TON - LGX024S5 WITH HUMIDITROL® DEHUMIDIFICATION OPERATING

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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	18.4	920	.61	.78	.94	15.2	1050	.55	.76	.95	11.8	1200	.46	.74	.97	8.4	1360	.31	.68	.89
	800	19.7	910	.67	.86	1.00	16.0	1040	.62	.85	1.00	12.2	1180	.53	.85	1.00	8.3	1350	.37	.84	.96
	960	21.0	900	.72	.86	.99	16.5	1030	.68	.95	1.00	12.4	1170	.61	.95	1.00	8.2	1340	.48	.99	1.00
67°F	640	20.5	920	.45	.61	.77	17.2	1050	.36	.56	.74	13.9	1200	.27	.49	.71	10.4	1360	.01	.36	.67
	800	21.8	910	.48	.66	.83	18.1	1040	.40	.63	.82	14.3	1180	.27	.56	.81	10.3	1350	.02	.45	.81
	960	22.7	900	.52	.72	.89	18.6	1030	.42	.70	.90	14.5	1170	.29	.63	.93	10.2	1340	.03	.54	.94
71°F	640	22.9	920	.28	.46	.60	19.2	1050	.21	.39	.56	15.8	1200	.06	.29	.50	12.3	1360	-.18	.13	.41
	800	24.0	910	.32	.50	.65	20.3	1040	.22	.43	.62	16.4	1180	.06	.33	.59	12.4	1350	-.22	.16	.50
	960	25.1	900	.34	.53	.71	21.0	1030	.23	.47	.69	16.7	1170	.06	.37	.66	12.3	1340	-.25	.19	.57

3 TON - LGX036S5 WITH HUMIDITROL® DEHUMIDIFICATION OPERATING

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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	23.7	1530	.58	.76	.94	20.4	1720	.54	.75	.95	16.7	1940	.48	.74	.98	12.7	2190	.35	.71	1.00
	1200	24.8	1540	.64	.85	.99	21.0	1730	.61	.85	.91	16.9	1930	.56	.87	1.00	12.5	2180	.47	.88	1.00
	1440	25.6	1550	.70	.94	1.00	21.5	1730	.68	.96	.96	17.1	1930	.64	1.00	1.00	12.6	2170	.58	.97	1.00
67°F	960	26.4	1550	.41	.57	.73	23.0	1740	.36	.54	.71	19.4	1950	.27	.49	.70	15.6	2190	.13	.41	.68
	1200	27.7	1560	.44	.63	.81	23.9	1750	.39	.60	.82	19.8	1950	.30	.56	.74	15.4	2190	.16	.50	.83
	1440	28.5	1570	.47	.69	.91	24.4	1750	.42	.67	.91	19.9	1950	.33	.64	.95	15.1	2180	.18	.59	.98
71°F	960	29.0	1570	.27	.41	.56	25.7	1760	.20	.37	.53	22.0	1970	.11	.30	.49	18.2	2200	-.03	.20	.43
	1200	30.6	1590	.28	.44	.61	26.7	1770	.20	.40	.59	22.6	1970	.10	.34	.56	18.3	2200	-.05	.24	.51
	1440	31.5	1600	.29	.49	.67	27.3	1780	.21	.44	.66	22.9	1970	.10	.37	.63	18.2	2200	-.08	.27	.60

4 TON - LGX048S5 WITH HUMIDITROL® DEHUMIDIFICATION OPERATING

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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	35.7	2160	.58	.77	.93	29.5	2440	.54	.76	.98	23.3	2730	.46	.74	.98	17.3	3060	.32	.71	1.00
	1600	37.4	2160	.65	.85	1.00	30.7	2430	.62	.84	1.00	23.9	2730	.52	.85	1.00	17.3	3040	.42	.84	1.00
	1920	38.7	2160	.70	.91	1.00	31.5	2430	.65	.92	1.00	24.0	2720	.66	.96	.94	17.0	3030	.44	1.00	1.00
67°F	1280	39.4	2180	.41	.58	.73	33.0	2460	.34	.54	.73	26.8	2760	.22	.48	.71	20.7	3090	.02	.37	.68
	1600	41.1	2180	.45	.64	.82	34.2	2460	.37	.61	.82	27.3	2750	.29	.57	.81	20.7	3080	.02	.44	.82
	1920	42.1	2170	.42	.71	.89	34.6	2450	.40	.69	.90	27.6	2750	.25	.61	.93	20.3	3060	.01	.55	.96
71°F	1280	42.8	2200	.26	.43	.57	36.4	2480	.17	.36	.54	30.1	2790	.02	.27	.48	23.8	3120	-.19	.12	.41
	1600	44.6	2200	.28	.45	.63	37.5	2480	.18	.40	.60	30.6	2780	.07	.31	.57	23.7	3110	-.24	.14	.52
	1920	45.7	2190	.26	.49	.69	38.1	2480	.18	.43	.65	30.5	2770	.12	.37	.62	23.6	3100	-.32	.11	.58

HUMIDITROL® DEHUMIDIFICATION SYSTEM RATINGS

5 TON - LGX060S5 WITH HUMIDITROL® DEHUMIDIFICATION OPERATING

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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	1600	42.3	2750	.50	.73	.93	35.3	3020	.45	.69	.95	27.9	3340	.33	.64	.97	19.7	3730	.12	.55	.99
	2000	44.2	2770	.60	.83	1.00	35.9	3030	.52	.85	1.00	30.1	3360	.43	.57	1.00	18.9	3720	.22	.76	.99
	2400	45.3	2780	.67	.95	.99	37.0	3040	.59	.93	.98	28.4	3340	.51	.93	.98	18.5	3720	.29	.91	1.00
67°F	1600	47.7	2800	.34	.52	.70	40.4	3060	.25	.46	.66	33.2	3380	.11	.36	.62	25.1	3770	-.12	.22	.55
	2000	49.5	2810	.40	.60	.79	41.8	3080	.28	.52	.78	33.5	3380	.16	.44	.77	24.3	3760	-.15	.31	.74
	2400	50.8	2830	.41	.66	.90	42.3	3080	.30	.59	.89	32.9	3370	.15	.56	.88	23.0	3740	-.19	.43	.88
71°F	1600	54.3	2850	.18	.28	.51	45.7	3110	.10	.28	.45	38.2	3430	-.05	.17	.39	29.9	3810	-.30	.01	.27
	2000	55.3	2860	.16	.38	.56	46.6	3110	.09	.32	.51	38.3	3420	-.07	.21	.46	29.1	3800	-.38	.03	.37
	2400	56.1	2870	.21	.42	.64	46.8	3110	.09	.35	.59	37.7	3420	-.10	.23	.55	28.1	3780	-.48	.03	.48

6 TON - LGX072S5 WITH HUMIDITROL® DEHUMIDIFICATION OPERATING

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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	1920	43.6	3210	.54	.74	.93	36.3	3520	.47	.73	.95	29.1	3890	.37	.69	.96	21.3	4320	.21	.64	1.00
	2400	45.8	3250	.61	.82	1.00	37.9	3550	.54	.80	1.00	29.1	3890	.43	.87	.88	20.7	4310	.25	.87	.99
	2880	46.5	3270	.63	.95	.99	38.2	3550	.63	.95	.98	29.7	3900	.60	.95	.98	20.6	4310	.31	.97	1.00
67°F	1920	48.8	3280	.34	.52	.70	41.4	3590	.27	.48	.69	34.0	3960	.15	.40	.67	25.9	4400	-.19	.29	.64
	2400	50.7	3310	.37	.57	.81	42.7	3610	.28	.52	.79	34.0	3960	.08	.47	.76	25.5	4390	-.10	.36	.79
	2880	51.4	3320	.39	.65	.91	43.1	3620	.24	.60	.88	33.2	3950	.01	.61	.90	24.9	4380	-.15	.38	.91
71°F	1920	53.6	3330	.19	.35	.51	46.3	3650	.09	.28	.47	38.4	4030	-.04	.19	.40	30.2	4470	-.29	.05	.33
	2400	55.0	3360	.22	.38	.57	46.8	3660	.09	.31	.54	38.1	4020	-.07	.22	.47	29.1	4450	-.37	.06	.41
	2880	55.7	3370	.25	.41	.64	46.7	3660	.10	.34	.59	37.4	4020	-.10	.23	.55	26.1	4400	-.46	.25	.50

BLOWER DATA

DIRECT DRIVE - 2 TON | 3 TON [0.5 HP ECM]

LGX024S5E | LGX036S5E

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 (larger gas heat section, economizer, wet coil, etc.) See page 35.

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.) See page 35.

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	811	50	415	994	82	473	1177	114	531	1319	154	579	1461	194	626	1564	236	663	1667	278	700	1804	349	753	1878	396	783
0.1	716	47	494	906	81	547	1095	115	599	1243	158	642	1391	200	685	1500	243	718	1608	286	751	1753	361	798	1833	409	824
0.2	631	49	570	827	85	618	1023	121	665	1176	165	704	1329	209	742	1442	254	772	1555	299	802	1708	375	843	1794	425	865
0.3	556	54	644	758	92	687	960	130	729	1118	176	764	1275	222	799	1392	268	825	1509	314	851	1668	392	888	1759	443	907
0.4	489	62	715	696	102	753	903	142	791	1065	189	822	1227	236	853	1347	284	877	1467	331	900	1632	410	932	1726	462	949
0.5	- - -	- - -	- - -	- - -	- - -	- - -	851	155	851	1017	204	879	1183	253	906	1306	301	927	1429	349	948	1597	430	976	1693	481	991
0.6	- - -	- - -	- - -	- - -	- - -	- - -	804	170	909	973	220	933	1141	269	957	1267	318	976	1392	367	994	1562	449	1019	1660	501	1032
0.7	- - -	- - -	- - -	- - -	- - -	- - -	759	184	964	930	235	985	1101	286	1006	1228	336	1023	1355	385	1039	1527	467	1062	1624	519	1074
0.8	- - -	- - -	- - -	- - -	- - -	- - -	716	199	1017	889	251	1036	1061	302	1054	1189	352	1069	1317	402	1083	1489	484	1103	1585	535	1115
0.9	- - -	- - -	- - -	- - -	- - -	- - -	671	211	1067	845	264	1083	1019	316	1099	1148	366	1112	1276	416	1125	1447	499	1144	1540	549	1156
1.0	- - -	- - -	- - -	- - -	- - -	- - -	625	222	1114	800	275	1128	974	327	1142	1102	378	1154	1230	428	1165	1400	510	1183	1489	559	1196
1.1	- - -	- - -	- - -	- - -	- - -	- - -	576	230	1158	751	283	1170	925	336	1182	1052	387	1193	1179	437	1203	1345	518	1221	1430	566	1235
1.2	- - -	- - -	- - -	- - -	- - -	- - -	521	234	1199	695	288	1210	869	341	1220	995	391	1230	1121	441	1240	1283	521	1258	1361	567	1273
1.3	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	806	340	1255	930	390	1265	1054	440	1274	1210	519	1293	1281	562	1311
1.4	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	734	335	1288	856	384	1297	977	433	1306	1126	510	1326	1188	552	1347

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	794	45	388	970	76	454	1146	107	519	1281	149	575	1416	191	630	1522	110	678	1627	293	726	1715	351	768	1802	408	810
0.1	709	44	460	895	78	519	1080	111	577	1223	155	627	1366	199	677	1477	251	721	1588	303	764	1681	362	804	1773	420	843
0.2	630	46	531	855	82	583	1019	117	634	1169	163	679	1318	208	723	1435	262	763	1552	315	803	1648	375	841	1743	434	878
0.3	556	51	602	759	88	646	961	125	690	1117	172	730	1273	219	769	1395	274	805	1516	328	841	1615	388	877	1714	448	912
0.4	486	58	671	696	97	709	906	135	746	1068	184	781	1230	232	815	1356	288	848	1481	343	880	1582	403	914	1683	463	948
0.5	420	66	740	637	107	771	854	147	802	1021	196	831	1188	245	860	1317	301	890	1446	357	919	1549	418	951	1652	478	983
0.6	- - -	- - -	- - -	- - -	- - -	- - -	804	159	856	946	209	881	1147	259	905	1279	316	932	1410	372	958	1514	432	989	1618	492	1019
0.7	- - -	- - -	- - -	- - -	- - -	- - -	756	172	910	932	223	930	1107	273	949	1241	330	973	1374	386	996	1478	446	1026	1582	506	1055
0.8	- - -	- - -	- - -	- - -	- - -	- - -	709	185	962	888	236	978	1066	287	993	1201	344	1014	1336	400	1034	1440	460	1063	1544	519	1091
0.9	- - -	- - -	- - -	- - -	- - -	- - -	663	197	1013	844	249	1025	1025	300	1036	1161	357	1054	1296	413	1072	1399	472	1100	1502	530	1127
1.0	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	982	313	1078	1118	369	1094	1254	424	1109	1355	482	1136	1456	540	1163
1.1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	938	323	1119	1073	379	1133	1208	434	1146	1307	491	1172	1406	548	1198
1.2	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	892	332	1158	1026	387	1170	1159	441	1182	1255	497	1208	1351	553	1233
1.3	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	843	340	1197	975	393	1207	1106	446	1216	1198	501	1242	1290	555	1268
1.4	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	790	344	1234	920	396	1242	1049	448	1250	1137	501	1276	1224	553	1302

BLOWER DATA

DIRECT DRIVE - 3 TON | 4 TON | 5 TON [1 HP ECM]

LGX048S5E I LGX060S5E

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 (larger gas heat section, economizer, wet coil, etc.) See page 35.

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.) See page 35.

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	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	- - -	- - -	- - -

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	1087	111	493	1304	184	579	1520	257	665	1689	368	738	1857	478	810	1972	588	864	2087	698	918	2196	844	975	2283	925	1000
0.1	1021	104	537	1246	180	618	1470	255	699	1646	368	768	1821	480	837	1941	592	888	2061	704	938	2179	852	992	2255	926	1017
0.2	961	102	582	1193	181	658	1425	259	734	1607	373	799	1789	487	864	1914	601	912	2039	714	960	2163	864	1012	2231	932	1034
0.3	906	106	628	1145	186	699	1384	266	769	1572	382	831	1759	498	892	1889	613	938	2018	728	984	2149	879	1033	2209	941	1053
0.4	855	113	674	1101	196	740	1347	278	806	1540	396	864	1732	513	921	1866	629	965	1999	744	1008	2134	896	1054	- - -	- - -	- - -
0.5	808	125	720	1060	209	781	1312	293	842	1509	412	896	1706	530	950	1843	646	992	1980	762	1033	2119	915	1077	- - -	- - -	- - -
0.6	764	139	766	1022	225	823	1279	310	879	1481	430	930	1682	549	980	1821	666	1019	1960	782	1058	2102	935	1101	- - -	- - -	- - -
0.7	722	155	812	984.5	242	864	1247	328	916	1452	449	964	1657	569	1011	1799	686	1048	1940	803	1084	2084	955	1125	- - -	- - -	- - -
0.8	682	172	858	949	260	906	1216	348	953	1424	469	997	1632	589	1041	1776	706	1076	1919	823	1111	2063	974	1150	- - -	- - -	- - -
0.9	643	191	903	914	279	946	1185	367	989	1396	489	1030	1606	610	1071	1751	727	1104	1895	843	1137	2039	992	1175	- - -	- - -	- - -
1.0	- - -	- - -	- - -	- - -	- - -	- - -	1153	386	1024	1366	508	1062	1579	629	1100	1724	745	1132	1869	861	1163	2011	1008	1201	- - -	- - -	- - -
1.1	- - -	- - -	- - -	- - -	- - -	- - -	1120	404	1059	1334	525	1095	1548	646	1130	1694	761	1160	1839	876	1189	1979	1021	1226	- - -	- - -	- - -
1.2	- - -	- - -	- - -	- - -	- - -	- - -	1085	420	1093	1300	541	1126	1515	661	1158	1660	775	1186	1805	889	1214	1941	1031	1250	- - -	- - -	- - -
1.3	- - -	- - -	- - -	- - -	- - -	- - -	1047	433	1126	1263	553	1156	1478	672	1186	1622	785	1213	1766	898	1239	1897	1037	1275	- - -	- - -	- - -
1.4	- - -	- - -	- - -	- - -	- - -	- - -	1005	442	1158	1221	561	1185	1436	680	1212	1579	792	1238	1721	903	1263	1847	1037	1298	- - -	- - -	- - -

LGX036S5D | LGX048S5D

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 (larger gas heat section, economizer, wet coil, etc.) See page 35.
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.) See page 35.

Minimum Air Volume Required For Different Gas Heat Sizes:

Standard Heat - 1075 cfm; Medium Heat - 1150 cfm; High Heat - 1500 cfm

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
3 and 4 Ton Standard Efficiency (Downflow)									**LGX036S and LGX048S**
0.0	1873	1561	1123	2094	1783	1321	2064	1727	1216
0.1	1993	1601	1148	2168	1797	1338	2105	1744	1229
0.2	1913	1601	1137	2098	1803	1308	2050	1694	1198
0.3	1858	1527	1078	2036	1725	1261	1987	1638	1167
0.4	1801	1496	1046	1973	1679	1219	1905	1598	1148
0.5	1763	1467	987	1910	1647	1177	1862	1559	1108
0.6	1709	1414	897	1830	1560	1080	1781	1509	1057
0.7	1617	1368	806	1727	1519	986	1698	1449	982
0.8	1472	1269	730	1604	1419	918	1614	1389	920
0.9	1359	1162	487	1478	1363	706	1488	1346	792
1.0	961	922	370	1093	1083	590	1167	1099	703
3 and 4 Ton Standard Efficiency (Horizontal)									**LGX036S and LGX048S**
0.0	1799	1530	1073	2012	1747	1263	2015	1756	1251
0.1	1868	1544	1088	2032	1733	1268	2071	1760	1279
0.2	1802	1494	1068	1976	1682	1228	2014	1700	1226
0.3	1735	1432	1014	1900	1618	1185	1937	1634	1187
0.4	1666	1397	980	1825	1568	1142	1878	1597	1174
0.5	1615	1350	904	1750	1516	1078	1801	1558	1124
0.6	1564	1305	842	1675	1440	1014	1743	1479	1060
0.7	1462	1228	758	1562	1364	928	1664	1415	982
0.8	1330	1151	670	1449	1287	842	1512	1335	865
0.9	1194	1011	464	1298	1185	671	1393	1297	733
1.0	878	878	355	998	1032	565	1060	1063	618

LGX060S5B

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 (larger gas heat section, economizer, wet coil, etc.) See page 35.

2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.) See page 35.

See page 35 for blower motors and drives.

Minimum Air Volume Required For Different Gas Heat Sizes:

Standard Heat - 1075 cfm; Medium Heat - 1150 cfm; High Heat - 1500 cfm

DOWNFLOW

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
1600	720	0.28	769	0.33	819	0.37	871	0.41	926	0.44	975	0.47	1016	0.51	1054	0.55
1700	779	0.30	822	0.35	864	0.39	908	0.44	953	0.48	995	0.52	1034	0.57	1072	0.61
1800	828	0.34	864	0.39	901	0.43	938	0.48	977	0.53	1015	0.58	1053	0.63	1091	0.67
1900	858	0.41	892	0.45	927	0.50	962	0.55	999	0.60	1036	0.65	1074	0.69	1112	0.73
2000	879	0.47	913	0.52	948	0.56	984	0.61	1020	0.67	1058	0.72	1096	0.76	1134	0.80
2100	900	0.53	935	0.58	970	0.63	1007	0.69	1044	0.74	1081	0.79	1119	0.84	1157	0.88
2200	922	0.60	958	0.65	994	0.71	1031	0.76	1068	0.82	1106	0.87	1143	0.91	1180	0.95
2300	947	0.67	983	0.73	1020	0.79	1057	0.85	1094	0.90	1131	0.95	1168	1.00	1205	1.03
2400	974	0.76	1010	0.82	1047	0.88	1084	0.94	1120	0.99	1157	1.04	1193	1.08	1230	1.12
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
1600	1093	0.60	1133	0.63	1173	0.67	1214	0.70	1253	0.73	1288	0.77	1318	0.81	1351	0.85
1700	1111	0.65	1150	0.69	1190	0.72	1230	0.76	1268	0.79	1301	0.83	1331	0.87	1363	0.92
1800	1130	0.71	1169	0.75	1208	0.78	1247	0.82	1285	0.86	1317	0.90	1345	0.94	1377	0.98
1900	1150	0.77	1188	0.81	1227	0.85	1267	0.88	1303	0.92	1333	0.97	1361	1.02	1392	1.06
2000	1172	0.84	1210	0.88	1248	0.92	1286	0.96	1321	1.00	1350	1.05	1377	1.10	1409	1.14
2100	1195	0.91	1233	0.95	1269	1.00	1306	1.04	1339	1.09	1367	1.14	1395	1.19	1426	1.23
2200	1218	0.99	1255	1.03	1290	1.09	1324	1.14	1356	1.19	1385	1.24	1413	1.28	1444	1.32
2300	1242	1.07	1277	1.13	1310	1.20	1343	1.26	1374	1.30	1403	1.34	1432	1.38	1464	1.42
2400	1267	1.16	1300	1.23	1332	1.31	1364	1.37	1394	1.41	1423	1.45	1453	1.48	1484	1.53

HORIZONTAL

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
1600	654	0.28	712	0.32	769	0.36	825	0.39	879	0.43	933	0.47	982	0.50	1024	0.54
1700	703	0.31	756	0.35	807	0.39	858	0.43	906	0.47	955	0.51	999	0.55	1039	0.59
1800	752	0.34	798	0.38	844	0.43	889	0.48	933	0.52	977	0.57	1017	0.61	1056	0.65
1900	796	0.38	837	0.43	878	0.48	918	0.53	958	0.58	997	0.62	1036	0.67	1074	0.71
2000	833	0.43	870	0.48	907	0.54	943	0.59	980	0.64	1018	0.69	1055	0.73	1093	0.77
2100	864	0.50	897	0.55	931	0.60	966	0.65	1002	0.71	1038	0.76	1075	0.80	1113	0.83
2200	887	0.57	920	0.62	953	0.67	988	0.73	1024	0.78	1060	0.83	1097	0.87	1135	0.90
2300	909	0.64	942	0.70	976	0.75	1011	0.81	1046	0.86	1083	0.91	1120	0.95	1157	0.98
2400	931	0.72	965	0.78	999	0.83	1035	0.89	1071	0.94	1108	0.99	1144	1.03	1181	1.07
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
1600	1063	0.58	1101	0.61	1141	0.64	1181	0.67	1222	0.70	1261	0.73	1298	0.77	1333	0.81
1700	1078	0.63	1117	0.66	1156	0.69	1196	0.72	1235	0.75	1273	0.79	1309	0.83	1344	0.87
1800	1094	0.68	1133	0.72	1172	0.75	1211	0.78	1250	0.81	1287	0.85	1322	0.90	1355	0.94
1900	1112	0.74	1151	0.77	1190	0.81	1228	0.84	1265	0.88	1301	0.92	1335	0.97	1367	1.01
2000	1131	0.80	1170	0.83	1208	0.87	1245	0.91	1281	0.96	1316	1.00	1349	1.04	1380	1.09
2100	1151	0.87	1189	0.90	1227	0.94	1263	0.99	1298	1.04	1331	1.08	1363	1.13	1394	1.17
2200	1173	0.94	1210	0.98	1246	1.02	1281	1.07	1315	1.12	1347	1.17	1379	1.22	1409	1.26
2300	1195	1.02	1231	1.06	1266	1.11	1300	1.16	1333	1.22	1364	1.27	1395	1.32	1424	1.36
2400	1217	1.10	1252	1.15	1286	1.20	1319	1.26	1351	1.32	1382	1.38	1411	1.43	1440	1.48

LGX072S5T

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 (larger gas heat section, economizer, wet coil, etc.) See page 35.
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.) See page 35.

See page 35 for blower motors and drives.

Minimum Air Volume Required For Different Gas Heat Sizes:

Standard Heat - 1075 cfm; Medium Heat - 1150 cfm; High Heat - 1500 cfm

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
1900	857	0.41	892	0.45	927	0.50	962	0.55	999	0.60	1036	0.65	1074	0.69	1112	0.73
2000	879	0.47	913	0.52	948	0.56	984	0.61	1020	0.67	1058	0.72	1096	0.76	1134	0.80
2100	900	0.53	935	0.58	970	0.63	1007	0.69	1044	0.74	1081	0.79	1119	0.84	1157	0.88
2200	922	0.60	958	0.65	994	0.71	1031	0.76	1068	0.82	1106	0.87	1143	0.91	1180	0.95
2300	947	0.67	983	0.73	1020	0.79	1057	0.85	1094	0.90	1131	0.95	1168	1.00	1205	1.03
2400	974	0.76	1010	0.82	1047	0.88	1084	0.94	1120	0.99	1157	1.04	1193	1.08	1230	1.12
2500	1002	0.85	1039	0.91	1075	0.97	1112	1.03	1148	1.08	1184	1.13	1220	1.17	1257	1.21
2600	1032	0.95	1068	1.01	1105	1.07	1141	1.13	1177	1.17	1213	1.22	1248	1.26	1284	1.31
2700	1062	1.05	1099	1.11	1136	1.17	1172	1.22	1207	1.27	1242	1.32	1277	1.37	1312	1.43
2800	1094	1.16	1131	1.22	1167	1.27	1202	1.32	1237	1.38	1271	1.43	1305	1.49	1339	1.56
2900	1127	1.26	1163	1.32	1198	1.38	1233	1.44	1267	1.50	1300	1.56	1334	1.64	1367	1.71

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
1900	1150	0.77	1188	0.81	1227	0.85	1267	0.88	1303	0.92	1333	0.97	1360	1.02	1392	1.06
2000	1172	0.84	1210	0.88	1248	0.92	1286	0.96	1321	1.00	1350	1.05	1377	1.10	1409	1.14
2100	1195	0.91	1233	0.95	1269	1.00	1306	1.04	1339	1.09	1367	1.14	1395	1.19	1426	1.23
2200	1218	0.99	1255	1.03	1290	1.09	1324	1.14	1356	1.19	1385	1.24	1413	1.28	1444	1.32
2300	1242	1.07	1277	1.13	1310	1.20	1343	1.26	1374	1.30	1403	1.34	1432	1.38	1464	1.42
2400	1267	1.16	1300	1.23	1332	1.31	1364	1.37	1394	1.41	1423	1.45	1453	1.48	1484	1.53
2500	1292	1.26	1324	1.34	1355	1.42	1387	1.48	1417	1.52	1445	1.56	1475	1.59	1506	1.64
2600	1318	1.38	1350	1.46	1380	1.55	1411	1.60	1440	1.64	1469	1.68	1498	1.71	1529	1.76
2700	1345	1.51	1376	1.60	1406	1.68	1436	1.73	1465	1.77	1493	1.80	1523	1.84	1553	1.88
2800	1372	1.65	1403	1.74	1433	1.82	1462	1.86	1490	1.90	1519	1.93	1548	1.97	1578	2.01
2900	1399	1.80	1430	1.89	1460	1.96	1489	2.00	1516	2.03	1544	2.06	1573	2.10	1603	2.14

LGX072S5T

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 (larger gas heat section, economizer, wet coil, etc.) See page 35.
2 - Any field installed accessories air resistance (duct resistance, diffuser, etc.) See page 35.

See page 35 for blower motors and drives.

Minimum Air Volume Required For Different Gas Heat Sizes:

Standard Heat - 1075 cfm; Medium Heat - 1150 cfm; High Heat - 1500 cfm

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
1900	796	0.38	837	0.43	878	0.48	918	0.53	958	0.58	997	0.62	1036	0.67	1074	0.71
2000	833	0.43	870	0.48	907	0.54	943	0.59	980	0.64	1018	0.69	1055	0.73	1093	0.77
2100	864	0.50	897	0.55	931	0.60	966	0.65	1002	0.71	1038	0.76	1075	0.80	1113	0.83
2200	887	0.57	920	0.62	953	0.67	988	0.73	1024	0.78	1060	0.83	1097	0.87	1135	0.90
2300	909	0.64	942	0.70	976	0.75	1011	0.81	1046	0.86	1083	0.91	1120	0.95	1157	0.98
2400	931	0.72	965	0.78	999	0.83	1035	0.89	1071	0.94	1108	0.99	1144	1.03	1181	1.07
2500	955	0.80	989	0.86	1024	0.92	1061	0.98	1097	1.03	1133	1.08	1170	1.11	1205	1.15
2600	981	0.90	1016	0.96	1052	1.01	1088	1.07	1124	1.12	1160	1.16	1195	1.20	1230	1.25
2700	1009	0.99	1044	1.05	1080	1.11	1116	1.16	1152	1.21	1187	1.26	1221	1.30	1254	1.35
2800	1038	1.10	1073	1.16	1109	1.21	1145	1.26	1180	1.31	1214	1.36	1247	1.40	1279	1.46
2900	1068	1.20	1104	1.26	1139	1.31	1174	1.36	1208	1.41	1240	1.47	1273	1.52	1304	1.58

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
1900	1112	0.74	1151	0.77	1190	0.81	1228	0.84	1265	0.88	1301	0.92	1335	0.97	1367	1.01
2000	1131	0.80	1170	0.83	1208	0.87	1245	0.91	1281	0.96	1316	1.00	1349	1.04	1380	1.09
2100	1151	0.87	1189	0.90	1227	0.94	1263	0.99	1298	1.04	1331	1.08	1363	1.13	1394	1.17
2200	1173	0.94	1210	0.98	1246	1.02	1281	1.07	1315	1.12	1347	1.17	1379	1.22	1409	1.26
2300	1195	1.02	1231	1.06	1266	1.11	1300	1.16	1333	1.22	1364	1.27	1395	1.32	1424	1.36
2400	1217	1.10	1252	1.15	1286	1.20	1319	1.26	1351	1.32	1382	1.38	1411	1.43	1440	1.48
2500	1240	1.20	1274	1.25	1307	1.31	1339	1.37	1370	1.43	1400	1.49	1428	1.55	1457	1.59
2600	1264	1.30	1297	1.35	1329	1.42	1360	1.49	1389	1.55	1418	1.61	1446	1.67	1475	1.72
2700	1287	1.40	1319	1.47	1350	1.54	1380	1.61	1409	1.68	1437	1.74	1465	1.79	1493	1.84
2800	1311	1.52	1342	1.59	1373	1.66	1402	1.74	1430	1.8	1457	1.87	1485	1.92	1513	1.97
2900	1335	1.65	1366	1.72	1395	1.79	1424	1.87	1451	1.94	1478	2.00	1505	2.05	1533	2.09

BLOWER DATA

BELT DRIVE KIT SPECIFICATIONS

Model No.	Motor HP		No. of Speeds	Drive Kits and RPM Range			
	Nominal	Maximum		A03	A04	A07	A08
060	2	2.3	1	833-1250	- - -	1212-1548	- - -
072	2	2.3	2	- - -	968-1340	- - -	1193-1591

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		Reheat Coil		Gas Heat		Economizer	Filters		
	024, 036, 048, 060	072	024, 036, 048, 060	072	Medium Input	High Input		MERV 8	MERV 13	MERV 16
800	0.01	0.01	0.00	0.00	0.02	0.02	0.04	0.04	0.05	0.04
1000	0.02	0.01	0.00	0.00	0.02	0.02	0.04	0.04	0.07	0.05
1200	0.03	0.02	0.01	0.00	0.02	0.02	0.04	0.04	0.07	0.05
1400	0.04	0.03	0.02	0.01	0.02	0.03	0.04	0.04	0.07	0.06
1600	0.05	0.04	0.03	0.02	0.03	0.04	0.04	0.04	0.07	0.08
1800	0.06	0.05	0.04	0.02	0.03	0.05	0.05	0.05	0.07	0.09
2000	0.08	0.06	0.04	0.03	0.04	0.06	0.05	0.05	0.08	0.10
2200	0.09	0.07	- - -	0.04	0.04	0.07	0.05	0.05	0.08	0.11
2400	0.10	0.08	- - -	0.04	0.05	0.08	0.05	0.05	0.08	0.12

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
2600	- - -	- - - -	- - -	- - -	0.24	0.21	0.18	0.17
2800	- - -	- - - -	- - -	- - -	0.27	0.24	0.21	0.20
3000	- - -	- - - -	- - -	- - -	0.32	0.29	0.25	0.25

CEILING DIFFUSER AIR THROW DATA

Air Volume - cfm	[1] Effective Throw - ft.	
Model	**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
Model	**RTD11-95S**	**FD11-95S**
2600	24 - 29	19 - 24
2800	25 - 30	20 - 28
3000	27 - 33	21 - 29

[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 DATA — DIRECT DRIVE - 2 TON [ECM]

Model		LGX024S5E
[1] Voltage - 60hz		208/230V - 1 Ph
Compressor 1 (Non-Inverter)	Rated Load Amps	10.3
	Locked Rotor Amps	60.2
Outdoor Fan Motor	Full Load Amps (1 Non-ECM)	1.7
Power Exhaust (1) 0.33 HP	Full Load Amps	2.4
Service Outlet 115V GFI (amps)		15
Indoor Blower Motor	HP	0.5
	Type	Direct (ECM)
	Full Load Amps	4.3
[2] Maximum Overcurrent Protection (MOCP)	Unit Only	25
	with (1) 0.33 HP Power Exhaust	30
[3] Minimum Circuit Ampacity (MCA)	Unit Only	19
	with (1) 0.33 HP Power Exhaust	22

ELECTRICAL ACCESSORIES

Disconnect	**20W23**

Disconnects - 20W23 - 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 DATA — DIRECT DRIVE - 3 TON [ECM]

Model		LGX036S5E				
[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	0.5	1	1	1	1
	Type	Direct (ECM)		Direct (ECM)	Direct (ECM)	Direct (ECM)
	Full Load Amps	4.3	7.4	7.4	3.7	3
[2] Maximum Overcurrent Protection (MOCP)	Unit Only	35	40	25	15	15
	with (1) 0.33 HP Power Exhaust	40	40	30	15	15
[3] Minimum Circuit Ampacity (MCA)	Unit Only	24	28	21	10	8
	with (1) 0.33 HP Power Exhaust	27	30	23	12	9

ELECTRICAL ACCESSORIES

Disconnect	**20W23**		**20W23**	**20W23**	**20W23**

Disconnects - 20W23 - 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 DATA — DIRECT DRIVE - 4 TON [ECM]

Model		LGX048S5E			
[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 (ECM)	Direct (ECM)	Direct (ECM)	Direct (ECM)
	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	34	25	13	10
	with (1) 0.33 HP Power Exhaust	36	27	14	11
ELECTRICAL ACCESSORIES					
Disconnect		**20W23**	**20W23**	**20W23**	**20W23**

Disconnects - 20W23 - 80A

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

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

[2] 2 HACR type breaker or fuse.

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

ELECTRICAL DATA — DIRECT DRIVE - 5 TON [ECM]

Model		LGX060S5E			
[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)	1.65	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 (ECM)	Direct (ECM)	Direct (ECM)	Direct (ECM)
	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	39	30	14	12
	with (1) 0.33 HP Power Exhaust	42	32	15	13
ELECTRICAL ACCESSORIES					
Disconnect		**20W23**	**20W23**	**20W23**	**20W23**

Disconnects - 20W23 - 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 DATA — DIRECT DRIVE - 3 TON [PSC]

Model		LGX036S5D		
[1] Voltage - 60hz		208/230V - 3 Ph	460V - 3 Ph	575V - 3 Ph
Compressor 1 (Non-Inverter)	Rated Load Amps	9	4.1	3.3
	Locked Rotor Amps	70	39	29
Outdoor Fan Motor	Full Load Amps (1 Non-ECM)	1.7	1.1	0.7
Power Exhaust (1) 0.33 HP	Full Load Amps	2.4	1.3	1
Service Outlet 115V GFI (amps)		15	15	20
Indoor Blower Motor	HP	0.5	0.5	0.5
	Type	Direct (PSC)	Direct (PSC)	Direct (PSC)
	Full Load Amps	3.1	1.5	1.5
[2] Maximum Overcurrent Protection (MOCP)	Unit Only	25	15	15
	with (1) 0.33 HP Power Exhaust	25	15	15
[3] Minimum Circuit Ampacity (MCA)	Unit Only	17	8	7
	with (1) 0.33 HP Power Exhaust	19	10	8
ELECTRICAL ACCESSORIES				
Disconnect		**20W23**	**20W23**	**20W23**

Disconnects - 20W23 - 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 DATA — DIRECT DRIVE - 4 TON [PSC]

Model		LGX048S5D		
[1] Voltage - 60hz		208/230V - 3 Ph	460V - 3 Ph	575V - 3 Ph
Compressor 1 (Non-Inverter)	Rated Load Amps	12	6.3	4.4
	Locked Rotor Amps	123	60	41
Outdoor Fan Motor	Full Load Amps (1 Non-ECM)	1.7	1.1	0.7
Power Exhaust (1) 0.33 HP	Full Load Amps	2.4	1.3	1
Service Outlet 115V GFI (amps)		15	15	20
Indoor Blower Motor	HP	0.5	0.5	0.5
	Type	Direct (PSC)	Direct (PSC)	Direct (PSC)
	Full Load Amps	3.1	1.5	1.5
[2] Maximum Overcurrent Protection (MOCP)	Unit Only	30	15	15
	with (1) 0.33 HP Power Exhaust	30	15	15
[3] Minimum Circuit Ampacity (MCA)	Unit Only	20	11	8
	with (1) 0.33 HP Power Exhaust	23	12	9
ELECTRICAL ACCESSORIES				
Disconnect		**20W23**	**20W23**	**20W23**

Disconnects - 20W23 - 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 DATA — BELT DRIVE (SINGLE SPEED) - 5 TON

Model		LGX060S5B		
[1] Voltage - 60hz		208/230V - 3 Ph	460V - 3 Ph	575V - 3 Ph
Compressor 1 (Non-Inverter)	Rated Load Amps	16	7.1	6.4
	Locked Rotor Amps	156.4	69	47.8
Outdoor Fan Motor	Full Load Amps (1 Non-ECM)	1.7	1.1	0.7
Power Exhaust (1) 0.33 HP	Full Load Amps	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	32	15	13
ELECTRICAL ACCESSORIES				
Disconnect		**20W23**	**20W23**	**20W23**

Disconnects - 20W23 - 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 DATA — BELT DRIVE (TWO-SPEED) - 6 TON

Model		LGX072S5T		
[1] Voltage - 60hz		208/230V - 3 Ph	460V - 3 Ph	575V - 3 Ph
Compressor	Rated Load Amps	19.2	9.1	6.2
	Locked Rotor Amps	162.3	70.8	58.2
Outdoor Fan Motor	Full Load Amps (1 Non-ECM)	2.4	1.3	1
Power Exhaust (1) 0.33 HP	Full Load Amps	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	50	25	15
	with (1) 0.33 HP Power Exhaust	50	25	15
[3] Minimum Circuit Ampacity (MCA)	Unit Only	34	17	12
	with (1) 0.33 HP Power Exhaust	37	18	13
ELECTRICAL ACCESSORIES				
Disconnect		**22A25**	**22A25**	**22A25**

Disconnects - 20W25 - 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.

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

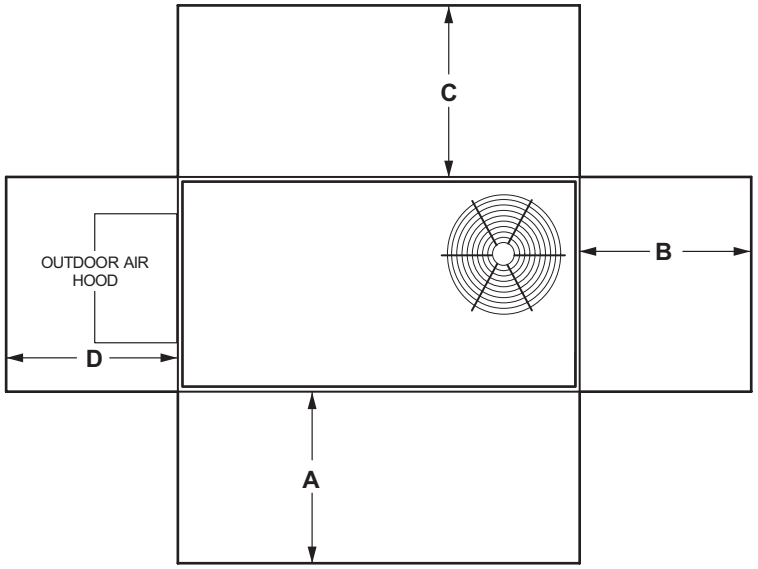
OUTDOOR SOUND DATA

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, 048, 060	62	66	70	69	66	60	50	74
072	66	71	74	73	70	65	57	79

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	48	1219	36	914	36	914	36	914	Unobstructed
Clearance to Combustibles	36	914	1	25	1	25	1	25	
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.
Clearance to Combustibles - Required clearance to combustible material.
Minimum Operation Clearance - Required clearance for proper unit operation.

WEIGHT DATA

Size	Net		Shipping	
	lbs.	kg	lbs.	kg
024 Base Unit	521	236	562	255
024 Max. Unit	631	286	672	305
036 Base Unit	531	241	572	259
036 Max. Unit	677	307	718	326
048 Base Unit	532	241	573	260
048 Max. Unit	693	314	734	333
060 Base Unit	532	241	573	260
060 Max. Unit	693	314	734	333
072 Base Unit	604	274	645	293
072 Max. Unit	705	320	746	338

FACTORY / FIELD INSTALLED OPTIONS AND ACCESSORIES - NET WEIGHTS

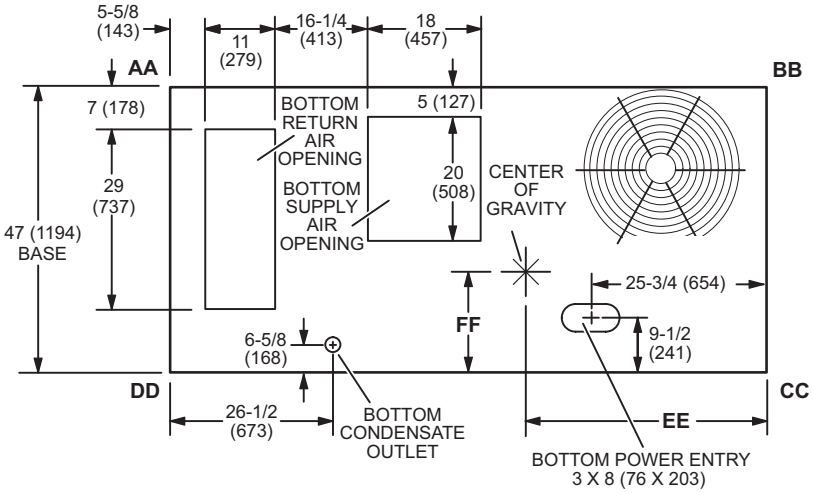
Description		lbs.	kg
ECONOMIZER / OUTDOOR AIR / POWER EXHAUST			
Economizer			
High Performance Economizer - Includes Barometric Relief Dampers and Combination Hood		84	38
Outdoor Air Dampers			
Motorized		40	18
Manual		30	14
Power Exhaust		35	16
GAS HEAT			
Medium Heat (adder over standard heat)		8	4
High Heat (adder over standard heat)		19	9
COMBINATION 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
HUMIDITROL® DEHUMIDIFICATION SYSTEM			
Humiditrol Dehumidification Option		27	12

DIMENSIONS - UNIT

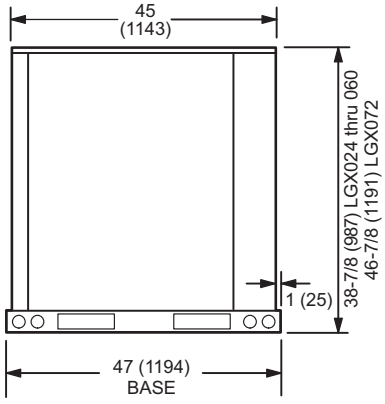
Size	CORNER WEIGHTS																CENTER OF GRAVITY							
	AA				BB				CC				DD				EE				FF			
	Base		Max.		Base		Max.		Base		Max.		Base		Max.		Base		Max.		Base		Max.	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm	in.	mm	in.	mm
024	107	49	129	59	124	56	132	60	160	73	170	77	138	63	208	95	39-1/2	1003	45	1143	20-1/2	521	20-1/2	521
036	112	51	142	64	130	59	141	64	168	76	190	86	145	66	228	104	39-1/2	1003	45	1143	20-1/2	521	20	508
048	112	51	145	66	130	59	144	65	168	76	194	88	145	66	233	106	39-1/2	1003	45	1143	20-1/2	521	20	508
060	112	51	145	66	130	59	144	65	168	76	194	88	145	66	233	106	39-1/2	1003	45	1143	20-1/2	521	20	508
072	130	59	162	74	147	67	167	76	198	90	226	103	175	79	257	117	40	1016	44	1118	20	508	20	508

Base Unit - The unit with NO INTERNAL OPTIONS.

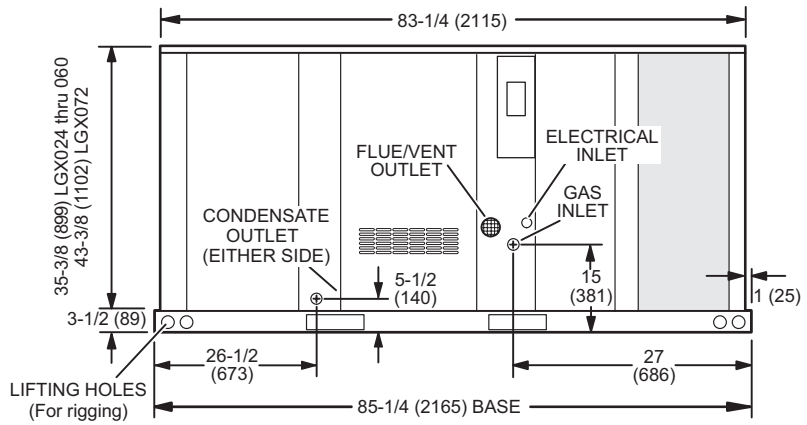
Max. Unit - The unit with ALL INTERNAL OPTIONS Installed. (Economizer, Standard Static Power Exhaust Fans, Controls, etc.). Does not include accessories external to unit or high static power exhaust.



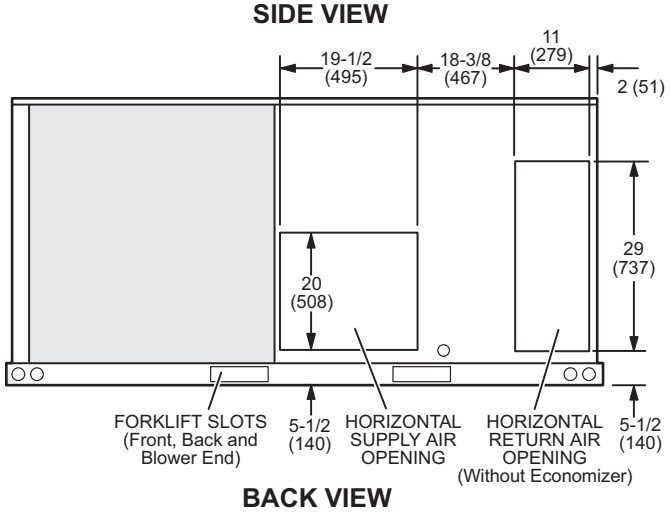
TOP VIEW (Base)



END VIEW



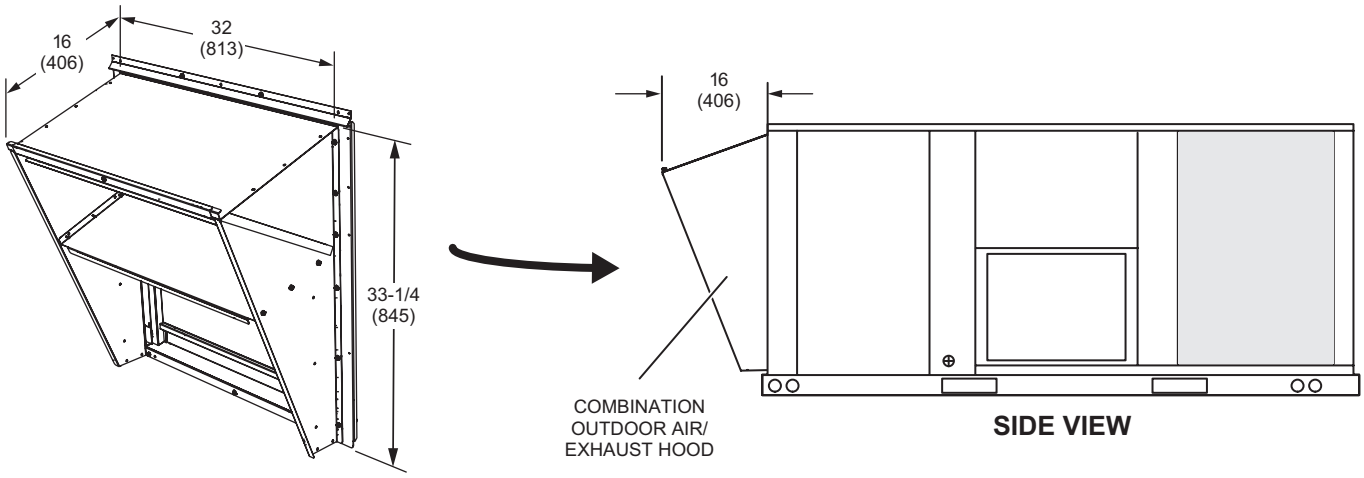
SIDE VIEW



BACK VIEW

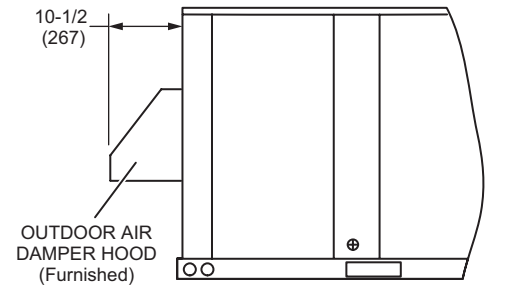
COMBINATION OUTDOOR AIR HOOD DETAIL FOR OPTIONAL ECONOMIZER AND BAROMETRIC RELIEF DAMPERS - DOWNFLOW APPLICATIONS

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

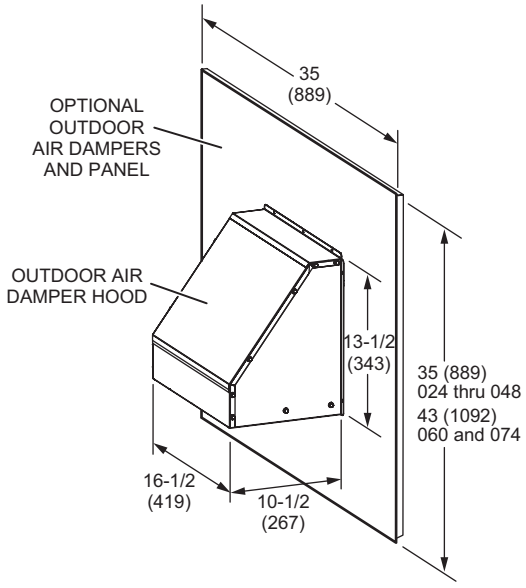


OUTDOOR AIR DAMPER HOOD DETAIL (Downflow or Horizontal Applications)

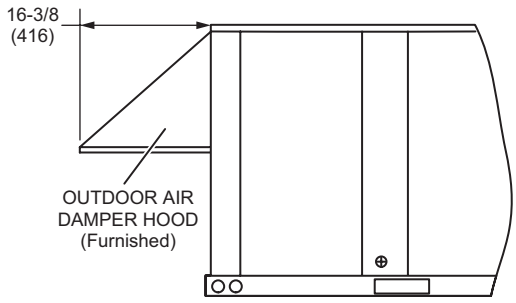
MANUAL OUTDOOR AIR HOOD



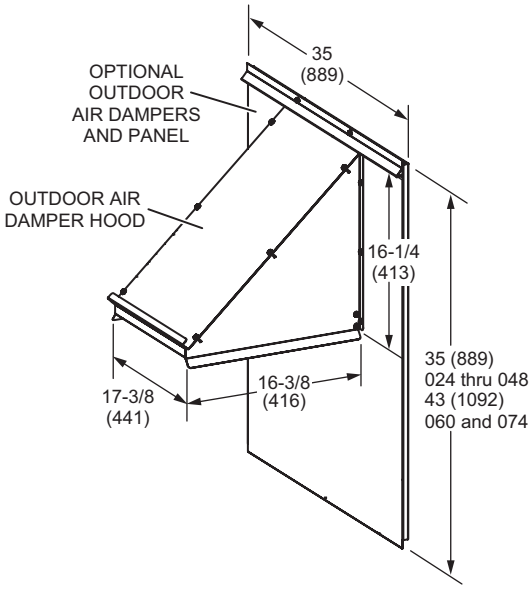
SIDE VIEW



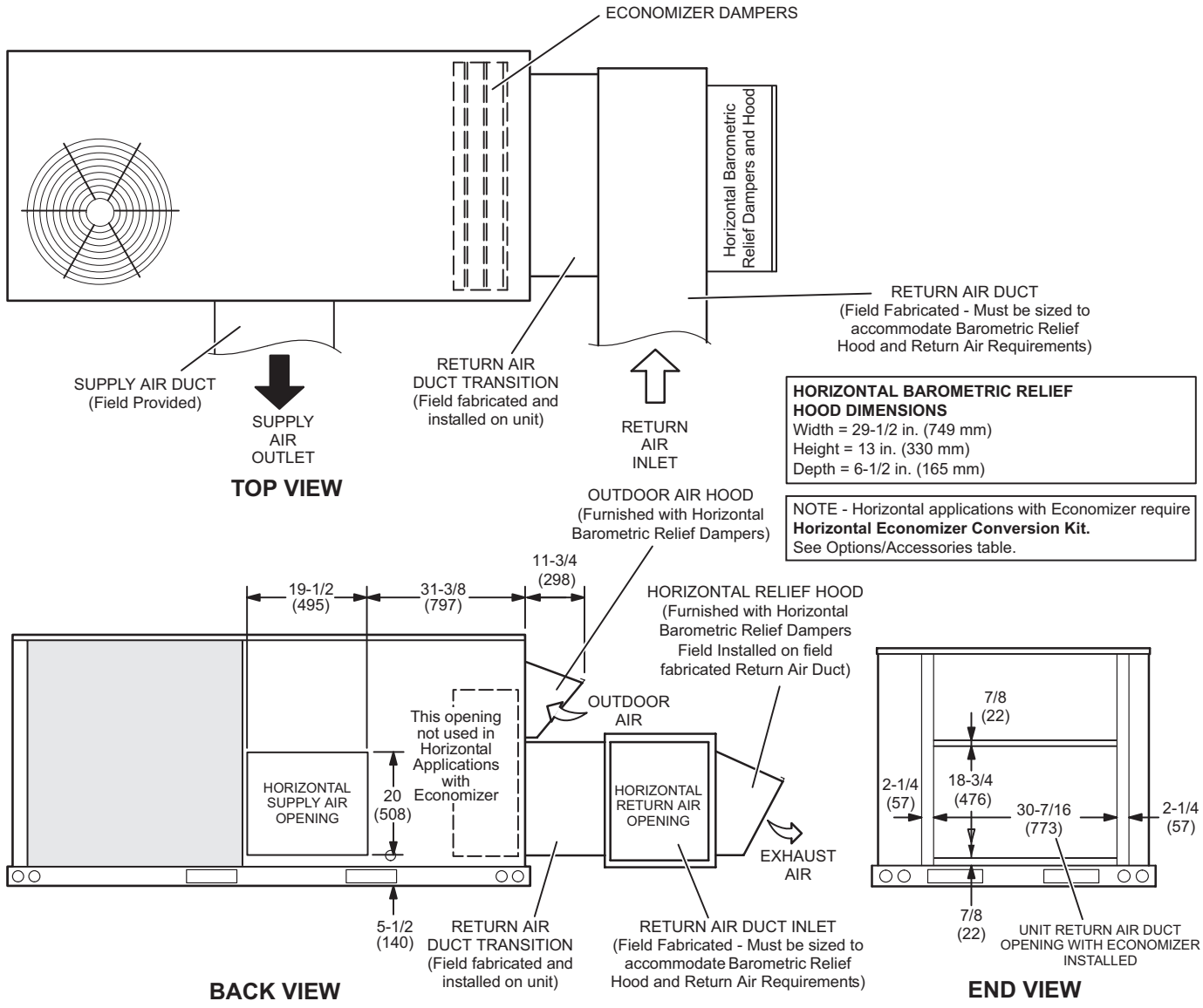
MOTORIZED OUTDOOR AIR HOOD



SIDE VIEW



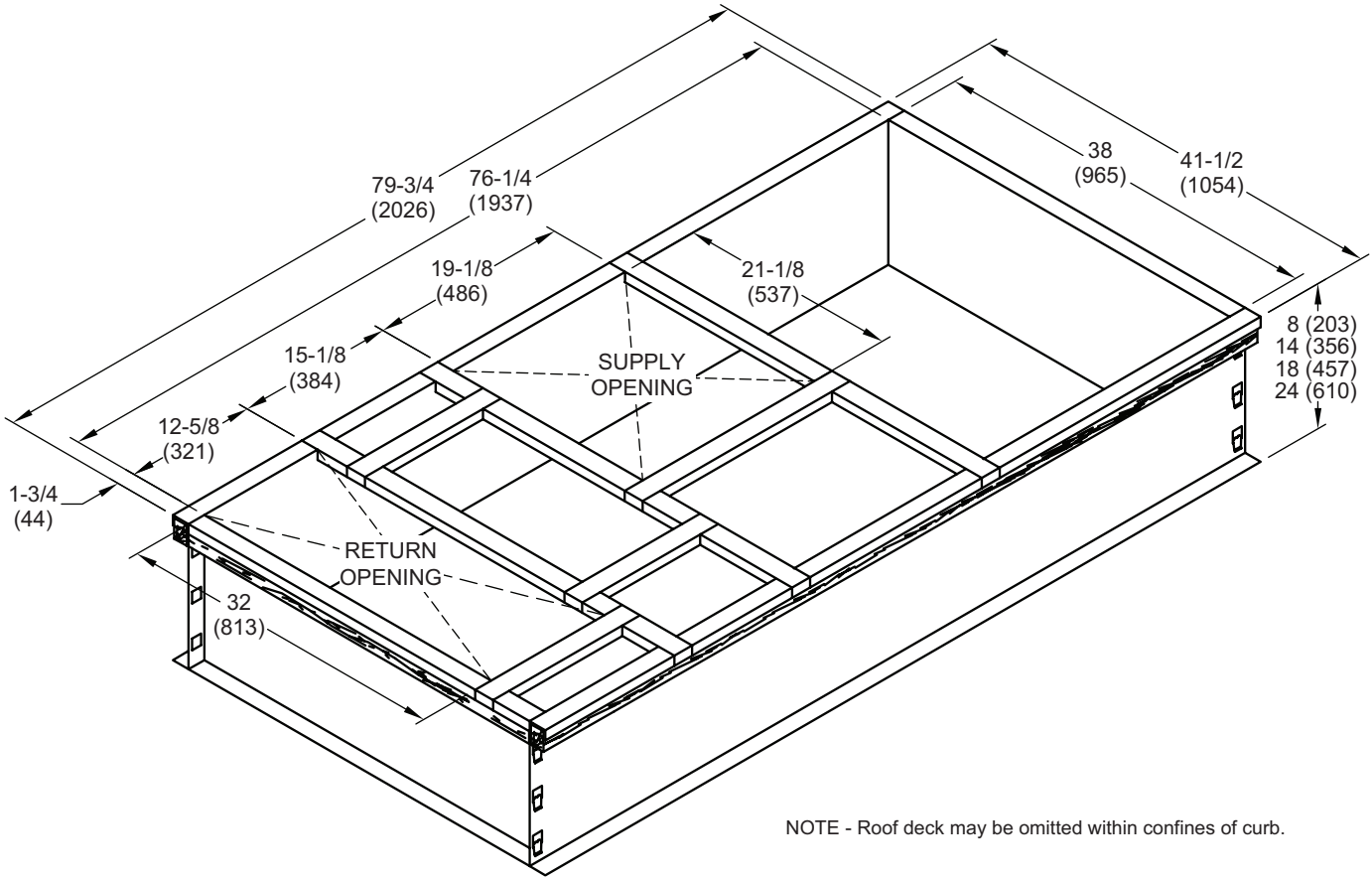
HORIZONTAL ECONOMIZER APPLICATIONS - OUTDOOR AIR HOOD DETAIL WITH OPTIONAL ECONOMIZER DAMPERS AND OPTIONAL HORIZONTAL BAROMETRIC RELIEF DAMPERS AND HOOD



NOTE - Return Air Duct and Transition must be supported.

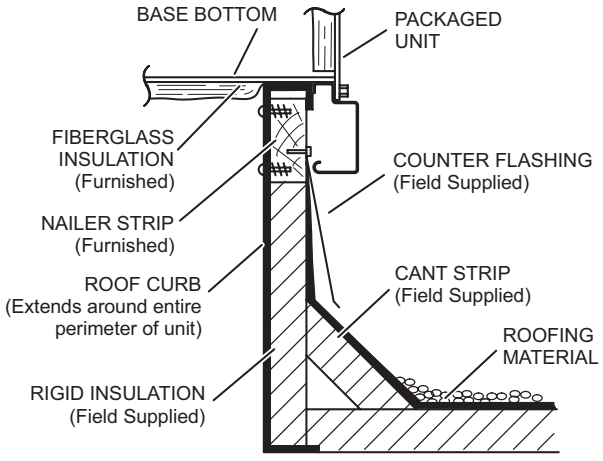
DIMENSIONS - ACCESSORIES

HYBRID ROOF CURBS - DOUBLE DUCT OPENING

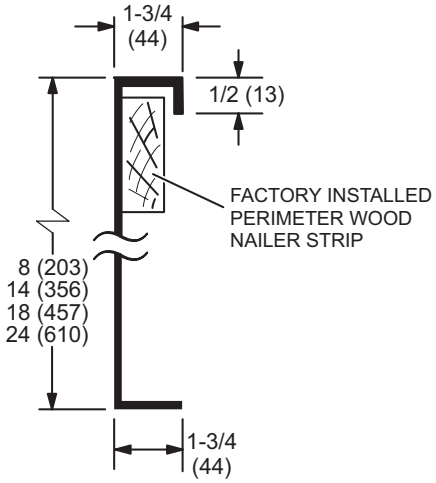


NOTE - Roof deck may be omitted within confines of curb.

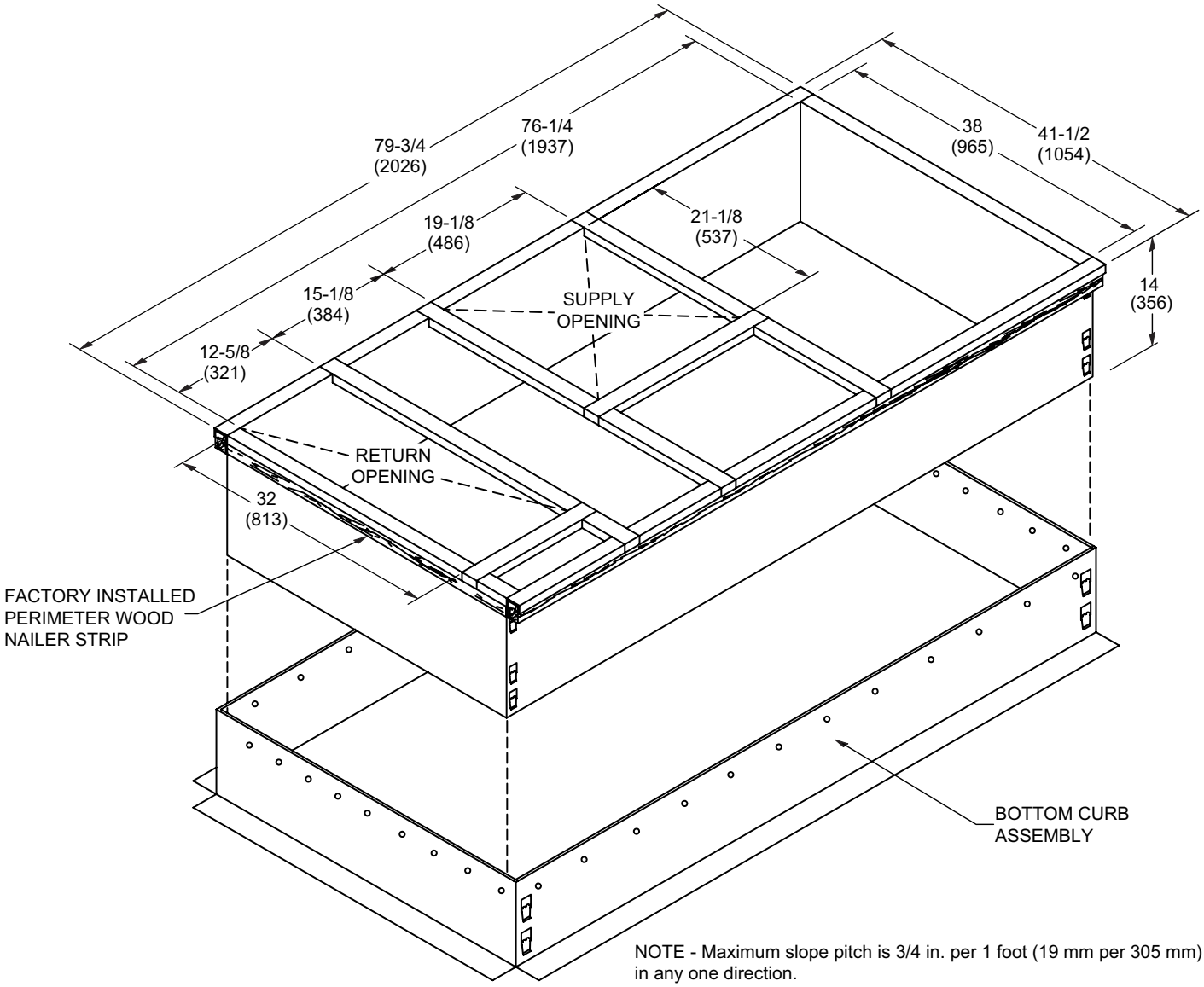
TYPICAL FLASHING DETAIL FOR ROOF CURB



DETAIL ROOF CURB

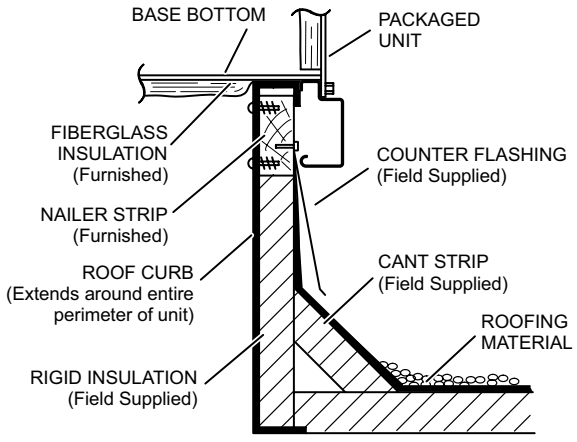


ADJUSTABLE PITCH CURBS - DOUBLE DUCT OPENING

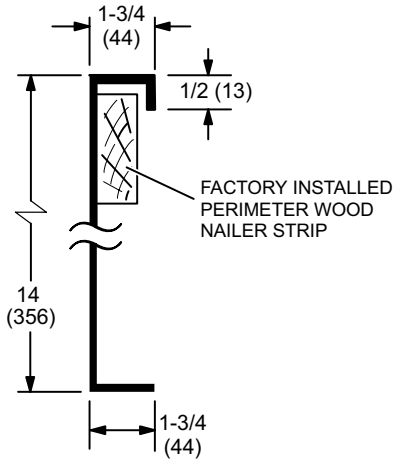


NOTE - Maximum slope pitch is 3/4 in. per 1 foot (19 mm per 305 mm) in any one direction.

TYPICAL FLASHING DETAIL FOR ROOF CURB

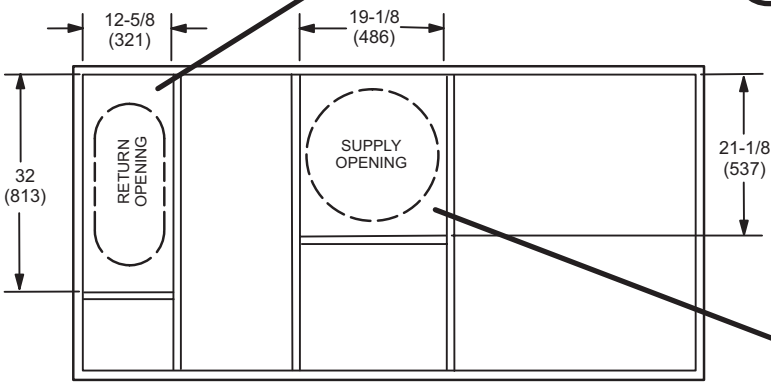


DETAIL ROOF CURB

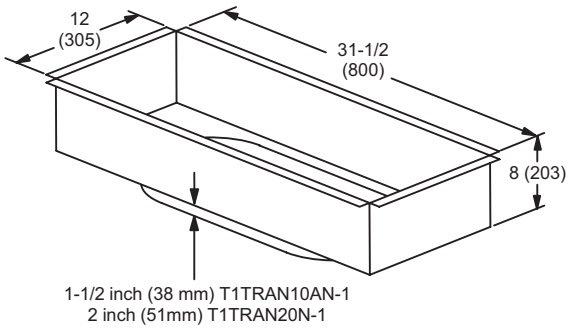


DIMENSIONS - ACCESSORIES

TRANSITIONS

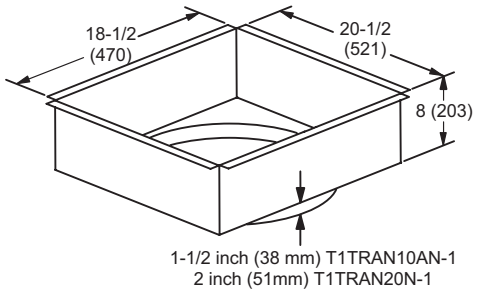


T1TRAN10AN-1 - FOR 18 INCH (457 MM) DUCT
T1TRAN20N-1 - FOR 20 INCH (508 MM) DUCT



RETURN TRANSITION

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

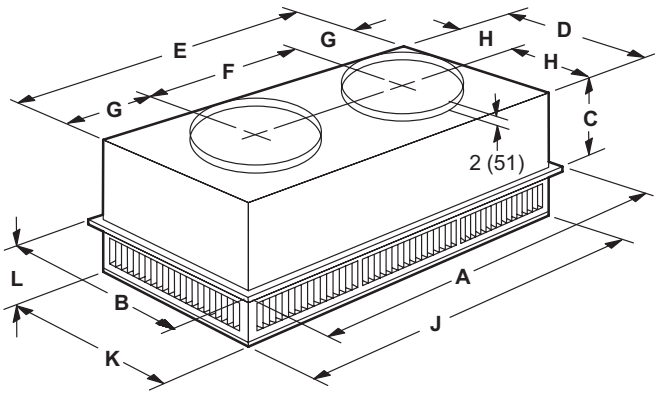


SUPPLY TRANSITION

DIMENSIONS - ACCESSORIES

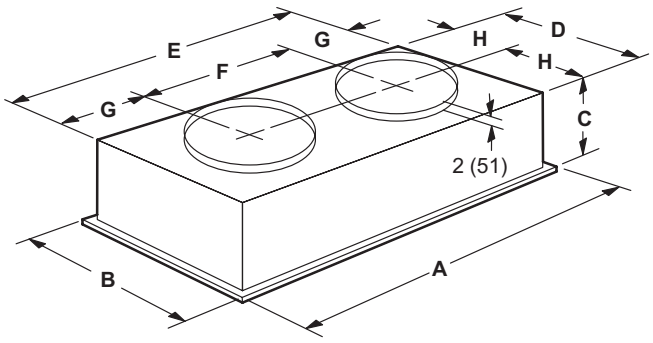
COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

STEP-DOWN CEILING DIFFUSER

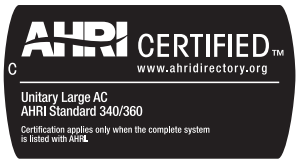


Model		RTD9-65S	RTD11-95S
A	in.	47-5/8	47-5/8
	mm	1159	1159
B	in.	23-5/8	29-5/8
	mm	600	752
C	in.	11-3/8	14-3/8
	mm	289	365
D	in.	21-1/2	27-1/2
	mm	546	699
E	in.	45-1/2	45-1/2
	mm	1156	1158
F	in.	22-1/2	22-1/2
	mm	572	572
G	in.	11-1/2	11-1/2
	mm	292	292
H	in.	10-3/4	13-3/4
	mm	273	349
J	in.	45-1/2	45-1/2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



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