



PACKAGED GAS ELECTRIC

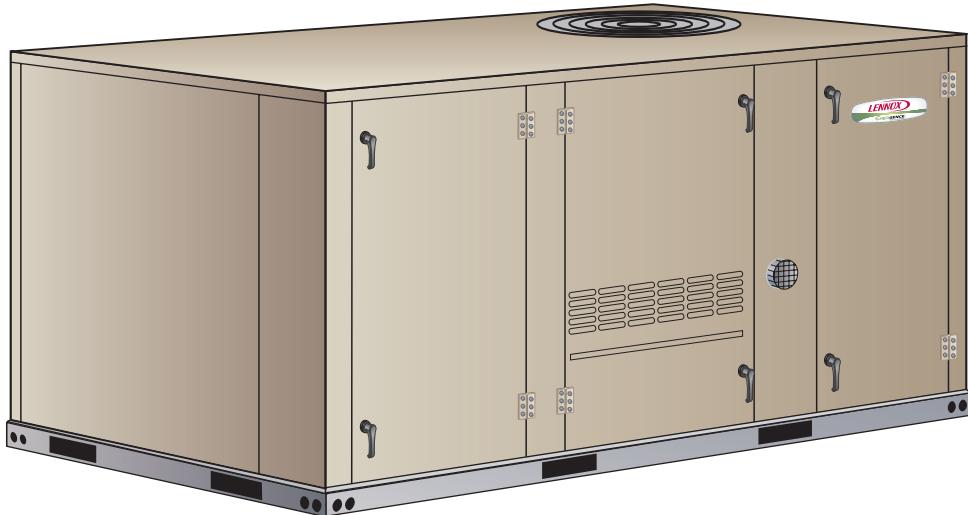
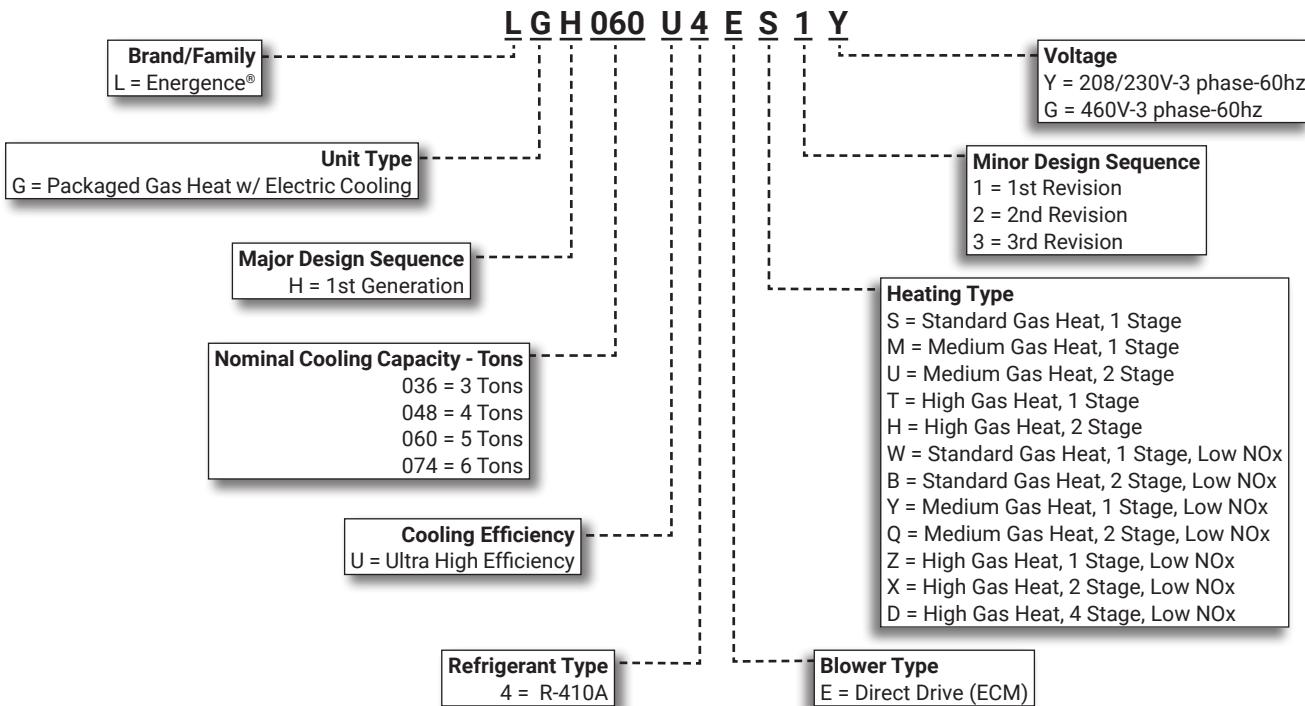
LGH

Energence® Ultra-High Efficiency Rooftop Units

60 Hz

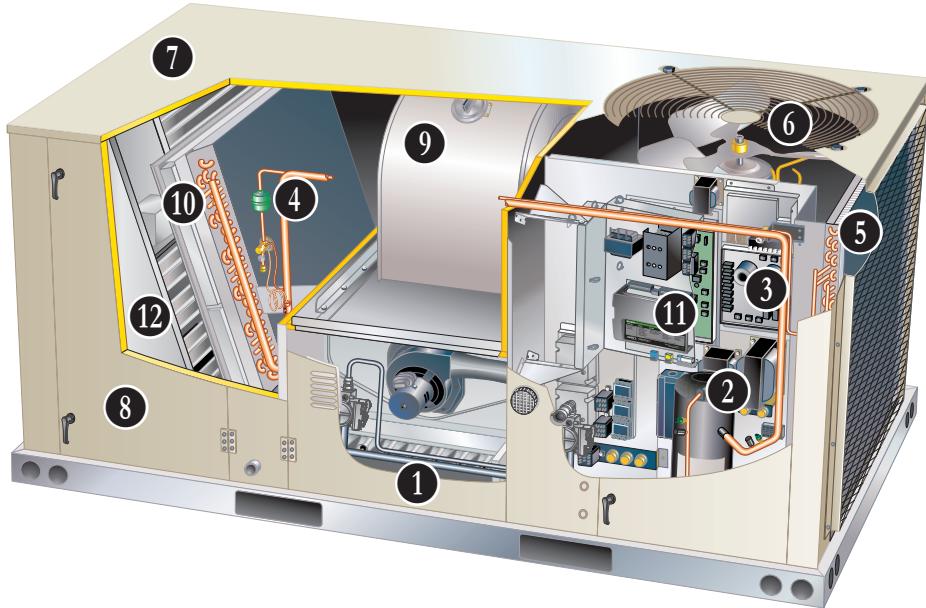
**COMMERCIAL  
PRODUCT SPECIFICATIONS**

Bulletin No. 210764  
March 2021  
Supersedes July 2019

**ENERGENCEx**  
Saving Energy with Intelligence™**PRODIGY**  
CONTROL SYSTEM**SMARTWIRE™ SYSTEM****L Connection®**  
NET WORK**ASHRAE 90.1  
COMPLIANT****3 to 6 Tons****Net Cooling Capacity - 34,500 to 70,000 Btuh  
Gas Input Heat Capacity - 28,000 to 150,000 Btuh****MODEL NUMBER IDENTIFICATION**

## FEATURE HIGHLIGHTS

Lennox' Energence® Ultra-High Efficiency rooftop unit product line was created to save energy with intelligence by offering some of the highest energy efficiency ratings available with a powerful, easy to use unit controller. This makes Energence rooftop units perfect for business owners looking for an HVAC product with the lowest total cost of ownership.



1. Aluminized Steel Inshot Burners
2. Variable Capacity Scroll Compressor
3. DC Inverter Control
4. Filter/Drier
5. Condenser Coil
6. Variable-Speed ECM Outdoor Coil Fan Motor
7. Heavy Gauge Steel Cabinet
8. Hinged Access Panels
9. Supply Air Blower
10. Air Filters
11. Prodigy 2.0 Control System
12. Economizer (option)

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## APPROVALS AND WARRANTY

### APPROVALS

- AHRI Certified to AHRI Standard 210/240 (3 thru 5 ton models) and AHRI Standard 340/360 (6 ton models)
- ETL listed
- Efficiency rating certified by CSA
- Components bonded for grounding to meet safety standards for servicing required by UL, ULC and National and Canadian Electrical Codes
- All models are ASHRAE 90.1 compliant
- ENERGY STAR® certified units are designed to use less energy, help save money on utility bills, and help protect the environment
- ISO 9001 Registered Manufacturing Quality System

### California Only

- If installed in South Coast Air Quality Management District (SCAQMD) only
- This gas unit does not meet the SCAQMD Rule 1111 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program:  
[www.CleanAirFurnaceRebate.com](http://www.CleanAirFurnaceRebate.com)
- If installed in San Joaquin Valley Air Pollution Control District (SJVAPCD) only
- This gas unit does not meet the SJVAPCD Rule 4905 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450

### WARRANTY

- Aluminized Steel Heat Exchanger - Limited ten years
- Stainless Steel Heat Exchanger (optional) - Limited fifteen years
- Compressor - Limited five years
- Prodigy® 2.0 Unit Controller - Limited three years
- High Performance Economizers (optional) - Limited five years

## FEATURES AND BENEFITS

- All other covered components - Limited one year

### Required Selections

#### Gas Input Choice - Order one:

- Standard Gas Heat (1 Stage)  
65,000 Btuh
- Standard Gas Heat (2 Stage)  
70,000/53,000 Btuh
- Medium Gas Heat (1 Stage)  
108,000 Btuh
- Medium Gas Heat (2 Stage)  
81,000/108,000 Btuh
- High Gas Heat (1 Stage)  
150,000 Btuh
- High Gas Heat (2 Stage)  
113,000/150,000 Btuh
- High Gas Heat (4 Stage)  
28,000/81,000/113,000/  
150,000 Btuh

#### Standard or Low NOx

- Specify standard gas heat or low NOx (40 ng/J) option

**NOTE** - Standard Gas Heat (2 Stage) and High Gas Heat (4 Stage) is only available with low NOx models.

### HEATING SYSTEM

- 1 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

### 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.

### Limit Controls

- Factory installed, redundant limit controls with fixed temperature setting
- Heat limit controls 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 Prodigy 2.0 Unit Controller and diagnostic information is reported and recorded

### Low NOx Models

- All models are available in low NOx versions (40 ng/J)

## FEATURES AND BENEFITS

### **HEATING SYSTEM (continued)**

#### Options/Accessories

#### **Factory Installed**

##### **Stainless Steel Heat Exchanger**

- Required if mixed air temperature is below 45 °F
- Furnished as Standard when Four-Stage Heat is ordered

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

##### **Low Temperature Vestibule Heater**

- Extends gas heat operation from -40°F (standard) down to -60°F
- Electric heater automatically controls minimum temperature in gas burner compartment when temperature falls below -40°F

#### **Field Installed**

##### **LPG/Propane Kits**

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

##### **Combustion Air Intake Extensions**

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

##### **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
- 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 0°F to 125°F without any additional controls

#### **R-410A Refrigerant**

- Non-chlorine based
- Ozone friendly

#### **2 Variable Capacity Scroll Compressor**

- Operates on a variable frequency
- DC Inverter Control varies the capacity based on the cooling load required
- High volumetric efficiency
- Uniform suction flow
- Constant discharge flow
- Quiet operation

#### **Compressor Operation**

- Two involute spiral scrolls matched together to generate a series of crescent shaped gas pockets between them
- During compression, one scroll remains stationary while the other scroll orbits around it
- Gas is drawn into the outer pocket, the pocket is sealed as the scroll rotates
- As the spiral movement continues, gas pockets are pushed to the center of the scrolls
- Volume between the pockets is simultaneously reduced
- When the pocket reaches the center, gas is now at high pressure and is forced out of a port located in the center of the fixed scrolls
- During compression, several pockets are compressed simultaneously resulting in a smooth continuous compression cycle
- Continuous flank contact, maintained by centrifugal force, minimizes gas leakage and maximizes efficiency
- Compressor is tolerant to the effects of slugging and contaminants
- If this occurs, scrolls separate, allowing liquid or contaminants to be worked toward the center and discharged

#### **Top Cap Thermal Sensor Switch**

- Located on top of the compressor casing
- Discontinues compressor operation in case of abnormal operating conditions

#### **Crankcase Heater**

- Prevents migration of liquid refrigerant into compressor
- Ensures proper compressor lubrication

## FEATURES AND BENEFITS

### COOLING SYSTEM (continued)

#### 3 DC Inverter Control

- Converts AC line voltage into filtered variable DC voltage
- Provides continuous compressor operation, while adjusting the capacity according to indoor temperature
- Adjusts compressor output in increments as small as 1%
- Prevents frequent changes in capacity and ensures efficient, economical operation
- Power Factor Correction (PFC) circuit monitors the DC bus for high, low and abnormal voltage conditions to protect the compressor
- Two LEDS (red and green) indicate inverter operating status and aid in troubleshooting
- Noise filter reduces unwanted electromagnetic interference (EMI)
- Inverter reactor adds inductance to the line between the inverter and the compressor to limit current rise and protect the compressor

#### 4 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

#### Low Pressure Switch

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

#### FreezeStat

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

#### 5 Condenser Coil

##### Copper tube construction

- Enhanced rippled-edge aluminum fins
- Flared shoulder tubing connections
- Silver soldered construction

##### Evaporator Coil

- Copper tube construction
- Enhanced rippled-edge aluminum fins
- Flared shoulder tubing connections
- Silver soldered construction
- Factory leak tested
- Cross row circuiting with rifled tubing

##### Condensate Drain Pan

- Plastic pan, sloped to meet drainage requirements per ASHRAE 62.1
- Side or bottom drain connections
- Reversible to allow connection at back of unit

#### 6 Variable-Speed ECM Outdoor Coil Fan Motors

- Fan speed is directly controlled by the Prodigy 2.0 unit controller
- Thermal overload protected
- Totally enclosed
- Permanently lubricated ball bearings
- Shaft up
- Wire basket mount

##### Outdoor Coil Fans

- PVC coated fan guard furnished

#### Required Selections

##### Cooling Capacity

- Specify nominal cooling capacity

#### Options/Accessories

##### Factory Installed

##### Service Valves

- Fully serviceable brass valves installed in discharge & liquid lines

##### Factory Installed

##### Condensate Drain Trap

- Available in copper or PVC

**NOTE** - Factory installed option is shipped with the unit for field installation.

##### Drain Pan Overflow Switch

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

## FEATURES AND BENEFITS

### 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 flow configuration
- Can be field converted to horizontal airflow configuration without any optional kits

#### Duct Flanges

- Provided for horizontal duct attachment

#### Power Entry

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

#### Exterior Panels

- Constructed of heavy-gauge, galvanized steel
- Two-layer enamel paint finish

#### 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

#### 8 Hinged Access Panels

- Tool-less access
- Economizer/ Filter sections
- Blower/heating section
- Compressor/controls section
- Panel seals and quarter-turn latching handles provide a tight air and water seal

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

### Required Selections

#### Airflow Configuration

- Specify horizontal or downflow

### Options/Accessories

#### Factory Installed

##### Corrosion Protection

- Completely flexible immersed coating
- Electrodeposited dry film process
- AST ElectroFin E-Coat
- Meets Mil Spec MIL-P-53084, ASTM B117 Standard Method Salt Spray Testing
- Indoor Corrosion Protection:
  - Coated coil
  - Painted blower housing
  - Painted base
- Outdoor Corrosion Protection:
  - Coated coil
  - Painted outdoor base

#### Field Installed

##### Combination Coil/Hail Guards

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

### BLOWER

#### Direct Drive ECM Motor

- High-efficiency
- Variable-speed ECM (electronically commutated) motor
- Maintains the ability to ramp the blower up or down to meet comfort needs
- The amount of airflow for each stage can be set according to a parameter in the Prodigy 2.0 unit controller
- Unit is shipped from the factory with preset airflow

#### Airflow Management

- Allows the installer to directly enter the design-specified supply air (blower) parameters without the need to manually take measurements and adjust settings
- Monitors supply air volume as well as customizable diagnostics

#### 9 Supply Air Blower

- Forward curved blades
- Blower wheel is statically and dynamically balanced

#### Ordering Information

- Specify motor output when base unit is ordered

## FEATURES AND BENEFITS

### ELECTRICAL

#### **SmartWire™ System**

- Keyed and color-coded wiring connectors prevent miswiring
- Wire coloring scheme is standardized across all models
- Each connection is intuitively labeled to make troubleshooting and servicing quick and easy

#### **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 Installed**

##### **Circuit Breakers**

- HACR type
- For overload and short circuit protection
- Factory wired and mounted in the power entry panel
- Current sensitive and temperature activated
- Manual reset

##### **Short-Circuit Current Rating (SCCR)**

- Higher short circuit protection up to 100kA

**NOTE** - Disconnect Switch is not available as an option with High SCCR option.

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

##### **Disconnect Switch**

- Accessible outside of unit
- Spring loaded weatherproof cover furnished

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

- 115V ground fault circuit interrupter (GFCI) type
- 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

#### **10 Air Filters**

- Disposable 2 inch filters furnished as standard

### Options/Accessories

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

##### **Healthy Climate® High Efficiency Air Filters**

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

#### **Field Installed**

##### **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
- This process either destroys the organism or controls its ability to reproduce
- 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)
- 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, 1 phase power supply

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

- Approved by ETL

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

- Monitors CO<sub>2</sub> levels
- Reports to the Prodigy 2.0 Unit Controller, which adjusts economizer dampers as needed

##### **Replacement Filter Media Kit With Frame**

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

## CONTROL SYSTEM

### PRODIGY CONTROL SYSTEM



- 11 The Prodigy 2.0 unit controller is a microprocessor-based controller that provides flexible control of all unit functions.

#### Features:

- LCD Display
- Easy to read menu (4 lines x 20 character display)
- Buttons for menu navigation during setup and diagnostic
- Menu navigation LEDs for Data, Setup, Service, Settings
- Main Menu and Help Buttons for quick navigation to home screen and built-in help functions
- Scroll, Value Adjustment Select and Save Buttons
- Setup menu ensures proper installation and simplified setup of the rooftop unit
- 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 Control System enhance functionality without the need to change components
- Unit Controller Software
- Unit self-test verifies individual critical component and system performance
- Economizer test function assures economizer is operating correctly
- Time Clock with Run-Time Information

#### Built-In Functions Include:

- Adjustable Blower On/Off Delay
- Built-in Control Parameter Defaults
- Compressor Time-Off Delay
- DDC Compatible
- Dirty Filter Switch Input
- Discharge Air Temperature Control
- Display/Sensor Readout
- Economizer Control Options (See Economizer / Exhaust Air / Outdoor Air sections)
- Fresh Air Tempering
- Over 100 diagnostic and status messages in English
- Exhaust Fan Control Modes for fresh air damper position
- Permanent Diagnostic Code Storage
- Field Adjustable Control Parameters (Over 200 settings)
- Indoor Air Quality Input (Demand Control Ventilation)
- Low Ambient Controls for cooling operation down to 0°F
- Gas Valve Time Delay Between First and Second Stage

- Minimum Compressor Run Time
- Network Capable  
(Can be daisy chained to other units or controls)
- Night Setback Mode
- Return Air Temperature Limit Control
- Safety Switch Input allows Controller to respond to a external safety switch trip
- Service Relay Output
- Smoke Alarm Mode has four choices (unit off, positive pressure, negative pressure, purge)
- Up to 2 heat/2 cool (standard unit controller thermostat input)
- Up to 3 cool with additional relay
- Up to 4 cool with room sensor or network operation
- "Strike Three" Protection
- Alternate Humidity Control Options allow simultaneous heating and cooling operation for humidity control of process air applications such as supermarkets
- Thermostat Bounce Delay
- Warm Up Mode Delay
- LED Indicators
- PC Interface connects the Prodigy 2.0 unit controller to a PC with the Lennox Unit Controller Software
- Room Sensor Operation controls temperature

**NOTE** - Prodigy® Control System features vary with the type of rooftop unit in which the control is installed.

**NOTE** - See separate Prodigy® Control System Product Specifications Bulletin for additional information.

#### Increased Dehumidification Mode

- Prodigy® 2.0 Unit Controller operates the compressor, indoor blower, and outdoor fan with full variability to more accurately and efficiently match the humidity load in the space

## CONTROL SYSTEM

### PRODIGY CONTROL SYSTEM (continued)

#### Controls Options

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

##### Dirty Filter Switch

- Senses static pressure increase

##### Fresh Air Tempering

- Used in applications with high outside air requirements
- Controller energizes the first stage heat as needed to maintain a minimum supply air temperature for comfort, regardless of the thermostat demand
- When ordered as a factory option, sensor ships with the unit for field installation

##### 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

##### Interoperability via BACnet® or LonTalk® Protocols

- Communication compatible with third-party automation systems that support the BACnet Application Specific Controller device profile, LonMark® Space Comfort Controller functional profile, or LonMark Discharge Air Controller functional profile

#### **Commercial Control Systems**

##### L Connection® Network Control System

- Complete building automation control system for single or multi-zone applications
- Options include local interface, software for local or remote communication, and hardware for networking other control functions
- See L Connection Network Control System Product Specifications Bulletin for details

##### After-Market DDC

- Novar® Unit Controller and options

##### Thermostats

- Control system and thermostat options, see page 12
- After-Market unit controller options

#### **Field Installed**

##### General Purpose Control Kit

- Plug-in control provides additional analog and digital inputs/outputs for field installed options

## OPTIONS / ACCESSORIES

#### **ECONOMIZER**

- Economizer operation is set and controlled by the Prodigy 2.0 Unit Controller
- Simple plug-in connections from economizer to unit controller for easy installation
- All Energence® 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**

##### ⑫ 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.

**NOTE** - Horizontal Barometric Dampers are required for horizontal Economizer applications and must be ordered separately.

- Demand Control Ventilation (DCV) ready using optional CO<sub>2</sub> sensors
- Gear-driven action
- High torque 24-volt
- Fully-modulating spring return damper motor
- Return air and outdoor air dampers
- Plug-in connections to unit
- Nylon bearings
- Enhanced thermoplastic vulcanizate (TPV) seals
- Flexible stainless steel jamb seals to minimize air leakage

## OPTIONS / ACCESSORIES

### **ECONOMIZER (continued)**

#### **Factory or Field Installed (continued)**

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

**NOTE** - The Free Cooling setpoint for Title 24 applications must be set based on the Climate Zone where the system is installed. See Section 140.4 "Prescriptive Requirements for Space Conditioning Systems" of the California Energy Commission's 2013 Building Energy Efficiency Standards.

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

#### Differential Sensible Control

- Factory setting
- Uses outdoor air and return air sensors that are furnished with the unit
- The Prodigy 2.0 unit controller compares outdoor air and return air and using setpoints
- Enables the economizer when the outdoor air temperature is below the configured setpoint and cooler than return air

**NOTE** - Differential Sensible Control can be configured in the field to provide Offset Differential Sensible Control or Single Sensible Control.

In Offset Differential Sensible Control mode, the economizer is enabled if the temperature differential (offset) between outdoor air and return air reaches the configured setpoint.

In Single Sensible Control mode, the economizer is enabled when outdoor air temperature falls below the configured setpoint.

#### Global Control

- The unit controller communicates with a DDC system with one global sensor (enthalpy or sensible) to determine whether outside air is suitable for free cooling on all units connected to the control system
- Sensor must be field provided

**NOTE** - Global control with enthalpy is not approved for Title 24 applications.

#### 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

#### 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

### **Field Installed**

#### Outdoor Air CFM Control

- Maintains constant outdoor air volume levels on the supply air fan and varying unit airflows
- References a velocity sensor located in the rooftop unit outdoor air section
- Prodigy® 2.0 unit controller changes the economizer position to help minimize the effect of supply fan speed changes on outdoor air volume levels
- Setpoint for outdoor air volume is established by field testing

**NOTE** - Not available with Demand Control Ventilation (CO<sub>2</sub> Sensor) or Building Pressure Control.

#### Building Pressure Control

- Maintains constant building pressure level
- Using differential pressure information between the outdoor air and the building air, the Prodigy 2.0 unit controller changes the economizer position to help maintain a constant building pressure

**NOTE** - Not available with Demand Control Ventilation (CO<sub>2</sub> Sensor).

#### 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

### **Factory or Field Installed**

#### Power Exhaust Fan

- Installs internal to unit for downflow applications 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 fan blades
- 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.

## **OPTIONS / ACCESSORIES**

### **OUTDOOR AIR**

#### **Factory or 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
- Automatic model features fully modulating spring return damper motor with plug-in connection
- Manual model features parallel blade, gear-driven dampers with adjustable fixed position

### **ROOF CURBS**

#### **Field Installed**

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

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

- Roof curb can be assembled using interlocking tabs to fasten corners together; no tools required
- Curb can also be fastened together with furnished hardware
- Available in 8, 14, 18, and 24 inch heights
- See Options/Accessories table

#### **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
- Uses interlocking tabs to fasten corners together; no tools required
- 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)**

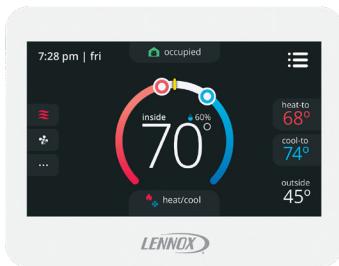
- White powder coat finish on diffuser face and grilles
- Insulated UL listed duct liner
- Diffuser box has collars for duct connection
- Step-down diffusers have double deflection blades
- Flush diffusers have fixed blades
- Provisions for suspending
- Internally sealed to prevent recirculation
- Removable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

### ComfortSense® 8500 Commercial 7-Day Programmable Thermostat



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

### ComfortSense® 7500 Commercial 7-Day Programmable Thermostat



- Premium Universal Thermostat
- Full Color Touchscreen Interface
- Up To 4 Heat / 4 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

### ComfortSense® 3000 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 Room Sensor (LCS-5030)



- Simple Push-Button Override
- Variable Speed System Control (On Compatible Units)
- Up To 4 Heat / 4 Cool
- Built-In Temperature and Humidity Sensors
- AA Battery / 24VAC Powered
- SBUS Wired Operation
- Automatic Sensor Averaging
- Locking Hex Screw

## OPTIONAL CONVENTIONAL TEMPERATURE CONTROL SYSTEMS

Description	Catalog No.
<b>ComfortSense® 8500 Commercial 7 Day Programmable Thermostat</b>	
CS8500 7-Day Thermostat	No CO <sub>2</sub> Sensing <b>17G75</b>
	With CO <sub>2</sub> Sensing <b>17G76</b>
Sensors/Accessories	<sup>1</sup> Remote non-adjustable wall-mount 10k <b>47W37</b>
	<sup>1</sup> Remote non-adjustable wall-mount 11k <b>94L61</b>
<b>Sysbus Network Cable (Yellow) for ComfortSense 8500 and LCS-5030 Wired Room Sensor</b>	
Twisted pair 100% shielded communication cable, Red and Black	500 ft. box <b>27M19</b>
22 AWG, yellow jacket, rated at 75°C, 300V, Plenum rated	1000 ft. box <b>94L63</b>
Insulation - Low smoke PVC, NEC, CMP	2500 ft. roll <b>68M25</b>
<b>ComfortSense® 7500 Commercial 7-Day Programmable Thermostat</b>	
CS7500 7-Day Thermostat	<b>17G74</b>
Sensors/Accessories	<sup>2</sup> Remote non-adjustable wall-mount 20k <b>47W36</b>
	<sup>2</sup> Remote non-adjustable wall-mount 10k <b>47W37</b>
	Remote non-adjustable discharge air (duct mount) <b>19L22</b>
	Outdoor temperature sensor <b>X2658</b>
<b>ComfortSense® 3000 Commercial 5-2 Day Programmable Thermostat</b>	
CS3000 5-2 Day Thermostat	<b>11Y05</b>
Sensors/Accessories	Remote non-adjustable wall mount 10k averaging <b>47W37</b>
	Thermostat wall mounting plate <b>X2659</b>
<b>ComfortSense® Non-Programmable Thermostat</b>	
CS3000 Non-Programmable Thermostat	<b>51M32</b>
<b>Universal Thermostat Guard with Lock (clear)</b>	Inside Dimensions (H x W) 5 7/8 x 8 3/8 in. <b>39P21</b>
<b>Wired Room Sensor</b>	
LCS-5030 Wired Room Sensor	<b>21L07</b>

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

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

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

## OPTIONS / ACCESSORIES

Item	Catalog Number	Unit Model No			
		036	048	060	074
<b>COOLING SYSTEM</b>					
Condensate Drain Trap	PVC	22H54	OX	OX	OX
	Copper	76W27	OX	OX	OX
Drain Pan Overflow Switch		21Z07	OX	OX	OX
Service valves	Factory	O	O	O	O
<b>HEATING SYSTEM</b>					
Bottom Gas Piping Kit		19W50	OX	OX	OX
Combustion Air Intake Extensions		19W51	X	X	X
Gas Heat Input	Standard One-Stage - 65 kBtuh input	Factory	O	O	O
	Standard Two-Stage - 53/70 kBtuh input	Factory	<sup>1</sup> O	<sup>1</sup> O	<sup>1</sup> O
	Medium One-Stage - 108 kBtuh input	Factory	O	O	O
	Medium Two-Stage - 81/108 kBtuh input	Factory	O	O	O
	High One-Stage - 150 kBtuh input	Factory	O	O	O
	High Two-Stage - 113/150 kBtuh input	Factory	O	O	O
	High Four-Stage - 28/81/113/150 kBtuh input	Factory	<sup>1</sup> O	<sup>1</sup> O	<sup>1</sup> O
Low Temperature Vestibule Heater	208/230V-1 or 3ph	21Z17	OX	OX	OX
	460V-3ph	21Z18	OX	OX	OX
LPG/Propane Conversion Kits	For One-Stage models	11U62	X	X	X
	For Two-Stage Standard models	21Z24	X	X	X
	For Two-Stage Medium and High models	11U63	X	X	X
	For Four-Stage High models	21Z25	X	X	X
Stainless Steel Heat Exchanger (Furnished as Standard when Four-Stage Heat is Ordered)	Factory	O	O	O	O
Vertical Vent Extension		31W62	X	X	X
<b>BLOWER - SUPPLY AIR</b>					
Motors	Direct Drive - 0.50 hp	Factory	O		
	Direct Drive - 0.75 hp	Factory		O	
	Direct Drive - 1 hp	Factory			O
<b>CABINET</b>					
Combination Coil/Hail Guards		13T03	X	X	X
Corrosion Protection (indoor coil / outdoor coil)	Factory	O	O	O	O
<b>CONTROLS</b>					
Commercial Controls	CPC Einstein Integration	Factory	O	O	O
	Prodigy® Control System - BACnet® Module - C0CTRL60AE1L	59W51	OX	OX	OX
	Prodigy® Control System - LonTalk® Module - C0CTRL65FF1	54W27	OX	OX	OX
	Novar® LSE	Factory	O	O	O
	L Connection® Building Automation System	---	X	X	X
Dirty Filter Switch		53W66	OX	OX	OX
General Purpose Control Kit		13J78	X	X	X
Fresh Air Tempering		21Z08	OX	OX	OX
Smoke Detector - Supply or Return (Power board and one sensor)		21Z11	OX	OX	OX
Smoke Detector - Supply and Return (Power board and two sensors)		21Z12	OX	OX	OX

<sup>1</sup> Standard Two-Stage Heat and High Four-Stage Heat is only available with Low NOx Models.

NOTE - Catalog and numbers shown are for ordering field installed accessories.

OX - Configure To Order (Factory Installed) or Field Installed

O = Configure To Order (Factory Installed)

X = Field Installed

## OPTIONS / ACCESSORIES

Item	Catalog Number	Unit Model No			
		036	048	060	074
<b>ELECTRICAL</b>					
Voltage 60 hz	208/230V - 3 phase 460V - 3 phase	Factory Factory	O O	O O	O O
HACR Circuit Breakers		Factory	O	O	O
<sup>1</sup> Short-Circuit Current Rating (SCCR) of 100kA		Factory	O	O	O
Disconnect Switch	80 amp	<b>22A23</b>	OX	OX	OX
GFI Service Outlets	15 amp non-powered, field-wired	<b>74M70</b>	OX	OX	OX
Weatherproof Cover for GFI		<b>10C89</b>	X	X	X
<b>ECONOMIZER</b>					
<b>High Performance Economizer With Outdoor Air Hood (Sensible Control) (Approved for California Title 24 Building Standards / AMCA Class 1A Certified)</b>					
High Performance Economizer - Includes Barometric Relief Dampers with Exhaust Hood		<b>20H48</b>	OX	OX	OX
High Performance Economizer - No Exhaust Option	Factory	O	O	O	O
<b>Economizer Accessories</b>					
Horizontal Economizer Conversion Kit		<b>17W45</b>	X	X	X
<b>Economizer Controls (Not for Title 24)</b>					
Differential Enthalpy	Order 2	<b>21Z09</b>	OX	OX	OX
Sensible Control	Sensor is Furnished	Factory	O	O	O
Single Enthalpy		<b>21Z09</b>	OX	OX	OX
Global Control	Sensor Field Provided	Factory	O	O	O
Building Pressure Control		<b>13J77</b>	X	X	X
Outdoor Air CFM Control		<b>13J76</b>	X	X	X
<b>POWER EXHAUST FAN</b>					
Standard Static	208/230V-3ph	<b>21Z13</b>	OX	OX	OX
<i>NOTE - Factory or Field installed Power Exhaust Fan requires "Barometric Relief Dampers for Power Exhaust Kit" for field installation. See below.</i>	460V-3ph	<b>21Z14</b>	OX	OX	OX
<b>BAROMETRIC RELIEF</b>					
<sup>2</sup> Barometric Relief Dampers for Power Exhaust Kit		<b>21Z21</b>	X	X	X
<sup>3</sup> Horizontal Barometric Relief Dampers With Exhaust Hood		<b>19F01</b>	X	X	X
<b>OUTDOOR AIR</b>					
<b>Outdoor Air Dampers With Outdoor Air Hood</b>					
Motorized		<b>15D17</b>	OX	OX	OX
Manual		<b>15D18</b>	OX	OX	OX

<sup>1</sup> Disconnect Switch not available with higher SCCR option.

<sup>2</sup> Required when Economizer is factory installed with factory installed Power Exhaust Fan option.

<sup>3</sup> Required when Economizer is configured for horizontal airflow.

NOTE - Catalog and numbers shown are for ordering field installed accessories.

OX - Configure To Order (Factory Installed) or Field Installed

O = Configure To Order (Factory Installed)

X = Field Installed

## OPTIONS / ACCESSORIES

Item	Catalog Number	Unit Model No				
		036	048	060	074	
<b>INDOOR AIR QUALITY</b>						
<b>Air Filters</b>						
Healthy Climate® High Efficiency Air Filters	MERV 8 (20 x 20 x 2 in.)	<b>54W21</b>	OX	OX	OX	
Order 4 per unit	MERV 13 (20 x 20 x 2 in.)	<b>52W39</b>	OX	OX	OX	
Replaceable Media Filter With Metal Mesh Frame (includes non-pleated filter media)	20 x 20 x 2 in. (Order 4)	<b>44N60</b>	X	X	X	
<b>Indoor Air Quality (CO<sub>2</sub>) Sensors</b>						
Sensor - Wall-mount, off-white plastic cover with LCD display		<b>77N39</b>	X	X	X	
Sensor - Wall-mount, off-white plastic cover, no display		<b>87N53</b>	X	X	X	
Sensor - Black plastic case with LCD display, rated for plenum mounting		<b>87N52</b>	X	X	X	
Sensor - Wall-mount, black plastic case, no display, rated for plenum mounting		<b>87N54</b>	X	X	X	
CO <sub>2</sub> Sensor Duct Mounting Kit - for downflow applications		<b>85L43</b>	X	X	X	
Aspiration Box - for duct mounting non-plenum rated CO <sub>2</sub> sensors (87N53 or 77N39)		<b>90N43</b>	X	X	X	
<b>UVC Germicidal Lamps</b>						
<sup>1</sup> Healthy Climate® UVC Light Kit (110/230v-1ph)		<b>21A92</b>	X	X	X	
Step-Down Transformers	460V primary, 230V secondary	<b>10H20</b>	X	X	X	
	575V primary, 230V secondary	<b>10H21</b>	X	X	X	
<b>ROOF CURBS</b>						
<b>Hybrid Roof Curbs, Downflow</b>						
8 in. height		<b>11F50</b>	X	X	X	
14 in. height		<b>11F51</b>	X	X	X	
18 in. height		<b>11F52</b>	X	X	X	
24 in. height		<b>11F53</b>	X	X	X	
<b>Adjustable Pitched Curb</b>						
14 in. height		<b>43W27</b>	X	X	X	
<b>Transition Curb</b>						
Matches Emergence® 036-074 Units to existing L Series® Curbs		<b>20W06</b>	X	X	X	
<b>CEILING DIFFUSERS</b>						
Step-Down - Order one	RTD11-95S	<b>13K61</b>	X	X	X	
Flush - Order one	FD11-95S	<b>13K56</b>	X	X	X	
Transitions (Supply and Return) - Order one	T1TRAN20N-1	<b>17W54</b>	X	X	X	

<sup>1</sup> 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 - Catalog and numbers shown are for ordering field installed accessories.

OX - Configure To Order (Factory Installed) or Field Installed

O = Configure To Order (Factory Installed)

X = Field Installed

## SPECIFICATIONS

General Data	Nominal Tonnage Model Number Efficiency Type Blower Type	3 Ton	4 Ton	5 Ton	6 Ton
		LGH036U4E	LGH048U4E	LGH060U4E	LGH074U4E
		Ultra	Ultra	Ultra	Ultra
		MSAV (Multi-Stage Air Volume) Direct Drive	MSAV (Multi-Stage Air Volume) Direct Drive	MSAV (Multi-Stage Air Volume) Direct Drive	MSAV (Multi-Stage Air Volume) Direct Drive
Cooling Performance	Gross Cooling Capacity - Btuh	35,300	48,500	59,500	72,000
	<sup>1</sup> Net Cooling Capacity - Btuh	34,500	47,000	58,000	70,000
	AHRI Rated Air Flow - cfm	1200	1550	1800	2050
	Total Unit Power - kW	2.3	3.4	4.5	5.8
	SEER (Btuh/Watt) - 208/230V-3ph	<sup>1</sup> 23.5	<sup>1</sup> 21.0	<sup>1</sup> 20.0	---
	SEER (Btuh/Watt) - 460V-3ph	<sup>1</sup> 22.5	<sup>1</sup> 20.2	<sup>1</sup> 19.5	---
	EER (Btuh/Watt) - 208/230V-3ph	<sup>1</sup> 15.0	<sup>1</sup> 14.0	<sup>1</sup> 13.0	<sup>2</sup> 12.0
	EER (Btuh/Watt) - 460V-3ph	<sup>1</sup> 14.5	<sup>1</sup> 13.7	<sup>1</sup> 12.5	<sup>2</sup> 12.0
	IEER (Btuh/Watt) - 208/230V-3ph-3ph	---	---	---	<sup>2</sup> 22.0
	IEER (Btuh/Watt) - 460V-3ph	---	---	---	<sup>2</sup> 22.0
Refrigerant Charge	Refrigerant Type	R-410A	R-410A	R-410A	R-410A
		17 lbs. 0 oz.	17 lbs. 0 oz.	16 lbs. 11 oz.	16 lbs. 11 oz.
Gas Heating Options Available - See page 18		Standard (1 or 2 stage), Medium (1 or 2 stage)	Standard (1 or 2 stage), Medium (1 or 2 stage), High (1, 2 or 4 Stage)		
Compressor Type (number)		Variable Capacity Scroll (1)	Variable Capacity Scroll (1)	Variable Capacity Scroll (1)	Variable Capacity Scroll (1)
Outdoor Coil	Net face area (total) - sq. ft.	19.3	19.3	19.3	19.3
	Tube diameter - in.	3/8	3/8	3/8	3/8
	Number of rows	2	2	2	2
	Fins per inch	20	20	20	20
Outdoor Coil Fan	Motor - (No.) horsepower	(1) 1/3 (ECM)	(1) 1/3 (ECM)	(1) 1/3 (ECM)	(1) 1/3 (ECM)
	Motor rpm	550 - 850	600 - 900	700 - 950	700 - 1050
	Total Motor Input - watts	50 - 200	80 - 236	120 - 272	120 - 360
	Diameter - (No.) in.	(1) 24	(1) 24	(1) 24	(1) 24
	Number of blades	3	3	3	3
	Total air volume - cfm	2500 - 3850	2750 - 4100	3200 - 4300	3200 - 4700
Indoor Coil	Net face area (total) - sq. ft.	9.72	9.72	9.72	9.72
	Tube diameter - in.	3/8	3/8	3/8	3/8
	Number of rows	3	3	4	4
	Fins per inch	14	14	14	14
	Drain connection (Number) and size - in.	1 in. NPT coupling			
	Expansion device type	Balance port TXV, removable head			
<sup>2</sup> Indoor Blower	Nominal motor HP	0.50 (ECM)	0.75 (ECM)	1 (ECM)	1 (ECM)
	Blower wheel nominal diameter x width - in.	(1) 10 x 10	(1) 10 x 10	(1) 11 x 10	(1) 11 x 10
Filters	Type of filter	Disposable			
	Number and size - in.	(4) 20 x 20 x 2	(4) 20 x 20 x 2	(4) 20 x 20 x 2	(4) 20 x 20 x 2
Electrical characteristics		208/230V or 460V - 3 phase			

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

<sup>1,2</sup> AHRI Certified to AHRI Standard <sup>1</sup> 210/240 or <sup>2</sup> 340/360: 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

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

## SPECIFICATIONS - GAS HEAT

Model No.	036 048 060 074	036 048 060 074	036 048 060 074	036 048 060 074	048 060 074	048 060 074	048 060 074
Heat Input Type	Standard (1 Stage)	<sup>1</sup> Standard (2 Stage) Low NOx Only	Medium (1 Stage)	Medium (2 Stage)	High (1 Stage)	High (2 Stage)	<sup>1, 2</sup> High (4 Stage) Low NOx Only
Input Btuh	1st Stage	65,000	53,000	108,000	81,000	150,000	113,000
	2nd Stage	---	70,000	---	108,000	---	150,000
	3rd Stage	---	---	---	---	---	113,000
	4th Stage	---	---	---	---	---	150,000
Output Btuh Standard Models	1st Stage	52,000	---	86,000	65,000	120,000	90,000
	2nd Stage	---	---	---	86,000	---	120,000
	3rd Stage	---	---	---	---	---	---
	4th Stage	---	---	---	---	---	---
Output Btuh Low NOx Models	1st Stage	---	43,000	87,000	66,000	121,000	92,000
	2nd Stage	---	57,000	---	87,000	---	121,000
	3rd Stage	---	---	---	---	---	92,000
	4th Stage	---	---	---	---	---	121,000
Temp. Rise Range- °F	1st stage	15-45	5-35	30-70	25-55	45-75	30-60
	2nd Stage	---	15-45	---	30-70	---	45-75
	3rd Stage	---	---	---	---	---	35-65
	4th Stage	---	---	---	---	---	45-75
<sup>3</sup> Thermal Efficiency - Standard	80%	---	80%	80%	80%	80%	---
<sup>3</sup> Thermal Efficiency -Low NOx Gas Heat	81%	81%	81%	81%	81%	81%	81%
Gas Supply Connections	1/2 in. NPT						
Rec. Gas Supply Pressure - Nat./ LPG	7 in. w.g. / 11 in. w.g.						

<sup>1</sup> Two-Stage Standard Heat and Four-Stage High Heat is only available with Low NOx Models.

<sup>2</sup> Stainless Steel Heat Exchanger is furnished as Standard when Four-Stage Heat is Ordered.

<sup>3</sup> Thermal Efficiency at full input.

## HIGH ALTITUDE DERATE

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

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

Heat Input Type	Altitude Feet	Gas Manifold Pressure in. w.g.		Input Rate (Btuh)
		Natural Gas	LPG/ Propane	
Standard (1 stage)	2001 - 4500	3.0	9.0	60,000
Standard (2 stage)	2001 - 4500	3.0/1.7	9.0/5.1	65,000 / 49,000
Medium (1 stage)	2001 - 4500	3.0	9.0	100,000
Medium (2 stage)	2001 - 4500	3.0/1.7	9.0/5.1	100,000 / 75,000
High (1 stage)	2001 - 4500	3.0	9.0	139,000
High (2 stage)	2001 - 4500	3.0/1.7	9.0/5.1	139,000 / 104,000
High (4 stage)	2001 - 4500	3.0/1.7	9.0/5.1	139,000 / 104,000 / 75,000 / 26,000

## RATINGS

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

### 3 TON - LGH036U4

Entering Wet Bulb Tempera- ture	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F						75°F						85°F							
		Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)				
					Dry Bulb						Dry Bulb							Dry Bulb			
cfm	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F			
63°F	550	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
	700	33.5	1.26	45.1	0.68	0.79	0.89	32.4	1.52	45.7	0.69	0.80	0.91	31.1	1.79	46.5	0.70	0.81	0.93		
	850	35.5	1.22	47.9	0.71	0.83	0.95	34.3	1.48	48.4	0.72	0.85	0.97	32.8	1.76	49.3	0.73	0.86	0.99		
	1000	37.1	1.19	50.0	0.74	0.88	1.00	35.7	1.46	50.9	0.75	0.89	1.00	34.2	1.74	51.7	0.77	0.91	1.00		
	1200	38.7	1.16	52.9	0.78	0.94	1.00	37.2	1.44	53.6	0.80	0.96	1.00	35.7	1.71	54.4	0.81	0.98	1.00		
	1400	40.0	1.14	55.2	0.82	0.99	1.00	38.5	1.41	55.9	0.84	1.00	1.00	37.1	1.69	56.6	0.86	1.00	1.00		
67°F	550	32.7	1.27	45.5	0.54	0.63	0.71	31.7	1.53	46.4	0.54	0.63	0.72	30.5	1.80	47.3	0.54	0.64	0.73		
	700	35.5	1.22	49.3	0.55	0.65	0.76	34.3	1.49	49.9	0.56	0.66	0.77	33.0	1.76	50.8	0.56	0.67	0.78		
	850	37.7	1.19	51.9	0.57	0.68	0.80	36.3	1.46	52.7	0.57	0.69	0.81	34.7	1.73	53.3	0.58	0.71	0.83		
	1000	39.2	1.15	54.0	0.59	0.72	0.84	37.7	1.43	54.6	0.59	0.73	0.86	36.2	1.71	55.2	0.60	0.74	0.88		
	1200	40.8	1.13	56.2	0.61	0.76	0.90	39.2	1.40	56.7	0.62	0.77	0.92	37.7	1.68	57.1	0.63	0.79	0.94		
	1400	42.2	1.09	57.7	0.64	0.80	0.96	40.5	1.37	58.1	0.65	0.82	0.98	38.7	1.66	58.7	0.66	0.84	1.00		
71°F	550	34.7	1.24	50.0	0.43	0.51	0.60	33.5	1.50	50.9	0.43	0.52	0.60	32.3	1.77	51.7	0.43	0.52	0.61		
	700	37.6	1.19	53.6	0.43	0.53	0.63	36.2	1.45	54.3	0.43	0.54	0.64	34.9	1.73	55.2	0.43	0.54	0.64		
	850	39.8	1.14	56.2	0.44	0.55	0.66	38.3	1.42	56.8	0.44	0.56	0.67	36.7	1.69	57.6	0.44	0.56	0.68		
	1000	41.4	1.11	58.3	0.44	0.57	0.69	39.9	1.39	58.7	0.45	0.58	0.70	38.2	1.67	59.2	0.45	0.59	0.72		
	1200	43.2	1.08	60.0	0.46	0.60	0.74	41.5	1.35	60.6	0.46	0.61	0.75	39.8	1.64	61.1	0.46	0.62	0.77		
	1400	44.5	1.05	61.6	0.47	0.63	0.78	42.8	1.33	62.0	0.47	0.64	0.80	40.9	1.62	62.4	0.48	0.65	0.82		
Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																				
	95°F						105°F						115°F								
	Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)					
				Dry Bulb						Dry Bulb							Dry Bulb				
cfm	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F			
63°F	550	---	---	---	---	---	---	---	---	---	---	---	---	25.1	2.75	45.9	0.69	0.81	0.92		
	700	29.8	2.08	47.3	0.71	0.83	0.95	28.4	2.38	48.2	0.72	0.85	0.97	27.0	2.71	49.2	0.73	0.87	0.99		
	850	31.4	2.05	50.1	0.74	0.88	1.00	29.9	2.36	51.1	0.76	0.90	1.00	28.3	2.70	52.2	0.78	0.93	1.00		
	1000	32.6	2.03	52.6	0.78	0.94	1.00	31.1	2.35	53.5	0.80	0.96	1.00	29.4	2.67	54.5	0.82	0.99	1.00		
	1200	34.0	2.00	55.3	0.83	1.00	1.00	32.6	2.31	56.0	0.86	1.00	1.00	31.0	2.65	57.0	0.88	1.00	1.00		
	1400	35.6	1.98	57.4	0.88	1.00	1.00	34.1	2.29	58.1	0.91	1.00	1.00	32.4	2.62	59.0	0.94	1.00	1.00		
67°F	550	29.3	2.08	48.1	0.55	0.65	0.74	28.0	2.39	49.2	0.55	0.65	0.76	26.7	2.71	50.2	0.56	0.66	0.77		
	700	31.6	2.05	51.4	0.57	0.68	0.80	30.2	2.36	52.4	0.57	0.69	0.81	28.6	2.69	53.3	0.58	0.71	0.83		
	850	33.3	2.02	53.9	0.59	0.72	0.85	31.7	2.34	54.7	0.60	0.73	0.87	30.0	2.67	55.5	0.61	0.75	0.89		
	1000	34.6	2.00	55.8	0.61	0.76	0.90	32.8	2.31	56.4	0.62	0.78	0.93	31.2	2.65	57.1	0.63	0.80	0.95		
	1200	35.8	1.97	57.7	0.64	0.81	0.97	34.1	2.28	58.2	0.66	0.83	0.99	32.3	2.62	59.0	0.67	0.86	1.00		
	1400	36.9	1.95	59.4	0.67	0.86	1.00	35.0	2.27	60.1	0.69	0.89	1.00	33.1	2.60	60.9	0.71	0.91	1.00		
71°F	550	31.0	2.06	52.5	0.43	0.53	0.62	29.6	2.36	53.6	0.43	0.53	0.63	28.2	2.69	54.5	0.43	0.54	0.64		
	700	33.4	2.02	55.7	0.44	0.55	0.66	31.9	2.32	56.7	0.44	0.55	0.67	30.3	2.66	57.6	0.44	0.56	0.68		
	850	35.1	1.99	58.3	0.44	0.57	0.69	33.5	2.30	58.8	0.45	0.58	0.71	31.8	2.63	59.6	0.45	0.59	0.73		
	1000	36.5	1.97	59.9	0.45	0.60	0.73	34.8	2.27	60.5	0.46	0.61	0.75	33.0	2.61	61.1	0.47	0.62	0.77		
	1200	38.0	1.94	61.5	0.47	0.63	0.79	36.1	2.26	62.2	0.47	0.64	0.81	34.2	2.59	62.7	0.48	0.66	0.83		
	1400	38.9	1.91	63.1	0.47	0.66	0.84	37.0	2.23	63.4	0.49	0.68	0.86	35.0	2.57	64.0	0.49	0.70	0.89		

## RATINGS

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

### 4 TON - LGH048U4

Entering Wet Bulb Tempera- ture	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																	
		65°F						75°F						85°F					
		Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)		
					Dry Bulb						Dry Bulb						Dry Bulb		
cfm	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	
63°F	850	---	---	---	---	---	---	---	---	---	---	---	40.9	2.45	45.0	0.68	0.79	0.89	
	1000	46.5	1.84	45.7	0.69	0.80	0.90	44.5	2.13	46.8	0.69	0.81	0.92	42.8	2.45	47.5	0.70	0.82	0.94
	1150	48.4	1.83	47.8	0.71	0.83	0.94	46.4	2.12	48.6	0.72	0.84	0.96	44.5	2.44	49.3	0.73	0.86	0.98
	1300	50.0	1.82	49.5	0.73	0.86	0.98	47.8	2.12	50.3	0.74	0.88	1.00	45.9	2.43	51.2	0.75	0.89	1.00
	1600	52.5	1.81	52.8	0.77	0.92	1.00	50.1	2.10	53.6	0.79	0.94	1.00	48.0	2.43	54.3	0.81	0.97	1.00
	1900	54.4	1.81	55.3	0.82	0.98	1.00	52.0	2.10	56.0	0.84	1.00	1.00	49.9	2.42	56.8	0.86	1.00	1.00
67°F	850	46.9	1.84	47.5	0.54	0.64	0.73	45.0	2.12	48.3	0.55	0.65	0.74	43.3	2.44	49.3	0.55	0.65	0.75
	1000	49.3	1.83	50.0	0.55	0.66	0.76	47.3	2.11	50.8	0.56	0.67	0.77	45.4	2.43	51.6	0.56	0.68	0.79
	1150	51.3	1.82	51.9	0.57	0.68	0.79	49.1	2.11	52.7	0.57	0.69	0.81	47.1	2.43	53.3	0.58	0.70	0.83
	1300	53.0	1.81	53.6	0.58	0.70	0.82	50.7	2.11	54.1	0.59	0.72	0.84	48.5	2.43	54.9	0.59	0.73	0.86
	1600	55.4	1.81	56.1	0.60	0.75	0.89	52.9	2.10	56.6	0.61	0.77	0.91	50.7	2.42	57.2	0.62	0.78	0.93
	1900	57.2	1.80	57.9	0.63	0.80	0.95	54.6	2.09	58.4	0.64	0.82	0.97	52.2	2.42	58.9	0.66	0.83	1.00
71°F	850	49.5	1.82	52.0	0.43	0.52	0.61	47.5	2.11	52.7	0.43	0.53	0.62	45.7	2.44	53.6	0.43	0.53	0.63
	1000	52.0	1.82	54.5	0.43	0.53	0.63	49.9	2.11	55.1	0.44	0.54	0.64	48.0	2.43	55.7	0.44	0.55	0.65
	1150	54.1	1.81	56.2	0.44	0.55	0.65	51.8	2.10	56.9	0.44	0.55	0.67	49.7	2.43	57.6	0.44	0.56	0.68
	1300	55.9	1.81	57.7	0.44	0.56	0.68	53.4	2.10	58.4	0.44	0.57	0.69	51.2	2.42	59.0	0.45	0.58	0.70
	1600	58.5	1.80	60.0	0.45	0.59	0.73	55.8	2.09	60.6	0.46	0.60	0.74	53.5	2.42	61.1	0.46	0.61	0.76
	1900	60.6	1.80	61.8	0.46	0.62	0.77	57.7	2.09	62.2	0.47	0.63	0.80	55.1	2.41	62.6	0.48	0.65	0.81
Entering Wet Bulb Tempera- ture	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																	
		95°F						105°F						115°F					
		Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)		
					Dry Bulb						Dry Bulb						Dry Bulb		
cfm	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	
63°F	850	39.2	2.80	45.84	0.69	0.80	0.91	37.5	3.20	46.78	0.70	0.81	0.93	35.5	3.62	47.90	0.71	0.83	0.95
	1000	41.2	2.80	48.08	0.71	0.84	0.96	39.3	3.19	48.83	0.73	0.86	0.98	37.1	3.62	50.00	0.74	0.88	1.00
	1150	42.7	2.79	49.97	0.74	0.88	1.00	40.7	3.18	51.05	0.75	0.90	1.00	38.4	3.61	52.28	0.77	0.92	1.00
	1300	43.9	2.78	52.07	0.77	0.91	1.00	41.8	3.18	53.01	0.78	0.94	1.00	39.4	3.61	54.00	0.81	0.97	1.00
	1600	46.0	2.78	55.07	0.82	0.99	1.00	43.8	3.17	56.00	0.84	1.00	1.00	41.6	3.60	56.97	0.87	1.00	1.00
	1900	48.0	2.78	57.54	0.88	1.00	1.00	45.9	3.17	58.38	0.90	1.00	1.00	43.6	3.61	59.25	0.93	1.00	1.00
67°F	850	41.7	2.80	49.87	0.56	0.66	0.77	39.8	3.17	50.95	0.56	0.67	0.78	37.7	3.62	51.80	0.57	0.69	0.80
	1000	43.6	2.79	52.28	0.57	0.69	0.80	41.7	3.18	52.97	0.58	0.70	0.82	39.2	3.60	53.99	0.59	0.72	0.84
	1150	45.2	2.79	54.16	0.58	0.71	0.84	43.1	3.18	54.78	0.59	0.73	0.86	40.6	3.60	55.59	0.60	0.75	0.89
	1300	46.5	2.78	55.49	0.60	0.74	0.88	44.3	3.17	56.13	0.61	0.76	0.90	41.6	3.61	56.89	0.63	0.78	0.93
	1600	48.4	2.78	57.59	0.64	0.80	0.96	46.0	3.17	58.26	0.65	0.82	0.98	43.4	3.60	58.99	0.66	0.85	1.00
	1900	49.9	2.78	59.57	0.67	0.85	1.00	47.4	3.17	60.29	0.68	0.88	1.00	44.5	3.60	61.13	0.70	0.91	1.00
71°F	850	44.0	2.80	54.28	0.43	0.54	0.64	42.1	3.18	55.24	0.43	0.54	0.65	39.8	3.61	56.15	0.44	0.55	0.66
	1000	46.0	2.78	56.57	0.44	0.55	0.66	43.9	3.17	57.37	0.44	0.56	0.67	41.5	3.61	58.23	0.44	0.57	0.69
	1150	47.6	2.78	58.28	0.44	0.57	0.69	45.5	3.18	58.87	0.45	0.58	0.70	42.9	3.61	59.74	0.45	0.59	0.72
	1300	49.1	2.78	59.48	0.45	0.59	0.72	46.7	3.17	60.15	0.45	0.60	0.74	44.1	3.60	60.84	0.46	0.61	0.76
	1600	51.1	2.77	61.57	0.47	0.62	0.78	48.7	3.17	62.06	0.47	0.64	0.80	45.8	3.60	62.77	0.48	0.65	0.82
	1900	52.6	2.77	63.17	0.48	0.66	0.83	50.0	3.17	63.59	0.48	0.68	0.86	47.0	3.60	64.12	0.49	0.70	0.89

## RATINGS

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

### 5 TON - LGH060U4

Entering Wet Bulb Tempera- ture	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																	
		65°F						75°F						85°F					
		Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)		
					Dry Bulb						Dry Bulb							Dry Bulb	
cfm	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	
63°F	950	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	1150	56.1	2.48	45.2	0.67	0.77	0.87	54.7	2.79	45.8	0.67	0.78	0.88	52.8	3.18	46.4	0.68	0.79	0.90
	1300	58.3	2.48	46.9	0.68	0.80	0.91	56.5	2.80	47.7	0.69	0.80	0.92	54.7	3.19	48.1	0.70	0.82	0.94
	1550	61.0	2.48	49.5	0.71	0.84	0.96	59.0	2.80	50.0	0.72	0.85	0.98	57.0	3.20	50.6	0.73	0.87	0.99
	1800	63.1	2.47	51.4	0.75	0.89	1.00	61.2	2.80	52.1	0.76	0.90	1.00	59.0	3.21	52.8	0.77	0.92	1.00
	2300	66.3	2.47	55.3	0.81	0.97	1.00	64.1	2.80	55.8	0.82	0.99	1.00	61.9	3.21	56.5	0.83	1.00	1.00
67°F	950	56.4	2.48	45.9	0.53	0.62	0.71	54.8	2.79	46.4	0.54	0.63	0.72	53.1	3.19	47.4	0.54	0.63	0.72
	1150	59.9	2.48	49.1	0.54	0.64	0.74	58.1	2.80	49.6	0.55	0.65	0.75	56.1	3.19	50.6	0.55	0.65	0.75
	1300	61.9	2.48	51.0	0.55	0.66	0.76	60.1	2.80	51.5	0.55	0.67	0.78	58.0	3.20	52.2	0.56	0.67	0.79
	1550	64.6	2.47	53.4	0.57	0.69	0.81	62.5	2.80	54.1	0.57	0.69	0.82	60.4	3.21	54.5	0.58	0.70	0.84
	1800	66.9	2.46	55.2	0.59	0.72	0.85	64.8	2.80	55.7	0.59	0.73	0.87	62.3	3.21	56.3	0.60	0.74	0.88
	2300	70.2	2.45	57.8	0.63	0.79	0.94	67.8	2.80	58.3	0.63	0.80	0.96	65.3	3.22	58.8	0.63	0.81	0.98
71°F	950	59.7	2.48	50.3	0.43	0.51	0.59	58.1	2.80	50.9	0.43	0.51	0.60	56.3	3.20	51.6	0.43	0.52	0.60
	1150	63.3	2.47	53.3	0.43	0.52	0.62	61.5	2.80	53.9	0.43	0.53	0.62	59.5	3.21	54.6	0.43	0.53	0.63
	1300	65.6	2.47	55.2	0.43	0.53	0.63	63.6	2.80	55.7	0.43	0.54	0.64	61.5	3.21	56.3	0.43	0.54	0.65
	1550	68.5	2.46	57.6	0.43	0.55	0.66	66.4	2.80	58.1	0.44	0.55	0.67	64.0	3.22	58.7	0.44	0.55	0.68
	1800	70.9	2.45	59.1	0.44	0.58	0.70	68.6	2.80	59.7	0.44	0.58	0.71	66.0	3.22	60.1	0.45	0.59	0.72
	2300	74.2	2.44	61.7	0.46	0.62	0.76	71.7	2.79	62.0	0.47	0.62	0.78	68.9	3.22	62.6	0.46	0.63	0.79
Entering Wet Bulb Tempera- ture	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																	
		95°F						105°F						115°F					
		Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)		
					Dry Bulb						Dry Bulb							Dry Bulb	
cfm	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	
63°F	950	---	---	---	---	---	45.9	4.10	45.3	0.67	0.78	0.88	43.7	4.60	46.4	0.68	0.79	0.90	
	1150	50.7	3.63	47.2	0.69	0.80	0.92	48.5	4.12	48.0	0.70	0.82	0.94	46.1	4.62	48.9	0.71	0.84	0.96
	1300	52.4	3.65	48.9	0.71	0.83	0.96	50.1	4.13	49.7	0.72	0.85	0.98	47.5	4.63	50.7	0.73	0.87	1.00
	1550	54.6	3.66	51.4	0.74	0.89	1.00	52.1	4.15	52.3	0.76	0.91	1.00	49.4	4.66	53.2	0.78	0.94	1.00
	1800	56.3	3.66	53.7	0.78	0.94	1.00	53.9	4.16	54.5	0.80	0.96	1.00	51.0	4.67	55.4	0.82	0.99	1.00
	2300	59.5	3.68	57.2	0.86	1.00	1.00	57.1	4.18	58.0	0.87	1.00	1.00	54.4	4.70	58.8	0.91	1.00	1.00
67°F	950	51.1	3.64	48.3	0.54	0.64	0.73	49.0	4.13	49.3	0.55	0.64	0.74	46.6	4.63	50.5	0.55	0.65	0.75
	1150	54.0	3.65	51.4	0.55	0.66	0.76	51.6	4.15	52.0	0.56	0.67	0.79	49.0	4.65	53.2	0.56	0.68	0.80
	1300	55.7	3.66	52.8	0.57	0.69	0.80	53.2	4.15	53.7	0.57	0.69	0.82	50.5	4.67	54.5	0.58	0.71	0.84
	1550	57.9	3.67	55.1	0.59	0.72	0.85	55.3	4.17	55.7	0.60	0.74	0.87	52.4	4.68	56.3	0.61	0.76	0.90
	1800	59.7	3.68	56.7	0.61	0.76	0.91	57.0	4.18	57.2	0.62	0.78	0.93	53.9	4.69	58.1	0.62	0.79	0.96
	2300	62.5	3.69	59.1	0.66	0.83	1.00	59.3	4.19	59.9	0.66	0.86	1.00	56.2	4.71	60.7	0.68	0.88	1.00
71°F	950	54.1	3.65	52.6	0.43	0.52	0.61	51.9	4.15	53.4	0.43	0.53	0.62	49.5	4.66	54.4	0.43	0.53	0.63
	1150	57.2	3.66	55.4	0.43	0.53	0.64	54.7	4.16	56.2	0.43	0.54	0.65	52.0	4.68	57.0	0.44	0.55	0.66
	1300	59.1	3.68	57.0	0.43	0.55	0.66	56.4	4.18	57.8	0.44	0.55	0.67	53.5	4.69	58.7	0.44	0.56	0.68
	1550	61.4	3.69	59.1	0.45	0.57	0.69	58.6	4.19	59.8	0.45	0.58	0.70	55.6	4.70	60.3	0.45	0.60	0.73
	1800	63.3	3.69	60.6	0.46	0.60	0.73	60.3	4.20	61.2	0.46	0.61	0.75	57.0	4.72	61.9	0.46	0.62	0.77
	2300	66.0	3.70	63.0	0.47	0.64	0.81	62.8	4.21	63.3	0.48	0.67	0.83	59.4	4.74	64.0	0.48	0.67	0.86

## 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 - LGH074U4

Entering Wet Bulb Tempera- ture	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																	
		65°F						75°F						85°F					
		Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)		
					Dry Bulb						Dry Bulb						Dry Bulb		
cfm	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	
63°F	950	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	1200	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	1500	70.9	3.24	45.3	0.68	0.80	0.90	68.6	3.66	46.0	0.69	0.80	0.92	66.6	4.17	46.4	0.70	0.82	0.93
	1750	73.7	3.25	47.8	0.70	0.83	0.95	71.5	3.67	48.0	0.72	0.85	0.97	68.8	4.19	48.7	0.73	0.86	0.99
	2050	76.3	3.25	49.9	0.74	0.88	1.00	74.0	3.68	50.7	0.74	0.89	1.00	71.3	4.21	51.3	0.76	0.91	1.00
	2300	78.3	3.25	51.7	0.77	0.92	1.00	75.8	3.69	52.4	0.78	0.93	1.00	72.9	4.22	53.2	0.79	0.95	1.00
67°F	950	65.1	3.22	41.3	0.53	0.61	0.69	63.4	3.63	42.3	0.53	0.61	0.69	61.4	4.13	43.1	0.53	0.62	0.70
	1200	70.4	3.24	45.8	0.54	0.63	0.72	68.5	3.66	46.5	0.54	0.63	0.73	66.3	4.17	47.3	0.54	0.64	0.74
	1500	75.2	3.25	49.5	0.55	0.66	0.76	72.9	3.68	50.2	0.56	0.66	0.77	70.3	4.20	50.9	0.56	0.67	0.78
	1750	78.1	3.25	51.9	0.56	0.68	0.80	75.7	3.69	52.4	0.57	0.69	0.81	72.9	4.22	52.9	0.58	0.70	0.83
	2050	80.9	3.25	53.9	0.58	0.72	0.84	78.2	3.70	54.5	0.58	0.73	0.86	75.3	4.23	54.9	0.60	0.74	0.87
	2300	82.8	3.25	55.3	0.60	0.74	0.88	80.1	3.70	55.6	0.61	0.76	0.90	77.2	4.24	56.2	0.61	0.77	0.92
71°F	950	69.1	3.23	45.9	0.43	0.51	0.58	67.3	3.65	46.8	0.43	0.51	0.58	65.1	4.17	47.6	0.43	0.51	0.59
	1200	74.8	3.25	50.2	0.43	0.52	0.60	72.6	3.68	50.9	0.43	0.52	0.61	70.2	4.20	51.7	0.43	0.52	0.62
	1500	79.6	3.25	54.0	0.43	0.53	0.63	77.2	3.70	54.4	0.43	0.54	0.64	74.5	4.23	55.2	0.43	0.54	0.65
	1750	82.7	3.25	56.1	0.44	0.55	0.65	80.2	3.70	56.7	0.44	0.55	0.66	77.3	4.24	57.1	0.44	0.56	0.68
	2050	85.5	3.25	58.1	0.44	0.57	0.69	82.9	3.71	58.7	0.44	0.57	0.70	79.9	4.26	59.1	0.45	0.58	0.71
	2300	87.7	3.25	59.3	0.45	0.59	0.72	85.0	3.71	59.7	0.45	0.60	0.73	81.6	4.27	60.4	0.45	0.60	0.74
Entering Wet Bulb Tempera- ture	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																	
		95°F						105°F						115°F					
		Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Dis- charge Air Temp.	Sensible To Total Ratio (S/T)		
					Dry Bulb						Dry Bulb							Dry Bulb	
cfm	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	
63°F	950	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	1200	---	---	---	---	---	57.2	5.34	45.1	0.68	0.79	0.90	54.5	5.96	46.1	0.69	0.81	0.92	
	1500	63.7	4.76	47.4	0.71	0.83	0.95	60.8	5.38	48.1	0.72	0.85	0.98	57.7	6.01	49.1	0.73	0.87	1.00
	1750	65.9	4.77	49.7	0.73	0.88	1.00	63.0	5.40	50.6	0.75	0.90	1.00	59.7	6.03	51.8	0.76	0.92	1.00
	2050	68.3	4.80	52.2	0.77	0.93	1.00	65.0	5.42	53.1	0.79	0.96	1.00	61.9	6.06	54.0	0.81	0.98	1.00
	2300	69.8	4.81	54.0	0.81	0.97	1.00	66.6	5.44	54.8	0.83	0.99	1.00	63.3	6.07	55.8	0.85	1.00	1.00
67°F	950	59.1	4.71	44.3	0.53	0.62	0.71	56.8	5.33	45.1	0.54	0.63	0.72	54.3	5.97	46.3	0.54	0.64	0.73
	1200	63.7	4.75	48.1	0.55	0.65	0.75	61.0	5.38	49.1	0.55	0.66	0.76	58.0	6.01	50.2	0.56	0.67	0.77
	1500	67.6	4.79	51.6	0.56	0.68	0.80	64.5	5.41	52.4	0.57	0.69	0.82	61.3	6.05	53.1	0.58	0.71	0.84
	1750	70.0	4.81	53.7	0.58	0.71	0.84	66.8	5.44	54.3	0.59	0.73	0.86	63.3	6.08	55.1	0.60	0.74	0.89
	2050	72.1	4.83	55.6	0.61	0.74	0.90	69.0	5.46	56.0	0.62	0.77	0.92	65.4	6.11	56.7	0.63	0.79	0.95
	2300	73.8	4.84	56.7	0.62	0.79	0.94	70.5	5.47	57.1	0.64	0.81	0.97	66.6	6.12	57.9	0.65	0.83	0.99
71°F	950	62.8	4.74	48.8	0.43	0.51	0.59	60.2	5.36	49.9	0.43	0.51	0.60	57.7	6.01	50.8	0.43	0.52	0.61
	1200	67.5	4.79	52.6	0.43	0.53	0.62	64.7	5.42	53.5	0.43	0.53	0.63	61.6	6.06	54.5	0.43	0.54	0.64
	1500	71.6	4.82	56.0	0.43	0.55	0.65	68.4	5.45	56.6	0.44	0.55	0.67	65.1	6.10	57.5	0.44	0.56	0.68
	1750	74.2	4.84	57.8	0.44	0.57	0.69	70.7	5.48	58.6	0.45	0.57	0.70	67.2	6.12	59.1	0.45	0.59	0.72
	2050	76.6	4.86	59.7	0.45	0.59	0.72	73.0	5.50	60.2	0.46	0.60	0.74	69.3	6.15	60.7	0.46	0.62	0.77
	2300	78.2	4.88	60.7	0.46	0.62	0.76	74.6	5.51	61.2	0.47	0.63	0.78	70.4	6.16	61.9	0.47	0.64	0.81

## BLOWER DATA

### 036 DIRECT DRIVE BLOWER - BASE UNIT

FOR ALL UNITS ADD:

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

See page 26 or blower motors and drives and wet coil and options/accessory air resistance data.

#### DOWNTIME

External Static Press. in. w.g.	Percentage of Total Motor Torque																														
	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%																					
0.1	459	29	380	698	47	414	903	76	475	1069	110	539	1224	153	598	1374	195	632	1500	248	677	1617	312	723	1729	375	763	1821	447	803	
0.2	357	32	464	596	55	520	828	86	563	1023	120	597	1180	165	634	1331	210	685	1461	264	727	1590	325	757	1704	387	796	1796	460	835	
0.3	255	36	554	521	61	596	772	94	607	977	130	654	1137	177	706	1302	220	720	1435	274	776	1550	344	808	1666	406	843	1772	473	866	
0.4	166	39	637	445	67	669	716	102	694	916	143	728	1108	185	740	1258	235	772	1397	289	808	1523	356	841	1641	417	874	1735	492	911	
0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### HORIZONTAL

External Static Press. in. w.g.	Percentage of Total Motor Torque																														
	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%																					
0.1	432	29	395	674	49	443	882	79	511	1053	115	567	1211	156	617	1334	205	676	1463	260	725	1583	322	769	1692	391	813	1791	466	852	
0.2	334	32	479	581	56	537	822	87	582	1021	122	609	1178	165	659	1308	215	712	1439	270	758	1560	333	801	1670	402	843	1771	477	877	
0.3	217	36	578	517	61	603	763	96	651	953	137	696	1128	179	720	1265	230	768	1400	286	809	1522	350	850	1634	420	888	1737	494	920	
0.4	149	39	636	436	68	684	703	105	719	918	145	738	1079	193	781	1237	239	805	1374	297	842	1498	361	881	1611	431	917	1714	505	947	
0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## BLOWER DATA

### 048 DIRECT DRIVE BLOWER - BASE UNIT

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

FOR ALL UNITS ADD:

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

See page 26 for blower motors and drives and wet coil and options/accessory air resistance data.

#### DOWNFLOW

Percentage of Total Motor Torque											
External Static Press. in. w.g.	50%										
	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
0.1	682	46	420	894	79	499	1148	131	579	1366	192
0.2	583	52	510	836	87	562	1105	142	635	1329	204
0.3	484	59	601	778	96	629	1062	152	688	1292	217
0.4	410	64	666	720	105	697	1019	162	739	1255	231
0.5	---	---	---	662	114	764	961	176	805	1218	244
0.6	---	---	---	---	---	---	---	1182	257	887	1398
0.7	---	---	---	---	---	---	1145	270	933	1367	354
0.8	---	---	---	---	---	---	1096	287	992	1326	372
0.9	---	---	---	---	---	---	1047	302	1047	1296	385
1.0	---	---	---	---	---	---	1010	312	1085	1255	403
1.1	---	---	---	---	---	---	---	---	---	1425	505
1.2	---	---	---	---	---	---	---	---	---	1160	1606

#### HORIZONTAL

Percentage of Total Motor Torque											
External Static Press. in. w.g.	50%										
	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	
0.1	641	46	443	875	82	522	1127	137	614	1334	202
0.2	568	50	505	831	90	582	1097	144	650	1310	211
0.3	483	56	584	778	98	647	1050	155	706	1269	225
0.4	398	62	661	724	106	707	1004	167	764	1228	240
0.5	---	---	---	671	113	763	957	179	822	1201	250
0.6	---	---	---	---	---	---	---	1161	265	919	1378
0.7	---	---	---	---	---	---	---	1120	279	970	1344
0.8	---	---	---	---	---	---	---	1093	288	1003	1310
0.9	---	---	---	---	---	---	---	1052	302	1051	1275
1.0	---	---	---	---	---	---	---	1012	314	1096	1241
1.1	---	---	---	---	---	---	---	---	1386	516	1201
1.2	---	---	---	---	---	---	---	---	1620	697	1282

## BLOWER DATA

### 060/074 DIRECT DRIVE BLOWER - BASE UNIT

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

See page 26 for blower motors and drives and wet coil and options/accessory air resistance data.

#### DOWNTIME

Percentage of Total Motor Torque												
External Static Press. in. w.g.	10%			20%			30%			40%		
	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM
0.1	743	58	428	992	100	492	1284	161	556	1526	231	607
0.2	661	65	497	928	110	556	1231	175	610	1479	251	662
0.3	579	71	563	881	118	602	1179	188	663	1431	270	716
0.4	518	76	611	818	128	662	1126	202	716	1400	283	751
0.5	-	-	-	754	138	719	1074	216	768	1352	301	801
0.6	-	-	-	-	-	-	-	-	1305	319	850	1551
0.7	-	-	-	-	-	-	-	-	1273	330	882	1511
0.8	-	-	-	-	-	-	-	-	1226	347	928	1470
0.9	-	-	-	-	-	-	-	-	1178	363	972	1430
1.0	-	-	-	-	-	-	-	-	1147	374	1000	1390
1.1	-	-	-	-	-	-	-	-	-	-	-	-
1.2	-	-	-	-	-	-	-	-	-	-	-	-

#### HORIZONTAL

Percentage of Total Motor Torque												
External Static Press. in. w.g.	10%			20%			30%			40%		
	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM	Cfm	Watts	RPM
0.1	695	49	431	1051	88	470	1280	157	562	1430	314	665
0.2	610	55	495	973	96	543	1233	166	607	1382	332	715
0.3	525	61	560	914	104	612	1186	177	657	1347	345	752
0.4	461	66	611	856	115	695	1138	190	714	1312	358	788
0.5	-	-	-	822	122	749	1095	202	772	1277	370	823
0.6	-	-	-	-	-	-	-	-	-	1242	382	857
0.7	-	-	-	-	-	-	-	-	-	1194	398	901
0.8	-	-	-	-	-	-	-	-	-	1148	413	943
0.9	-	-	-	-	-	-	-	-	-	1112	424	974
1.0	-	-	-	-	-	-	-	-	-	1069	438	1011
1.1	-	-	-	-	-	-	-	-	-	-	1474	688
1.2	-	-	-	-	-	-	-	-	-	-	-	-

## BLOWER DATA

### FACTORY INSTALLED OPTIONS/FIELD INSTALLED ACCESSORY AIR RESISTANCE - in. w.g.

Air Volume cfm	Wet Indoor Coil		Gas Heating		Economizer	Filters	
	036, 048	060, 074	Medium Heat	High Heat		MERV 8	MERV 13
800	0.01	---	0.02	0.02	0.04	0.04	0.05
1000	0.02	0.02	0.02	0.02	0.04	0.04	0.07
1200	0.03	0.04	0.02	0.02	0.04	0.04	0.07
1400	0.04	0.05	0.02	0.03	0.04	0.04	0.07
1600	0.05	0.07	0.03	0.04	0.04	0.04	0.07
1800	0.06	0.08	0.04	0.05	0.05	0.04	0.07
2000	0.08	0.10	0.04	0.06	0.05	0.05	0.08
2200	---	0.11	0.04	0.07	0.05	0.05	0.08
2400	---	0.13	0.05	0.08	0.05	0.05	0.08

### 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

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

Air Volume - cfm	RTD11-95S Step-Down Diffuser			FD11-95S Flush Diffuser
	2 Ends Open	1 Side & 2 Ends Open	All Ends & Sides Open	
1800	0.13	0.11	0.09	0.09
2000	0.15	0.13	0.11	0.10
2200	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.	
	RTD11-95S	FD11-95S
2600	24 - 29	19 - 24
2800	25 - 30	20 - 28
3000	27 - 33	21 - 29

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

**ELECTRICAL DATA****3 TON**

Model No.		LGH036U4E	
<b><sup>1</sup> Voltage - 60hz</b>		<b>208/230V - 3 Ph</b>	
Compressor	Rated Load Amps	9.1	5.1
Outdoor Fan Motor	Full Load Amps	4.1	2.1
Power Exhaust (1) 0.33 HP	Full Load Amps	2.4	1.3
Service Outlet 115V GFI (amps)		15	15
Indoor Blower Motor	Horsepower	0.5	0.5
	Full Load Amps	4.3	2.2
<b><sup>2</sup> Maximum Overcurrent Protection</b>	Unit Only	25	15
	With (1) 0.33 HP Power Exhaust	30	15
<b><sup>3</sup> Minimum Circuit Ampacity</b>	Unit Only	20	11
	With (1) 0.33 HP Power Exhaust	23	12

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

<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.<sup>2</sup> HACR type breaker or fuse.<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.**ELECTRICAL DATA****4 TON**

Model No.		LGH048U4E	
<b><sup>1</sup> Voltage - 60hz</b>		<b>208/230V - 3 Ph</b>	
Compressor	Rated Load Amps	13.8	6.5
Outdoor Fan Motor	Full Load Amps	4.1	2.1
Power Exhaust (1) 0.33 HP	Full Load Amps	2.4	1.3
Service Outlet 115V GFI (amps)		15	15
Indoor Blower Motor	Horsepower	0.75	0.75
	Full Load Amps	6.1	3.1
<b><sup>2</sup> Maximum Overcurrent Protection</b>	Unit Only	40	15
	With (1) 0.33 HP Power Exhaust	40	20
<b><sup>3</sup> Minimum Circuit Ampacity</b>	Unit Only	28	14
	With (1) 0.33 HP Power Exhaust	30	15

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

<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.<sup>2</sup> HACR type breaker or fuse.<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

**ELECTRICAL DATA****5 TON**

Model No.		LGH060U4E	
<b><sup>1</sup> Voltage - 60hz</b>		<b>208/230V - 3 Ph</b>	
Compressor	Rated Load Amps	14.6	7
Outdoor Fan Motor	Full Load Amps	4.1	2.1
Power Exhaust (1) 0.33 HP	Full Load Amps	2.4	1.3
Service Outlet 115V GFI (amps)		15	15
Indoor Blower Motor	Horsepower	1	1
	Full Load Amps	7.4	3.7
<sup>2</sup> Maximum Overcurrent Protection	Unit Only	40	20
	With (1) 0.33 HP Power Exhaust	45	20
<sup>3</sup> Minimum Circuit Ampacity	Unit Only	30	15
	With (1) 0.33 HP Power Exhaust	33	16

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

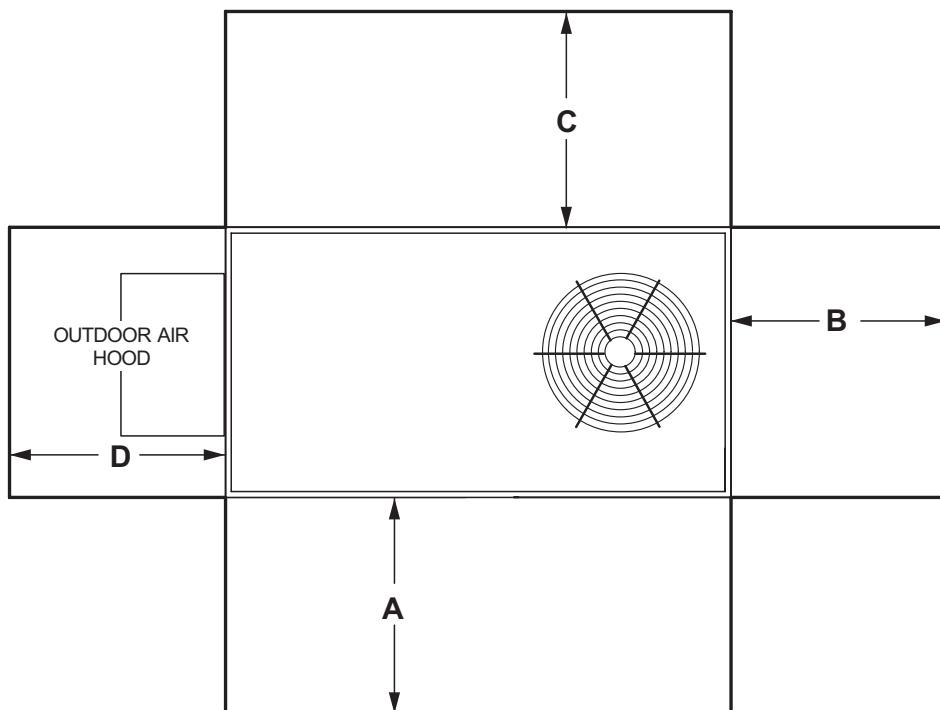
<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.<sup>2</sup> HACR type breaker or fuse.<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.**ELECTRICAL DATA****6 TON**

Model No.		LGH074U4E	
<b><sup>1</sup> Voltage - 60hz</b>		<b>208/230V - 3 Ph</b>	
Compressor	Rated Load Amps	16.9	8.3
Outdoor Fan Motor	Full Load Amps	4.1	2.1
Power Exhaust (1) 0.33 HP	Full Load Amps	2.4	1.3
Service Outlet 115V GFI (amps)		15	16
Indoor Blower Motor	Horsepower	1	1
	Full Load Amps	7.4	3.7
<sup>2</sup> Maximum Overcurrent Protection	Unit Only	45	20
	With (1) 0.33 HP Power Exhaust	50	25
<sup>3</sup> Minimum Circuit Ampacity	Unit Only	33	17
	With (1) 0.33 HP Power Exhaust	36	18

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

<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.<sup>2</sup> HACR type breaker or fuse.<sup>3</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

## 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	934	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.

## OUTDOOR SOUND DATA

Unit Model No.	Octave Band Sound Power Levels dBA, re 10⁻¹² Watts Center Frequency - Hz							¹,² Sound Rating Number dBA
	125	250	500	1000	2000	4000	8000	
036	60	65	69	68	63	58	51	73
048	64	67	73	71	66	59	52	76
060	66	69	74	74	68	62	55	78
074	67	72	76	76	70	64	58	80

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

¹ Sound Rating Number according to AHRI Standard 270-2008. Sound Rating Number is the overall A-Weighted Sound Power Level, (LWA), dB (100 Hz to 10,000 Hz).

² Sound Rating Number according to AHRI Standard 370-2011. Sound Rating Number is the overall A-Weighted Sound Power Level, (LWA), dB (100 Hz to 10,000 Hz).

## WEIGHT DATA

Model Number	Net		Shipping	
	Ibs.	kg	Ibs.	kg
036 Base Unit	710	322	752	341
036 Max. Unit	902	409	962	436
048 Base Unit	735	333	776	352
048 Max. Unit	949	430	1009	457
060 Base Unit	759	344	801	363
060 Max. Unit	973	441	1033	469
074 Base Unit	759	344	801	363
074 Max. Unit	973	441	1033	469

## OPTIONS / ACCESSORIES

	Shipping Weight		
	Ibs.	kg	
<b>ECONOMIZER / OUTDOOR AIR / EXHAUST</b>			
<b>Economizer</b>			
Economizer, Includes Outdoor Air Hood and Barometric Relief Dampers with Hood	131	59	
<b>Outdoor Air Dampers</b>			
Motorized	40	18	
Manual	30	14	
<b>Power Exhaust</b>			
Standard Static	35	17	
<b>GAS HEAT</b>			
Medium Heat (adder over standard heat)	8	4	
High Heat (adder over standard heat)	19	9	
<b>PACKAGING</b>			
LTL Packaging (less than truck load)	60	27	
<b>ROOF CURBS</b>			
<b>Hybrid Roof Curbs, Downflow</b>			
8 in. height	C1CURB70A-1	50	23
14 in. height	C1CURB71A-1	70	32
18 in. height	C1CURB72A-1	80	36
24 in. height	C1CURB73A-1	100	45
<b>Adjustable Pitch Curb, Downflow</b>			
14 in. height		113	51
<b>CEILING DIFFUSERS</b>			
Step-Down	RTD11-95S	118	54
Flush	FD11-95S	118	54
Transitions	T1TRAN20N-1	21	10

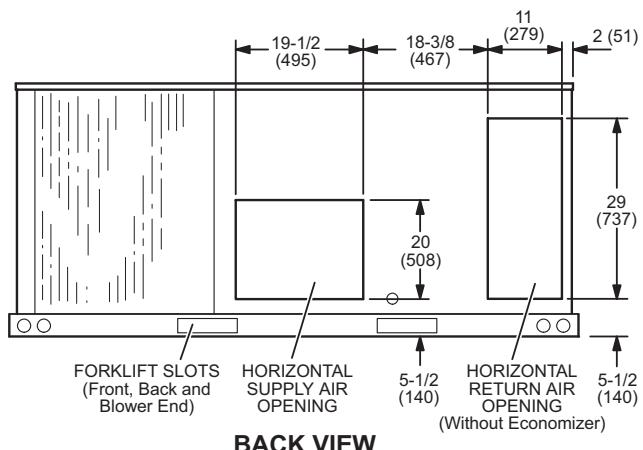
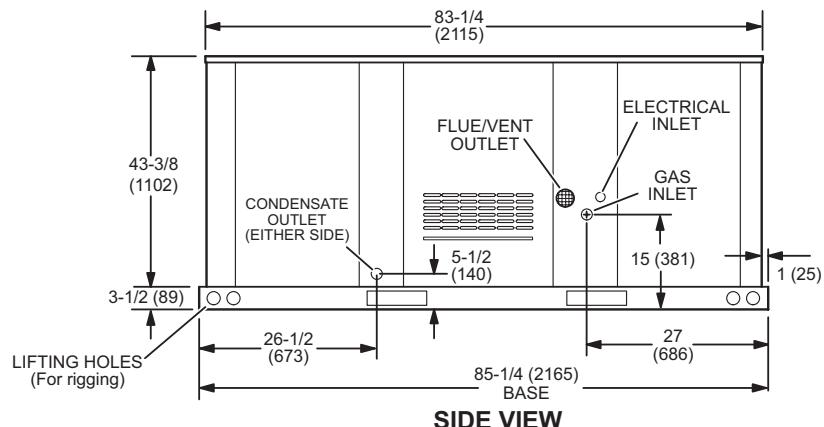
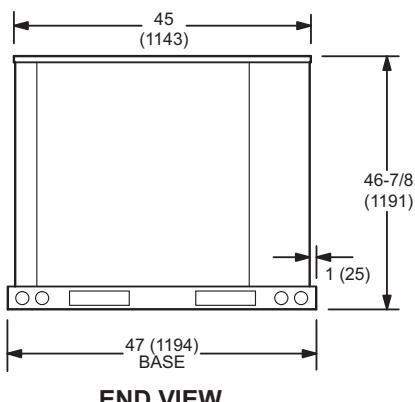
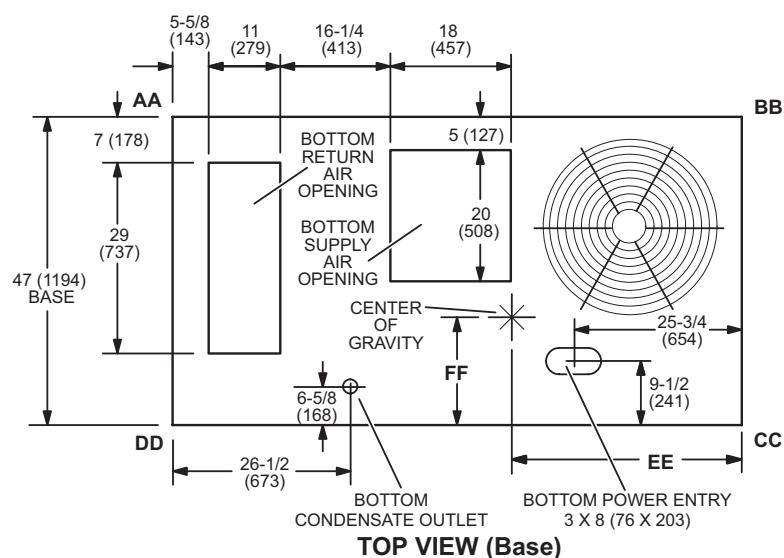
## DIMENSIONS - UNIT

### CORNER WEIGHTS

Model No.	AA		BB		CC		DD		EE		FF	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm
LGH036U Base Unit	134	61	171	78	221	100	174	79	38	953	21	521
LGH036U Max. Unit	184	83	218	99	282	128	238	108	39	991	21	521
LGH048U Base Unit	134	61	179	81	232	105	173	78	37	927	21	521
LGH048U Max. Unit	183	83	218	99	294	133	237	108	38	965	21	521
LGH060U Base Unit	137	62	183	83	237	108	177	80	37	927	21	521
LGH060U Max. Unit	187	85	233	106	301	137	242	110	38	965	21	521
LGH074U Base Unit	137	62	183	83	237	108	177	80	37	927	21	521
LGH074U Max. Unit	187	85	233	106	301	137	242	110	38	965	21	521

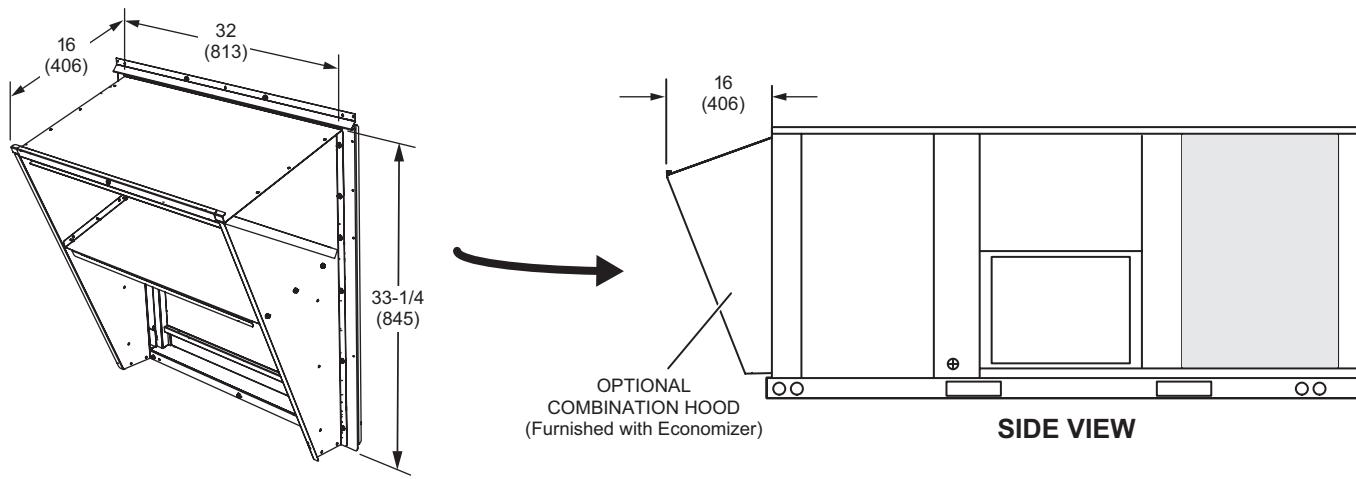
Base Unit - The unit with NO INTERNAL OPTIONS.

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.



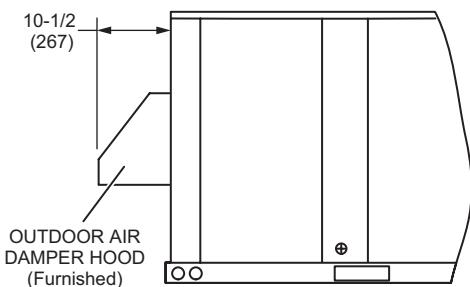
## DIMENSIONS - ACCESSORIES

### COMBINATION OUTDOOR AIR HOOD DETAIL FOR OPTIONAL ECONOMIZER AND BAROMETRIC RELIEF DAMPERS (Furnished With Economizer for Downflow Applications)

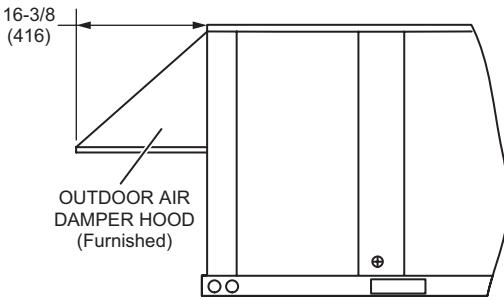


### OUTDOOR AIR DAMPER HOOD DETAIL (Downflow or Horizontal Applications)

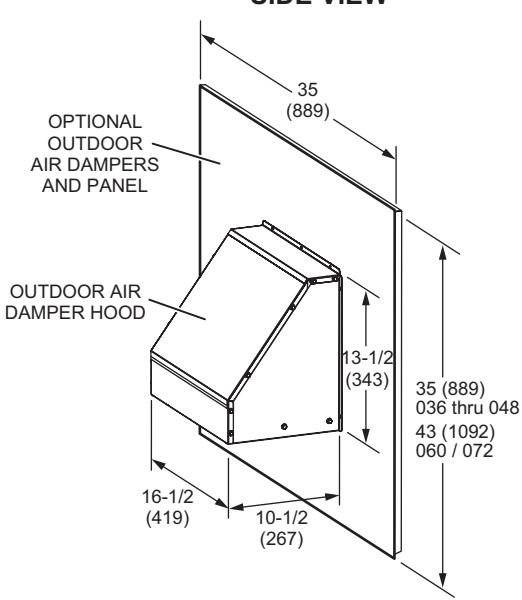
MANUAL OUTDOOR AIR HOOD



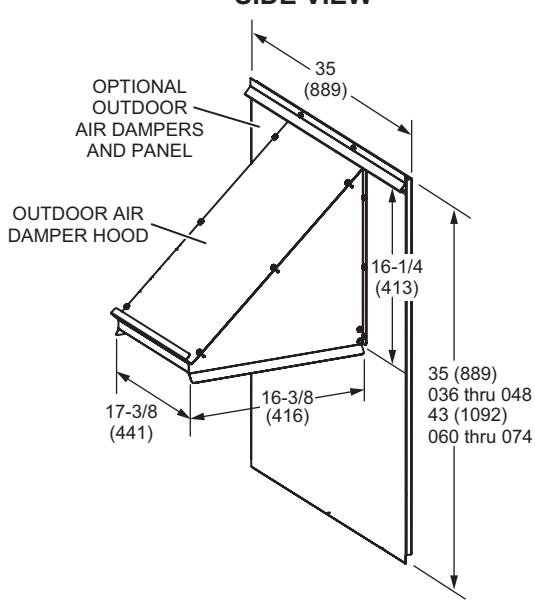
MOTORIZED OUTDOOR AIR HOOD



OPTIONAL OUTDOOR AIR DAMPERS AND PANEL

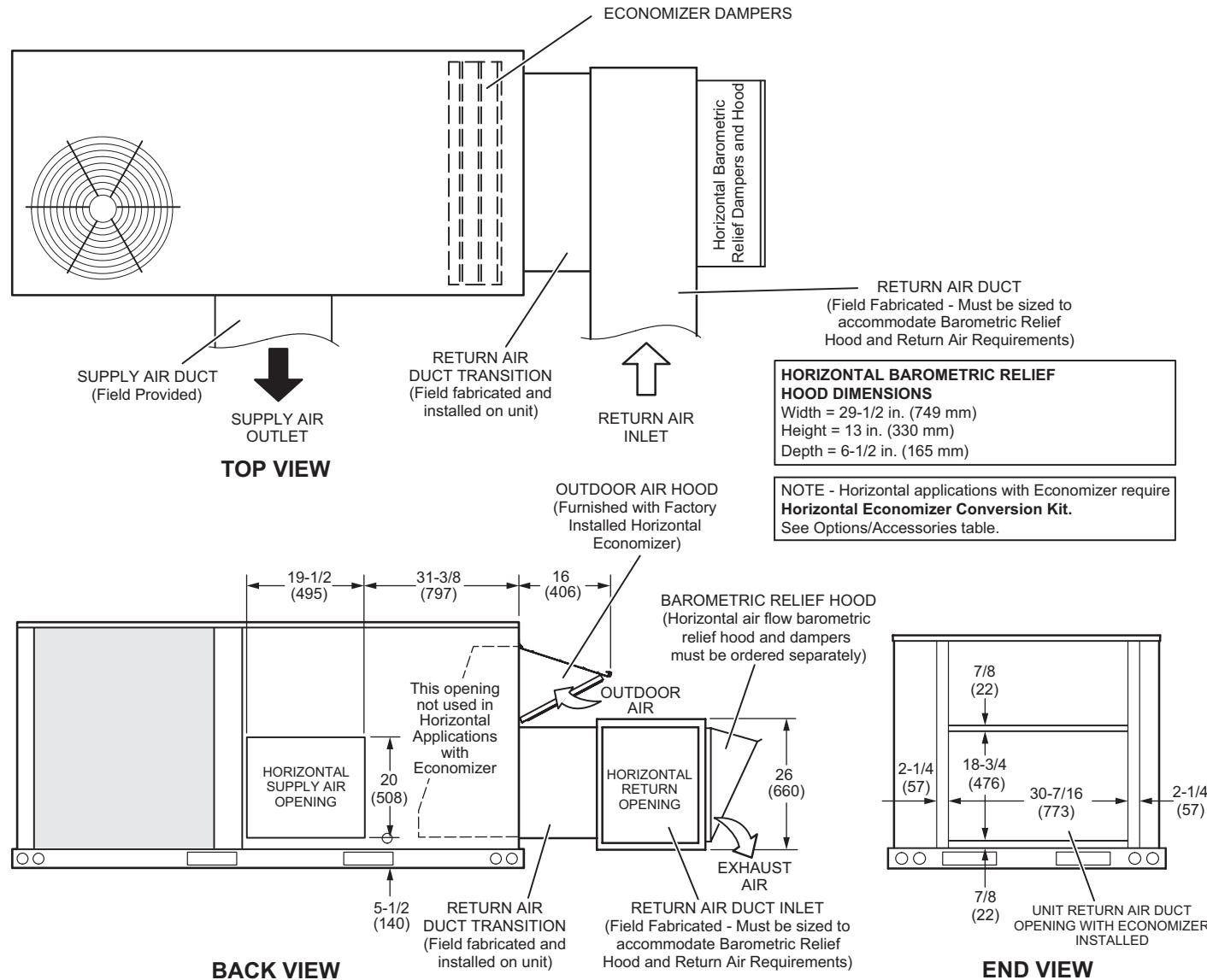


OPTIONAL OUTDOOR AIR DAMPERS AND PANEL



## DIMENSIONS - ACCESSORIES

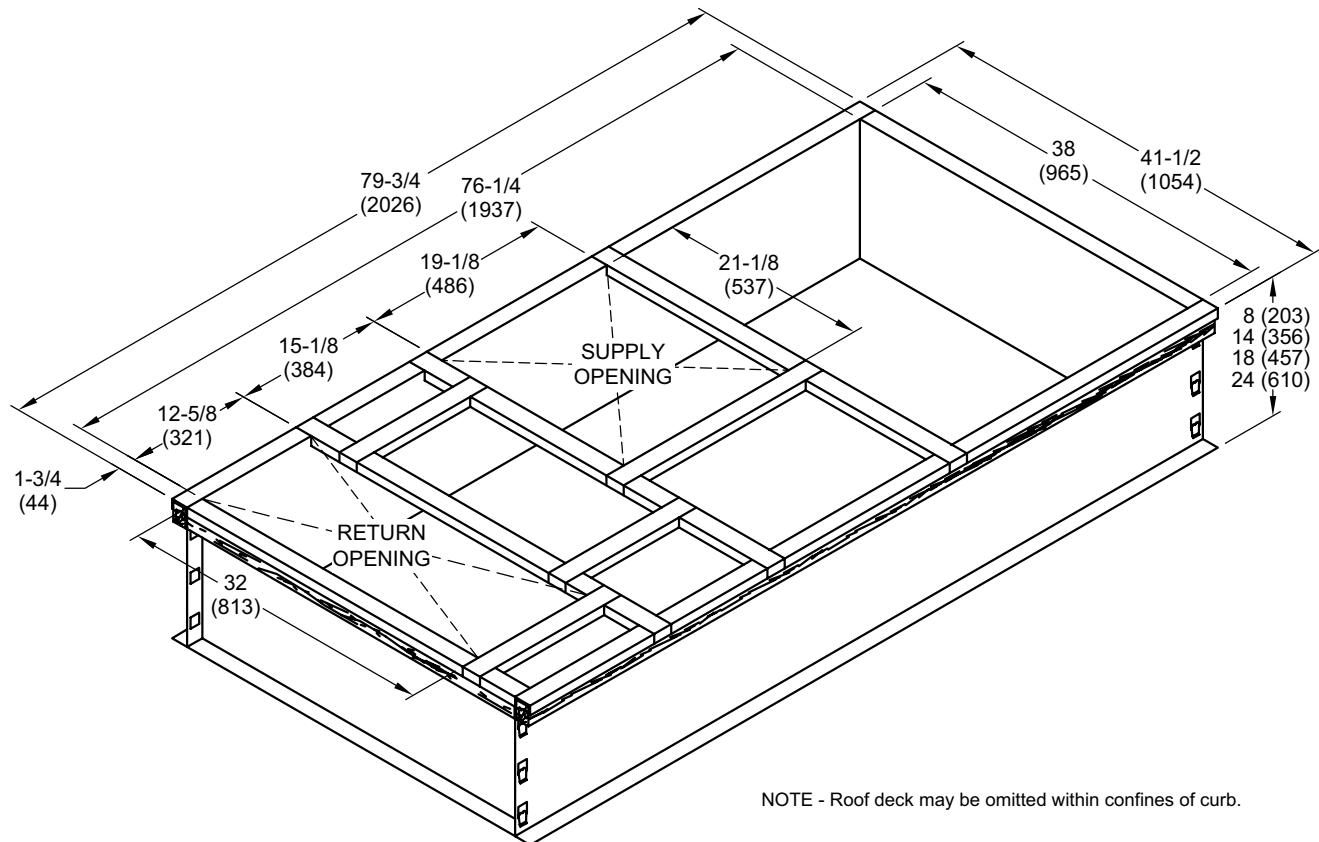
### OUTDOOR AIR HOOD DETAIL WITH OPTIONAL ECONOMIZER AND OPTIONAL BAROMETRIC RELIEF DAMPERS WITH HOOD (Horizontal Application)



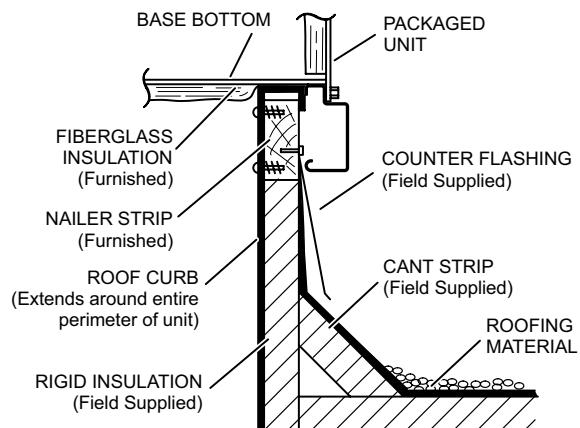
NOTE - Return Air Duct and Transition must be supported

## DIMENSIONS - ACCESSORIES

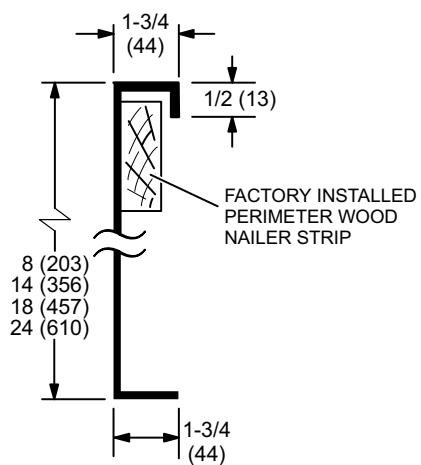
### HYBRID ROOF CURBS - DOUBLE DUCT OPENING



### TYPICAL FLASHING DETAIL FOR ROOF CURB

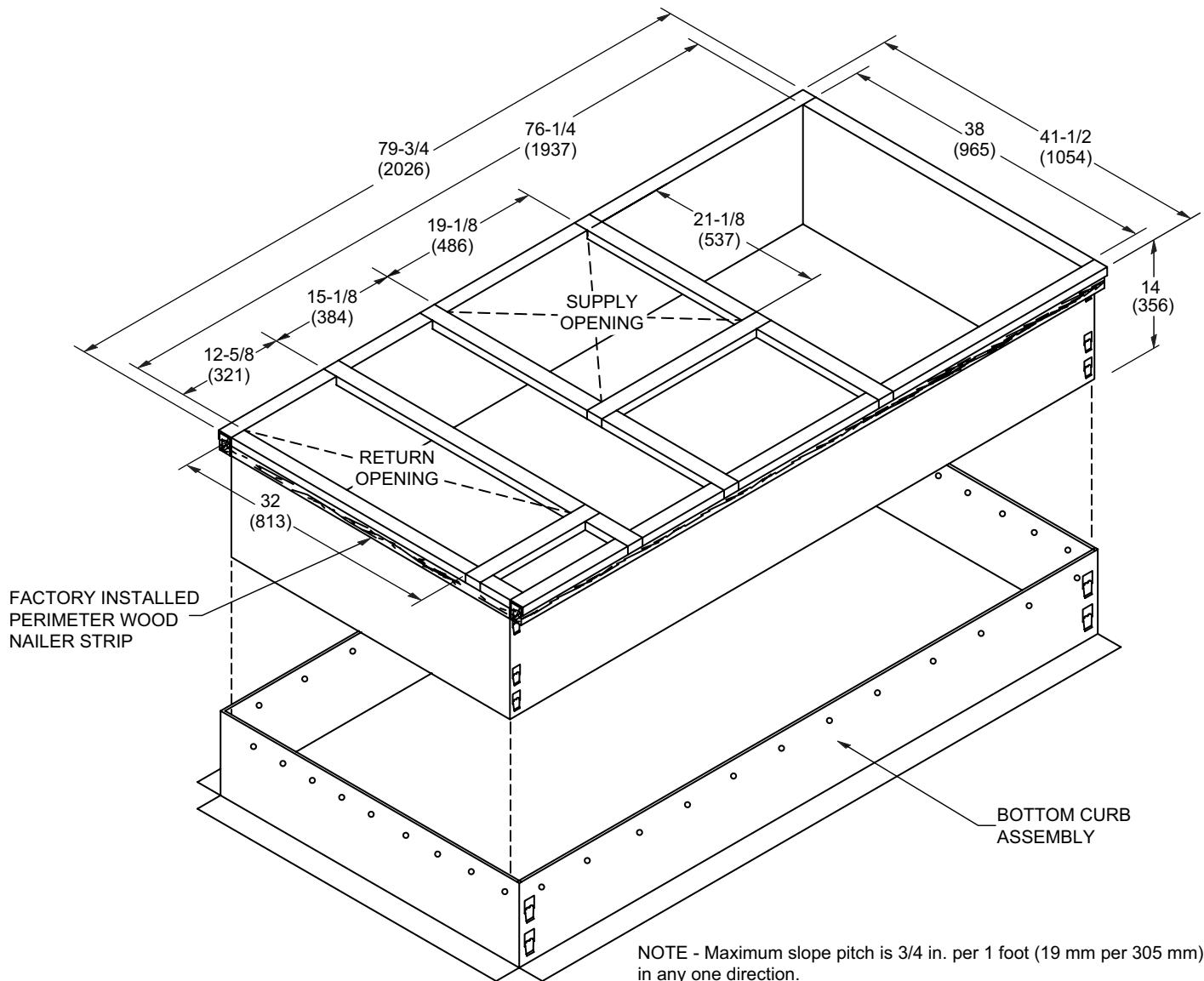


### DETAIL ROOF CURB

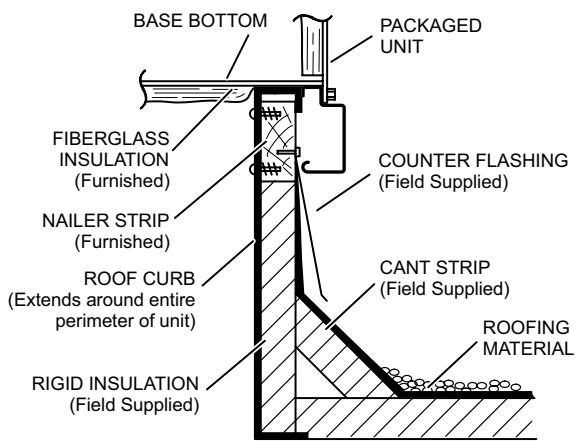


## DIMENSIONS - ACCESSORIES

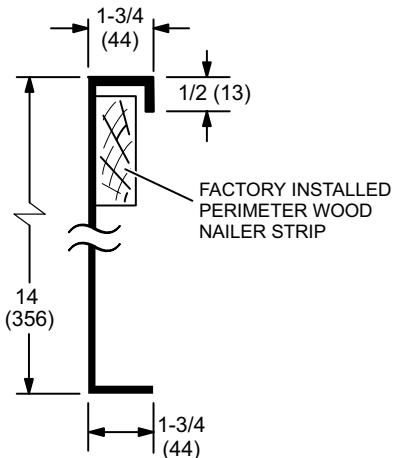
### ADJUSTABLE PITCH CURBS - DOUBLE DUCT OPENING



**TYPICAL FLASHING DETAIL FOR ROOF CURB**

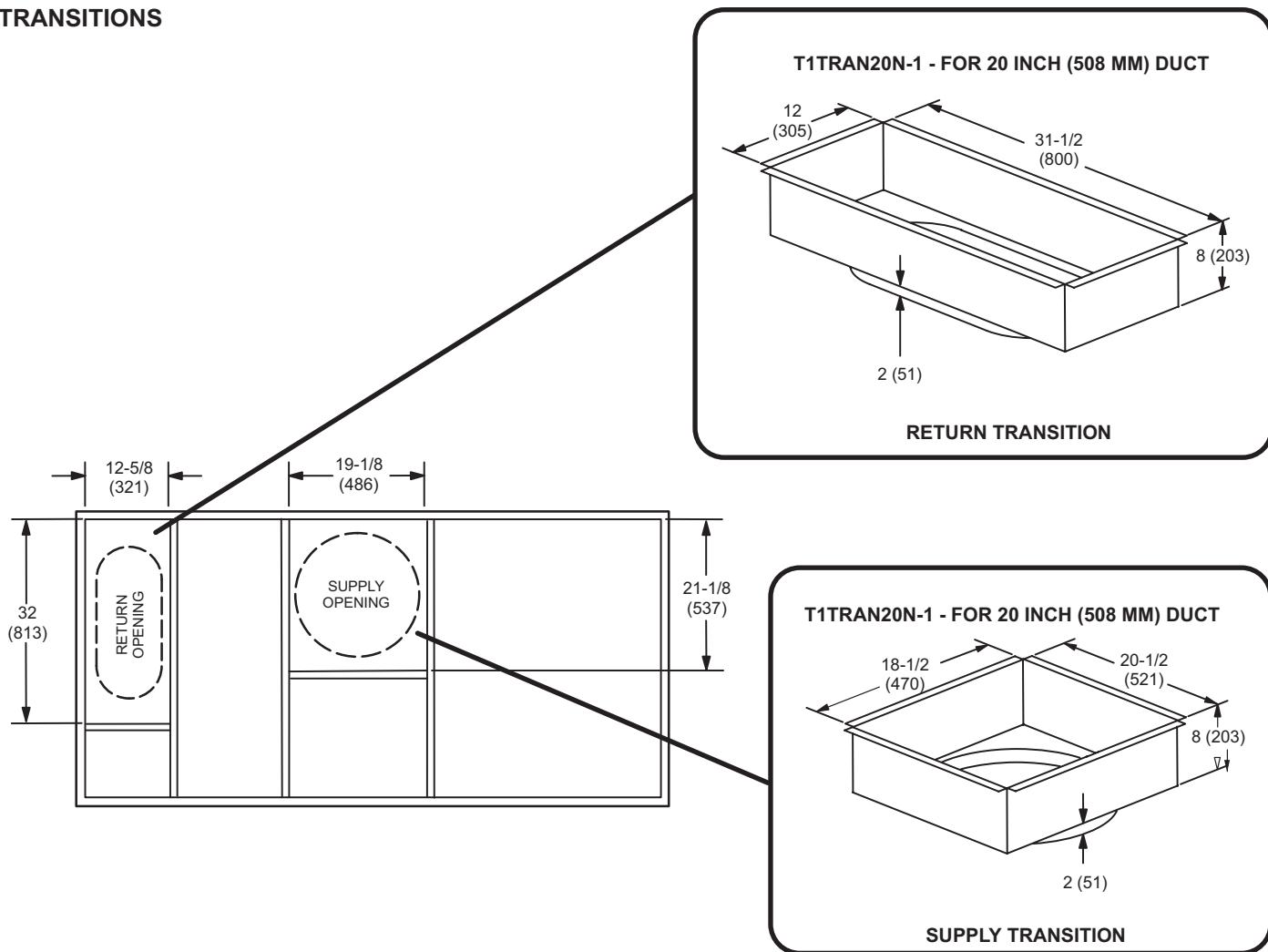


**DETAIL ROOF CURB**



## DIMENSIONS - ACCESSORIES

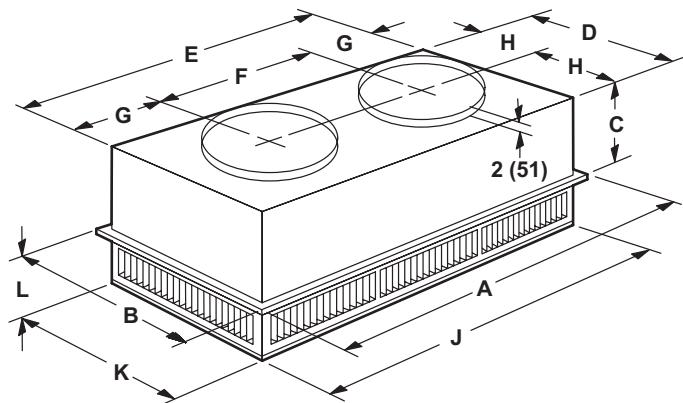
### TRANSITIONS



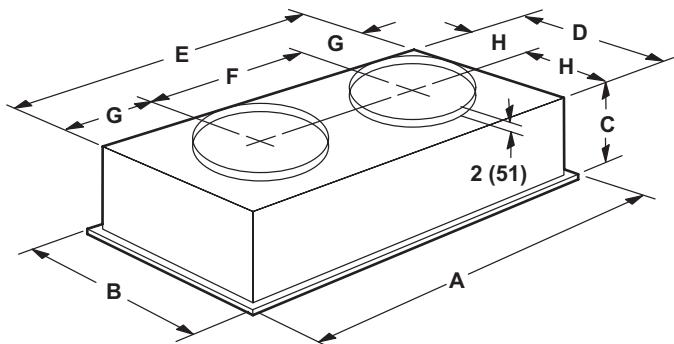
## DIMENSIONS - ACCESSORIES

### COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

#### STEP-DOWN CEILING DIFFUSER



#### FLUSH CEILING DIFFUSER



Model Number		RTD11-95S
<b>A</b>	in.	47-5/8
	mm	1159
<b>B</b>	in.	29-5/8
	mm	752
<b>C</b>	in.	14-3/8
	mm	365
<b>D</b>	in.	27-1/2
	mm	699
<b>E</b>	in.	45-1/2
	mm	1158
<b>F</b>	in.	22-1/2
	mm	572
<b>G</b>	in.	11-1/2
	mm	292
<b>H</b>	in.	13-3/4
	mm	349
<b>J</b>	in.	45-1/2
	mm	1156
<b>K</b>	in.	27-1/2
	mm	699
<b>L</b>	in.	8-1/8
	mm	206
<b>Duct Size</b>	in.	20 round
	mm	508 round

Model Number		FD11-95S
<b>A</b>	in.	47-5/8
	mm	1159
<b>B</b>	in.	29-5/8
	mm	752
<b>C</b>	in.	16-5/8
	mm	422
<b>D</b>	in.	27
	mm	686
<b>E</b>	in.	45
	mm	1143
<b>F</b>	in.	22-1/2
	mm	572
<b>G</b>	in.	11-1/4
	mm	286
<b>H</b>	in.	13-1/2
	mm	343
<b>Duct Size</b>	in.	20 round
	mm	508 round





## REVISIONS

Sections	Description of Change
Options/Accessories	<p>Added step-down transformers for UVC lights.</p> <p><b>Catalog numbers revised for:</b></p> <ul style="list-style-type: none"> <li>Barometric Relief Dampers</li> <li>Blower Proving Switch</li> <li>Cold Weather Kits</li> <li>Condensate Drain Trap</li> <li>Disconnects</li> <li>Drain Pan Overflow Switch</li> <li>Economizers</li> <li>Fresh Air Tempering</li> <li>LPG Kits</li> <li>Power Exhaust</li> <li>Single Enthalpy</li> <li>Smoke Detectors</li> </ul>



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