



COMMERCIAL PRODUCT SPECIFICATIONS

PACKAGED GAS ELECTRIC

LGM

Model L™ Ultra-High Efficiency Rooftop Units

60 Hz

Bulletin No. 210935

February 2024

Supersedes November 2023



ASHRAE 90.1
COMPLIANT

3 to 6 Tons
Net Cooling Capacity - 34,000 to 69,000 Btuh
Gas Input Heat Capacity - 65,000 to 150,000 Btuh

MODEL NUMBER IDENTIFICATION

L G M 060 U 4 E B 1 Y

Brand/Family
L = Model L™

Unit Type
G = Packaged Gas Heat w/ Electric Cooling

Major Design Sequence
M = 1st Generation

Nominal Cooling Capacity - Tons

036 = 3 Tons
048 = 4 Tons
060 = 5 Tons
074 = 6 Tons

Cooling Efficiency
U = Ultra-High Efficiency

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

Minor Design Sequence
1 = 1st Revision

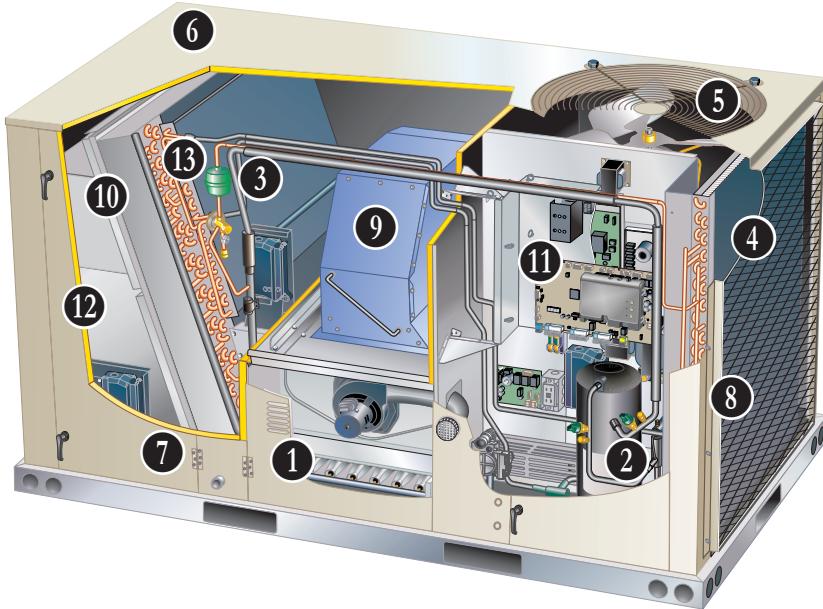
Heating Type
B = Standard Gas Heat, 2 Stage, Low NOx
Q = Medium Gas Heat, 2 Stage, Low NOx
X = High Gas Heat, 2 Stage, Low NOx

Blower Type
E = SZVAV DirectPlus™ Blower System (Direct Drive)
P = VAV DirectPlus™ Blower System (Direct Drive)

Refrigerant Type
4 = R-410A

FEATURE HIGHLIGHTS

The Model L™ packaged rooftop line is engineered with advanced variable speed technology to offer some of the highest energy efficiencies in the industry while delivering superior temperature and humidity control in a wide variety of commercial applications.



1. Heat Exchanger
2. Variable Capacity Scroll Compressor
3. Filter/Drier
4. Condenser Coil
5. Variable Speed ECM Outdoor Fan Motor
6. Heavy Gauge Steel Cabinet
7. Hinged Access Panels
8. Combination Coil/Hail Guards (option)
9. DirectPlus™ Direct Drive ECM Blower System
10. Air Filters
11. Lennox® CORE Control System
12. Economizer (option)
13. Humiditrol™+ Dehumidification System (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 and CSA listed
- Efficiency rating certified by CSA
- Unit and components ETL, NEC and CEC bonded for grounding to meet safety standards for servicing
- All models are ASHRAE 90.1 compliant
- All models have HCAI (formerly OSHPD) OSP and Special Seismic Certification ([Number: OSP-0596](#)), and meet 2018 International Building Code (IBC), 2019 California Building Code (CBC) ASCE 7, and ICC-ES AC156
- 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

WARRANTY

- Aluminized Steel Heat Exchanger - Limited ten years
- Stainless Steel Heat Exchanger (optional) - Limited fifteen years
- Compressor - Limited five years
- Lennox® CORE Unit Controller - Limited three years
- High Performance Economizer (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 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.

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 Lennox® CORE Unit Controller and diagnostic information is reported and recorded

Low NOx Models

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

Required Selections

Gas Input Choice - Order one:

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

NOTE - All gas heat options are Low NOx (40 ng/J).

Options/Accessories

Factory Installed

Stainless Steel Heat Exchanger

- Required if mixed air temperature is below 45 °F

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.

Combustion Air Intake Extensions

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

LPG/Propane Kits

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

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

FEATURES AND BENEFITS

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
- "Soft Start" feature slowly ramps up system from low to high speed
- 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

Compressor Crankcase Heater

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

DC Inverter Control

- Converts AC line voltage into filtered variable DC voltage
- Provides continuous compressor operation, while adjusting the capacity according to discharge air 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

Thermal Expansion Valve

- Ensures optimal performance throughout the application range
- Removable element head

3 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

Indoor Coil Freeze Protection

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

4 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 for improved heat transfer
- Factory leak tested
- Cross-row circuiting with rifled tubing optimizes both sensible and latent cooling capacity

Anti-Microbial Condensate Drain Pan

- Plastic pan, sloped to meet drainage requirements of ASHRAE 62.1
- Anti-Microbial 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

FEATURES AND BENEFITS

COOLING SYSTEM (continued)

5 Variable-Speed ECM Outdoor Fan Motor

- Fan speed is directly controlled by the Lennox® CORE Unit Controller
- Thermal overload protected
- Totally enclosed
- Permanently lubricated ball bearings
- Shaft up
- Wire basket mount

Outdoor Coil Fan

- 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 and liquid lines

NOTE - Not available for units equipped with Humiditrol™+ Dehumidification Option.

Factory or Field Installed

Condensate Drain Trap

- Constructed of PVC (factory or field) or copper (field only)

NOTE - Trap is field installed only; PVC version may be factory ordered to ship with unit.

Drain Pan Overflow Switch

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

CABINET

6 Construction

- Heavy-gauge steel panels
- Full perimeter heavy-gauge galvanized steel base rail
- Base rails have rigging holes
- Three sides of the base rail have 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) configuration

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

Duct Flanges

- Provided for horizontal duct attachment

Power/Gas Entry

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

Exterior Panels

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

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

7 Hinged Access Panels

- Tool-less access
- Economizer/ Filter sections
- Blower/heating section
- Compressor/controls sections
- 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 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)
- ASTM B117 / DIN 53167 Salt Spray - 15,000+ hours
- ASTM G85 Annex A3 SWAAT Modified Salt Spray - 3000 hours
- VA Master Construction Specification Division 23 for High Humidity Installations
- CID AA-52474A (GSA)
- Indoor Corrosion Protection:
 - Coated coil
 - Coated reheat coil (Humiditrol™+)
 - Painted blower housing
 - Painted indoor base
- Outdoor Corrosion Protection:
 - Coated coil
 - Painted outdoor base

Factory or Field Installed

8 Combination Coil/Hail Guards

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

FEATURES AND BENEFITS

BLOWER

9 DirectPlus™ Direct Drive ECM Blower System

- High-efficiency, variable-speed ECM (electronically commutated) motor
- Eliminates the need for a separate variable-frequency drive
- Advanced Blower Diagnostics: Lennox® CORE Unit Controller communicates via Modbus with DirectPlus™ blower to provide control commands, blower proving functionality, and detailed alarm codes
- SZVAV equipped models modulate the amount of supply blower airflow according to cooling demand, heating demand, ventilation demand or smoke alarm
- The amount of airflow for each stage can be set according to a parameter in the Lennox® CORE Unit Controller
- Unit is shipped from the factory with preset airflows
- Fully variable speed motor modulates to maximize system efficiency
- Combines the motor and electronics into one unit
- Aerodynamically optimized impeller
- Backward curved blades mounted directly onto the rotor
 - Air inlet grill reduces indoor sound levels without affecting air performance



Supply Static Pressure Transducer (VAV Models Only)

- Sends information to the Lennox® CORE Unit Controller to control blower speed to the desired supply duct static pressure
- Shipped with the unit for remote field installation in the supply duct

Required Selections

Blower Selection

- SZVAV (Single Zone Variable Air Volume) controls the speed of the blower based on the cooling and heating demands
- VAV (Variable Air Volume) blower varies the air volume to maintain a constant supply duct static pressure

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

Phase/Voltage Detection (3 Phase models only)

- Monitors power supply to assure phase is correct at unit start-up
- If phase is incorrect, the unit will not start and an alarm code is reported to the unit controller
- Protects unit from being started with incorrect phasing which could lead to issues such as compressors running backwards
- Voltage detection monitors power supply voltage to assure proper voltage
- If voltage is not correct (over/under voltage conditions) the unit will not start and an alarm code is reported to the unit controller

Short-Circuit Current Rating (SCCR)

- Higher short circuit protection up to 100kA

NOTE - Disconnect Switch is furnished and factory installed 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 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

FEATURES AND BENEFITS

INDOOR AIR QUALITY

10 Air Filters

- Disposable 2 inch MERV 4 filters furnished as standard

Options/Accessories

Factory or 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

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)
- Installed in the blower/evaporator coil section
- Safety interlock switch automatically shuts off power to the UVC light when panel is removed
- Interlock switch is factory installed or field installed in the blower/evaporator coil section panel
- All necessary hardware for installation is included
- Lamps operate on 110/230V, 1 phase power supply
- Approved by ETL

NOTE - Step-down transformer may be ordered for field installed UVC lamps when used with 460V and 575V rooftop units. Step-down transformer is furnished with lamps when factory installed.

Needlepoint Bipolar Ionization (NPBI) Kit

- NPBI technology integrates with system controls for effective air treatment
- Ionization has been shown to effectively reduce harmful pathogens, pollutants and odors

NOTE - Please visit www.sciencedirect.com for additional information.

- 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

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

Indoor Air Quality (CO₂) Sensors

- Monitors CO₂ levels
- Reports to the Lennox® CORE Unit Controller, which adjusts economizer dampers as needed

CONTROL SYSTEM

LENNOX® CORE CONTROL SYSTEM



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

- 11 The Lennox® CORE 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



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
- Built-in BACnet MS/TP and IP allow open integration to building management systems
- Two-port Ethernet Switch enables daisy chaining for BACnet IP and automatic firmware updates

NOTE - Unit Internet Connection required.

- 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 Unit Controller enhance functionality without the need to change components
- Unit Controller Software

Configurable Built-In Functions

- Full modulation of variable speed compressor for discharge air temperature control in room sensor or thermostat mode
- Discharge Air Cooling Control

- Up to three distinct Cooling Airflows in Thermostat Mode
- Programmable independent heating, ventilation and cooling blower speeds
- Discharge Air Heating Control
- 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
- Fresh Air Tempering for Improved Ventilation
- Demand Control Ventilation
- Low Ambient Controls for operation down to 0°F
- Humiditrol™+ Operation
- Enhanced Dehumidification (Latent Demand Control without reheat)

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 and IP
- LONTalk (Factory and Field Option)
- Lennox SBUS
- Compatibility with Lennox Wireless Zone Sensors
- 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 200 settings)
- Multiple Configurable Digital Inputs
- LED Indicators
- PC Interface connects the Lennox® CORE Unit Controller to a PC with the Lennox Unit Controller Software

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

CONTROL SYSTEM

LENNOX® CORE CONTROL SYSTEM (continued)

Controls Options

Factory or Field Installed

Dirty Filter Switch

- Senses static pressure increase and issues alarm if necessary

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

Field Installed

After-Market DDC

- Novar® Unit Controller and options

Thermostats

- Control system and thermostat options, see Page 13
- After-Market unit controller options

OPTIONS / ACCESSORIES

ECONOMIZER

- 12 • Economizer operation is set and controlled by the Lennox® CORE Unit Controller
- Simple plug-in connections from economizer to unit controller for easy installation
 - All Model L™ 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 and IECC 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 CO₂ sensors
- Linked damper action
- High torque 24-volt fully-modulating spring return damper motor
- Return air and outdoor air dampers
- Plug-in connections to unit

OPTIONS / ACCESSORIES

ECONOMIZER (continued)

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 2019 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 Lennox® CORE 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
- Lennox® CORE 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 (CO₂ 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 Lennox® CORE Unit Controller changes the economizer position to help maintain a constant building pressure

NOTE - Not available with Demand Control Ventilation (CO₂ Sensor).

Horizontal Barometric Relief Dampers

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

Horizontal Economizer Conversion Kit

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

OPTIONS / ACCESSORIES

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.

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
- 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

NOTE - Manual Outdoor Air Damper is a field installed option only.

NOTE - Outdoor Air Hood is included when motorized damper is factory installed. Outdoor Air Hood is furnished with motorized or manual damper when ordered for field installation.

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

HUMIDITROL™+ DEHUMIDIFICATION SYSTEM OPTION

OVERVIEW

- Factory installed hot gas reheat option designed to control humidity
- 13 • Humiditrol™+ utilizes advanced control algorithms, variable speed technology and a reheat coil to efficiently control humidity levels independent of room temperature
- Provides dehumidification on demand using ASHRAE 90.1 recommended method for comfort conditioning humidity control
- Unit comes equipped with one row reheat coil and solenoid valve

NOTE - A dehumidification demand from a relative humidity sensor, dehumidistat, a DDC controller or building automation system is required to control humidity.

BENEFITS

- Improves indoor air quality
- Discharge air control for overcool protection
- Adjustable discharge air temperature setpoint
- Energy efficient dehumidification
- Modulating latent and sensible capacity
- 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

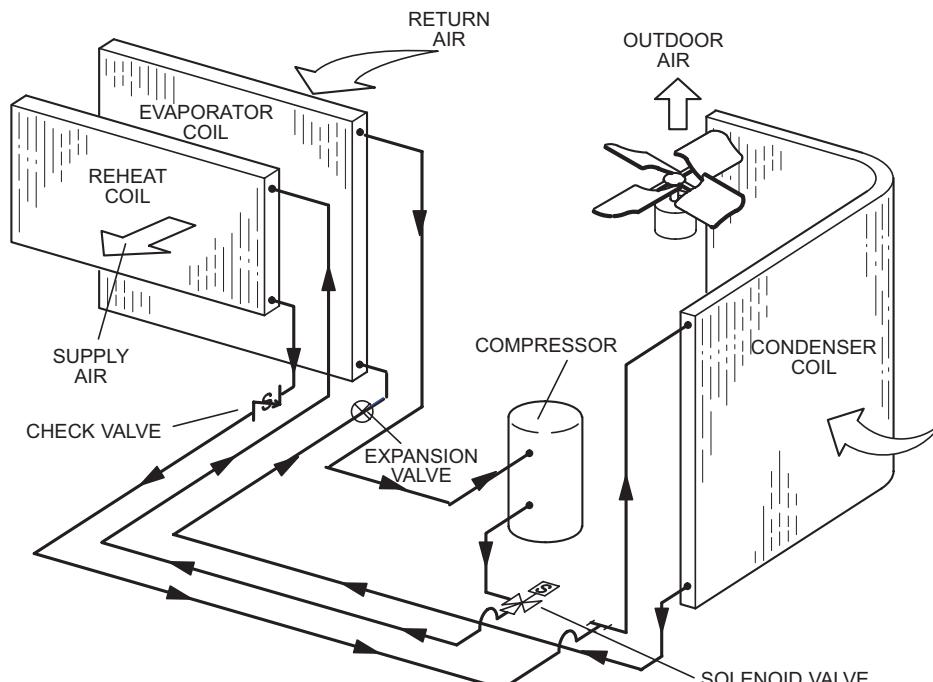
- Reheat operation will initiate on a dehumidification demand and does not require a cooling demand
- The unit will operate in hot gas reheat dehumidification mode until the relative humidity of the conditioned space is below the setpoint
- A solenoid valve diverts hot gas from the compressor to the reheat coil
- The cooled and dehumidified air from the evaporator is reheated as it passes through the reheat coil
- The 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
- The reheat coil is sized to provide optimal reheat performance without overheating supply air
- The compressor will modulate based on dehumidification load
- The outdoor fan modulates speed to provide discharge air temperature control in reheat mode

Dehumidification and Cooling Demand

- If both a dehumidification and a cooling demand occur, the system will operate in cooling until the cooling demand is satisfied
- Then the system will energize the dehumidification mode

NOTE - See Sequence of Operation for additional information.

TYPICAL DEHUMIDIFICATION SCHEMATIC



OPTIONAL CONVENTIONAL TEMPERATURE CONTROL SYSTEMS

CS8500 Commercial 7-Day Programmable Thermostat



- Fully Communicating Sensor
- Full Color Touchscreen Interface
- Variable Speed System Control (On Compatible Units)
- Up To 4 Heat / 4 Cool
- Built-In Sensors For Temperature, Humidity And Optional CO₂
- Remote Sensor Options For Occupancy, Temperature
- BACnet Capable Options
- 5-2 or 7-Day Scheduling
- Smooth Setback Recovery
- Heat/Cool Auto-Changeover
- Four-Wire Installation
- FDD, ASHRAE, IECC Compliant

CS7500 Commercial 7-Day Programmable Thermostat



- Premium Universal Thermostat
- Full Color Touchscreen Interface
- Up To 4 Heat / 2 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

Wireless/Wired Temperature/Humidity Room Sensor (LCS-5030)



- Simple Push-Button Override
- Variable Speed System Control (On Compatible Units)
- Up To 4 Heat / 4 Cool
- AA Battery / 24VAC Powered
- Bluetooth™ Mesh Operation
- SBUS Wired Operation
- Automatic Sensor Averaging
- Locking Hex Screw

Wireless Repeater for LCS-5030



- Extends Effective Range of Wireless Sensor (LCS-5030)
- 24VAC Only
- Locking Hex Screw

NOTE - Wireless only.

OPTIONAL CONVENTIONAL TEMPERATURE CONTROL SYSTEMS

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	Catalog No.
CS8500 Commercial 7 Day Programmable Thermostat	
CS8500 7-Day Thermostat	No CO ₂ Sensing 17G75
	With CO ₂ Sensing 17G76
Sensors/Accessories	¹ Remote non-adjustable wall-mount 10k 47W37
	¹ Remote non-adjustable wall-mount 11k 94L61
Sysbus Network Cable (Yellow) for CS8500 and LCS-5030 Wired Room Sensor	
Twisted pair 100% shielded communication cable, Red and Black 22 AWG, yellow jacket, rated at 75°C, 300V, Plenum rated Insulation - Low smoke PVC, NEC, CMP	500 ft. box 27M19
	1000 ft. box 94L63
	2500 ft. roll 68M25
CS7500 Commercial 7-Day Programmable Thermostat	
CS7500 7-Day Thermostat	17G74
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 Sensors	
LCS-5030 Wireless/Wired Temperature/Humidity Room Sensor	21L07
Wireless Repeater for LCS-5030	21L09
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

COOLING

A-Two-Stage Thermostat

1 - Economizer With Outdoor Air Suitable

Y1 Demand

- Compressor Off
- Blower Low
- Dampers Modulate

Y2 Demand

- Compressor Modulates
- Blower Low
- Dampers Full Open

NOTE - Compressor is energized after damper has been at full open for three minutes.

2 - No Economizer or Outdoor Air Not Suitable

Y1 Demand

- Compressor Modulates
- Blower Low
- Dampers Minimum Position

Y2 Demand

- Compressor Modulates
- Blower High
- Dampers Minimum Position

B-Three-Stage Thermostat

1 - Economizer With Outdoor Air Suitable

Y1 Demand

- Compressors Off
- Blower Low
- Dampers Modulate

Y2 Demand

- Compressor Modulates
- Blower Low
- Dampers Full Open

NOTE - Compressor is energized after damper has been at full open for three minutes.

Y3 Demand

- Compressor Modulates
- Blower High
- Dampers Full Open

SEQUENCE OF OPERATION

COOLING (CONTINUED)

2 - No Economizer or Outdoor Air Not Suitable

Y1 Demand

- Compressor Modulates
- Blower Low
- Dampers Minimum Position

Y2 Demand

- Compressor Modulates
- Blower Mid
- Dampers Minimum Position

Y3 Demand

- Compressor Modulates
- Blower High
- Dampers Minimum Position

C-Zone Sensor

1 - Economizer With Outdoor Air Suitable

Low Cooling Demand

- Compressor Off
- Blower Variable
- Dampers Modulate

High Cooling Demand

- Compressor Modulates
- Blower Variable
- Dampers Full Open

NOTE - Compressor is energized after damper has been at full open for three minutes.

NOTE - Free cooling is locked out when a dehumidification demand is received. The unit operates in dehumidification mode as if the outdoor air is not suitable.

2 - No Economizer or Outdoor Air Not Suitable

Any Demand

- Compressor Modulates
- Blower Variable
- Damper Minimum Position

HEATING

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

W1 or Low Heating Demand

Gas valve is open on low and the supply fan operates at high speed.

W2 or High Heating Demand

Gas valve is open on high and the supply fan operates at high speed.

SEQUENCE OF OPERATION

HUMIDITROL™+

A - Thermostat Mode With 24V Humidistat

Dehumidification Demand (DI4) and No Cooling Demand

Compressor operates at 100%, blower and outdoor fan modulate to maintain indoor coil and discharge air temperatures, reheat valve is energized.

Y1 and DI4 Demand

Compressor is modulating, blower is on low, and the reheat valve is de-energized.

Y2 and DI4 Demand

Compressor is modulating, blower is on high, reheat valve is de-energized.

B - Thermostat Mode With Zone Relative Humidity Sensor

Dehumidification Demand (Zone Relative Humidity is greater than the relative humidity setpoint) and No Cooling Demand

Compressor modulates based on zone relative humidity, blower and outdoor fan modulate to maintain indoor coil and discharge air temperatures, reheat valve is energized.

Y1 and Dehumidification Demand

Compressor is modulating, blower is on low, and the reheat valve is de-energized.

Y2 and Dehumidification Demand

Compressor is modulating, blower is on high, reheat valve is de-energized.

C - Zone Sensor Mode With Humidistat

Dehumidification Demand (DI4) and No Cooling Demand

Compressor operates at 100%, blower and outdoor fan modulate to maintain indoor coil and discharge air temperatures, reheat valve is energized.

Cooling and Dehumidification Demand

Compressor is modulating, blower is modulating, reheat valve is de-energized.

D - Zone Sensor Mode With Zone Relative Humidity Sensor

Dehumidification Demand (Zone Relative Humidity is greater than the relative humidity setpoint) and No Cooling Demand

Compressor modulates based on zone relative humidity, blower and outdoor fan modulate to maintain indoor coil and discharge air temperatures, reheat valve is energized.

Cooling and Dehumidification Demand

Compressor is modulating, blower is modulating, and the reheat valve is de-energized.

OPTIONS / ACCESSORIES

Item	Catalog Number	Unit Model Number			
		036	048	060	074
COOLING SYSTEM					
Condensate Drain Trap	PVC	22H54	OX	OX	OX
	Copper	76W27	X	X	X
Drain Pan Overflow Switch		21Z07	OX	OX	OX
Service Valves (not for Humiditrol™+ equipped units)	Factory	O	O	O	O
HEATING SYSTEM					
Bottom Gas Piping Kit		19W50	OX	OX	OX
Combustion Air Intake Extensions		19W51	X	X	X
Gas Heat Input	Standard Two-Stage - 53/65 kBtuh input	Factory	O	O	O
	Medium Two Stage - 81/108 kBtuh input	Factory	O	O	O
	High Two-Stage - 113/150 kBtuh input	Factory	O	O	O
Low Temperature Vestibule Heater	208/230V-3ph	21Z17	X	X	X
	460V-3ph	21Z18	X	X	X
	575V-3ph	21Z19	X	X	X
LPG/Propane Conversion Kits	For two-stage standard models	21Z24	X	X	X
	For two-stage medium and high models	21Z23	X	X	X
Stainless Steel Heat Exchanger	Factory	O	O	O	O
Vertical Vent Extension		31W62	X	X	X
BLOWER - SUPPLY AIR					
Motors	DirectPlus™ Direct Drive ECM Blower System with MSAV®	Factory	O	O	O
	DirectPlus™ Direct Drive ECM Blower System with VAV	Factory	O	O	O
CABINET					
Combination Coil/Hail Guards		13T03	OX	OX	OX
Corrosion Protection (indoor coil / outdoor coil)	Factory	O	O	O	O
CONTROLS					
Commercial Controls	Lennox® CORE Control System - LonTalk® Module	54W27	OX	OX	OX
	CPC Einstein Integration	Factory	O	O	O
	Novar® LSE	Factory	O	O	O
Dirty Filter Switch		53W66	OX	OX	OX
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
ELECTRICAL					
Voltage 60 Hz	208/230V - 3ph	Factory	O	O	O
	460V - 3ph	Factory	O	O	O
	575V-3ph	Factory	O	O	O
HACR Circuit Breakers		Factory	O	O	O
¹ Short-Circuit Current Rating (SCCR) of 100kA (includes Phase/Voltage Detection)		Factory	O	O	O
Disconnect Switch	80 amp	22A25	OX	OX	OX
GFI Service Outlets	15 amp non-powered, field-wired (208/230V, 460V only)	74M70	OX	OX	OX
	20 amp non-powered, field-wired (575V only)	67E01	OX	OX	OX
Weatherproof Cover for GFI		10C89	X	X	X
Phase/Voltage Detection - 3 Phase Models Only	Factory	O	O	O	O

¹ Disconnect Switch is furnished and factory installed with High SCCR option.

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).

OPTIONS / ACCESSORIES

Item	Catalog Number	Unit Model Number				
		036	048	060	074	
ECONOMIZER						
High Performance Economizer With Outdoor Air Hood (Sensible Control) (Approved for California Title 24 Building Standards / AMCA Class 1A Certified)						
High Performance Economizer - Includes Barometric Relief Dampers and Combination Hood	20H48	OX	OX	OX	OX	
High Performance Economizer - No Exhaust Option	Factory	O	O	O	O	
Economizer Accessories						
Horizontal Economizer Conversion Kit	17W45	X	X	X	X	
Economizer Controls						
Differential Enthalpy (Not for Title 24)	Order 2	21Z09	OX	OX	OX	
Sensible Control	Sensor is Furnished	Factory	O	O	O	
Single Enthalpy (Not for Title 24)		21Z09	OX	OX	OX	
Outdoor Air CFM Control		13J76	X	X	X	
Global Control	Sensor Field Provided	Factory	O	O	O	
Building Pressure Control		13J77	X	X	X	
POWER EXHAUST FAN						
Standard Static	208/230V-3ph	21Z13	OX	OX	OX	
<i>NOTE - Factory installed Power Exhaust Fan requires "Barometric Relief Dampers for Power Exhaust Kit" for field installation. See below.</i>	460V-3ph	21Z14	OX	OX	OX	
	575V-3ph	21Z15	OX	OX	OX	
BAROMETRIC RELIEF						
¹ Barometric Relief Dampers for Power Exhaust Kit		21Z21	X	X	X	
² Horizontal Barometric Relief Dampers With Exhaust Hood		19F01	X	X	X	
OUTDOOR AIR						
Outdoor Air Dampers With Outdoor Air Hood						
Motorized		15D17	OX	OX	OX	
Manual		15D18	X	X	X	
HUMIDITROL™+ HOT GAS REHEAT OPTION						
Humiditrol™+ Dehumidification Option	Factory	O	O	O	O	

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

² Required when Economizer is configured for horizontal airflow.

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).

OPTIONS / ACCESSORIES

Item	Catalog Number	Unit Model Number				
		036	048	060	074	
INDOOR AIR QUALITY						
Air Filters						
Healthy Climate® High Efficiency Air Filters 20 x 20 x 2 in.	MERV 8 (Order 4)	54W21	OX	OX	OX	
	MERV 13 (Order 4)	52W39	OX	OX	OX	
	MERV 16 (Order 4)	21U40	OX	OX	OX	
Replaceable Media Filter With Metal Mesh Frame 20 x 20 x 2 in. (includes non-pleated filter media)	(Order 4)	44N60	X	X	X	
Needlepoint Bipolar Ionization (NPBI)						
Needlepoint Bipolar Ionization Kit		21U35	X	X	X	
Indoor Air Quality (CO₂) Sensors						
Sensor - Wall-mount, off-white plastic cover with LCD display		77N39	X	X	X	
Sensor - Wall-mount, off-white plastic cover, no display		23V86	X	X	X	
Sensor - Black plastic case with LCD display, rated for plenum mounting		87N52	X	X	X	
Sensor - Wall-mount, black plastic case, no display, rated for plenum mounting		87N54	X	X	X	
CO ₂ Sensor Duct Mounting Kit - for downflow applications		85L43	X	X	X	
Aspiration Box - for duct mounting non-plenum rated CO ₂ sensors (77N39)		90N43	X	X	X	
UVC Germicidal Lamps						
¹ Healthy Climate® UVC Light Kit (110/230V-1ph)		21A92	X	X	X	
Step-Down Transformer	460V primary, 230V secondary	10H20	X	X	X	
	575V primary, 230V secondary	10H21	X	X	X	
ROOF CURBS						
Hybrid Roof Curbs, Downflow						
8 in. height		11F50	X	X	X	
14 in. height		11F51	X	X	X	
18 in. height		11F52	X	X	X	
24 in. height		11F53	X	X	X	
Adjustable Pitched Curb						
14 in. height		43W27	X	X	X	
Transition Curb						
Matches Model L™ 036-074 Units to existing L Series® Curbs		31B05	X	X	X	
CEILING DIFFUSERS						
Step-Down - Order one	RTD11-95S	13K61	X	X	X	
Flush - Order one	FD11-95S	13K56	X	X	X	
Transitions (Supply and Return) - Order one	T1TRAN20N-1	17W54	X	X	X	

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).

SPECIFICATIONS		UNIT			
General Data	Nominal Tonnage	3 Ton	4 Ton	5 Ton	6 Ton
	Efficiency Type	Ultra-High	Ultra-High	Ultra-High	Ultra-High
	Model Number	LGM036U4E	LGM048U4E	LGM060U4E	LGM074U4E
	Blower Type	DirectPlus™ ECM Direct Drive with MSAV®	DirectPlus™ ECM Direct Drive with MSAV®	DirectPlus™ ECM Direct Drive with MSAV®	DirectPlus™ ECM Direct Drive with MSAV®
	Model Number	LGM036U4P	LGM048U4P	LGM060U4P	LGM074U4P
	Blower Type	DirectPlus™ ECM Direct Drive with VAV	DirectPlus™ ECM Direct Drive with VAV	DirectPlus™ ECM Direct Drive with VAV	DirectPlus™ ECM Direct Drive with VAV
	Gross Cooling Capacity - Btuh	34,600	47,000	58,500	71,000
	Net Cooling Capacity - Btuh	34,000	46,000	57,000	69,000
Cooling Performance	AHRI Rated Air Flow - cfm	1200	1550	1800	2150
	Total Unit Power - kW	2.3	3.3	4.4	5.8
	SEER (Btuh/Watt) - 208/230V-3ph	¹ 22.5	¹ 21.0	¹ 20.0	---
	SEER (Btuh/Watt) - 460V-3ph	¹ 22.0	¹ 20.2	¹ 19.5	---
	SEER (Btuh/Watt) - 575V-3ph	¹ 22.0	¹ 20.2	¹ 19.5	---
	IEER (Btuh/Watt) - 208/230V-3ph	---	---	---	² 23.3
	IEER (Btuh/Watt) - 460V-3ph	---	---	---	² 23.3
	IEER (Btuh/Watt) - 575V-3ph	---	---	---	² 23.3
	EER (Btuh/Watt) - 208/230V-3ph	¹ 15.0	¹ 14.0	¹ 13.0	² 12.0
	EER (Btuh/Watt) - 460V-3ph	¹ 14.5	¹ 13.7	¹ 12.5	² 12.0
	EER (Btuh/Watt) - 575V-3ph	¹ 14.5	¹ 13.7	¹ 12.5	² 12.0
Refrigerant Charge	Refrigerant Type	R-410A	R-410A	R-410A	R-410A
	Without Reheat Option	17 lbs. 0 oz.	17 lbs. 0 oz.	16 lbs. 8 oz.	16 lbs. 8 oz.
	With Reheat Option	17 lbs. 2 oz.	17 lbs. 2 oz.	16 lbs. 13 oz.	16 lbs. 13 oz.
Gas Heating Options		Standard (2 stage) Medium (2 stage)	Standard (2 stage) Medium (2 stage) High (2 Stage)		
Compressor Type (Number)					
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 Fans	Motor - (No.) HP	(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 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	1 in. NPT coupling			
Expansion device type					
Indoor Blower	Nominal motor output	1.5 HP (ECM)	1.5 HP (ECM)	1.5 HP (ECM)	1.5 HP (ECM)
	Blower wheel nominal diameter x width - in.	(1) 14 x 5	(1) 14 x 5	(1) 14 x 5	(1) 14 x 5
Filters	Type of filter	MERV 4, Disposable			
	Number and size - in.	(4) 20 x 20 x 2			
Electrical characteristics		208/230V, 460V, or 575V - 60 hz -3 phase			

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

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

SPECIFICATIONS

GAS HEAT

Model No.	036, 048 060, 074	036, 048 060, 074	048 060, 074
Heat Input Type	Standard (2 Stage)	Medium (2 Stage)	High (2 Stage)
Input Btuh	1st Stage	53,000	81,000
	2nd Stage	65,000	108,000
Output Btuh	1st Stage	43,000	66,000
	2nd Stage	52,000	87,000
Temperature Rise Range - °F	1st stage	5 - 35	25 - 55
	2nd Stage	15 - 45	30 - 70
Thermal Efficiency	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 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 2% for each 1000 ft. 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 (2 stage)	2001 - 4500	3.0/1.7	9.0/5.1	60,000 / 49,000
Medium (2 stage)	2001 - 4500	3.0/1.7	9.0/5.1	100,000 / 75,000
High (2 stage)	2001 - 4500	3.0/1.7	9.0/5.1	139,000 / 104,000

COOLING 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 - LGM036U4

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)				
	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	

COOLING 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 - LGM048U4

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 - LGM060U4

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 - LGM074U4

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

HUMIDITROL™+ SYSTEM RATINGS

3 TON - LGM036U4E WITH HUMIDITROL™+ OPERATING

Entering Wet Bulb Tempera- ture	Outdoor Air Temperature Entering Outdoor Coil																							
	65°F						75°F						85°F						95°F					
	Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	cfm	kBtuh	kW	75°F	80°F	85°F	cfm	kBtuh	kW	75°F	80°F	85°F	cfm	kBtuh	kW	75°F	80°F	85°F
63°F	710	15.5	1.5	0.37	0.61	0.84	675	11.4	1.7	0.25	0.55	0.79	635	7.8	1.9	0.07	0.41	0.76	600	5.1	2.1	-0.11	0.22	0.74
67°F	570	18.6	1.5	0.21	0.35	0.51	555	15.5	1.7	0.17	0.24	0.45	530	12.2	1.9	0.08	0.09	0.36	520	10.1	1.9	-0.24	0.06	0.32
71°F	500	21.7	1.6	0.13	0.23	0.35	500	18.9	1.8	0.12	0.14	0.26	500	16.7	1.9	0.00	0.13	0.20	500	13.8	1.9	-0.20	0.01	0.17

NOTE - Compressor operating at maximum Hz., indoor blower operating at optimal CFM and outdoor fan operating to maintain a discharge air temperature target equal to indoor dry bulb temperature.

4 TON - LGM048U4E WITH HUMIDITROL™+ OPERATING

Entering Wet Bulb Tempera- ture	Outdoor Air Temperature Entering Outdoor Coil																							
	65°F						75°F						85°F						95°F					
	Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	cfm	kBtuh	kW	75°F	80°F	85°F	cfm	kBtuh	kW	75°F	80°F	85°F	cfm	kBtuh	kW	75°F	80°F	85°F
63°F	930	19.8	2.4	0.30	0.54	0.78	730	16.4	2.6	0.15	0.47	0.76	760	11.1	2.8	-0.04	0.29	0.61	730	8.5	3.1	-0.04	0.16	0.50
67°F	725	23.0	2.4	0.14	0.31	0.44	660	18.0	2.7	0.01	0.21	0.37	600	15.8	2.9	0.02	0.08	0.26	585	14.3	3.2	-0.03	0.07	0.09
71°F	555	25.1	2.5	0.07	0.19	0.29	525	21.8	2.8	0.01	0.12	0.20	495	19.4	3.1	0.01	0.01	0.11	730	17.5	3.2	-0.06	0.00	0.02

NOTE - Compressor operating at maximum Hz., indoor blower operating at optimal CFM and outdoor fan operating to maintain a discharge air temperature target equal to indoor dry bulb temperature.

5 TON - LGM060U4E WITH HUMIDITROL™+ OPERATING

Entering Wet Bulb Tempera- ture	Outdoor Air Temperature Entering Outdoor Coil																							
	65°F						75°F						85°F						95°F					
	Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	cfm	kBtuh	kW	75°F	80°F	85°F	cfm	kBtuh	kW	75°F	80°F	85°F	cfm	kBtuh	kW	75°F	80°F	85°F
63°F	1300	22.4	3.2	0.30	0.56	0.80	1210	19.1	3.4	0.27	0.83	0.83	1240	14.1	3.7	0.21	0.42	0.83	1140	9.9	3.7	-0.02	0.10	0.82
67°F	1085	26.5	3.3	0.08	0.24	0.48	800	22.9	3.6	0.06	0.22	0.31	1000	20.4	3.6	0.00	0.22	0.39	995	16.6	3.5	-0.28	0.00	0.40
71°F	865	32.0	3.4	0.09	0.04	0.22	740	30.6	3.4	0.09	0.09	0.21	830	28.6	3.4	-0.06	0.09	0.20	750	21.1	3.6	-0.26	-0.05	0.10

NOTE - Compressor operating at maximum Hz., indoor blower operating at optimal CFM and outdoor fan operating to maintain a discharge air temperature target equal to indoor dry bulb temperature.

6 TON - LGM074U4E WITH HUMIDITROL™+ OPERATING

Entering Wet Bulb Tempera- ture	Outdoor Air Temperature Entering Outdoor Coil																							
	65°F						75°F						85°F						95°F					
	Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	cfm	kBtuh	kW	75°F	80°F	85°F	cfm	kBtuh	kW	75°F	80°F	85°F	cfm	kBtuh	kW	75°F	80°F	85°F
63°F	1300	24.8	4.1	0.28	0.44	0.71	1310	21.0	4.4	0.27	0.40	0.69	1310	18.0	4.5	0.18	0.39	0.66	1310	13.3	4.5	-0.18	0.28	0.69
67°F	1220	32.0	4.3	0.17	0.22	0.41	1210	29.7	4.5	0.17	0.22	0.36	1185	25.0	4.4	0.02	0.21	0.36	1130	19.9	4.4	-0.26	0.00	0.34
71°F	1020	39.4	4.4	0.12	0.16	0.22	985	36.9	4.3	0.07	0.14	0.21	980	32.1	4.2	-0.07	0.08	0.20	910	25.4	4.5	-0.29	-0.07	0.10

NOTE - Compressor operating at maximum Hz., indoor blower operating at optimal CFM and outdoor fan operating to maintain a discharge air temperature target equal to indoor dry bulb temperature.

BLOWER DATA

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

3 | 4 TON

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 32 for blower motors and drives and wet coil and options/accessory air resistance data.

DOWNFLOW

Total Air Volume cfm	Total Static Pressure - in. w.g.									
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM
400	686	18	789	39	---	---	---	---	---	---
500	761	33	860	52	957	68	---	---	---	---
600	840	46	937	64	1031	80	1112	91	---	---
700	926	60	1020	77	1110	92	1190	105	1258	117
800	1022	73	1110	90	1195	105	1272	119	1338	133
900	1126	88	1207	104	1286	119	1358	135	1421	150
1000	1237	103	1310	120	1381	136	1447	153	1507	171
1100	1352	120	1417	138	1481	156	1541	174	1597	194
1200	1468	141	1527	159	1583	179	1637	200	1688	222
1300	1584	164	1636	185	1687	206	1736	230	1783	255
1400	1697	191	1744	215	1790	240	1834	266	1877	293
1500	1802	227	1846	253	1888	280	1930	308	1970	336
1600	1903	271	1944	298	1984	326	2024	354	2062	380
1700	2007	319	2045	346	2083	373	2120	399	2157	423
1800	2115	363	2151	390	2186	416	2221	442	2256	466
1900	2234	394	2265	422	2296	450	2328	478	2359	505
2000	2345	434	2371	466	2399	498	2426	530	2455	562
2100	2435	502	2459	537	2484	572	2511	606	2539	641
2200	2535	587	2535	623	2561	658	2588	694	2618	728
2300	2586	672	2612	707	2640	741	2669	776	2700	809

Total Air Volume cfm	Total Static Pressure - in. w.g.									
RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM
1100	2028	415	2072	438	---	---	---	---	---	---
1200	2095	449	2138	473	2183	497	2229	522	2274	550
1300	2165	486	2206	510	2249	535	2293	562	2337	591
1400	2239	523	2279	549	2320	576	2361	605	2402	636
1500	2317	563	2355	592	2393	623	2432	656	2471	689
1600	2396	612	2432	645	2468	679	2505	714	2542	748
1700	2477	672	2512	707	2547	742	2583	777	2619	812
1800	2565	737	2599	772	2634	808	2670	842	2705	877
1900	2656	806	2691	841	2727	876	2762	911	2798	945
2000	2749	879	2785	913	2820	947	2855	981	2890	1015
2100	2840	953	2876	987	2911	1020	2946	1053	2981	1087
2200	2930	1028	2965	1061	3000	1094	3035	1128	3069	1161
2300	3017	1104	3052	1137	3087	1170	---	---	---	---

Total Static Pressure - in. w.g.

Total Air Volume cfm	Total Static Pressure - in. w.g.									
RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM
1100	2028	415	2072	438	---	---	---	---	---	---
1200	2095	449	2138	473	2183	497	2229	522	2274	550
1300	2165	486	2206	510	2249	535	2293	562	2337	591
1400	2239	523	2279	549	2320	576	2361	605	2402	636
1500	2317	563	2355	592	2393	623	2432	656	2471	689
1600	2396	612	2432	645	2468	679	2505	714	2542	748
1700	2477	672	2512	707	2547	742	2583	777	2619	812
1800	2565	737	2599	772	2634	808	2670	842	2705	877
1900	2656	806	2691	841	2727	876	2762	911	2798	945
2000	2749	879	2785	913	2820	947	2855	981	2890	1015
2100	2840	953	2876	987	2911	1020	2946	1053	2981	1087
2200	2930	1028	2965	1061	3000	1094	3035	1128	3069	1161
2300	3017	1104	3052	1137	3087	1170	---	---	---	---

3 | 4 TON

BLOWER DATA 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 32 for blower motors and drives and wet coil and options/accessory air resistance data.

HORIZONTAL

Total Static Pressure - in. w.g.									
Total Air Volume cfm	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts
400	673	18	---	---	---	---	---	---	---
500	754	33	861	53	---	---	---	---	---
600	838	48	942	66	1037	80	---	---	---
700	928	61	1027	78	1118	92	1192	104	---
800	1023	75	1117	91	1204	106	1276	119	1339
900	1125	89	1212	105	1293	121	1362	136	1424
1000	1232	104	1311	121	1386	138	1452	155	1512
1100	1341	121	1413	139	1481	158	1544	178	1602
1200	1452	141	1518	161	1580	182	1638	205	1694
1300	1564	164	1623	187	1680	211	1735	237	1788
1400	1673	192	1728	219	1781	247	1832	276	1882
1500	1778	229	1829	259	1879	289	1928	320	1974
1600	1881	274	1930	304	1978	336	2024	367	2067
1700	1987	321	2033	352	2078	382	2122	412	2163
1800	2096	367	2139	397	2182	426	2224	456	2264
1900	2208	396	2248	429	2288	461	2328	493	2367
2000	2318	437	2356	474	2394	511	2431	549	2469
2100	2424	505	2461	546	2497	587	2533	628	2568
2200	2530	582	2566	623	2602	664	2636	705	2670
2300	2638	659	2672	700	2707	741	2740	781	2773
Total Air Volume cfm	1.4	1.5	1.6	1.7	1.8	1.9	2.0		
RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts
1100	---	---	---	---	---	---	---	---	---
1200	2192	497	2234	522	2275	549	---	---	---
1300	2271	542	2312	569	2353	597	2393	626	2431
1400	2353	591	2392	621	2431	652	2470	683	2507
1500	2436	646	2474	679	2512	712	2549	746	2585
1600	2520	709	2557	744	2593	779	2628	815	2663
1700	2605	778	2640	815	2675	852	2709	889	2742
1800	2690	857	2723	895	2757	933	2790	970	2822
1900	2775	941	2808	979	2841	1016	2873	1053	2905
2000	2865	1021	2898	1058	2930	1096	2963	1132	2995
2100	2961	1097	2993	1135	3025	1172	3057	1208	3089
2200	3059	1173	3091	1211	3122	1248	3154	1284	3221
2300	---	---	---	---	---	---	---	---	---

Total Static Pressure - in. w.g.									
Total Air Volume cfm	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts
400	673	18	---	---	---	---	---	---	---
500	754	33	861	53	---	---	---	---	---
600	838	48	942	66	1037	80	---	---	---
700	928	61	1027	78	1118	92	1192	104	---
800	1023	75	1117	91	1204	106	1276	119	1339
900	1125	89	1212	105	1293	121	1362	136	1424
1000	1232	104	1311	121	1386	138	1452	155	1512
1100	1341	121	1413	139	1481	158	1544	178	1602
1200	1452	141	1518	161	1580	182	1638	205	1694
1300	1564	164	1623	187	1680	211	1735	237	1788
1400	1673	192	1728	219	1781	247	1832	276	1882
1500	1778	229	1829	259	1879	289	1928	320	1974
1600	1881	274	1930	304	1978	336	2024	367	2067
1700	1987	321	2033	352	2078	382	2122	412	2163
1800	2096	367	2139	397	2182	426	2224	456	2264
1900	2208	396	2248	429	2288	461	2328	493	2367
2000	2318	437	2356	474	2394	511	2431	549	2469
2100	2424	505	2461	546	2497	587	2533	628	2568
2200	2530	582	2566	623	2602	664	2636	705	2670
2300	2638	659	2672	700	2707	741	2740	781	2773
Total Air Volume cfm	1.4	1.5	1.6	1.7	1.8	1.9	2.0		
RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts
1100	---	---	---	---	---	---	---	---	---
1200	2192	497	2234	522	2275	549	---	---	---
1300	2271	542	2312	569	2353	597	2393	626	2431
1400	2353	591	2392	621	2431	652	2470	683	2507
1500	2436	646	2474	679	2512	712	2549	746	2585
1600	2520	709	2557	744	2593	779	2628	815	2663
1700	2605	778	2640	815	2675	852	2709	889	2742
1800	2690	857	2723	895	2757	933	2790	970	2822
1900	2775	941	2808	979	2841	1016	2873	1053	2905
2000	2865	1021	2898	1058	2930	1096	2963	1132	2995
2100	2961	1097	2993	1135	3025	1172	3057	1208	3089
2200	3059	1173	3091	1211	3122	1248	3154	1284	3221
2300	---	---	---	---	---	---	---	---	---

BLOWER DATA

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

Air Volume cfm	Wet Indoor Coil		Humiditrol™ + Reheat Coil	Gas Heating		Economizer	Filters		
	036, 048	060, 074		Medium Heat	High Heat		MERV 8	MERV 13	MERV 16
800	0.01	---	---	0.02	0.02	0.04	0.04	0.05	0.04
1000	0.02	0.02	0.00	0.02	0.02	0.04	0.04	0.07	0.05
1200	0.03	0.04	0.00	0.02	0.02	0.04	0.04	0.07	0.05
1400	0.04	0.05	0.01	0.02	0.03	0.04	0.04	0.07	0.06
1600	0.05	0.07	0.02	0.03	0.04	0.04	0.04	0.07	0.08
1800	0.06	0.08	0.02	0.04	0.05	0.05	0.04	0.07	0.09
2000	0.08	0.10	0.02	0.04	0.06	0.05	0.05	0.08	0.10
2200	---	0.11	0.04	0.04	0.07	0.05	0.05	0.08	0.11
2400	---	0.13	0.04	0.05	0.08	0.05	0.05	0.08	0.12

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

^¹ Effective throw based on terminal velocities of 75 ft. per minute.

ELECTRICAL DATA

3 TON

	Model No.	LGM036U4E / LGM036U4P		
¹ Voltage - 60Hz		208/230V-3ph	460V-3ph	575V-3ph
Compressor (Inverter)	Rated Load Amps	9.1	5.1	4.1
Outdoor Fan Motor	Full Load Amps (1 ECM)	2.8	1.4	1.1
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	Horsepower	1.5	1.5	1.5
	Full Load Amps	4.4	2.3	2.3
² Maximum Overcurrent Protection (MOCP)	Unit Only	25	15	15
	With (1) 0.33 HP Power Exhaust	30	15	15
³ Minimum Circuit Ampacity (MCA)	Unit Only	19	11	9
	With (1) 0.33 HP Power Exhaust	21	12	10

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

4 TON

	Model No.	LGM048U4E / LGM048U4P		
¹ Voltage - 60Hz		208/230V-3ph	460V-3ph	575V-3ph
Compressor (Inverter)	Rated Load Amps	13.8	6.5	5.5
Outdoor Fan Motor	Full Load Amps (1 ECM)	2.8	1.4	1.1
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	Horsepower	1.5	1.5	1.5
	Full Load Amps	4.4	2.3	2.4
² Maximum Overcurrent Protection (MOCP)	Unit Only	35	15	15
	With (1) 0.33 HP Power Exhaust	40	15	15
³ Minimum Circuit Ampacity (MCA)	Unit Only	25	12	11
	With (1) 0.33 HP Power Exhaust	27	14	12

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

5 TON

	Model No.	LGM060U4E / LGM060U4P		
¹ Voltage - 60Hz		208/230V-3ph	460V-3ph	575V-3ph
Compressor (Inverter)	Rated Load Amps	14.6	7	5.8
Outdoor Fan Motor	Full Load Amps (1 ECM)	2.8	1.4	1.1
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	Horsepower	1.5	1.5	1.5
	Full Load Amps	4.4	2.3	2.4
² Maximum Overcurrent Protection (MOCP)	Unit Only	40	15	15
	With (1) 0.33 HP Power Exhaust	40	20	15
³ Minimum Circuit Ampacity (MCA)	Unit Only	26	13	11
	With (1) 0.33 HP Power Exhaust	28	14	12

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

6 TON

	Model No.	LGM074U4E / LGM074U4P		
¹ Voltage - 60Hz		208/230V-3ph	460V-3ph	575V-3ph
Compressor (Inverter)	Rated Load Amps	16.9	8.3	6.8
Outdoor Fan Motor	Full Load Amps (1 ECM)	2.8	1.4	1.1
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	Horsepower	1.5	1.5	1.5
	Full Load Amps	4.4	2.3	2.4
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	29	15	12
	With (1) 0.33 HP Power Exhaust	31	16	13

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

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		UNIT
	lbs.	kg	lbs.	kg	
036 Base Unit	730	331	772	350	
036 Max. Unit	862	391	922	418	
048 Base Unit	752	341	796	361	
048 Max. Unit	909	412	969	440	
060 Base Unit	774	351	816	370	
060 Max. Unit	933	423	993	450	
074 Base Unit	774	351	816	370	
074 Max. Unit	933	423	993	450	

WEIGHT DATA

OPTIONS / ACCESSORIES

	Shipping Weight	
	lbs.	kg

ECONOMIZER / OUTDOOR AIR / EXHAUST

Economizer

Economizer, Includes Outdoor Air Hood and Barometric Relief Dampers with Hood	131	59
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Outdoor Air Dampers

Motorized	40	18
Manual	30	14

Power Exhaust

Standard Static	35	17
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GAS HEAT

Medium Heat (adder over standard heat)	8	4
High Heat (adder over standard heat)	19	9

COMBINATION COIL/HAIL GUARDS

All models	31	14
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ROOF CURBS

Hybrid Roof, 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
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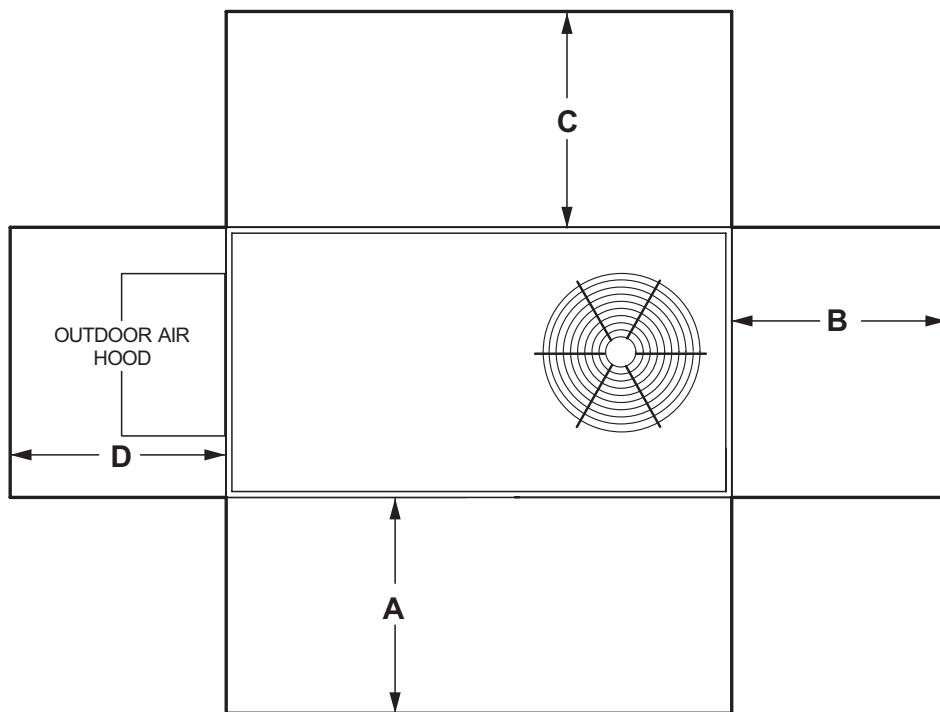
CEILING DIFFUSERS

Step-Down	RTD11-95S	118	54
Flush	FD11-95S	118	54
Transitions	T1TRAN20N-1	21	10

HUMIDITROL™+ DEHUMIDIFICATION SYSTEM

Humiditrol™+ Dehumidification Option (Net Weight)	27	12
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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.

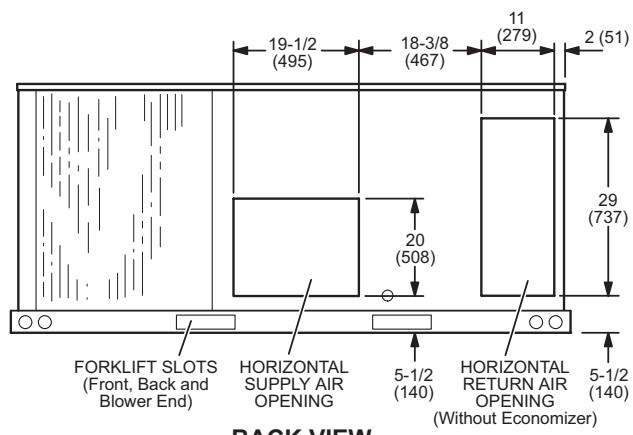
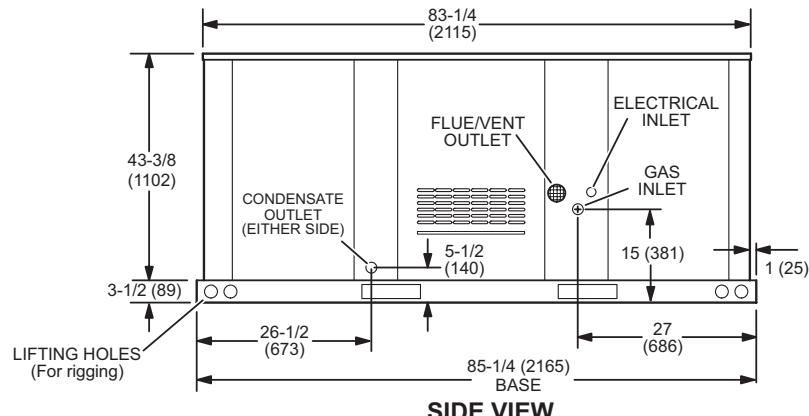
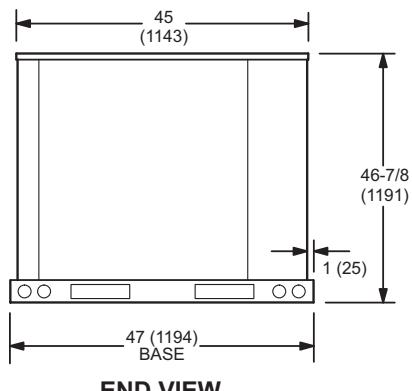
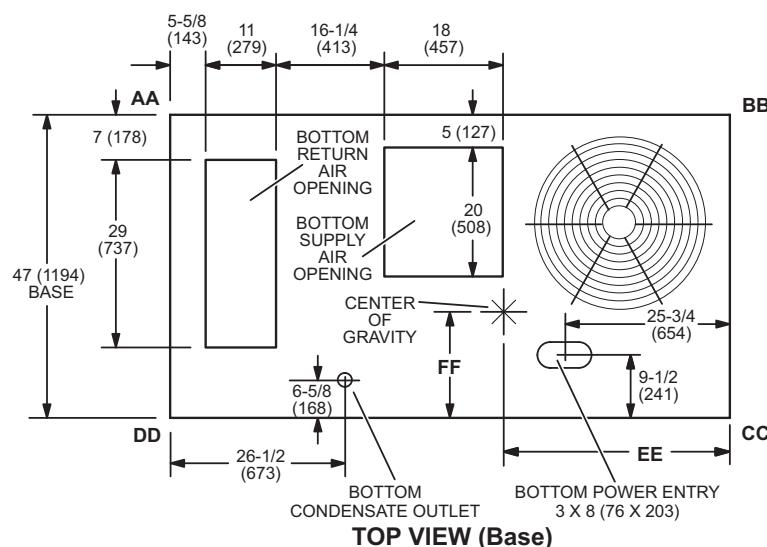
DIMENSIONS

CORNER WEIGHTS

Model No.	AA		BB		CC		DD		EE		FF		UNIT
	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg	in.	mm	in.	mm	
LGM036 Base Unit	134	61	171	78	221	100	174	79	38	953	21	521	
LGM036 Max. Unit	184	83	218	99	282	128	238	108	39	991	21	521	
LGM048 Base Unit	134	61	179	81	232	105	173	78	37	927	21	521	
LGM048 Max. Unit	183	83	218	99	294	133	237	108	38	965	21	521	
LGM060 Base Unit	137	62	183	83	237	108	177	80	37	927	21	521	
LGM060 Max. Unit	187	85	233	106	301	137	242	110	38	965	21	521	
LGM074 Base Unit	137	62	183	83	237	108	177	80	37	927	21	521	
LGM074 Max. Unit	187	85	233	106	301	137	242	110	38	965	21	521	

Base Unit - The unit with NO INTERNAL OPTIONS.

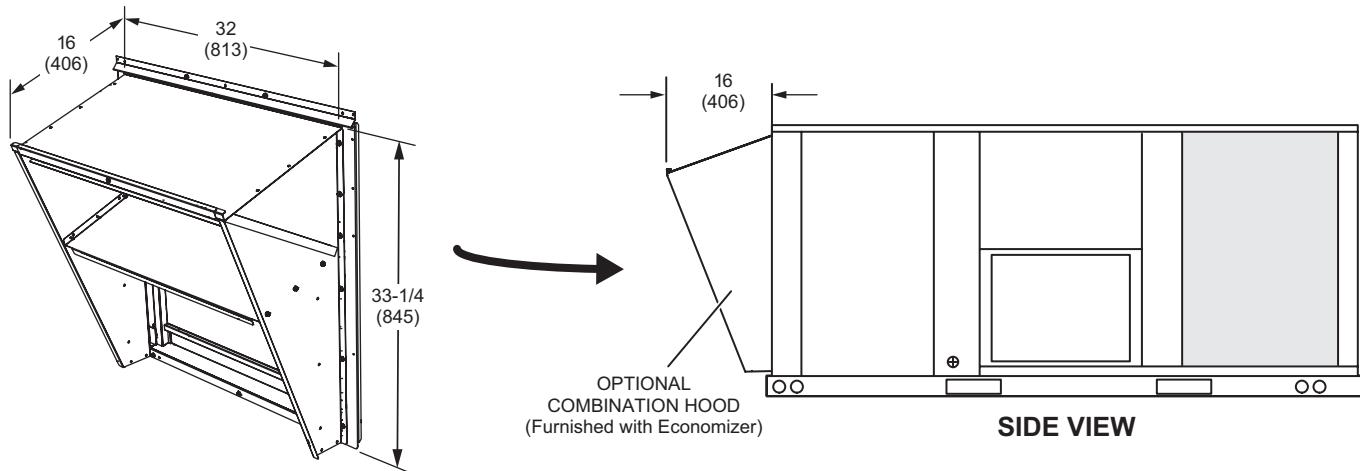
Max. Unit - The unit with ALL INTERNAL OPTIONS Installed. (Economizer, Standard Static Power Exhaust Fans, Controls, etc.). Does not include accessories external to unit or high static power exhaust.



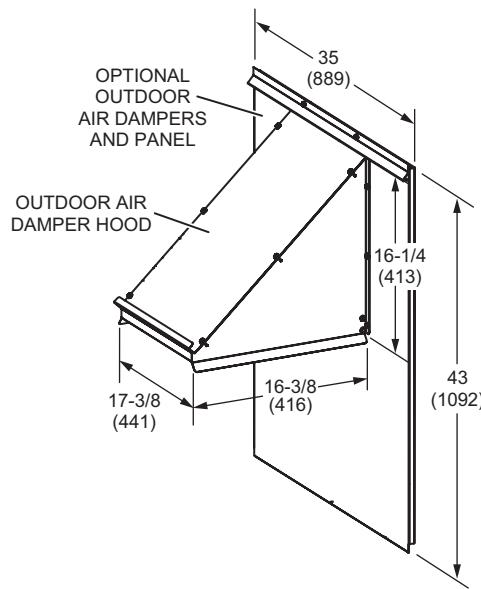
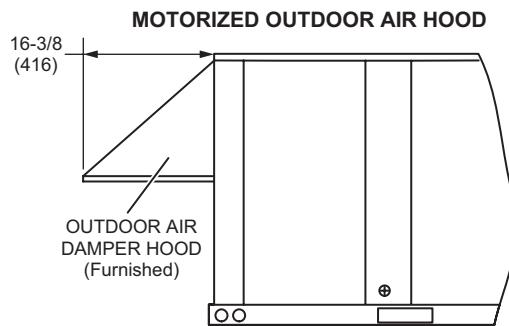
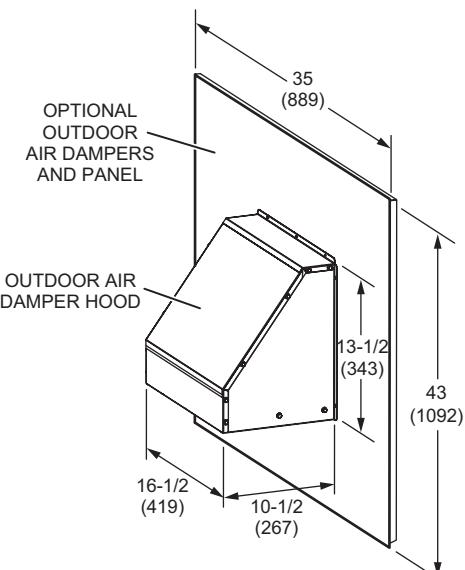
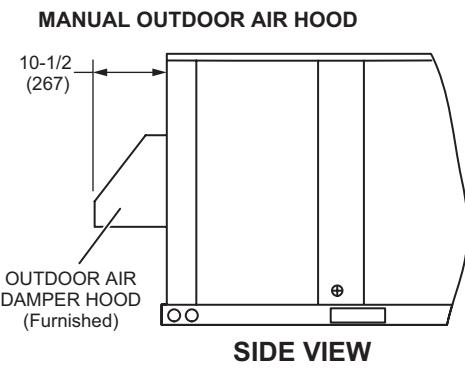
DIMENSIONS

ACCESSORIES

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



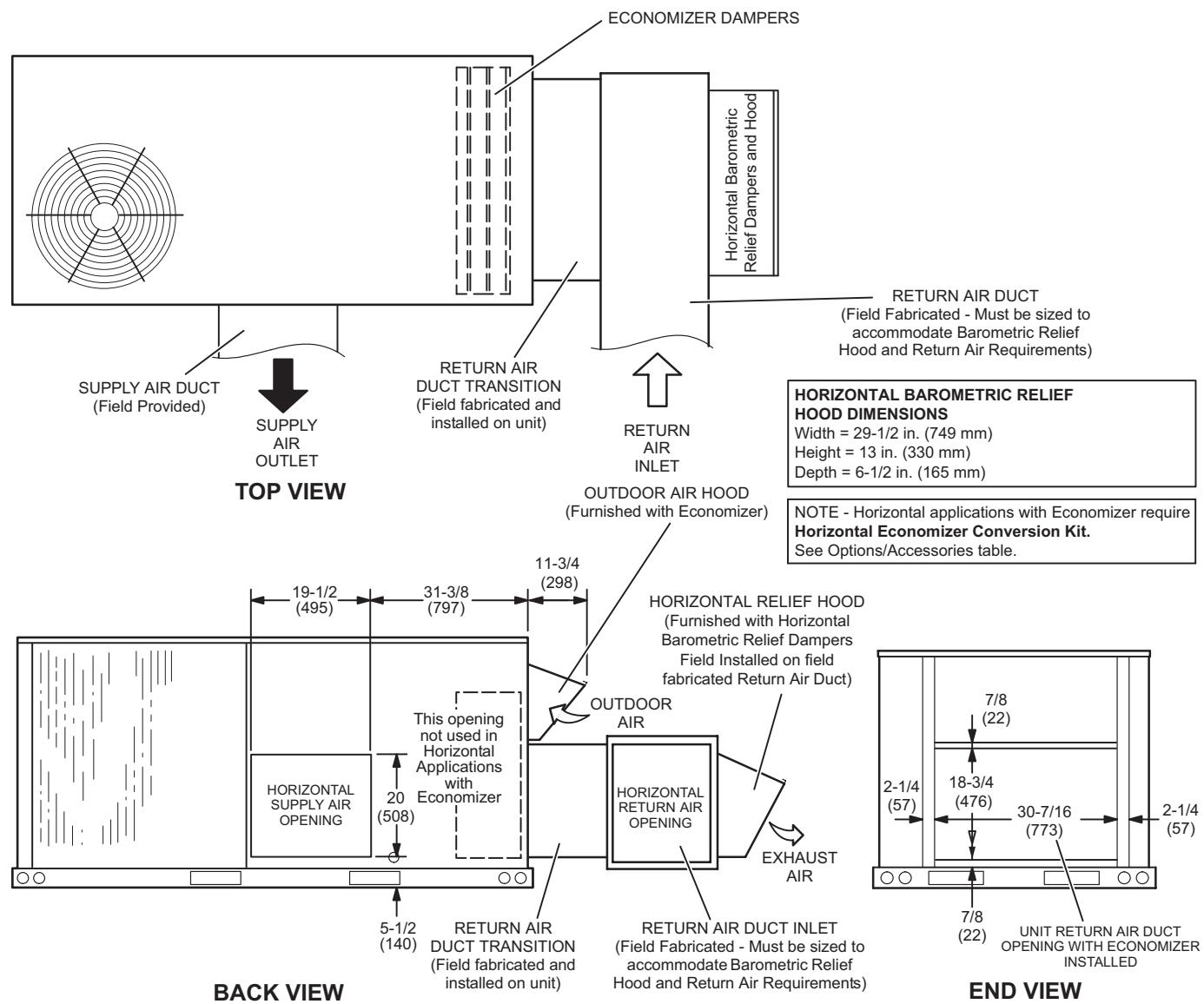
OUTDOOR AIR DAMPER HOOD DETAIL (Downflow or Horizontal Applications)



DIMENSIONS

ACCESSORIES

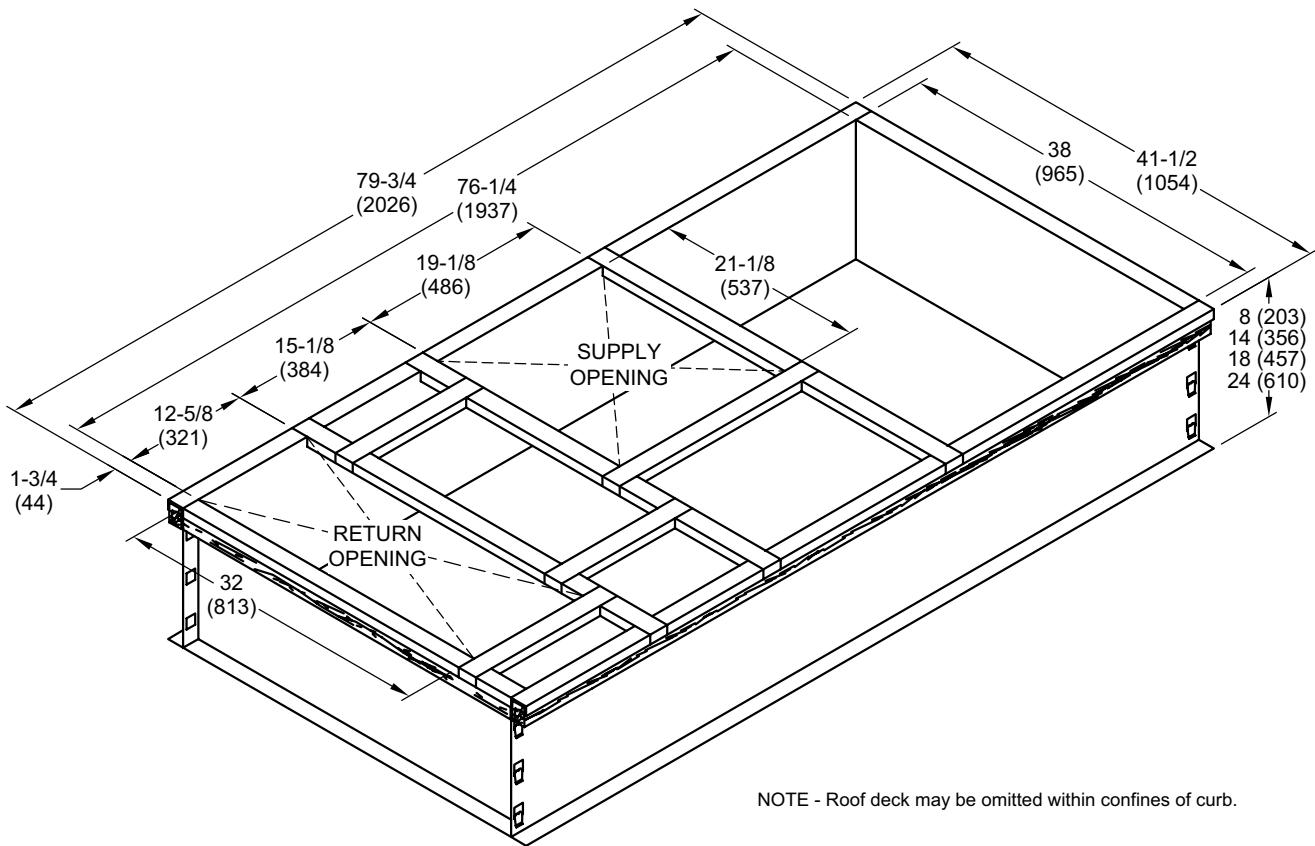
HORIZONTAL ECONOMIZER APPLICATIONS - OUTDOOR AIR HOOD DETAIL WITH OPTIONAL ECONOMIZER DAMPERS AND OPTIONAL HORIZONTAL BAROMETRIC RELIEF DAMPERS AND HOOD



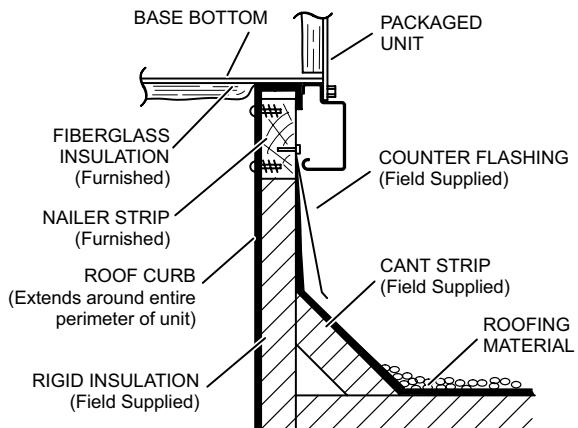
DIMENSIONS

ACCESSORIES

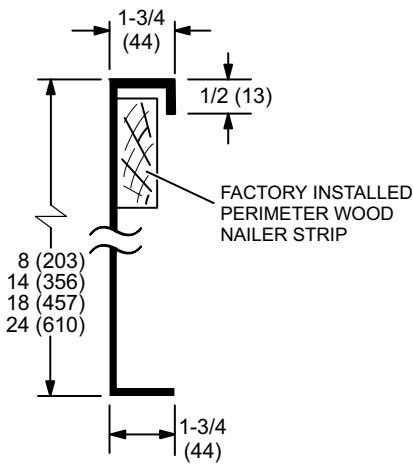
HYBRID ROOF CURBS - DOUBLE DUCT OPENING

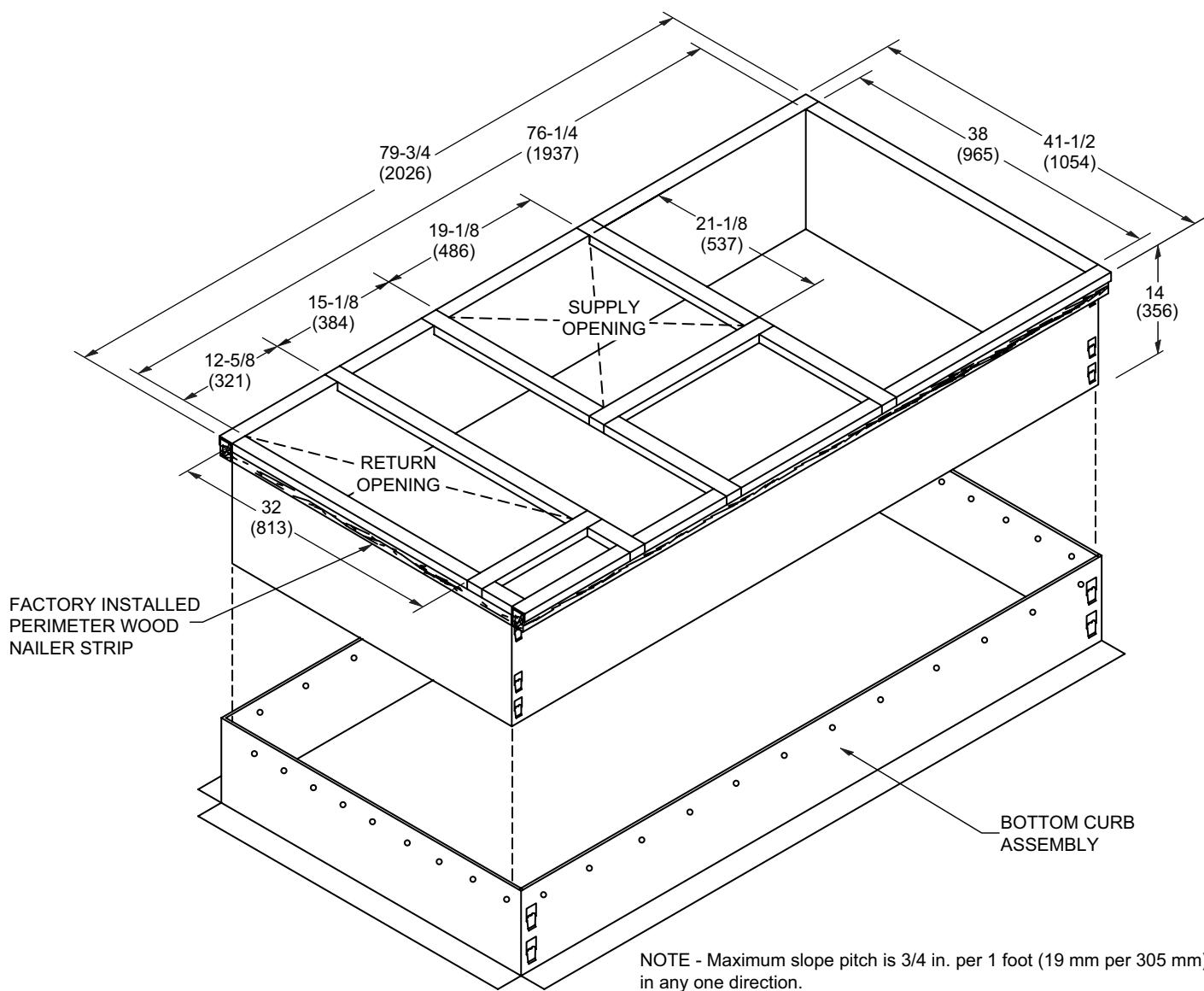
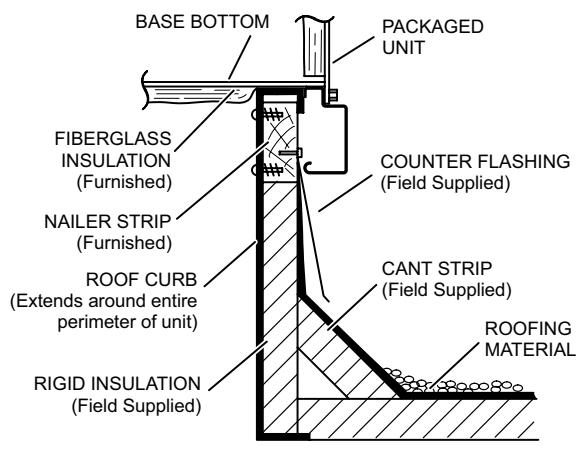
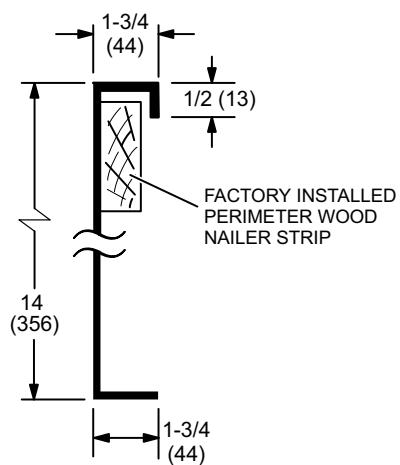


TYPICAL FLASHING DETAIL FOR ROOF CURB



DETAIL ROOF CURB

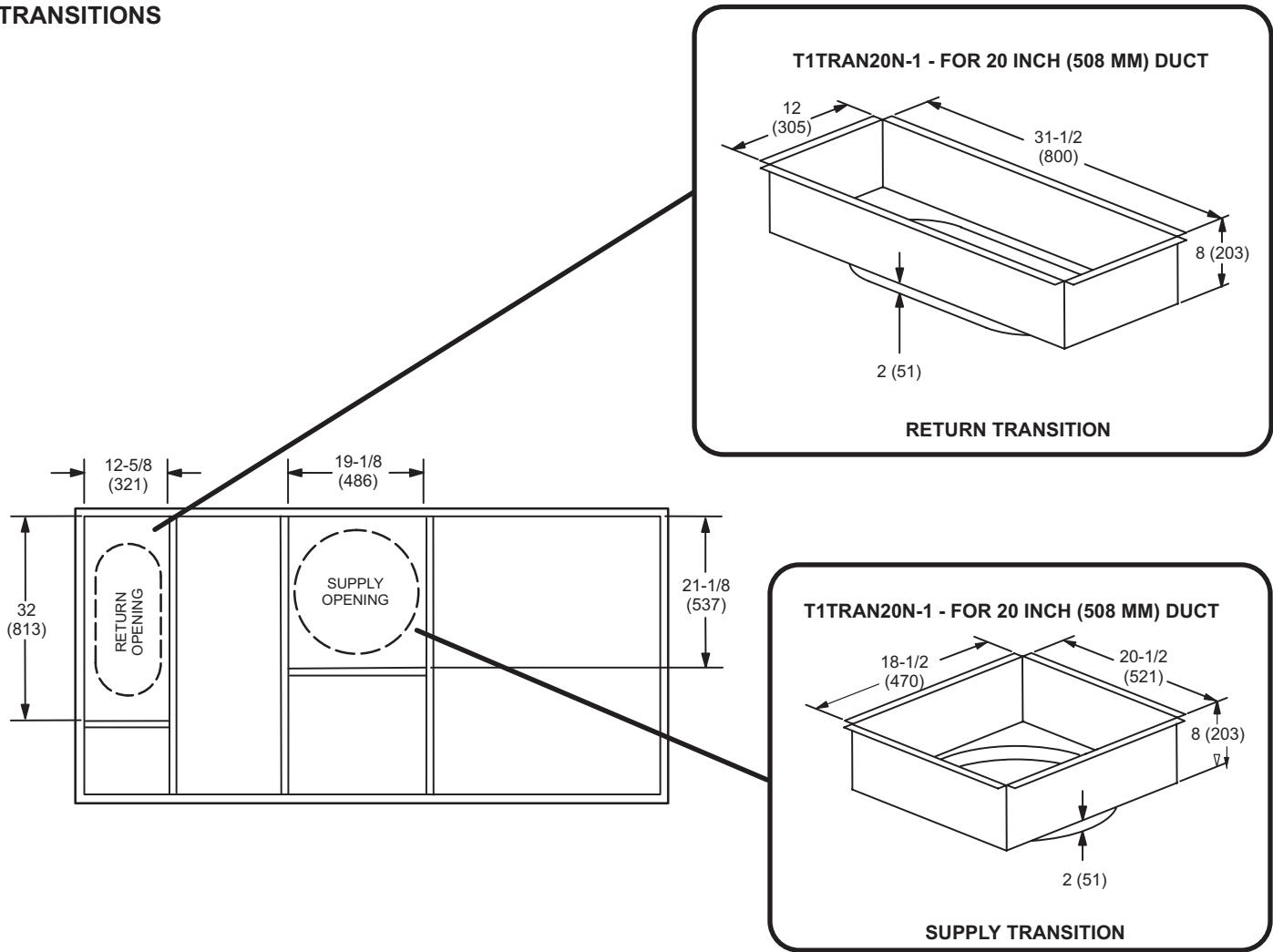


DIMENSIONS**ACCESSORIES****ADJUSTABLE PITCH CURBS - DOUBLE DUCT OPENING****TYPICAL FLASHING DETAIL FOR ROOF CURB****DETAIL ROOF CURB**

DIMENSIONS

ACCESSORIES

TRANSITIONS

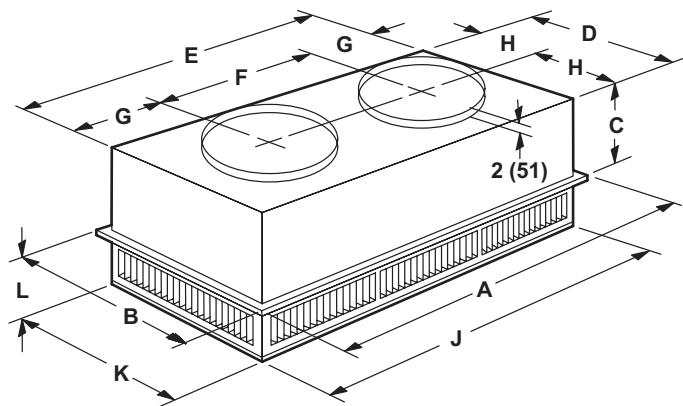


DIMENSIONS

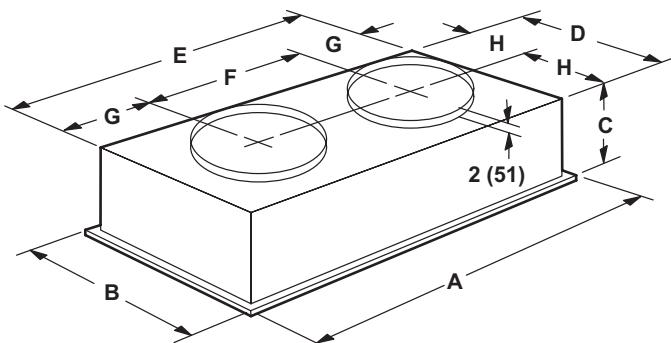
ACCESSORIES

COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

STEP-DOWN CEILING DIFFUSER



FLUSH CEILING DIFFUSER



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

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

REVISIONS

Sections	Description of Change
Options / Accessories	Updated Transition Curb Catalog Number.



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Contact us at 1-800-4-LENNOX

NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability.
Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury.
Installation and service must be performed by a qualified installer and servicing agency.

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