LCM

Model L™ Ultra-High Efficiency Rooftop Units
60 Hz

COMMERCIAL
PRODUCT SPECIFICATIONS

Bulletin No. 210932
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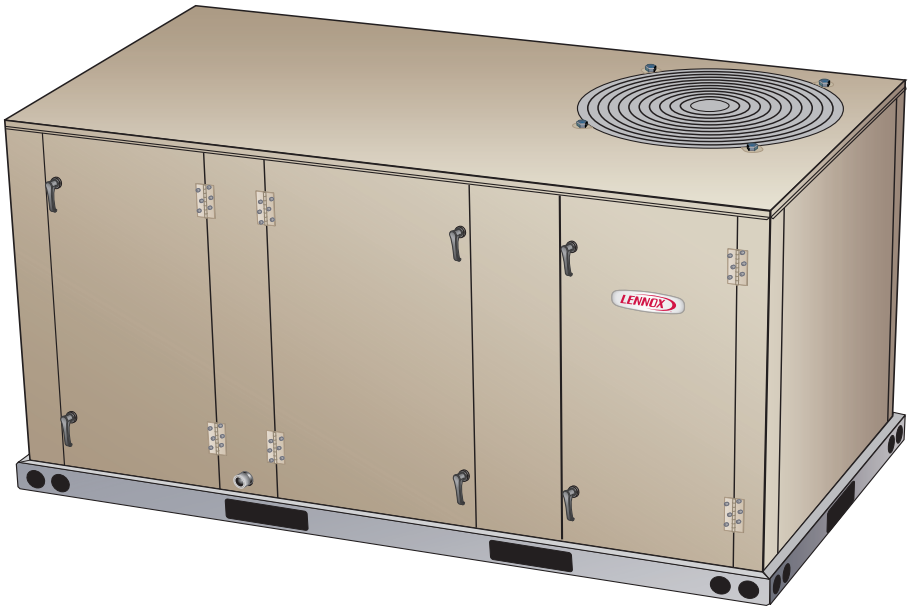


CORE CONTROL SYSTEM

Humiditrol+

SmartWire™ System

ENERGY STAR

ASHRAE 90.1 COMPLIANT

3 to 6 Tons
Net Cooling Capacity - 34,000 to 69,000 Btuh
Optional Electric Heat - 7.5 to 22.5 kW

MODEL NUMBER IDENTIFICATION

L C M 060 U 4 E N 1 Y

Brand/Family
L = Model L™

Unit Type
C = Packaged Electric Cooling w/ optional Electric Heat

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

Refrigerant Type
4 = R-410A

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

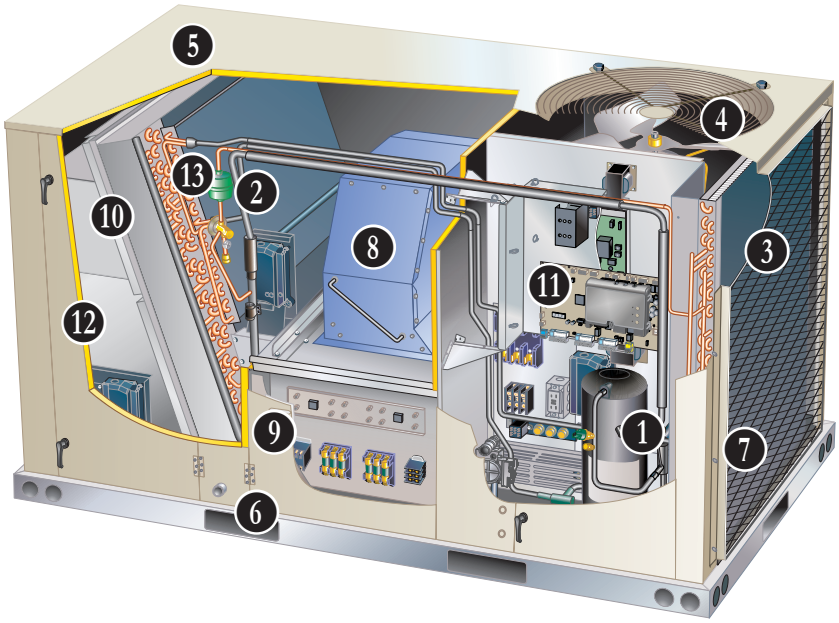
Factory Installed Electric Heat
N = No Heat
C = 7.5 kW Electric Heat
E = 15 kW Electric Heat
G = 22.5 kW Electric Heat

Minor Design Sequence
1 = 1st Revision

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

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. Variable Capacity Scroll Compressor
2. Filter/Drier
3. Condenser Coil
4. Variable-Speed ECM Outdoor Fan
5. Heavy Gauge Steel Cabinet
6. Hinged Access Panels
7. Combination Coil/Hail Guards (option)
8. DirectPlus™ Direct Drive ECM Blower System
9. Electric Heat (option)
10. Air Filters
11. Lennox® CORE Control System
12. Economizer (option)
13. Humiditrol™+ Dehumidification System (option)

CONTENTS

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

- 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

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

1 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)

FEATURES AND BENEFITS

COOLING SYSTEM (continued)

- 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

2 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

3 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

4 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

5 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 Entry
- Electrical 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

FEATURES AND BENEFITS

CABINET (continued)

6 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

7 Combination Coil/Hail Guards
- Heavy gauge steel frame
- Painted to match cabinet
- Expanded metal mesh protects outdoor coil

BLOWER

8 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

FEATURES AND BENEFITS

ELECTRICAL

SmartWire™ System
- Advanced wiring connectors are keyed and color-coded to 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 not available as an option with High SCCR option.

Factory or Field Installed

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

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

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

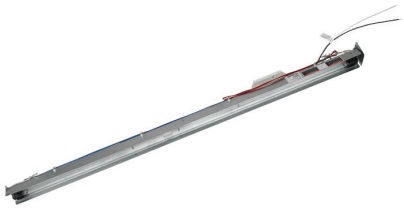
Factory or Field Installed

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

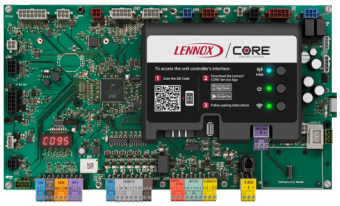
- Replaces existing pleated filter media
- Includes washable metal mesh screen and metal frame with clip for holding replaceable non-pleated filter

Indoor Air Quality (CO_2) Sensors

- Monitors CO_2 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

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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

- Discharge Air Cooling Control
- Full modulation of variable speed compressor for discharge air temperature control in room sensor or thermostat mode
- 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® 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 CO_2 sensors
- Gear-driven action
- High torque 24-volt
- Fully-modulating spring return damper motor
- Return air and outdoor air dampers
- Plug-in connections to unit
- Nylon bearings
- Enhanced thermoplastic vulcanizate (TPV) seals
- Flexible stainless steel jamb seals to minimize air leakage

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 (CO_2 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 (CO_2 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
- 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
- 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
- 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

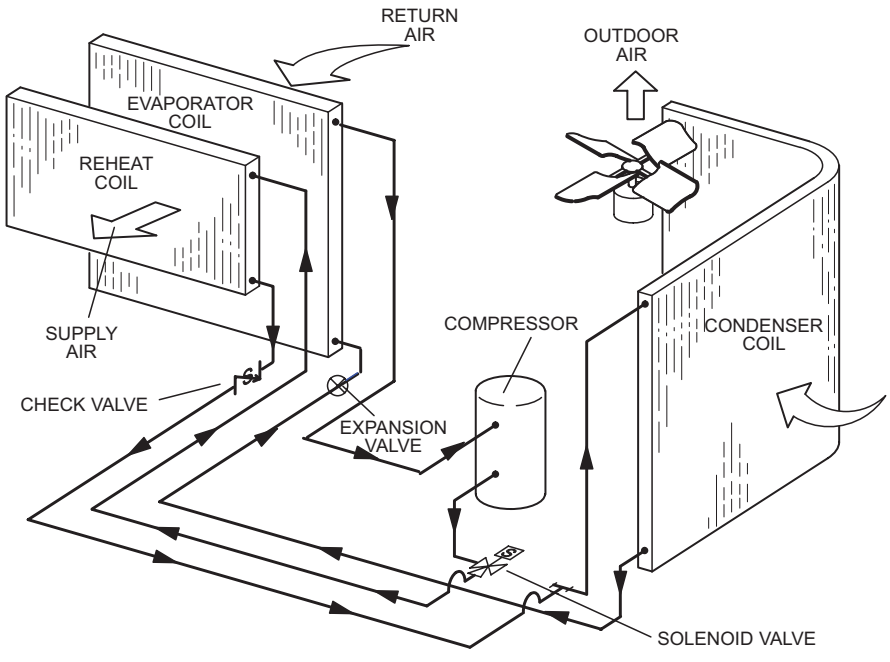
- Reheat operation will initiate on a dehumidification demand and does not require a cooling demand
- The unit will operate in hot gas reheat dehumidification mode until the relative humidity of the conditioned space is below the setpoint
- A solenoid valve diverts hot gas from the compressor to the 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

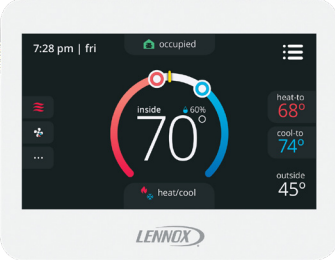
NOTE - See Sequence of Operation for additional information.

TYPICAL DEHUMIDIFICATION SCHEMATIC



OPTIONAL CONVENTIONAL TEMPERATURE CONTROL SYSTEMS

CS8500 Commercial 7-Day Programmable Thermostat

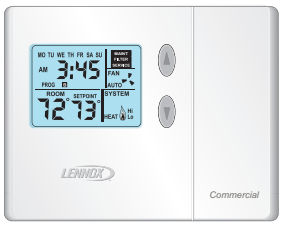


- Fully Communicating Sensor
- Full Color Touchscreen Interface
- Variable Speed System Control (On Compatible Units)
- Up To 4 Heat / 4 Cool
- Built-In Sensors For Temperature, Humidity And Optional CO_2
- Remote Sensor Options For Occupancy, Temperature
- BACnet Capable Options
- 5-2 or 7-Day Scheduling
- Smooth Setback Recovery
- Heat/Cool Auto-Changeover
- Four-Wire Installation
- FDD, ASHRAE, IECC Compliant

CS7500 Commercial 7-Day Programmable Thermostat

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

CS3000 Commercial 5-2 Day Programmable Thermostat



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

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	**24K55**
	With CO_2 Sensing	**24K53**
Sensors/Accessories	[1] Remote non-adjustable wall-mount 10k	**47W37**
	[1] Remote non-adjustable wall-mount 11k	**94L61**
Sysbus Network Cable (Yellow) for CS8500 and LCS-5030 Wired Room Sensor		
Twisted pair 100% shielded communication cable, Red and Black 22 AWG, yellow jacket, rated at 75°C, 300V, Plenum rated Insulation - Low smoke PVC, NEC, CMP	500 ft. box	**27M19**
	1000 ft. box	**94L63**
	2500 ft. roll	**68M25**
CS7500 Commercial 7-Day Programmable Thermostat		
CS7500 7-Day Thermostat		**24K41**
Sensors/Accessories	[2] Remote non-adjustable wall-mount 20k	**47W36**
	[2] Remote non-adjustable wall-mount 10k	**47W37**
	Remote non-adjustable discharge air (duct mount)	**19L22**
	Outdoor temperature sensor	**X2658**
CS3000 Commercial 5-2 Day Programmable Thermostat		
CS3000 5-2 Day Thermostat		**11Y05**
Sensors/Accessories	Remote non-adjustable wall mount 10k averaging	**47W37**
	Thermostat wall mounting plate	**X2659**
Universal Thermostat Guard with Lock (clear)		
	Inside Dimensions (H x W x D) 5-7/8 x 8-3/8 x 3 in.	**39P21**
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

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 (1 stage W1)

W1 Demand

Electric Heat is energized 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	OX
	Copper	**76W27**	X	X	X	X
Drain Pan Overflow Switch		**21Z07**	OX	OX	OX	OX
Service Valves (not for Humiditrol™+ equipped units)		Factory	O	O	O	O
BLOWER - SUPPLY AIR						
Motors	DirectPlus™ Direct Drive ECM Blower System with SZVAV	Factory	O	O	O	O
	DirectPlus™ Direct Drive ECM Blower System with VAV	Factory	O	O	O	O
CABINET						
Combination Coil/Hail Guards		**13T03**	OX	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	OX
	CPC Einstein Integration	Factory	O	O	O	O
	Novar® LSE	Factory	O	O	O	O
Dirty Filter Switch		**53W66**	OX	OX	OX	OX
Fresh Air Tempering		**21Z08**	OX	OX	OX	OX
Smoke Detector - Supply or Return (Power board and one sensor)		**21Z11**	OX	OX	OX	OX
Smoke Detector - Supply and Return (Power board and two sensors)		**21Z12**	OX	OX	OX	OX
ELECTRICAL						
Voltage 60 Hz	208/230V-3ph	Factory	O	O	O	O
	460V-3ph	Factory	O	O	O	O
	575V-3ph	Factory	O	O	O	O
HACR Circuit Breakers		Factory	O	O	O	O
Disconnect Switch (See Electrical / Electric Heat Tables for selection)	80 amp	**22A23**	OX	OX	OX	OX
	150 amp	**22A24**			OX	OX
[1] Short-Circuit Current Rating (SCCR) of 100kA (includes Phase/Voltage Detection)		Factory	O	O	O	O
GFI Service Outlets	15 amp non-powered, field-wired (208/230V, 460V only)	**74M70**	OX	OX	OX	OX
	20 amp non-powered, field-wired (575V only)	**67E01**	OX	OX	OX	OX
Weatherproof Cover for GFI		**10C89**	X	X	X	X
Phase/Voltage Detection - 3 Phase Models Only		Factory	O	O	O	O
ELECTRIC HEAT						
7.5 kW	208/240V-3ph	**21Z26**	OX	OX	OX	OX
	460V-3ph	**21Z27**	OX	OX	OX	OX
	575V-3ph	**22U17**	OX	OX	OX	OX
15 kW	208/240V-3ph	**21Z28**	OX	OX	OX	OX
	460V-3ph	**21Z29**	OX	OX	OX	OX
	575V-3ph	**22U18**	OX	OX	OX	OX
22.5 kW	208/240V-3ph	**21Z30**			OX	OX
	460V-3ph	**21Z31**			OX	OX
	575V-3ph	**22U19**			OX	OX

[1] Disconnect Switch not available with higher SCCR option. Short-Circuit Current Rating option not available on field installed electric heat.

NOTE - Catalog numbers shown are for ordering field installed accessories.
OX - Configure To Order (Factory Installed) or Field Installed
O = Configure To Order (Factory Installed)
X = Field Installed

OPTIONS / ACCESSORIES

Item		Catalog Number	Unit Model 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
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	OX
Sensible Control	Sensor is Furnished	Factory	O	O	O	O
Single Enthalpy (Not for Title 24)		**21Z09**	OX	OX	OX	OX
Outdoor Air CFM Control		**13J76**	X	X	X	X
Global Control	Sensor Field Provided	Factory	O	O	O	O
Building Pressure Control		**13J77**	X	X	X	X
POWER EXHAUST FAN (DOWNFLOW ONLY)						
Standard Static	208/230V-3ph	**21Z13**	OX	OX	OX	OX
NOTE - Factory installed Power Exhaust Fan requires "Barometric Relief Dampers for Power Exhaust Kit" for field installation. See below.	460V-3ph	**21Z14**	OX	OX	OX	OX
	575V-3ph	**21Z15**	OX	OX	OX	OX
BAROMETRIC RELIEF						
[1] Barometric Relief Dampers for Power Exhaust Kit		**21Z21**	X	X	X	X
[2] Horizontal Barometric Relief Dampers With Exhaust Hood		**19F01**	X	X	X	X
OUTDOOR AIR						
Outdoor Air Dampers With Outdoor Air Hood						
Motorized		**15D17**	OX	OX	OX	OX
Manual		**15D18**	X	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.

NOTE - Catalog numbers shown are for ordering field installed accessories.
OX - Configure To Order (Factory Installed) or Field Installed
O = Configure To Order (Factory Installed)
X = Field Installed

OPTIONS / ACCESSORIES

Item		Catalog Number	Unit Model 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	OX
	MERV 13 (Order 4)	**52W39**	OX	OX	OX	OX
	MERV 16 (Order 4)	**21U40**	OX	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	X
Needlepoint Bipolar Ionization (NPBI)						
Needlepoint Bipolar Ionization Kit		**21U35**	X	X	X	X
Indoor Air Quality (CO_2) Sensors						
Sensor - Wall-mount, off-white plastic cover with LCD display		**77N39**	X	X	X	X
Sensor - Wall-mount, off-white plastic cover, no display		**23V86**	X	X	X	X
Sensor - Black plastic case with LCD display, rated for plenum mounting		**87N52**	X	X	X	X
Sensor - Wall-mount, black plastic case, no display, rated for plenum mounting		**87N54**	X	X	X	X
CO_2 Sensor Duct Mounting Kit - for downflow applications		**85L43**	X	X	X	X
Aspiration Box - for duct mounting non-plenum rated CO_2 sensors (**77N39**)		**90N43**	X	X	X	X
UVC Germicidal Lamps						
[1] Healthy Climate® UVC Light Kit (110/230V-1ph)		**21A92**	X	X	X	X
Step-Down Transformer	460V primary, 230V secondary	**10H20**	X	X	X	X
	575V primary, 230V secondary	**10H21**	X	X	X	X
ROOF CURBS						
Hybrid Roof Curbs, Downflow						
8 in. height		**11F50**	X	X	X	X
14 in. height		**11F51**	X	X	X	X
18 in. height		**11F52**	X	X	X	X
24 in. height		**11F53**	X	X	X	X
Transition Curb						
Matches Model L™ 036-074 Units to existing L Series® Curbs		**20W06**	X	X	X	X
CEILING DIFFUSERS						
Step-Down - Order one	RTD11-95S	**13K61**	X	X	X	X
Flush - Order one	FD11-95S	**13K56**	X	X	X	X
Transitions (Supply and Return) - Order one	T1TRAN20N-1	**17W54**	X	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).

NOTE - Catalog numbers shown are for ordering field installed accessories.
OX - Configure To Order (Factory Installed) or Field Installed
O = Configure To Order (Factory Installed)
X = Field Installed

SPECIFICATIONS — 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	**LCM036U4E**	**LCM048U4E**	**LCM060U4E**	**LCM074U4E**
	Blower Type	DirectPlus™ ECM Direct Drive with SZVAV	DirectPlus™ ECM Direct Drive with SZVAV	DirectPlus™ ECM Direct Drive with SZVAV	DirectPlus™ ECM Direct Drive with SZVAV
	Model Number	**LCM036U4P**	**LCM048U4P**	**LCM060U4P**	**LCM074U4P**
	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
Cooling Performance	Gross Cooling Capacity - Btuh	34,600	47,000	58,500	71,000
	[1] Net Cooling Capacity - Btuh	34,000	46,000	57,000	69,000
	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.
Electric Heat Available		7.5 and 15 kW	7.5 and 15 kW	7.5, 15 and 22.5 kW	7.5, 15 and 22.5 kW
Compressor Type (Number)		Variable Capacity Scroll (1)			
Outdoor Coil	Net face area (total) - sq. ft.	19.3	19.3	19.3	19.3
	Tube diameter - in.	3/8	3/8	3/8	3/8
	Number of rows	2	2	2	2
	Fins per inch	20	20	20	20
Outdoor Coil 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	Balance port TXV			
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.

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 - LCM036U4

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																	
		65°F						75°F						85°F					
		Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge 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

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																	
		95°F						105°F						115°F					
		Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)		
					Dry Bulb						Dry Bulb						Dry Bulb		
	cfm	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F	kBtuh	kW	°F	75°F	80°F	85°F
63°F	550	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	25.1	2.75	45.9	0.69	0.81	0.92
	700	29.8	2.08	47.3	0.71	0.83	0.95	28.4	2.38	48.2	0.72	0.85	0.97	27.0	2.71	49.2	0.73	0.87	0.99
	850	31.4	2.05	50.1	0.74	0.88	1.00	29.9	2.36	51.1	0.76	0.90	1.00	28.3	2.70	52.2	0.78	0.93	1.00
	1000	32.6	2.03	52.6	0.78	0.94	1.00	31.1	2.35	53.5	0.80	0.96	1.00	29.4	2.67	54.5	0.82	0.99	1.00
	1200	34.0	2.00	55.3	0.83	1.00	1.00	32.6	2.31	56.0	0.86	1.00	1.00	31.0	2.65	57.0	0.88	1.00	1.00
	1400	35.6	1.98	57.4	0.88	1.00	1.00	34.1	2.29	58.1	0.91	1.00	1.00	32.4	2.62	59.0	0.94	1.00	1.00
67°F	550	29.3	2.08	48.1	0.55	0.65	0.74	28.0	2.39	49.2	0.55	0.65	0.76	26.7	2.71	50.2	0.56	0.66	0.77
	700	31.6	2.05	51.4	0.57	0.68	0.80	30.2	2.36	52.4	0.57	0.69	0.81	28.6	2.69	53.3	0.58	0.71	0.83
	850	33.3	2.02	53.9	0.59	0.72	0.85	31.7	2.34	54.7	0.60	0.73	0.87	30.0	2.67	55.5	0.61	0.75	0.89
	1000	34.6	2.00	55.8	0.61	0.76	0.90	32.8	2.31	56.4	0.62	0.78	0.93	31.2	2.65	57.1	0.63	0.80	0.95
	1200	35.8	1.97	57.7	0.64	0.81	0.97	34.1	2.28	58.2	0.66	0.83	0.99	32.3	2.62	59.0	0.67	0.86	1.00
	1400	36.9	1.95	59.4	0.67	0.86	1.00	35.0	2.27	60.1	0.69	0.89	1.00	33.1	2.60	60.9	0.71	0.91	1.00
71°F	550	31.0	2.06	52.5	0.43	0.53	0.62	29.6	2.36	53.6	0.43	0.53	0.63	28.2	2.69	54.5	0.43	0.54	0.64
	700	33.4	2.02	55.7	0.44	0.55	0.66	31.9	2.32	56.7	0.44	0.55	0.67	30.3	2.66	57.6	0.44	0.56	0.68
	850	35.1	1.99	58.3	0.44	0.57	0.69	33.5	2.30	58.8	0.45	0.58	0.71	31.8	2.63	59.6	0.45	0.59	0.73
	1000	36.5	1.97	59.9	0.45	0.60	0.73	34.8	2.27	60.5	0.46	0.61	0.75	33.0	2.61	61.1	0.47	0.62	0.77
	1200	38.0	1.94	61.5	0.47	0.63	0.79	36.1	2.26	62.2	0.47	0.64	0.81	34.2	2.59	62.7	0.48	0.66	0.83
	1400	38.9	1.91	63.1	0.47	0.66	0.84	37.0	2.23	63.4	0.49	0.68	0.86	35.0	2.57	64.0	0.49	0.70	0.89

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 - LCM048U4

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																	
		65°F						75°F						85°F					
		Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge 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 Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																	
		95°F						105°F						115°F					
		Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge 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 - LCM060U4

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																		
		65°F						75°F						85°F						
		Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge 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 Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																		
		95°F						105°F						115°F						
		Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge 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 - LCM074U4

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																	
		65°F						75°F						85°F					
		Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge 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 Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																	
		95°F						105°F						115°F					
		Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge Air Temp.	Sensible To Total Ratio (S/T)			Total Cooling Cap.	Comp. Motor Input	Discharge 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 - LCM036U4E WITH HUMIDITROL™+ OPERATING

Entering Wet Bulb Temperature	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) Dry Bulb			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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 - LCM048U4E WITH HUMIDITROL™+ OPERATING

Entering Wet Bulb Temperature	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) Dry Bulb			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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 - LCM060U4E WITH HUMIDITROL™+ OPERATING

Entering Wet Bulb Temperature	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) Dry Bulb			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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 - LCM074U4E WITH HUMIDITROL™+ OPERATING

Entering Wet Bulb Temperature	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) Dry Bulb			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Air Vol.	Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) 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 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.).

MINIMUM AIR VOLUME REQUIRED FOR USE WITH OPTIONAL ELECTRIC HEAT
7.5 kW - 1200 cfm, 15 kW - 1350 cfm, 22.5 kW - 1800 cfm

See Page 31 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		1.1		1.2		1.3	
	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts
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	1319	131	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
800	1022	73	1110	90	1195	105	1272	119	1338	133	1399	148	1460	166	1523	184	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
900	1126	88	1207	104	1286	119	1358	135	1421	150	1480	168	1539	187	1599	207	1660	227	1719	250	- - -	- - -	- - -	- - -	- - -	- - -
1000	1237	103	1310	120	1381	136	1447	153	1507	171	1564	190	1619	211	1676	232	1733	255	1788	280	1836	306	1879	332	- - -	- - -
1100	1352	120	1417	138	1481	156	1541	174	1597	194	1650	216	1703	238	1757	262	1810	287	1860	312	1905	339	1946	365	1986	391
1200	1468	141	1527	159	1583	179	1637	200	1688	222	1739	246	1789	271	1839	296	1888	321	1935	348	1977	375	2016	401	2055	426
1300	1584	164	1636	185	1687	206	1736	230	1783	255	1829	281	1877	306	1924	332	1969	359	2011	386	2051	412	2088	438	2126	462
1400	1697	191	1744	215	1790	240	1834	266	1877	293	1920	320	1964	346	2007	371	2048	398	2088	424	2126	449	2163	474	2201	498
1500	1802	227	1846	253	1888	280	1930	308	1970	336	2010	361	2049	386	2089	410	2128	436	2166	461	2204	486	2241	511	2279	536
1600	1903	271	1944	298	1984	326	2024	354	2062	380	2100	403	2137	426	2174	448	2211	474	2248	499	2285	525	2322	553	2359	582
1700	2007	319	2045	346	2083	373	2120	399	2157	423	2193	445	2229	466	2264	489	2300	516	2336	544	2372	573	2407	604	2442	637
1800	2115	363	2151	390	2186	416	2221	442	2256	466	2291	488	2325	512	2359	538	2393	567	2428	599	2462	631	2496	666	2530	701
1900	2234	394	2265	422	2296	450	2328	478	2359	505	2391	533	2423	563	2455	595	2487	629	2520	664	2553	699	2587	735	2621	771
2000	2345	434	2371	466	2399	498	2426	530	2455	562	2484	595	2515	630	2545	667	2577	703	2609	739	2643	775	2678	810	2713	845
2100	2435	502	2459	537	2484	572	2511	606	2539	641	2569	676	2599	712	2631	748	2664	783	2697	818	2732	853	2768	887	2804	920
2200	2511	587	2535	623	2561	658	2588	694	2618	728	2650	762	2683	796	2716	830	2750	863	2785	897	2821	930	2857	963	2894	995
2300	2586	672	2612	707	2640	741	2669	776	2700	809	2734	842	2768	875	2802	908	2837	941	2873	974	2909	1007	2945	1039	2981	1071

Total Air Volume cfm	Total Static Pressure - in. w.g.													
	1.4		1.5		1.6		1.7		1.8		1.9		2.0	
	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts
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	2381	620	2425	651
1400	2239	523	2279	549	2320	576	2361	605	2402	636	2443	668	2485	701
1500	2317	563	2355	592	2393	623	2432	656	2471	689	2509	723	2548	758
1600	2396	612	2432	645	2468	679	2505	714	2542	748	2579	783	2615	818
1700	2477	672	2512	707	2547	742	2583	777	2619	812	2655	846	2691	881
1800	2565	737	2599	772	2634	808	2670	842	2705	877	2741	911	2777	946
1900	2656	806	2691	841	2727	876	2762	911	2798	945	2833	979	2868	1013
2000	2749	879	2785	913	2820	947	2855	981	2890	1015	2925	1049	2959	1082
2100	2840	953	2876	987	2911	1020	2946	1053	2981	1087	3015	1121	3049	1154
2200	2930	1028	2965	1061	3000	1094	3035	1128	3069	1161	- - -	- - -	- - -	- - -
2300	3017	1104	3052	1137	3087	1170	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -

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.).

MINIMUM AIR VOLUME REQUIRED FOR USE WITH OPTIONAL ELECTRIC HEAT
7.5 kW - 1200 cfm, 15 kW - 1350 cfm, 22.5 kW - 1800 cfm

See Page 31 for blower motors and drives and wet coil and options/accessory air resistance data.

HORIZONTAL

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		1.1		1.2		1.3	
	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	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	134	1401	150	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
900	1125	89	1212	105	1293	121	1362	136	1424	152	1485	171	1547	190	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
1000	1232	104	1311	121	1386	138	1452	155	1512	174	1571	195	1631	216	1689	239	1744	264	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
1100	1341	121	1413	139	1481	158	1544	178	1602	200	1660	223	1717	246	1772	271	1823	298	1868	326	1910	352	- - -	- - -	- - -	- - -
1200	1452	141	1518	161	1580	182	1638	205	1694	230	1750	255	1804	281	1856	308	1903	335	1946	363	1988	389	2029	412	2072	434
1300	1564	164	1623	187	1680	211	1735	237	1788	265	1841	292	1893	319	1941	347	1985	375	2026	403	2067	428	2108	451	2150	474
1400	1673	192	1728	219	1781	247	1832	276	1882	305	1931	334	1979	362	2024	391	2066	418	2107	445	2147	469	2188	493	2230	516
1500	1778	229	1829	259	1879	289	1928	320	1974	350	2020	379	2064	408	2107	436	2149	463	2190	488	2231	512	2272	537	2312	563
1600	1881	274	1930	304	1978	336	2024	367	2067	396	2109	425	2151	453	2193	481	2235	507	2277	532	2318	558	2358	585	2397	614
1700	1987	321	2033	352	2078	382	2122	412	2163	441	2204	469	2244	498	2286	525	2327	551	2368	578	2408	606	2446	638	2484	673
1800	2096	367	2139	397	2182	426	2224	456	2264	484	2303	512	2344	540	2384	568	2424	596	2463	626	2501	660	2537	698	2571	738
1900	2208	396	2248	429	2288	461	2328	493	2367	524	2406	556	2445	587	2484	618	2522	650	2558	686	2593	726	2626	770	2657	814
2000	2318	437	2356	474	2394	511	2431	549	2469	585	2505	622	2542	659	2579	695	2614	733	2648	773	2681	814	2712	857	2743	900
2100	2424	505	2461	546	2497	587	2533	628	2568	668	2603	708	2637	748	2672	788	2706	828	2738	867	2770	906	2802	945	2833	983
2200	2530	582	2566	623	2602	664	2636	705	2670	745	2703	786	2737	826	2770	866	2803	905	2835	944	2866	983	2897	1021	2929	1060
2300	2638	659	2672	700	2707	741	2740	781	2773	822	2805	862	2838	902	2870	942	2902	982	2934	1021	2965	1059	2996	1098	3027	1136

Total Air Volume cfm	Total Static Pressure - in. w.g.													
	1.4		1.5		1.6		1.7		1.8		1.9		2.0	
	RPM	Watts	RPM	Watts	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	658	- - -	- - -	- - -	- - -
1400	2353	591	2392	621	2431	652	2470	683	2507	717	2543	752	2577	788
1500	2436	646	2474	679	2512	712	2549	746	2585	781	2620	816	2653	852
1600	2520	709	2557	744	2593	779	2628	815	2663	851	2696	887	2730	923
1700	2605	778	2640	815	2675	852	2709	889	2742	926	2775	963	2807	999
1800	2690	857	2723	895	2757	933	2790	970	2822	1008	2854	1044	2886	1081
1900	2775	941	2808	979	2841	1016	2873	1053	2905	1090	2937	1126	2969	1162
2000	2865	1021	2898	1058	2930	1096	2963	1132	2995	1168	3027	1204	3059	1240
2100	2961	1097	2993	1135	3025	1172	3057	1208	3089	1245	- - -	- - -	- - -	- - -
2200	3059	1173	3091	1211	3122	1248	3154	1284	- - -	- - -	- - -	- - -	- - -	- - -
2300	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -

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.).

MINIMUM AIR VOLUME REQUIRED FOR USE WITH OPTIONAL ELECTRIC HEAT
7.5 kW - 1200 cfm, 15 kW - 1350 cfm, 22.5 kW - 1800 cfm

See Page 31 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		1.1		1.2		1.3	
	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts
400	655	12	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
500	727	26	822	46	918	63	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
600	802	40	896	58	990	74	1072	86	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
700	883	53	975	70	1065	85	1148	99	1218	111	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
800	970	66	1059	82	1146	97	1226	111	1296	125	1359	139	1420	156	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
900	1065	79	1150	95	1233	110	1309	125	1377	140	1438	156	1499	174	1560	193	1621	213	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
1000	1167	93	1246	109	1323	125	1395	141	1460	157	1521	175	1579	195	1638	215	1696	237	1752	260	1801	285	1844	311	- - -	- - -
1100	1274	108	1347	125	1418	142	1485	159	1547	177	1605	197	1662	219	1718	242	1773	265	1825	290	1872	316	1914	343	1953	368
1200	1383	126	1450	144	1516	162	1577	181	1635	201	1691	223	1746	247	1800	272	1852	297	1900	323	1944	350	1985	377	2022	402
1300	1493	146	1555	164	1615	184	1672	205	1726	229	1779	254	1831	280	1882	306	1931	332	1977	359	2019	386	2057	413	2094	438
1400	1602	167	1659	188	1714	211	1766	235	1816	261	1866	289	1915	316	1964	343	2010	370	2053	397	2093	424	2132	449	2169	474
1500	1707	194	1758	219	1808	244	1857	271	1904	300	1950	328	1996	355	2041	381	2085	408	2127	434	2168	459	2207	484	2245	509
1600	1803	231	1851	258	1898	286	1945	314	1990	342	2034	369	2077	395	2120	419	2162	445	2204	471	2245	496	2285	522	2324	549
1700	1898	275	1944	303	1989	331	2034	359	2078	386	2120	410	2162	434	2204	458	2245	484	2286	511	2327	538	2366	567	2403	598
1800	1998	318	2041	347	2085	375	2128	402	2171	427	2213	451	2254	475	2294	500	2334	528	2374	557	2412	588	2449	621	2484	655
1900	2102	341	2143	371	2185	401	2226	431	2267	459	2308	487	2348	515	2387	546	2425	578	2463	611	2499	646	2534	682	2567	719
2000	2206	361	2245	396	2285	431	2325	465	2365	499	2404	534	2442	568	2479	604	2515	641	2551	677	2586	715	2619	752	2652	790
2100	2308	407	2347	446	2386	485	2424	524	2462	562	2499	600	2535	638	2570	676	2605	714	2640	752	2674	789	2707	826	2738	863
2200	2410	477	2449	517	2487	557	2524	597	2561	636	2596	674	2630	712	2664	750	2698	787	2732	825	2765	862	2797	898	2828	934
2300	2514	552	2552	591	2589	631	2625	670	2660	709	2694	747	2727	784	2760	822	2793	859	2826	896	2858	933	2889	969	2920	1004
2400	2621	627	2657	666	2693	706	2728	744	2762	782	2794	820	2826	857	2858	894	2890	931	2922	968	2953	1004	2984	1040	3014	1076
2500	2729	703	2764	742	2798	781	2831	819	2864	856	2895	893	2927	930	2958	967	2989	1004	3020	1040	3050	1076	3080	1112	3111	1147

Total Air Volume cfm	Total Static Pressure - in. w.g.													
	1.4		1.5		1.6		1.7		1.8		1.9		2.0	
	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts
1100	1990	392	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
1200	2060	426	2098	449	2136	470	2176	493	- - -	- - -	- - -	- - -	- - -	- - -
1300	2131	462	2169	485	2208	507	2247	531	2286	555	2325	582	2363	609
1400	2206	498	2244	522	2282	546	2320	572	2358	599	2396	627	2433	657
1500	2283	534	2321	560	2359	588	2395	617	2432	648	2467	680	2503	713
1600	2362	577	2398	608	2434	640	2469	673	2503	707	2537	741	2571	775
1700	2439	631	2474	665	2507	700	2540	736	2573	772	2606	807	2639	842
1800	2518	691	2551	728	2583	765	2615	802	2647	838	2680	873	2713	908
1900	2600	757	2631	794	2663	832	2694	868	2726	904	2759	940	2791	975
2000	2683	827	2715	864	2746	901	2777	937	2809	972	2841	1008	2873	1043
2100	2770	899	2800	935	2831	971	2863	1006	2894	1041	2926	1077	2958	1112
2200	2859	970	2889	1005	2920	1040	2951	1076	2983	1111	3014	1146	3046	1181
2300	2950	1040	2981	1076	3012	1111	3043	1146	3074	1182	- - -	- - -	- - -	- - -
2400	3045	1111	3075	1147	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
2500	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -

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.).

MINIMUM AIR VOLUME REQUIRED FOR USE WITH OPTIONAL ELECTRIC HEAT
7.5 kW - 1200 cfm, 15 kW - 1350 cfm, 22.5 kW - 1800 cfm

See Page 31 for blower motors and drives and wet coil and options/accessory air resistance data.

HORIZONTAL

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		1.1		1.2		1.3	
	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts
400	685	20	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
500	776	37	880	57	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
600	867	53	968	71	1054	83	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
700	959	67	1058	85	1143	97	1209	107	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
800	1056	81	1151	98	1233	112	1299	123	1358	137	1416	153	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
900	1159	95	1248	113	1326	128	1390	142	1448	158	1506	176	1564	194	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
1000	1266	111	1348	129	1421	146	1483	163	1541	182	1598	202	1653	223	1706	244	1756	268	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
1100	1377	129	1451	149	1518	168	1578	188	1635	210	1690	232	1744	256	1794	280	1840	306	1882	333	1922	358	- - -	- - -	- - -	- - -
1200	1489	151	1556	172	1618	194	1676	218	1731	243	1784	268	1835	293	1883	320	1926	347	1967	374	2006	398	2046	420	2086	441
1300	1602	175	1663	200	1720	226	1774	253	1827	281	1878	308	1927	335	1972	363	2013	391	2052	417	2091	441	2131	463	2170	484
1400	1712	207	1768	235	1822	265	1873	296	1923	325	1971	354	2017	382	2059	410	2100	437	2139	462	2177	485	2217	508	2256	531
1500	1817	248	1871	279	1922	311	1971	343	2017	373	2062	402	2106	431	2148	459	2188	484	2227	508	2267	532	2306	556	2344	581
1600	1922	295	1973	328	2023	360	2069	392	2113	422	2155	451	2198	479	2239	506	2280	531	2320	556	2359	581	2397	609	2434	638
1700	2030	345	2078	377	2126	409	2170	439	2212	469	2253	498	2294	526	2336	553	2376	579	2415	606	2453	635	2490	668	2525	703
1800	2141	391	2187	423	2231	454	2274	484	2315	514	2356	543	2396	571	2436	598	2475	627	2513	659	2549	695	2583	734	2616	774
1900	2255	423	2297	458	2339	492	2380	526	2420	559	2460	591	2499	623	2537	655	2574	689	2609	727	2642	769	2674	813	2704	856
2000	2365	470	2405	511	2445	550	2484	589	2522	628	2560	666	2597	703	2634	740	2668	779	2701	819	2732	861	2763	903	2793	944
2100	2472	545	2511	588	2550	631	2587	674	2624	716	2659	757	2695	798	2730	838	2763	877	2795	915	2826	953	2857	991	2888	1028
2200	2580	624	2618	668	2656	711	2692	754	2727	795	2762	837	2796	877	2830	917	2863	957	2894	995	2925	1033	2956	1071	2987	1108
2300	2689	704	2726	748	2762	791	2798	833	2832	875	2866	916	2899	957	2932	997	2964	1036	2996	1074	3027	1112	3057	1150	3088	1187
2400	2798	784	2834	827	2870	870	2904	913	2937	954	2970	995	3003	1036	3035	1076	3067	1115	3098	1153	- - -	- - -	- - -	- - -	- - -	- - -
2500	2908	864	2943	907	2977	950	3011	992	3043	1034	3076	1075	3108	1115	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -

Total Air Volume cfm	Total Static Pressure - in. w.g.													
	1.4		1.5		1.6		1.7		1.8		1.9		2.0	
	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts	RPM	Watts
1100	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
1200	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
1300	2210	507	2248	531	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
1400	2295	555	2332	581	2369	607	2405	634	2439	661	- - -	- - -	- - -	- - -
1500	2382	609	2418	637	2454	666	2489	695	2522	726	2554	758	2585	792
1600	2470	669	2506	700	2540	731	2573	763	2606	796	2637	829	2667	863
1700	2559	737	2593	770	2626	804	2658	838	2689	872	2719	906	2748	940
1800	2649	811	2681	847	2713	882	2744	917	2774	952	2803	987	2832	1021
1900	2736	895	2767	932	2798	968	2828	1003	2858	1039	2886	1073	2914	1108
2000	2825	982	2856	1019	2886	1054	2916	1090	2945	1125	2974	1159	3003	1193
2100	2919	1065	2950	1101	2980	1137	3010	1172	3039	1206	3069	1240	3098	1274
2200	3018	1144	3048	1180	3078	1216	3108	1251	- - -	- - -	- - -	- - -	- - -	- - -
2300	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
2400	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
2500	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -

BLOWER DATA

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

Air Volume cfm	Wet Indoor Coil		Humiditrol® Condenser Reheat Coil	Electric Heat	Economizer	Filters		
	036, 048	060, 074				MERV 8	MERV 13	MERV 16
800	0.01	- - -	- - -	0.01	0.04	0.04	0.05	0.04
1000	0.02	0.02	0.00	0.03	0.04	0.04	0.07	0.05
1200	0.03	0.04	0.00	0.06	0.04	0.04	0.07	0.05
1400	0.04	0.05	0.01	0.09	0.04	0.04	0.07	0.06
1600	0.05	0.07	0.02	0.12	0.04	0.04	0.07	0.08
1800	0.06	0.08	0.02	0.15	0.05	0.04	0.07	0.09
2000	0.08	0.10	0.02	0.18	0.05	0.05	0.08	0.10
2200	- - -	0.11	0.04	0.18	0.05	0.05	0.08	0.11
2400	- - -	0.13	0.04	0.20	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/ELECTRIC HEAT DATA — 3 TON

			Model No.	LCM036U4E / LCM036U4P		
[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
ELECTRIC HEAT DATA						
Electric Heat Voltage				**208V**	**240V**	**480V**	**600V**
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat	7.5 kW		30	30	15	15
		15 kW		[4] **45**	60	30	25
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat	7.5 kW		26	29	15	12
		15 kW		45	51	26	21
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat and (1) 0.33 HP Power Exhaust	7.5 kW		30	35	20	15
		15 kW		[4] **50**	60	30	25
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat and (1) 0.33 HP Power Exhaust	7.5 kW		29	32	16	14
		15 kW		48	54	28	23
ELECTRICAL ACCESSORIES						
Disconnect		7.5 kW		**22A23**	**22A23**	**22A23**	**22A23**
		15 kW		**22A23**	**22A23**	**22A23**	**22A23**

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

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

[2] HACR type breaker or fuse.

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

[4] Factory installed circuit breaker not available.

ELECTRICAL/ELECTRIC HEAT DATA — 4 TON

			Model No.	LCM048U4E / LCM048U4P		
[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
ELECTRIC HEAT DATA						
Electric Heat Voltage				**208V**	**240V**	**480V**	**600V**
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat	7.5 kW		35	35	15	15
		15 kW		[4] **45**	60	30	25
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat	7.5 kW		26	29	15	13
		15 kW		45	51	26	22
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat and (1) 0.33 HP Power Exhaust	7.5 kW		40	40	20	15
		15 kW		[4] **50**	60	30	25
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat and (1) 0.33 HP Power Exhaust	7.5 kW		29	32	16	14
		15 kW		48	54	28	23
ELECTRICAL ACCESSORIES						
Disconnect		7.5 kW		**22A23**	**22A23**	**22A23**	**22A23**
		15 kW		**22A23**	**22A23**	**22A23**	**22A23**

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.
[1] Extremes of operating range are plus and minus 10% of line voltage.
[2] HACR type breaker or fuse.
[3] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.
[4] Factory installed circuit breaker not available.

ELECTRICAL/ELECTRIC HEAT DATA — 5 TON

		Model No.	**LCM060U4E / LCM060U4P**			
[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
ELECTRIC HEAT DATA						
Electric Heat Voltage			**208V**	**240V**	**480V**	**600V**
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat	7.5 kW	40	40	15	15
		15 kW	**[4] 45**	60	30	25
		22.5 kW	**[4] 70**	80	40	35
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat	7.5 kW	26	29	15	13
		15 kW	45	51	26	22
		22.5 kW	65	74	37	31
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat and (1) 0.33 HP Power Exhaust	7.5 kW	40	40	20	15
		15 kW	**[4] 50**	60	30	25
		22.5 kW	70	80	40	35
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat and (1) 0.33 HP Power Exhaust	7.5 kW	29	32	16	14
		15 kW	48	54	28	23
		22.5 kW	68	77	39	32
ELECTRICAL ACCESSORIES						
Disconnect		7.5 kW	**22A23**	**22A23**	**22A23**	**22A23**
		15 kW	**22A23**	**22A23**	**22A23**	**22A23**
		22.5 kW	**22A24**	**22A24**	**22A23**	**22A23**

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.
[1] Extremes of operating range are plus and minus 10% of line voltage.
[2] HACR type breaker or fuse.
[3] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.
[4] Factory installed circuit breaker not available.

ELECTRICAL/ELECTRIC HEAT DATA — 6 TON

			Model No.	LCM074U4E / LCM074U4P		
[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
ELECTRIC HEAT DATA						
Electric Heat Voltage				**208V**	**240V**	**480V**	**600V**
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat	7.5 kW		45	45	20	15
		15 kW		[4] **45**	60	30	25
		22.5 kW		[4] **70**	80	40	35
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat	7.5 kW		29	29	15	13
		15 kW		45	51	26	22
		22.5 kW		65	74	37	31
[2] Maximum Overcurrent Protection (MOCP)	Unit+ Electric Heat and (1) 0.33 HP Power Exhaust	7.5 kW		45	45	20	15
		15 kW		[4] **50**	60	30	25
		22.5 kW		[4] **70**	80	40	35
[3] Minimum Circuit Ampacity (MCA)	Unit+ Electric Heat and (1) 0.33 HP Power Exhaust	7.5 kW		31	32	16	14
		15 kW		48	54	28	23
		22.5 kW		68	77	39	32
ELECTRICAL ACCESSORIES						
Disconnect		7.5 kW		**22A23**	**22A23**	**22A23**	**22A23**
		15 kW		**22A23**	**22A23**	**22A23**	**22A23**
		22.5 kW		**22A24**	**22A24**	**22A23**	**22A23**

NOTE - All units have a minimum Short Circuit Current Rating (SCCR) of 5000 amps.
[1] Extremes of operating range are plus and minus 10% of line voltage.
[2] HACR type breaker or fuse.
[3] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.
[4] Factory installed circuit breaker not available.

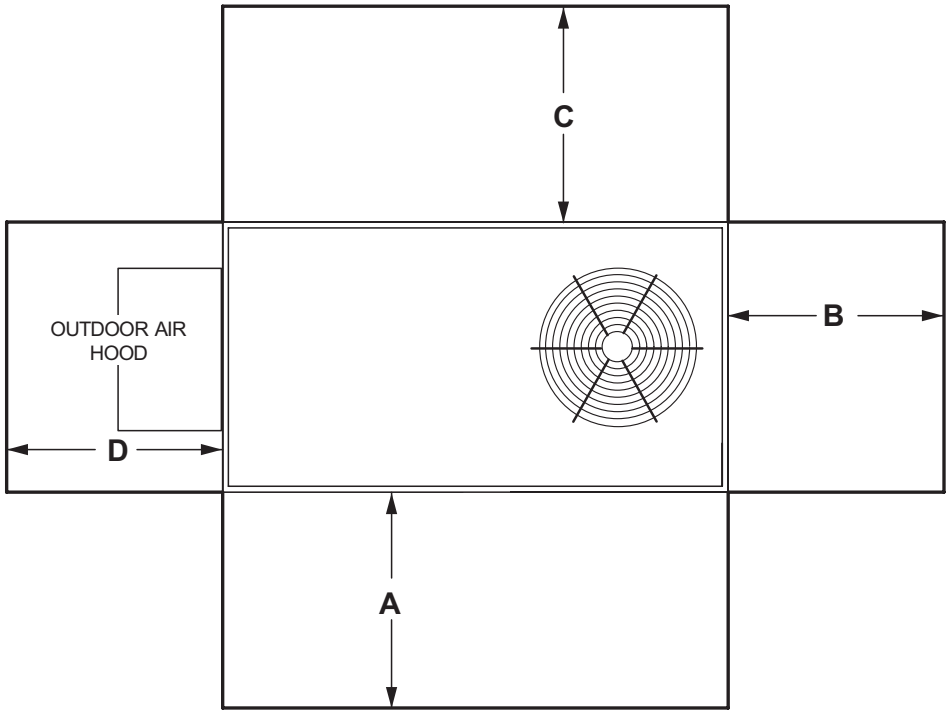
ELECTRIC HEAT CAPACITIES

Input Voltage	7.5 kW			15 kW			22.5 kW		
	No of Stages	kW input	Btuh Output	No of Stages	kW input	Btuh Output	No of Stages	kW input	Btuh Output
208	1	5.6	19,200	1	11.2	38,200	1	16.9	57,700
220	1	6.3	21,500	1	12.6	43,000	1	18.9	64,500
230	1	6.9	23,500	1	13.8	47,000	1	20.7	70,700
240	1	7.5	25,600	1	15	51,200	1	22.5	76,800
440	1	6.3	21,500	1	12.6	43,000	1	18.9	64,500
460	1	6.9	23,500	1	13.8	47,000	1	20.7	70,700
480	1	7.5	25,600	1	15	51,200	1	22.5	76,800
550	1	6.3	21,500	1	12.6	43,000	1	18.9	64,500
575	1	6.9	23,500	1	13.8	47,000	1	20.7	70,700
600	1	7.5	25,600	1	15	51,200	1	22.5	76,800

FIELD WIRING NOTES

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

UNIT CLEARANCES



[1] Unit Clearance	A		B		C		D		Top Clearance
	in.	mm	in.	mm	in.	mm	in.	mm	
Service Clearance	36	914	36	914	36	934	36	914	Unobstructed
Minimum Operation Clearance	36	914	36	914	36	914	36	914	

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

[1] **Service Clearance** - Required for removal of serviceable parts.
Minimum Operation Clearance - Required clearance for proper unit operation.

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 — UNIT

Model Number	Net		Shipping	
	lbs.	kg	lbs.	kg
036 Base Unit	694	315	736	333
036 Max. Unit	853	387	913	414
048 Base Unit	722	328	764	346
048 Max. Unit	878	398	938	425
060 Base Unit	748	339	790	358
060 Max. Unit	902	409	962	436
074 Base Unit	748	339	790	358
074 Max. Unit	902	409	962	436

WEIGHT DATA — OPTIONS / ACCESSORIES

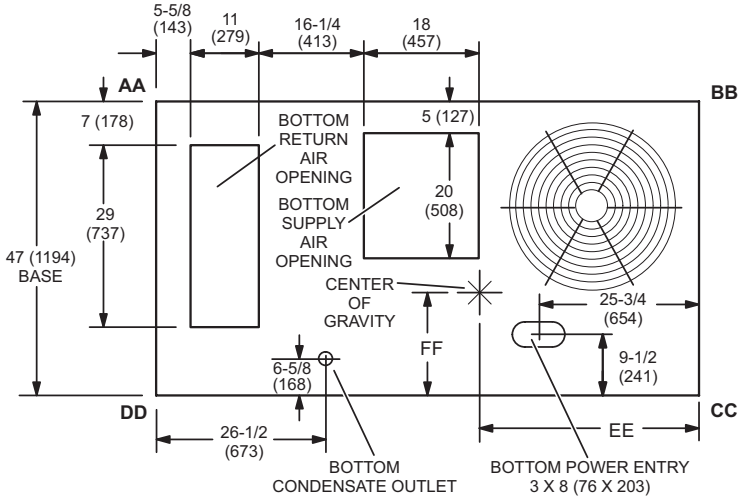
	Shipping Weight	
	lbs.	kg
ECONOMIZER / OUTDOOR AIR / EXHAUST		
Economizer		
Economizer, Includes Combination Outdoor Air Hood and Barometric Relief Dampers	131	59
Outdoor Air Dampers		
Motorized	40	18
Manual	30	14
Power Exhaust		
Standard Static	35	17
ELECTRIC HEAT		
7.5 kW	31	14
15 kW	31	14
22.5 kW	35	16
ROOF CURBS		
Hybrid Roof Curbs, Downflow		
8 in. height	50	23
14 in. height	70	32
18 in. height	80	36
24 in. height	100	45
Adjustable Pitch Curb, Downflow		
14 in. height	113	51
CEILING DIFFUSERS		
Step-Down RTD11-95S	118	54
Flush FD11-95S	118	54
Transitions T1TRAN20N-1	21	10
HUMIDITROL™+ HOT GAS REHEAT SYSTEM		
Humiditrol™+ Dehumidification Option (Net Weight)	27	12

DIMENSIONS — UNIT

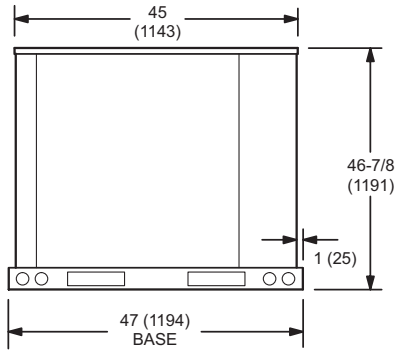
CORNER WEIGHTS									CENTER OF GRAVITY			
Model No.	AA		BB		CC		DD		EE		FF	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm
LCM036 Base Unit	92	42	112	51	180	82	148	67	38.5	978	18	457
LCM036 Max. Unit	133	61	151	69	243	110	215	98	40	1016	18	457
LCM048 Base Unit	97	44	118	54	190	87	157	71	38.5	978	18	457
LCM048 Max. Unit	139	63	158	72	254	115	224	102	40	1016	18	457
LCM060 Base Unit	112	51	136	62	219	100	181	82	38.5	978	18	457
LCM060 Max. Unit	159	72	180	82	290	132	257	117	40	1016	18	457
LCM074 Base Unit	126	57	152	69	246	112	202	92	38.5	978	18	457
LCM074 Max Unit	168	76	190	86	306	139	270	123	40	1016	18	457

Base Unit - The unit with NO INTERNAL OPTIONS.

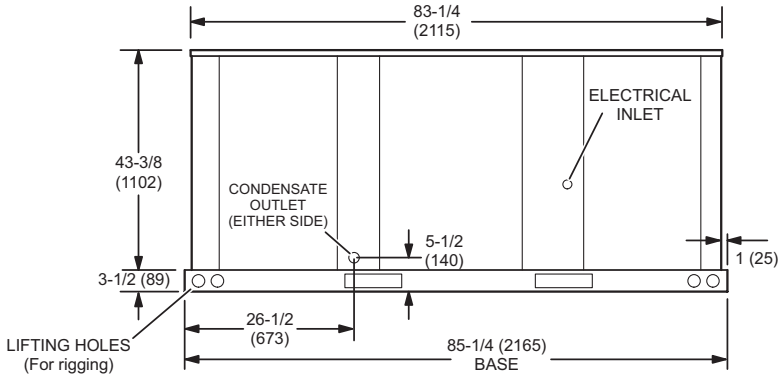
Max. Unit - The unit with ALL INTERNAL OPTIONS Installed. (Economizer, Standard Static Power Exhaust Fans, Controls, etc.). Does not include accessories external to unit or high static power exhaust.



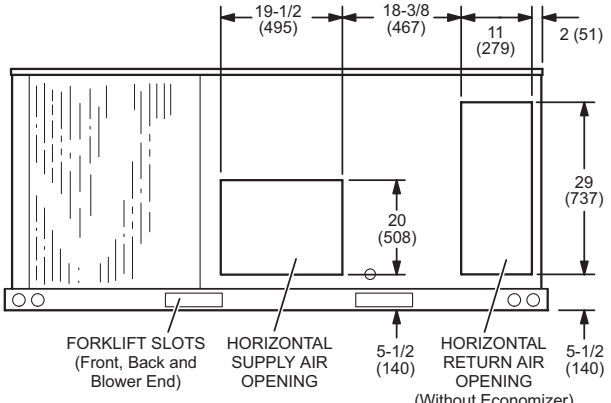
TOP VIEW (Base)



END VIEW

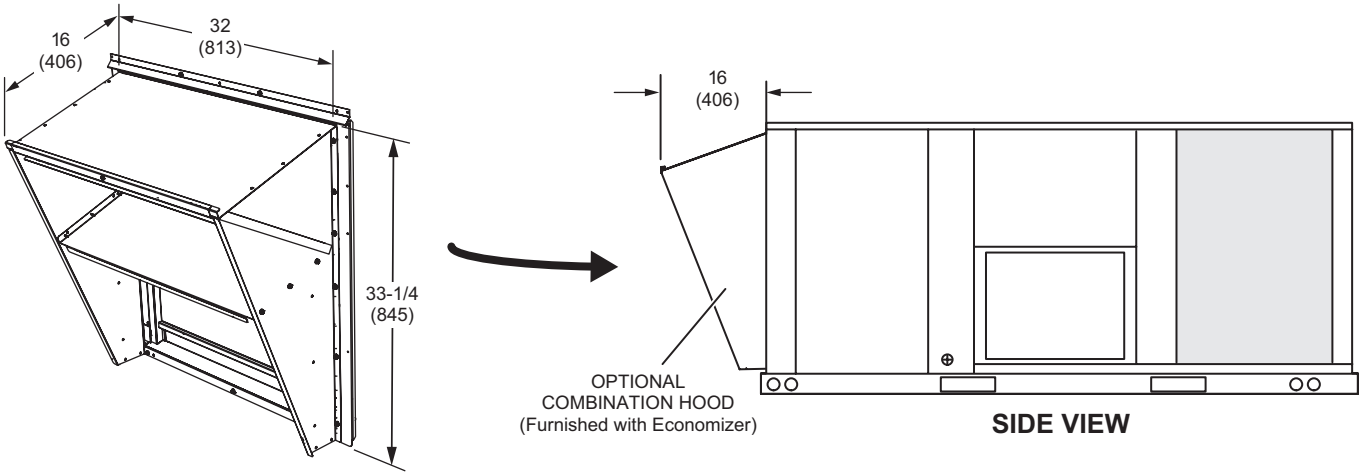


SIDE VIEW



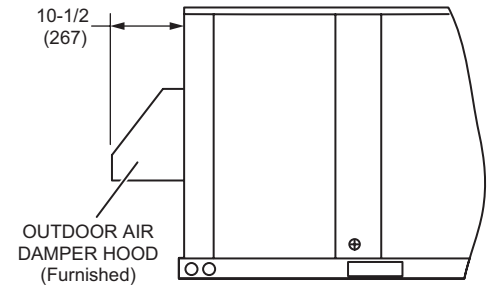
BACK VIEW

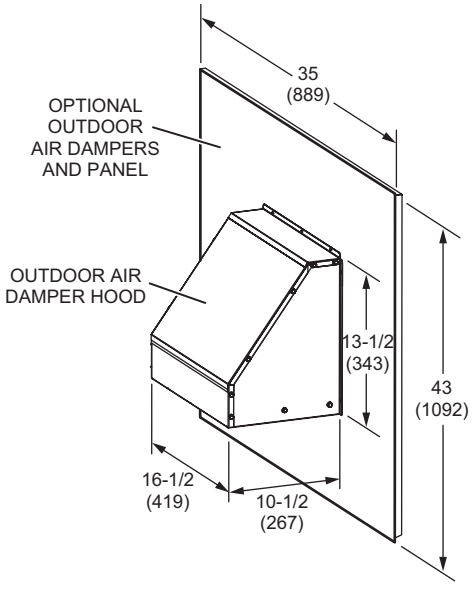
COMBINATION OUTDOOR AIR HOOD DETAIL FOR OPTIONAL ECONOMIZER AND BAROMETRIC RELIEF DAMPERS
(Furnished With Economizer for Downflow Applications)



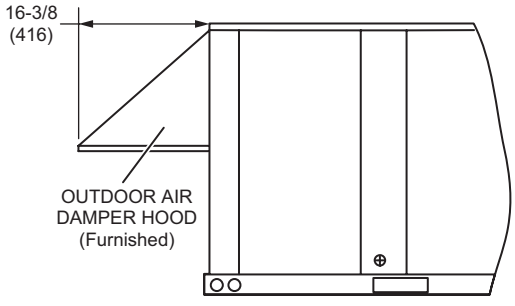
OUTDOOR AIR DAMPER HOOD DETAIL (Downflow or Horizontal Applications)

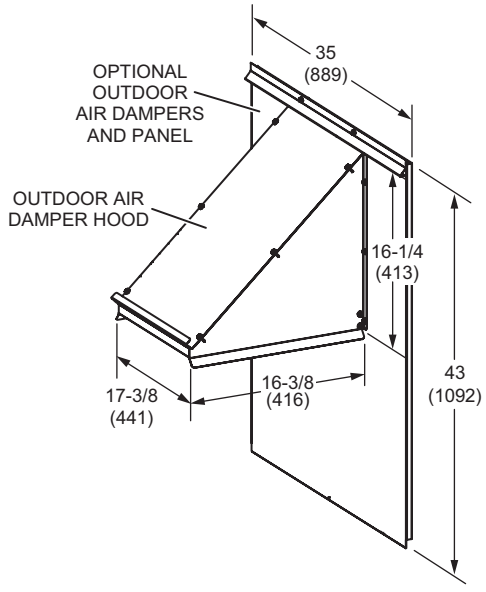
MANUAL OUTDOOR AIR HOOD



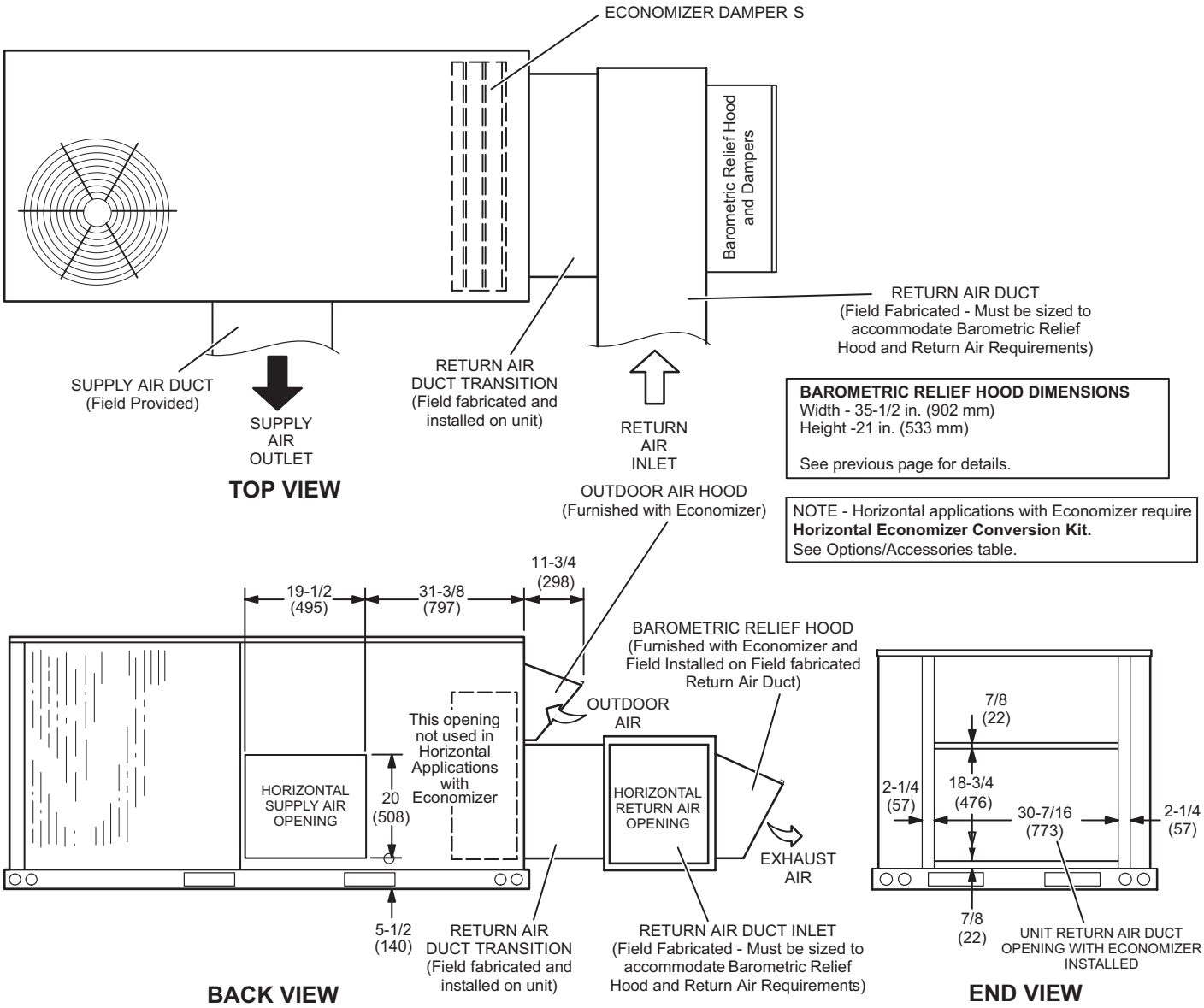


MOTORIZED OUTDOOR AIR HOOD



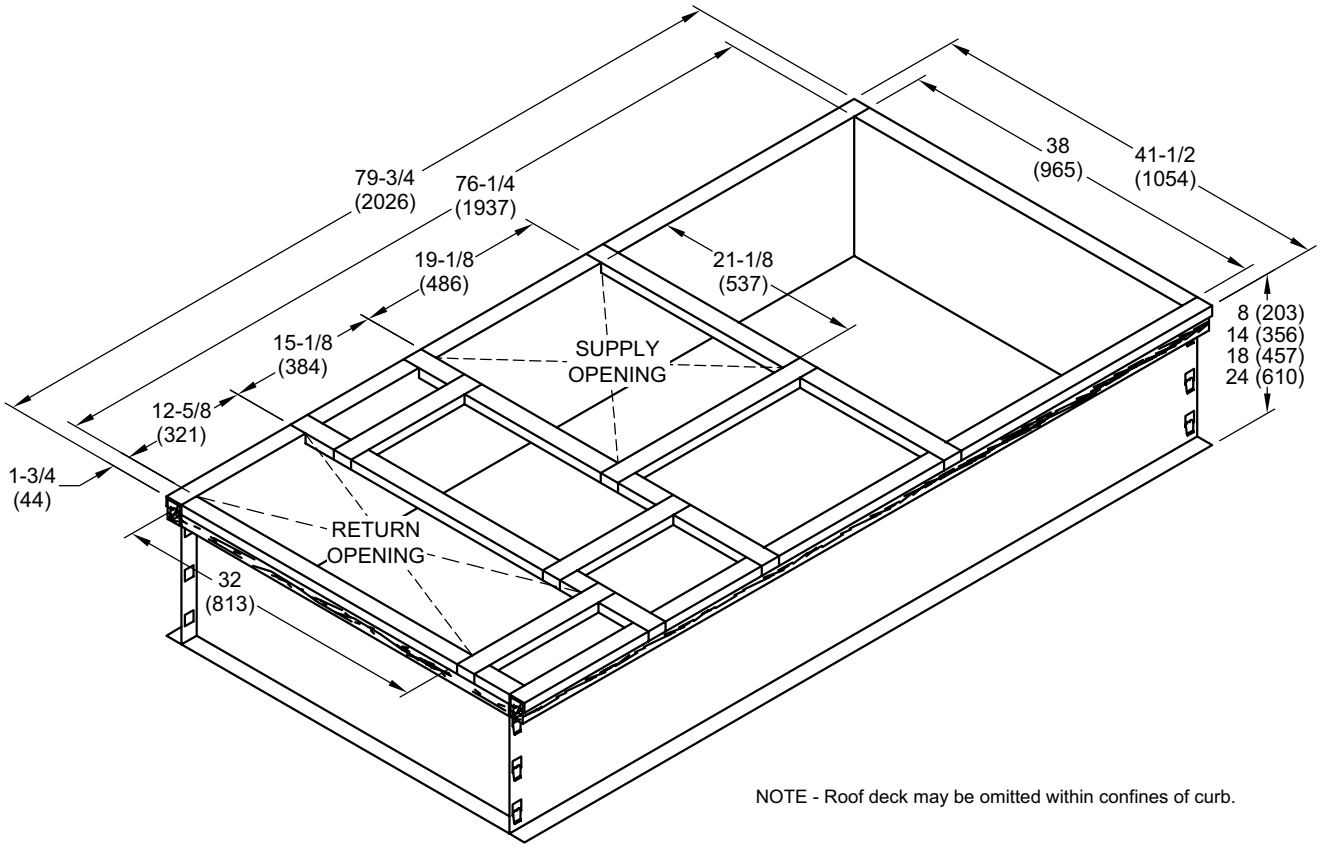


OUTDOOR AIR HOOD DETAIL WITH OPTIONAL ECONOMIZER AND BAROMETRIC RELIEF DAMPERS (Horizontal Applications)



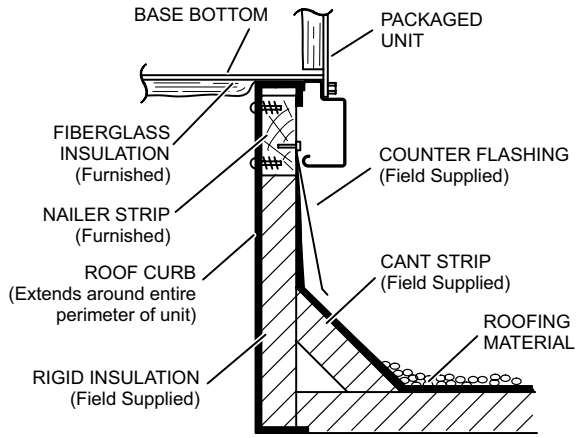
NOTE - Return Air Duct and Transition must be supported.

HYBRID ROOF CURBS - DOUBLE DUCT OPENING

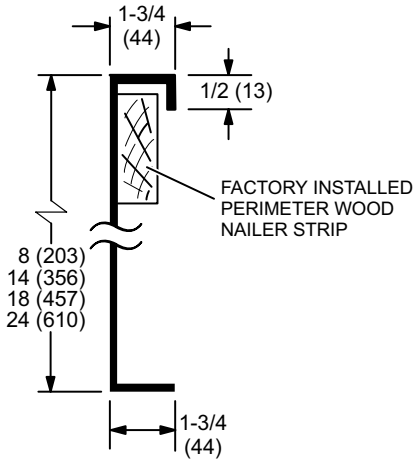


NOTE - Roof deck may be omitted within confines of curb.

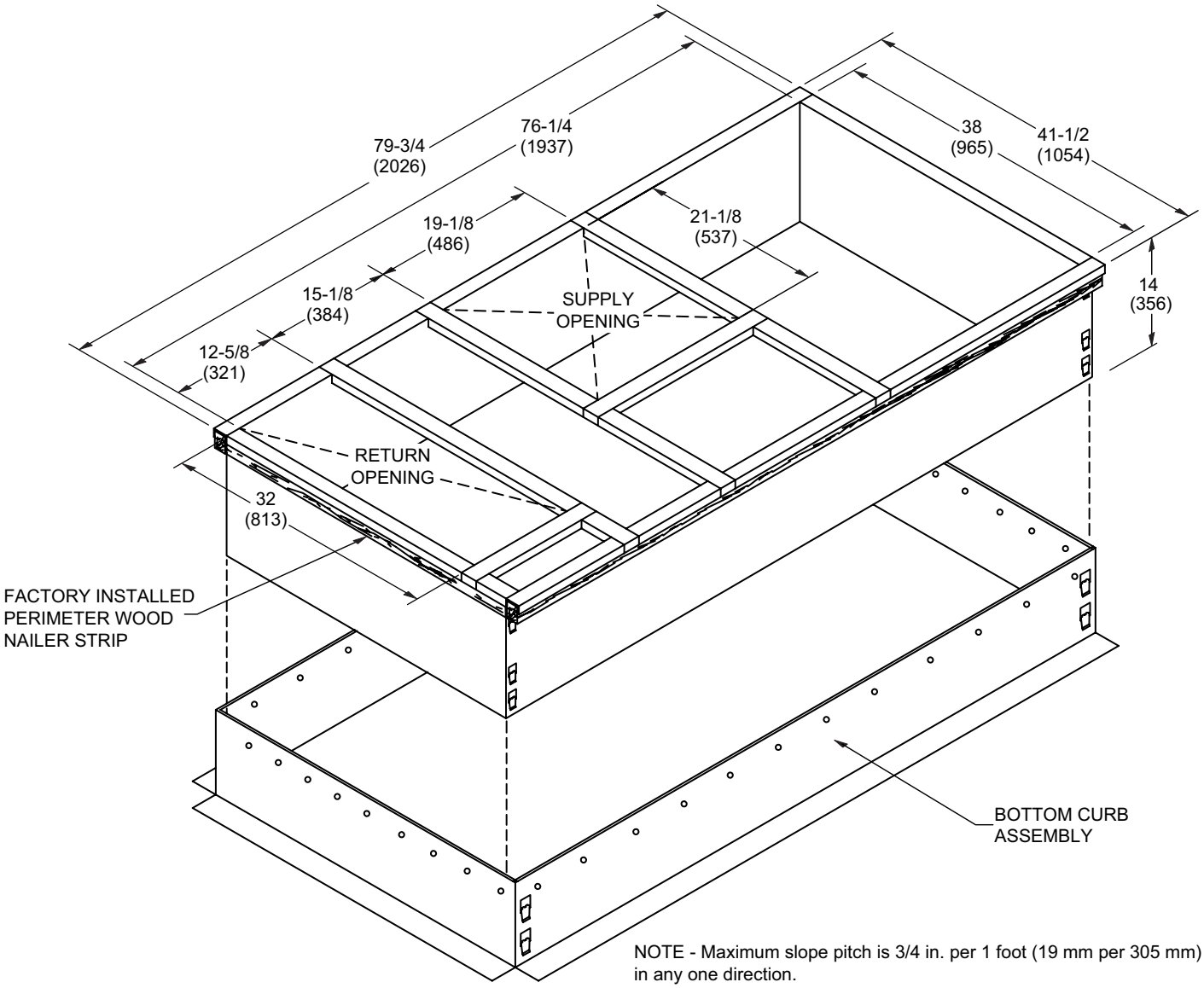
TYPICAL FLASHING DETAIL FOR ROOF CURB



DETAIL ROOF CURB

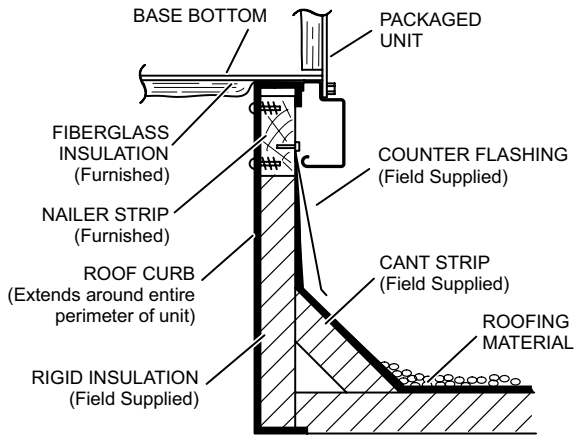


ADJUSTABLE PITCH CURBS - DOUBLE DUCT OPENING

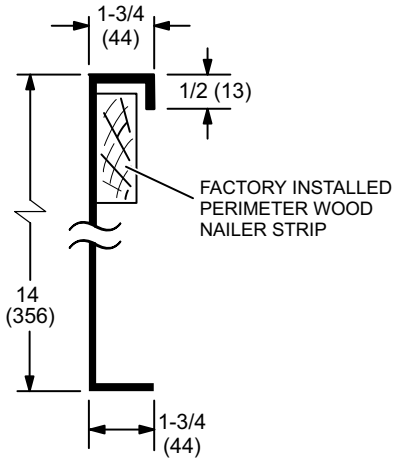


NOTE - Maximum slope pitch is 3/4 in. per 1 foot (19 mm per 305 mm) in any one direction.

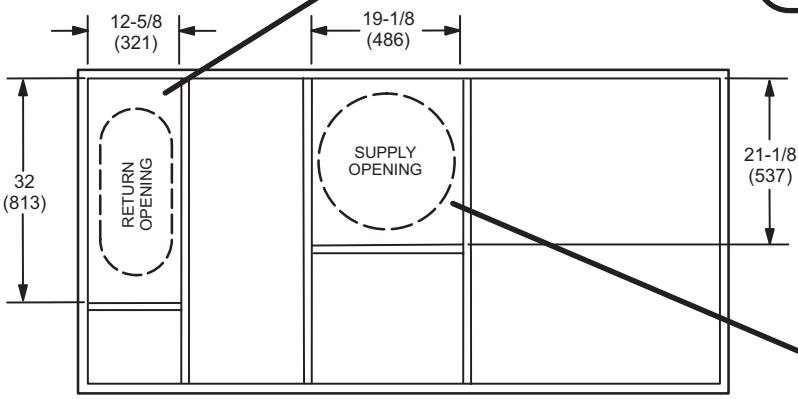
TYPICAL FLASHING DETAIL FOR ROOF CURB

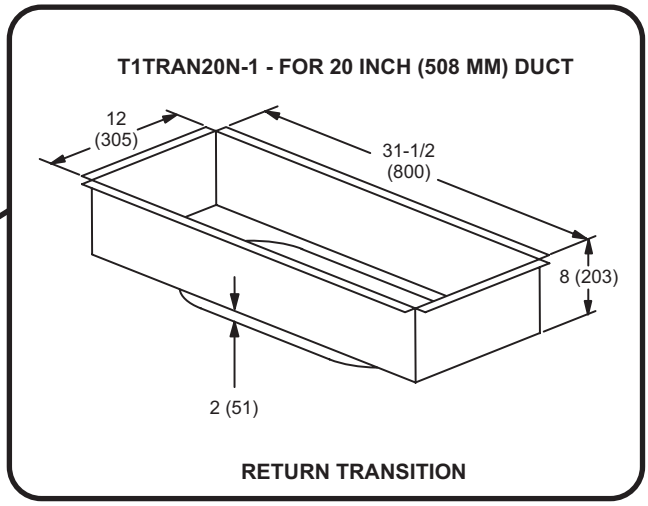


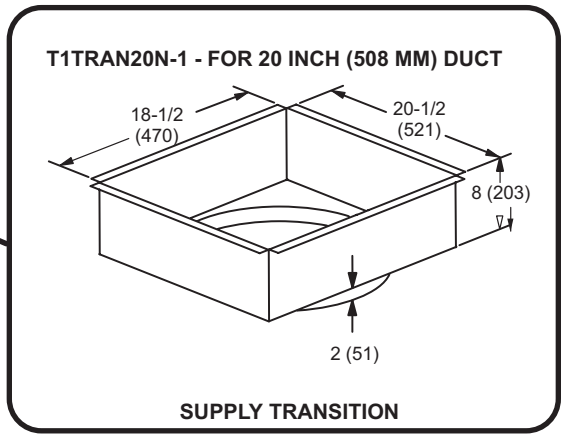
DETAIL ROOF CURB



TRANSITIONS

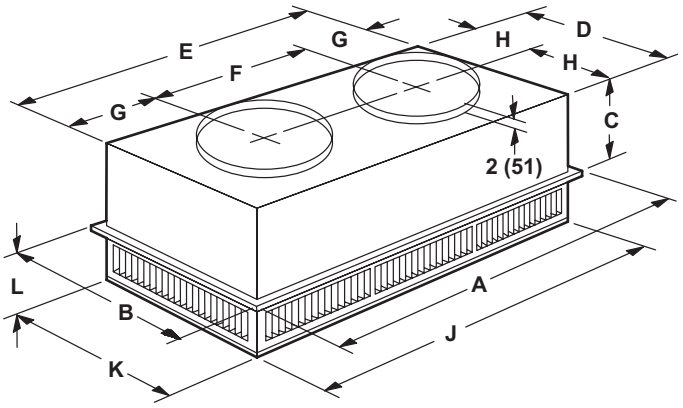






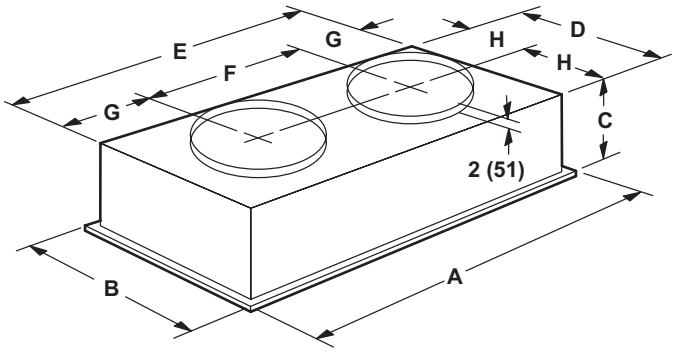
COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

STEP-DOWN 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

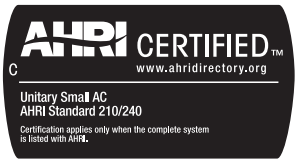
FLUSH CEILING DIFFUSER

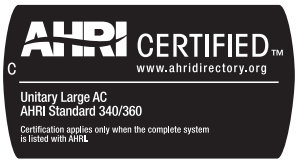


Model Number		FD11-95S
A	in.	47-5/8
	mm	1159
B	in.	29-5/8
	mm	752
C	in.	16-5/8
	mm	422
D	in.	27
	mm	686
E	in.	45
	mm	1143
F	in.	22-1/2
	mm	572
G	in.	11-1/4
	mm	286
H	in.	13-1/2
	mm	343
Duct Size	in.	20 round
	mm	508 round

REVISIONS

Sections	Description of Change
Options/Accessories	CO2 Sensor usage updated. Combination Coil/Hail Guards - Added factory option.





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