

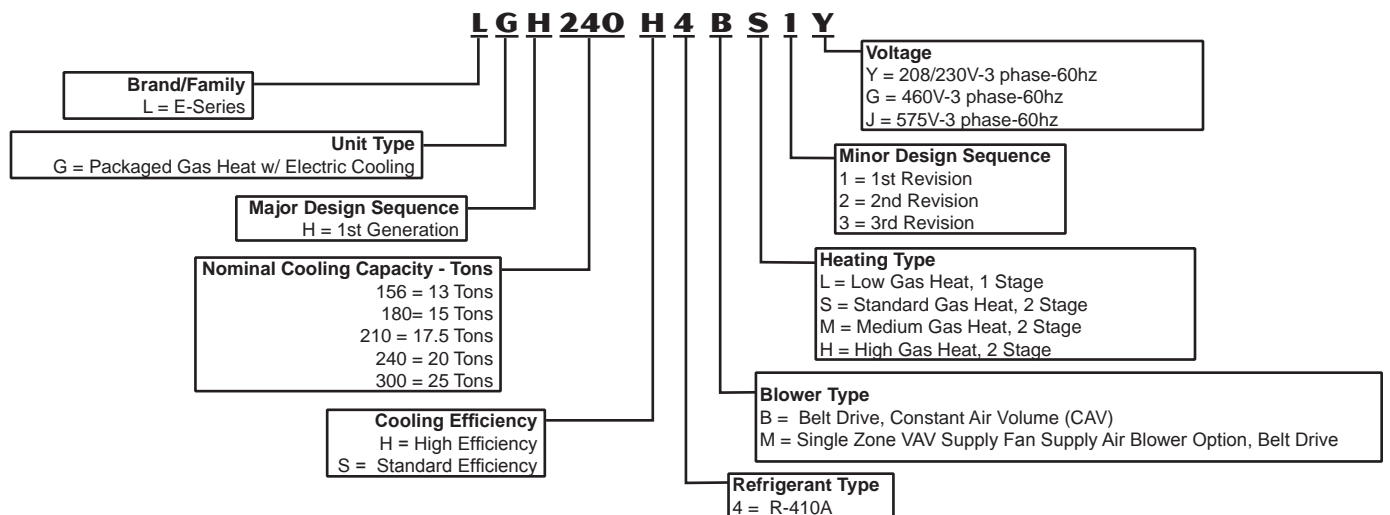


**ASHRAE 90.1
COMPLIANT**

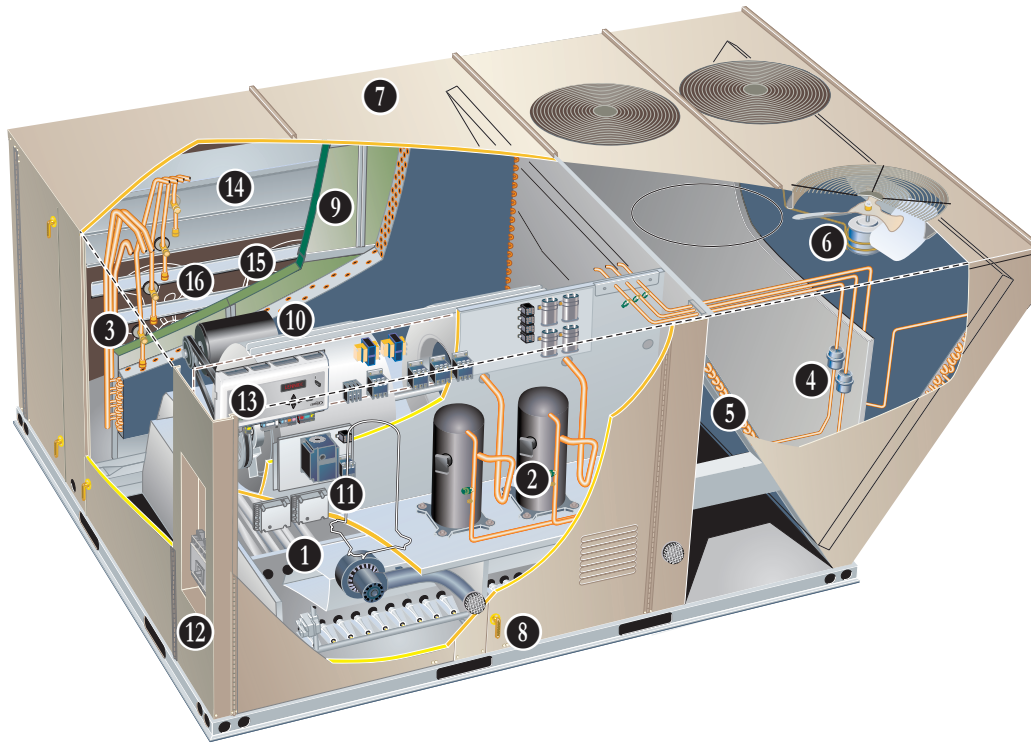
ENERGY STAR

13 to 25 Tons
 Net Cooling Capacity - 152,000 to 270,000 Btuh
 Gas Input Heat Capacity - 169,000 to 480,000 Btuh

MODEL NUMBER IDENTIFICATION



FEATURES AND BENEFITS



E-Series packaged rooftop unit product line was created to save energy with intelligence by offering some of the highest energy efficiency ratings available with a powerful, easy to use unit controller. This makes E-Series rooftop units perfect for business owners looking for an HVAC product with the lowest total cost of ownership. E-Series rooftop units feature:

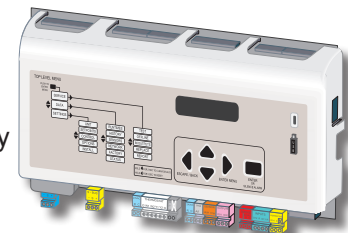
- **Hinged Access Panels** - Provide quick access to components and protect panels and roof from damage during servicing.
- **Isolated Compressor Compartment** - Allows performance check during normal compressor operation without disrupting airflow.
- **Corrosion-Resistant Removable Drain Pan** - End or bottom drain connection capability. Provides application flexibility, durability and improved serviceability.
- **Thermostatic Expansion Valves** - Provide peak cooling performance across the entire application range.
- **Scroll Compressors** - Standard on all units for reliable, long-term operation.
- **Eco-last™ Coil System (180 and 240 models only)** - Smaller, lighter condenser coil.
- **Dehumidification System** - Patented system allows for independent control of temperature and humidity, providing enhanced comfort control.
- **Constant Air Volume (CAV) or Single Zone VAV Supply Fan Supply Air Blower Option** - Allows constant or multi-staged air delivery.
- **Auto-Tensioner for Blower Belt** - Factory option ensures blower is delivering the proper airflow for comfort, while maximizing efficiency and belt life.
- **MERV 13 Filters** - Available as factory or field option, provide an enhanced level of indoor air quality, and can help the building qualify for additional LEED credits.
- **Foil-Faced Insulation** - Insulation on all internal surfaces that have contact with airflow helps minimize airborne fibers and improve IAQ.

Intelli-guide™ System

Standard on every E-Series rooftop unit, the new Intelli-guide™ unit controller is the heart of the Allied controls offering. The intuitive user interface makes setup, troubleshooting and service easier than ever. Each unit tracks the runtime of every major component and records the date and time when service or maintenance is performed.

WireRight™ System

The WireRight system simplifies field sensor or thermostat installation through advanced connectors that are keyed and color-coded to help prevent miswiring. Not only is the wire coloring scheme standardized across all models, each connection is intuitively labeled to make troubleshooting and servicing quick and easy.



FEATURES AND BENEFITS

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APPROVALS

AHRI Certified to AHRI Standard 340/360-2007.

ETL listed.

Efficiency ratings are certified by CSA.

Components are bonded for grounding to meet safety standards for servicing required by UL, ULC and National and Canadian Electrical Codes.

All models are ASHRAE 90.1-2010 compliant.

Single Zone VAV models meet California Code of Regulations, Title 24 requirements for staged airflow.

ISO 9001 Registered Manufacturing Quality System.

ENERGY STAR® certified units are designed to use less energy, help save money on utility bills, and help protect the environment.

WARRANTY

Limited ten years aluminized heat exchanger, limited fifteen years optional stainless steel heat exchanger.

Limited five years on compressors.

Limited three years on the Eco-last™ Coil System.

Limited three years on Intelli-guide™ Unit Controller.

Limited one year all other covered components.

HEATING SYSTEM

- Aluminized steel inshot burners, direct spark ignition, electronic flame sensor, combustion air inducer, redundant automatic dual stage gas valve with manual shut-off.

Heat Exchanger

Tubular construction, aluminized steel, life cycle tested.

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

Electronic Pilot Ignition

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

Ignition control is factory installed in the controls section.

Limit Controls

Factory installed, redundant limit controls with fixed temperature setting. Heat limit controls protect heat exchanger and other components from overheating.

Safety Switches

Flame roll-out switch, flame sensor and combustion air inducer proving switch protect system operation.

REQUIRED SELECTIONS

Gas Input Choice - Order one:

Low Gas Heat, 1 Stage
(169,000 Btuh)

Standard Gas Heat, 2 Stage
(169,000/260,000 Btuh)

Medium Gas Heat, 2 Stage
(234,000/360,000 Btuh)

High Gas Heat, 2 Stage
(312,000/480,000 Btuh)

FEATURES AND BENEFITS

HEATING SYSTEM (CONTINUED)

OPTIONS/ACCESSORIES

Factory Installed

Stainless Steel Heat Exchanger

Required if mixed air temperature is below 45°F.

Factory or Field Installed

Bottom Gas Piping Kit

Allows bottom gas entry. Field installed only, may be factory enclosed to ship with unit.

Low Temperature Vestibule Heater

Electric heater automatically controls minimum temperature in gas burner compartment when temperature is below -40°F. CSA certified to allow operation of unit down to -60°F.

Field Installed

Combustion Air Intake Extensions

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

LPG/Propane Kits

Conversion kit to field change over units from Natural Gas to LPG/Propane. Order two kits.

Vertical Vent Extension Kit

Use to exhaust flue gases vertically above unit. Required when unit vent is too close to fresh air intakes per building codes. The vent kit also prevents ice formation on intake louvers. Order two kits.

Kit contains vent transition, vent tee, drain cap and installation hardware.

NOTE - Straight vent pipes (4 in. B-Vent) and caps are not furnished and must be field supplied. Refer to kit instructions for additional information.

COOLING SYSTEM

Designed to maximize sensible and latent cooling performance at design conditions.

System can operate from 0°F to 125°F without any additional controls.

R-410A Refrigerant

Non-chlorine based, ozone friendly, R-410A.

2 Scroll Compressors

Scroll compressors on all models for high performance, reliability and quiet operation.

Resiliently mounted on rubber grommets for quiet operation.

Compressor Crankcase Heaters

Protects against refrigerant migration that can occur during low ambient operation.

3 Thermal Expansion Valves

Assures optimal performance throughout the application range. Removable element head.

4 Filter/Driers

High capacity filter/drier protects the system from dirt and moisture.

High Pressure Switches

Protects the compressors from overload conditions such as dirty condenser coils, blocked refrigerant flow, or loss of outdoor fan operation.

Low Pressure Switches

Protects the compressors from low pressure conditions such as low refrigerant charge, or low/no airflow.

Freezestats

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

5 Eco-last™ Coil System (180 and 240 Models Only)

Condenser coil features lightweight, all aluminum brazed fin construction.

Constructed of three components:

a flat extrusion tube, fins in-between the flat extrusion tube and two refrigerant manifolds.

Eco-last™ Coil System Features:

- Improved heat transfer performance due to high primary surface area (flat tubes) versus secondary surface (fins).
- Smaller internal volume (reduced refrigerant charge).
- High durability (all aluminum construction).
- Fewer brazed joints.
- Compact design (reduces unit weight).
- Easy maintenance/cleaning.

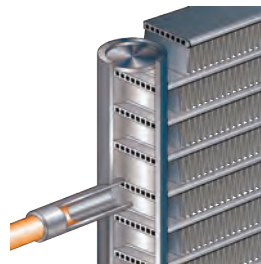
Face split design.

Mounting brackets with rubber inserts secure coil to unit providing vibration dampening and corrosion protection.

Angled design in cabinet helps protect coil from possible contact or hail damage.

Conventional Fin/Tube Coil (Condenser Coil for 156, 210 and 300 Models) and Evaporator Coil (all models)

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.



FEATURES AND BENEFITS

COOLING SYSTEM (CONTINUED)

Condensate Drain Pan

Plastic pan, sloped to meet drainage requirements per ASHRAE 62.1.

Side or bottom drain connections.

6 Outdoor Coil Fan Motors

Thermal overload protected, totally enclosed, permanently lubricated ball bearings, shaft up, wire basket mount.

Outdoor Coil Fans

PVC coated fan guard furnished.

REQUIRED SELECTIONS

Cooling Capacity

Specify nominal cooling capacity of the unit

OPTIONS/ACCESSORIES

Factory Installed

Conventional Fin/Tube

Condenser Coil

**(180 and 240 Models Only)
(replaces Eco-last™ Coil System)**

Copper tube construction, enhanced rippled-edge aluminum fins, flared shoulder tubing connections, silver soldered construction.

NOTE - Required if Dehumidification System is ordered.

Service Valves

Fully serviceable brass valves installed in discharge & liquid lines.

Not available for units equipped with Eco-last™ Coil System or Dehumidification option.

Factory or Field Installed

Condensate Drain Trap

Field installed only, may be factory enclosed to ship with unit.

Available in copper or PVC.

Drain Pan Overflow Switch

Monitors condensate level in drain pan, shuts down unit if drain becomes clogged.

CABINET

7 Construction

Heavy-gauge steel panels and full perimeter heavy-gauge galvanized steel base rail provides structural integrity for transportation, handling, and installation.

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 provide additional protection against water entering the building.

Airflow Choice

Units are available in downflow (vertical) or horizontal return air flow configuration.

Horizontal air flow requires Horizontal Roof Curb.

Horizontal Return Air Panel Kit is also required if converting a downflow configured unit to horizontal air flow.

Power/Gas Entry

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

Exterior Panels

Constructed of heavy-gauge, galvanized steel with a two-layer enamel paint finish.

Insulation

All panels adjacent to conditioned air are fully insulated with non-hygroscopic fiberglass insulation.

Unit base is fully insulated. The insulation also serves as an air seal to the roof curb, eliminating the need to add a seal during installation.

8 Hinged Access Panels

Hinged tool-less access panels are provided for the filter section, the blower section and compressor/controls section.

All hinged panels have seals and quarter-turn latching handles to provide a tight air and water seal.

REQUIRED SELECTIONS

Airflow Configuration

Specify downflow or horizontal.

OPTIONS/ACCESSORIES

Factory Installed

Corrosion Protection

A completely flexible immersed coating with an electrodeposited dry film process. (AST ElectroFin E-Coat) Meets Mil Spec MIL-P-53084, ASTM B117 Standard Method Salt Spray Testing.

Indoor Corrosion Protection:

- Coated coil
- Coated reheat coil
- Painted blower housing
- Painted indoor base

Outdoor Corrosion Protection:

- Coated coil
- Painted outdoor base

Field Installed

Coil Guards

Painted, galvanized steel wire guards to protect outdoor coil.

Not used with Hail Guards.

Hail Guards

Constructed of heavy gauge steel, painted to match cabinet, helps protect outdoor coils from hail damage.

Not used with Coil Guards.

Horizontal Return Air Panel Kit

Required for horizontal applications with Horizontal Roof Curb, contains panel with return air opening for field replacement of existing unit panel and panel to cover bottom return air opening in unit, see dimension drawings.

FEATURES AND BENEFITS

INDOOR AIR QUALITY

9 Air Filters

Disposable 2 inch filters furnished as standard.

OPTIONS/ACCESSORIES

Factory or Field Installed

High Efficiency Air Filters

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

UVC Germicidal Light Kit



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).

Lamps are field installed in the blower/evaporator coil section.

All necessary hardware for installation is included.

Lamps operate on 110/230V, 1 phase power supply. Step-down transformer must be field supplied when used with 460V and 575V rooftop units. Step-down transformer is furnished with lamps when factory installed.

Approved by ETL.

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.

Field Installed

Indoor Air Quality (CO₂) Sensors

Monitors CO₂ levels, reports to the Intelli-guide™ Unit Controller which adjusts economizer dampers as needed.

10 **BLOWER**

A wide selection of supply air blower options are available to meet a variety of airflow requirements.

Motor

Overload protected, equipped with ball bearings.

Belt drive motors are offered on all models and are available in several different sizes to maximize air performance.

Motor Efficiency

All blower motors 5 hp and above meet minimum energy efficiency standards in accordance with the Energy Independence and Security Act (EISA).of 2007.

Supply Air Blower

Forward curved blades, double inlet, blower wheel is statically and dynamically balanced. Equipped with ball bearings and adjustable pulley (allows speed change).

Blower assembly slides out of unit for servicing.

Grease fittings furnished.

REQUIRED SELECTIONS

Select Constant Air Volume (CAV) or Single Zone VAV Supply Fan Supply Air Blower Option

On Constant Air volume (CAV) models, the supply air blower will provide a constant volume of air.

On Single Zone VAV Supply Fan supply air blower option models the supply air blower will stage the amount of airflow according to compressor stages, heating demand, ventilation demand or smoke alarm.

NOTE - Units with the VAV supply air blower option have the same face split indoor coils as units with the CAV supply air blower option. Part load airflow in cooling mode on VAV units should not be set below 220 cfm/nominal full load ton to reduce the risk of evaporator coil freeze-up.

- 11 Utilizes a Variable Frequency Drive (VFD) to stage the supply air blower airflow. The VFD alters the frequency and voltage of the power supply to the blower to control blower speed.

The amount of airflow for each stage can be set according to an ECTO parameter in the Intelli-guide Unit Controller. Unit is shipped from the factory with preset airflow.

The VAV supply air blower option can be ordered with or without an Electronic Bypass Control. If equipped with the bypass control the VAV features manual (default) or automatic electronic bypass control of the VFD. In case of a VFD malfunction, a VFD alarm is generated by the Intelli-guide Unit Controller. The VFD can be manually bypassed to continue unit operation at full blower speed. Or the unit controller can be set to automatically switch to full blower speed if a VFD alarm is generated.

The VFD has an operational range of -40 to 125° F outdoor air ambient temperature.

Lower operating costs are obtained when the blower is operated on lower speeds.

Ordering Information

Specify standard or high efficiency blower motor, motor horsepower and drive kit number when base unit is ordered, see Drive Kit Specifications Table.

OPTIONS/ACCESSORIES

Factory Installed

Blower Belt Auto-Tensioner

Provides proper tension to belt drive blower belt without the need for regular adjustments. Maintains airflow and proper performance.

FEATURES AND BENEFITS

ELECTRICAL

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 (Optional for CAV Models Only)

Phase detection 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.

NOTE - Phase/voltage detection is furnished when the **Single Zone VAV Supply Fan** option is ordered.

Factory or Field Installed

12 Disconnect Switch

Accessible from outside of unit, spring loaded weatherproof cover furnished.

GFI Service Outlets (2)

115V ground fault circuit interrupter (GFCI) type, non-powered, field-wired or factory-wired and powered.

SERVICEABILITY

Designed to streamline general maintenance and decrease troubleshooting time.

Diagnostics

Intelli-guide™ Unit Controller diagnostic scrolling text pinpoints problems, minimizing troubleshooting time.

WireRight™ 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.

Toolless, Hinged Access Panels

Large access panels are hinged and have quarter-turn, latching handles for quick and easy access to maintenance areas (filter, compressor / controls/ blower / heat section).

Blower Access

Supply air blower parts are located near the access door for easy servicing and adjustment.

Blower assembly slides out of unit for servicing.

Thermal Expansion Valves

Thermal expansion valves are located near the perimeter of the unit for easier access.

Removable element head allows change out of element and bulb without removing the TXV.

Standard Components

A large number of common maintenance parts are standard throughout the entire range of sizes (3-30 tons), reducing the need to carry a lot of different parts to the job or maintain in inventory.

Compressor Compartment

Compressors are located near the perimeter of the unit for easier access.

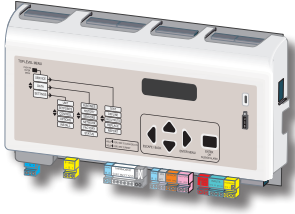
Compressors are isolated from the condenser airflow allowing system operation checks to be done without changing the airflow across the outdoor coils.

Service Valves (optional)

Optional factory installed liquid and discharge service valves allow refrigerant to be isolated to the high side for service work on the low side of the refrigeration system.

INTELLI-GUIDE™ CONTROL SYSTEM

INTELLI-GUIDE CONTROLLER



The Intelli-guide Unit Controller is a microprocessor-based control board that provides flexible control of all unit functions.

Intelli-guide™ Features:

Scrolling Display - Scrolls full text instead of numerical codes.

Push Buttons - Simplified navigation during setup and diagnostics.

Guided Setup Procedure - Insures proper installation and setup of the rooftop unit.

Profile setup - Copy key setpoints between units with the same configuration greatly reducing setup time.

USB Port - Easily download and transfer unit information via a USB flash drive and also interface with Allied Unit Controller Software.



Self Test Mode - Confirm proper component and system operation.

Time Clock with Run-time Information

Built-In Functions Include:

Adjustable Blower On/Off Delay

Built-in Control Parameter Defaults

Compressor Time-Off Delay

DDC Compatible

Dirty Filter Switch Input

Discharge Air Temperature Control

Display/Sensor Readout

Economizer Control Options - See *Economizer / Outdoor Air / Exhaust Options*.

Fresh Air Tempering

Extensive Unit Diagnostics - Over 100 diagnostic and status messages in English.

Exhaust Fan Control Modes - Fresh air damper position.

Permanent Diagnostic Code Storage

Field Changeable Control Setpoints - Over 200 different control setpoints.

Indoor Air Quality Input - Demand Control Ventilation ready

Low Ambient Controls - Cooling operation down to 0°F.

Gas Valve Time Delay Between First and Second Stage

Minimum Compressor Run Time

Network Capable - Can be daisy chained to other units or controls.

Night Setback Mode

Return Air Temperature Limit Control

Safety Switch Input - Allows Controller to respond to a external safety switch trip.

Service Relay Output

Smoke Alarm Mode - Four choices.

Staging - up to 2 heat/4 cool (zone sensor or network operation). Up to 2 heat/2 cool (standard Intelli-guide unit controller thermostat input). Up to 3 cool (thermostat input with additional relay).

“Strike Three” Protection

Gas Reheat Control - Simultaneous heating and cooling operation for controlling humidity for process air applications such as supermarkets.

On Demand Dehumidification

- Monitors and controls condenser hot gas reheat operation with dehumidification option.

Thermostat Bounce Delay

Warm Up Mode Delay

LED Indicators

PC Interface - For use with PC with optional Unit Controller software.

Zone Sensor Operation -

Controls zone temperature.

OPTIONS / ACCESSORIES

Factory or Field Installed

Blower Proving Switch

Monitors blower operation, shuts down unit if blower fails.

Dirty Filter Switch

Senses static pressure increase indicating dirty filter condition.

NOTE - Intelli-guide Control System features shown vary with the type of rooftop unit the control is installed in.

NOTE - See separate Intelli-guide Control System Product Specifications Bulletin for additional information.

CONTROLS OPTIONS

Factory or Field Installed

Fresh Air Tempering

Used in applications with high outside air requirements. The 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, the sensor ships with the unit but must be field installed.

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

Aftermarket DDC

Novar® Unit Controller and options.

Thermostats

Control system and thermostat options. Aftermarket unit controller options.

Field Installed

Humidity Sensor Kit

Humidity sensor required with factory installed dehumidification option or Supermarket reheat field selectable option.

14 ECONOMIZER/EXHAUST OPTIONS**Factory or Field Installed****Economizer - Downflow or Horizontal With Air Hood**

Parallel gear-driven action return air and outdoor air dampers, plug-in connections to unit, nylon bearings, neoprene seals, 24-volt, fully-modulating, spring return motor, adjustable minimum damper position. Outdoor air hoods with mist elimination filter for economizer and downflow barometric relief dampers are furnished.

Choice of economizer control options:

1. Differential Sensible Control

Factory setting. Uses outdoor air and return air sensors that are furnished with the unit. The Intelli-guide 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.

2. 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.

3. Single Enthalpy Control

Outdoor air enthalpy sensor enables economizer if the outdoor enthalpy is less than the setpoint of the board.

4. Differential Enthalpy Control

Two solid-state enthalpy sensors allow the economizer control to select between outdoor air or return air, whichever has lower enthalpy.

Factory or Field Installed**Downflow Barometric Relief Dampers**

- 15** Allow relief of excess air, aluminum blade dampers prevent blow back and outdoor air infiltration during off cycle, bird screen furnished.

Hood for downflow barometric relief dampers is factory installed when dampers are factory installed with economizer. Hood is furnished with dampers when ordered for field installation.

16 Power Exhaust Fans

Install internal to unit for downflow applications only with economizer option. Provides exhaust air pressure relief. Interlocked to run when supply air blower is operating, fans run when outdoor air dampers are 50% open (adjustable), motor is overload protected. Requires Economizer with Outdoor Air Hood and Downflow Barometric Relief Dampers. Dual fans are 20 in. diameter with 5 blades with (2) 1/3 hp motors.

NOTE - Single Zone VAV Supply Fan models are equipped with 2-stage power exhaust fans. Power exhaust operates in 1st stage (one fan) up to 70% of supply air blower speed. Both exhaust fans operate in 2nd stage when supply air blower speed is above 70% (adjustable) of full speed.

Field Installed**Horizontal Barometric Relief Dampers**

For use when unit is configured for horizontal applications requiring an economizer.

Allows relief of excess air.

Aluminum blade dampers prevent blow back and outdoor air infiltration during off cycle.

Field installed in return air duct.

Bird screen and hood furnished.

OUTDOOR AIR OPTIONS**Factory or Field Installed****Outdoor Air Damper - Downflow or Horizontal With Air Hood**

Linked mechanical dampers, 0 to 25% (fixed) outdoor air adjustable, installs in unit. Includes outdoor air hood.

Automatic model features fully modulating spring return damper motor with plug-in connection.

Manual model features parallel blade, gear-driven dampers with adjustable fixed position.

ROOF CURBS

Nailer strip furnished, mates to unit, US National Roofing Contractors Approved, shipped knocked down.

Downflow

Clip Curbs - Uses interlocking tabs to fasten corners together. No tools required.

Standard Curbs - Curb corners fasten together with furnished hardware.

Adjustable Pitched Curb -

Curbs are regionally sourced. Dimensions will vary based upon the source. Contact your Allied sales representative for a detailed cut sheet with applicable dimensions.

Horizontal

Converts unit from downflow to horizontal (side) air flow, return air is on unit, supply air is on curb, see dimension drawings. Curbs for rooftop applications meet National Roofing Code requirements. Requires Horizontal Return Air Panel Kit. Available in 26, 30, 37 and 41 inch heights. Optional Insulation Kit is available to help prevent sweating.

CEILING DIFFUSERS

Ceiling Diffusers (Flush or Step-Down)

Aluminum grilles, large center grille, insulated diffuser box with flanges, hanging rings furnished, interior transition (even air flow), internally sealed (prevents recirculation), 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.

DEHUMIDIFICATION® SYSTEM

NOTE - Not available with Eco-last™ Coil System.

Conventional Fin/Tube condenser coil must be ordered as a factory option.

Factory installed option designed to control humidity.

Provides dehumidification on demand using ASHRAE 90.1 recommended method for comfort conditioning humidity control.

Unit comes equipped with one row reheat coil, solenoid valve and humidity controller.

In addition to a thermostat or room sensor used for conventional operation, a humidity sensor is required and must be located in the occupied space. Remote Mounted Humidity Sensor Kit is required for field installation.

The humidity sensor provides input to the Unit Controller which is used to control activation of the dehumidification operation.

Reheat controls are located in the compressor control section of the unit for easy access.

Benefits

Improves indoor air quality.

Helps prevent 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

The Unit Controller is factory set at 60% relative humidity setpoint and can be adjusted at the Unit Controller or with optional Unit Controller Software.

Reheat operation will initiate on a dehumidification demand and does not require a cooling demand.

The unit will operate in the dehumidification mode until the relative humidity of the conditioned space is below the setpoint.

The reheat coil is sized to provide 68°F to 75°F supply air during reheat operation.

This reduces sensible cooling capacity and extends compressor run time to control humidity when the cooling load is low.

A solenoid valve diverts hot gas from the compressor to the reheat coil.

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. The unit will continue to operate in this mode until the dehumidification demand is satisfied.

See Sequence of Operation for additional information.

Dehumidification and Cooling Demand (Thermostat/Room Sensor Application)

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

ACCESSORIES

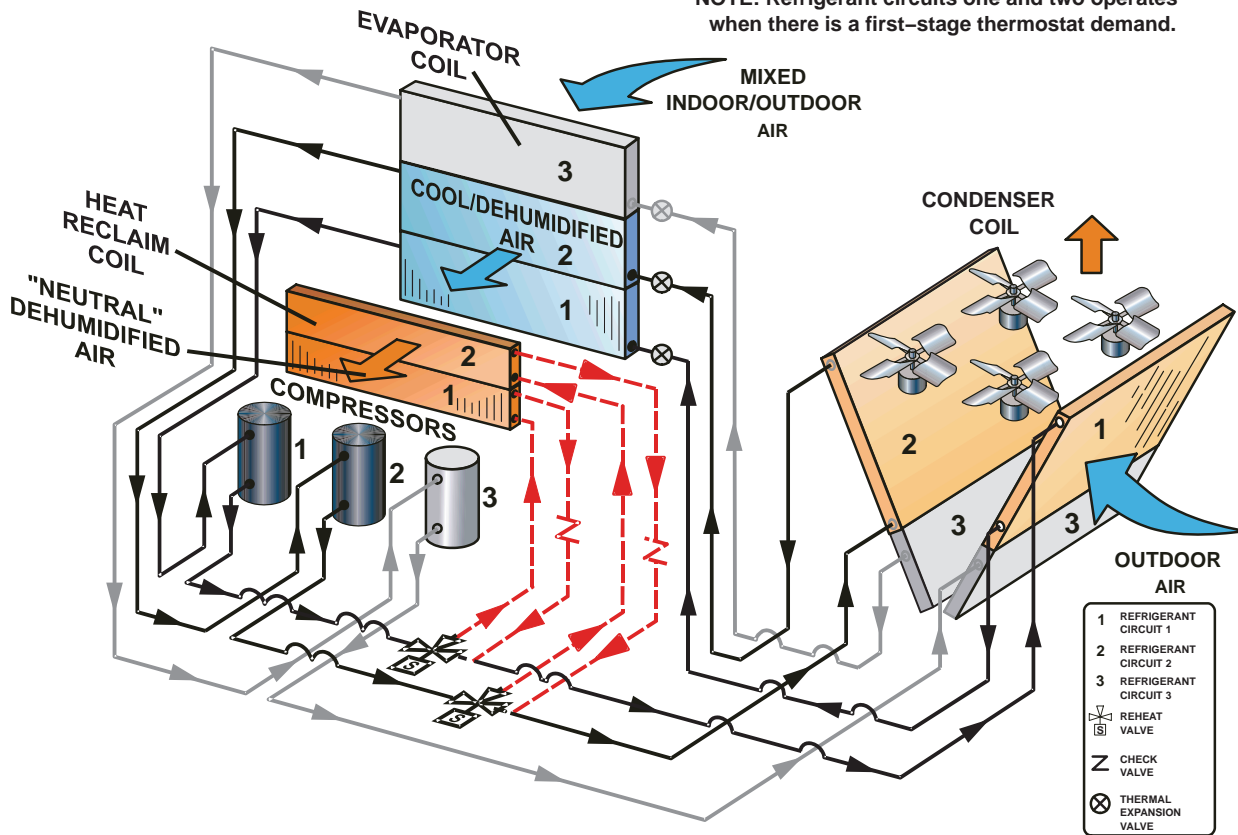
Humidity Sensor Kit, Remote Mounted Humidity sensor required with factory installed Dehumidification Option or Supermarket reheat field selectable option.

OPTIONS / ACCESSORIES

DEHUMIDIFICATION® SYSTEM (CONTINUED)

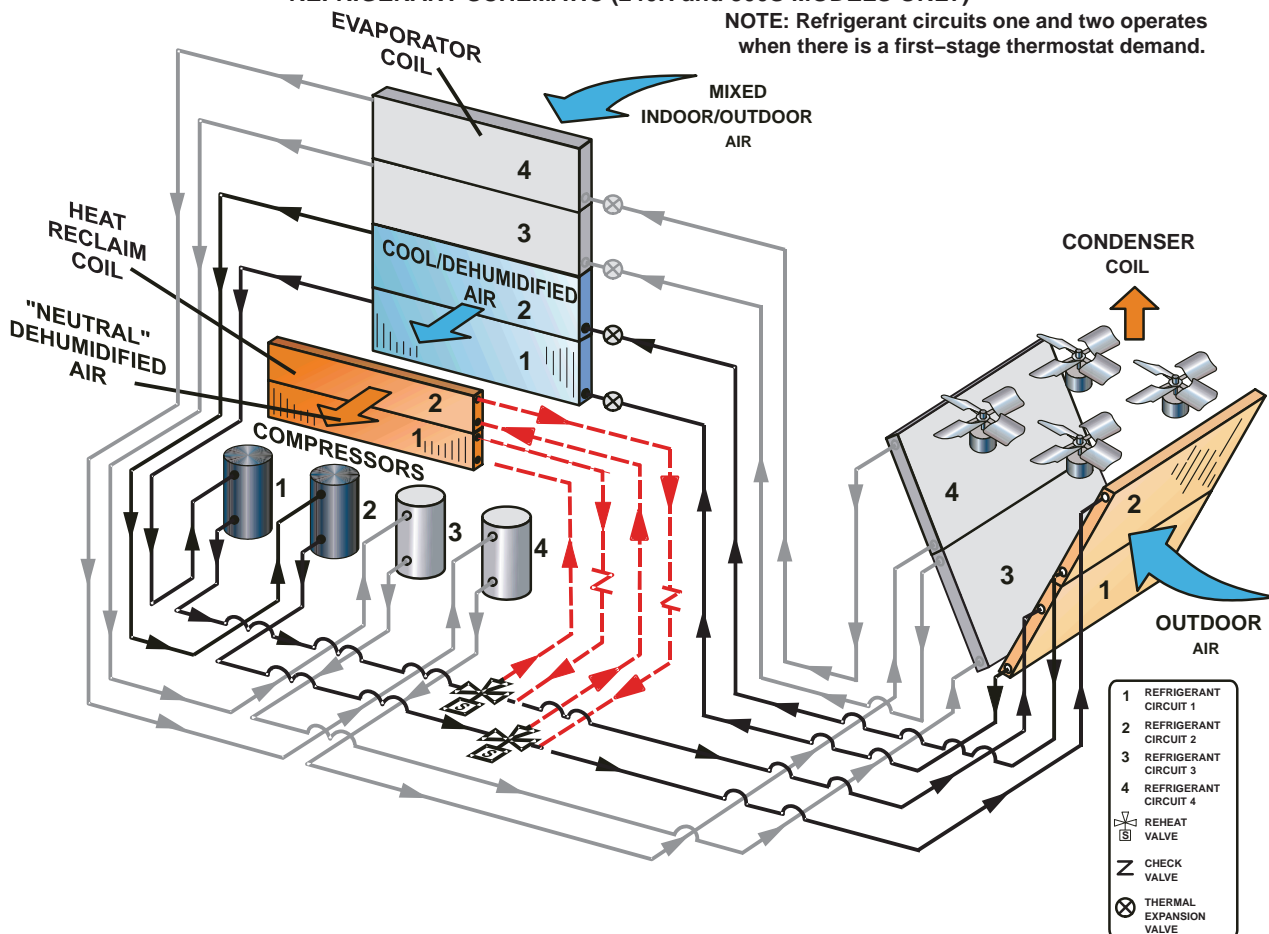
REFRIGERANT SCHEMATIC (156H, 180H and 210H MODELS ONLY)

NOTE: Refrigerant circuits one and two operates when there is a first-stage thermostat demand.



REFRIGERANT SCHEMATIC (240H and 300S MODELS ONLY)

NOTE: Refrigerant circuits one and two operates when there is a first-stage thermostat demand.



SEQUENCE OF OPERATION - SINGLE ZONE VAV SUPPLY FAN MODELS

Objective: Outline the unit functions as a result of room thermostat or zone sensor demands.

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

UNIT WITH 2-STAGE THERMOSTAT (2 COOLING STAGES, Y1, Y2) - 3 AND 4 COMPRESSORS MODELS

SUPPLY AIR BLOWER SPEED

Unit has the following supply air blower speed settings:

- Ventilation speed
- Low cooling speed
- High cooling speed
- Heating speed
- Smoke speed (Used only in smoke removal option - not discussed)

¹ UNIT FEATURES AN ECONOMIZER AND OUTDOOR AIR IS SUITABLE

Y1 Demand:

All compressors are off, supply air blower is on low cooling speed to minimize blower power consumption, economizer modulates (minimum to maximum open position) to maintain 55°F supply air temperature (default unit controller setting).

Y2 Demand:

All compressors are off, supply air blower is on high cooling speed providing higher cooling capacity, and economizer modulates to maintain 55°F supply air temperature.

If economizer stays at maximum open for 3 minutes, 1st stage compressors (compressor 1 and 2) are energized while supply air blower stays on high cooling speed providing maximum cooling capacity.

¹ *Outdoor air suitability is determined by the energy state of outdoor ambient (enthalpy or sensible) and its ability to achieve the desired free cooling effects. Outdoor air suitability can also be determined by a third party controller and provided to the RTU via a network connection.*

UNIT DOES NOT FEATURE AN ECONOMIZER OR OUTDOOR AIR IS NOT SUITABLE

Y1 Demand:

1st stage compressors operate and supply air blower operates at low cooling speed.

Y2 Demand:

All compressors operate and supply air blower operates at high cooling speed.

DEHUMIDIFICATION MODE

If a unit with Dehumidification Option receives a call for dehumidification, economizer free cooling is locked out.

Call For Dehumidification, No Y1, Y2 Demand:

1st stage compressors (1 & 2) operate, supply air blower operates at high cooling speed, and the reheat valves are energized.

Y1 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at high cooling speed and the reheat valves are energized.

Y2 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at high cooling speed, and the reheat valves are de-energized.

SEQUENCE OF OPERATION - SINGLE ZONE VAV SUPPLY FAN MODELS

UNIT WITH 3-STAGE THERMOSTAT (3 COOLING STAGES, Y1, Y2, Y3) - 3 AND 4 COMPRESSORS MODELS, OR ZONE SENSOR (4 COOLING STAGES, Y1, Y2, Y3, Y4) - 3 COMPRESSORS MODELS

SUPPLY AIR BLOWER SPEED

Unit has following supply air blower speed setting:

- Ventilation speed
- Cooling speed 1 (low)
- Cooling speed 2 (medium)
- Cooling speed 3 (high)
- Heating speed
- Smoke speed (Used only in smoke removal option - not discussed)

¹ UNIT FEATURES AN ECONOMIZER AND OUTDOOR AIR IS SUITABLE

3 Compressor Models

Y1 Demand:

All compressors are off, supply air blower is on cooling speed 1 to minimize blower power consumption, economizer modulates (minimum to maximum open position) to maintain 55°F supply air temperature (default unit controller setting).

Y2 Demand:

All compressors are off, supply air blower is on cooling speed 3 providing higher cooling capacity, economizer modulates (minimum to maximum open position) to maintain 55°F supply air temperature (default unit controller setting).

If economizer stays at maximum open for 3 minutes then compressor 1 is energized while supply air blower stays on cooling speed 3. After compressor is energized the economizer stays at maximum open.

Y3 Demand:

Compressors 1 and 2 are energized while supply air blower stays on cooling speed 3. After compressors are energized the economizer stays at maximum.

Y4 (Zone Sensor Only) Demand:

All compressors are energized and supply air blower stays on cooling speed 3.

4 Compressor Models

Y1 Demand:

All compressors are off, supply air blower is on cooling speed 1 to minimize blower power consumption, economizer modulates (minimum to maximum open position) to maintain 55°F supply air temperature (default unit controller setting).

Y2 Demand:

All compressors are off, supply air blower is on cooling speed 3 providing higher cooling capacity, economizer modulates (minimum to maximum open position) to maintain 55°F supply air temperature (default unit controller setting).

If economizer stays at maximum open for 3 minutes then compressors 1 and 2 are energized while supply air blower stays on cooling speed 3. After compressors are energized the economizer stays at maximum open.

Y3 Demand:

Compressors 1, 2 and 3 are energized and supply air blower stays on cooling speed 3.

¹ Outdoor air suitability is determined by the energy state of outdoor ambient (enthalpy or sensible) and its ability to achieve the desired free cooling effects. Outdoor air suitability can also be determined by a third party controller and provided to the RTU via a network connection.

SEQUENCE OF OPERATION - SINGLE ZONE VAV SUPPLY FAN MODELS

UNIT WITH 3-STAGE THERMOSTAT (3 COOLING STAGES, Y1, Y2, Y3) - 3 AND 4 COMPRESSORS MODELS, OR ZONE SENSOR (4 COOLING STAGES, Y1, Y2, Y3, Y4) - 3 COMPRESSORS MODELS - CONTINUED

UNIT DOES NOT FEATURE AN ECONOMIZER OR OUTDOOR AIR IS NOT SUITABLE

3 Compressor Units

Y1 Demand:

Compressor 1 operates and supply air blower operates at cooling speed 1.

Y2 Demand:

Compressors 1 and 2 operate and supply air blower operates at cooling speed 2.

Y3 or Y4 (Zone Sensor Only) Demand:

All compressors operate and supply air blower operates at cooling speed 3.

4 Compressor Units

Y1 Demand:

Compressors 1 and 2 operate and supply air blower operates at cooling speed 1.

Y2 demand:

Compressors 1, 2, and 3 operate and supply air blower operates at cooling speed 2.

Y3 demand:

All compressors operate and supply air blower operates at cooling speed 3.

DEHUMIDIFICATION MODE

If a unit with Dehumidification Option receives a call for dehumidification, economizer free cooling is locked out.

Call For Dehumidification, No Y1, Y2, Y3 Demand:

Compressor 1 and 2 operate, supply air blower operates at cooling speed 3, and both reheat valves are energized.

Y1 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at cooling speed 3 and both reheat valves are energized.

Y2 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at cooling speed 3, and the reheat valve of refrigeration circuit 1 is energized while the reheat valve of refrigeration circuit 2 is de-energized.

Y3 or Y4 (Zone Sensor Only) Demand:

All compressors operate, supply air blower operates at cooling speed 3, and both reheat valves are de-energized.

SEQUENCE OF OPERATION - SINGLE ZONE VAV SUPPLY FAN MODELS

UNIT WITH ZONE SENSOR (4 COOLING STAGES, Y1, Y2, Y3, Y4) – 4 COMPRESSORS MODELS

SUPPLY AIR BLOWER SPEED

Unit has following supply air blower speed setting:

- Ventilation speed
- Cooling speed 1 (low)
- Cooling speed 2 (medium-low)
- Cooling speed 3 (medium-high)
- Cooling speed 4 (high)
- Heating speed
- Smoke speed (Used only in smoke removal option - not discussed)

¹ UNIT FEATURES AN ECONOMIZER AND OUTDOOR AIR IS SUITABLE

Y1 Demand:

All compressors are off, supply air blower is on cooling speed 1 to minimize blower power consumption, economizer modulates (minimum to maximum open position) to maintain 55°F supply air temperature (default unit controller setting).

Y2 Demand:

All compressors are off, supply air blower is on cooling speed 4 providing higher cooling capacity, and economizer modulates to maintain 55°F supply air temperature.

If economizer stays at maximum open for 3 minutes, compressor 1 is energized while supply air blower stays on cooling speed 4. After compressor 1 is energized the economizer stays at maximum open.

Y3 Demand:

Compressor 1 and 2 are energized while supply air blower is on cooling speed 4 providing even higher cooling capacity.

Y4 Demand:

All compressors are energized while supply air blower is on cooling speed 4 providing maximum cooling capacity.

¹ *Outdoor air suitability is determined by the energy state of outdoor ambient (enthalpy or sensible) and its ability to achieve the desired free cooling effects. Outdoor air suitability can also be determined by a third party controller and provided to the RTU via a network connection.*

Unit Does Not Feature An Economizer (Or Outdoor Air Is Not Suitable)

Y1 demand:

Compressor 1 operates and supply air blower operates at cooling speed 1.

Y2 demand:

Compressors 1 and 2 operate and supply air blower operates at cooling speed 2.

Y3 demand:

Compressors 1, 2, and 3 operate and supply air blower operates at cooling speed 3.

Y4 demand:

All compressors operate and supply air blower operates at cooling speed 4.

SEQUENCE OF OPERATION - SINGLE ZONE VAV SUPPLY FAN MODELS

UNIT WITH ZONE SENSOR (4 COOLING STAGES, Y1, Y2, Y3, Y4) – 4 COMPRESSORS MODELS - CONTINUED

DEHUMIDIFICATION MODE

If a unit with Dehumidification Option receives a call for dehumidification, economizer free cooling is locked out.

Call For Dehumidification, No Y1, Y2, Y3, Y4 Demand:

Compressors 1 and 2 operate, supply air blower operates at cooling speed 4, and both reheat valves are energized.

Y1 Demand With A Call For Dehumidification:

Compressors 1, 2, and 3 operate, supply air blower operates at cooling speed 4 and both reheat valves are energized.

Y2 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at cooling speed 4, and both reheat valves are energized.

Y3 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at cooling speed 4, and the reheat valve of compressor 1 is energized while the reheat valve of compressor 2 is de-energized.

Y4 Demand With A Call For Dehumidification:

All compressors operate, supply air blower operates at cooling speed 4, and the reheat valves are de-energized.

HEATING MODE

NOTE - HEATING MODE IS THE SAME FOR ALL CONTROL OPTIONS.

W1 Demand:

Gas valves are open (stage 1 on units with 2-stage gas valves) and supply air blower operates at heating speed.

W2 Demand:

Gas valves are open (stage 2 on units with 2-stage gas valves) and supply air blower operates at heating speed.

MODULATING OUTDOOR AIR DAMPER

The minimum damper position for “occupied low blower” and “occupied high blower” is adjusted during unit setup to provide minimum fresh air requirements per ASHRAE 62.1 at the corresponding supply air blower speeds.

- When supply air blower is off or the unit is in unoccupied mode, the outdoor air damper is closed.
- When unit is in occupied mode and supply air blower is operating at a speed below the “midpoint” blower speed, the outdoor air damper is at minimum “low blower” position.
- When unit is in occupied mode and supply air blower is operating at a speed equal to or above the “midpoint” blower speed, the outdoor air damper is at minimum “high blower” position.

NOTE - The “midpoint” blower speed is an average of the minimum and maximum blower speed (minimum speed + maximum speed divided by 2).

POWER EXHAUST OPERATION

NOTE - POWER EXHAUST OPERATION IS THE SAME FOR ALL CONTROL OPTIONS

Single Zone VAV Supply Fan models are equipped with 2-stage power exhaust fans. Power exhaust fans operate when economizer outdoor air dampers are 50% open (adjustable). Power exhaust operates in 1st stage (one fan) up to 70% of supply air blower speed. 2nd stage power exhaust fans (both fans) operate when supply air blower speed is above 70% (adjustable) of full speed.

OPTIONS / ACCESSORIES

Item Description	Model Number	Catalog Number	Unit Model No				
			156	180	210	240	300
COOLING SYSTEM							
Condensate Drain Trap	PVC - C1TRAP20AD2	76W26	OX	OX	OX	OX	OX
	Copper - C1TRAP10AD2	76W27	OX	OX	OX	OX	OX
Conventional Fin/Tube Condenser Coil (replaces Eco-last™ Coil System)		Factory		O		O	
Corrosion Protection		Factory	O	O	O	O	O
Drain Pan Overflow Switch	E1SNSR71AD1	68W88	OX	OX	OX	OX	OX
Efficiency	High		O	O	O	O	
	Standard						O
Refrigerant Type		R-410A	O	O	O	O	O
Service valves (not for Eco-last™ Coil System or Dehumidification equipped units)		Factory	O	O	O	O	O
HEATING SYSTEM							
Bottom Gas Piping Kit	C1GPKT01C-1	85M31	OX	OX	OX	OX	OX
Combustion Air Intake Extensions (order two)	LTACA1K10/15	89L97	X	X	X	X	X
Gas Heat Input	Low - 169,000 Btuh	Factory	O	O	O		
	Standard - 260,000 Btuh	Factory	O	O	O	O	O
	Medium - 360,000 Btuh	Factory	O	O	O	O	O
	High - 480,000 Btuh	Factory		O	O	O	O
Low Temperature Vestibule Heater	208/230V-3ph - C1LTVH10C-1Y	58W28	OX	OX	OX	OX	OX
	460V-3ph - C1LTVH10C-1G	58W29	OX	OX	OX	OX	OX
	575V-3ph - C1LTVH10C-1J	58W30	OX	OX	OX	OX	OX
LPG/Propane Conversion Kits (Order 2 kits)	Low Heat - LTALPGK-130	72M94	X	X	X		
	Standard Heat - LTALPGK-130	72M94	X	X	X	X	X
	Medium Heat - LTALPGK-180	72M95	X	X	X	X	X
	High Heat - LTALPGK-240	72M96		X	X	X	X
Stainless Steel Heat Exchanger		Factory	O	O	O	O	O
Vertical Vent Extension Kit (Order two kits)	C1EXTN20FF1	42W16	X	X	X	X	X
BLOWER - SUPPLY AIR							
Blower Option	CAV (Constant Air Volume)	Factory	O	O	O	O	O
	Single Zone VAV Supply Fan supply air blower option (With VFD Bypass Control)	Factory	O	O	O	O	O
	Single Zone VAV Supply Fan supply air blower option (Without VFD Bypass Control)	Factory	O	O	O	O	O
Motors - Constant Air Volume (CAV)	Belt Drive (standard or high efficiency) - 2 hp	Factory	O				
	Belt Drive (standard or high efficiency) - 3 hp	Factory	O	O	O		
	Belt Drive (standard efficiency) - 5 hp	Factory	O	O	O	O	O
	Belt Drive (standard efficiency) - 7.5 hp	Factory		O	O	O	O
	Belt Drive (standard efficiency) - 10 hp	Factory				O	O
Motors - Single Zone VAV Supply Fan	Belt Drive (high efficiency) - 2 hp	Factory	O				
	Belt Drive (standard or high efficiency) - 3 hp	Factory	O	O	O		
	Belt Drive (standard efficiency) - 5 hp	Factory	O	O	O	O	O
	Belt Drive (standard efficiency) - 7.5 hp	Factory		O	O	O	O
	Belt Drive (standard efficiency) - 10 hp	Factory				O	O
Drive Kits See Blower Data Tables for usage and selection	Kit #1 535-725 rpm	Factory	O	O	O		
	Kit #2 710-965 rpm	Factory	O	O	O		
	Kit #3 685-856 rpm	Factory	O	O	O	O	O
	Kit #4 850-1045 rpm	Factory	O	O	O	O	O
	Kit #5 945-1185 rpm	Factory	O	O	O	O	O
	Kit #6 850-1045 rpm	Factory		O	O	O	O
	Kit #7 945-1185 rpm	Factory		O	O	O	O
	Kit #8 1045-1285 rpm	Factory		O	O	O	O
	Kit #10 1045-1285 rpm	Factory				O	O
	Kit #11 1135-1365 rpm	Factory				O	O
	Blower Belt Auto-Tensioner	Factory	O	O	O	O	O

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

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

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OPTIONS / ACCESSORIES

Item Description	Model Number	Catalog Number	Unit Model No					
			156	180	210	240	300	
CONTROLS								
Blower Proving Switch		C1SNSR35FF1	53W65	OX	OX	OX	OX	OX
Commercial Controls								
	Intelli-guide™ System - BACnet® Module - C0CTRL60AE1L		59W51	OX	OX	OX	OX	OX
	Intelli-guide™ System - LonTalk® Module - C0CTRL65FF1		54W27	OX	OX	OX	OX	OX
	Novar® ETM-2051 - E0CTRL030C1		64W74	OX	OX	OX	OX	OX
	Novar® LSE	Factory		O	O	O	O	O
Dirty Filter Switch		E1SNSR55C-1	53W68	OX	OX	OX	OX	OX
Fresh Air Tempering		C1SNSR75AD1	58W63	OX	OX	OX	OX	OX
Smoke Detector - Supply or Return (Power board and one sensor)		C1SNSR44C-1	83W40	OX	OX	OX	OX	OX
Smoke Detector - Supply and Return (Power board and two sensors)		C1SNSR43C-1	83W41	OX	OX	OX	OX	OX
INDOOR AIR QUALITY								
Air Filters								
High Efficiency Air Filters	MERV 8 - C1FLTR15C-1-		54W67	OX	OX	OX	OX	OX
24 x 24 x 2 (Order 6 per unit)	MERV 13 - C1FLTR40C-1-		52W40	OX	OX	OX	OX	OX
Replacement Media Filter With Metal Mesh Frame (includes non-pleated filter media)	C1FLTR30C-1-		44N61	OX	OX	OX	OX	OX
Indoor Air Quality (CO₂) Sensors								
Sensor - Wall-mount, off-white plastic cover with LCD display		C0SNSR50AE1L	77N39	X	X	X	X	X
Sensor - Wall-mount, off-white plastic cover, no display		C0SNSR52AE1L	87N53	X	X	X	X	X
Sensor - Black plastic case with LCD display, rated for plenum mounting		C0SNSR51AE1L	87N52	X	X	X	X	X
Sensor - Wall-mount, black plastic case, no display, rated for plenum mounting		C0MISC19AE1	87N54	X	X	X	X	X
CO ₂ Sensor Duct Mounting Kit - for downflow applications		C0MISC19AE1-	85L43	X	X	X	X	X
Aspiration Box - for duct mounting non-plenum rated CO ₂ sensors (87N53 or 77N39)		C0MISC16AE1-	90N43	X	X	X	X	X
UV-C Germicidal Light Kit								
¹ UV-C Light Kit (110/230v-1ph)			54W65	OX	OX	OX	OX	OX
ELECTRICAL								
Voltage 60 hz	208/230V - 3 phase	Factory		O	O	O	O	O
	460V - 3 phase	Factory		O	O	O	O	O
	575V - 3 phase	Factory		O	O	O	O	O
HACR Circuit Breakers		Factory		O	O	O	O	O
Disconnect Switch	80 amp - E1DISC080C-1		54W88	OX	OX	OX	OX	OX
(see Disconnect Table for usage, page 37)	150 amp - E1DISC150C-1		54W89	OX	OX	OX	OX	OX
GFI Service	15 amp non-powered, field-wired (208/230V, 460V only)	LTAGFIK10/15	74M70	OX	OX	OX	OX	OX
Outlets	15 amp factory-wired and powered (208/230V, 460V only)	Factory		O	O	O	O	O
	20 amp non-powered, field-wired (575V only)	Factory		O	O	O	O	O
Phase/Voltage Detection		Factory		O	O	O	O	O
ECONOMIZER								
Economizer								
Economizer - Downflow or Horizontal (Outdoor Air Hoods furnished for Economizer)		E1ECON15C-1	54W75	OX	OX	OX	OX	OX
Economizer Controls								
Differential Enthalpy	Order 2 - C1SNSR64FF1		53W64	OX	OX	OX	OX	OX
Sensible Control	Sensor is Furnished	Factory		O	O	O	O	O
Single Enthalpy	C1SNSR64FF1		53W64	OX	OX	OX	OX	OX
Global Control	Sensor Field Provided	Factory		O	O	O	O	O
Downflow Barometric Relief Dampers								
Barometric Relief Dampers (Hood furnished)		C1DAMP50C	54W78	OX	OX	OX	OX	OX
Horizontal Barometric Relief Dampers								
Barometric Relief Dampers with Outdoor Air Hood		LAGEDH18/24	16K99	X	X	X	X	X

¹ Lamps operate on 110-230V single-phase power supply. Step-down transformer must be field supplied for field installation in 460V and 575V rooftop units (transformer is furnished for factory installed light kits). Alternately, a separate 110V power supply may be used to directly power the UV-C ballast(s).

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OPTIONS / ACCESSORIES

Item Description	Model Number	Catalog Number	Unit Model No				
			156	180	210	240	300
OUTDOOR AIR							
Outdoor Air Dampers							
Motorized Dampers with Outdoor Air Hood	E1DAMP20C-1	54W74	OX	OX	OX	OX	OX
Manual Dampers With Outdoor Air Hood	C1DAMP10C-1	54W76	OX	OX	OX	OX	OX
POWER EXHAUST							
Standard Static	208/230V - C1PWRE11C-1Y	75W90	OX	OX	OX	OX	OX
	460V - C1PWRE11C-1G	75W91	OX	OX	OX	OX	OX
	575V - C1PWRE11C-1J	75W92	OX	OX	OX	OX	OX
Humidity Sensor Kit, Remote mounted (required)	COSNSR31AE-1	17M50	X	X	X	X	X
CABINET							
Coil Guards	Conventional Fin/Tube Condenser Coil - C1GARD20C11	54W79	X				
	Conventional Fin/Tube Condenser Coil - C1GARD20C31	54W80		X	X	X	X
	Eco-last Coil System - E1GARD21C11	93W17		X		X	
Hail Guards	Conventional Fin/Tube Condenser Coil - C1GARD10C11	54W83	X				
	Conventional Fin/Tube Condenser Coil - C1GARD10C31	54W84		X	X	X	X
	Eco-last Coil System - E1GARD11C11	93W16		X		X	
ROOF CURBS - DOWNFLOW							
Clip Curb							
8 in. height	C1CURB40CD1	26W32	X	X	X	X	X
14 in. height	LARMF18/30S-14	33K44	X	X	X	X	X
18 in. height	LARMF18/30S-18	33K45	X	X	X	X	X
24 in. height	LARMF18/30S-24	33K46	X	X	X	X	X
Standard							
14 in. height	LARMF18/36-14	16K87	X	X	X	X	X
24 in. height	LARMF18/36-24	16K88	X	X	X	X	X
Adjustable Pitched Curb							
14 in. height	L1CURB55C	43W26	X	X	X	X	X
ROOF CURBS - HORIZONTAL (REQUIRES HORIZONTAL RETURN AIR PANEL KIT)							
Standard							
26 in. height - slab applications	LARMFH18/24-26	97J33	X	X	X	X	
37 in. height - rooftop applications	LARMFH18/24-37	38K53	X	X	X	X	
30 in. height - slab applications	LARMFH30/36-30	33K79					X
41 in. height - rooftop applications	LARMFH30/36-41	38K54					X
Insulation Kit For Standard Horizontal Curbs							
for LARMFH18/24-26	C1INSU11C-1-	73K32	X	X	X	X	
for LARMFH18/24-37	C1INSU13C-1-	73K34	X	X	X	X	
for LARMFH30/36-30	C1INSU12C-1-	73K33					X
for LARMFH30/36-41	C1INSU14C-1-	73K35					X
Horizontal Return Air Panel Kit							
Required for Horizontal Applications with Roof Curb	C1HRAP10C-1-	87M00	X	X	X	X	X
CEILING DIFFUSERS							
Step-Down - Order one	RTD11-185	29G06	X	X			
	RTD11-275-R	29G07			X	X	X
	RTD11-150/180S (Canada only)	13K63	X	X			
	RTD11-275S (Canada only)	13K64			X	X	X
Flush - Order one	FD11-185	29G10	X	X			
	FD11-275-R	29G11			X	X	X
	FD11-150/180S (Canada only)	13K58	X	X			
	FD11-275S (Canada only)	13K59			X	X	X
Transitions (Supply and Return) - Order one	LASRT18	19K01	X	X			
	LASRT21/24	19K02			X	X	X
	LASRT18S (Canada only)	33K48	X	X			
	LASRT21/24S (Canada only)	33K49			X	X	X

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SPECIFICATIONS

General Data		Nominal Tonnage	13 Ton	13 Ton	15 Ton	15 Ton	17.5 Ton
		Model Number	LGH156H4B	LGH156H4M	LGH180H4B	LGH180H4M	LGH210H4B
Efficiency Type		Blower Type	High	High	High	High	High
			Constant Air Volume CAV	Single Zone VAV Supply Fan	Constant Air Volume CAV	Single Zone VAV Supply Fan	Constant Air Volume CAV
Cooling Performance	Gross Cooling Capacity - Btuh		156,000	156,000	176,000	176,000	204,000
	¹ Net Cooling Capacity - Btuh		152,000	152,000	172,000	172,000	198,000
	AHRI Rated Air Flow - cfm		5200	5200	5250	5250	6125
	Total Unit Power - kW		12.7	12.7	14.3	14.3	16.5
	¹ EER (Btuh/Watt)		12.0	12.0	12.0	12.0	12.0
	² IEER (Btuh/Watt)		13.6	14.1	13.5	13.7	13.0
	Refrigerant Type		R-410A	R-410A	R-410A	R-410A	R-410A
Refrigerant Charge	Eco-last™ Coil System	Circuit 1	N/A	N/A	6 lbs. 4 oz.	6 lbs. 4 oz.	N/A
		Circuit 2	N/A	N/A	5 lbs. 12 oz.	5 lbs. 12 oz.	N/A
		Circuit 3	N/A	N/A	6 lbs. 0 oz.	6 lbs. 0 oz.	N/A
	Conventional Fin/Tube Coil Option	Circuit 1	9 lbs. 8 oz.	9 lbs. 8 oz.	12 lbs. 8 oz.	12 lbs. 8 oz.	13 lbs. 0 oz.
		Circuit 2	9 lbs. 8 oz.	9 lbs. 8 oz.	12 lbs. 8 oz.	12 lbs. 8 oz.	13 lbs. 0 oz.
		Circuit 3	9 lbs. 8 oz.	9 lbs. 8 oz.	12 lbs. 8 oz.	12 lbs. 8 oz.	13 lbs. 0 oz.
	Conventional Fin/Tube With Dehumidification Option	Circuit 1	12 lbs. 0 oz.	12 lbs. 0 oz.	14 lbs. 8 oz.	14 lbs. 8 oz.	15 lbs. 0 oz.
		Circuit 2	12 lbs. 0 oz.	12 lbs. 0 oz.	14 lbs. 8 oz.	14 lbs. 8 oz.	15 lbs. 0 oz.
		Circuit 3	9 lbs. 8 oz.	9 lbs. 8 oz.	12 lbs. 8 oz.	12 lbs. 8 oz.	13 lbs. 0 oz.
Gas Heating Options Available			See page 23				
Compressor Type (number)			Scroll (3)	Scroll (3)	Scroll (3)	Scroll (3)	Scroll (3)
Outdoor Coils	Eco-last™ (Fin/Tube)	Net face area (total) - sq. ft.	N/A (41.4)	N/A (41.4)	55.2 (55.2)	55.2 (55.2)	N/A (55.2)
		Tube depth (diameter) - in.	N/A (3/8)	N/A (3/8)	0.71 (3/8)	0.71 (3/8)	N/A (3/8)
		Number of rows	N/A (2)	N/A (2)	1 (2)	1 (2)	N/A (2)
		Fins per inch	N/A (20)	N/A (20)	23 (20)	23 (20)	N/A (20)
Outdoor Coil Fans	Motor - (No.) horsepower		(3) 1/3	(3) 1/3	(4) 1/3	(4) 1/3	(6) 1/3
	Motor rpm		1075	1075	1075	1075	1075
	Total Motor watts		1100	1100	1500	1500	1950
	Diameter - (No.) in.		(3) 24	(3) 24	(4) 24	(4) 24	(6) 24
	Number of blades		3	3	3	3	3
	Total Air volume - cfm		12,000	12,000	16,000	16,000	20,000
Indoor Coils	Net face area (total) - sq. ft.		21.4	21.4	21.4	21.4	21.4
	Tube diameter - in.		3/8	3/8	3/8	3/8	3/8
	Number of rows		3	3	3	3	4
	Fins per inch		14	14	14	14	14
	Drain connection - No. and size		(1) 1 in. FPT	(1) 1 in. FPT	(1) 1 in. FPT	(1) 1 in. FPT	(1) 1 in. FPT
		Expansion device type					Balance port TXV, removable head
³ Indoor Blower and Drive Selection	Nominal motor output		2 hp, 3 hp, 5 hp		3 hp, 5 hp, 7.5 hp		
	Maximum usable motor output (US Only)		2.3 hp, 3.45 hp, 5.75 hp		3.45 hp, 5.75 hp, 8.62 hp		
	Motor - Drive kit number		2 hp Kit 1 535-725 rpm Kit 2 710-965 rpm 3 hp Std. Eff. Kit 1 535-725 rpm Kit 2 710-965 rpm 3 hp High. Eff. Kit 3 685-856 rpm Kit 4 850-1045 rpm 5 hp Kit 3 - 685-856 rpm Kit 4 850-1045 rpm Kit 5 945-1185 rpm		3 hp Std. Eff. Kit 1 535-725 rpm Kit 2 710-965 rpm 3 hp High. Eff. Kit 3 - 685-856 rpm Kit 4 850-1045 rpm 5 hp Kit 3 685-856 rpm Kit 4 850-1045 rpm Kit 5 945-1185 rpm 7.5 hp Kit 6 850-1045 rpm Kit 7 945-1185 rpm Kit 8 1045-1285 rpm		
	Blower wheel nominal D x W - in.		(2) 15 x 15 in.		(2) 15 x 15 in.		
Filters	Type of filter		Fiberglass, disposable				
	Number and size - in.		(6) 24 x 24 x 2				
Electrical characteristics			208/230V, 460V or 575V - 60 hertz - 3 phase				

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

¹ AHRI Certified to AHRI Standard 340/360; 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

² Integrated Energy Efficiency Ratio tested according to AHRI Standard 340/360.

³ Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor output required. Maximum usable output of motors furnished are shown. In Canada, nominal motor output is also maximum usable motor output. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

NOTE - Units equipped with Single Zone VAV Supply Fan option are limited to a motor service factor of 1.0.

SPECIFICATIONS

General Data		Nominal Tonnage	17.5 Ton	20 Ton	20 Ton	25 Ton	25 Ton	
Model Number			LGH210H4M	LGH240H4B	LGH240HAM	LGH300S4B	LGH300S4M	
Efficiency Type			High	High	High	Standard	Standard	
Blower Type			Single Zone VAV Supply Fan	Constant Air Volume CAV	Single Zone VAV Supply Fan	Constant Air Volume CAV	Single Zone VAV Supply Fan	
Cooling Performance	Gross Cooling Capacity - Btuh		204,000	238,000	238,000	282,000	282,000	
	¹ Net Cooling Capacity - Btuh		198,000	230,000	230,000	270,000	270,000	
	AHRI Rated Air Flow - cfm		6125	6400	6400	8400	8400	
	Total Unit Power - kW		16.5	19.2	19.2	25.7	25.7	
	¹ EER (Btuh/Watt)		12.0	12.0	12.0	10.5	10.5	
	² IEER (Btuh/Watt)		14.0	13.2	14.5	10.9	13.8	
Refrigerant Type			R-410A	R-410A	R-410A	R-410A	R-410A	
Refrigerant Charge	Eco-last™ Coil System	Circuit 1	N/A	6 lbs. 8 oz.	6 lbs. 8 oz.	N/A	N/A	
		Circuit 2	N/A	6 lbs. 4 oz.	6 lbs. 4 oz.	N/A	N/A	
		Circuit 3	N/A	6 lbs. 0 oz.	6 lbs. 0 oz.	N/A	N/A	
		Circuit 4	N/A	5 lbs. 8 oz.	5 lbs. 8 oz.	N/A	N/A	
	Conventional Fin/Tube Coil Option	Circuit 1	13 lbs. 0 oz.	10 lbs. 0 oz.	10 lbs. 0 oz.	11 lbs. 8 oz.	11 lbs. 8 oz.	
		Circuit 2	13 lbs. 0 oz.	10 lbs. 0 oz.	10 lbs. 0 oz.	11 lbs. 8 oz.	11 lbs. 8 oz.	
		Circuit 3	13 lbs. 0 oz.	10 lbs. 0 oz.	10 lbs. 0 oz.	11 lbs. 8 oz.	11 lbs. 8 oz.	
		Circuit 4	N/A	8 lbs. 12 oz.	8 lbs. 12 oz.	10 lbs. 8 oz.	10 lbs. 8 oz.	
	Conventional Fin/Tube With Dehumidification Option	Circuit 1	15 lbs. 0 oz.	12 lbs. 0 oz.	12 lbs. 0 oz.	12 lbs. 8 oz.	12 lbs. 8 oz.	
		Circuit 2	15 lbs. 0 oz.	12 lbs. 0 oz.	12 lbs. 0 oz.	12 lbs. 8 oz.	12 lbs. 8 oz.	
		Circuit 3	13 lbs. 0 oz.	10 lbs. 0 oz.	10 lbs. 0 oz.	11 lbs. 8 oz.	11 lbs. 8 oz.	
		Circuit 4	N/A	8 lbs. 12 oz.	8 lbs. 12 oz.	10 lbs. 8 oz.	10 lbs. 8 oz.	
Gas Heating Options Available			See page 23					
Compressor Type (number)			Scroll (3)	Scroll (4)	Scroll (4)	Scroll (4)	Scroll (4)	
Outdoor Coils	Net face area (total) - sq. ft.		N/A (55.2)	55.2 (55.2)	55.2 (55.2)	N/A (55.2)	N/A (55.2)	
	Eco-last™ Tube depth (diameter) - in.		N/A (3/8)	0.71 (3/8)	0.71 (3/8)	N/A (3/8)	N/A (3/8)	
	(Fin/Tube) Number of rows		N/A (2)	1 (2)	1 (2)	N/A (2)	N/A (2)	
	Fins per inch		N/A (20)	23 (20)	23 (20)	N/A (20)	N/A (20)	
Outdoor Coil Fans	Motor - (No.) horsepower		(6) 1/3	(6) 1/3	(6) 1/3	(6) 1/3	(6) 1/3	
	Motor rpm		1075	1075	1075	1075	1075	
	Total Motor watts		1950	1950	1950	1950	1950	
	Diameter - (No.) in.		(6) 24	(6) 24	(6) 24	(6) 24	(6) 24	
	Number of blades		3	3	3	3	3	
	Total Air volume - cfm		20,000	20,000	20,000	20,000	20,000	
Indoor Coils	Net face area (total) - sq. ft.		21.4	21.4	21.4	21.4	21.4	
	Tube diameter - in.		3/8	3/8	3/8	3/8	3/8	
	Number of rows		4	4	4	4	4	
	Fins per inch		14	14	14	14	14	
	Drain connection - No. and size		(1) 1 in. FPT	(1) 1 in. FPT	(1) 1 in. FPT	(1) 1 in. FPT	(1) 1 in. FPT	
	Expansion device type		Balance port TXV, removable head					
³ Indoor Blower and Drive Selection	Nominal motor output		3 hp, 5 hp, 7.5 hp	5 hp, 7.5 hp, 10 hp				
	Maximum usable motor output (US Only)		3.45 hp, 5.75 hp, 8.62 hp	5.75 hp, 8.62 hp, 11.5 hp				
	Motor - Drive kit number	3 hp Std. Eff.		Kit 1 535-725 rpm Kit 2 710-965 rpm	5 hp			
		3 hp High. Eff.		Kit 3 - 685-856 rpm Kit 4 850-1045 rpm	Kit 3 685-856 rpm Kit 4 850-1045 rpm			
		5 hp		Kit 3 685-856 rpm Kit 4 850-1045 rpm	Kit 5 945-1185 rpm Kit 6 850-1045 rpm Kit 7 945-1185 rpm Kit 8 1045-1285 rpm			
		7.5 hp		Kit 5 945-1185 rpm	10 hp			
		7.5 hp		Kit 6 850-1045 rpm Kit 7 945-1185 rpm Kit 8 1045-1285 rpm	Kit 7 945-1185 rpm Kit 10 1045-1285 rpm Kit 11 1135-1365 rpm			
		7.5 hp		Kit 5 945-1185 rpm				
		7.5 hp		Kit 6 850-1045 rpm Kit 7 945-1185 rpm Kit 8 1045-1285 rpm				
		7.5 hp		Kit 5 945-1185 rpm				
7.5 hp			Kit 6 850-1045 rpm Kit 7 945-1185 rpm Kit 8 1045-1285 rpm					
7.5 hp			Kit 5 945-1185 rpm					
Blower wheel nominal D x W - in.			(2) 15 x 15 in.					
Filters	Type of filter		Fiberglass, disposable					
	Number and size - in.		(6) 24 x 24 x 2					
Electrical characteristics			208/230V, 460V or 575V - 60 hertz - 3 phase					

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

¹ AHRI Certified to AHRI Standard 340/360; 95°F outdoor air temperature and 80°F db/67°F wb entering evaporator air; minimum external duct static pressure.

² Integrated Energy Efficiency Ratio tested according to AHRI Standard 340/360.

³ Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor output required. Maximum usable output of motors furnished are shown. In Canada, nominal motor output is also maximum usable motor output. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

NOTE - Units equipped with Single Zone VAV Supply Fan option are limited to a motor service factor of 1.0.

SPECIFICATIONS - GAS HEAT

Usage Data		Model Number	LGH156 LGH180 LGH210	LGH156 LGH180 LGH210 LGH240 LGH300	LGH180 LGH210 LGH240 LGH300	
		Heat Input Type	Low (L)	Standard (S)	Medium (M)	High (H)
		Number of Gas Heat Stages	1	2	2	2
Gas Heating Performance	Input - Btuh	First Stage	169,000	169,000	234,000	312,000
		Second Stage	N/A	260,000	360,000	480,000
	Output - Btuh	First Stage	135,000	---	---	---
		Second Stage	N/A	208,000	288,000	384,000
	Temperature Rise Range - °F		15 - 45	15 - 45	30 - 60	40 - 70
	Thermal Efficiency		80.0%	80.0%	80.0%	80.0%
Gas Supply Connections		1 in. npt	1 in. npt	1 in. npt	1 in. npt	
Recommended Gas Supply Pressure - in. w.g.	Natural	7	7	7	7	
	LPG/Propane	11	11	11	11	

HIGH ALTITUDE DERATE

Units may be installed at altitudes up to 2000 feet above sea level without any modification.

At altitudes above 2000 feet, units must be derated to match gas manifold pressures shown in table below.

At altitudes above 4500 feet unit must be derated 2% for each 1000 feet above sea level.

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

Gas Heat Type	Altitude - ft.	Gas Manifold Pressure - in. w.g.		Input Rate Natural Gas or LPG/Propane - Btuh	
		Natural Gas	LPG/Propane Gas	First Stage	Second Stage
Low (L)	No adjustment required				
Standard (S)	2001 - 4500	3.4	9.6	169,000	249,000
Medium (M)	2001 - 4500	3.4	9.6	234,000	345,000
High (H)	2001 - 4500	3.4	9.6	312,000	460,000

RATINGS

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

13 TON HIGH EFFICIENCY LGH156H4B (1ST STAGE) - CONSTANT AIR VOLUME

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		65°F						75°F						85°F						95°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	4160	107.7	4.68	.67	.80	.93	103.7	5.30	.68	.81	.95	99.4	5.97	.69	.83	.97	94.7	6.73	.71	.85	.99				
	5200	113.5	4.73	.71	.86	.99	109.1	5.34	.72	.88	1.00	104.4	6.01	.74	.90	1.00	99.4	6.78	.76	.93	1.00				
	6240	117.8	4.77	.75	.93	1.00	113.1	5.38	.77	.95	1.00	108.2	6.05	.79	.97	1.00	103.1	6.81	.81	.99	1.00				
67°F	4160	113.7	4.73	.54	.65	.76	109.5	5.34	.55	.66	.77	105.0	6.02	.55	.67	.79	100.3	6.79	.56	.68	.81				
	5200	120.0	4.79	.56	.69	.82	115.4	5.39	.57	.70	.84	110.5	6.07	.58	.71	.86	105.3	6.83	.59	.73	.89				
	6240	124.7	4.83	.59	.73	.89	119.6	5.43	.59	.74	.91	114.5	6.11	.61	.76	.94	109.0	6.87	.62	.78	.96				
71°F	4160	119.7	4.78	.42	.52	.63	115.3	5.39	.42	.53	.63	110.6	6.07	.42	.54	.65	105.7	6.83	.42	.54	.66				
	5200	126.3	4.84	.42	.55	.66	121.4	5.45	.42	.55	.68	116.4	6.12	.43	.56	.69	111.1	6.89	.43	.57	.71				
	6240	131.3	4.88	.43	.57	.70	126.1	5.49	.43	.58	.72	120.8	6.17	.44	.59	.74	115.0	6.93	.44	.60	.76				

13 TON HIGH EFFICIENCY LGH156H4B (2ND STAGE) - CONSTANT AIR VOLUME

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		85°F						95°F						105°F						115°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	4160	148.0	9.05	.71	.85	.99	141.0	10.20	.72	.88	1.00	133.9	11.51	.74	.90	1.00	126.1	13.01	.76	.94	1.00				
	5200	155.0	9.11	.76	.93	1.00	147.7	10.26	.78	.96	1.00	140.0	11.57	.80	.99	1.00	132.5	13.08	.83	1.00	1.00				
	6240	160.7	9.17	.81	.99	1.00	153.5	10.32	.83	1.00	1.00	146.4	11.64	.86	1.00	1.00	139.0	13.15	.90	1.00	1.00				
67°F	4160	156.5	9.13	.56	.68	.81	149.3	10.28	.57	.70	.84	141.9	11.59	.58	.71	.86	133.8	13.09	.59	.73	.90				
	5200	164.2	9.20	.59	.73	.90	156.5	10.35	.60	.75	.92	148.3	11.66	.61	.77	.95	139.6	13.16	.63	.80	.98				
	6240	169.7	9.25	.62	.79	.97	161.4	10.40	.63	.81	.99	152.8	11.71	.64	.84	1.00	143.8	13.21	.66	.87	1.00				
71°F	4160	164.8	9.21	.42	.54	.66	157.3	10.36	.42	.55	.67	149.8	11.68	.43	.56	.69	141.4	13.18	.44	.57	.71				
	5200	173.0	9.29	.43	.58	.71	165.0	10.44	.44	.59	.73	156.5	11.75	.44	.60	.75	147.7	13.25	.45	.61	.77				
	6240	179.0	9.35	.44	.61	.76	170.4	10.50	.45	.62	.78	161.4	11.81	.45	.63	.81	152.2	13.31	.46	.65	.84				

15 TON HIGH EFFICIENCY LGH180H4B (1ST STAGE) - CONSTANT AIR VOLUME

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		65°F						75°F						85°F						95°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	4800	124.9	5.04	0.7	0.81	0.92	120.4	5.79	0.7	0.82	0.94	115.9	6.62	0.71	0.84	0.96	110.9	7.53	0.72	0.85	0.98				
	6000	131.9	5.05	0.73	0.86	0.99	126.9	5.81	0.74	0.88	1	121.8	6.64	0.75	0.9	1	116.4	7.56	0.77	0.92	1				
	7200	136.9	5.05	0.77	0.92	1	131.6	5.82	0.78	0.94	1	126.2	6.66	0.8	0.96	1	120.5	7.58	0.82	0.98	1				
67°F	4800	131.8	5.05	0.56	0.67	0.78	127.3	5.81	0.56	0.68	0.79	122.5	6.65	0.57	0.69	0.8	117.1	7.56	0.58	0.7	0.82				
	6000	139.2	5.06	0.58	0.71	0.83	134.1	5.83	0.59	0.72	0.85	128.8	6.67	0.59	0.73	0.86	123	7.6	0.6	0.75	0.88				
	7200	144.6	5.06	0.6	0.74	0.89	139.2	5.84	0.61	0.76	0.9	133.6	6.69	0.62	0.78	0.93	127.5	7.62	0.63	0.79	0.95				
71°F	4800	138.6	5.05	0.44	0.54	0.64	133.8	5.83	0.44	0.55	0.65	128.8	6.67	0.44	0.55	0.66	123.3	7.6	0.44	0.56	0.67				
	6000	146.4	5.07	0.44	0.56	0.68	141.1	5.85	0.44	0.57	0.69	135.5	6.7	0.44	0.58	0.71	129.5	7.63	0.44	0.59	0.72				
	7200	152.1	5.08	0.45	0.59	0.72	146.5	5.86	0.45	0.6	0.73	140.5	6.72	0.45	0.61	0.75	134.1	7.66	0.45	0.62	0.77				

15 TON HIGH EFFICIENCY LGH180H4B (2ND STAGE) - CONSTANT AIR VOLUME

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		85°F						95°F						105°F						115°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	4800	172.3	9.96	0.72	0.86	0.99	164.6	11.32	0.73	0.88	1	156.2	12.83	0.75	0.9	1	147	14.51	0.77	0.93	1				
	6000	180.4	9.99	0.77	0.93	1	172	11.37	0.79	0.96	1	163.2	12.89	0.81	0.98	1	153.6	14.57	0.83	1	1				
	7200	186.5	10.02	0.82	0.99	1	178.2	11.41	0.84	1	1	169.8	12.94	0.86	1	1	160.7	14.64	0.9	1	1				
67°F	4800	182.1	10	0.57	0.7	0.82	174	11.38	0.58	0.71	0.84	165.3	12.9	0.59	0.72	0.87	155.6	14.59	0.6	0.74	0.9				
	6000	190.9	10.04	0.6	0.74	0.9	182.1	11.43	0.61	0.76	0.92	172.4	12.96	0.62	0.78	0.95	162.1	14.65	0.64	0.81	0.98				
	7200	197.3	10.07	0.63	0.8	0.96	187.9	11.46	0.64	0.82	0.99	177.5	13	0.65	0.84	1	166.6	14.69	0.67	0.87	1				
71°F	4800	191.6	10.04	0.43	0.55	0.67	183	11.43	0.44	0.56	0.68	173.9	12.97	0.44	0.57	0.7	164	14.67	0.44	0.59	0.72				
	6000	200.8	10.09	0.44	0.58	0.72	191.5	11.48	0.44	0.6	0.74	181.7	13.03	0.45	0.61	0.76	170.7	14.73	0.45	0.63	0.78				
	7200	207.5	10.12	0.45	0.62	0.77	197.7	11.52	0.45	0.63	0.79	187.2	13.07	0.46	0.64	0.82	175.9	14.78	0.47	0.66	0.85				

RATINGS

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

17.5 TON HIGH EFFICIENCY LGH210H4B (1ST STAGE) - CONSTANT AIR VOLUME

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
		cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F
63°F	5600	139.5	5.49	.71	.84	.97	134.0	6.23	.72	.86	.99	128.4	7.05	.73	.88	1.00	122.4	7.97	.75	.90	1.00
	7000	146.4	5.54	.76	.91	1.00	140.7	6.29	.77	.93	1.00	134.6	7.11	.79	.96	1.00	128.3	8.03	.81	.98	1.00
	8400	152.2	5.58	.81	.98	1.00	146.1	6.34	.82	1.00	1.00	139.8	7.16	.84	1.00	1.00	134.0	8.08	.87	1.00	1.00
67°F	5600	148.5	5.56	.56	.69	.80	142.4	6.30	.57	.69	.82	136.4	7.13	.58	.71	.84	130.0	8.04	.59	.72	.86
	7000	155.3	5.61	.59	.73	.88	148.9	6.36	.60	.74	.90	142.5	7.19	.61	.77	.92	135.4	8.10	.63	.78	.95
	8400	160.6	5.65	.62	.78	.95	153.8	6.41	.63	.80	.97	146.8	7.23	.64	.82	.99	139.2	8.14	.65	.84	1.00
71°F	5600	157.4	5.63	.43	.55	.66	151.0	6.38	.43	.55	.67	144.5	7.21	.43	.56	.68	137.9	8.13	.44	.57	.70
	7000	164.7	5.69	.44	.58	.71	158.0	6.45	.45	.59	.72	150.9	7.27	.45	.60	.74	143.6	8.19	.45	.61	.76
	8400	170.0	5.74	.45	.61	.76	162.9		.46	.62	.78	155.3	7.32	.47	.63	.79	147.3	8.24	.47	.64	.82

17.5 TON HIGH EFFICIENCY LGH210H4B (2ND STAGE) - CONSTANT AIR VOLUME

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
		cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F
63°F	5600	197.4	11.25	.73	.87	.99	188.2	12.71	.74	.89	1.00	178.8	14.36	.76	.92	1.00	168.4	16.25	.78	.95	1.00
	7000	207.3	11.34	.78	.95	1.00	197.3	12.80	.80	.97	1.00	187.4	14.45	.82	.99	1.00	177.2	16.33	.85	1.00	1.00
	8400	215.3	11.42	.83	.99	1.00	206.0	12.89	.86	1.00	1.00	196.1	14.55	.88	1.00	1.00	185.6	16.42	.91	1.00	1.00
67°F	5600	209.7	11.36	.57	.70	.83	200.1	12.82	.58	.72	.85	189.6	14.48	.59	.73	.88	178.5	16.34	.60	.75	.91
	7000	219.5	11.46	.61	.76	.91	208.9	12.92	.62	.77	.94	197.7	14.56	.63	.80	.96	185.7	16.41	.64	.82	.99
	8400	226.4	11.53	.63	.81	.98	214.9	12.98	.65	.83	.99	203.2	14.62	.66	.86	1.00	190.9	16.47	.68	.89	1.00
71°F	5600	222.5	11.49	.43	.55	.67	212.1	12.95	.44	.57	.69	201.1	14.60	.44	.58	.71	189.3	16.46	.44	.59	.73
	7000	232.4	11.59	.44	.59	.73	221.2	13.05	.45	.61	.75	209.2	14.69	.45	.62	.77	196.7	16.54	.46	.63	.80
	8400	239.3	11.66	.46	.62	.78	227.5	13.12	.46	.64	.81	215.3	14.75	.47	.66	.83	201.7	16.60	.48	.67	.87

20 TON HIGH EFFICIENCY LGH240H4B (1ST STAGE) - CONSTANT AIR VOLUME

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
		cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F
63°F	6400	128.1	5.15	.68	.80	.94	123.4	5.86	.69	.82	.96	118.4	6.64	.70	.84	.98	112.9	7.52	.71	.86	.99
	8000	134.8	5.20	.72	.87	.99	129.6	5.91	.73	.89	1.00	124.1	6.69	.75	.92	1.00	118.5	7.57	.77	.94	1.00
	9600	139.9	5.25	.77	.94	1.00	134.6	5.96	.78	.96	1.00	128.8	6.74	.80	.98	1.00	123.1	7.62	.83	.99	1.00
67°F	6400	136.2	5.22	.55	.66	.77	131.1	5.93	.55	.67	.78	125.5	6.71	.55	.68	.80	119.7	7.58	.56	.69	.82
	8000	142.8	5.27	.57	.70	.84	137.2	5.99	.57	.71	.86	131.3	6.77	.58	.73	.88	125.1	7.64	.59	.74	.91
	9600	147.8	5.31	.59	.74	.91	141.8	6.03	.60	.76	.93	135.5	6.81	.62	.78	.95	128.7	7.68	.63	.80	.98
71°F	6400	144.1	5.28	.42	.53	.63	138.6	6.00	.42	.53	.64	132.9	6.79	.42	.54	.65	126.7	7.66	.43	.55	.67
	8000	151.1	5.34	.43	.55	.68	145.2	6.06	.43	.56	.69	138.9	6.85	.43	.57	.70	132.3	7.73	.44	.58	.72
	9600	156.2	5.39	.44	.58	.72	149.8	6.11	.44	.59	.73	143.3	6.90	.44	.61	.76	136.3	7.77	.45	.62	.78

20 TON HIGH EFFICIENCY LGH240H4B (2ND STAGE) - CONSTANT AIR VOLUME

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
		cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F
63°F	6400	236.1	13.31	.72	.88	1.00	225.1	15.06	.74	.90	1.00	213.2	17.05	.76	.94	1.00	200.7	19.35	.78	.97	1.00
	8000	247.1	13.43	.78	.96	1.00	235.7	15.17	.80	.98	1.00	223.2	17.17	.83	.99	1.00	210.8	19.47	.86	1.00	1.00
	9600	256.5	13.53	.84	1.00	1.00	244.9	15.28	.87	1.00	1.00	233.0	17.29	.90	1.00	1.00	220.1	19.59	.94	1.00	1.00
67°F	6400	250.1	13.46	.57	.70	.84	238.1	15.20	.58	.72	.86	225.5	17.20	.59	.74	.90	211.6	19.48	.61	.76	.93
	8000	260.3	13.57	.60	.76	.93	247.3	15.31	.62	.78	.96	233.6	17.30	.63	.80	.98	219.1	19.57	.64	.84	.99
	9600	267.6	13.66	.64	.82	.99	254.2	15.39	.65	.84	1.00	239.8	17.38	.66	.87	1.00	225.1	19.65	.68	.92	1.00
71°F	6400	264.3	13.62	.42	.55	.68	251.7	15.37	.43	.56	.69	238.4	17.36	.44	.58	.71	223.9	19.64	.44	.59	.74
	8000	275.2	13.75	.44	.59	.73	261.6	15.49	.45	.61	.76	247.1	17.48	.45	.62	.78	231.3	19.74	.45	.64	.81
	9600	282.6	13.83	.45	.63	.79	268.2	15.57	.46	.64	.82	253.1	17.55	.47	.66	.85	236.7	19.81	.47	.68	.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.

25 TON STANDARD EFFICIENCY LGH300S4B (1ST STAGE) - CONSTANT AIR VOLUME

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	8000	149.4	6.82	0.69	0.81	0.93	143.9	7.68	0.7	0.82	0.95	137.9	8.64	0.71	0.84	0.96	131.4	9.72	0.72	0.86	0.98
	10000	157.2	6.9	0.73	0.87	0.98	151.1	7.76	0.74	0.89	0.99	144.8	8.72	0.75	0.91	1	138.1	9.81	0.77	0.93	1
	12000	163.3	6.97	0.77	0.93	1	156.9	7.83	0.78	0.95	1	150.4	8.79	0.8	0.97	1	143.1	9.88	0.82	0.98	1
67°F	8000	158.7	6.92	0.55	0.66	0.77	152.7	7.78	0.56	0.67	0.79	146.4	8.74	0.56	0.68	0.8	139.4	9.83	0.57	0.69	0.82
	10000	166.7	7.01	0.58	0.7	0.83	160.1	7.87	0.58	0.71	0.85	153.1	8.83	0.59	0.73	0.87	145.7	9.92	0.6	0.74	0.9
	12000	172.4	7.08	0.6	0.74	0.89	165.6	7.94	0.61	0.76	0.91	158.2	8.9	0.62	0.78	0.94	150.3	9.99	0.63	0.8	0.96
71°F	8000	167.9	7.02	0.43	0.53	0.64	161.8	7.89	0.43	0.54	0.65	155.1	8.86	0.43	0.55	0.66	147.7	9.95	0.43	0.55	0.67
	10000	176.1	7.12	0.43	0.56	0.68	169.4	7.99	0.44	0.57	0.69	162	8.96	0.44	0.57	0.7	154.3	10.05	0.44	0.59	0.72
	12000	182.3	7.2	0.44	0.58	0.72	175	8.07	0.45	0.59	0.73	167.3	9.03	0.45	0.61	0.76	159.1	10.12	0.45	0.62	0.78

25 TON STANDARD EFFICIENCY LGH300S4B (2ND STAGE) - CONSTANT AIR VOLUME

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	8000	276.6	17.49	0.74	0.89	1	263.3	19.68	0.75	0.91	1	249.7	22.2	0.77	0.93	1	234.8	25.14	0.8	0.97	1
	10000	289.2	17.66	0.79	0.96	1	275	19.85	0.81	0.98	1	261.1	22.38	0.84	0.99	1	245.9	25.32	0.87	1	1
	12000	299.5	17.81	0.85	1	1	285.8	20.02	0.87	1	1	271.8	22.57	0.9	1	1	256.7	25.53	0.93	1	1
67°F	8000	293	17.72	0.58	0.71	0.85	279.1	19.91	0.59	0.73	0.87	264.2	22.44	0.6	0.75	0.9	247.7	25.35	0.62	0.77	0.93
	10000	305.4	17.89	0.61	0.77	0.93	290	20.08	0.62	0.79	0.96	273.9	22.61	0.64	0.81	0.98	256.7	25.52	0.66	0.84	1
	12000	313.8	18.02	0.65	0.83	0.99	297.8	20.22	0.66	0.85	1	280.9	22.72	0.67	0.88	1	263.1	25.63	0.69	0.91	1
71°F	8000	309.9	17.96	0.44	0.56	0.69	295	20.16	0.44	0.57	0.71	279.2	22.7	0.44	0.59	0.72	262.2	25.62	0.45	0.6	0.75
	10000	322.3	18.15	0.45	0.6	0.75	306.3	20.36	0.45	0.61	0.77	289.2	22.87	0.46	0.63	0.79	271.2	25.78	0.47	0.65	0.82
	12000	331.4	18.3	0.46	0.64	0.8	314.5	20.5	0.47	0.65	0.83	296.6	23	0.47	0.67	0.86	277.4	25.9	0.48	0.69	0.89

13 TON HIGH EFFICIENCY LGH156H4M (1ST STAGE) - SINGLE ZONE VAV SUPPLY FAN SUPPLY AIR BLOWER

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	3000	98.4	4.5	0.66	0.76	0.85	95.1	5.11	0.66	0.77	0.87	91.4	5.78	0.67	0.78	0.88	87.4	6.53	0.68	0.79	0.9
	3500	103.2	4.53	0.68	0.78	0.89	99.5	5.14	0.68	0.8	0.91	95.6	5.81	0.69	0.81	0.92	91.2	6.56	0.7	0.82	0.94
	4000	107.1	4.56	0.7	0.81	0.93	103.2	5.16	0.7	0.83	0.95	98.9	5.83	0.71	0.84	0.97	94.3	6.58	0.73	0.86	0.98
67°F	3000	104	4.54	0.54	0.63	0.72	100.5	5.15	0.54	0.64	0.73	96.6	5.81	0.55	0.65	0.74	92.4	6.57	0.55	0.65	0.76
	3500	109	4.57	0.55	0.65	0.75	105.1	5.18	0.55	0.66	0.76	101	5.84	0.56	0.67	0.77	96.5	6.59	0.56	0.68	0.79
	4000	113.2	4.6	0.56	0.67	0.78	109.1	5.21	0.56	0.68	0.79	104.6	5.87	0.57	0.69	0.81	99.9	6.62	0.58	0.7	0.82
71°F	3000	109.4	4.57	0.43	0.52	0.61	105.6	5.18	0.43	0.52	0.61	101.7	5.85	0.43	0.53	0.62	97.4	6.6	0.43	0.53	0.63
	3500	114.7	4.61	0.43	0.53	0.62	110.7	5.22	0.43	0.53	0.63	106.3	5.88	0.43	0.54	0.64	101.7	6.63	0.43	0.55	0.65
	4000	119.1	4.64	0.43	0.54	0.64	114.8	5.25	0.44	0.55	0.65	110.2	5.91	0.44	0.55	0.66	105.2	6.66	0.44	0.56	0.67

13 TON HIGH EFFICIENCY LGH156H4M (2ND STAGE) - SINGLE ZONE VAV SUPPLY FAN SUPPLY AIR BLOWER

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	4160	148.0	9.05	.71	.85	.99	141.0	10.20	.72	.88	1.00	133.9	11.51	.74	.90	1.00	126.1	13.01	.76	.94	1.00
	5200	155.0	9.11	.76	.93	1.00	147.7	10.26	.78	.96	1.00	140.0	11.57	.80	.99	1.00	132.5	13.08	.83	1.00	1.00
	6240	160.7	9.17	.81	.99	1.00	153.5	10.32	.83	1.00	1.00	146.4	11.64	.86	1.00	1.00	139.0	13.15	.90	1.00	1.00
67°F	4160	156.5	9.13	.56	.68	.81	149.3	10.28	.57	.70	.84	141.9	11.59	.58	.71	.86	133.8	13.09	.59	.73	.90
	5200	164.2	9.20	.59	.73	.90	156.5	10.35	.60	.75	.92	148.3	11.66	.61	.77	.95	139.6	13.16	.63	.80	.98
	6240	169.7	9.25	.62	.79	.97	161.4	10.40	.63	.81	.99	152.8	11.71	.64	.84	1.00	143.8	13.21	.66	.87	1.00
71°F	4160	164.8	9.21	.42	.54	.66	157.3	10.36	.42	.55	.67	149.8	11.68	.43	.56	.69	141.4	13.18	.44	.57	.71
	5200	173.0	9.29	.43	.58	.71	165.0	10.44	.44	.59	.73	156.5	11.75	.44	.60	.75	147.7	13.25	.45	.61	.77
	6240	179.0	9.35	.44	.61	.76	170.4	10.50	.45	.62	.78	161.4	11.81	.45	.63	.81	152.2	13.31	.46	.65	.84

RATINGS

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

15 TON HIGH EFFICIENCY LGH180H4M (1ST STAGE) - SINGLE ZONE VAV SUPPLY FAN SUPPLY AIR BLOWER

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																				
		65°F						75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb			
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F		
63°F	3500	114.5	5.01	0.65	0.74	0.84	110.9	5.76	0.65	0.75	0.85	106.9	6.57	0.66	0.76	0.87	102.6	7.47	0.67	0.78	0.88	
	4000	119.4	5.02	0.66	0.77	0.87	115.4	5.77	0.67	0.78	0.89	111.1	6.59	0.68	0.79	0.9	106.5	7.49	0.69	0.8	0.92	
	4500	123.5	5.02	0.68	0.79	0.91	119.2	5.78	0.68	0.8	0.92	114.7	6.6	0.69	0.82	0.94	109.8	7.51	0.7	0.83	0.96	
67°F	3500	121	5.02	0.53	0.62	0.71	117.1	5.77	0.53	0.63	0.72	113	6.59	0.54	0.63	0.73	108.4	7.5	0.54	0.64	0.74	
	4000	126.1	5.03	0.54	0.63	0.73	121.9	5.78	0.54	0.64	0.74	117.5	6.61	0.54	0.65	0.76	112.6	7.52	0.55	0.66	0.77	
	4500	130.4	5.03	0.55	0.65	0.76	125.9	5.8	0.55	0.66	0.77	121.2	6.63	0.55	0.67	0.78	116.1	7.54	0.56	0.68	0.8	
71°F	3500	127.3	5.03	0.42	0.51	0.59	123.2	5.79	0.42	0.51	0.6	118.8	6.62	0.42	0.52	0.61	114.1	7.53	0.42	0.52	0.61	
	4000	132.7	5.03	0.42	0.52	0.61	128.2	5.8	0.42	0.52	0.62	123.6	6.64	0.42	0.53	0.62	118.4	7.55	0.43	0.53	0.63	
	4500	137.2	5.04	0.43	0.53	0.63	132.5	5.81	0.43	0.53	0.63	127.5	6.65	0.43	0.54	0.64	122.1	7.57	0.43	0.54	0.65	

15 TON HIGH EFFICIENCY LGH180H4M (2ND STAGE) - SINGLE ZONE VAV SUPPLY FAN SUPPLY AIR BLOWER

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	4800	172.3	9.96	0.72	0.86	0.99	164.6	11.32	0.73	0.88	1	156.2	12.83	0.75	0.9	1	147	14.51	0.77	0.93	1
	6000	180.4	9.99	0.77	0.93	1	172	11.37	0.79	0.96	1	163.2	12.89	0.81	0.98	1	153.6	14.57	0.83	1	1
	7200	186.5	10.02	0.82	0.99	1	178.2	11.41	0.84	1	1	169.8	12.94	0.86	1	1	160.7	14.64	0.9	1	1
67°F	4800	182.1	10	0.57	0.7	0.82	174	11.38	0.58	0.71	0.84	165.3	12.9	0.59	0.72	0.87	155.6	14.59	0.6	0.74	0.9
	6000	190.9	10.04	0.6	0.74	0.9	182.1	11.43	0.61	0.76	0.92	172.4	12.96	0.62	0.78	0.95	162.1	14.65	0.64	0.81	0.98
	7200	197.3	10.07	0.63	0.8	0.96	187.9	11.46	0.64	0.82	0.99	177.5	13	0.65	0.84	1	166.6	14.69	0.67	0.87	1
71°F	4800	191.6	10.04	0.43	0.55	0.67	183	11.43	0.44	0.56	0.68	173.9	12.97	0.44	0.57	0.7	164	14.67	0.44	0.59	0.72
	6000	200.8	10.09	0.44	0.58	0.72	191.5	11.48	0.44	0.6	0.74	181.7	13.03	0.45	0.61	0.76	170.7	14.73	0.45	0.63	0.78
	7200	207.5	10.12	0.45	0.62	0.77	197.7	11.52	0.45	0.63	0.79	187.2	13.07	0.46	0.64	0.82	175.9	14.78	0.47	0.66	0.85

17.5 TON HIGH EFFICIENCY LGH210H4M (1ST STAGE) - SINGLE ZONE VAV SUPPLY FAN SUPPLY AIR BLOWER

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																				
		65°F						75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb			
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F		
63°F	4000	129.5	5.42	0.66	0.77	0.88	124.8	6.17	0.67	0.78	0.9	119.8	6.99	0.68	0.8	0.91	114.4	7.91	0.69	0.81	0.94	
	4750	135.7	5.46	0.69	0.81	0.93	130.6	6.22	0.7	0.82	0.95	125.1	7.03	0.71	0.84	0.97	119.3	7.96	0.72	0.86	0.99	
	5500	140.6	5.5	0.71	0.85	0.98	135	6.25	0.72	0.87	0.99	129.4	7.07	0.74	0.88	1	123.3	7.99	0.75	0.91	1	
67°F	4000	137.9	5.48	0.54	0.64	0.74	133	6.23	0.54	0.64	0.75	127.5	7.05	0.54	0.65	0.76	121.9	7.98	0.55	0.66	0.78	
	4750	144.5	5.52	0.55	0.66	0.77	139.1	6.28	0.55	0.67	0.79	133.3	7.1	0.56	0.68	0.81	126.9	8.03	0.57	0.69	0.82	
	5500	149.8	5.56	0.56	0.69	0.81	143.7	6.32	0.57	0.7	0.83	137.7	7.15	0.58	0.71	0.85	130.9	8.06	0.59	0.73	0.87	
71°F	4000	146.5	5.54	0.42	0.52	0.61	141.3	6.3	0.42	0.52	0.62	135.6	7.12	0.42	0.53	0.63	129.3	8.05	0.42	0.53	0.64	
	4750	153.3	5.59	0.43	0.53	0.63	147.5	6.35	0.43	0.54	0.64	141.4	7.18	0.43	0.55	0.66	134.7	8.1	0.43	0.55	0.67	
	5500	158.9	5.63	0.43	0.55	0.66	152.4	6.39	0.43	0.55	0.67	146	7.22	0.43	0.56	0.69	139.2	8.15	0.44	0.58	0.7	

17.5 TON HIGH EFFICIENCY LGH210H4M (2ND STAGE) - SINGLE ZONE VAV SUPPLY FAN SUPPLY AIR BLOWER

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	5600	197.4	11.25	.73	.87	.99	188.2	12.71	.74	.89	1.00	178.8	14.36	.76	.92	1.00	168.4	16.25	.78	.95	1.00
	7000	207.3	11.34	.78	.95	1.00	197.3	12.80	.80	.97	1.00	187.4	14.45	.82	.99	1.00	177.2	16.33	.85	1.00	1.00
	8400	215.3	11.42	.83	.99	1.00	206.0	12.89	.86	1.00	1.00	196.1	14.55	.88	1.00	1.00	185.6	16.42	.91	1.00	1.00
67°F	5600	209.7	11.36	.57	.70	.83	200.1	12.82	.58	.72	.85	189.6	14.48	.59	.73	.88	178.5	16.34	.60	.75	.91
	7000	219.5	11.46	.61	.76	.91	208.9	12.92	.62	.77	.94	197.7	14.56	.63	.80	.96	185.7	16.41	.64	.82	.99
	8400	226.4	11.53	.63	.81	.98	214.9	12.98	.65	.83	.99	203.2	14.62	.66	.86	1.00	190.9	16.47	.68	.89	1.00
71°F	5600	222.5	11.49	.43	.55	.67	212.1	12.95	.44	.57	.69	201.1	14.60	.44	.58	.71	189.3	16.46	.44	.59	.73
	7000	232.4	11.59	.44	.59	.73	221.2	13.05	.45	.61	.75	209.2	14.69	.45	.62	.77	196.7	16.54	.46	.63	.80
	8400	239.3	11.66	.46	.62	.78	227.5	13.12	.46	.64	.81	215.3	14.75	.47	.66	.83	201.7	16.60	.48	.67	.87

RATINGS

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

20 TON HIGH EFFICIENCY LGH240H4M (1ST STAGE) - SINGLE ZONE VAV SUPPLY FAN SUPPLY AIR BLOWER

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	4500	115.4	5.2	0.65	0.75	0.85	111.7	5.97	0.66	0.76	0.86	107.5	6.8	0.67	0.77	0.88	103	7.72	0.68	0.79	0.89
	5500	122.4	5.22	0.68	0.79	0.9	118.1	5.99	0.69	0.8	0.92	113.7	6.83	0.69	0.82	0.93	108.6	7.76	0.7	0.83	0.95
	6500	127.7	5.23	0.7	0.83	0.95	123	6.01	0.71	0.84	0.97	118.1	6.86	0.73	0.86	0.98	113	7.79	0.74	0.88	0.99
67°F	4500	122.9	5.22	0.53	0.63	0.72	118.9	5.99	0.54	0.63	0.73	114.4	6.84	0.54	0.64	0.74	109.7	7.77	0.54	0.65	0.75
	5500	130.2	5.24	0.55	0.65	0.76	125.6	6.02	0.55	0.66	0.77	120.8	6.87	0.55	0.67	0.78	115.6	7.81	0.56	0.68	0.8
	6500	135.7	5.25	0.56	0.68	0.79	130.9	6.04	0.57	0.69	0.81	125.7	6.9	0.57	0.7	0.82	119.9	7.84	0.58	0.71	0.84
71°F	4500	130.2	5.24	0.42	0.51	0.6	126.1	6.02	0.42	0.52	0.61	121.4	6.87	0.42	0.52	0.61	116.3	7.81	0.42	0.53	0.62
	5500	138	5.26	0.43	0.53	0.63	133	6.05	0.43	0.53	0.64	128.1	6.91	0.43	0.54	0.64	122.5	7.86	0.43	0.55	0.65
	6500	143.7	5.27	0.43	0.55	0.65	138.6	6.07	0.43	0.55	0.66	133.1	6.94	0.44	0.56	0.67	127	7.89	0.44	0.56	0.69

20 TON HIGH EFFICIENCY LGH240H4M (2ND STAGE) - SINGLE ZONE VAV SUPPLY FAN SUPPLY AIR BLOWER

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	6400	236.1	13.31	.72	.88	1.00	225.1	15.06	.74	.90	1.00	213.2	17.05	.76	.94	1.00	200.7	19.35	.78	.97	1.00
	8000	247.1	13.43	.78	.96	1.00	235.7	15.17	.80	.98	1.00	223.2	17.17	.83	.99	1.00	210.8	19.47	.86	1.00	1.00
	9600	256.5	13.53	.84	1.00	1.00	244.9	15.28	.87	1.00	1.00	233.0	17.29	.90	1.00	1.00	220.1	19.59	.94	1.00	1.00
67°F	6400	250.1	13.46	.57	.70	.84	238.1	15.20	.58	.72	.86	225.5	17.20	.59	.74	.90	211.6	19.48	.61	.76	.93
	8000	260.3	13.57	.60	.76	.93	247.3	15.31	.62	.78	.96	233.6	17.30	.63	.80	.98	219.1	19.57	.64	.84	.99
	9600	267.6	13.66	.64	.82	.99	254.2	15.39	.65	.84	1.00	239.8	17.38	.66	.87	1.00	225.1	19.65	.68	.92	1.00
71°F	6400	264.3	13.62	.42	.55	.68	251.7	15.37	.43	.56	.69	238.4	17.36	.44	.58	.71	223.9	19.64	.44	.59	.74
	8000	275.2	13.75	.44	.59	.73	261.6	15.49	.45	.61	.76	247.1	17.48	.45	.62	.78	231.3	19.74	.45	.64	.81
	9600	282.6	13.83	.45	.63	.79	268.2	15.57	.46	.64	.82	253.1	17.55	.47	.66	.85	236.7	19.81	.47	.68	.89

25 TON STANDARD EFFICIENCY LGH300S4M (1ST STAGE) - SINGLE ZONE VAV SUPPLY FAN SUPPLY AIR BLOWER

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	5750	139.9	6.58	0.66	0.76	0.86	135.1	7.42	0.67	0.77	0.88	129.8	8.37	0.68	0.78	0.89	124.3	9.44	0.68	0.8	0.91
	6750	146.4	6.64	0.68	0.79	0.9	140.9	7.48	0.69	0.81	0.92	135.4	8.42	0.7	0.82	0.94	129.1	9.5	0.71	0.83	0.96
	7750	151.5	6.69	0.7	0.82	0.94	145.7	7.53	0.71	0.84	0.96	139.7	8.47	0.72	0.85	0.98	133.3	9.55	0.74	0.88	0.99
67°F	5750	148.8	6.66	0.54	0.63	0.73	143.5	7.51	0.54	0.64	0.74	138.1	8.45	0.55	0.65	0.75	132	9.54	0.55	0.66	0.76
	6750	155.6	6.73	0.55	0.65	0.76	149.9	7.57	0.55	0.66	0.77	143.9	8.52	0.56	0.67	0.78	137.3	9.59	0.56	0.68	0.8
	7750	160.9	6.79	0.56	0.68	0.79	154.8	7.63	0.57	0.68	0.8	148.4	8.57	0.57	0.7	0.82	141.5	9.65	0.58	0.71	0.84
71°F	5750	157.5	6.75	0.42	0.52	0.61	152.2	7.6	0.42	0.52	0.61	146.2	8.55	0.43	0.53	0.62	139.7	9.63	0.43	0.53	0.63
	6750	164.7	6.82	0.43	0.53	0.63	158.5	7.68	0.43	0.54	0.64	152.3	8.63	0.43	0.54	0.65	145.2	9.71	0.43	0.55	0.66
	7750	170.2	6.89	0.43	0.54	0.65	163.8	7.73	0.44	0.55	0.66	157.1	8.69	0.43	0.56	0.67	149.7	9.77	0.44	0.56	0.69

25 TON STANDARD EFFICIENCY LGH300S4M (2ND STAGE) - SINGLE ZONE VAV SUPPLY FAN SUPPLY AIR BLOWER

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	8000	276.6	17.49	0.74	0.89	1	263.3	19.68	0.75	0.91	1	249.7	22.2	0.77	0.93	1	234.8	25.14	0.8	0.97	1
	10000	289.2	17.66	0.79	0.96	1	275	19.85	0.81	0.98	1	261.1	22.38	0.84	0.99	1	245.9	25.32	0.87	1	1
	12000	299.5	17.81	0.85	1	1	285.8	20.02	0.87	1	1	271.8	22.57	0.9	1	1	256.7	25.53	0.93	1	1
67°F	8000	293	17.72	0.58	0.71	0.85	279.1	19.91	0.59	0.73	0.87	264.2	22.44	0.6	0.75	0.9	247.7	25.35	0.62	0.77	0.93
	10000	305.4	17.89	0.61	0.77	0.93	290	20.08	0.62	0.79	0.96	273.9	22.61	0.64	0.81	0.98	256.7	25.52	0.66	0.84	1
	12000	313.8	18.02	0.65	0.83	0.99	297.8	20.22	0.66	0.85	1	280.9	22.72	0.67	0.88	1	263.1	25.63	0.69	0.91	1
71°F	8000	309.9	17.96	0.44	0.56	0.69	295	20.16	0.44	0.57	0.71	279.2	22.7	0.44	0.59	0.72	262.2	25.62	0.45	0.6	0.75
	10000	322.3	18.15	0.45	0.6	0.75	306.3	20.36	0.45	0.61	0.77	289.2	22.87	0.46	0.63	0.79	271.2	25.78	0.47	0.65	0.82
	12000	331.4	18.3	0.46	0.64	0.8	314.5	20.5	0.47	0.65	0.83	296.6	23	0.47	0.67	0.86	277.4	25.9	0.48	0.69	0.89

DEHUMIDIFICATION SYSTEM RATINGS

13 TON HIGH EFFICIENCY LGH156H4 WITH DEHUMIDIFICATION OPERATING (1ST STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	4160	78.9	4.67	.56	.74	.93	66.3	5.28	.50	.73	.96	53.6	5.89	.45	.72	.99	40.9	6.50	.39	.71	1.00
	5200	86.8	4.71	.58	.80	1.00	72.5	5.30	.52	.79	1.00	58.1	5.89	.47	.78	1.00	43.7	6.48	.41	.77	1.00
	6240	94.7	4.74	.60	.86	1.00	78.7	5.32	.54	.85	1.00	62.6	5.89	.49	.83	1.00	46.6	6.47	.43	.82	1.00
67°F	4160	89.4	4.76	.40	.57	.74	77.1	5.37	.33	.53	.74	64.8	5.98	.26	.49	.73	52.5	6.59	.18	.46	.73
	5200	97.5	4.77	.41	.61	.80	83.6	5.38	.34	.57	.80	69.6	5.98	.26	.53	.80	55.7	6.58	.18	.49	.81
	6240	105.7	4.79	.43	.64	.86	90.1	5.38	.34	.60	.87	74.5	5.98	.26	.57	.88	58.9	6.57	.17	.53	.89
71°F	4160	99.9	4.85	.25	.40	.55	87.9	5.46	.16	.33	.51	76.0	6.07	.07	.27	.47	64.1	6.69	-.03	.20	.43
	5200	108.2	4.84	.25	.41	.58	94.7	5.45	.15	.35	.55	81.2	6.07	.05	.28	.52	67.7	6.68	-.06	.22	.49
	6240	116.6	4.84	.25	.43	.61	101.5	5.45	.14	.36	.59	86.4	6.06	.03	.30	.57	71.3	6.68	-.09	.23	.55

13 TON HIGH EFFICIENCY LGH156H4 WITH DEHUMIDIFICATION OPERATING (2ND STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	4160	131.1	7.12	.64	.82	1.00	116.4	8.10	.62	.83	1.00	101.6	9.08	.60	.84	1.00	86.8	10.05	.57	.85	1.00
	5200	142.5	7.16	.67	.87	1.00	125.8	8.14	.66	.89	1.00	109.2	9.11	.65	.90	1.00	92.6	10.09	.64	.91	1.00
	6240	153.8	7.20	.71	.93	1.00	135.3	8.17	.71	.94	1.00	116.8	9.15	.71	.96	1.00	98.3	10.12	.71	.98	1.00
67°F	4160	148.3	7.23	.47	.63	.79	132.8	8.20	.44	.62	.81	117.3	9.18	.41	.61	.82	101.8	10.15	.37	.61	.84
	5200	160.5	7.28	.49	.67	.85	143.0	8.25	.46	.67	.87	125.4	9.22	.44	.66	.88	107.8	10.19	.41	.65	.90
	6240	172.8	7.33	.51	.71	.91	153.1	8.30	.49	.71	.92	133.5	9.26	.47	.70	.94	113.8	10.23	.44	.70	.96
71°F	4160	165.4	7.34	.31	.45	.59	149.2	8.31	.26	.42	.58	133.0	9.28	.22	.39	.57	116.8	10.24	.17	.36	.56
	5200	178.6	7.40	.31	.47	.63	160.1	8.37	.27	.44	.62	141.6	9.33	.22	.42	.62	123.0	10.29	.17	.39	.62
	6240	191.8	7.46	.32	.49	.67	171.0	8.42	.27	.47	.67	150.1	9.38	.22	.45	.67	129.2	10.34	.17	.42	.68

15 TON HIGH EFFICIENCY LGH180H4 WITH DEHUMIDIFICATION OPERATING (1ST STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	4800	91.6	5.36	.56	.74	.91	78.7	6.02	.51	.73	.94	65.8	6.67	.46	.71	.96	52.8	7.33	.41	.70	.98
	6000	97.3	5.40	.60	.80	1.00	82.5	6.03	.56	.81	1.00	67.7	6.65	.53	.82	1.00	52.9	7.28	.49	.83	1.00
	7200	103.0	5.44	.63	.87	1.00	86.4	6.04	.61	.90	1.00	69.7	6.64	.59	.94	1.00	53.0	7.23	.57	.97	1.00
67°F	4800	103.7	5.47	.41	.57	.72	90.4	6.13	.34	.53	.72	77.0	6.78	.28	.49	.71	63.6	7.44	.21	.46	.71
	6000	108.5	5.51	.43	.61	.79	94.0	6.14	.37	.59	.81	79.5	6.76	.31	.56	.82	65.0	7.39	.25	.54	.84
	7200	113.3	5.54	.44	.65	.86	97.6	6.14	.39	.64	.90	82.0	6.75	.33	.63	.93	66.3	7.35	.28	.63	.97
71°F	4800	115.9	5.58	.25	.39	.53	102.1	6.24	.17	.33	.50	88.2	6.90	.09	.28	.46	74.4	7.55	.01	.22	.43
	6000	119.7	5.61	.25	.41	.57	105.5	6.24	.17	.36	.55	91.2	6.87	.08	.30	.52	77.0	7.51	.00	.25	.50
	7200	123.5	5.64	.25	.43	.61	108.9	6.25	.17	.38	.60	94.2	6.85	.08	.33	.58	79.6	7.46	-.01	.28	.57

15 TON HIGH EFFICIENCY LGH180H4 WITH DEHUMIDIFICATION OPERATING (2ND STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)		
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb		
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	
63°F	4800	154.5	8.08	.64	.80	.96	138.5	9.09	.63	.81	.99	122.4	10.11	.62	.82	1.00	106.3	11.13	.61	.83	1.00
	6000	163.3	8.13	.69	.87	1.00	144.9	9.13	.69	.89	1.00	126.4	10.12	.69	.90	1.00	108.0	11.12	.69	.92	1.00
	7200	172.0	8.18	.73	.94	1.00	151.3	9.16	.74	.96	1.00	130.5	10.14	.75	.98	1.00	109.7	11.12	.76	1.00	1.00
67°F	4800	171.4	8.23	.48	.62	.77	155.1	9.24	.45	.62	.79	138.8	10.25	.42	.61	.80	122.6	11.26	.39	.60	.81
	6000	180.3	8.27	.50	.65	.80	161.9	9.27	.48	.65	.83	143.5	10.27	.46	.66	.86	125.1	11.26	.44	.67	.90
	7200	189.2	8.31	.53	.67	.82	168.7	9.30	.51	.69	.87	148.2	10.28	.49	.71	.93	127.7	11.26	.48	.73	.98
71°F	4800	188.2	8.38	.31	.45	.59	171.7	9.39	.27	.42	.58	155.3	10.39	.23	.40	.57	138.9	11.40	.18	.37	.56
	6000	197.3	8.41	.31	.43	.54	179.0	9.41	.27	.42	.57	160.6	10.41	.23	.42	.61	142.3	11.40	.19	.41	.64
	7200	206.4	8.45	.32	.40	.49	186.2	9.43	.27	.42	.57	165.9	10.42	.23	.44	.65	145.7	11.41	.19	.46	.72

DEHUMIDIFICATION SYSTEM RATINGS

17.5 TON HIGH EFFICIENCY LGH210H4 WITH DEHUMIDIFICATION OPERATING (1ST STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		65°F						75°F						85°F						95°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	5600	105.3	5.76	.58	.77	.96	91.1	6.45	.53	.75	.98	76.8	7.14	.48	.74	1.00	62.6	7.84	.43	.72	1.00				
	7000	109.7	5.79	.63	.85	1.00	92.9	6.47	.60	.85	1.00	76.1	7.14	.57	.86	1.00	59.3	7.82	.54	.86	1.00				
	8400	114.0	5.82	.68	.93	1.00	94.7	6.48	.67	.95	1.00	75.3	7.14	.65	.98	1.00	56.0	7.81	.64	1.00	1.00				
67°F	5600	120.6	5.91	.42	.59	.77	105.7	6.59	.35	.55	.76	90.7	7.27	.29	.52	.74	75.8	7.95	.23	.48	.73				
	7000	126.6	5.95	.45	.64	.83	108.8	6.62	.39	.62	.84	91.0	7.28	.33	.59	.86	73.1	7.95	.27	.57	.87				
	8400	132.7	5.99	.47	.69	.90	111.9	6.64	.42	.68	.93	91.2	7.29	.37	.67	.97	70.5	7.94	.32	.66	1.00				
71°F	5600	135.8	6.07	.26	.42	.58	120.2	6.74	.18	.36	.53	104.7	7.40	.10	.30	.49	89.1	8.06	.02	.23	.45				
	7000	143.6	6.11	.26	.43	.60	124.7	6.77	.18	.38	.58	105.9	7.42	.10	.33	.56	87.0	8.07	.01	.28	.55				
	8400	151.3	6.16	.27	.44	.62	129.2	6.80	.18	.40	.63	107.1	7.44	.09	.36	.64	84.9	8.08	.00	.32	.65				

17.5 TON HIGH EFFICIENCY LGH210H4 WITH DEHUMIDIFICATION OPERATING (2ND STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		65°F						75°F						85°F						95°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	5600	179.3	9.23	.65	.81	.98	162.1	10.35	.63	.82	1.00	144.9	11.47	.62	.83	1.00	127.6	12.60	.60	.83	1.00				
	7000	189.8	9.32	.69	.87	1.00	170.6	10.43	.68	.88	1.00	151.4	11.54	.67	.89	1.00	132.2	12.64	.66	.90	1.00				
	8400	200.2	9.42	.74	.94	1.00	179.0	10.51	.73	.95	1.00	157.9	11.60	.73	.96	1.00	136.7	12.69	.72	.98	1.00				
67°F	5600	199.6	9.47	.48	.63	.79	181.4	10.58	.45	.62	.80	163.2	11.68	.43	.62	.81	144.9	12.78	.40	.61	.81				
	7000	210.4	9.58	.51	.68	.85	190.2	10.67	.48	.67	.87	170.0	11.75	.46	.67	.88	149.8	12.84	.44	.66	.89				
	8400	221.3	9.68	.54	.73	.92	199.1	10.76	.51	.72	.94	176.9	11.83	.49	.72	.95	154.6	12.91	.47	.72	.97				
71°F	5600	219.9	9.72	.31	.45	.60	200.7	10.80	.28	.43	.59	181.5	11.88	.24	.41	.58	162.2	12.96	.20	.39	.57				
	7000	231.1	9.83	.32	.48	.65	209.9	10.90	.28	.46	.64	188.6	11.97	.25	.44	.64	167.4	13.04	.21	.42	.64				
	8400	242.4	9.93	.33	.52	.70	219.1	11.00	.29	.50	.70	195.8	12.06	.25	.48	.71	172.6	13.13	.21	.46	.71				

20 TON HIGH EFFICIENCY LGH240H4 WITH DEHUMIDIFICATION OPERATING (1ST STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		65°F						75°F						85°F						95°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	6400	91.1	5.34	.52	.70	.88	75.6	5.99	.43	.68	.93	60.0	6.63	.34	.66	.97	44.4	7.28	.25	.64	1.00				
	8000	98.6	5.37	.54	.76	.97	80.6	5.99	.47	.76	1.00	62.7	6.61	.39	.77	1.00	44.7	7.23	.31	.78	1.00				
	9600	106.1	5.40	.57	.82	1.00	85.7	5.99	.50	.85	1.00	65.3	6.59	.43	.88	1.00	45.0	7.19	.36	.92	1.00				
67°F	6400	106.4	5.48	.37	.52	.68	89.5	6.12	.27	.48	.69	72.6	6.76	.17	.43	.69	55.7	7.40	.07	.38	.69				
	8000	112.6	5.50	.38	.57	.75	94.4	6.12	.28	.53	.78	76.2	6.74	.18	.49	.80	58.0	7.36	.09	.46	.83				
	9600	118.9	5.52	.39	.61	.82	99.3	6.12	.30	.58	.87	79.7	6.72	.20	.56	.92	60.2	7.32	.11	.54	.96				
71°F	6400	121.7	5.62	.22	.35	.49	103.5	6.25	.10	.28	.45	85.3	6.88	-.01	.20	.40	67.1	7.52	-.12	.12	.36				
	8000	126.7	5.63	.22	.38	.54	108.2	6.25	.10	.30	.49	89.7	6.87	-.02	.22	.45	71.2	7.49	-.13	.14	.41				
	9600	131.6	5.64	.21	.40	.58	112.9	6.25	.09	.32	.54	94.1	6.85	-.02	.24	.49	75.4	7.46	-.14	.15	.45				

20 TON HIGH EFFICIENCY LGH240H4 WITH DEHUMIDIFICATION OPERATING (2ND STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																							
		65°F						75°F						85°F						95°F					
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)						
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb						
cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F					
63°F	6400	215.7	10.70	.64	.79	.93	193.6	12.10	.63	.81	.99	171.4	13.50	.62	.84	1.00	149.3	14.90	.61	.86	1.00				
	8000	226.5	10.73	.69	.86	1.00	201.6	12.10	.69	.88	1.00	176.6	13.48	.70	.91	1.00	151.7	14.86	.70	.93	1.00				
	9600	237.4	10.76	.73	.94	1.00	209.6	12.11	.75	.96	1.00	181.8	13.46	.77	.98	1.00	154.0	14.81	.80	1.00	1.00				
67°F	6400	240.5	10.89	.48	.62	.76	217.4	12.29	.46	.62	.79	194.3	13.69	.44	.63	.82	171.2	15.10	.42	.63	.85				
	8000	249.1	10.91	.51	.67	.84	224.6	12.30	.49	.68	.86	200.1	13.69	.48	.68	.88	175.7	15.08	.46	.68	.91				
	9600	257.6	10.94	.53	.73	.92	231.8	12.31	.53	.73	.93	206.0	13.68	.52	.73	.95	180.1	15.05	.51	.74	.96				
71°F	6400	265.4	11.07	.32	.45	.58	241.3	12.48	.29	.44	.59	217.2	13.88	.25	.42	.59	193.1	15.29	.22	.40	.59				
	8000	271.6	11.10	.33	.49	.64	247.6	12.50	.29	.47	.65	223.6	13.89	.26	.45	.65	199.6	15.29	.22	.44	.66				
	9600	277.8	11.12	.34	.52	.70	254.0	12.51	.30	.50	.70	230.1	13.90	.26	.49	.71	206.2	15.29	.22	.47	.72				

DEHUMIDIFICATION SYSTEM RATINGS

25 TON STANDARD EFFICIENCY LGH300S4 WITH DEHUMIDIFICATION OPERATING (1ST STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																				
		65°F						75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb			
		cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	8000	100.4	7.25	.55	.74	.93	83.6	7.96	.47	.71	.96	66.7	8.67	.38	.69	.99	49.8	9.38	.29	.66	1.00	
	10,000	108.3	7.35	.59	.78	.98	91.2	8.04	.51	.77	1.00	74.1	8.72	.43	.76	1.00	57.0	9.41	.35	.74	1.00	
	12,000	116.1	7.45	.62	.83	1.00	98.8	8.11	.55	.83	1.00	81.5	8.78	.48	.83	1.00	64.2	9.44	.41	.83	1.00	
67°F	8000	116.1	7.40	.37	.54	.71	98.8	8.14	.27	.48	.70	81.5	8.87	.17	.43	.69	64.2	9.61	.07	.37	.68	
	10,000	124.8	7.48	.39	.57	.75	106.0	8.20	.29	.52	.75	87.2	8.92	.19	.47	.76	68.4	9.64	.08	.43	.77	
	12,000	133.6	7.56	.40	.59	.78	113.2	8.27	.30	.56	.81	92.9	8.97	.20	.52	.83	72.5	9.67	.10	.48	.86	
71°F	8000	131.7	7.55	.19	.34	.49	114.0	8.31	.07	.25	.44	96.3	9.07	-.04	.17	.38	78.6	9.83	-.16	.09	.33	
	10,000	141.4	7.62	.19	.35	.51	120.8	8.37	.07	.27	.47	100.3	9.12	-.06	.19	.44	79.8	9.87	-.18	.11	.40	
	12,000	151.0	7.68	.19	.36	.53	127.6	8.42	.06	.29	.51	104.3	9.16	-.08	.21	.49	80.9	9.90	-.21	.13	.47	

25 TON STANDARD EFFICIENCY LGH300S4 WITH DEHUMIDIFICATION OPERATING (2ND STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																				
		65°F						75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T)			
				Dry Bulb					Dry Bulb					Dry Bulb					Dry Bulb			
		cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	8000	255.0	14.40	.65	.82	1.00	231.4	16.02	.64	.84	1.00	207.9	17.64	.64	.85	1.00	184.3	19.26	.63	.86	1.00	
	10,000	263.1	14.51	.70	.88	1.00	237.4	16.13	.71	.91	1.00	211.6	17.76	.72	.94	1.00	185.9	19.38	.73	.96	1.00	
	12,000	271.3	14.62	.76	.94	1.00	243.3	16.25	.78	.98	1.00	215.3	17.88	.80	1.00	1.00	187.4	19.51	.82	1.00	1.00	
67°F	8000	271.1	14.65	.48	.64	.81	250.3	16.32	.47	.64	.82	229.5	18.00	.45	.64	.83	208.6	19.67	.43	.63	.84	
	10,000	275.5	14.85	.51	.68	.85	253.9	16.49	.50	.69	.88	232.3	18.12	.49	.70	.91	210.7	19.76	.48	.71	.94	
	12,000	279.9	15.05	.54	.72	.90	257.6	16.65	.54	.74	.95	235.2	18.24	.54	.77	.99	212.9	19.84	.53	.79	1.04	
71°F	8000	287.2	14.89	.32	.47	.61	269.1	16.62	.29	.45	.60	251.0	18.35	.26	.42	.59	232.9	20.09	.22	.40	.59	
	10,000	287.9	15.19	.33	.49	.65	270.5	16.84	.30	.48	.66	253.1	18.48	.26	.47	.67	235.6	20.13	.23	.46	.68	
	12,000	288.6	15.49	.33	.51	.68	271.8	17.05	.30	.51	.72	255.1	18.61	.27	.51	.75	238.3	20.17	.24	.51	.78	

BLOWER DATA

BLOWER TABLE INCLUDES RESISTANCE FOR BASE UNIT ONLY WITH DRY INDOOR COIL & AIR FILTERS IN PLACE FOR ALL UNITS ADD:

- 1 - Wet indoor coil air resistance of selected unit.
- 2 - Any factory installed options air resistance (electric heat, economizer, etc.)
- 3 - Any field installed accessories air resistance (electric heat, duct resistance, diffuser, etc.)

Then determine from blower table blower motor output and drive required.

See page 8 for wet coil and option/accessory air resistance data.

See page 8 for factory installed drive kit specifications.

MINIMUM AIR VOLUME REQUIRED FOR DIFFERENT GAS HEAT SIZES

Low (L), Standard (S) and Medium Heat (M) - 4500 cfm minimum

High Heat (H) - 5125 cfm minimum

Air Volume cfm	TOTAL STATIC PRESSURE - Inches Water Gauge (Pa)																									
	0.20		0.40		0.60		0.80		1.00		1.20		1.40		1.60		1.80		2.00		2.20		2.40		2.60	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2750	385	0.30	505	0.50	600	0.70	680	0.90	755	1.10	820	1.30	885	1.50	950	1.70	1005	1.90	1060	2.10	1110	2.30	1160	2.50	1205	2.70
3000	395	0.35	515	0.55	610	0.75	685	1.00	760	1.20	825	1.45	885	1.70	950	1.95	1005	2.15	1060	2.35	1110	2.55	1160	2.75	1205	2.95
3250	405	0.40	520	0.60	615	0.85	695	1.10	765	1.30	830	1.60	890	1.85	955	2.05	1005	2.25	1060	2.45	1110	2.65	1160	2.85	1205	3.05
3500	415	0.45	530	0.70	620	0.95	700	1.20	775	1.45	840	1.70	900	1.95	965	2.15	1005	2.35	1060	2.55	1110	2.75	1160	2.95	1205	3.15
3750	425	0.50	540	0.75	630	1.05	710	1.30	780	1.60	845	1.85	905	2.05	970	2.25	1005	2.45	1060	2.65	1110	2.85	1160	3.05	1205	3.25
4000	435	0.55	545	0.85	635	1.10	715	1.40	785	1.70	850	2.00	910	2.20	975	2.40	1005	2.60	1060	2.80	1110	3.00	1160	3.20	1205	3.40
4250	445	0.60	555	0.90	645	1.25	725	1.55	795	1.85	855	2.15	915	2.35	980	2.55	1005	2.75	1060	2.95	1110	3.15	1160	3.35	1205	3.55
4500	455	0.70	565	1.00	655	1.35	730	1.65	800	2.00	865	2.35	925	2.55	990	2.75	1005	2.95	1060	3.15	1110	3.35	1160	3.55	1205	3.75
4750	470	0.75	575	1.10	660	1.45	740	1.80	810	2.15	875	2.50	935	2.70	1000	2.90	1005	3.10	1060	3.30	1110	3.50	1160	3.70	1205	3.90
5000	480	0.85	585	1.25	670	1.60	750	1.95	815	2.30	880	2.70	940	2.90	1005	3.10	1005	3.30	1060	3.50	1110	3.70	1160	3.90	1205	4.10
5250	495	0.95	595	1.35	680	1.70	755	2.10	825	2.50	890	2.90	950	3.05	1010	3.25	1005	3.45	1060	3.65	1110	3.85	1160	4.05	1205	4.25
5500	505	1.05	605	1.45	690	1.85	765	2.25	835	2.65	895	3.05	955	3.20	1015	3.40	1005	3.60	1060	3.80	1110	4.00	1160	4.20	1205	4.40
5750	520	1.15	615	1.60	700	2.00	775	2.45	840	2.85	905	3.25	965	3.40	1025	3.60	1005	3.80	1060	4.00	1110	4.20	1160	4.40	1205	4.60
6000	530	1.30	630	1.75	710	2.15	785	2.60	850	3.05	910	3.45	970	3.60	1030	3.80	1005	4.00	1060	4.20	1110	4.40	1160	4.60	1205	4.80
6250	545	1.40	640	1.90	720	2.35	795	2.80	860	3.25	920	3.70	975	3.85	1040	4.05	1005	4.25	1060	4.45	1110	4.65	1160	4.85	1205	5.00
6500	560	1.55	650	2.05	730	2.50	805	3.00	870	3.45	930	3.95	985	4.10	1045	4.30	1005	4.50	1060	4.70	1110	4.90	1160	5.10	1205	5.30
6750	570	1.70	665	2.20	745	2.70	815	3.20	880	3.70	940	4.20	995	4.35	1055	4.55	1005	4.75	1060	4.95	1110	5.15	1160	5.35	1205	5.50
7000	585	1.85	675	2.35	755	2.90	825	3.40	890	3.95	950	4.45	1005	4.55	1065	4.75	1005	4.95	1060	5.15	1110	5.35	1160	5.55	1205	5.70
7250	600	2.00	690	2.60	765	3.10	835	3.65	900	4.15	955	4.65	1010	4.75	1070	4.95	1005	5.15	1060	5.35	1110	5.55	1160	5.75	1205	5.90
7500	615	2.20	700	2.75	775	3.30	845	3.85	910	4.45	965	4.95	1020	5.05	1080	5.25	1005	5.45	1060	5.65	1110	5.85	1160	6.05	1205	6.15
7750	630	2.40	715	3.00	790	3.55	855	4.10	920	4.70	975	5.25	1030	5.35	1090	5.55	1005	5.75	1060	5.95	1110	6.15	1160	6.35	1205	6.45
8000	640	2.55	725	3.20	800	3.80	865	4.35	930	4.95	985	5.50	1040	5.65	1100	5.85	1005	6.05	1060	6.25	1110	6.45	1160	6.65	1205	6.75
8250	655	2.80	740	3.40	810	4.00	880	4.65	940	5.25	995	5.85	1050	6.05	1110	6.25	1005	6.45	1060	6.65	1110	6.85	1160	7.05	1205	7.15
8500	670	3.00	750	3.65	825	4.30	890	4.90	950	5.55	1005	6.15	1060	6.35	1120	6.55	1005	6.65	1060	6.85	1110	7.05	1160	7.25	1205	7.35
8750	685	3.25	765	3.90	835	4.55	900	5.20	960	5.85	1015	6.45	1070	6.65	1130	6.85	1005	6.85	1060	7.05	1110	7.25	1160	7.45	1205	7.55
9000	700	3.50	780	4.20	850	4.85	910	5.50	970	6.15	1025	6.80	1080	7.05	1140	7.25	1005	7.05	1060	7.25	1110	7.45	1160	7.65	1205	7.75
9250	715	3.75	790	4.45	860	5.15	925	5.85	985	6.55	1040	7.20	1090	7.45	1150	7.65	1005	7.25	1060	7.45	1110	7.65	1160	7.85	1205	7.95
9500	730	4.00	805	4.75	875	5.45	935	6.15	995	6.90	1050	7.60	1100	7.85	1160	8.05	1005	7.45	1060	7.65	1110	7.85	1160	8.05	1205	8.15
9750	745	4.30	820	5.05	885	5.75	950	6.55	1005	7.20	1060	7.95	1110	8.15	1170	8.35	1005	7.65	1060	7.85	1110	8.05	1160	8.25	1205	8.35
10,000	760	4.60	835	5.40	900	6.15	960	6.85	1015	7.60	1070	8.35	1120	8.55	1180	8.75	1005	7.85	1060	8.05	1110	8.25	1160	8.45	1205	8.55
10,250	775	4.90	845	5.65	910	6.45	970	7.20	1030	8.00	1080	8.75	1135	8.95	1190	9.15	1005	8.05	1060	8.25	1110	8.45	1160	8.65	1205	8.75
10,500	790	5.20	860	6.00	925	6.85	985	7.65	1040	8.40	1095	9.20	1145	9.45	1200	9.65	1005	8.25	1060	8.45	1110	8.65	1160	8.85	1205	8.95
10,750	805	5.55	875	6.40	940	7.25	1000	8.05	1055	8.85	1105	9.65	1155	9.85	1210	10.05	1005	8.45	1060	8.65	1110	8.85	1160	9.05	1205	9.15
11,000	820	5.90	890	6.80	950	7.60	1010	8.45	1065	9.30	1115	10.05	1165	10.25	1220	10.45	1005	8.65	1060	8.85	1110	9.05	1160	9.25	1205	9.35

BLOWER DATA

FACTORY INSTALLED BELT DRIVE KIT SPECIFICATIONS

Motor Efficiency	Nominal hp	Maximum hp	Drive Kit Number	RPM Range
Standard or High	2	2.30	1	535 - 725
Standard or High	2	2.30	2	710 - 965
Standard	3	3.45	1	535 - 725
Standard	3	3.45	2	710 - 965
High	3	3.45	3	685 - 856
High	3	3.45	4	850 - 1045
Standard	5	5.75	3	685 - 856
Standard	5	5.75	4	850 - 1045
Standard	5	5.75	5	945 - 1185
Standard	7.5	8.63	6	850 - 1045
Standard	7.5	8.63	7	945 - 1185
Standard	7.5	8.63	8	1045 - 1285
Standard	10	11.50	7	945 - 1185
Standard	10	11.50	10	1045 - 1285
Standard	10	11.50	11	1135 - 1365

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

NOTE - Units equipped with MSAV® (Multi-Stage Air Volume) option are limited to a motor service factor of 1.0.

FACTORY INSTALLED OPTIONS/FIELD INSTALLED ACCESSORY AIR RESISTANCE

Air Volume cfm	Wet Indoor Coil		Dehumid. Condenser Reheat Coil	Gas Heat Exchanger			Economizer	Filters		Horizontal Roof Curb	
	156H, 180H	210H, 240H, 300S		Low/Standard Heat	Medium Heat	High Heat		156H thru 240H	300S		
	in. w.g.	in. w.g.	in. w.g.	in. w.g.	in. w.g.	in. w.g.	in. w.g.	MERV 8	MERV 13	in. w.g.	in. w.g.
2750	.01	.02	.01	.02	.04	.05	---	.01	.03	---	---
3000	.01	.02	.01	.03	.04	.05	---	.01	.03	---	---
3250	.01	.03	.01	.03	.05	.06	---	.01	.04	.01	---
3500	.01	.03	.02	.03	.05	.06	---	.01	.04	.01	---
3750	.01	.03	.02	.04	.06	.07	---	.01	.04	.01	---
4000	.02	.04	.02	.04	.06	.07	---	.04	.06	.06	---
4250	.02	.04	.02	.04	.06	.08	---	.04	.06	.07	---
4500	.02	.05	.02	.05	.07	.09	---	.04	.07	.07	.02
4750	.02	.05	.02	.05	.08	.10	---	.04	.07	.08	.03
5000	.02	.05	.02	.05	.09	.11	---	.05	.07	.08	.03
5250	.02	.06	.03	.06	.10	.12	---	.05	.07	.09	.04
5500	.02	.07	.03	.06	.10	.13	---	.05	.07	.10	.04
5750	.03	.07	.03	.06	.11	.14	---	.05	.08	.11	.05
6000	.03	.08	.03	.07	.12	.15	---	.05	.08	.11	.06
6250	.03	.08	.03	.07	.12	.16	.01	.05	.08	.12	.07
6500	.03	.09	.04	.08	.13	.17	.02	.05	.08	.13	.08
6750	.04	.10	.04	.08	.14	.18	.03	.05	.08	.14	.08
7000	.04	.10	.04	.09	.15	.19	.04	.06	.08	.15	.09
7250	.04	.11	.04	.09	.16	.20	.05	.06	.09	.16	.10
7500	.05	.12	.05	.10	.17	.21	.06	.06	.09	.17	.11
8000	.05	.13	.05	.11	.19	.24	.09	.06	.09	.19	.13
8500	.06	.15	.05	.12	.20	.26	.11	.06	.09	.21	.15
9000	.07	.16	.06	.13	.23	.29	.14	.07	.10	.24	.17
9500	.08	.18	.07	.14	.25	.32	.16	.07	.10	.26	.19
10,000	.08	.20	.07	.16	.27	.35	.19	.07	.11	.29	.21
10,500	.09	.22	.08	.17	.30	.38	.22	.07	.11	.31	.24
11,000	.11	.24	.08	.18	.31	.40	.25	.08	.11	.34	.27

BLOWER DATA

POWER EXHAUST FAN PERFORMANCE

Return Air System Static Pressure	Air Volume Exhausted
in. w.g.	cfm
0.00	8630
0.05	8210
0.10	7725
0.15	7110
0.20	6470
0.25	5790
0.30	5060
0.35	4300
0.40	3510
0.45	2690
0.50	1840

CEILING DIFFUSER AIR RESISTANCE - in. w.g.

Air Volume cfm	Step-Down Diffuser						Flush Diffuser	
	RTD11-185			RTD11-275			FD11-185	FD11-275
	2 Ends Open	1 Side/2 Ends Open	All Ends & Sides Open	2 Ends Open	1 Side/2 Ends Open	All Ends & Sides Open		
5000	.51	.44	.39	---	---	---	.27	---
5200	.56	.48	.42	---	---	---	.30	---
5400	.61	.52	.45	---	---	---	.33	---
5600	.66	.56	.48	---	---	---	.36	---
5800	.71	.59	.51	---	---	---	.39	---
6000	.76	.63	.55	.36	.31	.27	.42	.29
6200	.80	.68	.59	---	---	---	.46	---
6400	.86	.72	.63	---	---	---	.50	---
6500	---	---	---	.42	.36	.31	---	.34
6600	.92	.77	.67	---	---	---	.54	---
6800	.99	.83	.72	---	---	---	.58	---
7000	1.03	.87	.76	.49	.41	.36	.62	.40
7200	1.09	.92	.80	---	---	---	.66	---
7400	1.15	.97	.84	---	---	---	.70	---
7500	---	---	---	.51	.46	.41	---	.45
7600	1.20	1.02	.88	---	---	---	.74	---
8000	---	---	---	.59	.49	.43	---	.50
8500	---	---	---	.69	.58	.50	---	.57
9000	---	---	---	.79	.67	.58	---	.66
9500	---	---	---	.89	.75	.65	---	.74
10,000	---	---	---	1.00	.84	.73	---	.81
10,500	---	---	---	1.10	.92	.80	---	.89
11,000	---	---	---	1.21	1.01	.88	---	.96

CEILING DIFFUSER AIR THROW DATA - ft.

Model No.	Air Volume cfm	¹ Effective Throw Range - ft.		Model No.	Air Volume cfm	¹ Effective Throw Range - ft.	
		RTD11-185 Step-Down	FD11-185 Flush			RTD11-275 Step-Down	FD11-275 Flush
156 180	5600	39 - 49	28 - 37	210 240 300	7200	33 - 38	26 - 35
	5800	42 - 51	29 - 38		7400	35 - 40	28 - 37
	6000	44 - 54	40 - 50		7600	36 - 41	29 - 38
	6200	45 - 55	42 - 51		7800	38 - 43	40 - 50
	6400	46 - 55	43 - 52		8000	39 - 44	42 - 51
	6600	47 - 56	45 - 56		8200	41 - 46	43 - 52
					8400	43 - 49	44 - 54
					8600	44 - 50	46 - 57
					8800	47 - 55	48 - 59

¹ Throw is the horizontal or vertical distance an airstream travels on leaving the outlet diffuser before the maximum velocity is reduced to 50 ft. per minute. Four sides open.

ELECTRICAL DATA**13 TON****13 TON HIGH EFFICIENCY (R-410A)****LGH156H4**

¹ Voltage - 60hz		208/230V - 3 Ph			460V - 3 Ph			575V - 3 Ph		
Compressor 1	Rated Load Amps	16			7.1			5.6		
	Locked Rotor Amps	91			46			37		
Compressor 2	Rated Load Amps	16			7.1			5.6		
	Locked Rotor Amps	91			46			37		
Compressor 3	Rated Load Amps	16			7.1			5.6		
	Locked Rotor Amps	91			46			37		
Outdoor Fan Motors (3)	Full Load Amps (total)	2.4 (7.2)			1.3 (3.9)			1 (3)		
Power Exhaust (2) 0.33 HP	Full Load Amps (total)	2.4 (4.8)			1.3 (2.6)			1 (2)		
Service Outlet 115V GFI (amps)		15			15			20		
Indoor Blower Motor	Horsepower	2	3	5	2	3	5	2	3	5
	Full Load Amps	7.5	10.6	16.7	3.4	4.8	7.6	2.7	3.9	6.1
² Maximum Overcurrent Protection	Unit Only With (2) 0.33 HP Power Exhaust	80	90	90	35	35	40	25	30	30
³ Minimum Circuit Ampacity	Unit Only With (2) 0.33 HP Power Exhaust	67	70	77	31	32	35	24	26	28

ELECTRICAL DATA**15 TON****15 TON HIGH EFFICIENCY (R-410A)****LGH180H4**

¹ Voltage - 60hz		208/230V - 3 Ph			460V - 3 Ph			575V - 3 Ph		
Compressor 1	Rated Load Amps	13.5			8			5		
	Locked Rotor Amps	109			59			40		
Compressor 2	Rated Load Amps	13.5			8			5		
	Locked Rotor Amps	109			59			40		
Compressor 3	Rated Load Amps	13.5			8			5		
	Locked Rotor Amps	109			59			40		
Outdoor Fan Motors (4)	Full Load Amps (total)	2.4 (9.6)			1.3 (5.2)			1 (4)		
Power Exhaust (2) 0.33 HP	Full Load Amps (total)	2.4 (4.8)			1.3 (2.6)			1 (2)		
Service Outlet 115V GFI (amps)		15			15			20		
Indoor Blower Motor	Horsepower	3	5	7.5	3	5	7.5	3	5	7.5
	Full Load Amps	10.6	16.7	24.2	4.8	7.6	11	3.9	6.1	9
² Maximum Overcurrent Protection	Unit Only With (2) 0.33 HP Power Exhaust	70	80	100	40	45	50	25	30	35
³ Minimum Circuit Ampacity	Unit Only With (2) 0.33 HP Power Exhaust	65	71	81	36	39	43	25	27	31

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* Factory installed circuit breaker not available

ELECTRICAL DATA**17.5 TON****17.5 TON HIGH EFFICIENCY (R-410A)****LGH210H4**

¹ Voltage - 60hz		208/230V - 3 Ph			460V - 3 Ph			575V - 3 Ph		
Compressor 1	Rated Load Amps	15.6			7.8			5.8		
	Locked Rotor Amps	110			52			38.9		
Compressor 2	Rated Load Amps	15.6			7.8			5.8		
	Locked Rotor Amps	110			52			38.9		
Compressor 3	Rated Load Amps	19.6			8.2			6.6		
	Locked Rotor Amps	136			66.1			55.3		
Outdoor Fan Motors (6)	Full Load Amps (total)	2.4 (14.4)			1.3 (7.8)			1 (6)		
Power Exhaust (2) 0.33 HP	Full Load Amps (total)	2.4 (4.8)			1.3 (2.6)			1 (2)		
Service Outlet 115V GFI (amps)		15			15			20		
Indoor Blower Motor	Horsepower	3	5	7.5	3	5	7.5	3	5	7.5
	Full Load Amps	10.6	16.7	24.2	4.8	7.6	11	3.9	6.1	9
² Maximum Overcurrent Protection	Unit Only	100	100	110	45	45	50	35	35	40
	With (2) 0.33 HP Power Exhaust	100	110	110	45	50	50	35	40	45
³ Minimum Circuit Ampacity	Unit Only	80	87	96	39	42	46	30	32	36
	With (2) 0.33 HP Power Exhaust	86	92	101	42	44	48	32	34	38

ELECTRICAL DATA**20 TON****20 TON HIGH EFFICIENCY (R-410A)****LGH240H4**

¹ Voltage - 60hz		208/230V - 3 Ph			460V - 3 Ph			575V - 3 Ph		
Compressor 1	Rated Load Amps	13.5			8			5		
	Locked Rotor Amps	109			59			40		
Compressor 2	Rated Load Amps	13.5			8			5		
	Locked Rotor Amps	109			59			40		
Compressor 3	Rated Load Amps	13.5			8			5		
	Locked Rotor Amps	109			59			40		
Compressor 4	Rated Load Amps	13.5			8			5		
	Locked Rotor Amps	109			59			40		
Outdoor Fan Motors (6)	Full Load Amps (total)	2.4 (14.4)			1.3 (7.8)			1 (6)		
Power Exhaust (2) 0.33 HP	Full Load Amps (total)	2.4 (4.8)			1.3 (2.6)			1 (2)		
Service Outlet 115V GFI (amps)		15			15			20		
Indoor Blower Motor	Horsepower	5	7.5	10	5	7.5	10	5	7.5	10
	Full Load Amps	16.7	24.2	30.8	7.6	11	14	6.1	9	11
² Maximum Overcurrent Protection	Unit Only	100	110	125	50	60	70	35	45	50
	With (2) 0.33 HP Power Exhaust	110	125	125	60	60	70	40	45	50
³ Minimum Circuit Ampacity	Unit Only	90	99	107	50	54	58	34	38	40
	With (2) 0.33 HP Power Exhaust	95	104	112	53	57	60	36	40	42

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 DATA

25 TON

25 TON STANDARD EFFICIENCY (R-410A)

LGH300S4

¹ Voltage - 60hz		208/230V - 3 Ph			460V - 3 Ph			575V - 3 Ph		
Compressor 1	Rated Load Amps	19.6			8.2			6.6		
	Locked Rotor Amps	136			66.1			55.3		
Compressor 2	Rated Load Amps	19.6			8.2			6.6		
	Locked Rotor Amps	136			66.1			55.3		
Compressor 3	Rated Load Amps	19.6			8.2			6.6		
	Locked Rotor Amps	136			66.1			55.3		
Compressor 4	Rated Load Amps	19.6			8.2			6.6		
	Locked Rotor Amps	136			66.1			55.3		
Outdoor Fan Motors (6)	Full Load Amps (total)	2.4 (14.4)			1.3 (7.8)			1 (6)		
Power Exhaust (2) 0.33 HP	Full Load Amps (total)	2.4 (4.8)			1.3 (2.6)			1 (2)		
Service Outlet 115V GFI (amps)		15			15			20		
Indoor Blower Motor	Horsepower	5	7.5	10	5	7.5	10	5	7.5	10
	Full Load Amps	16.7	24.2	30.8	7.6	11	14	6.1	9	11
² Maximum Overcurrent Protection	Unit Only	125	125	150	60	60	70	45	50	50
	With (2) 0.33 HP Power Exhaust	125	150	150	60	60	70	45	50	50
³ Minimum Circuit Ampacity	Unit Only	115	124	132	51	55	59	41	44	47
	With (2) 0.33 HP Power Exhaust	120	128	137	53	57	61	43	46	49

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

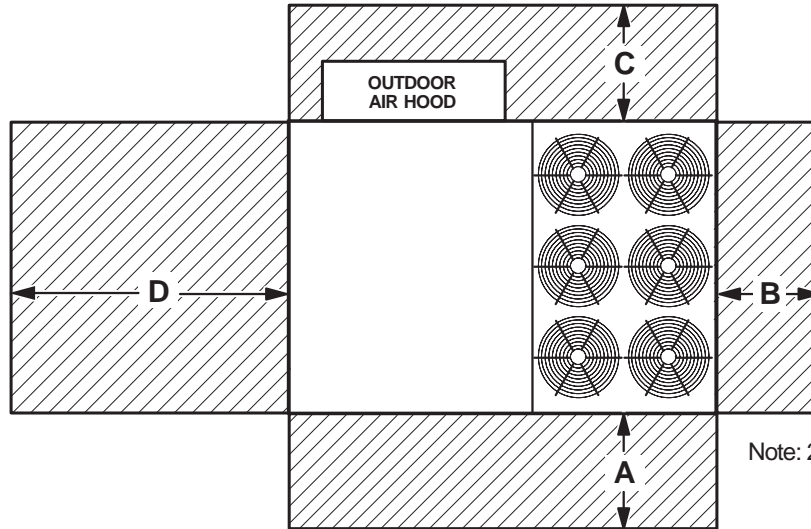
ELECTRICAL ACCESSORIES

DISCONNECTS

Voltage	208V	230V	208V	230V	208V	230V	460V	460V	460V	575V	575V	575V
Model No.	LGH156H4											
Blower Motor HP	2		3		5		2	3	5	2	3	5
Unit Only	54W88	54W88	54W88	54W88	54W89	54W89	54W88	54W88	54W88	54W88	54W88	54W88
Unit w/ Power Exhaust	54W88	54W88	54W89	54W89	54W89	54W89	54W88	54W88	54W88	54W88	54W88	54W88
Model No.	LGH180H4											
Blower Motor HP	3		5		7.5		3	5	7.5	3	5	7.5
Unit Only	54W88	54W88	54W88	54W88	54W89	54W89	54W88	54W88	54W88	54W88	54W88	54W88
Unit w/ Power Exhaust	54W88	54W88	54W89	54W89	54W89	54W89	54W88	54W88	54W88	54W88	54W88	54W88
Model No.	LGH210H4											
Blower Motor HP	3		5		7.5		3	5	7.5	3	5	7.5
Unit Only	54W89	54W89	54W89	54W89	54W89	54W89	54W88	54W88	54W88	54W88	54W88	54W88
Unit w/ Power Exhaust	54W89	54W89	54W89	54W89	54W89	54W89	54W88	54W88	54W88	54W88	54W88	54W88
Model No.	LGH240H4											
Blower Motor HP	5		7.5		10		5	7.5	10	5	7.5	10
Unit Only	54W89	54W89	54W89	54W89	54W89	54W89	54W88	54W88	54W88	54W88	54W88	54W88
Unit w/ Power Exhaust	54W89	54W89	54W89	54W89	54W89	54W89	54W88	54W88	54W88	54W88	54W88	54W88
Model No.	LGH300S4											
Blower Motor HP	5		7.5		10		5	7.5	10	5	7.5	10
Unit Only	54W89	54W89	54W89	54W89	54W89	54W89	54W88	54W88	54W88	54W88	54W88	54W88
Unit w/ Power Exhaust	54W89	54W89	54W89	54W89	54W89	54W89	54W88	54W88	54W88	54W88	54W88	54W88

UNIT CLEARANCES - INCHES (MM)

Unit With Economizer



Note: 210-240-300 sizes shown

¹ Unit Clearance	A		B		C		D		Top Clearance
	in.	mm	in.	mm	in.	mm	in.	mm	
Service Clearance	60	1524	36	914	36	934	66	1676	Unobstructed
Clearance to Combustibles	36	914	1	25	1	25	1	25	
Minimum Operation Clearance	45	1143	36	914	36	914	41	1041	

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

¹ **Service Clearance** - Required for removal of serviceable parts.

Clearance to Combustibles - Required clearance to combustible material.

Minimum Operation Clearance - Required clearance for proper unit operation.

OUTDOOR SOUND DATA

Unit Model Number	Octave Band Sound Power Levels dBA, re 10 ⁻¹² Watts Center Frequency - HZ							¹ Sound Rating Number (dB)
	125	250	500	1000	2000	4000	8000	
156	71	78	81	81	76	71	63	86
180	80	83	87	88	84	80	71	93
210, 240, 300	79	84	88	89	85	82	73	94

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

¹ Sound Rating Number according to AHRI Standard 370-2001.

WEIGHT DATA

Model Number	Net		Shipping	
	lbs.	kg	lbs.	kg
156 Base Unit	2000	907	2200	998
156 Max. Unit	2270	1030	2470	1120
180 Base Unit (Eco-last Coil System)	2115	959	2315	1050
180 Max. Unit (Eco-last Coil System)	2400	1089	2600	1179
180 Base Unit (Conventional Fin/Tube Coil)	2220	1007	2420	1098
180 Max. Unit (Conventional Fin/Tube Coil)	2505	1136	2705	1227
210 Base Unit	2330	1057	2530	1148
210 Max. Unit	2615	1186	2815	1277
240 Base Unit (Eco-last Coil System)	2175	987	2375	1077
240 Max. Unit (Eco-last Coil System)	2465	1118	2665	1209
240 Base Unit (Conventional Fin/Tube Coil)	2430	1102	2630	1193
240 Max. Unit (Conventional Fin/Tube Coil)	2715	1232	2915	1322
300 Base Unit	2495	1132	2695	1222
300 Max. Unit	2780	1261	2980	1352

OPTIONS / ACCESSORIES

Description	Shipping Weight		
	lbs.	kg	
CEILING DIFFUSERS			
Step-Down			
	RTD11-185	392	178
	RTD11-275	403	183
Flush			
	FD11-185	289	131
	FD11-275	363	165
Transitions			
	LASRT18	80	36
	LASRT21/24	75	34
ECONOMIZER / OUTDOOR AIR / EXHAUST			
Economizer			
Economizer Dampers	E1ECON15C-1	86	39
Barometric Relief Dampers (downflow)	C1DAMP50C	30	14
Barometric Relief Dampers (horizontal)	LAGEDH18/24	20	9
Outdoor Air Dampers			
Outdoor Air Damper Section (downflow) - Automatic	E1DAMP20C-1	52	24
Outdoor Air Damper Section (downflow) - Manual	C1DAMP10C-1	49	22
Outdoor Air Damper Hood (downflow)		65	29
Power Exhaust		62	28
GAS HEAT EXCHANGER (NET WEIGHT)			
	Medium Heat (adder over standard heat)	18	8
	High Heat (adder over standard heat)	64	29
DEHUMIDIFICATION SYSTEM			
Dehumidification Option (Net Weight)		50	23
SINGLE ZONE VAV SUPPLY FAN SUPPLY AIR BLOWER OPTION			
Variable Frequency Drive (VFD) and associated components		10	5
ROOF CURBS - CLIP CURB			
Downflow			
8 in. height	C1CURB40CD1	132	60
14 in. height	LARMF18/30S-14	164	74
18 in. height	LARMF18/30S-18	187	85
24 in. height	LARMF18/30S-24	222	101
ROOF CURBS - STANDARD			
Downflow			
14 in. height	LARMF18/36-14	160	73
24 in. height	LARMF18/36-24	220	100
Horizontal			
26 in. height	LARMFH18/24-26	420	191
37 in. height	LARMFH18/24-37	580	263
30 in. height	LARMFH30/36-30	445	202
41 in. height	LARMFH30/36-41	725	329
PACKAGING			
LTL Packaging (less than truck load)		310	141

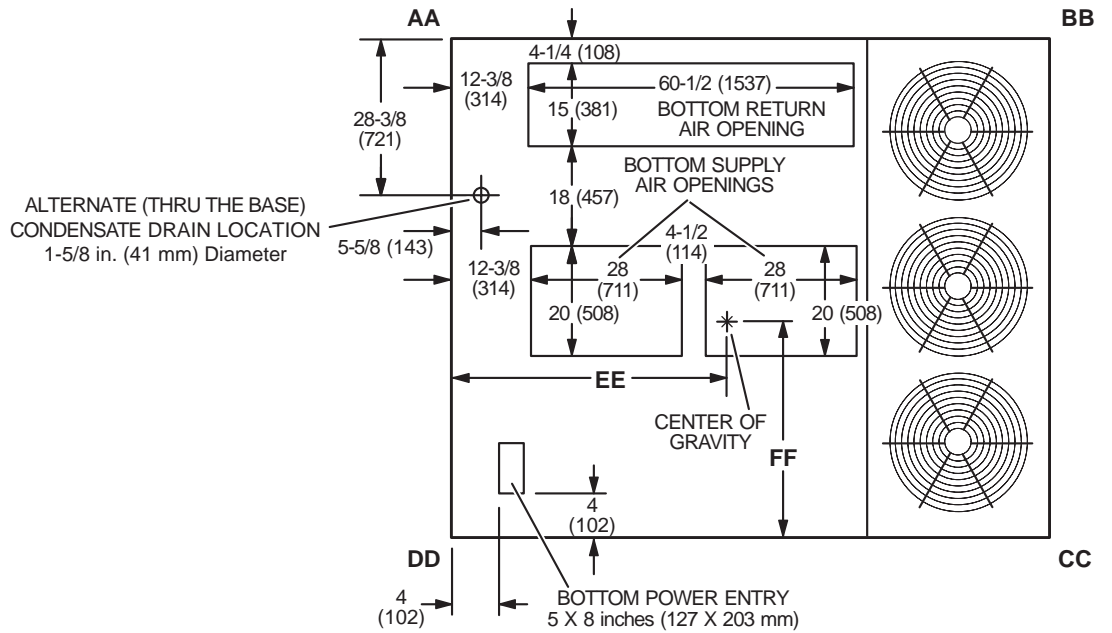
DIMENSIONS - INCHES (MM)

LGH156

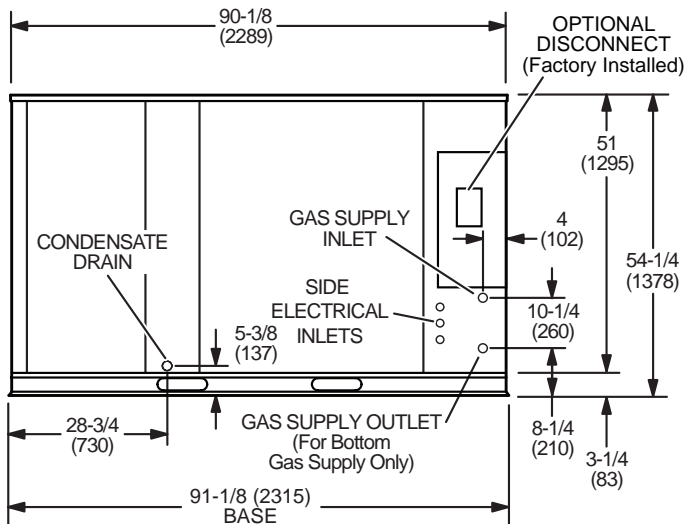
Model No.	CORNER WEIGHTS								CENTER OF GRAVITY			
	AA		BB		CC		DD		EE		FF	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm
LGH156 Base Unit	476	216	397	180	513	233	615	279	49	1245	39-3/4	1010
LGH156 Max. Unit	588	267	477	216	540	245	665	302	48-1/4	1226	42-3/4	1086

Base Unit - The unit with NO INTERNAL OPTIONS.

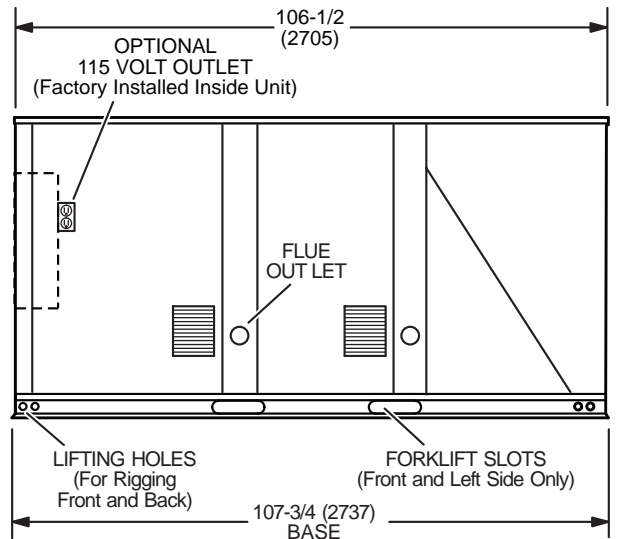
Max. Unit - The unit with ALL INTERNAL OPTIONS Installed. (Economizer, Standard Static Power Exhaust Fans, Controls, etc.). Does not include accessories external to unit or high static power exhaust.



TOP VIEW



END VIEW



SIDE VIEW

DIMENSIONS - INCHES (MM)

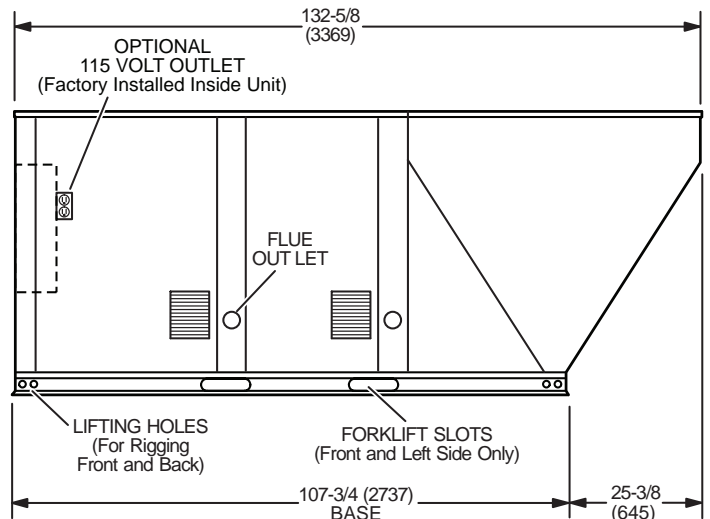
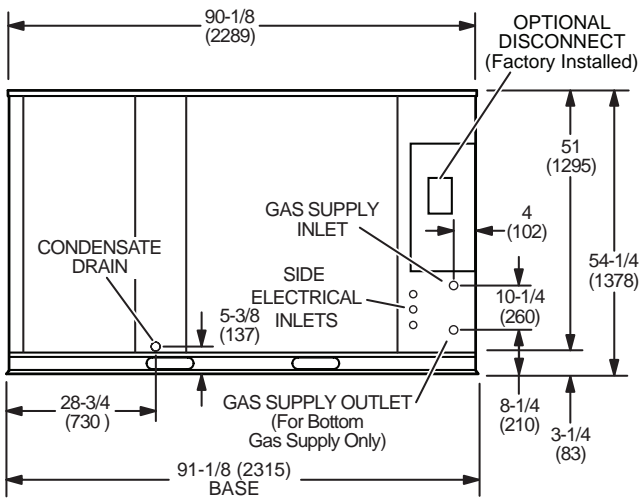
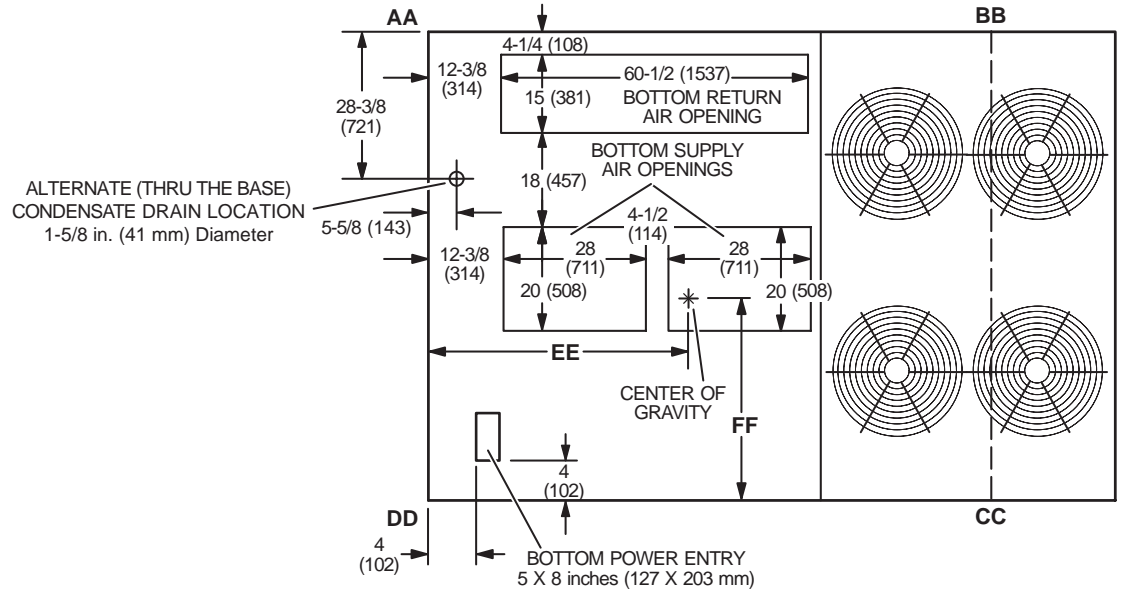
LGH180

CORNER WEIGHTS

Model No.	AA		BB		CC		DD		CENTER OF GRAVITY			
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	EE		FF	
									in.	mm	in.	mm
LGH180 Base Unit (Eco-last)	487	221	423	192	569	259	636	289	50-3/4	1289	39-1/4	997
LGH180 Max. Unit (Eco-last)	597	272	505	229	599	272	699	318	49-3/4	1264	42	1067
LGH180 Base Unit (Fin/Tube)	487	221	476	216	622	282	636	288	53-1/4	1353	39-1/2	1003
LGH180 Max. Unit (Fin/Tube)	597	271	557	253	652	296	699	317	52	1321	42	1067

Base Unit - The unit with NO INTERNAL OPTIONS.

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



DIMENSIONS - INCHES (MM)

LGH210, LGH240, LGH300

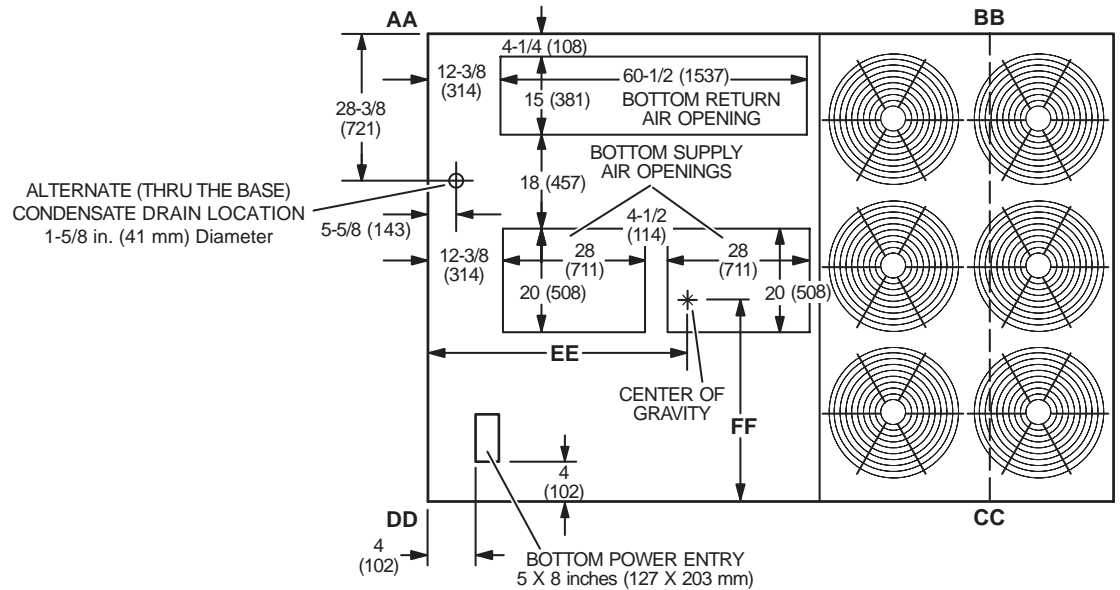
CORNER WEIGHTS

CENTER OF GRAVITY

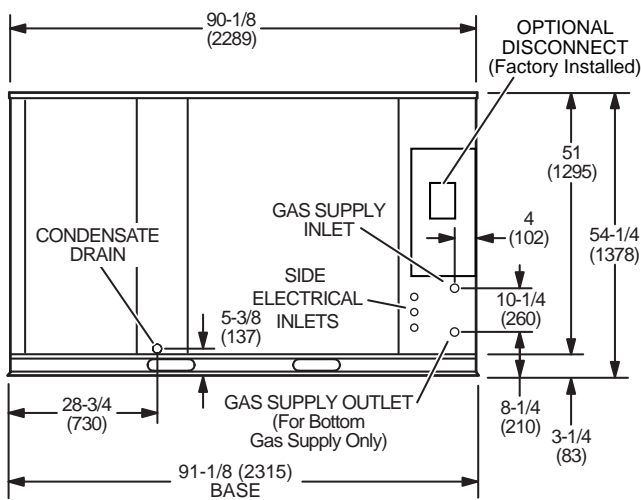
Model No.	AA		BB		CC		DD		EE		FF	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	in.	mm	in.	mm
LGH210 Base Unit	497	225	513	233	671	304	649	294	54-3/4	1391	39-1/2	1003
LGH210 Max. Unit	607	275	598	271	700	318	710	322	53-1/2	1359	42	1067
LGH240 Base Unit (Eco-last)	507	230	481	219	660	300	677	308	53	1346	38-3/4	984
LGH240 Max. Unit (Eco-last)	617	280	567	258	688	313	738	335	52	1321	41-1/2	1054
LGH240 Base Unit (Fin/Tube)	507	230	533	242	713	323	677	307	55-1/4	1403	39	991
LGH240 Max. Unit (Fin/Tube)	617	280	620	281	741	336	738	335	54	1372	41-1/2	1054
LGH300 Base Unit	513	233	535	243	739	335	709	322	55	1397	38-1/4	972
LGH300 Max. Unit	623	283	620	281	767	348	770	349	53-3/4	1365	40-3/4	1035

Base Unit - The unit with NO INTERNAL OPTIONS.

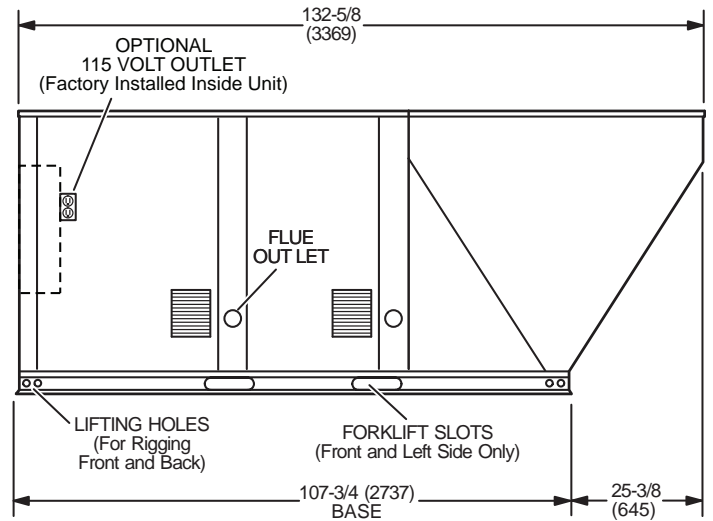
Max. Unit - The unit with ALL INTERNAL OPTIONS Installed. (Economizer, Standard Static Power Exhaust Fans, Controls, etc.). Does not include accessories external to unit or high static power exhaust.



TOP VIEW



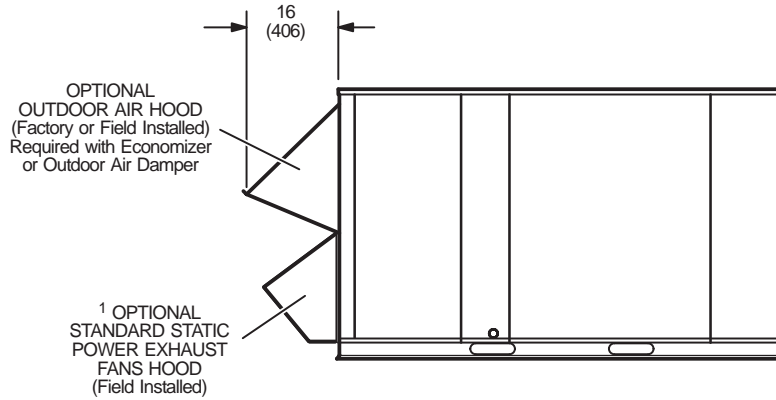
END VIEW



SIDE VIEW

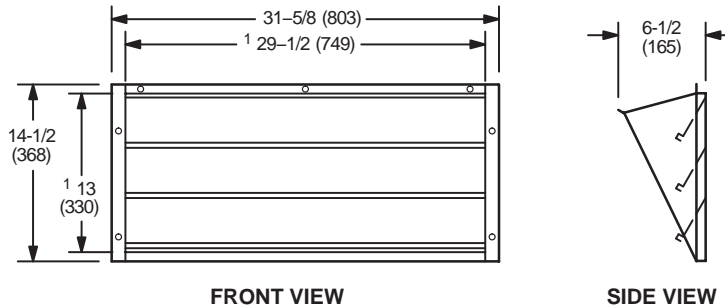
ACCESSORY DIMENSIONS - INCHES (MM)

**OPTIONAL OUTDOOR AIR HOOD DETAIL
WITH STANDARD STATIC POWER EXHAUST FANS**



¹ Field Installed in Return Air Duct for Horizontal Applications.

HORIZONTAL BAROMETRIC RELIEF DAMPERS
(Field installed in horizontal return air duct adjacent to unit)

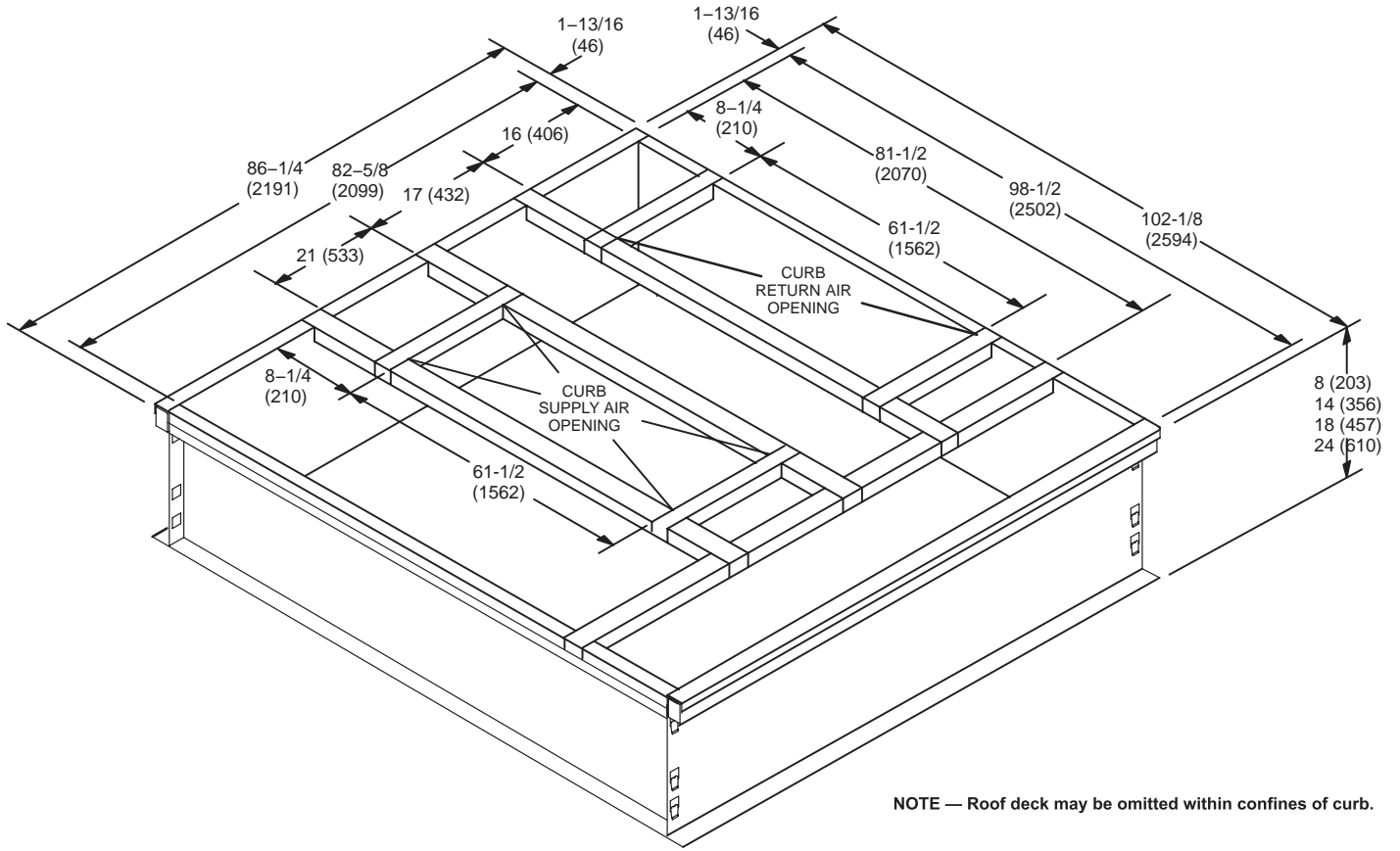


NOTE – Two furnished per order no.

¹ NOTE – Opening size required in return air duct.

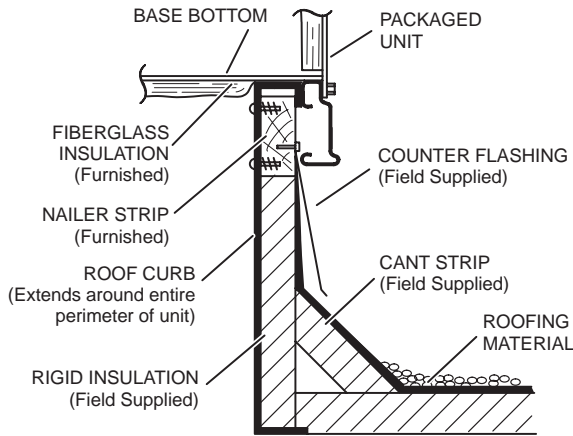
ACCESSORY DIMENSIONS - INCHES (MM)

CLIP CURB - DOUBLE DUCT OPENING

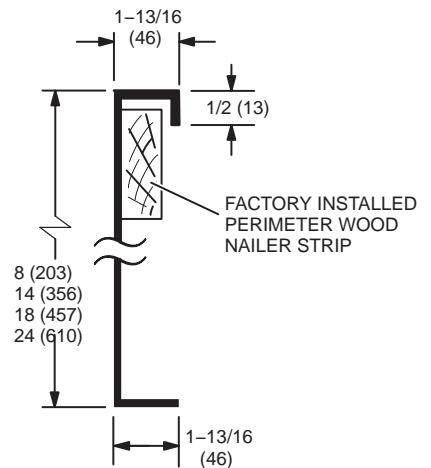


NOTE — Roof deck may be omitted within confines of curb.

TYPICAL FLASHING DETAIL FOR ROOF CURB

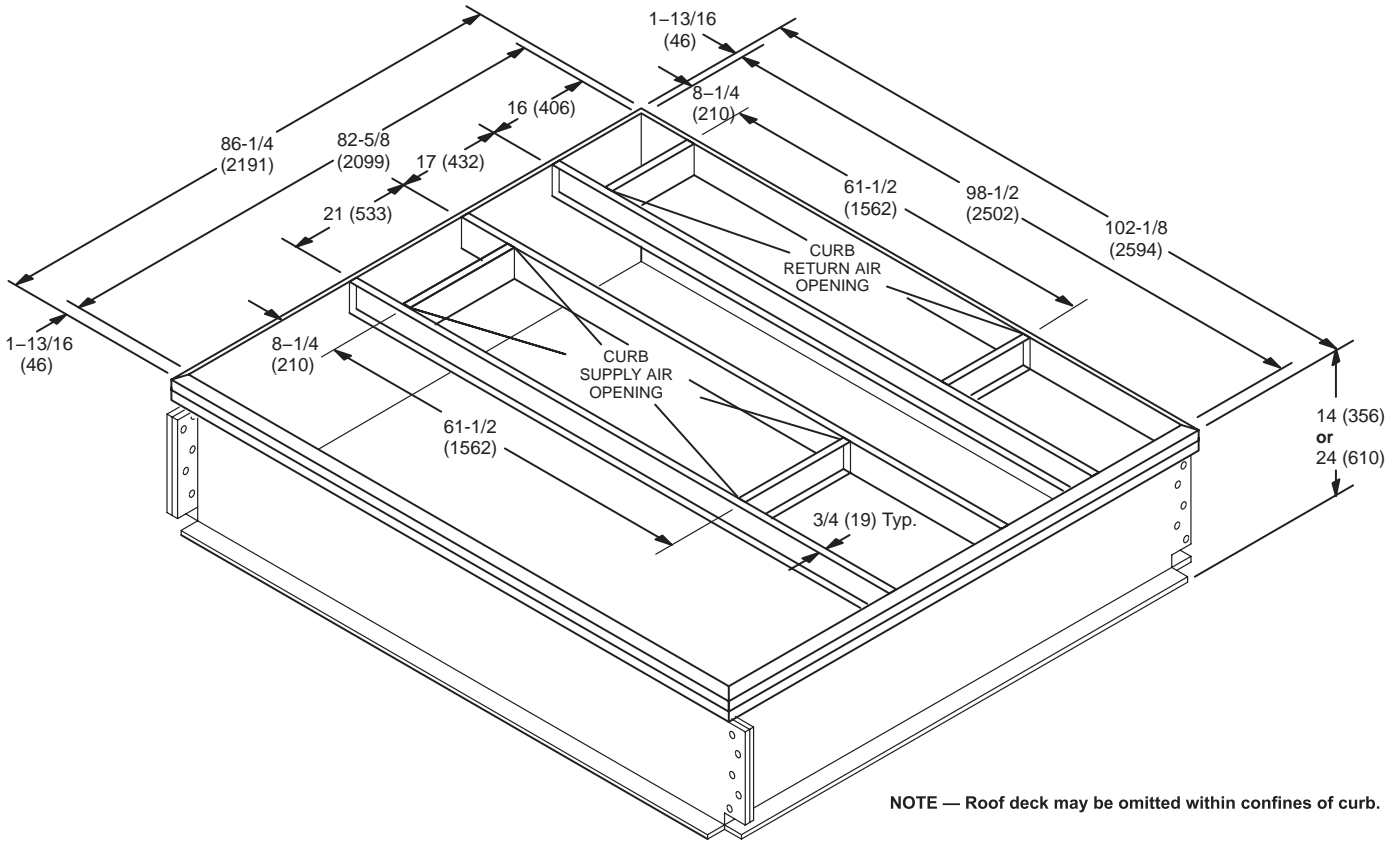


DETAIL ROOF CURB

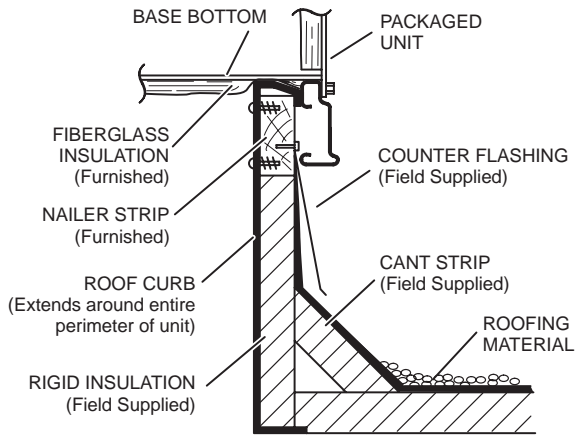


ACCESSORY DIMENSIONS - INCHES (MM)

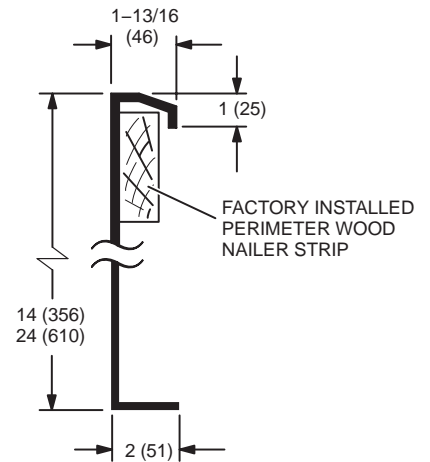
STANDARD ROOF CURBS – DOUBLE DUCT OPENING



TYPICAL FLASHING DETAIL FOR ROOF CURB

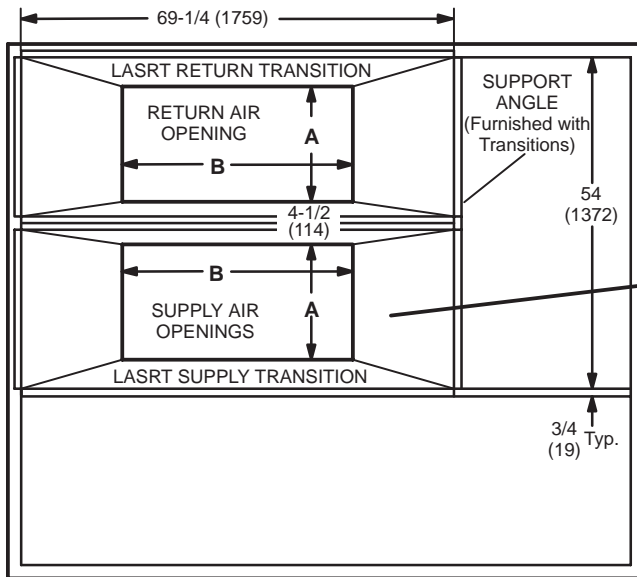


DETAIL ROOF CURB

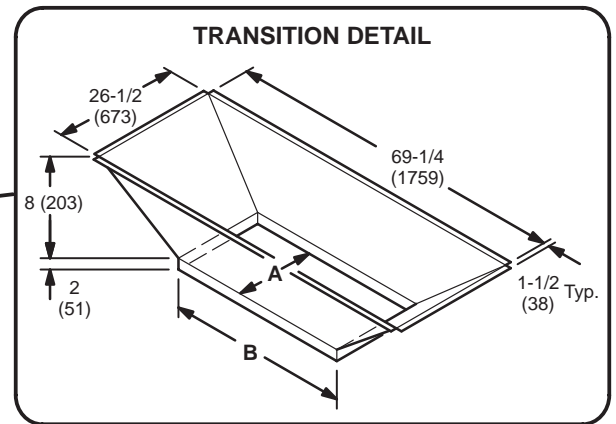


ACCESSORY DIMENSIONS - INCHES (MM)

ROOF CURBS WITH SUPPLY & RETURN AIR TRANSITIONS FOR CEILING DIFFUSERS



TOP VIEW

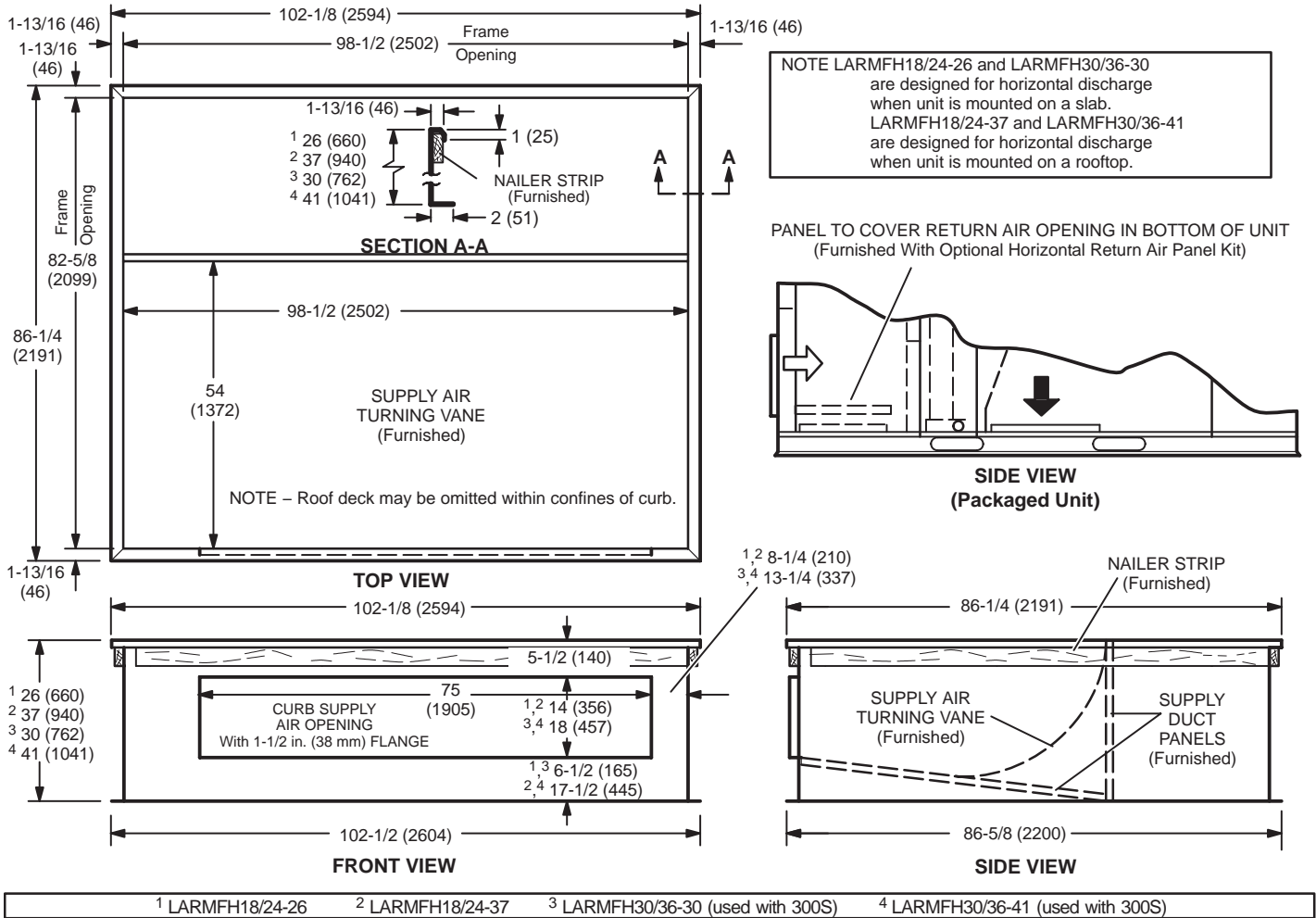


TRANSITION OPENING SIZES

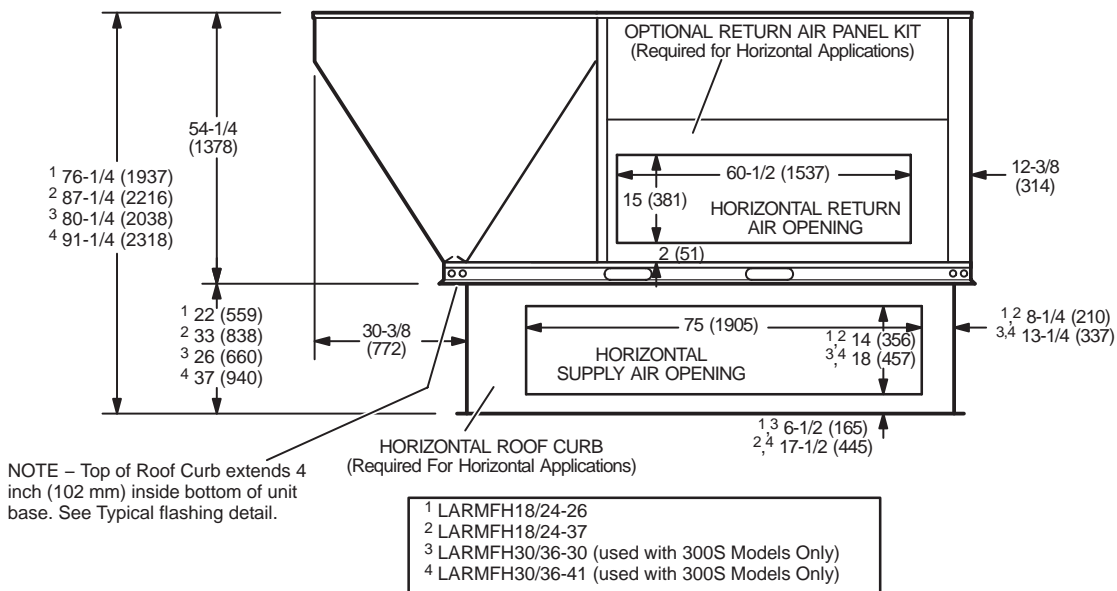
Model Number	A		B	
	inch	mm	inch	mm
LASRT18	18	457	36	914
LASRT21/24	24	610	48	1219

ACCESSORY DIMENSIONS - INCHES (MM)

HORIZONTAL ROOF CURBS – Requires Optional Horizontal Return Air Panel Kit



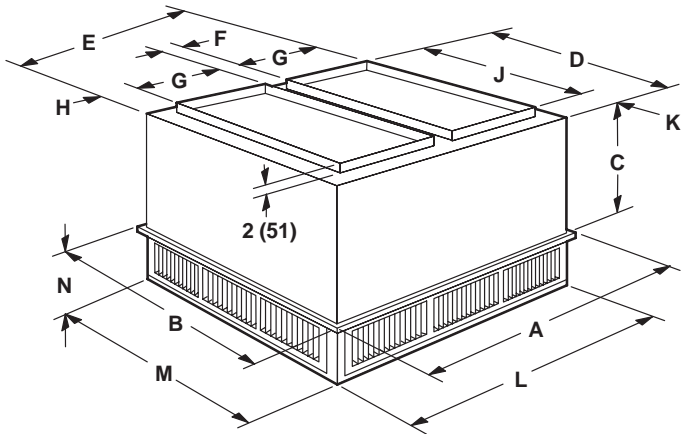
HORIZONTAL SUPPLY AND RETURN AIR OPENINGS WITH HORIZONTAL ROOF CURB



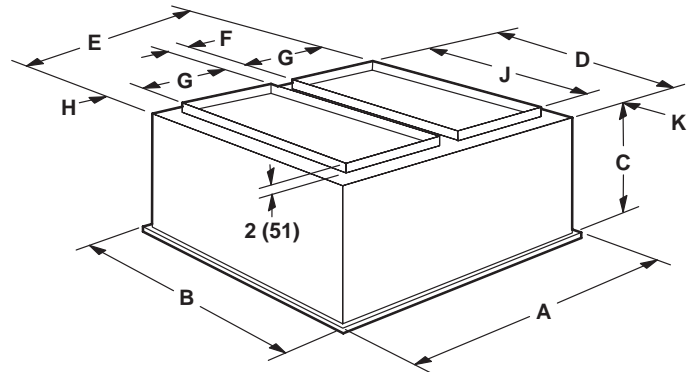
ACCESSORY DIMENSIONS - INCHES (MM)

COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

STEP-DOWN CEILING DIFFUSER



FLUSH CEILING DIFFUSER



Model Number		RTD11-185	RTD11-275
A	in.	47-5/8	59-5/8
	mm	1210	1514
B	in.	47-5/8	59-5/8
	mm	1210	1514
C	in.	24-5/8	30-5/8
	mm	625	778
D	in.	45-1/2	57-1/2
	mm	1156	1461
E	in.	45-1/2	57-1/2
	mm	1156	1461
F	in.	4-1/2	4-1/2
	mm	114	114
G	in.	18	24
	mm	457	610
H	in.	2-1/2	2-1/2
	mm	64	64
J	in.	36	48
	mm	914	1219
K	in.	4-3/4	4-3/4
	mm	121	121
L	in.	45-1/2	57-1/2
	mm	1156	1461
M	in.	45-1/2	57-1/2
	mm	1156	1461
N	in.	10-1/8	11-1/8
	mm	257	283
Duct Size	in.	18 x 36	24 x 48
	mm	457 x 914	610 x 1219

Model Number		FD11-185	FD11-275
A	in.	47-5/8	59-5/8
	mm	1210	1514
B	in.	47-5/8	59-5/8
	mm	1210	1514
C	in.	29-1/4	35-1/4
	mm	743	895
D	in.	45	57
	mm	1143	1148
E	in.	45	57
	mm	1143	1448
F	in.	4-1/2	4-1/2
	mm	114	114
G	in.	18	24
	mm	457	610
H	in.	2-1/4	2-1/4
	mm	57	57
J	in.	36	48
	mm	914	1219
K	in.	4-1/2	4-1/2
	mm	114	114
Duct Size	in.	18 x 36	24 x 48
	mm	457 x 914	610 x 1219



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