



**PRODUCT SPECIFICATIONS**

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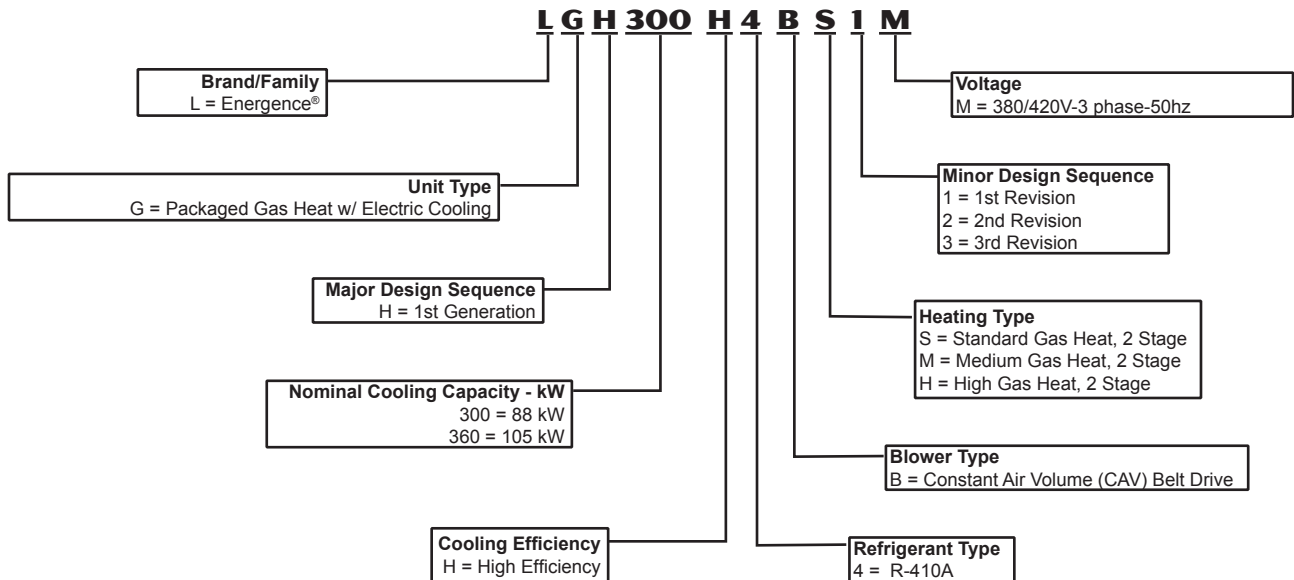


SMARTWIRE™ SYSTEM

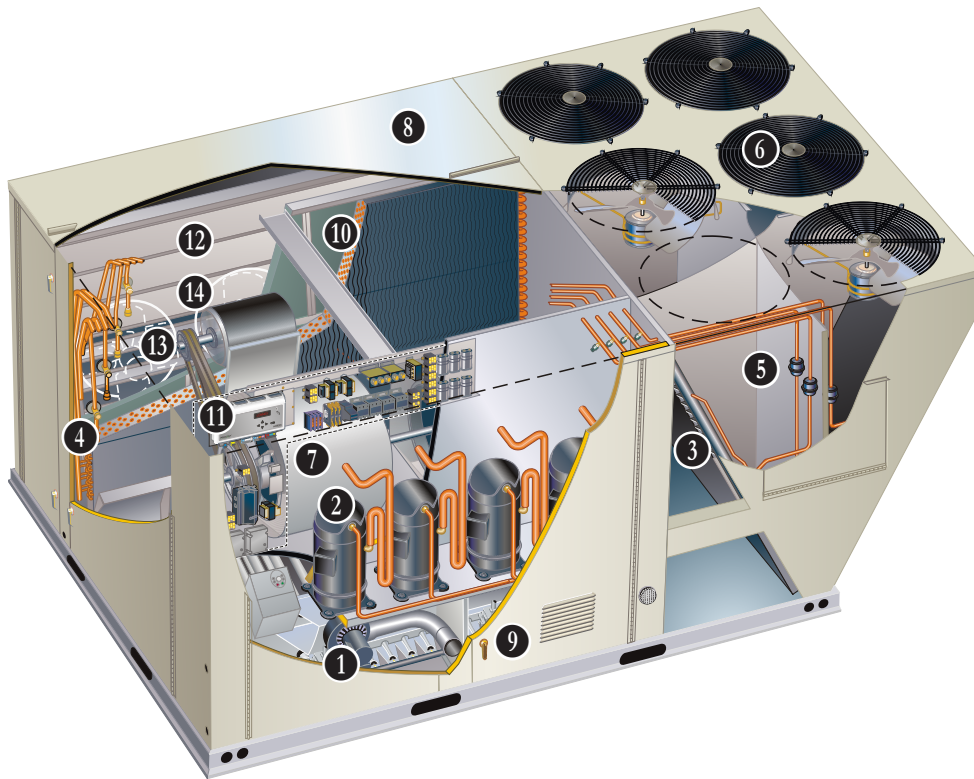


**88 to 105 kW (25 to 30 Tons)**  
**Net Cooling Capacity - 78.5 to 93.2 kW (268 000 to 318 000 Btuh)**  
**Gas Input Heat Capacity - 68.5 to 123 kW (234 000 to 420 000 Btuh)**

**MODEL NUMBER IDENTIFICATION**



## FEATURES AND BENEFITS



Lennox' Energence® 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 Energence rooftop units perfect for business owners looking for an Heating/Ventilation/Air Conditioning (HVAC) product with the lowest total cost of ownership. Energence rooftop units feature:

- **Hinged Access Panels** - Provides 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** - Provides peak cooling performance across the entire application range.
- **Scroll Compressors** - Standard on all units for reliable, long-term operation.
- **Lennox' Environ™ Coil System** - Smaller, lighter condenser coil.
- **Constant Air Volume (CAV) Blower** - Allows constant 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 (Minimum Efficiency Reporting Value) Filters** - Available as factory or field option, provides an enhanced level of indoor air quality (IAQ).
- **Foil-Faced Insulation** - Insulation on all internal surfaces that have contact with airflow helps minimize airborne fibers and improve indoor air quality (IAQ).

### Prodigy® Control System

Standard on every Energence rooftop unit, the new Prodigy® unit controller is the heart of the Lennox® 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.

### SmartWire™ System

The SmartWire 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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### PERFORMANCE/QUALITY

Components bonded for grounding to meet safety standards for servicing required by Underwriters Laboratories (UL) and the International Electrotechnical Commission (IEC).

Cooling performance is rated at test conditions included in Air-Conditioning, Heating and Refrigeration (AHRI) Standard 340/360-2007 while operating at rated voltage and air volumes. International Organization for Standardization (ISO) 9001 Registered Manufacturing Quality System.

### CE MARK OPTION

The CE mark has been added to our rooftop product line as a configure to order (CTO) option.



This optional construction allows units to be sold into countries requiring CE marking for rooftop products.

CE marked units meet the requirements of the Machinery Directive 2006/42/EC, Low Voltage Directive 73/23/EEC, EMC Directive 89/336/EEC, and Gas Directive 90/396/EEC. Declaration of conformity certificates will be provided for each CE marked unit on demand.

Key features of this option over and above standard product features are:

- Touch-proof electrical components meeting the requirements of EN 60529.
- Branch circuits over 0.5 kW load have overcurrent protection.
- Rotary style/finger safe disconnect switch with locking handle prevents disconnect door from being opened with the power on. Padlock can be applied to lock the disconnect switch in the OFF position.
- The factory wiring has been redesigned for separation of high and low voltage circuits.

### HEATING SYSTEM

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

#### Heat Exchanger

Tubular construction, aluminized steel, life cycle tested.

Optional Stainless Steel Heat Exchanger is required if mixed air temperature is below 7°C.

### 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:

Standard Gas Heat, 2 Stage  
49.5/68.5 kW.

Medium Gas Heat, 2 Stage  
68.6/91.9 kW.

High Gas Heat, 2 Stage  
91.4/123 kW.

### OPTIONS/ACCESSORIES

#### Factory Installed

#### Stainless Steel Heat Exchanger

Required if mixed air temperature is below 7°C.

#### Factory or Field Installed

#### Low Temperature Vestibule Heater

Electric heater automatically controls minimum temperature in gas burner compartment when temperature is below -40°C.

#### 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.

## FEATURES AND BENEFITS

### HEATING SYSTEM (CONTINUED)

#### 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 (102 mm 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 18°C to 52°C 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.

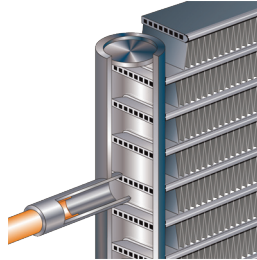
#### Compressor Crankcase Heaters

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

### 3 Lennox' Environ™ Coil System

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.



Environ™ Coil System Features:

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

#### Evaporator Coil

Copper tube construction, enhanced rippled-edge aluminum fins, flared shoulder tubing connections, silver-soldered construction for improved heat transfer. Factory leak tested. Cross row circuiting with rifled tubing optimizes both sensible and latent cooling capacity. Low fin per inch count minimizes air pressure drop.

Models have face-split evaporator coils.

### 4 Thermal Expansion Valves

Assures optimal performance throughout the application range.

Removable element head.

### 5 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. Automatic reset.

#### Low Pressure Switches

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

#### Condensate Drain Pan

Plastic, sloped drain pan.

Side drain connections.

Stainless steel drain pan available as a factory installed option.

#### Freezestats

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

### 6 Outdoor Coil Fan Motors

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

#### Outdoor Coil Fans

Polyvinyl chloride (PVC) coated fan guard furnished.

### REQUIRED SELECTIONS

#### Cooling Capacity

Specify nominal cooling capacity of the unit.

### OPTIONS/ACCESSORIES

#### Factory Installed

#### Discharge Air Temperature Sensor

Sensor sends information to the unit controller to cycle up to 2 stages of heating or 4 stages of cooling to maintain the discharge air setpoints for heating or cooling. Optional for units with single zone or bypass zoning control. Sensor is shipped with the unit for remote field installation in the supply duct.

## FEATURES AND BENEFITS

### **COOLING SYSTEM** **(CONTINUED)**

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

##### **Condensate Drain Trap**

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

Available in copper or Polyvinyl chloride (PVC).

##### **Drain Pan Overflow Switch**

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

##### **Stainless Steel Drain Pan**

Non-corrosive drain pan.

### **7 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.

#### **Supply Air Blower**

Forward curved blades, double inlet, blower wheel is statically and dynamically balanced. Belt drive motors with adjustable pulley for speed change.

Blower assembly slides out of unit for servicing.

Grease fittings furnished.

### **REQUIRED SELECTIONS**

Specify motor output and drive kit number when base unit is ordered, see Drive Kit Specifications tables.

Order one drive kit, 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.

#### **Field Installed**

##### **Supply Static Limit Switch**

Field installed manual reset switch for supply static high pressure limit. Prevents exceeding pressure limit in supply air duct. Optional Mounting Kit includes tubing and adaptors.

### **CABINET**

#### **8 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 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.

#### **9 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.

### **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
- 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.

##### **Grille Guards**

Protects the space between outdoor coils and main cabinet.

##### **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

### **ELECTRICAL**

All units include terminal block and fuse block in power entry junction box for single power entry application.

### **REQUIRED SELECTIONS**

#### **Voltage Choice**

Specify when ordering base unit.

### **INDOOR AIR QUALITY**

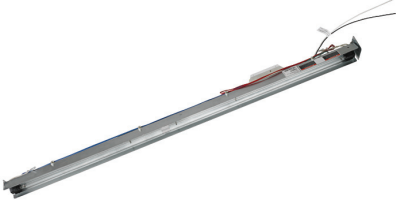
#### **10 Air Filters**

Disposable 51 mm filters furnished as standard.

### **OPTIONS/ACCESSORIES**

#### **Factory Installed**

#### **Healthy Climate® 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 220V single-phase power supply. Step-down transformer is furnished with lamps when used with 380/420V rooftop units. Alternatively, 220V power supply may be used to directly power the UVC ballast(s).

### **Factory or Field Installed**

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

Disposable MERV 8 or MERV 13 (Minimum Efficiency Reporting Value based on ASHRAE 52.2) efficiency 51 mm pleated filters.

#### **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 (CO<sub>2</sub>) Sensors**

Monitors CO<sub>2</sub> levels, reports to the Prodigy® Unit Controller, which adjusts economizer dampers as needed.

### **SERVICEABILITY**

Designed to streamline general maintenance and decrease troubleshooting time.

#### **Diagnostics**

Prodigy Unit Controller diagnostic scrolling text pinpoints problems, minimizing troubleshooting time.

#### **SmartWire™ System**

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

#### **Electrical Plugs**

Positive connection electrical plugs are used to connect common accessories or maintenance parts for easy removal or installation.

#### **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 Thermal Expansion Valves (TXV).

### **Coil Cleaning**

Slab condenser coils provided for easier cleaning.

### **Standard Components**

A large number of common maintenance parts are standard throughout the entire range of sizes 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.

## PRODIGY® CONTROL SYSTEM

### 11 PRODIGY UNIT CONTROLLER



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

#### **Prodigy Unit Controller features:**

**Scrolling Display** - Scrolls full text instead of numerical codes.

**Push Buttons** - Simplified navigation during setup and diagnostics.

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

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

**Universal Serial Bus (USB) Port** - Easily download and transfer unit information via a USB flash drive and also interface with Lennox Unit Controller Software.



**Self Test Mode** - Confirm proper component and system operation.

**Time Clock with Run-time Information**

#### **Built-In Functions Include:**

**Blower Air Delivery Options**

**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 -18°C.

**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 / 2 cool with standard Prodigy unit controller. Up to 2 heat / 4 cool with add-on control board.

**“Strike Three” Protection**

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

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

NOTE - See separate Prodigy 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 Supermarket reheat field selectable option.

**12 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 for economizer and downflow barometric relief dampers 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 Prodigy Unit Controller compares outdoor air with return air. When the outdoor air is below the configured setpoint and cooler than return air, the controller enables the economizer.

*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**

- 13** Allows 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.

- 14** **Standard Static Power Exhaust Fans**

Three 0.25 kW motors with 508 mm diameter, five-blade propeller type fans with a total power input of 1125 W and a total air volume of 6040 L/s at 0 Pa.

Installs internal to unit for downflow applications only with economizer option, provides exhaust air pressure relief, interlocked to run when return air dampers are closed and supply air blower is operating, fan runs when outdoor air dampers are 50% open (adjustable), motor is overload protected, steel cabinet and hood painted to match unit, requires optional Downflow Economizer Barometric Relief Dampers. See Standard Static Power Exhaust Blower Tables.

**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.

Minimum mixed air temperature in heating mode is -1°C. Maximum mixed air temperature in cooling mode is 32°C.



## **OPTIONS / ACCESSORIES**

### **ROOF CURBS**

Nailer strip furnished, mates to unit, shipped knocked down.

#### **Downflow**

**Standard Curbs** - Curb corners fasten together with furnished hardware.

Available in 356 mm and 610 mm heights.

#### **Horizontal**

Converts unit from downflow to horizontal (side) air flow, return air is on unit, supply air is on curb, see dimension drawings.

Available in 940 mm and 1041 mm heights.

Requires Horizontal Return Air Panel Kit.

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.

## OPTIONS / ACCESSORIES

Item Description	Model Number	Catalog Number	Unit Model No	
			300	360
<b>CE MARK</b>				
CE Marked Unit		Factory	O	O
<b>GAS HEAT</b>				
Combustion Air Intake Extensions (Order 2 Kits)	C1EXTN10FF1	<b>89L97</b>	X	X
Gas Heat Input	Standard - 49.5/68.5 kW input	Factory	O	O
	Medium - 68.6/91.9 kW input	Factory	O	O
	High - 91.4/123 kW input	Factory	O	O
Low Temperature Vesibule Heater	380/420V-3ph - C1LTVH10C-1G	<b>58W29</b>	OX	OX
LPG/Propane Conversion Kits (Order 2 Kits)	Standard Heat - LTALPGK-130	<b>72M94</b>	X	X
	Medium Heat - LTALPGK-180	<b>72M95</b>	X	X
	High Heat - LTALPGK-240	<b>72M96</b>	X	X
Stainless Steel Heat Exchanger		Factory	O	O
Vertical Vent Extension	C1EXTN20FF1	<b>42W16</b>	X	X
<b>COOLING SYSTEM</b>				
Condensate Drain Trap	Polyvinyl chloride (PVC) - C1TRAP20AD2	<b>76M26</b>	OX	OX
	Copper - C1TRAP10AD2	<b>76W27</b>	OX	OX
Corrosion Protection		Factory	O	O
Drain Pan Overflow Switch	E1SNSR71AD1	<b>68W88</b>	OX	OX
Efficiency	High	Factory	O	O
Refrigerant Type	R-410A	Factory	O	O
Plastic Condensate Drain Pan		Factory	O	O
Stainless Steel Condensate Drain Pan	C1DPAN10D-1-	<b>84W76</b>	OX	OX
<b>BLOWER - SUPPLY AIR</b>				
Motors	Belt Drive - 3.7 kW	Factory	O	O
	Belt Drive - 5.6 kW	Factory	O	O
	Belt Drive - 7.5 kW	Factory	O	O
Drive Kits See Blower Data Tables for usage and selection	Kit #1 615-745 rev/min	Factory	O	O
	Kit #2 725-870 rev/min	Factory	O	O
	Kit #3 595-730 rev/min	Factory	O	O
	Kit #4 640-805 rev/min	Factory	O	O
	Kit #5 550-675 rev/min	Factory	O	O
	Kit #6 640-805 rev/min	Factory	O	O
	Kit #7 475-600 rev/min	Factory	O	O
	Kit #8 400-525 rev/min	Factory	O	O
	Kit #9 340-445 rev/min	Factory	O	O
	Blower Belt Auto-Tensioner	Factory	O	O
<b>CABINET</b>				
Coil Guards	C1GARD29121	<b>84W63</b>	X	X
Grille Guards	C1GARD39D-1-	<b>86K30</b>	X	X
Hail Guards	C1GARD19121	<b>84W62</b>	X	X
Horizontal Return Air Panel Kit		<b>38K48</b>	X	X

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

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

O = Configure To Order (Factory Installed)

X = Field Installed

## OPTIONS / ACCESSORIES

Item Description	Model Number	Catalog Number	Unit Model No	
			300	360
<b>CONTROLS</b>				
Blower Proving Switch	C1SNSR35FF1	<b>53W65</b>	OX	OX
	Prodigy® Control System - BACnet® Module - C0CTRL60AE1L	<b>59W51</b>	OX	OX
	Prodigy® Control System - LonTalk® Module - C0CTRL65FF1	<b>54W27</b>	OX	OX
	Novar® ETM-2051 Unit Controller - E0CTRL30C1	<b>64W74</b>	OX	OX
	Novar® LSE	Factory	O	O
Dirty Filter Switch	E1SNSR55C-1	<b>53W68</b>	OX	OX
Discharge Air Temperature Sensor		Factory	O	O
Fresh Air Tempering	C1SNSR75AD1	<b>58W63</b>	OX	OX
Smoke Detector - Supply or Return (Power board and one sensor)	C1SNSR44C-1	<b>83W40</b>	OX	OX
Smoke Detector - Supply and Return (Power board and two sensors)	C1SNSR43C-1	<b>83W41</b>	OX	OX
Supply Static Limit Switch	C0SNSR11AE1	<b>79M80</b>	X	X
Supply Static Limit Switch - Mounting Kit	C0SNSR12AE1	<b>79M81</b>	X	X
Supply Static Transducer	C0SNSR20AE1	<b>78M19</b>	X	X
<b>INDOOR AIR QUALITY</b>				
<b>Air Filters</b>				
Healthy Climate High Efficiency Air Filters 508 x 508 x 51 mm - order 12 per unit	MERV 8 - C1FLTR15D-1	<b>54W21</b>	OX	OX
	MERV 13 - C1FLTR40D-1	<b>52W39</b>	OX	OX
Replaceable Media Filter with Metal Mesh Frame (includes Non-Pleated Filter Media) 508 x 508 x 51 mm - order 12 per unit	C1FLTR30D-1	<b>44N60</b>	X	X
<b>Indoor Air Quality (CO<sub>2</sub>) Sensors</b>				
Sensor - Wall-mount, off-white plastic cover with LCD display	C0SNSR50AE1L	<b>77N39</b>	X	X
Sensor - Wall-mount, off-white plastic cover, no display	C0SNSR52AE1L	<b>87N53</b>	X	X
Sensor - Black plastic case with LCD display, rated for plenum mounting	C0SNSR51AE1L	<b>87N52</b>	X	X
Sensor - Wall-mount, black plastic case, no display, rated for plenum mounting	C0MISC19AE1	<b>87N54</b>	X	X
CO <sub>2</sub> Sensor Duct Mounting Kit - for downflow applications	C0MISC19AE1-	<b>85L43</b>	X	X
Aspiration Box - for duct mounting non-plenum rated CO <sub>2</sub> sensors ( <b>87N53</b> or <b>77N39</b> )	C0MISC16AE1-	<b>90N43</b>	X	X
<b>UVC Germicidal Light Kit</b>				
<sup>1</sup> Healthy Climate® UVC Light Kit (220V-1ph)		Factory	O	O
<b>ELECTRICAL</b>				
Voltage 50 hz with neutral (No neutral on CE marked models)	380/420V - 3 phase	Factory	O	O
<b>ECONOMIZER</b>				
<b>Economizer</b>				
Economizer - (Hood Furnished)	E1ECON15D-1	<b>74W43</b>	OX	OX
<b>Economizer Controls</b>				
Differential Enthalpy	Order 2 - C1SNSR64FF1	<b>53W64</b>	OX	OX
Sensible Control	Sensor is Furnished	Factory	O	O
Single Enthalpy	C1SNSR64FF1	<b>53W64</b>	OX	OX
Global, Enthalpy	Sensor Field Provided	Factory	O	O
Differential Sensible	Sensor is Furnished	Factory	O	O
<b>Barometric Relief</b>				
Downflow Barometric Relief Dampers - (Hood Furnished)	E1DAMP60D-1	<b>76W17</b>	OX	OX
Horizontal Barometric Relief Dampers - (Hood Furnished)	LAGEDH30/36	<b>33K78</b>	OX	OX

<sup>1</sup> Lamps operate on 220V, single phase power supply. Step-down transformer is furnished with lamps when used with 380/420V rooftop units.

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

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

O = Configure To Order (Factory Installed)

X = Field Installed

## OPTIONS / ACCESSORIES

Item Description	Model Number	Catalog Number	Unit Model No	
			300	360
<b>OUTDOOR AIR</b>				
Outdoor Air Dampers - Motorized - (Hood Furnished)	E1DAMP25D-1-	<b>74W44</b>	OX	OX
Outdoor Air Dampers - Manual - (Hood Furnished)	E1DAMO15D-1-	<b>74W45</b>	OX	OX
<b>POWER EXHAUST</b>				
Standard Static	380/420V - E1PWRE40D-1M	<b>74W24</b>	OX	OX
<b>ROOF CURBS - DOWNFLOW</b>				
<b>Standard Curbs</b>				
356 mm height	LARMF18/36-14	<b>16K87</b>	X	X
610 mm height	LARMF18/36-24	<b>16K88</b>	X	X
<b>ROOF CURBS - HORIZONTAL (REQUIRES HORIZONTAL AIR PANEL KIT)</b>				
<b>Standard Curbs</b>				
762 mm height - rooftop applications	LARMFH30/36-30	<b>33K79</b>	X	X
1041 mm height - slab applications	LARMFH30/36-41	<b>38K54</b>	X	X
<b>Horizontal Return Air Panel Kit (Required)</b>		<b>38K48</b>	X	X
<b>Insulation Kit For Standard Horizontal Curbs</b>				
	for LARMFH30/36-30	<b>73K33</b>	X	X
	for LARMFH30/36-41	<b>73K35</b>	X	X
<b>CEILING DIFFUSERS</b>				
Step-Down - Order one	LARTD30/36	<b>35K25</b>	X	X
Flush - Order one	LAFD30/36	<b>35K24</b>	X	X
Transitions (Supply and Return) - Order one	LASRT30/36	<b>33K80</b>	X	X

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

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O = Configure To Order (Factory Installed)

X = Field Installed

## SPECIFICATIONS

General Data		Nominal kW (Tons)	88 (25)	105 (30)	
		Model Number	LGH300H4B	LGH360H4B	
		Efficiency Type	High	High	
		Blower Type	Constant Air Volume (CAV)	Constant Air Volume (CAV)	
Cooling Performance	Gross Cooling Capacity - kW (Btuh)		80.8 (276 000)	96.7 (330 000)	
	<sup>1</sup> Net Cooling Capacity - kW (Btuh)		78.5 (268 000)	93.2 (318 000)	
	AHRI Rated Air Flow - L/s (cfm)		3825 (8100)	4530 (9600)	
	Total Unit Power - kW		22.8	29.2	
	<sup>1</sup> EER (Btuh/Watt)		11.8	10.8	
	<sup>2</sup> IEER (Btuh/Watt)		12.5	11.5	
		Refrigerant Type		R-410A	R-410A
	Refrigerant Charge	Circuit 1		4.2 kg (9 lbs. 4 oz.)	4.1 kg (9 lbs. 0 oz.)
		Circuit 2		4.1 kg (9 lbs. 0 oz.)	3.6 kg (8 lbs. 0 oz.)
		Circuit 3		4.0 kg (8 lbs. 13 oz.)	4.1 kg (9 lbs. 0 oz.)
	Circuit 4		3.9 kg (8 lbs. 9 oz.)	3.4 kg (7 lbs. 8 oz.)	
Gas Heating Options Available - See page 14			Standard (2 Stage), Medium (2 Stage), or High (2 Stage)		
Compressor Type (number)			Scroll (4)	Scroll (4)	
Outdoor Coils	Net face area - m <sup>2</sup> (sq. ft.) total		6.4 (68.3)	6.4 (68.3)	
	Number of rows		1	1	
	Fins per m (Fins per inch)		906 (23)	906 (23)	
Outdoor Coil Fans	Motor - (No.) W (hp)		(6) 249 (1/3)	(6) 249 (1/3)	
	Motor rev/min		1075	1075	
	Total Motor watts		2500	2500	
	Diameter - mm (in.)		(6) 610 (24)	(6) 610 (24)	
	Number of blades		3	3	
	Total Air volume - L/s (cfm)		10 145 (21 500)	10 145 (21 500)	
Indoor Coils	Net face area - m <sup>2</sup> (sq. ft.) total		2.9 (31.40)	2.9 (31.40)	
	Tube diameter - mm (in.)		9.5 (3/8)	9.5 (3/8)	
	Number of rows		4	4	
	Fins per m (Fins per inch)		551 (14)	(551) 14	
	Drain connection - No. and size		(1) 1 in. NPT	(1) 1 in. NPT	
	Expansion device type		Balance port Thermostatic Expansion Valve (TXV), removable head		
<sup>3</sup> Indoor Blower and Kit Selection	Nominal motor output		3.7 kW (5 hp) - 5.6 kW (7.5 hp) - 7.5 kW (10 hp)		
	Maximum usable motor output		4.3 kW (5.75 hp) - 6.4 kW (8.63 hp) - 8.6 kW (11.5 hp)		
		Motor - Drive kit		3.7 kW (5 hp) Kit 5 - 550-675 rev/min Kit 6 - 640-805 rev/min Kit 7 - 475-600 rev/min Kit 8 - 400-525 rev/min Kit 9 - 340-445 rev/min	
				5.6 kW (7.5 hp) Kit 3 - 595-730 rev/min Kit 4 - 640-805 rev/min	
				7.5 kW (10 hp) Kit 1 - 615-745 rev/min Kit 2 - 725-870 rev/min	
		Blower wheel nominal diameter and width - mm (in.)		(2) 457 x 381 (18 x 15)	
	Filters	Type of filter		Fiberglass, disposable	
		Number and size - mm (in.)		(12) 508 x 508 x 51 (20 x 20 x 2)	
	Electrical characteristics			380/420V - 50 hertz - 3 phase with neutral (No neutral on CE marked models)	

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

<sup>1</sup> Tested at conditions based on AHRI Standard 340/360; 35°C (95°F) outdoor air temperature and 27°C (80°F) db/19°C (67°F) wb entering evaporator air; minimum external duct static pressure while operating at rated voltage and air volumes.

<sup>2</sup> Integrated Energy Efficiency Ratio tested at conditions included in AHRI Standard 340/360 while operating at rated voltage and air volumes.

<sup>3</sup> Using total air volume and system static pressure requirements determine from blower performance tables rev/min and motor output required. Maximum usable output of motors furnished are shown. See Belt Drive Specification Table for maximum usable motor output. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

## SPECIFICATIONS - GAS HEAT

		Model Number	LGH300 LGH360		
			Standard (S)	Medium (M)	High (H)
Usage Data		Heat Input Type			
		Number of Gas Heat Stages	2	2	2
Gas Heating Performance	Input - kW (Btuh)	First Stage	49.5 (169 000)	68.6 (234 000)	91.4 (312 000)
		Second Stage	68.5 (234 000)	91.9 (314 000)	123.0 (420 000)
	Output - kW (Btuh)	First Stage	---	---	---
		Second Stage	54.8 (187 000)	73.5 (251 000)	98.4 (336 000)
Temperature Rise Range - °C (°F)			6 - 22 (10 - 40)	8 - 25 (15 - 45)	11 - 28 (20 - 50)
Thermal Efficiency			80.0%	80.0%	80.0%
Gas Supply Connections			1 in. NPT	1 in. NPT	1 in. NPT
Recommended Gas Supply Pressure - Pa ( in. w.g.)	Natural		1.7 (7)	1.7 (7)	1.7 (7)
	LPG/Propane		2.7 (11)	2.7 (11)	2.7 (11)

## HIGH ALTITUDE DERATE

Units may be installed at altitudes up to 610 m (2000 ft.) above sea level without any modification. At altitudes above 610 m (2000 ft.), units must be derated to match gas manifold pressures shown in table below.

At altitudes above 1372 m (4500 ft.) unit must be derated 2% for each 305 m (1000 ft.) above sea level.

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

Gas Heat Type	Altitude - m (ft.)	Gas Manifold Pressure - Pa (in. w.g.)		Input Rate Natural Gas or LPG/Propane - kW (Btuh)	
		Natural Gas	LPG/Propane Gas	First Stage	Second Stage
Standard (S)	610- 1372 (2001 - 4500)	0.5 (2.6)	1.8 (7.3)	49.5 (169 000)	66.0 (225 500)
Medium (M)	610 - 1372 (2001 - 4500)	0.5 (2.6)	1.8 (7.3)	68.6 (234 000)	88.7 (303 400)
High (H)	610 - 1372 (2001 - 4500)	0.5 (2.6)	1.8 (7.3)	91.4 (312 000)	118.6 (405 000)

# RATINGS

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

## 88 kW - LGH300H4 (1ST STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		18°C					24°C					29°C					35°C				
		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		
L/s	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	
17°C	3776	42.2	6.60	0.74	0.86	0.98	40.9	7.35	0.75	0.88	0.99	39.4	8.20	0.76	0.89	1.00	37.9	9.17	0.77	0.91	1.00
	4719	44.2	6.71	0.79	0.93	1.00	42.8	7.46	0.80	0.95	1.00	41.3	8.31	0.81	0.97	1.00	39.7	9.28	0.83	0.98	1.00
	5663	45.8	6.80	0.83	0.99	1.00	44.4	7.55	0.85	1.00	1.00	43.0	8.40	0.86	1.00	1.00	41.4	9.38	0.88	1.00	1.00
19°C	3776	44.6	6.73	0.58	0.71	0.83	43.2	7.48	0.59	0.73	0.85	41.7	8.33	0.60	0.74	0.86	40.0	9.29	0.60	0.75	0.88
	4719	46.5	6.84	0.61	0.77	0.90	45.1	7.59	0.62	0.78	0.92	43.4	8.43	0.63	0.79	0.94	41.6	9.39	0.64	0.81	0.96
	5663	47.9	6.92	0.65	0.82	0.97	46.4	7.67	0.65	0.83	0.98	44.8	8.51	0.67	0.85	0.99	42.9	9.47	0.69	0.86	1.00
22°C	3776	47.2	6.88	0.44	0.57	0.69	45.8	7.63	0.45	0.58	0.70	44.2	8.47	0.45	0.58	0.71	42.5	9.44	0.45	0.59	0.73
	4719	49.2	7.00	0.45	0.60	0.75	47.7	7.74	0.46	0.61	0.76	46.0	8.58	0.46	0.62	0.77	44.2	9.54	0.46	0.63	0.78
	5663	50.7	7.08	0.46	0.64	0.79	49.1	7.82	0.47	0.65	0.81	47.3	8.66	0.47	0.66	0.82	45.4	9.62	0.48	0.67	0.85

## 88 kW - LGH300H4 (2ND STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		27°C					35°C					43°C					52°C				
		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		
L/s	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	
17°C	3776	80.5	15.52	0.76	0.90	1.00	76.0	18.36	0.78	0.92	1.00	70.8	21.92	0.8	0.95	1.00	64.1	26.31	0.84	0.99	1.00
	4719	84.1	15.73	0.82	0.97	1.00	79.5	18.55	0.83	0.99	1.00	74.5	22.13	0.87	1.00	1.00	68.2	26.59	0.91	1.00	1.00
	5663	87.6	15.92	0.87	1.00	1.00	83.3	18.78	0.89	1.00	1.00	78.2	22.35	0.93	1.00	1.00	71.3	26.76	0.98	1.00	1.00
19°C	3776	85.3	15.79	0.59	0.74	0.86	80.6	18.61	0.61	0.75	0.89	75.1	22.17	0.62	0.78	0.92	67.7	26.55	0.64	0.82	0.97
	4719	88.8	15.99	0.63	0.79	0.94	83.9	18.81	0.65	0.81	0.97	78.0	22.34	0.67	0.84	0.99	70.1	26.67	0.69	0.89	1.00
	5663	91.3	16.14	0.66	0.85	0.99	86.3	18.95	0.68	0.87	1.00	80.2	22.47	0.70	0.91	1.00	72.2	26.82	0.74	0.96	1.00
22°C	3776	90.2	16.08	0.45	0.58	0.71	85.4	18.90	0.45	0.59	0.73	79.7	22.44	0.46	0.61	0.75	71.9	26.80	0.47	0.63	0.79
	4719	93.9	16.30	0.46	0.62	0.77	88.8	19.11	0.46	0.63	0.79	82.7	22.63	0.47	0.65	0.82	74.3	26.96	0.49	0.68	0.87
	5663	96.6	16.46	0.47	0.66	0.82	91.1	19.26	0.48	0.67	0.85	84.6	22.75	0.50	0.69	0.89	76.2	27.09	0.51	0.74	0.94

## 105 kW - LGH360H4 (1ST STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		18°C					24°C					29°C					35°C				
		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		
L/s	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	
17°C	4455	50.5	8.59	0.72	0.85	0.98	48.9	9.51	0.73	0.87	0.99	47.3	10.56	0.74	0.88	1.00	45.6	11.78	0.76	0.90	1.00
	5569	52.8	8.73	0.77	0.93	1.00	51.0	9.65	0.78	0.94	1.00	49.2	10.69	0.80	0.95	1.00	47.6	11.91	0.81	0.98	1.00
	6683	54.5	8.84	0.82	0.99	1.00	52.8	9.77	0.84	1.00	1.00	51.2	10.82	0.85	1.00	1.00	49.6	12.06	0.87	1.00	1.00
19°C	4455	53.2	8.76	0.57	0.70	0.82	51.6	9.68	0.58	0.71	0.84	49.8	10.72	0.59	0.72	0.85	48.0	11.94	0.59	0.73	0.87
	5569	55.3	8.89	0.60	0.75	0.90	53.5	9.81	0.61	0.77	0.91	51.7	10.86	0.62	0.78	0.93	49.8	12.07	0.63	0.79	0.95
	6683	56.9	9.00	0.64	0.80	0.96	55.0	9.91	0.64	0.82	0.98	53.1	10.96	0.65	0.83	0.99	51.2	12.18	0.66	0.85	1.00
22°C	4455	56.2	8.95	0.44	0.56	0.68	54.4	9.87	0.44	0.56	0.69	52.6	10.92	0.44	0.57	0.70	50.7	12.14	0.44	0.58	0.71
	5569	58.4	9.10	0.45	0.59	0.73	56.4	10.02	0.45	0.60	0.75	54.6	11.06	0.46	0.61	0.76	52.7	12.28	0.46	0.62	0.77
	6683	60.1	9.21	0.46	0.63	0.78	58.0	10.12	0.46	0.63	0.80	55.9	11.16	0.47	0.64	0.81	53.9	12.37	0.47	0.65	0.83

## 105 kW - LGH360H4 (2ND STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		27°C					35°C					43°C					52°C				
		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		
L/s	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	kW	kW	24°C	27°C	29°C	
17°C	4455	97.0	20.06	0.74	0.88	1.00	91.6	23.55	0.76	0.91	1.00	85.5	27.88	0.78	0.94	1.00	76.9	33.11	0.82	0.99	1.00
	5569	101.1	20.33	0.80	0.96	1.00	95.5	23.82	0.82	0.99	1.00	89.2	28.16	0.84	1.00	1.00	81.3	33.52	0.90	1.00	1.00
	6683	104.6	20.57	0.85	1.00	1.00	99.4	24.10	0.88	1.00	1.00	93.1	28.48	0.91	1.00	1.00	84.3	33.78	0.97	1.00	1.00
19°C	4455	102.2	20.41	0.58	0.72	0.85	96.6	23.89	0.59	0.74	0.88	89.8	28.23	0.61	0.76	0.91	80.7	33.46	0.63	0.80	0.96
	5569	106.2	20.68	0.62	0.78	0.93	100.2	24.16	0.63	0.80	0.96	93.0	28.46	0.65	0.83	0.99	83.4	33.71	0.68	0.88	1.00
	6683	109.0	20.87	0.65	0.83	0.99	102.8	24.35	0.67	0.86	1.00	95.2	28.65	0.69	0.89	1.00	85.5	33.89	0.73	0.95	1.00
22°C	4455	107.7	20.78	0.44	0.57	0.69	101.8	24.29	0.45	0.58	0.72	94.8	28.62	0.45	0.60	0.74	85.4	33.87	0.46	0.62	0.78
	5569	111.8	21.07	0.45	0.61	0.76	105.7	24.56	0.46	0.62	0.78	98.1	28.86	0.47	0.64	0.81	87.9	34.10	0.48	0.67	0.86
	6683	114.6	21.26	0.47	0.64	0.81	108.0	24.73	0.47	0.66	0.84	100.4	29.04	0.48	0.69	0.87	89.7	34.26	0.50	0.72	0.94

## 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 18 for wet coil and option/accessory air resistance data.

See page 18 for factory installed drive kit specifications.

Air Volume		TOTAL STATIC PRESSURE - Pa (Inches Water Gauge)																	
		100 (0.40)			150 (0.60)			200 (0.80)			250 (1.00)			300 (1.20)			350 (1.40)		
L/s	cfm	rev/min	kW	BHP	rev/min	kW	BHP	rev/min	kW	BHP	rev/min	kW	BHP	rev/min	kW	BHP	rev/min	kW	BHP
1890	4000	433	0.49	0.66	497	0.74	0.99	565	0.95	1.27	630	1.15	1.54	687	1.33	1.78	738	1.52	2.04
2125	4500	441	0.59	0.79	506	0.83	1.11	574	1.05	1.41	638	1.26	1.69	694	1.45	1.94	744	1.65	2.21
2360	5000	451	0.7	0.94	516	0.93	1.25	584	1.16	1.55	646	1.38	1.85	702	1.58	2.12	751	1.79	2.40
2595	5500	462	0.81	1.09	527	1.04	1.39	594	1.28	1.72	655	1.51	2.02	710	1.72	2.31	758	1.95	2.61
2830	6000	473	0.93	1.25	539	1.16	1.55	605	1.42	1.90	665	1.65	2.21	718	1.87	2.51	766	2.11	2.83
3070	6500	486	1.06	1.42	551	1.3	1.74	616	1.56	2.09	675	1.8	2.41	727	2.04	2.73	774	2.29	3.07
3300	7000	499	1.19	1.60	565	1.44	1.93	628	1.73	2.32	685	1.97	2.64	737	2.22	2.98	782	2.49	3.34
3540	7500	513	1.34	1.80	579	1.6	2.14	641	1.9	2.55	696	2.15	2.88	747	2.42	3.24	792	2.71	3.63
3775	8000	528	1.49	2.00	593	1.78	2.39	653	2.1	2.82	708	2.35	3.15	757	2.63	3.53	801	2.95	3.95
4010	8500	544	1.66	2.23	608	1.98	2.65	667	2.31	3.10	720	2.57	3.45	768	2.87	3.85	812	3.21	4.30
4245	9000	561	1.85	2.48	624	2.2	2.95	681	2.54	3.40	733	2.8	3.75	780	3.13	4.20	823	3.5	4.69
4480	9500	578	2.05	2.75	640	2.44	3.27	696	2.78	3.73	746	3.06	4.10	792	3.42	4.58	834	3.81	5.11
4720	10 000	596	2.28	3.06	657	2.69	3.61	711	3.04	4.08	760	3.34	4.48	805	3.73	5.00	845	4.15	5.56
4955	10 500	615	2.53	3.39	674	2.95	3.95	727	3.31	4.44	775	3.65	4.89	817	4.07	5.46	857	4.52	6.06
5190	11 000	634	2.79	3.74	692	3.22	4.32	744	3.61	4.84	789	3.99	5.35	830	4.44	5.95	869	4.91	6.58
5425	11 500	653	3.07	4.12	711	3.51	4.71	760	3.93	5.27	803	4.36	5.84	843	4.84	6.49	881	5.32	7.13
5660	12 000	674	3.38	4.53	729	3.83	5.13	776	4.29	5.75	818	4.77	6.39	857	5.27	7.06	894	5.75	7.71
5900	12 500	695	3.72	4.99	748	4.2	5.63	792	4.69	6.29	832	5.21	6.98	870	5.72	7.67	906	6.21	8.32
6130	13 000	715	4.1	5.50	766	4.61	6.18	808	5.14	6.89	847	5.68	7.61	883	6.21	8.32	918	6.7	8.98
6370	13 500	736	4.52	6.06	784	5.06	6.78	824	5.62	7.53	861	6.18	8.28	896	6.72	9.01	930	7.21	9.66
6605	14 000	757	4.98	6.68	801	5.55	7.44	839	6.14	8.23	875	6.71	8.99	909	7.25	9.72	943	7.74	10.38
6840	14 500	777	5.48	7.35	818	6.08	8.15	854	6.69	8.97	889	7.27	9.75	922	7.81	10.47	955	8.3	11.13
7075	15 000	797	6.02	8.07	834	6.66	8.93	868	7.28	9.76	902	7.86	10.54	935	8.4	11.26	---	---	---

CONTINUED ON NEXT PAGE



## 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 18 for wet coil and option/accessory air resistance data.

See page 18 for factory installed drive kit specifications.

Air Volume		TOTAL STATIC PRESSURE - Pa (Inches Water Gauge)																	
		400 (1.60)			450 (1.80)			500 (2.00)			550 (2.20)			600 (2.40)			650 (2.60)		
L/s	cfm	rev/min	kW	BHP	rev/min	kW	BHP	rev/min	kW	BHP	rev/min	kW	BHP	rev/min	kW	BHP	rev/min	kW	BHP
1890	4000	784	1.72	2.31	824	1.91	2.56	861	2.1	2.82	897	2.31	3.10	932	2.54	3.40	---	---	---
2125	4500	790	1.86	2.49	831	2.07	2.77	868	2.28	3.06	903	2.5	3.35	938	2.73	3.66	974	2.99	4.01
2360	5000	796	2.01	2.69	837	2.24	3.00	874	2.46	3.30	909	2.69	3.61	944	2.94	3.94	980	3.21	4.30
2595	5500	802	2.18	2.92	843	2.42	3.24	880	2.66	3.57	916	2.9	3.89	951	3.15	4.22	987	3.43	4.60
2830	6000	809	2.36	3.16	850	2.62	3.51	887	2.87	3.85	922	3.12	4.18	957	3.38	4.53	994	3.66	4.91
3070	6500	817	2.56	3.43	857	2.83	3.79	894	3.1	4.16	929	3.35	4.49	964	3.62	4.85	1001	3.91	5.24
3300	7000	825	2.78	3.73	864	3.07	4.12	901	3.34	4.48	937	3.6	4.83	971	3.87	5.19	1008	4.17	5.59
3540	7500	833	3.02	4.05	872	3.32	4.45	909	3.61	4.84	945	3.88	5.20	979	4.15	5.56	1016	4.45	5.97
3775	8000	843	3.28	4.40	881	3.6	4.83	918	3.89	5.21	953	4.17	5.59	988	4.45	5.97	1025	4.75	6.37
4010	8500	852	3.56	4.77	890	3.89	5.21	927	4.2	5.63	962	4.49	6.02	997	4.77	6.39	1034	5.08	6.81
4245	9000	862	3.87	5.19	900	4.22	5.66	936	4.53	6.07	972	4.82	6.46	1007	5.11	6.85	1044	5.43	7.28
4480	9500	873	4.21	5.64	910	4.56	6.11	946	4.88	6.54	982	5.17	6.93	1018	5.47	7.33	1055	5.8	7.77
4720	10 000	884	4.57	6.13	921	4.93	6.61	957	5.24	7.02	992	5.54	7.43	1028	5.86	7.86	1066	6.2	8.31
4955	10 500	895	4.94	6.62	932	5.31	7.12	967	5.63	7.55	1003	5.93	7.95	1039	6.27	8.40	1077	6.63	8.89
5190	11 000	907	5.34	7.16	943	5.71	7.65	978	6.03	8.08	1013	6.35	8.51	1050	6.7	8.98	1089	7.08	9.49
5425	11 500	918	5.75	7.71	954	6.13	8.22	989	6.46	8.66	1025	6.78	9.09	1062	7.15	9.58	1101	7.55	10.12
5660	12 000	930	6.19	8.30	965	6.57	8.81	1000	6.9	9.25	1036	7.24	9.71	1073	7.62	10.21	1112	8.03	10.76
5900	12 500	941	6.65	8.91	976	7.03	9.42	1011	7.37	9.88	1048	7.72	10.35	1085	8.1	10.86	1124	8.52	11.42
6130	13 000	953	7.13	9.56	988	7.51	10.07	1023	7.85	10.52	1059	8.21	11.01	---	---	---	---	---	---
6370	13 500	965	7.64	10.24	1000	8.01	10.74	1035	8.35	11.19	---	---	---	---	---	---	---	---	---
6605	14 000	977	8.16	10.94	1012	8.53	11.43	---	---	---	---	---	---	---	---	---	---	---	---

## BLOWER DATA

### FACTORY INSTALLED BELT DRIVE KIT SPECIFICATIONS

Nominal kW	Nominal hp	Maximum kW	Maximum hp	Drive Kit Number	Rev/min Range
3.7	5	4.3	5.75	5	550 - 675
3.7	5	4.3	5.75	6	640 - 805
3.7	5	4.3	5.75	7	475 - 600
3.7	5	4.3	5.75	8	400 - 525
3.7	5	4.3	5.75	9	340 - 445
5.6	7.5	6.4	8.63	3	595 - 730
5.6	7.5	6.4	8.63	4	640 - 805
7.5	10	8.6	11.50	1	615 - 745
7.5	10	8.6	11.50	2	725 - 870

NOTE - Using total air volume and system static pressure requirements determine from blower performance tables rev/min and motor output required. Maximum usable output of motors furnished as shown. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

### FACTORY INSTALLED OPTIONS/FIELD INSTALLED ACCESSORY AIR RESISTANCE

Air Volume		Wet Indoor Coil		Gas Heat Exchanger						Economizer		Filters				Horizontal Roof Curb	
				Standard Heat		Medium Heat		High Heat				MERV 8		MERV 13			
L/s	cfm	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.
1890	4000	17	0.07	20	0.08	20	0.08	27	0.11	0	0.00	0	0.00	0	0.00	10	0.04
2125	4500	22	0.09	22	0.09	25	0.10	32	0.13	0	0.00	0	0.00	0	0.00	12	0.05
2360	5000	25	0.10	25	0.10	30	0.12	37	0.15	0	0.00	0	0.00	0	0.00	15	0.06
2595	5500	32	0.13	27	0.11	35	0.14	42	0.17	2	0.01	0	0.00	2	0.01	17	0.07
2830	6000	35	0.14	30	0.12	40	0.16	47	0.19	2	0.01	0	0.00	5	0.02	20	0.08
3070	6500	40	0.16	32	0.13	45	0.18	52	0.21	2	0.01	2	0.01	5	0.02	22	0.09
3300	7000	45	0.18	35	0.14	50	0.20	60	0.24	5	0.02	2	0.01	7	0.03	25	0.10
3540	7500	50	0.20	37	0.15	52	0.21	62	0.25	5	0.02	2	0.01	10	0.04	27	0.11
3775	8000	55	0.22	42	0.17	60	0.24	70	0.28	5	0.02	2	0.01	10	0.04	32	0.13
4010	8500	60	0.24	50	0.20	67	0.27	77	0.31	7	0.03	2	0.01	10	0.04	37	0.15
4245	9000	67	0.27	55	0.22	72	0.29	85	0.34	10	0.04	2	0.01	10	0.04	42	0.17
4480	9500	72	0.29	60	0.24	80	0.32	94	0.38	10	0.04	5	0.02	15	0.06	47	0.19
4720	10 000	77	0.31	67	0.27	90	0.36	104	0.42	12	0.05	5	0.02	15	0.06	52	0.21
4955	10 500	82	0.33	75	0.30	99	0.40	114	0.46	15	0.06	5	0.02	15	0.06	60	0.24
5190	11 000	90	0.36	82	0.33	107	0.43	124	0.50	17	0.07	5	0.02	17	0.07	67	0.27
5425	11 500	97	0.39	92	0.37	119	0.48	137	0.55	20	0.08	5	0.02	20	0.08	75	0.30
5660	12 000	102	0.41	99	0.40	129	0.52	149	0.60	25	0.10	5	0.02	20	0.08	82	0.33
5900	12 500	110	0.44	109	0.44	142	0.57	162	0.65	27	0.11	7	0.03	25	0.10	92	0.37
6130	13 000	117	0.47	119	0.48	152	0.61	174	0.70	32	0.13	7	0.03	25	0.10	100	0.40
6370	13 500	122	0.49	132	0.53	167	0.67	189	0.76	35	0.14	7	0.03	27	0.11	110	0.44
6605	14 000	129	0.52	142	0.57	179	0.72	204	0.82	40	0.16	7	0.03	30	0.12	122	0.49
6840	14 500	137	0.55	154	0.62	194	0.78	221	0.89	45	0.18	10	0.04	32	0.13	132	0.53
7075	15 000	144	0.58	169	0.68	209	0.84	236	0.95	52	0.21	10	0.04	32	0.13	144	0.58

## BLOWER DATA

### CEILING DIFFUSER AIR RESISTANCE

Air Volume		Step-Down Diffuser - LARTD30/36						Flush Diffuser - LAFD30/36	
		2 Ends Open		1 Side/2 Ends Open		All Ends & Sides Open		Pa	in. w.g.
L/s	cfm	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.
3540	7500	92	0.37	77	0.31	62	0.25	72	0.29
3775	8000	104	0.42	90	0.36	72	0.29	85	0.34
4010	8500	119	0.48	102	0.41	85	0.34	97	0.39
4245	9000	137	0.55	117	0.47	97	0.39	109	0.44
4485	9500	154	0.62	132	0.53	112	0.45	127	0.51
4720	10000	174	0.70	149	0.60	127	0.51	142	0.57
4955	10 500	194	0.78	169	0.68	144	0.58	162	0.65
5190	11 000	216	0.87	190	0.76	162	0.65	179	0.72
5425	11 500	241	0.97	211	0.85	182	0.73	201	0.81
5665	12 000	269	1.08	234	0.94	204	0.82	223	0.90
5900	12 500	296	1.19	259	1.04	226	0.91	246	0.99
6135	13 000	323	1.30	286	1.15	249	1.00	274	1.10
6370	13 500	356	1.43	313	1.26	374	1.10	298	1.20
6605	14 000	388	1.56	343	1.38	298	1.20	326	1.31
6845	14 500	420	1.69	373	1.50	326	1.31	356	1.43
7080	15 000	457	1.84	405	1.63	356	1.43	388	1.56

### CEILING DIFFUSER AIR THROW DATA

Air Volume		<sup>1</sup> Effective Throw Range			
		Step-Down		Flush	
L/s	cfm	m	ft.	m	ft.
4245	9000	12 - 14	40 - 47	8 - 11	29 - 35
4485	9500	13 - 15	43 - 50	10 - 12	33 - 41
4720	10 000	14 - 16	46 - 54	11 - 14	37 - 46
4955	10 500	15 - 18	50 - 58	13 - 15	42 - 51
4190	11 000	16 - 19	53 - 61	14 - 17	46 - 56
5425	11 500	17 - 20	55 - 64	15 - 19	50 - 61
5665	12 000	18 - 20	58 - 67	16 - 20	54 - 66
5900	12 500	19 - 22	61 - 71	18 - 22	58 - 71
6135	13 000	20 - 23	64 - 74	19 - 23	62 - 75
6370	13 500	20 - 23	67 - 77	20 - 24	66 - 79

<sup>1</sup> Throw is the horizontal or vertical distance an airstream travels on leaving the outlet or diffuser before the maximum velocity is reduced to 15 m (50 ft.) per minute. Four sides open.

### POWER EXHAUST FAN PERFORMANCE - STANDARD STATIC

Return Duct Negative Static Pressure		Air Volume Exhausted	
Pa	in. w.g.	L/s	cfm
0	0	6040	12 800
12	0.05	5760	12 200
25	0.10	5430	11 500
37	0.15	5100	10 800
50	0.20	4670	9900
62	0.25	4250	9000
75	0.30	3730	7900
87	0.35	3190	6750
100	0.40	2570	5450
112	0.45	1960	4150
125	0.50	1370	2900

## ELECTRICAL DATA

		LGH300H4B			LGH360H4B		
<sup>1</sup> Voltage - 50hz 3 Phase with neutral		380/420V			380/420V		
Compressor 1	Rated Load Amps	10.6			12.2		
	Locked Rotor Amps	74			101		
Compressor 2	Rated Load Amps	10.6			12.2		
	Locked Rotor Amps	74			101		
Compressor 3	Rated Load Amps	10.6			12.2		
	Locked Rotor Amps	74			101		
Compressor 4	Rated Load Amps	10.6			12.2		
	Locked Rotor Amps	74			101		
Outdoor Fan Motors (6)	Full Load Amps	1.3			1.3		
	(total)	(7.8)			(7.8)		
Standard Power Exhaust (3) 0.25 kW (0.33 HP)	Full Load Amps	1.3			1.3		
	(total)	(3.9)			(3.9)		
Indoor Blower Motor	kW	3.7	5.6	7.5	3.7	5.6	7.5
	Full Load Amps	7.8	11.8	15.2	7.8	11.8	15.2
<sup>2</sup> Maximum Overcurrent Protection	Unit Only	70	70	80	70	90	90
	With (3) 0.25 kW (0.33 HP) Standard Power Exhaust	70	80	80	80	80	90
<sup>3</sup> Minimum Circuit Ampacity	Unit Only	61	65	70	68	72	76
	With (3) 0.25 kW (0.33 HP) Standard Power Exhaust	65	69	74	72	76	80

<sup>1</sup> Extremes of operating range are plus and minus 10% of line voltage.

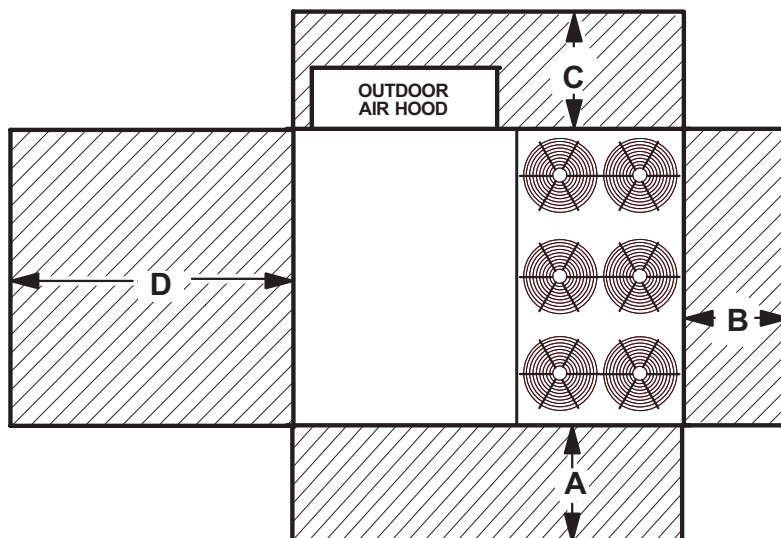
<sup>2</sup> Heating, Air Conditioning type breaker or fuse.

<sup>3</sup> Refer to local electrical code to determine wire, fuse and disconnect size requirements.

<sup>4</sup> Nominal kW based on 420V-3ph-50hz.

## UNIT CLEARANCES - MM (INCHES)

### Unit With Economizer



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

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

<sup>1</sup> **Service Clearance** - Required for removal of serviceable parts.

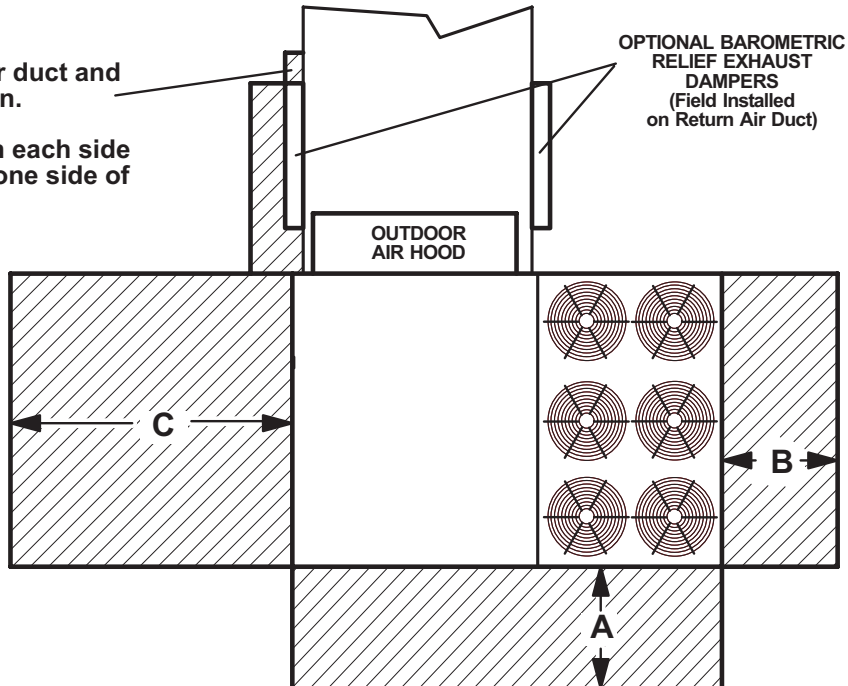
**Clearance to Combustibles** - Required clearance to combustible material.

**Minimum Operation Clearance** - Required clearance for proper unit operation.

### Unit With Horizontal Barometric Relief Dampers

NOTE Allow adequate clearance for duct and barometric relief damper installation.

NOTE Dampers may be installed on each side of return air duct or end to end on one side of return air duct.



<sup>1</sup> Unit Clearance	A		B		C		Top Clearance
	mm	in.	mm	in.	mm	in.	
<b>Service Clearance</b>	1524	60	914	36	1676	66	Unobstructed
<b>Clearance to Combustibles</b>	914	36	25	1	25	1	
<b>Minimum Operation Clearance</b>	1143	45	914	36	1041	41	

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

<sup>1</sup> **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.

## OPTIONAL CONVENTIONAL TEMPERATURE CONTROL SYSTEMS - FIELD INSTALLED

### COMMERCIAL TOUCHSCREEN THERMOSTAT



Intuitive Touchscreen Interface - **Two Stage Heating / Two Stage Cooling Conventional or Heat Pump** - Seven Day Programmable - Four Time Periods/Day - Economizer Output - Title 24 Compliant - ENERGY STAR® Qualified - Backlit Display - Automatic Changeover

C0STAT02AE1L  
(14W81)

#### Sensors For Touchscreen Thermostat

1 Remote non-adjustable wall mount 20k temperature sensor .....	C0SNZN01AE2- (47W36)
1 Remote non-adjustable wall mount 10k averaging temperature sensor .....	C0SNZN73AE1- (47W37)
1 Remote non-adjustable duct mount temperature sensor .....	C0SNDC00AE1- (19L22)
Outdoor temperature sensor .....	C0SNSR03AE1- (X4148)

#### Accessories For Touchscreen Thermostat

Locking cover (clear) .....	C0MISC15AE1- (39P21)
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<sup>1</sup> Remote sensors for C0STAT02AE1L can be applied in the following combinations: (1) C0SNZN01AE1-, (2) C0SNZN73AE1-, (2) C0SNZN01AE1- and (1) C0SNZN73AE1-, (4) C0SNZN01AE1-, (3) C0SNZN01AE1- and (2) C0SNZN73AE1.

### DIGITAL NON-PROGRAMMABLE THERMOSTATS

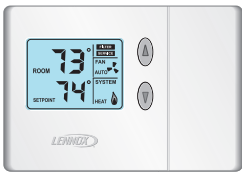


Intuitive Interface - Automatic Changeover - Simple Up and Down Temperature Control

<b>Two-stage heating / cooling</b> conventional systems .....	C0STAT10AE1L (13K98)
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#### Sensor For Digital Non-Programmable Thermostats Above

Remote wall mounted temperature sensor.....	C0SNZN00AE1- (26K57)
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Intuitive Interface - Automatic Changeover - Backlit Display - Simple Up and Down Temperature Control

One-stage heating / cooling conventional systems .....	C0STAT12AE1L (51M32)
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#### Sensor For Digital Non-Programmable Thermostats Above

Outdoor temperature sensor .....	C0SNSR04AE1- (X2658)
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#### Accessories For Digital Non-Programmable Thermostats Above

Optional wall mounting plate .....	C0MISC17AE1- (X2659)
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### OUTDOOR SOUND DATA

Unit Model Number	Octave Band Sound Power Levels dBA, re 10 <sup>-12</sup> Watts Center Frequency - HZ							<sup>1</sup> Sound Rating Number (dB)
	125	250	500	1000	2000	4000	8000	
300/360	84	85	90	90	85	80	72	95

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

<sup>1</sup> Sound Rating Number according to AHRI Standard 370-2001.

**WEIGHT DATA**

Model Number	Net		Shipping	
	kg	lbs.	kg	lbs.
300 Base Unit	1435	3107	1505	3317
300 Max. Unit	1581	3485	1676	3695
360 Base Unit	1435	3107	1505	3317
360 Max. Unit	1581	3485	1676	3695

**OPTIONS / ACCESSORIES**

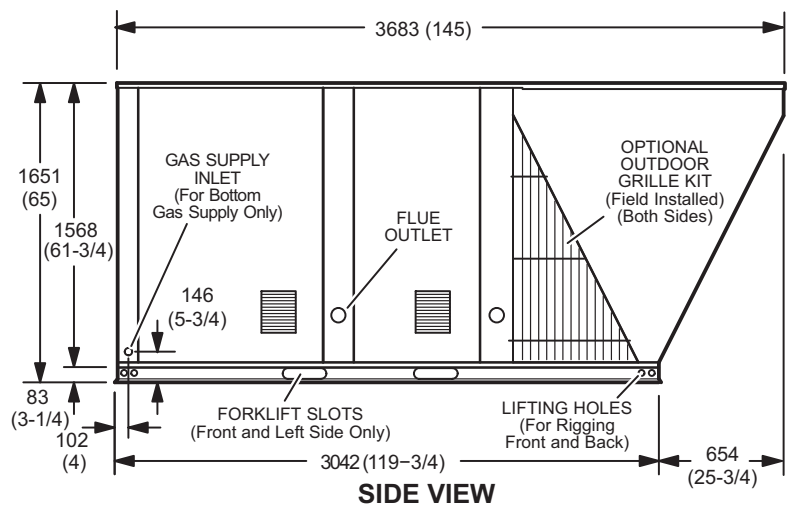
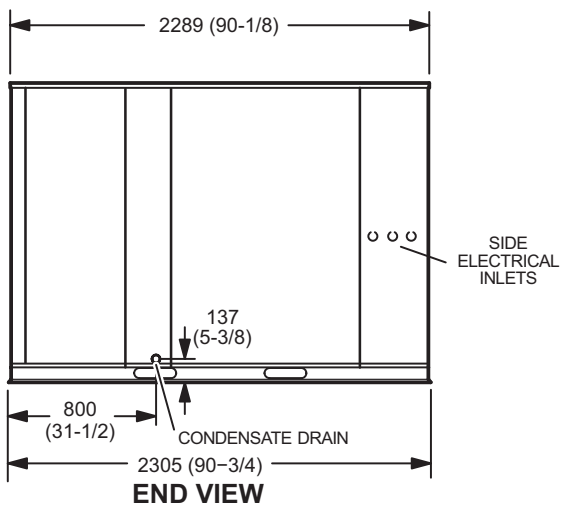
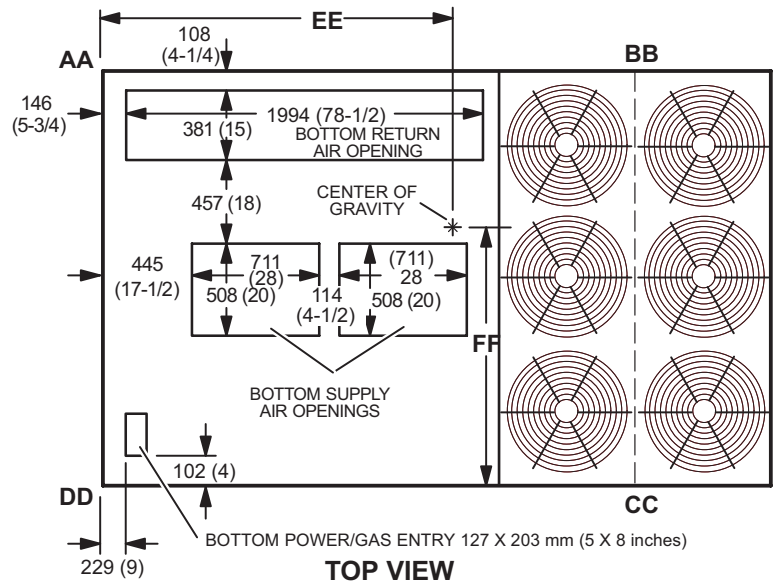
Description	Shipping Weight		
	kg	lbs.	
<b>CEILING DIFFUSERS</b>			
Step-Down	LARTD30/36	198	437
Flush	LAFD30/36	188	414
Transitions	LASRT30/36	39	85
<b>ECONOMIZER / OUTDOOR AIR / EXHAUST</b>			
Economizer	E1ECON15D-1	54	119
<b>Barometric Relief</b>			
Downflow Barometric Relief Dampers	E1DAMP60D-1	20	45
Horizontal Barometric Relief Dampers	LAGEDH30/36	9	20
<b>Outdoor Air Dampers</b>			
Damper Section (downflow)	Motorized - E1DAMP25D-1-	33	72
Damper Section (downflow)	Manual - E1DAMO15D-1-	31	68
<b>Outdoor Air Hood (downflow)</b>	LAOAH30/36	34	76
<b>Power Exhaust</b>			
	Standard Static - E1PWRE40D	45	99
<b>GAS HEAT EXCHANGER (NET WEIGHT)</b>			
	Medium Heat (adder over standard heat)	18	8
	High Heat (adder over standard heat)	64	29
<b>PACKAGING</b>			
LTL Packaging (less than truck load)		136	300
<b>ROOF CURBS - STANDARD</b>			
<b>Downflow</b>			
356 mm height	LARMF18/36-14	73	160
610 mm height	LARMF18/36-24	100	220
<b>Horizontal</b>			
762 mm height	LARMFH30/36-30	202	445
1041 mm height	LARMFH30/36-41	329	725

## DIMENSIONS - MM (INCHES)

Model No.	CORNER WEIGHTS								CENTER OF GRAVITY			
	AA		BB		CC		DD		EE		FF	
	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	mm	in.	mm	in.
LGH300 Base Unit	287	632	288	635	414	912	421	928	1524	60	940	37
LGH300 Max. Unit	322	709	323	712	464	1023	472	1041	1524	60	940	37
LGH360 Base Unit	287	632	288	635	414	912	421	928	1524	60	940	37
LGH360 Max. Unit	322	709	323	712	464	1023	472	1041	1524	60	940	37

Base Unit - The unit with NO INTERNAL OPTIONS.

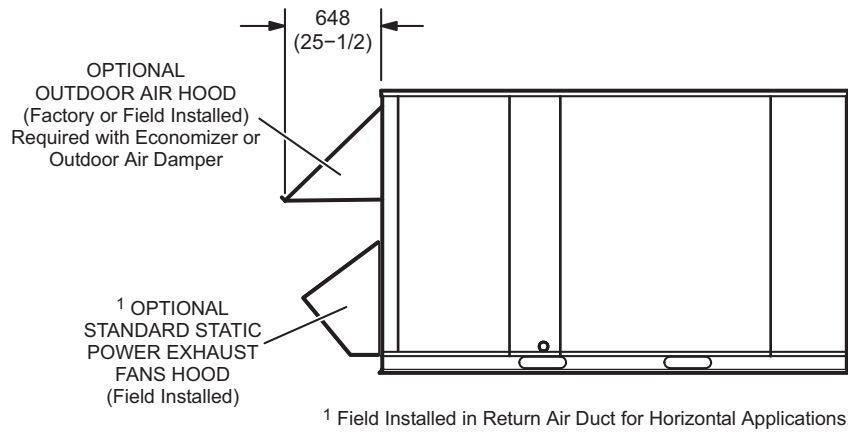
Max. Unit - The unit with ALL INTERNAL OPTIONS Installed. (Economizer, Standard Static Power Exhaust Fans, Controls, etc.). Does not include accessories external to unit or high static power exhaust.





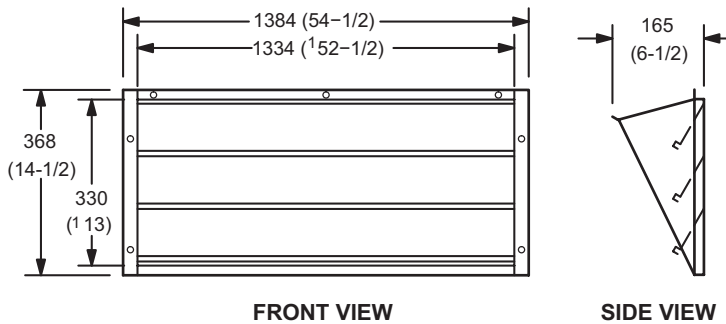
**ACCESSORY DIMENSIONS - MM (INCHES)**

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



**HORIZONTAL BAROMETRIC RELIEF DAMPERS**

(Field installed in horizontal return air duct adjacent to unit)

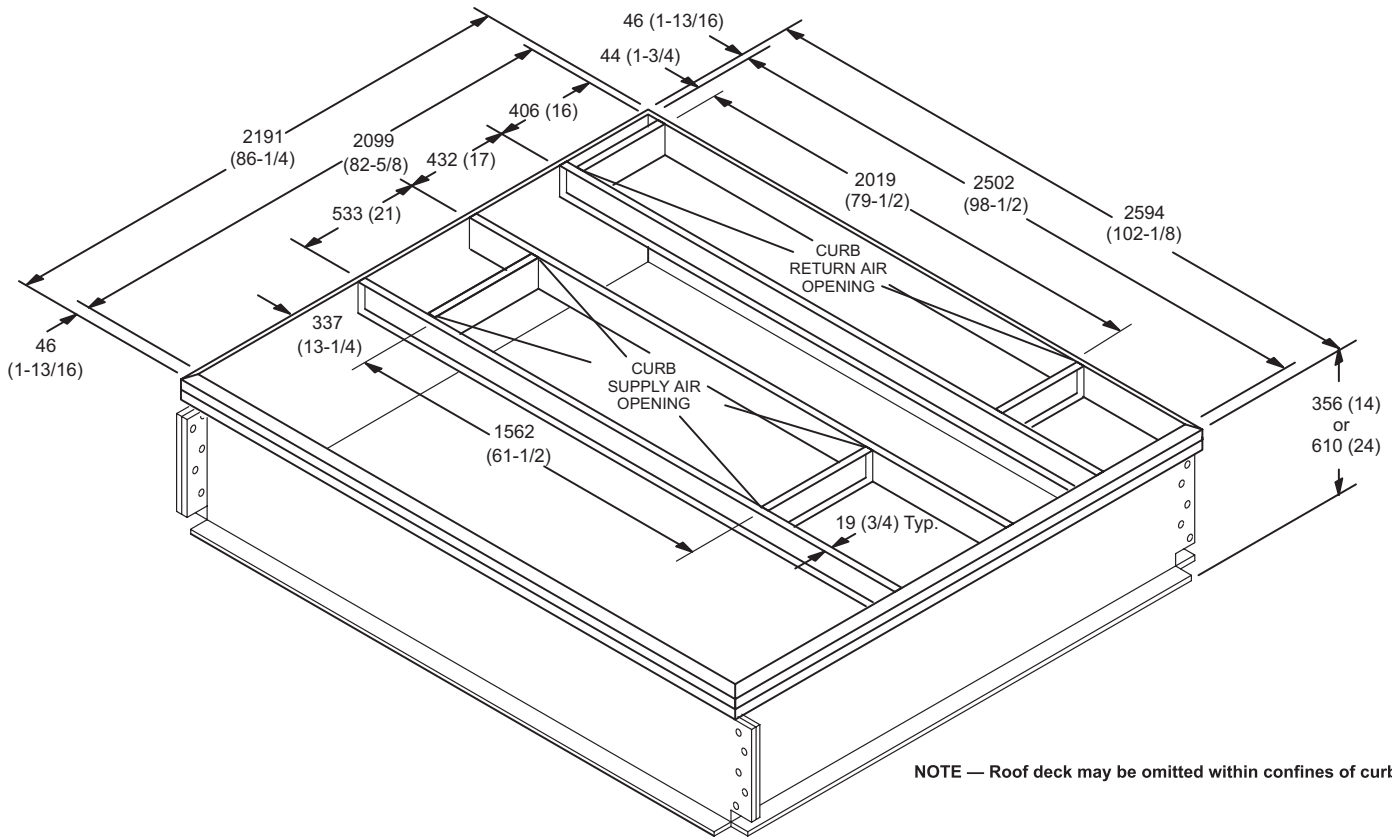


NOTE - Two furnished per order no.

<sup>1</sup> NOTE - Opening size required in return air duct.

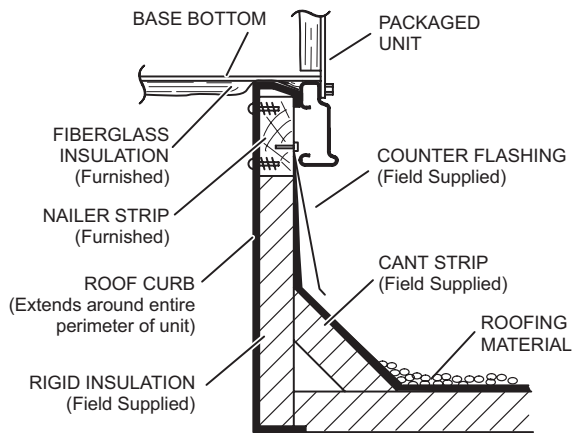
# ACCESSORY DIMENSIONS - MM (INCHES)

## STANDARD ROOF CURBS - DOUBLE DUCT OPENING

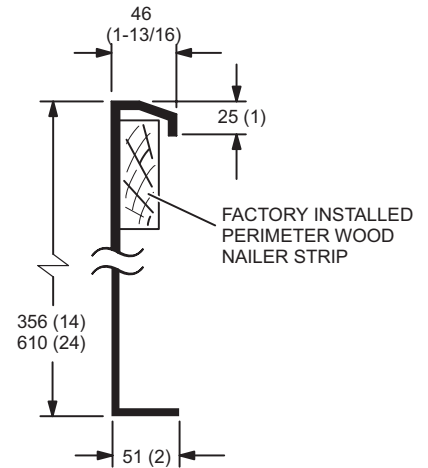


NOTE — Roof deck may be omitted within confines of curb.

### TYPICAL FLASHING DETAIL FOR ROOF CURB

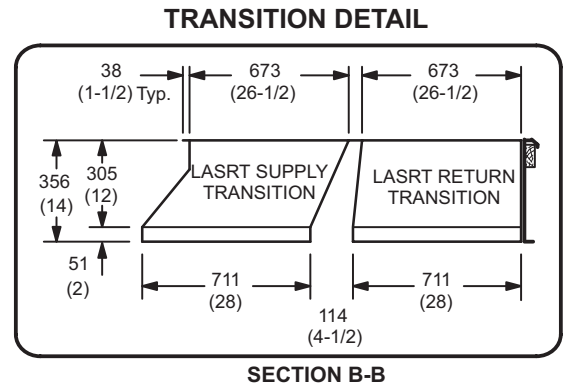
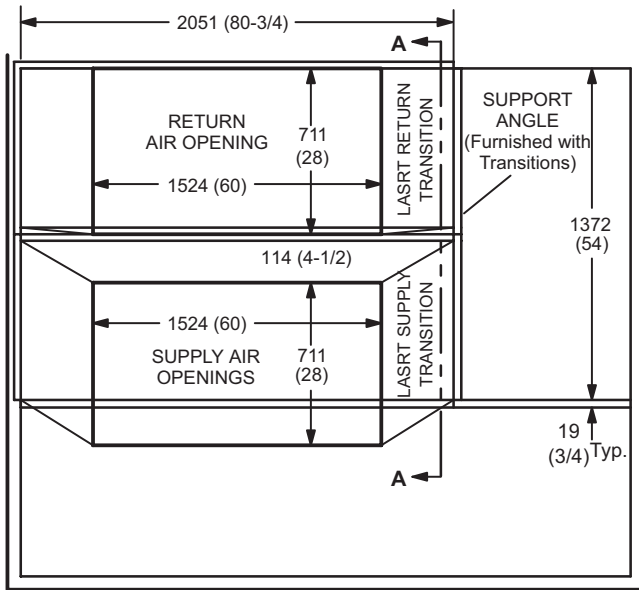


### DETAIL ROOF CURB



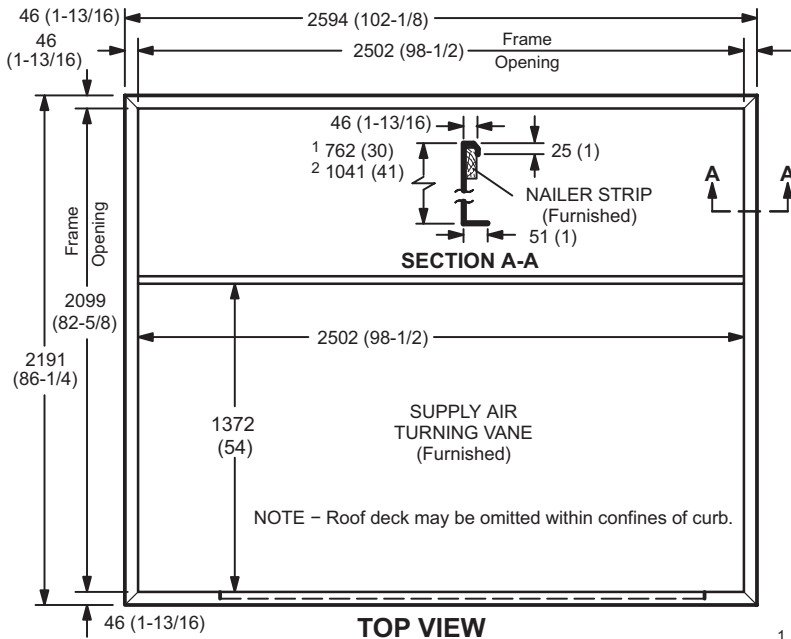
# ACCESSORY DIMENSIONS - MM (INCHES)

## ROOF CURBS WITH SUPPLY & RETURN AIR TRANSITIONS FOR CEILING DIFFUSERS



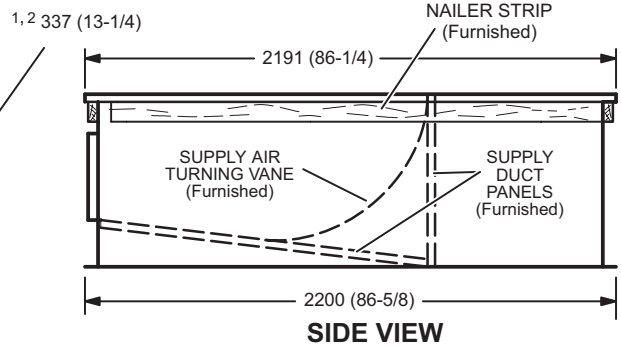
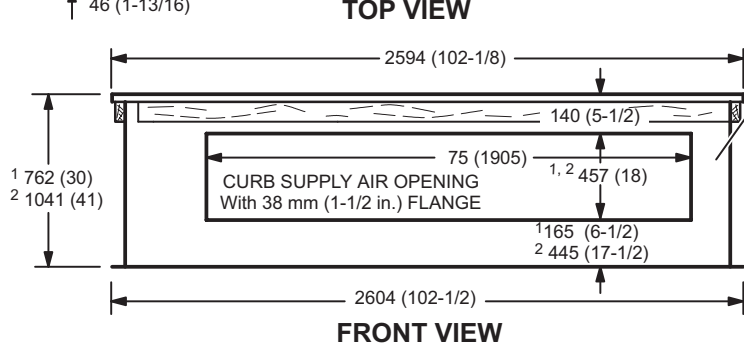
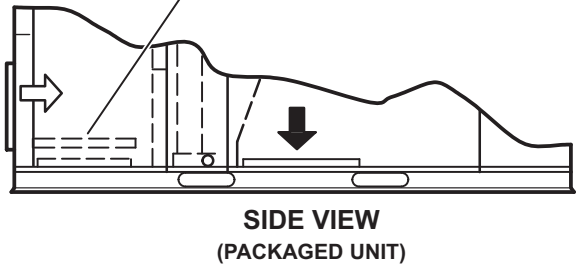
# ACCESSORY DIMENSIONS - MM (INCHES)

## HORIZONTAL ROOF CURBS – Requires Optional Horizontal Return Air Panel Kit



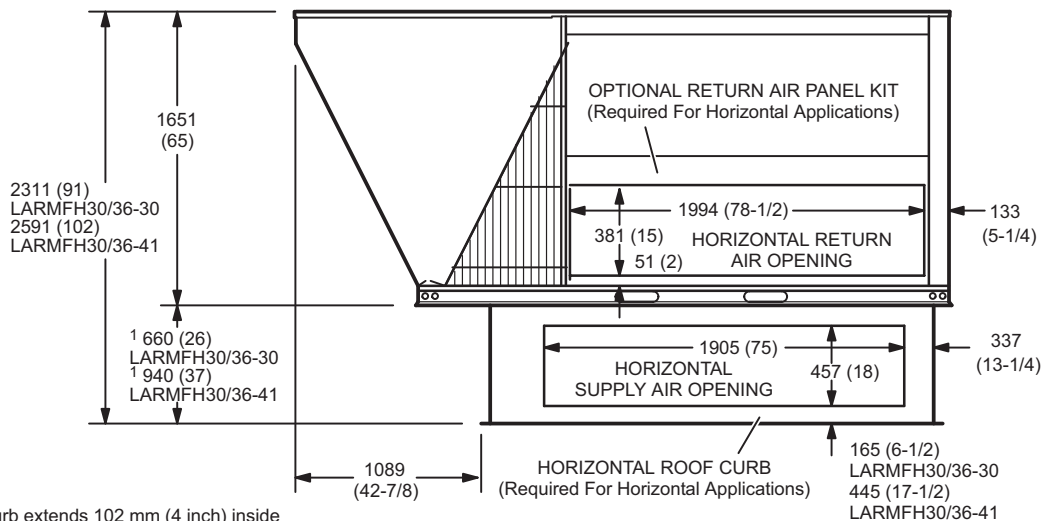
NOTE LARMFH30/36-30 is designed for horizontal discharge when unit is mounted on a slab.  
 LARMFH30/36-41 is designed for horizontal discharge when unit is mounted on a rooftop.

PANEL TO COVER RETURN AIR OPENING IN BOTTOM OF UNIT (Furnished With Optional Horizontal Return Air Panel Kit)



<sup>1</sup> LARMFH30/36-30 <sup>2</sup> LARMFH30/36-41

## HORIZONTAL SUPPLY AND RETURN AIR OPENINGS ROOFTOP UNIT WITH HORIZONTAL ROOF CURB

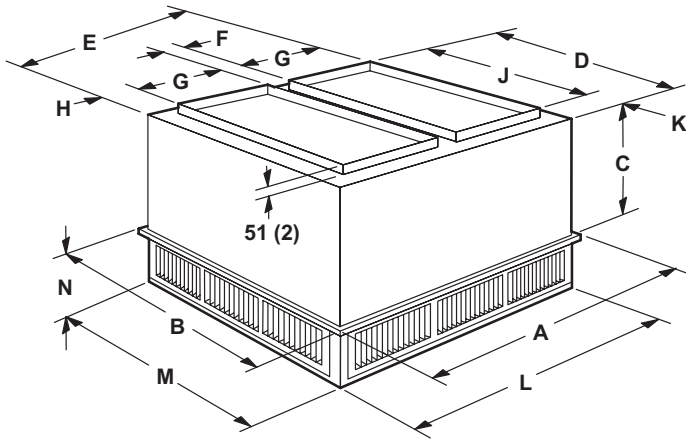


<sup>1</sup> NOTE – Top of Curb extends 102 mm (4 inch) inside bottom of unit base. See Typical Flashing Detail.

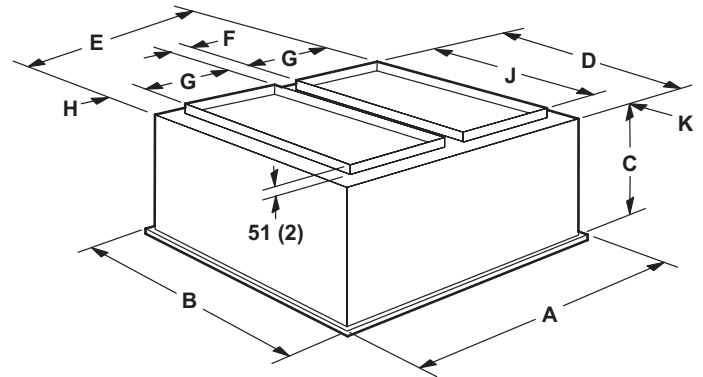
## ACCESSORY DIMENSIONS - MM (INCHES)

### COMBINATION CEILING SUPPLY AND RETURN DIFFUSERS

#### STEP-DOWN CEILING DIFFUSER



#### FLUSH CEILING DIFFUSER



Model Number		LARTD30/36
A	mm	1667
	in.	65-5/8
B	mm	1667
	in.	65-5/8
C	mm	1029
	in.	40-1/2
D	mm	1613
	in.	63-1/2
E	mm	1613
	in.	63-1/2
F	mm	114
	in.	4-1/2
G	mm	711
	in.	28
H	mm	38
	in.	1-1/2
J	mm	1524
	in.	60
K	mm	44
	in.	1-3/4
L	mm	1613
	in.	63-1/2
M	mm	1613
	in.	63-1/2
N	mm	308
	in.	12-1/8
Duct Size	mm	711 x 1524
	in.	28 x 60

Model Number		LAFD30/36
A	mm	1667
	in.	65-5/8
B	mm	1667
	in.	65-5/8
C	mm	1016
	in.	40
D	mm	1613
	in.	63-1/2
E	mm	1613
	in.	63-1/2
F	mm	108
	in.	4-1/4
G	mm	711
	in.	28
H	mm	32
	in.	1-5/8
J	mm	1524
	in.	60
K	mm	44
	in.	1-3/4
Duct Size	mm	711 x 1524
	in.	28 x 60





## REVISIONS

Sections	Description of Change
Outdoor Sound Data	Updated Outdoor Sound Data.



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SYSTEMS



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