L Series[®] Packaged Rooftop Units Up To 13.50 SEER, 12.2 EER and 14.7 IPLV



L SERIES®

Commercial Packaged Rooftop Units



LG/LC/LH Models

Designed to achieve a low total cost of ownership



MAXIMUM PERFORMANCE TO ACHIEVE A LOW TOTAL COST OF OWNERSHIP

L Series® rooftop units at a glance:

Reduce energy costs with high-efficiency ENERGY STAR[®] qualified and standardefficiency ASHRAE 90.1-2004 compliant units

The most energy-efficient commercial variable-air-volume unit*

Humiditrol[®] dehumidification system improves indoor air quality for customers and employees

Multiple cooling and heating stages, variable-air-volume option and an integrated DDC control improve comfort and reduce costs

Hinged access panels, a slide-out blower and straight condenser coils help reduce maintenance costs

A wide range of factory-installed and -tested options means faster installation and reliable start-up

Engineered for durability with highquality materials and components

Common replacement parts minimize the number of stocked parts

High- and low-static airflow capabilities meet the tough demands of replacement and remodeling jobs

Efficiency Rating

Up to 13.50 SEER, up to 12.2 EER and up to 14.7 IPLV

Warranty

15-Year Limited Warranty on stainless steel heat exchanger 10-Year Limited Warranty on aluminized steel gas heat exchanger 5-Year Limited Warranty on compressor 3-Year Limited Warranty on Integrated Modular Controller 1-Year Limited Warranty on covered components See actual warranty certificate for details.

Designed to achieve a low total cost of ownership

Save time and money with the L Series[®] line of commercial rooftop units from Lennox. Designed to achieve a low total cost of ownership, their reliable construction and innovative features keep buildings comfortable while helping lower energy bills, reducing the cost of installation and minimizing maintenance expenses. High-efficiency units meet or exceed ENERGY STAR[®] guidelines, while options and accessories such as premium-efficiency supply fan motors, economizers and energy recovery wheels improve efficiency even more. The variable-air-volume units feature up to 12.2 EER and 14.7 IPLV and are the most energy efficient in the industry.*



Illustrates the low 3-year cooling costs you can expect from a 13-ton LG rooftop unit versus a unit with lower efficiency ratings. Actual savings may vary depending on system settings, equipment maintenance, local weather, actual construction, installation of equipment, duct system, hours of operation, local fuel rates and other factors. Savings were calculated using a national average electric rate.

| Building type: | Retail |
|----------------|------------------------------------|
| City: | Kansas City |
| Software: | Lennox Total Cost of |
| | Ownership [™] Calculator, |
| | version 1.0.9 |

Lennox is built to last

Every L Series product is engineered for durability and is backed with a long-lasting warranty. High-quality components include a heavy-gauge galvanized steel cabinet with a two-layer paint finish and scroll compressors. Safety switches and Lennox' exclusive "Strike-Three" diagnostics protect the system's critical components against catastrophic failure, protecting businesses against high replacement costs.



Choose ENERGY STAR[®] qualified products to reduce energy spending and conserve natural resources. Lennox has developed a wide range of products that meet ENERGY STAR guidelines for energy efficiency. Proper sizing and installation of equipment are critical to achieve optimal performance. Must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor for details, or visit www.energystar.gov.



*Commercial gas/electric or electric/electric single-packaged rooftop units, variable air volume, 21-ton (248,000 Btuh) to 30-ton (336,000 Btuh) units. Efficiency ratings established per ARI's test standard: 340/360 95°F outdoor temperature and 80°F dB/67°F wb entering evaporator coil air. Claim pertains to EER rating for LCA248H2VS1Y unit. Established through review of competitive literature available to the general public in August 2007.

SLASH ENERGY COSTS

Installing units with economizers helps save energy by allowing outdoor air to be used for cooling.



50°F Balance Point 12-Hr. Occupied Period

Lennox creates a better, more efficient environment

Improving a building's indoor air quality (IAQ) creates a better indoor environment to help protect a company's productivity and profitability. Lennox offers a wide range of IAQ options for L Series units, including the groundbreaking Humiditrol[®] dehumidification system that removes moisture based on relative humidity levels without affecting room temperature, unlike temperature-controlled systems.

Control the spread of allergens while meeting temperature and humidity control needs

Controlling humidity can have an important impact on controlling productivity and profits. The Humiditrol dehumidification system was designed to do much more to improve the indoor environment than other humidity control systems.

- It removes humidity better than comparable systems, removing up to eight times more moisture than other rooftop units.*
- The system **controls humidity without overcooling rooms**, due to its patented hot gas reheat technology. Other systems use a thermostat to initiate moisture removal, which means they can't

work effectively on days when the temperature is mild. Lennox' design initiates dehumidification based on a humidity set point instead of a temperature set point.

 The Humiditrol system inhibits mold and bacteria growth by reducing excess moisture, helping control the spread of allergens.
 Airborne contaminants can affect employee productivity and are linked to absenteeism and long-term health problems.

Decrease in bar width indicates Comfort Zone decrease in effect **Bacteria** Viruses Fungi Mites Respiratory infections Allergic rhinitis and asthma Chemical interactions Ozone production 20 30 40 50 60 70 80 90 *Insufficient data above **Relative Humidity (%)** 50% relative humidity

unit with Humiditrol[®] dehumidification option.

OPTIMAL COMFORT ZONE

Source: ASHRAE, adapted from Sterling et al., 1985



COMPARATIVE MAXIMUM MOISTURE REMOVAL

Nominal 3-ton unit @ 1,050 CFM and entering air temperature at 80°/67°F

Lower installation, operation and maintenance costs

From the day they're installed, L Series[®] units pay off with savings. Factory-installed and -tested options reduce field labor costs and help to assure reliable start-up and operation. Time-saving features, including hinged access panels, slide-out supply fans and straight outdoor coils, reduce maintenance costs, while common replacement parts reduce required inventory.

Day after day, the Integrated Modular Controller (IMC) digitally controls the unit for efficient operation and optimal comfort. Its extensive diagnostics speed troubleshooting by pinpointing the problem right down to the failed component, reducing repair expenses. In addition, its exclusive "Strike-Three" safety logic protects critical components by shutting them down after the third strike or safety trip. This protects a part from further damage, typically allowing a repair rather than an expensive replacement.

Customized IAQ for more applications

Other components compatible with L Series units provide added IAQ control, with many also designed to help reduce energy needs.

INDOOR AIR QUALITY PRODUCTIVITY COSTS

| Estimated number of employees | 65 |
|---|-------------|
| Salary cost (per average employee) | \$30,000 |
| Total staff (yearly) | \$1,950,000 |
| Productivity losses due to poor thermal comfort, absenteeism, comfort, etc. (average %) | 3% |
| TOTAL LOST PRODUCTIVITY | \$58,500 |

Information from "Humidity Control, IAQ and You," Engineered Systems magazine.

The Humiditrol[®] dehumidification system efficiently maintains ASHRAE 62-2001 fresh-air requirements while controlling room humidity levels. With only three additional components to the standard rooftop unit, the Humiditrol dehumidification system is reliable humidity control that's an excellent investment in company productivity.



Energy Recovery Systems use recycled energy to condition outdoor air before it enters the building. This simple bolt-on option takes care of fresh-air needs while improving energy efficiency and lowering peak energy demand.



Demand Control Ventilation controls ventilation based on the actual occupancy of a room, gauging numbers by using a CO₂ sensor to measure carbon-dioxide levels. The accuracy of its gear-driven dampers introduces only as much fresh air as is really needed for more precise energy control.



Rooftop Unit





Air Filters

The **multiple-compressor configuration** adjusts the amount of heating and cooling for precise comfort control, eliminating temperature swings and improving efficiency by using only as much cooling as required.



Isolated Compressor Compartments

Increase control with the Integrated Modular Controller

An excellent feature of L Series[®] rooftop units, the IMC premium rooftop unit control system from Lennox provides superior flexibility for applications from zoning to systems integration.

The modular design can be customized with a wide range of add-on boards and more than 200 configuration parameters. More than 100 diagnostic readouts and alarms signal exactly what's happening within a rooftop unit. The extra information and flexibility help improve comfort control, increase equipment efficiencies and minimize maintenance costs.

The IMC's unique features set it apart from other direct digital controllers. When paired with a Lennox[®] premium rooftop unit, it creates a system unlike any other.

IT'S A TRULY MODULAR SYSTEM

The IMC is a powerful controller that enhances the standard features on premium Lennox rooftop units. Yet with application-specific add-on modules, the IMC provides even more powerful control for specific, customized applications.

Add-on modules allow configuration, control, feedback and diagnostics for:

- Outdoor air motorized dampers or economizers with power exhaust control, including demand control ventilation
 - Now it's possible to bring in sufficient outside air for a comfortable, healthy environment without exceeding energy budgets.
- Constant-volume bypass or variable-volume rooftop control
 - Count on zoning that meets your terms by using a premium L Series rooftop unit with variablefrequency drive to minimize lifecycle costs, or a constant-volume unit with bypass to keep initial equipment costs in check.
- Humiditrol[®] hot gas reheat
- Dramatically reduce humidity by first cooling and dehumidifying the supply air, then recycle hot refrigerant gas from a compressor to reheat dry air to a comfortable supply temperature.
- Four-stage control inputs from third-party DDC controllers or thermostats
 - Allow a thermostat or third-party DDC controller to individually control up to four separate compressors and heating stages.*



Integrated Modular Controller

- Interoperability via BACnet[®] or LonTalk[®] protocols
 - Communicate using the BACnet Application Specific Controller device profile, LonMark[®] Space Comfort Controller functional profile or LonMark Discharge Air Controller functional profile.
- Additional compressors, gas valves, electric heat and fans in large units
- Reversing valves in heat pump units

^{*}Thermostat or controller must provide individual staging commands. Not required to achieve four stages when IMC is configured for zone sensor or discharge air control.

LonTalk and LonMark are registered trademarks of the Echelon Corporation. BACnet is a registered trademark of the American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE).

Have more control from more places

Make configuration changes and check diagnostics through an LED interface, or from a remote location using PC software. Lennox' Unit Controller software makes it easy to determine how a unit has been configured and make changes, whether you're at the unit or across the country. The software also gives access to detailed diagnostic information for quick, easy troubleshooting.

For remote access, Lennox offers a modem pre-configured to work specifically with the IMC. Get access from a computer with the Unit Controller Software and a modem to dial out. Lennox' Ethernet converter gives the option of accessing Lennox equipment over an Ethernet local area network (LAN) or via the Internet.* Wherever you are, you can still be in control.



Raise the level of control with more than one IMC

With more than one IMC on a project, create an even more powerful system by linking them together via the L Connection[®] Network.

Adding a Network Control Panel (NCP) interface makes it easy to monitor and control one or an entire network of rooftop units without having to go to the roof. The L Connection Network adds scheduling capability and access to every unit on the network through a single NCP panel or software interface. With new zoning capabilities, it can control zone dampers or fan-powered terminal boxes. It can even control other Lennox and electromechanically controlled third-party rooftop units or split systems, as well as a range of building functions such as lighting or exhaust fans.



SUPERIOR ENGINEERING AND DURABLE DESIGN HELP ACHIEVE A LOW TOTAL COST OF OWNERSHIP



Application solutions for better unit control and efficient operation

- **1** Integrated Modular Controller—Provides centralized control and fast, simple troubleshooting to reduce service cost and improve performance.
- 2 Thermostatic Expansion Valves—Provide peak cooling performance across the entire application range for better comfort.
- Multiple Compressors—Allow the unit to provide efficient cooling with four-stage cooling capability.
- Humiditrol[®] Dehumidification System (not shown)—Helps control humidity levels, improving comfort and IAQ.
- Variable-Frequency Drives (not shown)—Provide variable-airvolume unit operation to meet a variety of zoning system needs.

Quick, easy installation and maintenance

- Independent Motor Mount—Allows for easy, efficient access without removing top panel.
- Full-Perimeter Base Rail—Provides greater structural integrity, so the unit is easier to handle when rigging and transporting.
- 8 Slab Coil—Permits faster, more thorough coil cleaning.

- Slide-Out Blower Deck—Improves access for belt, blower and motor, reducing maintenance time.
- Hinged Toolless 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.

Reliable performance

- Corrosion-Resistant Cabinet—Galvanized steel cabinet under a two-layer painted surface protects against rust and corrosion.
- High- and Low-Pressure Switches—Safeguard compressor from extreme operating conditions and unnecessary wear and tear.
- Low-Ambient Switches—Protect the cooling system during mild weather operation by cycling the outdoor fans as needed to prevent freezeup of the indoor coil.

IMPROVED COMFORT, EFFICIENCY AND CONTROL

The most energy-efficient commercial variable-air-volume rooftop unit you can buy

L Series[®] units are now available with a super-efficient Variable Air Volume (VAV) option to provide precise amounts of heating and cooling for better comfort control. The VAV system can provide customized comfort for each of a building's individual zones.

By varying the volume of air delivered as the temperature load changes, the VAV system costs less to operate because it moves only the amount of air needed to achieve the desired temperature.

Power exhaust fans

Modulating high-static power exhaust fans are available on 21- to 30-ton gas/electric and electric/electric units.

These 100% modulating high-static power exhaust fans precisely control building pressurization for improved comfort, improved efficiency.

3 MORE WAYS TO IMPROVE EFFICIENCY

- 1. First choose optional high-efficiency supply fan motors.
- Next, select the CO₂ sensor with economizer to provide both free cooling and demand control ventilation.
- Finally, select an Energy Recovery System with a patented pivoting wheel to maintain free cooling savings and reduce energy losses from outside air ventilation.

OPTIONS AND ACCESSORIES

Factory-Installed Options for Fast Installation

For a quick, built-to-order solution, L Series units can be built and tested at the factory to exact specifications in a few weeks, not months.

- Humiditrol[®] dehumidification system
- R-22 or R-410A refrigerant
- Low- or high-static motors and drives
- High-efficiency supply fan motors
- Coil corrosion protection
- Refrigerant service valves
- Stainless steel heat exchanger
- HACR breakers
- Variable-frequency drives on supply fan (select models)
- Variable-air-volume bypass (select models
- Systems integration with BACnet[®] or LonTalk[®] protocols
- Novar integration (requires Novar system gateway device)
- CPC integration (requires CPC system gateway device))

Field-Installed Accessories for Fast Replacement

L Series units include plug connections for wiring, panel knock-outs and pre-installed accessory framing, allowing you to choose a stock unit and quickly install accessories for those fast-track replacement jobs.

- Standard and high-static power exhaust fans (select models)
- Energy recovery systems (wheels)
- 14", 18" and 24" curbs
- Combustion air intake and exhaust extensions
- LPG conversion
- Coil guards
- Hail guards
- Humidity sensor
- CO₂ sensor
- Temperature sensor
- UVC germicidal lamp

Factory Options or Field Accessories

Choose to have these options installed in the field or at the factory for maximum flexibility in time and costs for jobs.

- Economizers
- Outdoor air dampers
- Disconnects
- GFIs
- Barometric relief dampers
- Standard power exhaust fans (select models)
- Supply and return smoke detectors
- Dirty filter switch
- MERV 8 air filters
- MERV 11 air filters
- MERV 15 air filters
- Fresh air tempering
- Novar[®] ETM 2051 DDC

L SERIES® R-22 UNIT PERFORMANCE SPECIFICATIONS

| | | | COOLI | NG DAT | A | | | HEATI | NG I | NPU | Т | | AIR I | LOW RAN | PHYSICAL DATA | | | |
|----------|-------------|-----------|------------------------|--------------------------------------|---------------------|-----------------------|--------------------------------------|------------|----------------|---------------|------------|-------------------|---------------------|---------------------|---------------|-------------------|---------------------------|------------------------------|
| | Nom. Ton | Model | Gross Cap [Btuh] | ARI Rated Net Cap [Btuh] | ARI Rated CFM | Full Load [EER] | Part Load [SEER or IPLV] | Low | Stand. | | Med. | High | CFM Min. Cool | CFM Min. Heat | CFM Max. | Static [in wc] | Dim. HxWxD [inches] | Ship Wt. Base [lbs] |
| | 3 | LGA036H2B | 37,600 | 36,400 | 1,200 | 11.2 | 13.00 | — | 78,00 | 00 | _ | _ | 840 | 1,050 | 1,440 | .20-1.8 | 37 x 45 x 86 | 786 |
| | 3.5 | LGA042H2B | 44,800 | 43,500 | 1,370 | 11.3 | 13.00 | — | 78,00 | 00 | _ | 125,000 | 980 | 1,050-1,320 | 1,680 | .20-1.8 | 37 x 45 x 86 | 786 |
| | 4 | LGA048H2B | 50,500 | 49,000 | 1,450 | 11.3 | 13.25 | — | 78,00 | 00 | — | 125,000 | 1,120 | 1,050-1,320 | 1,920 | .20-1.8 | 37 x 45 x 86 | 850 |
| | 5 | LGA060H2B | 63,000 | 61,000 | 2,000 | 11.0 | 13.00 | — | 78,00 | 00 | — | 125,000 | 1,400 | 1,050-1,320 | 2,400 | .20-1.8 | 37 x 45 x 86 | 860 |
| | 6 | LGA072H2B | 74,000 | 71,000 | 2,100 | 10.5 | _ | — | 78,00 | 00 | — | 125,000 | 1,680 | 1,050-1,320 | 2,880 | .20-1.8 | 37 x 45 x 86 | 875 |
| | 6 | LGC072S2B | 76,000 | 72,000 | 2,100 | 10.1 | | — | 78,00 | 00 | — | 125,000 | 1,680 | 1,050-1,320 | 2,880 | .20-1.8 | 37 x 45 x 86 | 875 |
| | 7.5 | LGA090H2B | 93,800 | 90,000 | 2,900 | 11.3 | 12.00 | — | 130,0 | 000 | 180,000 | 240,000 | 2,100 | 2,140-2,540 | 3,600 | .20-2.60 | 50 x 58 x 100 | 1,385 |
| | 7.5 | LGC090S2B | 96,000 | 93,000 | 3,000 | 10.3 | 10.80 | — | 130,0 | 000 | 180,000 | 240,000 | 2,100 | 2,140-2,540 | 3,600 | .20-2.60 | 50 x 58 x 100 | 1,385 |
| | 8.5 | LGA102H2B | 105,000 | 101,000 | 3,200 | 11.2 | 11.70 | — | 130,0 | 000 | 180,000 | 240,000 | 2,380 | 2,140-2,540 | 4,080 | .20-2.60 | 50 x 58 x 100 | 1,385 |
| | 8.5 | LGC102S2B | 106,000 | 102,000 | 3,400 | 10.3 | 10.40 | — | 130,0 | 000 | 180,000 | 240,000 | 2,380 | 2,140-2,540 | 4,080 | .20-2.60 | 50 x 58 x 100 | 1,385 |
| U | 10 | LGA120H2B | 125,000 | 120,000 | 3,600 | 11.0 | 11.80 | _ | 130,0 | 000 | 180,000 | 240,000 | 2,800 | 2,140-2,540 | 4,800 | .20-2.60 | 50 x 58 x 100 | 1,440 |
| ~ | 10 | LGC120S2B | 126,000 | 120,000 | 3,800 | 10.3 | 10.50 | — | 130,0 | 000 | 180,000 | 240,000 | 2,800 | 2,140-2,540 | 4,800 | .20-2.60 | 50 x 58 x 100 | 1,440 |
| 5 | 12.5 | LGC15052B | 145,000 | 138,000 | 4,250 | 9.5 | 9.20 | - | 130,0 | 000 | 180,000 | 240,000 | 3,500 | 2,140-2,540 | 6,000 | .20-2.60 | 50 x 58 x 100 | 1,4/5 |
| | 15 | LGC156H2B | 160,000 | 156,000 | 5,100 | 12.2 | 13.60 | 169,000 | 260,0 | 000 | 360,000 | | 3,640 | 2,780-4,445 | 6,240 | .20-2.60 | 55 X 91 X 133 | 2,555 |
| ۳ | 15 | LGC180H2B | 188,000 | 182,000 | 5,700 | 11.8 | 13.30 | 169,000 | 260,0 | 000 | 360,000 | 480,000 | 4,200 | 2,780-5,080 | 7,200 | .20-2.60 | 55 X 91 X 133 | 2,555 |
| ۸S | 17.6 | | 218,000 | 210,000 | 6,000 | 10.0 | 10.00 | 169,000 | 260,0 | 000 | 360,000 | 480,000 | 4,200 | 2,780-5,080 | 7,200 | .20-2.60 | 55 x 91 x 155 | 2,333 |
| 9 | 17.5 | | 218,000 | 210,000 | 6,800 | 10.0 | 12.50 | 169,000 | 260,0 | 000 | 360,000 | 480,000 | 4,900 | 2,780-3,080 | 8,400 | 20-2.00 | 55 × 01 × 122 | 2,003 |
| | 20 | LGC21032B | 212,000 | 204,000 | 7 500 | 11.0 | 11.80 | 109,000 | 260,0 | | 360,000 | 480,000 | 5,600 | 2,780-5,080 | 9,400 | 20-2.00 | 55 x 91 x 133 | 2,005 |
| | 20 | LGC24052B | 232,000 | 232,000 | 8,000 | 9.5 | 9.80 | | 260,0 | 000 | 360,000 | 480,000 | 5,600 | 2,780-5,080 | 9,600 | 20-2.60 | 55 x 91 x 133 | 2,735 |
| | 20 | LG6248H2B | 257,000 | 248,000 | 8,000 | 11.7 | 12 30 | _ | 260,0 | 000 | 360,000 | 480,000 | 5 880 | 2,780-7,110 | 10.080 | 20-2.60 | 65 x 91 x 145 | 3 230 |
| | 25 | LGC300H2B | 311,000 | 300,000 | 9 500 | 11.0 | 11 50 | _ | 260.0 | 000 | 360,000 | 480,000 | 7 000 | 2 780-7 110 | 12,000 | 20-2.60 | 65 x 91 x 145 | 3 230 |
| | 25 | LGC300S2B | 302,000 | 286.000 | 9,000 | 9.5 | 9.70 | _ | 260.0 | 000 | 360.000 | 480,000 | 7.000 | 3,130-6,465 | 12,000 | .20-2.60 | 65 x 91 x 133 | 2.735 |
| | 30 | LGC360H2B | 351,000 | 336,000 | 10,500 | 10.1 | 10.60 | _ | 260,0 | 000 | 360,000 | 480,000 | 8,400 | 4,815-7,110 | 14,400 | .20-2.60 | 65 x 91 x 145 | 3,230 |
| | | | | | | | | | | V Ra | nae | , | , | | 1 | <u> </u> | | |
| | 3 | LCA036H2B | 37,600 | 36,400 | 1,200 | 11.2 | 13.00 | 7 | 10 | 15 | 20 | NA | 840 | 960 | 1,440 | .20-1.8 | 37 x 47 x 88 | 775 |
| | 3.5 | LCA042H2B | 44,800 | 43,500 | 1,370 | 11.3 | 13.00 | 7 | 10 | 15 | 20 | NA | 980 | 1,050 | 1,680 | .20-1.8 | 37 x 47 x 88 | 775 |
| | 4 | LCA048H2B | 50,500 | 49,000 | 1,450 | 11.3 | 13.25 | 7 | 10 | 15 | 20 | NA | 1,120 | 1,050 | 1,920 | .20-1.8 | 37 x 47 x 88 | 805 |
| | 5 | LCA060H2B | 63,000 | 61,000 | 2,000 | 11.0 | 13.00 | 7 | 10 | 15 | 20 | 25 | 1,400 | 1,050 | 2,400 | .20-1.8 | 37 x 47 x 88 | 815 |
| | 6 | LCA072H2B | 74,000 | 71,000 | 2,100 | 10.5 | _ | 10 | 15 | 20 | 25 | 30 | 1,680 | 1,050 | 2,880 | .20-1.8 | 37 x 47 x 88 | 816 |
| | 6 | LCC072S2B | 76,000 | 72,000 | 2,100 | 10.3 | | 10 | 15 | 20 | 25 | 30 | 1,680 | 1,050 | 2,880 | .20-2.60 | 37 x 47 x 88 | 806 |
| | 7.5 | LCA090H2B | 93,800 | 90,000 | 2,900 | 11.3 | 12.00 | 7.5 | 15 | 22.5 | 5 30 | 45 | 2,100 | 2,400 | 3,600 | .20-2.60 | 50 x 58 x 100 | 1,305 |
| | 7.5 | LCC090S2B | 96,000 | 93,000 | 3,000 | 10.4 | 10.80 | 7.5 | 15 | 22.5 | 5 30 | 45 | 2,100 | 2,400 | 3,600 | .20-2.60 | 50 x 58 x 100 | 1,305 |
| | 8.5 | LCA102H2B | 105,000 | 101,000 | 3,200 | 11.2 | 11.70 | 7.5 | 15 | 22.5 | 5 30 | 45 | 2,380 | 2,400 | 4,080 | .20-2.60 | 50 x 58 x 100 | 1,305 |
| | 8.5 | LCC102S2B | 106,000 | 102,000 | 3,400 | 10.4 | 10.40 | 7.5 | 15 | 22.5 | 5 30 | 45 | 2,380 | 2,400 | 4,080 | .20-2.60 | 50 x 58 x 100 | 1,305 |
| E | 10 | LCA120H2B | 125,000 | 120,000 | 3,600 | 11.0 | 11.80 | 15 | 22.5 | 30 | 45 | 60 | 2,800 | 2,800 | 4,800 | .20-2.60 | 50 x 58 x 100 | 1,360 |
| | 10 | LCC120S2B | 126,000 | 120,000 | 3,800 | 10.4 | 10.50 | 15 | 22.5 | 30 | 45 | 60 | 2,800 | 2,800 | 4,800 | .20-2.60 | 50 x 58 x 100 | 1,360 |
| | 12.5 | LCC15052B | 145,000 | 140,000 | 4,250 | 9.7 | 9.40 | 15 | 22.5 | 30 | 45 | 60 | 3,500 | 3,000 | 6,000 | .20-2.60 | 50 x 58 x 100 | 1,395 |
| 2 | 15 | | 188,000 | 182,000 | 5,700 | 12.2 | 13.00 | 15 | 30 | 45 | 60 | NA NA | 3,040 | 4,180 | 7 200 | 20-2.00 | 55 × 01 × 133 | 2,300 |
| 5 | 15 | | 186,000 | 182,000 | 6,000 | 11.0 | 10.60 | 15 | 30 | 45 | 60 | NA NA | 4,200 | 4,800 | 7,200 | 20-2.60 | 55 x 91 x 133 | 2,300 |
| <u> </u> | 17.5 | LCC210H2B | 218 000 | 210,000 | 6,000 | 11.5 | 12.30 | 15 | 30 | 45 | 60 | 90 | 4,200 | 5 200 | 8 400 | 20-2.00 | 55 x 91 x 133 | 2,500 |
| | 17.5 | LCC21052B | 212,000 | 204 000 | 6,800 | 10.0 | 10.50 | 15 | 30 | 45 | 60 | 90 | 4 900 | 5,200 | 8 400 | 20-2.00 | 55 x 91 x 133 | 2,020 |
| | 20 | LCA240H2B | 252,000 | 242.000 | 7.500 | 11.0 | 11.80 | 15 | 30 | 45 | 60 | 90 | 5.600 | 6.000 | 9.600 | .20-2.60 | 55 x 91 x 133 | 2,680 |
| | 20 | LCC24052B | 243.000 | 234.000 | 8.000 | 9.7 | 10.00 | 15 | 30 | 45 | 60 | 90 | 5.600 | 6.000 | 9.600 | .20-2.60 | 55 x 91 x 133 | 2.680 |
| | 21 | LCA248H2B | 257,000 | 248,000 | 8,000 | 11.7 | 12.30 | 30 | 45 | 60 | 90 | 120 | 5,880 | 6,720 | 10.080 | .20-2.60 | 65 x 91 x 145 | 3,120 |
| | 25 | LCC300H2B | 311,000 | 300,000 | 9,500 | 11.0 | 11.50 | 30 | 45 | 60 | 90 | 120 | 7,000 | 8,000 | 12,000 | .20-2.60 | 65 x 91 x 145 | 3,120 |
| | 25 | LCC300S2B | 302,000 | 286,000 | 9,000 | 9.5 | 9.70 | 30 | 45 | 60 | 90 | 120 | 7,000 | 8,000 | 12,000 | .20-2.60 | 65 x 91 x 133 | 2,680 |
| | 30 | LCC360H2B | 351,000 | 336,000 | 10,500 | 10.1 | 10.60 | 30 | 45 | 60 | 90 | 120 | 8,400 | 9,600 | 14,400 | .20-2.60 | 65 x 91 x 145 | 3,120 |
| | | | | | • | | | 47 Cap. | CO 47 Ef | DP 7 f. | 17 Cap. | COP 17 Eff. | | | • | | | <u>.</u> |
| S | 7.5 | LHA090H2B | 94,000 | 89,000 | 3,000 | 11.5 | 12.50 | 90,000 | 3.3 | 3 | 52,000 | 2.1 | 2,625 | | 3,600 | .20-2.60 | 50 x 58 x 100 | 1,335 |
| d | 8.5 | LHA102H2B | 104,000 | 100,000 | 3,500 | 11.0 | 12.40 | 102,000 | 3.4 | 4 | 56,000 | 2.2 | 2,975 | _ | 4,080 | .20-2.60 | 50 x 58 x 100 | 1,335 |
| 5 | 10 | LHA120H2B | 124,000 | 118,000 | 4,200 | 10.3 | 11.30 | 120,000 | 3. | 3 | 72,000 | 2.1 | 3,500 | | 4,800 | .20-2.60 | 50 x 58 x 100 | 1,390 |
| <u> </u> | 12.5 | LHA150S2B | 145.200 | 137.000 | 4,400 | 9.3 | 10.50 | 140.000 | 3 | 3 | 80,000 | 2.0 | 4,200 | | 5,760 | .20-2.60 | 50 x 58 x 100 | 1,395 |
| N | 15 | LHA180H2B | 187.000 | 182.000 | 5,700 | 11.0 | 12.00 | 192.000 | 3.3 | 3 | 106,000 | 2.0 | 5,250 | | 7,200 | .20-2.60 | 55 x 91 x 129 | 2,570 |
| | 20 | LHA240H2B | 227,000 | 220,000 | 7,000 | 10.2 | 11.00 | 220,000 | 3. | 3 | 118,000 | 2.1 | 7,000 | _ | 9,600 | .20-2.60 | 55 x 91 x 129 | 2,615 |

L SERIES R-410A UNIT PERFORMANCE SPECIFICATIONS

| | | | COOLI | NG DAT | HEATING INPUT | | | | | | AIR FLOW RANGE | | | | PHYSICAL DATA | | | | |
|----------|-------------|-------------|------------------------|--------------------------------------|---------------------|-----------------------|--------------------------------------|---------|----------|-----|----------------|------|---------|---------------------|---------------------|-------------|-------------------|---------------------------|------------------------------|
| | Nom. Ton | Model | Gross Cap [Btuh] | ARI Rated Net Cap [Btuh] | ARI Rated CFM | Full Load [EER] | Part Load [SEER or IPLV] | Low | Star | nd. | Me | ed. | High | CFM Min. Cool | CFM Min. Heat | CFM Max. | Static [in wc] | Dim. HxWxD [inches] | Ship Wt. Base [Ibs] |
| | 3 | LGA036H4 | 36,200 | 35,000 | 1,300 | 11.4 | 13.40 | _ | 78,0 | 000 | _ | - | _ | 840 | 1,050 | 1,440 | .20-1.8 | 37 x 45 x 86 | 786 |
| | 4 | LGA048H4 | 51,000 | 49,500 | 1,600 | 11.5 | 13.50 | _ | - 78,000 | | _ | - | 125,000 | 1,120 | 1,050-1,320 | 1,920 | .20-1.8 | 37 x 45 x 86 | 850 |
| | 5 | LGA060H4 | 62,500 | 60,000 | 2,000 | 10.5 | 12.50 | _ | — 78,000 | | _ | - | 125,000 | 1,400 | 1,050-1,320 | 2,400 | .20-1.8 | 37 x 45 x 86 | 860 |
| | 6 | LGA072H4B** | 75,000 | 72,000 | 2,250 | 10.4 | _ | _ | — 78,000 | | _ | - | 125,000 | 1,680 | 1,050-1,320 | 2,880 | .20-1.8 | 37 x 45 x 86 | 875 |
| | 6 | LGC072S4B | 75,000 | 72,000 | 2,250 | 10.1 | _ | - | 78,0 | 000 | _ | - | 125,000 | 1,680 | 1,050-1,320 | 2,880 | .20-1.8 | 37 x 45 x 86 | 875 |
| 2 | 7.5 | LGA090H4B | 93,000 | 90,000 | 2,900 | 11.3 | 12.30 | _ | 130, | 000 | 180, | ,000 | 240,000 | 2,100 | 2,140-2,540 | 3,600 | .20-2.60 | 50 x 58 x 100 | 1,385 |
| TR | 8.5 | LGA102H4B | 103,000 | 99,000 | 3,200 | 11.2 | 12.20 | - | 130, | 000 | 180, | ,000 | 240,000 | 2,380 | 2,140-2,540 | 4,080 | .20-2.60 | 50 x 58 x 100 | 1,385 |
| EC | 10 | LGA120H4B | 124,000 | 120,000 | 3,600 | 11.0 | 12.00 | - | 130, | 000 | 180, | ,000 | 240,000 | 2,800 | 2,140-2,540 | 4,800 | .20-2.60 | 50 x 58 x 100 | 1,440 |
| JE, | 12.5 | LGC150S4B | 150,000 | 140,000 | 4,250 | 9.7 | 10.20 | _ | 130, | 000 | 180, | ,000 | 240,000 | 3,500 | 2,140-2,540 | 6,000 | .20-2.60 | 50 x 58 x 100 | 1,475 |
| 15 | 13 | LGC156H4B | 159,000 | 154,000 | 5,200 | 12.0 | 13.30 | 169,000 | 260, | 000 | 360, | ,000 | _ | 3,640 | 2,780-4,445 | 6,240 | .20-2.60 | 55 x 91 x 133 | 2,555 |
| 0 | 15 | LGC180H4B | 186,000 | 182,000 | 5,700 | 11.8 | 13.30 | 169,000 | 260, | 000 | 360, | ,000 | 480,000 | 4,200 | 2,780-5,080 | 7,200 | .20-2.60 | 55 x 91 x 133 | 2,555 |
| | 17.5 | LGC210H4B | 212,000 | 204,000 | 6,600 | 11.5 | 12.30 | 169,000 | 260, | 000 | 360, | ,000 | 480,000 | 4,900 | 2,780-5,080 | 8,400 | .20-2.60 | 55 x 91 x 133 | 2,685 |
| | 20 | LGA240H4B | 240,000 | 230,000 | 7,500 | 11.0 | 12.00 | _ | 260, | 000 | 360, | ,000 | 480,000 | 5,600 | 2,780-5,080 | 9,600 | .20-2.60 | 55 x 91 x 133 | 2,735 |
| | 21 | LGA248H4B | 257,000 | 248,000 | 8,000 | 11.7 | 12.70 | - | 260, | 000 | 360, | ,000 | 480,000 | 5,880 | 2,780-7,110 | 10,080 | .20-2.60 | 65 x 91 x 145 | 3,230 |
| | 25 | LGC300H4B | 311,000 | 300,000 | 9,500 | 11.0 | 11.80 | - | 260, | 000 | 360, | ,000 | 480,000 | 7,000 | 2,780-7,110 | 12,000 | .20-2.60 | 65 x 91 x 145 | 3,230 |
| | 25 | LGC300S4B | 294,000 | 274,000 | 9,000 | 9.5 | 9.70 | - | 260, | 000 | 360, | ,000 | 480,000 | 6,400 | 2,780-7,110 | 12,000 | .20-2.60 | 55 x 91 x 133 | 2,735 |
| | 30 | LGC360H4B | 359,000 | 344,000 | 10,500 | 10.1 | 11.20 | _ | 260, | 000 | 360, | ,000 | 480,000 | 8,400 | 4,815-7,110 | 14,400 | .20-2.60 | 65 x 91 x 145 | 3,230 |
| | | | | | | | | | KW Ra | | KW Range | | | | | | | | |
| | 3 | LCA036H4 | 36,200 | 35,000 | 1,300 | 11.4 | 13.40 | 7 | 10 | 15 | 5 | 20 | - | 840 | 960 | 1,440 | .20-1.8 | 37 x 47 x 88 | 775 |
| | 4 | LCA048H4 | 51,000 | 49,500 | 1,600 | 11.5 | 13.50 | 7 | 10 | 15 | 5 | 20 | — | 1,120 | 1,050 | 1,920 | .20-1.8 | 37 x 47 x 88 | 805 |
| | 5 | LCA060H4 | 62,500 | 60,000 | 2,000 | 10.5 | 12.50 | 7 | 10 | 15 | 5 | 20 | 25 | 1,400 | 1,050 | 2,400 | .20-1.8 | 37 x 47 x 88 | 815 |
| | 6 | LCA072H4B** | 75,000 | 72,000 | 2,250 | 10.4 | — | 10 | 15 | 20 |) | 25 | 30 | 1,680 | 1,050 | 2,880 | .20-1.8 | 37 x 47 x 88 | 816 |
| S S | 6 | LCC072SAB | 75,000 | 72,000 | 2,250 | 10.1 | — | 10 | 15 | 20 |) | 25 | 30 | 1,680 | 1,050 | 2,880 | .20-1.8 | 37 x 47 x 88 | 816 |
| E | 7.5 | LCA090H4B | 93,000 | 90,000 | 2,900 | 11.3 | 12.30 | 7.5 | 15 | 22. | .5 | 30 | 45 | 2,100 | 2,400 | 3,600 | .20-2.60 | 50 x 58 x 100 | 1,305 |
| Ĕ. | 8.5 | LCA102H4B | 103,000 | 99,000 | 3,200 | 11.2 | 12.20 | 7.5 | 15 | 22. | .5 | 30 | 45 | 2,380 | 2,400 | 4,080 | .20-2.60 | 50 x 58 x 100 | 1,305 |
| | 10 | LCA120H4B | 124,000 | 120,000 | 3,600 | 11.2 | 12.20 | 15 | 22.5 | 30 |) | 45 | 60 | 2,800 | 2,800 | 4,800 | .20-2.60 | 50 x 58 x 100 | 1,360 |
| U | 12.5 | LCC150S4B | 150,000 | 140,000 | 4,250 | 9.7 | 10.20 | 15 | 22.5 | 30 |) | 45 | 60 | 3,500 | 3,000 | 6,000 | .20-2.60 | 50 x 58 x 100 | 1,395 |
| Ë | 13 | LCC156H4B | 159,000 | 154,000 | 5,200 | 12.0 | 13.30 | 15 | 30 | 45 | 5 | 60 | — | 3,640 | 4,160 | 6,240 | .20-2.60 | 55 x 91 x 133 | 2,500 |
| Ĕ. | 15 | LCC180H4B | 186,000 | 182,000 | 5,700 | 11.8 | 13.30 | 15 | 30 | 45 | 5 | 60 | — | 4,200 | 4,800 | 7,200 | .20-2.60 | 55 x 91 x 133 | 2,500 |
| | 17.5 | LCC210H4B | 212,000 | 204,000 | 6,600 | 11.5 | 12.30 | 15 | 30 | 45 | 5 | 60 | 90 | 4,900 | 5,200 | 8,400 | .20-2.60 | 55 x 91 x 133 | 2,620 |
| | 20 | LCA240H4B | 240,000 | 230,000 | 7,500 | 11.0 | 12.00 | 15 | 30 | 45 | 5 | 60 | 90 | 5,600 | 6,000 | 9,600 | .20-2.60 | 55 x 91 x 133 | 2,680 |
| | 21 | LCA248H4B | 257,000 | 248,000 | 8,000 | 11.7 | 12.70 | 30 | 45 | 60 |) | 90 | 120 | 5,880 | 6,720 | 10,080 | .20-2.60 | 65 x 91 x 145 | 3,120 |
| | 25 | LCC300H4B | 311,000 | 300,000 | 9,500 | 11.0 | 11.80 | 30 | 45 | 60 |) | 90 | 120 | 7,000 | 8,000 | 12,000 | .20-2.60 | 65 x 91 x 145 | 3,120 |
| | 25 | LCC300S4B | 294,000 | 274,000 | 9,000 | 9.5 | 9.70 | 30 | 45 | 60 |) | 90 | 120 | 6,400 | 8,000 | 12,000 | .20-2.60 | 55 x 91 x 133 | 2,680 |
| | 30 | LCC360H4B | 359,000 | 344,000 | 10,500 | 10.1 | 11.20 | 30 | 45 | 60 |) | 90 | 120 | 8,400 | 9,600 | 14,400 | .20-2.60 | 65 x 91 x 145 | 3,120 |

L SERIES VAV UNIT PERFORMANCE SPECIFICATIONS

| | 21 | LGA248H2V | 257,000 | 248,000 | 8,000 | 11.7 | 14.00 | _ | 260,0 | 000 | 360,000 | 480,000 | 2,520 | 2,780-7,110 | 10,080 | .20-2.60 | 65 x 91 x 145 | 3,230 |
|-------------|----|-----------|---------|---------|--------|------|-------|----|-------|------|---------|---------|-------|-------------|--------|----------|---------------|-------|
| | 25 | LGC300H2V | 311,000 | 300,000 | 9,500 | 11.0 | 13.40 | _ | 260,0 | 000 | 360,000 | 480,000 | 3,000 | 2,780-7,110 | 12,000 | .20-2.60 | 65 x 91 x 145 | 3,230 |
| | 30 | LGC360H2V | 351,000 | 336,000 | 10,500 | 10.1 | 13.00 | _ | 260,0 | 000 | 360,000 | 480,000 | 3,600 | 4,815-7,110 | 14,400 | .20-2.60 | 65 x 91 x 145 | 3,230 |
| ~- 2 | | | | | | | | | K\ | N Ra | nge | | | | | | | |
| | 21 | LCA248H2V | 257,000 | 248,000 | 8,000 | 12.0 | 14.50 | 30 | 45 | 60 | 90 | 120 | 2,520 | 6,720 | 10,080 | .20-2.60 | 65 x 91 x 145 | 3,120 |
| | 25 | LCC300H2V | 311,000 | 300,000 | 9,500 | 11.0 | 13.40 | 30 | 45 | 60 | 90 | 120 | 3,000 | 8,000 | 12,000 | .20-2.60 | 65 x 91 x 145 | 3,120 |
| | 30 | LCC360H2V | 351,000 | 336,000 | 10,500 | 10.1 | 13.00 | 30 | 45 | 60 | 90 | 120 | 3,600 | 9,600 | 14,400 | .20-2.60 | 65 x 91 x 145 | 3,120 |
| | | | | | | | | | | | | | | | | | | |
| | 21 | LGA248H4V | 257,000 | 248,000 | 8,000 | 11.4 | 14.20 | — | 260,0 | 000 | 360,000 | 480,000 | 2,520 | 2,780-7,110 | 10,080 | .20-2.60 | 65 x 91 x 145 | 3,230 |
| | 25 | LGC300H4V | 311,000 | 300,000 | 9,500 | 11.0 | 14.00 | — | 260,0 | 000 | 360,000 | 480,000 | 3,000 | 2,780-7,110 | 12,000 | .20-2.60 | 65 x 91 x 145 | 3,230 |
| ΥC | 30 | LGC360H4V | 359,000 | 344,000 | 10,500 | 10.1 | 13.20 | _ | 260,0 | 000 | 360,000 | 480,000 | 3,600 | 4,815-7,110 | 14,400 | .20-2.60 | 65 x 91 x 145 | 3,230 |
| 41(| | | | | | | | | K\ | N Ra | nge | | | | | | | |
| Å | 21 | LCA248H4V | 257,000 | 248,000 | 8,000 | 11.7 | 14.70 | 30 | 45 | 60 | 90 | 120 | 2,520 | 6,720 | 10,080 | .20-2.60 | 65 x 91 x 145 | 3,120 |
| | 25 | LCC300H4V | 311,000 | 300,000 | 9,500 | 11.0 | 14.00 | 30 | 45 | 60 | 90 | 120 | 3,000 | 8,000 | 12,000 | .20-2.60 | 65 x 91 x 145 | 3,120 |
| | 30 | LCC360H4V | 359,000 | 344,000 | 10,500 | 10.1 | 13.20 | 30 | 45 | 60 | 90 | 120 | 3,600 | 9,600 | 14,400 | .20-2.60 | 65 x 91 x 145 | 3,120 |

Heating CFM for Gas models varies dependent upon heat option selected. Heating CFM for Heat Pump models does not include any supplemental electric heat. Dimensions are rounded up to the nearest inch.

Direct-drive models are also available in 3-, 4- and 5-ton capacities.

Note: Due to Lennox' ongoing commitment to quality, all specifications, ratings and dimensions are subject to change.

^{*}Not available in single-phase or \$75/3 voltage. **For 6-ton capacities, the Humiditrol® dehumidification system is only available on standard-efficiency models LGA072S and LCA072S.

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- Unit Heaters
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- Furnaces

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