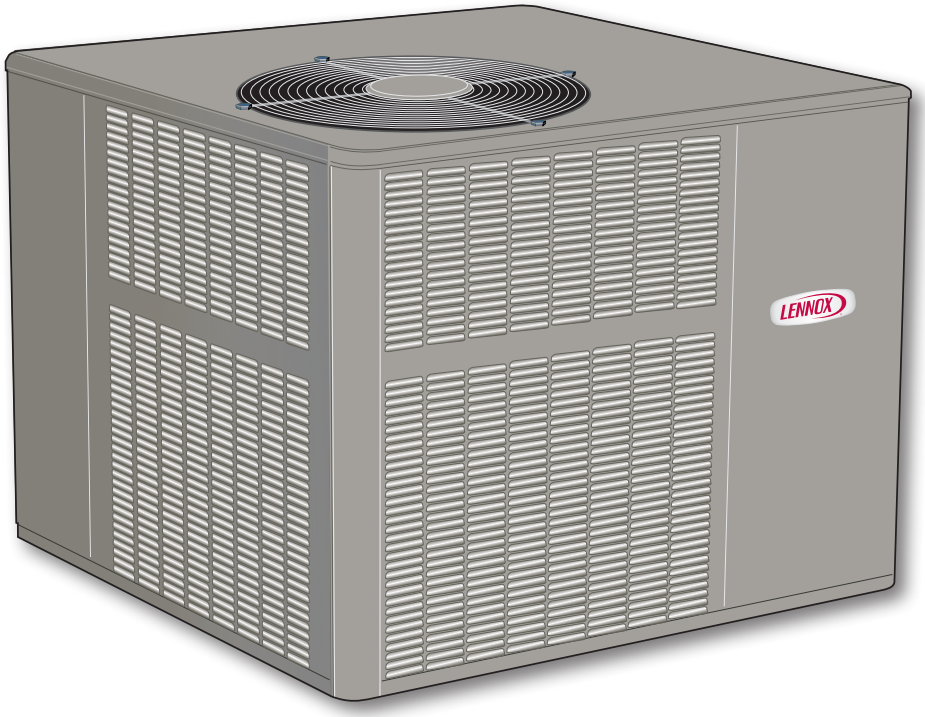
PACKAGED GAS / ELECTRIC

LRP16GE / LRP16GX

Residential - Two-Stage Compressor - Variable Speed Blower - 60Hz

RESIDENTIAL PRODUCT SPECIFICATIONS

Bulletin No. 210773
September 2019
Supersedes October 2018



SEER - 16.00
AFUE - 81%
2 to 5 Tons
Cooling Capacity - 23,800 to 57,000 Btuh
Input Gas Heating Capacity - 72,000 to 126,000 Btuh

MODEL NUMBER IDENTIFICATION

L RP 16 GE 36 - 090 V P - 1 - A

- **Brand**
  L = Lennox
- **Product Type**
  RP = Residential Packaged Unit
- **Nominal SEER**
  16 = 16 SEER
- **Unit Type**
  GE = Gas/Electric Unit
  GX = Low NOx Gas/Electric Unit
- **Nominal Cooling Capacity**
  24 = 2 tons
  36 = 3 tons
  48 = 4 tons
  60 = 5 tons
- **Nominal Heating Capacity Input**
  072 = 72,000 Btuh
  090 = 90,000 Btuh
  108 = 108,000 Btuh
  126 = 126,000 Btuh
- **Blower**
  V = Variable Speed Blower Motor
- **Voltage**
  P = 208/230V-1phase-60hz
- **Major Revision Sequence**
  1 = 1st Generation
- **Minor Revision Sequence**
  A = 1st Generation

CONTENTS

APPROVALS AND WARRANTY

APPROVALS

- AHRI Standard 210/240 Certified
- Design Certified by ETL Intertek
- Cooling system rated according to DOE test procedures
- ENERGY STAR® certified units are designed to use less energy, help save money on utility bills, and help protect the environment
- Heating ratings are Certified by AHRI according to U.S. Department of Energy (DOE) test procedures and Federal Trade Commission (FTC) labeling regulations
- LRP16GX models are approved by the California Energy Commission and meet California Nitrogen Oxides Standard (NOx) limits of 40 ng/J
- Units are ETL Certified for the U.S. and Canada
- Unit and components are UL bonded for grounding to meet safety standards for servicing
- Test operated at the factory before shipment ensuring dependable operation at start-up

California Only

- If installed in South Coast Air Quality Management District (SCAQMD) only:
  - This furnace does not meet the SCAQMD Rule 1111 NO_x emission limit (14 ng/J), and thus is subject to a mitigation fee of up to $450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.
- If installed in San Joaquin Valley Air Pollution Control District (SJVAPCD) only:
  - This furnace does not meet the SJVAPCD Rule 4905 NO_x emission limit (14 ng/J), and thus is subject to a mitigation fee of up to $450

WARRANTY

- Heat Exchanger:
  - Limited twenty years in residential applications
  - Limited ten years in non-residential applications
- Compressor:
  - Limited ten years in residential installations
  - Limited five years in non-residential installations
- All other covered components:
  - Limited five years in residential installations
  - Limited one year in non-residential installations

NOTE - Refer to Lennox Equipment Limited Warranty certificate included with unit for specific details.

FEATURES

APPLICATIONS

- Designed for outdoor installations at ground level or rooftop for residential applications

Zoning Applications
- Units are not approved for zoning applications

HEATING SYSTEM

Heat Exchanger
- Aluminized tubular steel for superior resistance to corrosion and oxidation
- Round surfaces create minimum air resistance and allow air to surround all surfaces for excellent heat transfer
- Compact design reduces space requirements in cabinet
- Laboratory life cycle tested

Inshot Burners
- Aluminized steel inshot burners provide efficient trouble free operation
- Burner venturi mixes air and gas in correct proportion for proper combustion
- Burner assembly is removable from the unit as a single component for ease of service
- Each burner may be removed individually

Two-Stage Gas Control Valve
- 24 volt redundant combination two-stage gas control valve combines manual shut off valve (On-Off), automatic electric valve (dual) and gas pressure regulation into a compact combination control

Two-Stage Combustion Air Inducer
- Heavy duty combustion air inducer prepurges heat exchanger and safely vents flue products
- Blower is controlled by the ignition control board
- Pressure switch proves blower operation before allowing gas valve to open
- Combustion air inducer operates during heating cycle
- Inducer operates for the first 10 seconds of every cooling cycle to prevent insects from nesting in the flue outlet during cooling season

Limit Control
- Factory installed on heating vestibule panel
- Automatic reset

Flame Rollout Switch
- Factory installed on burner box
- Provides protection from abnormal operating conditions
- Manual reset

Ignition Control Board
- Ignition control board with LED diagnostics

Optional Accessories

LPG/Propane Conversion Kit
- Required for field changeover from natural gas to LPG/ Propane

REFRIGERATION SYSTEM

R-410A Refrigerant
- Non-chlorine, ozone friendly
- Unit is factory pre-charged

Evaporator and Condenser Coils
- Copper tube with aluminum fin coils

Anti-Microbial Evaporator Coil Drain Pan
- Anti-Microbial additive resists growth of mold and mildew on drain pan which improves indoor air quality and reduces drain line blockage

Condenser Fan
- Weather protected heavy duty condenser fan motor
- Coated steel fan blades for long life
- Corrosion-resistant coated steel fan guard
- Internally mounted
- Totally enclosed fan motor

High Pressure Switch
- Protects the system from high pressure conditions
- Automatic reset.

Loss of Charge Switch
- Shuts off unit if suction pressure falls below setting
- Loss of charge and freeze-up protection

COMPRESSOR

Two-Stage Scroll Compressor
- High volumetric efficiency
- Uniform suction flow
- Constant discharge flow
- Quiet operation

Compressor Operation
- Two involute spiral scrolls matched together generate a series of crescent shaped gas pockets between them
- During compression, one scroll remains stationary while the other scroll orbits around it
- Gas is drawn into the outer pocket, the pocket is sealed as the scroll rotates
- As the spiral movement continues, gas pockets are pushed to the center of the scrolls
- Volume between the pockets is simultaneously reduced
- When the pocket reaches the center, gas is now at high pressure and is forced out of a port located in the center of the fixed scrolls
- During compression, several pockets are compressed simultaneously resulting in a smooth continuous compression cycle
- Continuous flank contact, maintained by centrifugal force, minimizes gas leakage and maximizes efficiency
- Compressor is tolerant to the effects of slugging and contaminants
- If this occurs, scrolls separate, allowing liquid or contaminants to be worked toward the center and discharged

FEATURES

COMPRESSOR (continued)

- During the compression process, there are several pockets in the scroll that are compressing gas
- Modulation is achieved by venting a portion of the gas in the first suction pocket back to the low side of the compressor thereby reducing the effective displacement of the compressor
- A 24-volt DC solenoid valve inside the compressor controls staging
- When the 3-way solenoid is energized it moves the lift ring assembly to block the ports and the compressor operates at full-load or 100% capacity
- When the solenoid is de-energized the lift ring assembly moves to unblock the compressor ports and the compressor operates at part-load or approximately 67% of its full-load capacity
- The "loading" and "unloading" of the two stage scroll is done "on the fly" without shutting off the single-speed compressor motor between stages
- Low gas pulses during compression reduces operational sound levels
- Compressor motor is internally protected from excessive current and temperature
- Compressor is installed in the unit on specially formulated, resilient rubber mounts for better sound dampening and vibration free operation

Optional Accessories

Compressor Crankcase Heater
- Protects against refrigerant migration that can occur during low ambient operation

Compressor Hard Start Kit
- A PSC compressor motor does not normally need a potential relay and start capacitor
- In cases of low voltage, this kit may be required to increase the compressor starting torque

Compressor Timed-Off Control
- Prevents compressor short-cycling
- Allows time for suction and discharge pressure to equalize
- Permits compressor start-up in an unloaded condition
- Automatic reset
- Five minute delay between compressor shut-off and start-up

SUPPLY AIR BLOWER

- Direct Drive Blower
- Blower wheel statically and dynamically balanced
- Multi-speed operation is achieved by the use of an ECM (Electronically Commutated Motor) variable speed motor
- Blower assembly easily removed for servicing

ECM Variable Speed Blower Motor
- Variable speed motor maintains specified air volume from 0 though 0.80 in. w.g. static range
- Motor is controlled by the blower control
- Change in blower speed is easily accomplished by simple jumper pin change on blower control
- Motor is resiliently mounted

CONTROLS

Electronic Blower Control
- Two Stages - HEAT and COOL (with four different air volume selections for each) are made by simple jumper pins
- ADJUST jumper pin allows approximately 10% higher, normal or 10% lower motor speed selection within (COOL) speeds selected for for fine tuning air volume
- See Blower Data tables

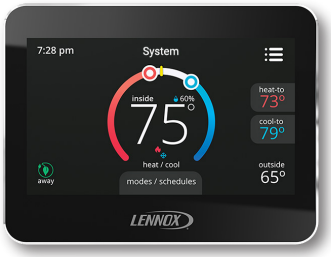
NOTE - HEAT speeds are not affected by jumper change.
- Cooling Airflow Ramp Up - At the beginning of a call for cooling, the blower will run at 82% of full airflow for 7.5 minutes
- This improves the system's moisture removal and saves blower power during cooling start
- Reduced Airflow Operation - For situations where humidity control is an issue, the variable speed motor can be connected to operate at a 25% reduction of the normal airflow rate
- The variable speed motor interface provides for connection of a thermostat with humidity control or a humidistat on the HUM terminal

NOTE - When connected, the dehumidifier resistor on the interface must be cut.
- The control should be wired to open during high humidity, which will reduce blower airflow

24 Volt Transformer
- 40VA transformer furnished and factory installed in control area

Optional Accessories

iComfort® M30 Smart Wi-Fi Progammable Thermostat
- Wi-Fi-enabled, electronic 7-day
- Universal, multi-stage
- 4 Heat/2 Cool
- Auto-changeover
- Dual-fuel control (optional outdoor sensor required)
- Dehumidification control during cooling mode
- Humidification control during heating mode
- Enhanced capabilities:
  - Humidification / Dehumidification
  - Dewpoint measurement and control
  - Humiditrol® control
  - Equipment maintenance reminders
- 4.3 in. color touchscreen (measured diagonally)



FEATURES

CONTROLS (continued)

Optional Accessories (continued)

- LCD display with backlight shows the current and set temperature, time, inside relative humidity, system status (operating mode and schedules) and outside temperature (optional outdoor sensor required)
- Smooth Setback Recovery starts system early to achieve setpoint at start of program period
- Compressor short-cycle protection (5 minutes)
- Four separate schedules available plus Schedule IQ™
- One-Touch Away Mode - Set the cooling and heating setpoints while away
- Smart Away™ - Geo-fencing technology determines when the homeowner is within a predetermined distance from the home to operate the system
- Amazon® Alexa-enabled, smart-home-compatible
- Works with Amazon Echo, Echo Dot and Tap devices
- WI-FI remote monitoring and adjustment

NOTE - See the iComfort® M30 Smart Wi-Fi Thermostat Product Specifications bulletin in the Controls section for more information.

Remote Outdoor Temperature Sensor

- Used with the iComfort® M30 Smart Wi-Fi Thermostat
- Outdoor sensor allows thermostat to display outdoor temperature

NOTE - Remote Outdoor Temperature Sensor is recommended for heat pump balance point control to lock out some of the the electric heating elements where two-stage control is applicable.

Thermostat

- Thermostat is not furnished with unit
- Lennox Price Book for selection

INDOOR AIR QUALITY (option)

Healthy Climate® PCO Accessory

- The Healthy Climate® PCO Accessory uses photocatalytic oxidation (PCO) technology to significantly reduce levels of airborne volatile organic compounds, cooking odors and common household odors
- Lennox' Healthy Climate® PCO Accessory is mounted internally to the unit cabinet for superior indoor air quality
- Kit contains PCO cartridge, UVA lamp, UVA lampholder assembly, ballast box, wiring harness and all necessary hardware

NOTE - The Healthy Climate® PCO Accessory cannot be used with the Internal Filter Rack Kit. High efficiency filtration external to the return air inlet and the PCO accessory in the unit is required and must be field supplied.

Internal Filter Rack Kits

- Available for 1 in. thick filters. Kit contains filter rails for mounting filters internal to unit
- Filters are not furnished and must be field provided

NOTE - The Internal Filter Rack Kit cannot be used with the Healthy Climate® PCO Accessory.

NOTE - Maximum acceptable filter efficiency is MERV 11.

CABINET

- Conditioned areas insulated with foil faced insulation
- Minimizes heat loss and reduce operating sound levels
- Powder paint for maximum durability
- Easy service access
- Steel louvered panels provides complete coil protection

Airflow Choice

- Units are shipped in horizontal configuration
- Can be field converted to downflow (vertical) airflow with optional Downflow Conversion Kit

Gas Piping Inlets, Electrical Inlets and Service Valves

- Gas piping and field wiring inlets are located in one central area of the cabinet
- See dimension drawing
- Gauge ports are located inside the cabinet

Optional Accessories

Downflow Conversion Kit

- Required for field conversion to downflow (vertical) air.
- Consists of 2 duct covers to block off horizontal air openings on side of unit
- Drain pan overflow switch monitors condensate level in drain pan
- Shuts down unit if drain becomes clogged

Lifting Brackets

- Available to facilitate rigging of the unit

Clip Curb (Full Perimeter)

- Interlocking tabs fasten corners together
- No tools required
- Available in 8 and 14 inch heights
- Shipped knocked down

Adjustable Pitch Roof Curb (Full Perimeter)

- Fully adjustable pitch curb provides a level platform for packaged units
- Allows flexible installations on roofs with sloped or uneven angles
- Adjustable from 2/12 to 6/12 pitch
- Unit hold-down brackets secure packaged unit to curb
- Constructed of heavy-gauge galvanized steel with fully welded seams and corners
- Rounded corners on flange prevent damage to roof shingles
- Built-in drip edge
- IAPMO/UMC listed
- CBC 2013 compliant (California)
- Seismic rating - Ss=3.73 Ip=1.5, wind rating - 155mph
- Maximum load rating – 800 lbs.

SPECIFICATIONS

General Data		Model No.	LRP16GE24	LRP16GE36	LRP16GE48	LRP16GE60
		Model No. - Low NOx	LRP16XE24	LRP16GX36	LRP16GX48	LRP16GX60
		Nominal Tonnage	2	3	4	5
Gas Heat Available - See Page 8			**-72**	**-72, -90**	**-108**	**-126**
Cooling Performance	Total cooling capacity - Btuh		23,800	35,400	47,500	57,000
	Total Unit Watts		1900	2950	3960	4750
	[1] SEER (Btuh/Watt)		16.0	16.0	16.0	16.0
	EER (Btuh/Watt)		12.5	12.0	12.0	12.0
	[2] Sound Rating Number (dB)		74	75	75	74
Refrigerant	Type		R-410A	R-410A	R-410A	R-410A
	Charge		5 lbs. 7 oz.	5 lbs. 12 oz.	6 lbs. 10 oz.	9 lbs. 1 oz.
Condensate drain size (fpt) - in.			3/4	3/4	3/4	3/4
Outdoor Coil	Net Face Area - sq. ft.		14.6	16.4	19.5	19.1
	Tube Dia. - in. and No. of Rows		5/16 – 1	5/16 – 1	5/16 – 1	5/16 – 2
	Fins per inch		26	26	26	22
Outdoor Coil Fan	Motor horsepower		1/6	1/6	1/4	1/4
	Dia. - in. and No. of blades		22 – 3	22 – 3	24 – 3	24 – 3
Indoor Coil	Net Face Area - sq. ft.		4.4	4.4	6.8	6.8
	Tube Dia. - in. and No. of rows		3/8 – 3	3/8 – 3	3/8 – 3	3/8 – 3
	Fins per in.		15	15	15	15
Indoor Blower	Blower wheel size dia. x width - in.		10 x 6	10 x 8	10 x 10	12 x 9
	Motor horsepower		1/2	1/2	3/4	1
Net weight of basic unit - lbs.			375	384	486	522
Shipping weight of basic unit (1 Pkg.) - lbs.			445	456	528	595
Electrical characteristics (60 hz)			208/230V-1ph-60Hz			

ELECTRICAL DATA

Line voltage data - 60hz 1 phase		208/230V	208/230V	208/230V	208/230V
[3] Maximum overcurrent protection (amps)		25	35	50	60
[4] Minimum Circuit Ampacity		17.0	22.7	31.2	41.7
Compressor	Rated load amps	11.7	15.3	21.2	28.8
	Locked rotor amps	58.3	83.0	104.0	152.9
Outdoor Coil Fan Motor	Full load amps	1.0	1.0	1.7	1.7
	Locked rotor amps	1.9	1.9	3.2	3.2
Indoor Blower Motor	Full load amps	1.1	2.3	3.1	4.0
	Locked rotor amps	4.3	4.3	6.8	9.1

NOTE-Extremes of operating range are plus and minus 10% of line voltage.

[1] AHRI Certified to AHRI Standard 210/240; 95°F outdoor air temperature, 80°F db/67°F wb entering evaporator air.

[2] Sound Rating Number rated in accordance with test conditions included in AHRI Standard 270.

[3] HACR type circuit breaker or fuse.

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

OPTIONAL ACCESSORIES - ORDER SEPARATELY

Model No.			24	36	48	60
Compressor Crankcase Heater		11X27	•	•	•	•
Compressor Hard Start Kit		10J42	•	•		
		12J90			•	•
Compressor Timed-Off Control		47J27	•	•	•	•
Downflow Conversion Kit		11U80	•	•		
		11U81			•	•
[1, 2] Internal Filter Rack Kit (Filters not furnished)	(1) 20 x 20 + (1) 14 x 20	11U73	•	•		
	(2) 20 x 20	11U74			•	•
Lifting Brackets		11U76	•	•	•	•
Clip Curbs	8 in. Height	14W71	•	•		
		14W72			•	•
	14 in. Height	14V68	•	•		
		14V69			•	•
Adjustable Pitch Roof Curb		Y7975	•	•		
		Y7976			•	•
[2] Healthy Climate® PCO Accessory		Y7960	•	•	•	•

MAINTENANCE SUPPLIES - ORDER SEPARATELY

Healthy Climate® PCO Accessory Maintenance Kit (Includes PureAir™ Cartridge and UVA lamp)		Y7972	•	•	•	•

CONTROLS - ORDER SEPARATELY

iComfort® M30 Smart Wi-Fi Thermostat		15Z69	•	•	•	•
[3] Outdoor Temperature Sensor		X2658	•	•	•	•

[1] Filters are not furnished and must be field provided. Maximum acceptable filter efficiency is MERV 11.

[2] Filter Rack Kit cannot be used with the Healthy Climate® PCO Accessory. High efficiency filtration between the return air inlet and the PCO accessory is required and must be field supplied.

[3] Remote Outdoor Temperature Sensor is used with residential packaged units. Allows the thermostat to display outdoor temperature.

SPECIFICATIONS - GAS HEAT

General Data	Model No.	LRP16GE24 LRP16GX24 LRP16GE36 LRP16GX36	LRP16GE36 LRP16GX36	LRP16GE48 LRP16GX48	LRP16GE60 LRP16GX60
	Heating Input	**-072**	**-090**	**-108**	**-126**
Heating Capacity Btuh	First Stage - Input	54,000	67,500	81,000	94,500
	Output	43,500	54,500	65,500	76,500
	Second Stage - Input	72,000	90,000	108,000	126,000
	Output	58,000	73,000	88,000	102,000
[1] AFUE		81%	81%	81%	81%
Temperature Rise - °F	First Stage	35 - 45	35 - 45	45 - 55	45 - 55
	Second Stage	45 - 55	45 - 55	50 - 60	50 - 60
Gas Supply Connection (FPT) - in.		1/2	1/2	1/2	1/2
Min. Reconmmended Gas Supply Pressure		5 in. w.g. Natural Gas, 11 in. w.g. LPG/Propane			
OPTIONAL ACCESSORIES - ORDER SEPARATELY					
LPG/Propane Conversion Kit		**15C55**	**15C55**	**15C55**	**15C55**

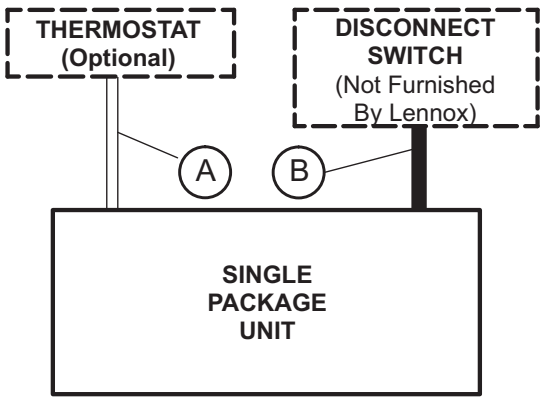
[1] Annual Fuel Utilization Efficiency based on U.S. DOE test procedures and FTC labeling regulations.

HIGH ALTITUDE DERATE

Units may be installed at altitudes up to 4500 feet above sea level without any modificationAt altitudes above 4500 feet, units must be derated 4% for every 1000 feet above sea level. Example - At an altitude of 6000 feet the unit would require a derate of 24%.

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

FIELD WIRING



A − Seven Wire Low Voltage (Electronic)

B − Two Wire Power (See Electrical Data Table)

− Field Wiring Not Furnished −

COOLING RATINGS

2 TON - LRP16GE24, LRP16GX24 (1ST STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	500	20.4	7.3	0.72	0.85	0.99	19.3	8.4	0.73	0.87	1.00	18.3	9.7	0.75	0.90	1.00	17.2	11.2	0.77	0.93	1.00
	560	20.9	7.3	0.74	0.89	1.00	19.8	8.4	0.76	0.91	1.00	18.8	9.7	0.77	0.94	1.00	17.6	11.2	0.80	0.98	1.00
	610	21.3	7.2	0.76	0.92	1.00	20.1	8.4	0.78	0.95	1.00	19.0	9.6	0.80	0.98	1.00	17.9	11.1	0.82	1.00	1.00
67°F	500	21.9	7.2	0.56	0.69	0.82	20.7	8.3	0.57	0.71	0.84	19.6	9.6	0.58	0.72	0.87	18.5	11.1	0.59	0.74	0.89
	560	22.3	7.1	0.58	0.72	0.86	21.1	8.2	0.59	0.74	0.88	19.9	9.5	0.60	0.76	0.90	18.8	11.0	0.61	0.78	0.94
	610	22.7	7.1	0.59	0.74	0.89	21.4	8.2	0.60	0.76	0.92	20.1	9.5	0.62	0.78	0.95	19.0	11.0	0.63	0.81	0.98
71°F	500	23.4	7.0	0.42	0.55	0.66	22.2	8.1	0.43	0.55	0.68	20.9	9.4	0.43	0.57	0.70	19.8	10.9	0.43	0.58	0.72
	560	23.9	7.0	0.43	0.56	0.69	22.6	8.1	0.43	0.57	0.71	21.3	9.4	0.44	0.59	0.73	20.1	10.8	0.44	0.60	0.75
	610	24.2	6.9	0.43	0.58	0.72	22.9	8.0	0.44	0.59	0.74	21.6	9.3	0.44	0.60	0.76	20.4	10.8	0.45	0.62	0.78

2 TON - LRP16GE24, LRP16GX24 (2ND STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	600	23.9	15.9	0.72	0.86	1.00	22.6	17.5	0.74	0.88	1.00	21.4	19.6	0.75	0.91	1.00	20.0	21.7	0.77	0.94	1.00
	800	25.2	16.0	0.80	0.97	1.00	23.9	17.6	0.81	1.00	1.00	22.7	19.6	0.83	1.00	1.00	21.5	21.8	0.85	1.00	1.00
	1000	26.6	16.1	0.86	1.00	1.00	25.3	17.7	0.88	1.00	1.00	24.0	19.6	0.90	1.00	1.00	22.7	21.9	0.93	1.00	1.00
67°F	600	25.5	16.0	0.57	0.70	0.83	24.2	17.6	0.58	0.71	0.85	22.8	19.5	0.59	0.73	0.88	21.4	21.9	0.60	0.75	0.90
	800	26.8	16.1	0.61	0.78	0.94	25.4	17.7	0.62	0.80	0.98	23.9	19.6	0.64	0.83	1.00	22.4	21.8	0.65	0.85	1.00
	1000	27.7	16.1	0.66	0.86	1.00	26.2	17.7	0.68	0.89	1.00	24.6	19.6	0.70	0.92	1.00	23.0	21.9	0.72	0.96	1.00
71°F	600	27.3	16.1	0.43	0.55	0.67	25.9	17.7	0.43	0.56	0.69	24.5	19.6	0.43	0.57	0.71	23.0	22.0	0.44	0.58	0.73
	800	28.6	16.2	0.44	0.60	0.76	27.0	17.8	0.45	0.61	0.78	25.5	19.6	0.45	0.63	0.81	23.9	21.8	0.46	0.65	0.84
	1000	29.4	16.2	0.46	0.65	0.84	27.8	17.8	0.47	0.67	0.87	26.1	19.7	0.48	0.69	0.91	24.4	21.9	0.49	0.72	1.00

3 TON - LRP16GE36, LRP16GX36 (1ST STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	760	29.0	10.8	0.74	0.88	1.00	27.5	12.3	0.75	0.90	1.00	26.0	14.2	0.77	0.93	1.00	24.4	16.3	0.79	0.96	1.00
	840	29.6	10.8	0.76	0.92	1.00	28.1	12.3	0.78	0.94	1.00	26.5	14.1	0.80	0.97	1.00	25.1	16.3	0.82	1.00	1.00
	920	30.1	10.7	0.78	0.95	1.00	28.6	12.2	0.80	0.98	1.00	26.9	14.1	0.83	1.00	1.00	25.6	16.2	0.84	1.00	1.00
67°F	760	31.1	10.7	0.58	0.71	0.84	29.5	12.2	0.58	0.73	0.87	27.8	14.0	0.59	0.75	0.90	26.2	16.2	0.61	0.77	0.93
	840	31.7	10.6	0.59	0.74	0.88	30.0	12.1	0.60	0.75	0.91	28.3	14.0	0.61	0.78	0.94	26.6	16.1	0.63	0.80	0.98
	920	32.1	10.6	0.60	0.76	0.92	30.4	12.1	0.62	0.78	0.95	28.7	14.0	0.63	0.81	0.99	28.9	16.0	0.60	0.78	0.94
71°F	760	33.4	10.5	0.43	0.56	0.68	31.7	12.0	0.43	0.57	0.70	29.9	13.9	0.44	0.58	0.72	28.2	16.0	0.44	0.59	0.74
	840	33.9	10.4	0.43	0.57	0.71	32.2	11.9	0.44	0.58	0.73	30.4	13.8	0.44	0.60	0.75	28.5	16.0	0.45	0.61	0.78
	920	34.4	10.4	0.44	0.59	0.74	32.6	11.9	0.44	0.60	0.76	30.8	13.8	0.45	0.62	0.78	27.2	16.1	0.48	0.67	0.86

3 TON - LRP16GE36, LRP16GX36 (2ND STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	1000	36.5	23.9	0.74	0.90	1.00	34.6	26.5	0.77	0.92	1.00	32.6	29.4	0.78	0.95	1.00	30.6	32.8	0.80	0.99	1.00
	1200	37.6	24.0	0.79	0.95	1.00	35.7	26.6	0.82	0.98	1.00	33.9	29.6	0.83	1.00	1.00	32.1	33.0	0.85	1.00	1.00
	1400	38.9	24.2	0.83	1.00	1.00	37.1	26.8	0.86	1.00	1.00	35.2	29.8	0.88	1.00	1.00	33.4	33.1	0.90	1.00	1.00
67°F	1000	38.9	24.2	0.58	0.73	0.87	36.9	26.8	0.59	0.74	0.89	34.8	29.7	0.60	0.76	0.92	32.7	33.1	0.62	0.79	0.96
	1200	40.0	24.3	0.61	0.78	0.95	37.9	26.9	0.63	0.80	0.98	36.0	29.8	0.63	0.82	0.98	33.4	33.1	0.66	0.86	1.00
	1400	40.6	24.4	0.65	0.83	1.00	38.6	27.0	0.66	0.86	1.00	36.3	29.9	0.68	0.90	1.00	34.1	33.2	0.70	0.93	1.00
71°F	1000	41.4	24.5	0.43	0.57	0.70	39.3	27.0	0.43	0.58	0.72	37.0	30.0	0.44	0.59	0.74	34.9	33.3	0.44	0.61	0.77
	1200	42.5	24.6	0.44	0.60	0.76	40.2	27.1	0.45	0.62	0.78	37.9	30.1	0.45	0.63	0.79	35.8	33.4	0.45	0.65	0.81
	1400	43.3	24.7	0.46	0.64	0.80	41.1	27.2	0.46	0.65	0.84	38.7	30.2	0.47	0.67	0.88	36.3	33.5	0.47	0.70	0.88

COOLING RATINGS

4 TON - LRP16GE48, LRP16GX48 (1ST STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	1010	39.3	13.8	0.73	0.87	1.00	37.0	16.1	0.75	0.90	1.00	34.7	18.7	0.77	0.93	1.00	32.3	21.6	0.79	0.97	1.00
	1120	40.1	13.7	0.75	0.91	1.00	37.7	16.0	0.77	0.94	1.00	35.3	18.7	0.80	0.97	1.00	33.2	21.5	0.82	1.00	1.00
	1230	40.7	13.6	0.78	0.95	1.00	38.4	16.0	0.80	0.98	1.00	36.0	18.6	0.82	1.00	1.00	34.0	21.4	0.84	1.00	1.00
67°F	1010	41.9	13.5	0.57	0.71	0.84	39.5	15.9	0.58	0.72	0.87	37.0	18.5	0.59	0.75	0.90	34.5	21.4	0.61	0.77	0.93
	1120	42.7	13.5	0.59	0.73	0.88	40.2	15.8	0.60	0.75	0.91	37.7	18.5	0.61	0.78	0.94	35.1	21.4	0.63	0.80	0.98
	1230	43.3	13.4	0.60	0.76	0.92	40.7	15.8	0.62	0.78	0.95	38.2	18.4	0.63	0.81	0.99	35.7	21.3	0.65	0.84	1.00
71°F	1010	44.9	13.3	0.43	0.55	0.68	42.3	15.6	0.43	0.57	0.70	39.7	18.3	0.44	0.58	0.72	37.2	21.2	0.44	0.59	0.74
	1120	45.6	13.2	0.43	0.57	0.71	43.0	15.6	0.44	0.58	0.73	40.3	18.2	0.44	0.60	0.75	37.7	21.1	0.45	0.62	0.78
	1230	46.3	13.1	0.44	0.59	0.74	43.6	15.5	0.44	0.60	0.76	40.9	18.2	0.45	0.62	0.79	38.2	21.1	0.46	0.64	0.82

4 TON - LRP16GE48, LRP16GX48 (2ND STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	1400	48.4	31.8	0.76	0.92	1.00	45.9	35.4	0.78	0.95	1.00	43.3	39.5	0.80	0.99	1.00	40.7	44.1	0.82	1.00	1.00
	1600	49.6	31.9	0.80	0.98	1.00	47.0	35.5	0.82	1.00	1.00	44.7	39.6	0.84	1.00	1.00	42.3	44.5	0.86	1.00	1.00
	1800	50.8	32.0	0.83	1.00	1.00	48.5	35.6	0.85	1.00	1.00	46.1	39.8	0.87	1.00	1.00	43.6	44.6	0.89	1.00	1.00
67°F	1400	51.6	32.1	0.59	0.74	0.89	48.8	35.7	0.60	0.76	0.92	46.0	39.8	0.62	0.79	0.95	43.2	44.6	0.63	0.81	0.99
	1600	52.6	32.2	0.62	0.79	0.96	49.8	35.8	0.63	0.81	0.99	46.8	39.9	0.65	0.84	1.00	44.0	44.7	0.66	0.87	1.00
	1800	53.4	32.3	0.64	0.83	0.99	50.5	35.8	0.66	0.86	1.00	47.6	40.0	0.67	0.89	1.00	44.6	44.8	0.70	0.92	1.00
71°F	1400	55.0	32.4	0.44	0.58	0.72	52.1	36.0	0.44	0.59	0.74	49.1	40.2	0.44	0.60	0.76	46.2	45.1	0.45	0.62	0.79
	1600	56.0	32.5	0.45	0.61	0.76	53.0	36.1	0.45	0.62	0.79	49.9	40.3	0.46	0.64	0.82	46.8	45.1	0.46	0.66	0.85
	1800	56.8	32.5	0.46	0.63	0.81	53.7	36.2	0.46	0.65	0.84	50.6	40.4	0.47	0.67	0.87	47.4	45.2	0.48	0.69	0.90

5 TON - LRP16GE60, LRP16GX60 (1ST STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		65°F					75°F					85°F					95°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	1130	46.2	17.4	0.72	0.85	0.99	43.5	20.1	0.73	0.88	1.00	40.8	23.2	0.75	0.91	1.00	38.0	26.6	0.77	0.94	1.00
	1260	47.3	17.3	0.74	0.89	1.00	44.5	20.1	0.76	0.92	1.00	41.6	23.2	0.78	0.95	1.00	38.9	26.6	0.80	0.99	1.00
	1390	48.1	17.2	0.76	0.93	1.00	45.2	20.0	0.79	0.96	1.00	42.4	23.1	0.81	0.99	1.00	39.8	26.5	0.83	1.00	1.00
67°F	1130	49.4	17.1	0.56	0.69	0.82	46.5	19.9	0.57	0.71	0.84	43.6	23.0	0.58	0.73	0.87	40.7	26.4	0.60	0.75	0.91
	1260	50.3	17.0	0.58	0.72	0.86	47.5	19.8	0.59	0.74	0.88	44.4	22.9	0.60	0.76	0.92	41.5	26.4	0.62	0.79	0.96
	1390	51.2	17.0	0.59	0.74	0.89	48.1	19.7	0.61	0.77	0.93	45.0	22.9	0.62	0.79	0.96	42.1	26.3	0.64	0.82	1.00
71°F	1130	52.8	16.8	0.43	0.55	0.66	49.8	19.6	0.43	0.56	0.68	46.8	22.7	0.43	0.57	0.70	43.7	26.2	0.44	0.58	0.73
	1260	53.8	16.7	0.43	0.56	0.69	50.7	19.5	0.43	0.57	0.71	47.5	22.7	0.44	0.59	0.73	44.5	26.1	0.44	0.60	0.76
	1390	54.6	16.6	0.44	0.58	0.72	51.4	19.4	0.44	0.59	0.74	48.2	22.6	0.45	0.61	0.77	45.0	26.0	0.45	0.63	0.80

5 TON - LRP16GE60, LRP16GX60 (2ND STAGE)

Entering Wet Bulb Temperature	Total Air Volume	Outdoor Air Temperature Entering Outdoor Coil																			
		85°F					95°F					105°F					115°F				
		Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb			Total Cool Cap.	Comp. Motor Input	Sensible To Total Ratio (S/T) Dry Bulb		
	cfm	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F	kBtuh	kW	75°F	80°F	85°F
63°F	1600	57.8	38.6	0.75	0.88	1.00	55.1	42.7	0.76	0.91	1.00	52.0	47.4	0.78	0.93	1.00	49.1	52.7	0.80	0.96	1.00
	1800	59.0	38.7	0.78	0.92	1.00	56.1	42.8	0.80	0.95	1.00	53.2	47.6	0.80	0.98	1.00	50.2	52.9	0.82	1.00	1.00
	2000	60.1	38.8	0.79	0.96	1.00	57.2	43.0	0.81	0.99	1.00	54.4	47.7	0.82	1.00	1.00	51.7	53.1	0.83	1.00	1.00
67°F	1600	61.7	39.1	0.58	0.73	0.85	58.5	43.1	0.59	0.75	0.88	55.4	47.8	0.60	0.77	0.91	52.2	53.2	0.62	0.79	0.93
	1800	62.8	39.2	0.60	0.76	0.90	59.6	43.3	0.61	0.78	0.93	56.4	48.0	0.63	0.81	0.95	53.0	53.3	0.64	0.81	0.98
	2000	63.6	39.3	0.62	0.78	0.94	60.5	43.4	0.64	0.80	0.97	57.0	48.1	0.65	0.82	1.00	53.7	53.4	0.67	0.85	1.00
71°F	1600	65.4	39.5	0.43	0.57	0.71	62.3	43.6	0.43	0.58	0.72	58.9	48.3	0.44	0.59	0.75	55.5	53.7	0.44	0.61	0.77
	1800	66.7	39.7	0.44	0.59	0.74	63.3	43.7	0.44	0.60	0.76	59.8	48.4	0.45	0.62	0.79	56.3	53.8	0.45	0.64	0.81
	2000	67.6	39.8	0.45	0.61	0.76	64.1	43.8	0.45	0.63	0.78	60.5	48.5	0.46	0.65	0.81	56.9	53.9	0.46	0.66	0.83

BLOWER DATA

LRP16GE24, LRP16GX24 Blower Performance

0 through 0.80 in. w.g. External Static Pressure Range

"ADJUST" Jumper Setting	Blower Control Jumper Speed Positions											
	"COOL" Speed - cfm				"HEAT" Speed - cfm				"CONTINUOUS FAN" Speed - cfm			
	A	B	C	D	A	B	C	D	A	B	C	D
+	1100	880	660	440	1100	1000	900	815	550	440	330	220
NORM	1000	800	600	400	1100	1000	900	815	500	400	300	200
—	900	720	540	360	1100	1000	900	815	450	360	270	180

NOTE - All air data is measured external to unit without air filters.

NOTE - 1st Stage airflow is 70% of 2nd Stage airflow (full capacity) in cooling mode. In heating mode, low stage airflow is optimized for a 40°F temperature rise.

LRP16GE36, LRP16GX36 Blower Performance

0 through 0.80 in. w.g. External Static Pressure Range

"ADJUST" Jumper Setting	Blower Control Jumper Speed Positions											
	"COOL" Speed - cfm				"HEAT" Speed - cfm				"CONTINUOUS FAN" Speed - cfm			
	A	B	C	D	A	B	C	D	A	B	C	D
+	1540	1320	1100	880	1400	1200	1100	975	770	660	550	440
NORM	1400	1200	1000	800	1400	1200	1100	975	700	600	500	400
—	1260	1080	900	720	1400	1200	1100	975	630	540	450	360

NOTE - All air data is measured external to unit without air filters.

NOTE - 1st Stage airflow is 70% of 2nd Stage airflow (full capacity) in cooling mode. In heating mode, low stage airflow is optimized for a 40°F temperature rise.

LRP16GE48, LRP16GX48 Blower Performance

0 through 0.80 in. w.g. External Static Pressure Range

"ADJUST" Jumper Setting	Blower Control Jumper Speed Positions											
	"COOL" Speed - cfm				"HEAT" Speed - cfm				"CONTINUOUS FAN" Speed - cfm			
	A	B	C	D	A	B	C	D	A	B	C	D
+	1980	1760	1540	1320	1350	1200	1100	1000	990	880	770	660
NORM	1800	1600	1400	1200	1350	1200	1100	1000	900	800	700	600
—	1620	1440	1260	1080	1350	1200	1100	1000	810	720	630	540

NOTE - All air data is measured external to unit without air filters.

NOTE - 1st Stage airflow is 70% of 2nd Stage airflow (full capacity) in cooling mode. In heating mode, low stage airflow is optimized for a 40°F temperature rise.

LRP16GE60, LRP16GX60 Blower Performance

0 through 0.80 in. w.g. External Static Pressure Range

"ADJUST" Jumper Setting	Blower Control Jumper Speed Positions											
	"COOL" Speed - cfm				"HEAT" Speed - cfm				"CONTINUOUS FAN" Speed - cfm			
	A	B	C	D	A	B	C	D	A	B	C	D
+	2200	1980	1760	1540	1480	1380	1280	1180	1100	990	880	770
NORM	2000	1800	1600	1400	1480	1380	1280	1180	1000	900	800	700
—	1800	1620	1440	1260	1480	1380	1280	1180	900	810	720	630

NOTE - All air data is measured external to unit without air filters.

NOTE - 1st Stage airflow is 70% of 2nd Stage airflow (full capacity) in cooling mode. In heating mode, low stage airflow is optimized for a 40°F temperature rise.

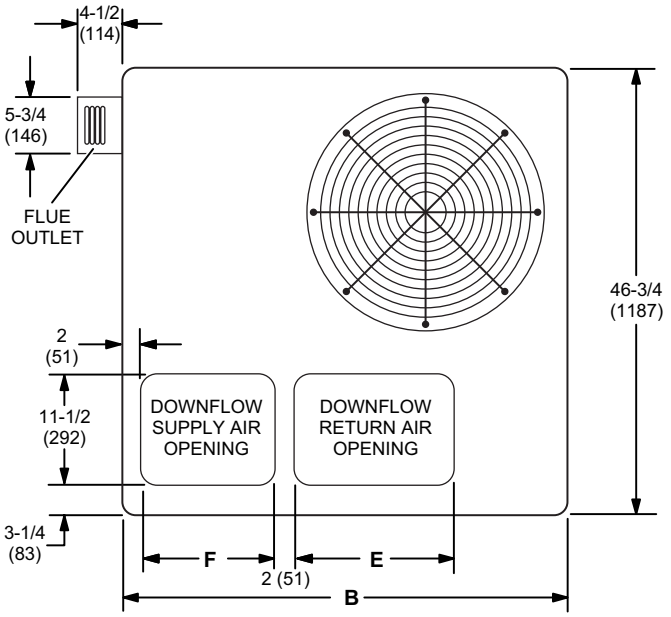
INSTALLATION CLEARANCES

	in.	mm
Front (heat exchanger access)	24	610
Right Side (blower access)	24	610
Left Side (evaporator coil access)	24	610
Back	0	0
Top	48	1219

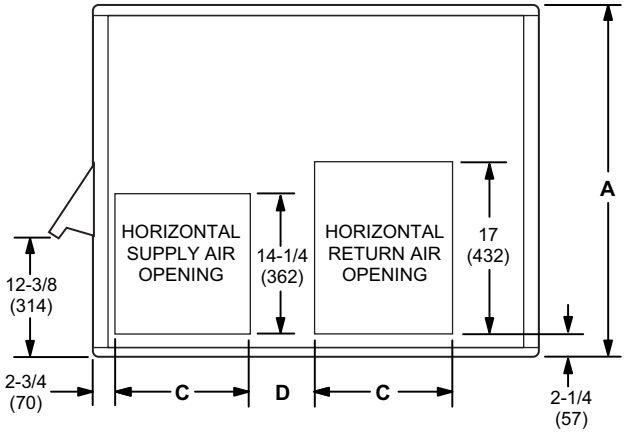
MINIMUM CLEARANCE TO COMBUSTIBLE MATERIAL

	in.	mm
Front	0	0
Back	0	0
Right Side (vent cover)	12	305
Left Side	0	0
Top	0	0
Below Unit	0	0

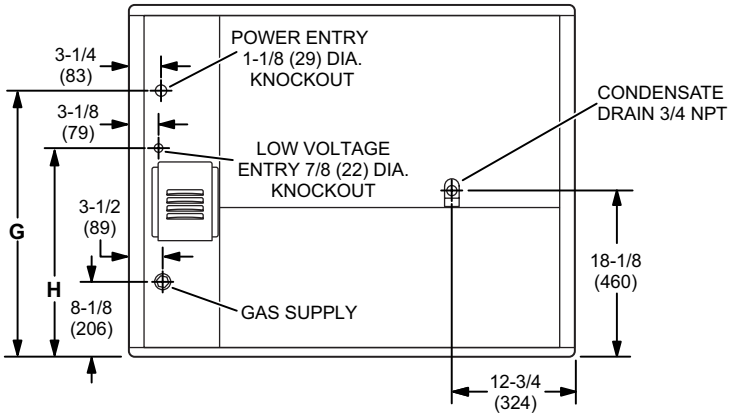
DIMENSIONS - UNIT



TOP VIEW



BACK VIEW



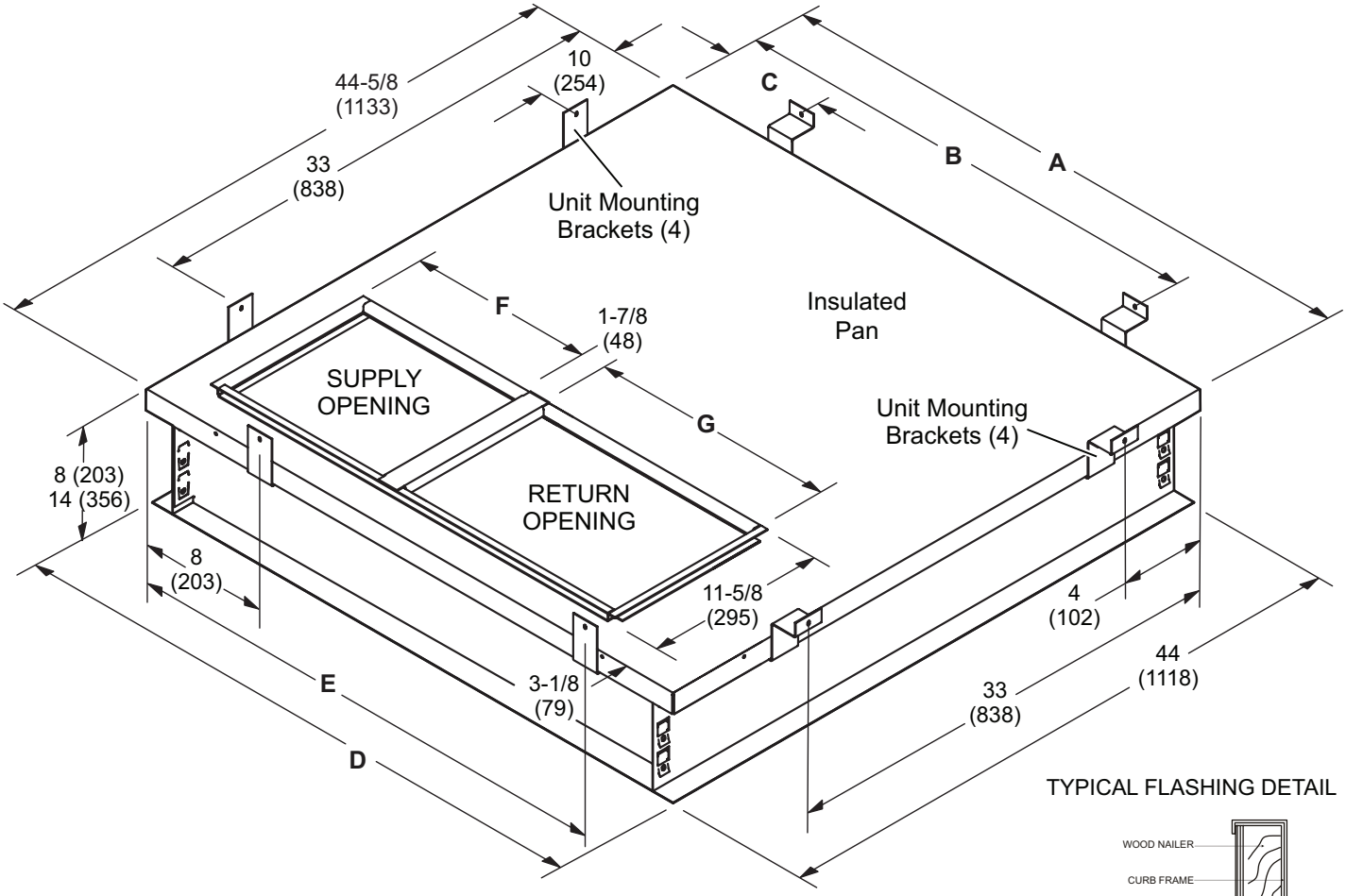
RIGHT SIDE VIEW

Size	A		B		C		D		E	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
24, 36	36-7/8	937	46-3/4	1187	13-3/8	340	5-7/8	149	16-3/4	425
48, 60	40-7/8	1038	55-1/4	1403	18-1/8	467	4-5/8	117	19-3/4	502

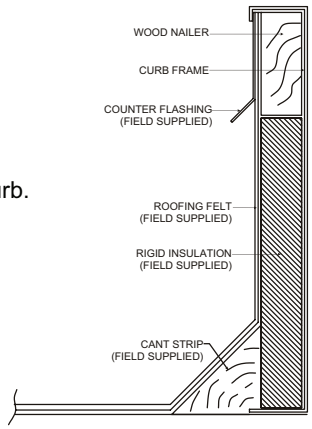
Size	F		G		H	
	in.	mm	in.	mm	in.	mm
24, 36	14	356	28-1/8	714	22-1/8	562
48, 60	19-1/2	495	32-1/8	816	26-1/8	664

DIMENSIONS - ACCESSORIES

CLIP CURB



TYPICAL FLASHING DETAIL



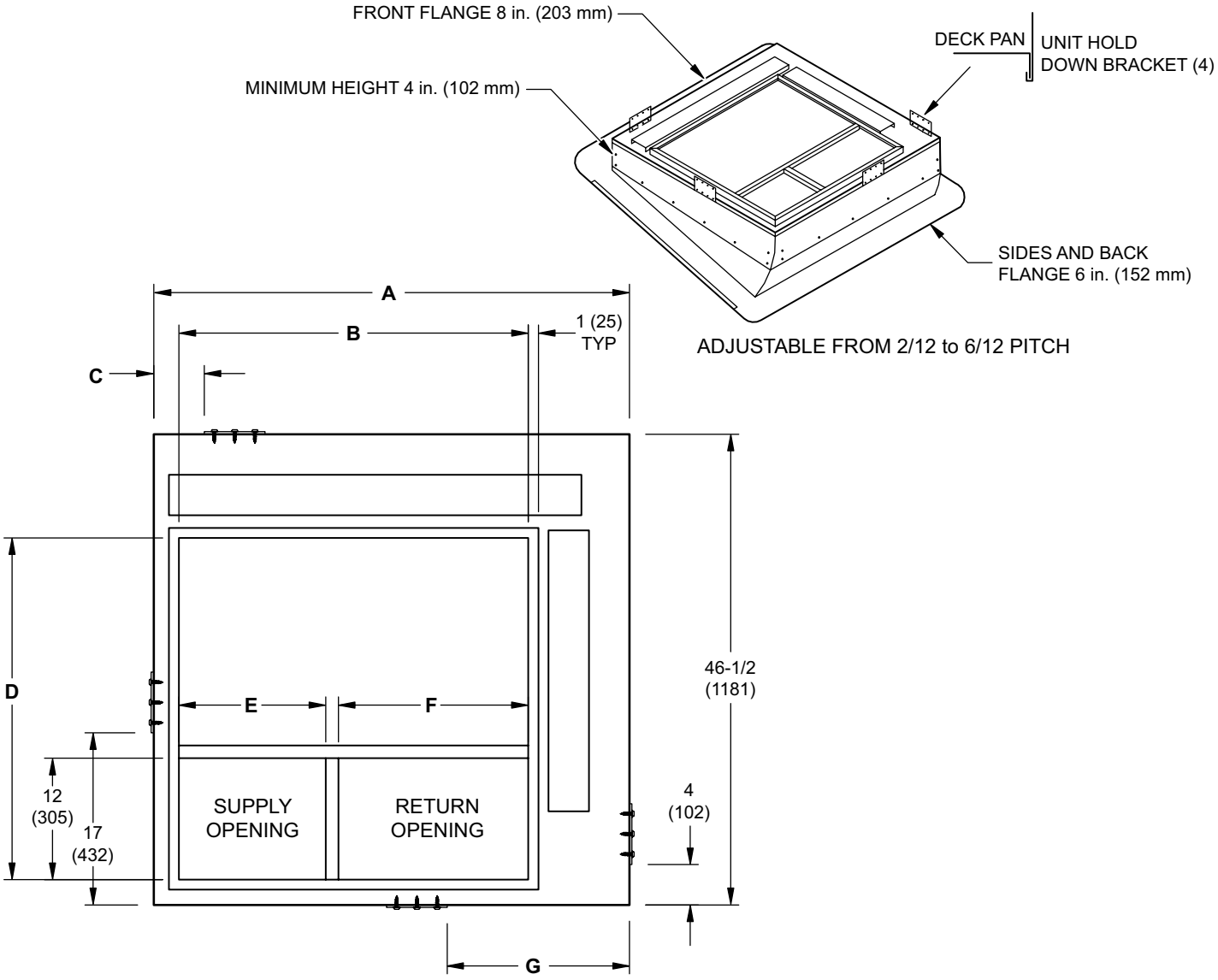
NOTE - Roof deck may be ommitted within confines of curb.

Usage	A		B		C		D		E	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
24, 36	44-5/8	1133	43	1092	18	457	44	1118	37	940
48, 60	53-1/8	1349	51	1295	24	610	52-1/2	1334	41	1041

Usage	F		G	
	in.	mm	in.	mm
24, 36	14	356	16-3/4	425
48, 60	19-1/2	495	19-3/4	502

DIMENSIONS - ACCESSORIES

ADJUSTABLE PITCH ROOF CURB



Usage	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
24, 36	47	1194	34-1/2	876	5	127	33-3/4	857
42, 60	55-1/4	1403	42-3/8	1076	10	254	33	838

Model No.	E		F		G	
	in.	mm	in.	mm	in.	mm
24, 36	14-1/2	368	18-3/4	476	18	457
42, 60	20	508	21-1/8	537	18-1/4	464

REVISIONS

Sections	Description of Change
Specification	Model number changed to incorporate “V” blower motors. “X” models changed to LRP16GX models.

Visit us at www.lennox.com
For the latest technical information, www.LennoxPros.com
Contact us at 1-800-4-LENNOX

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