### PACKAGED HEAT PUMP



# LRP14DF

Supersedes November 2016

## **Dual-Fuel Residential - R-410A**

Bulletin No. 210722 October 2018





SEER - 14.00

**HSPF - 8.00** 

**AFUE - 81%** 

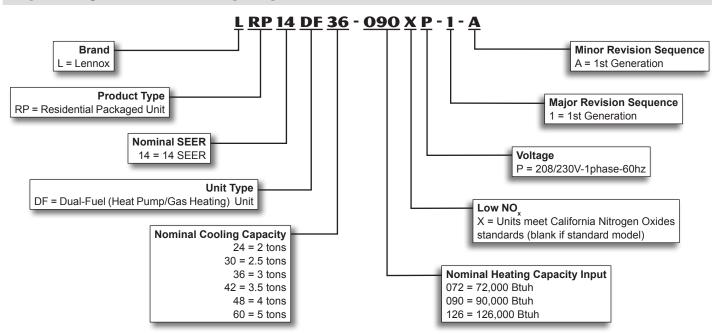
2 to 5 Tons

Cooling Capacity - 22,600 to 57,000 Btuh

Heating Capacity - 22,000 to 56,000 Btuh

Input Gas Heating Capacity - 72,000 to 126,000 Btuh

### **MODEL NUMBER IDENTIFICATION**



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### WARRANTY

Compressor - Ten year limited warranty in residential installations and five years in non-residential installations.

Heat Exchanger - Twenty year limited warranty in residential applications and ten years in non-residential applications.

All other covered components - Five years in residential installations and one year in non-residential installations.

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

## **APPROVALS**

AHRI Certified to AHRI Standard 210/240-2008.

Units are design certified by ETL Intertek.

Cooling system rated according to DOE test procedures.

Gas heating ratings are according to Department of Energy (DOE) test procedures and Federal Trade Commission (FTC) labeling regulations and are certified by AHRI.

"X" 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.

Packaged unit and components within bonded for grounding to meet safety standards required by UL.

Each unit 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 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 LRP14DF - 2 to 5 Ton Dual-Fuel / Page 2

District (SJVAPCD) only:

This furnace does not meet the SJVAPCD Rule 4905 NO emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450.

## **APPLICATIONS**

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

### **DUAL-FUEL OPERATION**

In the heating mode the unit operates the heat pump for 1st stage heating. If 1st stage is not satisfied, the 2nd stage will activate gas heating (secondary heat source).

The systems' dual-fuel (two-stage heat) thermostat will changeover to gas heating operation at outdoor ambient temperatures below the field selected changeover temperature.

Heat pump operation automatically terminates on gas heating start-up.

Blower speeds automatically change between heat pump and gas heat operation.

Blower operates in high speed during 1st stage (heat pump) operation and is terminated during changeover to gas heat operation.

Blower runs in low speed during 2nd stage (gas heat) operation.

If continuous blower operation is available on thermostat, change in blower speed automatically occurs during heat pump heating to gas heat changeover.

### REFRIGERATION SYSTEM

### R-410A Refrigerant

Non-chlorine, ozone friendly, R-410A. Unit pre-charged with refrigerant.





### **Indoor and Outdoor Coils**

Copper tube with aluminum fin coils.

## **Anti-Microbial Indoor Coil Drain Pan**



Anti-Microbial additive resists Microban growth of mold and mildew on crobial product protection drain pan which improves indoor

air quality and reduces drain line blockage.

## **Outdoor Coil Fan**

Weather protected heavy duty outdoor coil fan motor with coated steel fan blades for long life.

Internally mounted.

Totally enclosed motor.

Fan guard constructed of corrosion-resistant coated steel.

### **Reversing Valve**

4-way interchange reversing valve effects a rapid change in direction of refrigerant flow resulting in quick changeover from cooling to heating and vice versa.

### **REFRIGERATION SYSTEM (continued)**

### **High Pressure Switch**

Shuts off unit if abnormal operating conditions cause the discharge pressure to rise above setting.

Protects compressor from excessive condensing pressure. Automatic reset.

### **Loss of Charge Switch**

Provides loss of charge protection by shutting off unit if liquid pressure falls below setting.

### **Optional Accessories**

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

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

### SCROLL COMPRESSOR

Compressor features high efficiency with uniform suction flow, constant discharge flow and high volumetric efficiency and quiet operation.

Compressor consists of two involute spiral scrolls matched together to generate a series of crescent shaped gas pockets between them.

During compression, one scroll remains stationary while the other scroll orbits around it. Gas is drawn into the outer pocket, the pocket is sealed as the scroll rotates.

As the spiral movement continues, gas pockets are pushed to the center of the scrolls. Volume between the pockets is simultaneously reduced.

When 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.

Scroll compressor is tolerant to the effects of slugging and contaminants. If this occurs, scrolls separate, allowing liquid or contaminants to to be worked toward the center and discharged.

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 resilient rubber mounts for vibration free operation.

#### **Compressor Crankcase Heater**

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

### **Optional Accessories**

## **Compressor Hard Start Kit**

Single-phase units are equipped with a PSC compressor motor. This type of motor normally doesn't need a potential relay and start capacitor.

In conditions such as low voltage, this kit may be required to increase the compressor starting torque.

## **GAS 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 unit cabinet. Heat exchanger has been 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 and each burner may be removed individually.

#### **Gas Control Valve**

24 volt redundant combination gas control valve combines manual shut off valve (On-Off), automatic electric valve (dual) and gas pressure regulation into a compact combination control.

### **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 also operates for the first 10 seconds of every cooling cycle to prevent insects from nesting in the flue outlet during cooling season.

## **Limit Controls**

Automatic reset, primary limit is accurately located.

Primary limit factory installed on heating vestibule panel on all units.

### Flame Rollout Switch

Manual reset switch is factory installed on burner box. Switch provides protection from abnormal operating conditions.

## **Ignition Control Board**

Ignition control board with LED diagnostics.

## **GAS HEATING SYSTEM (continued)**

### **Optional Accessories**

## **LPG/Propane Conversion Kit**

Required for field changeover from natural gas to LPG/ Propane.

### **SUPPLY AIR BLOWER**

### **Direct Drive Blower**

Each blower wheel is statically and dynamically balanced.

Multi-speed, direct drive blower motor on 42 and 48 models.

Constant-torque ECM direct drive motor on the 24, 30, 36 and 60 models.

Change in blower speed is easily accomplished by simple wiring change on blower motor.

Blower assembly easily removed for servicing

See Blower Performance tables.

## **CABINET**

Conditioned areas insulated with foil faced insulation to minimize 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 and 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. Kit consists of 2 duct covers to block off horizontal air openings on side of unit. Required for field conversion to downflow (vertical) air. Kit consists of 2 duct covers to block off horizontal air openings on side of unit. Kit also includes drain pan overflow switch to monitor 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)

Mates to unit.

Roof curb can be assembled using interlocking tabs to 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 allowing 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.

## **AIR FILTER (required)**

Filters are not furnished - must be field provided.

#### Internal Filter Rack Kits

Available for 1 in. thick filters. Kit contains filter rails for mounting filters internal to unit. Filters must be field provided. Filters are available separately.

### **CONTROLS**

Electronic blower control.

Single pole contactor.

Trade available components.

#### **Defrost Control**

Defrost control furnished as standard equipment.

Gives a defrost cycle for every 30, 60 or 90 minutes (adjustable) of compressor "on" time at outdoor temperatures below 35°F.

Units are quiet-shift enabled. The compressor is de-energized entering and exiting the defrost cycle, reducing system sounds.

Sensor mounted on liquid line determines when defrost cycle is required and also when to terminate cycle.

Anti-short cycle, timed-off control incorporated into the board.

#### 24 Volt Transformer

40VA transformer furnished and factory installed in control area.

#### **Optional Accessories**

### iComfort® Equipment Interface Module (EIM)

Allows the iComfort® Thermostat to be used with residential packaged units.

Contains all necessary relays and controls to operate the system and communicate with the iComfort® Thermostat.



## **CONTROLS** (continued)

NOTE - The iComfort® Equipment Interface Module is required for proper operation of iComfort® Thermostats with residential packaged units.

#### iComfort® S30 Thermostat

The iComfort® S30 Thermostat recognizes and connects conventional heating/cooling products to automatically

configure and control the system (based on user-specified settings) for the highest level of comfort, performance and efficiency.



Wi-Fi remote temperature monitoring

and adjustment through a home wireless network for desktop PCs, laptops and apps for smartphones or tablets. Also displays service alerts and reminders.

A simple easy-to-use touchscreen allows complete system configuration. Scheduled maintenance alerts, system warnings and troubleshooting are also displayed on thermostat screen.

One-Touch Away Mode - A quick and easy way to set the cooling and heating setpoints while away.

Weather-On-Demand - Live up-to-date weather data and five-day forecasts.

Easy to read 7 in. high definition color display (measured diagonally).

High Definition Color Display, Mag-Mount, Smart Hub Controller, wallplate (for retrofit installations) furnished for easy installation.

See the iComfort® S30 Thermostat Product Specifications bulletin in the Controls section for more information.

#### iComfort Wi-Fi® Thermostat

The *iComfort Wi-Fi*® *Thermostat* recognizes and connects conventional heating/cooling products

to automatically configure and control the system (based on user-specified settings) for the highest level of comfort, performance and efficiency.



Wi-Fi remote

temperature monitoring and adjustment through a home wireless network for desktop PCs, laptops and apps for smartphones or tablets. Also displays service alerts and reminders.

A simple easy-to-use touchscreen allows complete system configuration. Scheduled maintenance alerts, system warnings and troubleshooting are also displayed on thermostat screen.

One-Touch Away Mode - A quick and easy way to set the cooling and heating setpoints while away.

Weather-On-Demand - Live up-to-date weather data and five-day forecasts.

Easy to read 7-inch color screen (measured diagonally). See the *iComfort Wi-Fi® Thermostat* Product Specifications bulletin in the Controls section for more information.

### iComfort® M30 Smart Wi-Fi Thermostat

Wi-Fi-enabled, electronic 7-day, universal, multi-stage, programmable, touchscreen

programmable, touchscreer thermostat.

4 Heat/2 Cool.

Auto-changeover.

Dual-fuel control with optional outdoor sensor.

Controls dehumidification during cooling mode and

humidification during heating mode.

7:28 pm

Système

Fear Cool

Frago

Cooks

79°

Outside

Modes / schedules

LENNOX

Offers enhanced capabilities including humidification / dehumidification / dewpoint measurement and control, *Humiditrol*® control, and equipment maintenance reminders.

Easy to read 4.3 in. color touchscreen (measured diagonally).

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).

Up to four separate schedules are available plus Schedule IQ™.

One-Touch Away Mode - A quick and easy way to set the cooling and heating setpoints while away.

Smart Away™ - Uses geo-fencing technology to determine when the homeowner is within a predetermined distance from the home to operate the system when leaving, away and arriving.

Amazon® Alexa-enabled, smart-home-compatible. It works with Amazon Echo, Echo Dot and Tap devices.

Wi-Fi remote monitoring and adjustment through a home wireless network for desktop PCs, laptops and apps for smartphones or tablets.

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

SPECIFIC	ATIONS							
<b>General Data</b>		Model No.	LRP14DF24	LRP14DF30	LRP14DF36	LRP14DF42	LRP14DF48	LRP14DF60
		Nominal Tonnage	2	2.5	3	3.5	4	5
Cooling /	Cooling	Total capacity - Btuh	22,600	28,600	34,000	40,000	46,000	57,000
Heating		Total unit watts	2055	2580	3090	3635	4180	5180
Performance	<sup>1</sup> SEER (Btuh/V		14.00	14.00	14.00	14.00	14.00	14.00
		EER (Btuh/Watt)	11.00	11.00	11.00	11.00	11.00	11.00
	High Temp.	Total capacity - Btuh	22,000	27,000	33,400	39,000	45,000	56,000
	Heat	Total unit watts	1700	2140	2645	3175	3565	4440
		COP	3.80	3.70	3.70	3.60	3.70	3.70
	HSP	F Region IV / Region V	8.00 / 6.95	8.00 / 6.95	8.00 / 6.95	8.00 / 6.95	8.00 / 6.95	8.00 / 6.95
	Low Temp.	Total capacity - Btuh	12,300	15,900	20,000	23,600	27,000	33,600
	Heat	Total unit watts	1570	2025	2550	3010	3445	4105
		COP	2.30	2.30	2.30	2.30	2.30	2.40
	<sup>2</sup> Sou	nd Rating Number (dB)	78	78	78	78	78	78
Gas Heat Avai	lable - See Ne	ext Page	-072(X)	-072(X)	-072(X), -090	-072(X), -090	-126(X)	-126(X)
Refrigerant		Туре	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
		Charge	5 lbs. 11 oz.	6 lbs. 0 oz.	5 lbs. 12 oz.	10 lbs. 5 oz.	10 lbs. 3 oz.	10 lbs. 1 oz.
Condensate d	rain size (fpt)	- in.	3/4	3/4	3/4	3/4	3/4	3/4
Outdoor Coil		Net Face Area - sq. ft.	16.4	16.4	16.4	16.6	16.6	18.6
	Tube Dia i	n. and Number of rows	5/16 - 1	5/16 - 1	5/16 - 1	5/16 - 2	5/16 - 2	5/16 - 2
		Fins per Inch	22	22	22	22	22	22
Outdoor Coil		Motor horsepower	1/6	1/6	1/6	1/4	1/4	1/4
Fan		Diameter - in.	22	22	22	24	24	24
		Number of blades	4	4	4	3	3	3
Indoor Coil		Net Face Area - sq. ft.	4.4	4.4	4.4	6.8	6.8	6.8
		Tube Diameter - in.	5/16	3/8	3/8	3/8	3/8	3/8
		Number of rows	3	3	3	3	3	3
		Fins per Inch	15	15	15	15	15	15
Indoor Blower	Blower whe	el size dia. x width - in.	10 x 6	10 x 6	10 x 8	10 x 10	10 x 10	12 x 9
		Motor horsepower	1/4	1/4	1/3	1/3	1/2	1
Net weight of	basic unit - Ib	S.	366	374	389	493	506	528
Shipping weig	ht of basic ur	nit (1 Pkg.) - Ibs.	429	437	452	566	579	601
Electrical char	racteristics (6	0 hz)			208/230V	-1ph-60hz		
ELECTRIC	CAL DATA							
Line voltage d	ata - 60hz 1 p	hase	208/230V	208/230V	208/230V	208/230V	208/230V	208/230V
<sup>3</sup> Maximum ov	ercurrent pro	tection (amps)	25	30	35	40	45	60
<sup>4</sup> Minimum Circuit Ampacity			17.4	20.7	24.4	24.4	27	39.7
Compressor		Rated load amps	10.9	13.5	15.4	15.9	18	24.3
-		Locked rotor amps	59.3	72.5	83.9	85	117	144.2
Outdoor Coil		Full load amps	1.0	1.0	1.0	1.7	1.7	1.7
Fan Motor		Locked rotor amps	1.9	1.9	1.9	3.2	3.2	3.2
Indoor Blower	,	Full load amps	2.8	2.8	4.1	2.8	2.8	7.6

5.4

6.8

Motor

Cooling Ratings - 95°F outdoor air temperature and 80°F db/67°F wb entering indoor coil air.

High Temperature Heating Ratings - 47°F db/43°F wb outdoor air temperature and 70°F entering indoor coil air. Low Temperature Heating Ratings - 17°F db/15°F wb outdoor air temperature and 70°F entering indoor coil air.

Locked rotor amps

<sup>&</sup>lt;sup>1</sup> AHRI Certified to AHRI Standard 210/240:

 $<sup>^{2}</sup>$  Sound Rating Number rated in accordance with test conditions included in AHRI Standard 270.

<sup>&</sup>lt;sup>3</sup> Annual Fuel Utilization Efficiency based on U.S. DOE test procedures and FTC labeling regulations.

<sup>&</sup>lt;sup>4</sup> Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

SPECIFICATIONS - GAS HEAT						
	Model	24, 30, 36, 42	36, 42	48, 60		
	Heating Input	-072	-090	-126		
Heating	Input	72,000	90,000	126,000		
Capacity Btuh	Output	58,400	72,900	102,100		
<sup>1</sup> AFUE		81%	81%	81%		
Temperature Rise - °F		40-70	40-70	45-75		
Gas Supply Connection (FPT)	) - in.	1/2	1/2	1/2		

Min. Recommended Gas Supply Pressure

5 in. w.g. Natural Gas, 11 in. w.g. LPG/Propane

OPTIONAL GAS HEAT ACCESSORIES - ORDER SEPARATELY							
LPG/Propane Conversion Kit	11U77	11U77	11U77				

<sup>&</sup>lt;sup>1</sup> 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 modification. At 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.

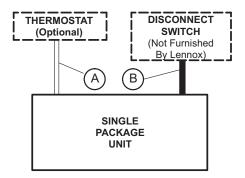
OPTIONAL A	ACCESSORIES -	ORDER	SEPARA	TELY				
	M	odel No.	LRP14DF24	LRP14DF30	LRP14DF36	LRP14DF42	LRP14DF48	LRP14DF60
Compressor Hard	Start Kit	10J42	•	•	•		•	•
		88M91				•		
<b>Downflow Conver</b>		11U80	•	•	•			
(includes drain pa	in overflow switch)	11U81				•	•	•
Drain Pan Overflo	w Switch	11U75	•	•	•	•	•	•
<sup>1</sup> Internal Filter	(1) 20 x 20 + (1) 14 x 20	11U73	•	•	•			
Rack Kit (filters not furnished)	(2) 20 x 20	11U74				•	•	•
Lifting Brackets		11U76	•	•	•	•	•	•
Clip Curbs	8 in. Height	14W71	•	•	•			
		14W72				•	•	•
	14 in. Height	14V68	•	•	•			
		14V69				•	•	•
Adjustable Pitch F	Roof Curb	Y7975	•	•	•			
		Y7976				•	•	•
CONTROLS	ORDER SEPAR	ATELY						
iComfort® S30 The	ermostat	12U67	•	•	•	•	•	•
iComfort Wi-Fi® Thermostat 10F81		•	•	•	•	•	•	
Equipment Interface Module (EIM) - 10T50 Required with iComfort® thermostat		•	•	•	•	•	•	
iComfort® M30 Sm	nart Wi-Fi Thermostat	15Z69	•	•	•	•	•	•
<sup>2</sup> Outdoor Temper	ature Sensor	X2658	•	•	•	•	•	•
<sup>3</sup> Discharge Air Te	mperature Sensor	88K38	•	•	•	•	•	•

<sup>&</sup>lt;sup>1</sup> Filters are not furnished and must be field provided.

<sup>&</sup>lt;sup>2</sup> Remote Outdoor Temperature Sensor is used with residential packaged units. Allows the thermostat to display outdoor temperature. Required in dual-fuel applications.

<sup>&</sup>lt;sup>3</sup> Used with the iComfort® S30 and iComfort Wi-Fi® Thermostats for optional service diagnostics.

## **FIELD WIRING**



- A Five Wire Low Voltage (Electronic)
- B Two Wire Power (See Electrical Data Table)

If multiple disconnects are used on units with electric heat; there must be two-wire power provided for each disconnect

- Field Wiring Not Furnished -

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							
Тор	48	1219							

COOLING RATINGS																
	Indoor						Out	door Ter	nperat	ure - D	В					
Model	Temp DB/WB		65°F			82°F		95°F			105°F			115°F		
	°F	Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW	Btuh	S/T	kW
	85/72	29,500	0.63	1.40	28,100	0.65	1.67	27,000	0.67	1.89	25,400	0.72	2.06	23,800	0.78	2.23
L DD44DE04	80/67	27,800	0.70	1.39	26,300	0.72	1.65	24,800	0.74	1.89	23,300	0.80	2.07	21,800	0.86	2.24
LRP14DF24	75/63	26,400	0.73	1.38	24,400	0.76	1.66	22,800	0.79	1.87	21,500	0.84	2.06	20,300	0.88	2.25
	75/57	23,300	1.00	1.38	21,800	1.00	1.65	20,600	1.00	1.86	20,100	1.00	2.05	19,500	1.00	2.25
	85/72	29,700	0.66	1.92	31,300	0.69	2.27	32,600	0.71	2.53	29,600	0.74	2.71	26,600	0.76	2.89
L DD44DE20	80/67	33,500	0.71	1.89	32,700	0.74	2.18	30,100	0.76	2.48	27,900	0.80	2.69	25,600	0.84	2.90
LRP14DF30	75/63	31,700	0.75	1.85	29,200	0.79	2.21	27,400	0.82	2.49	25,600	0.84	2.69	23,800	0.86	2.89
	75/57	29,900	1.00	1.87	27,500	1.00	2.24	25,800	1.00	2.52	24,500	1.00	2.71	23,300	1.00	2.89
	85/72	46,200	0.61	2.35	43,900	0.63	2.79	42,000	0.65	3.13	37,900	0.73	3.40	33,800	0.82	3.68
L DD44DE26	80/67	43,800	0.67	2.33	41,000	0.71	2.73	37,100	0.74	3.10	34,000	0.81	3.38	30,900	0.88	3.66
LRP14DF36	75/63	41,600	0.70	2.31	37,900	0.73	2.73	35,100	0.76	3.06	32,000	0.83	3.36	28,900	0.90	3.66
	75/57	34,500	1.00	2.30	31,600	1.00	2.72	29,300	1.00	3.05	28,700	1.00	3.35	28,100	1.00	3.65
	85/72	53,200	0.64	2.58	49,000	0.67	3.04	45,700	0.70	3.39	42,100	0.75	3.71	38,500	0.80	4.04
LRP14DF42	80/67	49,800	0.72	2.56	44,800	0.75	2.98	40,700	0.77	3.38	38,000	0.82	3.72	35,300	0.88	4.05
LNF 14DF42	75/63	45,700	0.76	2.56	41,000	0.79	3.03	37,400	0.81	3.39	35,100	0.86	3.72	32,900	0.91	4.06
	75/57	41,200	1.00	2.55	37,800	1.00	3.02	35,200	1.00	3.38	33,500	1.00	3.72	31,900	1.00	4.06
	85/72	67,000	0.62	2.95	60,500	0.64	3.48	55,600	0.66	3.89	50,100	0.71	4.39	44,600	0.76	4.89
LRP14DF48	80/67	60,400	0.68	2.94	51,700	0.73	3.44	48,400	0.74	3.93	44,700	0.78	4.40	41,100	0.83	4.87
LINI 14DI 40	75/63	55,100	0.71	2.92	49,100	0.74	3.47	44,600	0.76	3.89	42,000	0.82	4.38	39,300	0.88	4.87
	75/57	47,100	1.00	2.91	43,100	1.00	3.44	40,100	1.00	3.84	39,000	1.00	4.35	38,000	1.00	4.86
	85/72	74,100	0.62	3.54	68,100	0.65	4.32	63,500	0.67	4.91	60,100	0.71	5.53	56,600	0.75	6.14
LRP14DF60	80/67	69,200	0.69	3.51	63,000	0.71	4.24	57,700	0.73	4.85	55,000	0.78	5.48	52,400	0.82	6.10
LIXI 14DI 00	75/63	64,200	0.72	3.49	57,100	0.74	4.19	51,700	0.76	4.72	50,400	0.80	5.39	49,000	0.84	6.07
	75/57	57,500	1.00	3.44	51,700	1.00	4.21	47,300	1.00	4.80	46,900	1.00	5.42	46,500	1.00	6.04

HEATING	HEATING RATINGS											
		Outdoor Temp - DB/WB °F										
Model	0/	<b>'</b> 0	17/	15	35	/33	47	/43	62	/56		
	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW	Btuh	kW		
LRP14DF24	7,000	1.55	12,300	1.60	17,900	1.68	22,000	1710	27,800	1.75		
LRP14DF30	9,900	1.92	15,900	2.00	22,200	2.10	27,300	2160	33,000	2.23		
LRP14DF36	13500	2.49	20,100	2.50	24,100	2.59	34,100	2730	40,500	2.80		
LRP14DF42	14,800	2.99	23,600	3.10	33,000	3.29	40,000	3.36	48,700	3.45		
LRP14DF48	18,700	3.26	27,000	3.40	35,800	3.77	46,400	3.91	57,700	4.05		
LRP14DF60	20,100	3.89	33,700	4.10	48,100	4.51	57,000	4.78	67,400	4.88		

## **BLOWER DATA**

## <sup>1</sup> LRP14DF24 BLOWER PERFORMANCE

External Static	Air Volume at Specific Blower Taps (cfm)							
Pressure in. w.g.	Tap 1	Tap 2	Tap 3					
0.10	680	890	1000					
0.20	590	830	960					
0.30	550	800	930					
0.40	500	760	880					
0.50	450	710	840					
0.60	380	680	810					
0.70		640	770					
0.80		600	730					

NOTE - All air data measured external to unit with dry coil and less filter.

### <sup>1</sup> LRP14DF30 BLOWER PERFORMANCE

External Static	Air	Air Volume at Specific Blower Taps (cfm)							
Pressure in. w.g.	Tap 1	Tap 2	Tap 3						
0.10	680	1100	1180						
0.20	640	1070	1160						
0.30	600	1050	1130						
0.40	570	1020	1090						
0.50	530	990	1070						
0.60	490	960	1040						
0.70		930	1010						
0.80		900	960						

NOTE - All air data measured external to unit with dry coil and less filter.

### <sup>1</sup> LRP14DF36 BLOWER PERFORMANCE

External Static	Air	Air Volume at Specific Blower Taps (cfm)						
Pressure in. w.g.	Tap 1	Tap 2	Tap 3					
0.10	900	1330	1520					
0.20	860	1280	1490					
0.30	830	1250	1460					
0.40	770	1230	1430					
0.50	720	1200	1380					
0.60	680	1180	1340					
0.70	620	1130	1250					
0.80	560	1100	1170					

 $\ensuremath{\mathsf{NOTE}}$  - All air data measured external to unit with dry coil and less filter.

# <sup>1</sup> MOTOR SPEED TAP SETTINGS (24, 30 and 36 Models with Constant Torque Blower Motor Only)

Tap 1	Fan Only
Tap 2	Low Static Cooling
Tap 3	High Static Cooling
Tap 4 and 5	Taps 4 and 5 designed for Heating mid-point temperature rise:
Tap 4	Nominal 0.2 ext. static pressure
Tap 5	Nominal 0.5 ext. static pressure

## **BLOWER DATA**

## LRP14DF42 BLOWER PERFORMANCE

External Static	Air	Volume at Specific Blower Taps (c	fm)
Pressure in. w.g.	Tap 2	Tap 3	Tap 4
0.10	1790	1500	1070
0.20	1740	1470	1050
0.30	1670	1430	1010
0.40	1590	1370	980
0.50	1510	1310	920
0.60	1410	1240	870
0.70	1310	1140	820
0.80	1210	1010	690

NOTE - All air data measured external to unit with dry coil and less filter.

### LRP14DF48 BLOWER PERFORMANCE

External Static	Air Volume at Specific Blower Taps (cfm)						
Pressure in. w.g.	Tap 2	Tap 3	Tap 4				
0.10	1970	1730	1520				
0.20	1890	1690	1480				
0.30	1790	1600	1430				
0.40	1690	1540	1370				
0.50	1600	1450	1310				
0.60	1510	1360	1230				
0.70	1400	1270	1140				
0.80	1280	1150	1050				

NOTE - All air data measured external to unit with dry coil and less filter.

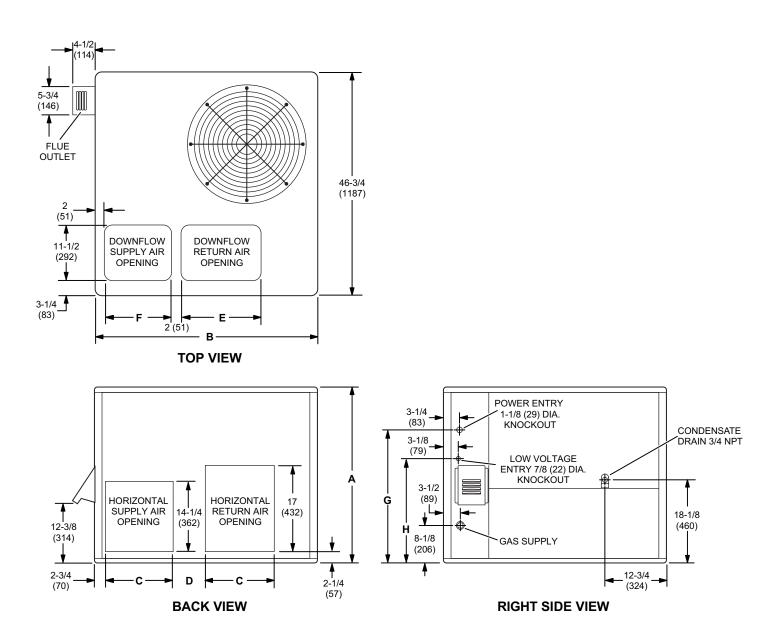
### <sup>1</sup> LRP14DF60 BLOWER PERFORMANCE

External Static	Air	Volume at Specific Blower Taps (c	fm)
Pressure in. w.g.	Tap 1	Tap 2	Tap 3
0.10	1400	1920	2240
0.20	1320	1870	2200
0.30	1260	1820	2140
0.40	1200	1770	2100
0.50	1120	1720	2060
0.60	1060	1670	2020
0.70	980	1450	1980
0.80	900	1360	1950

NOTE - All air data measured external to unit with dry coil and less filter.

## <sup>1</sup> MOTOR SPEED TAP SETTINGS (For 60 Model with Constant Torque Blower Motor Only)

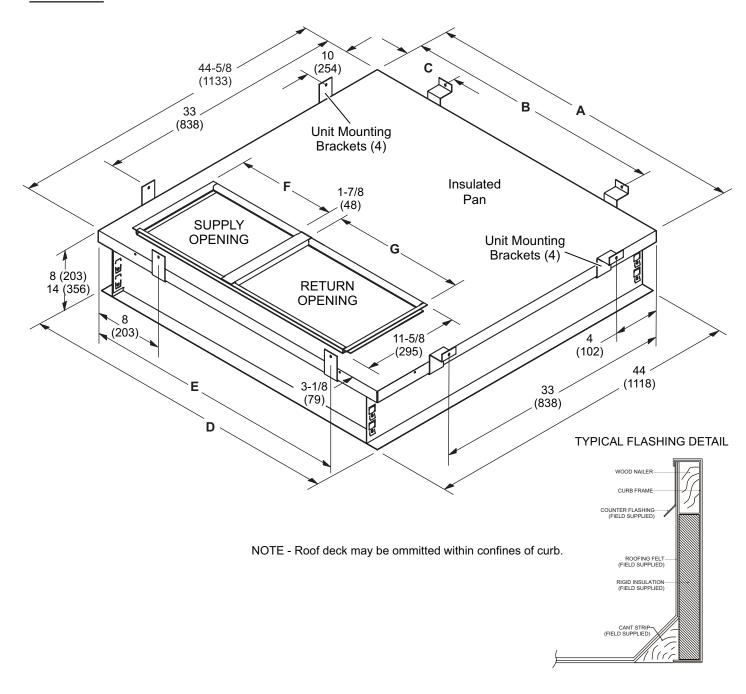
Fan Only
Low Static Cooling
High Static Cooling
Taps 4 and 5 designated for Heating Mid-Point Temperature Rise:
Nominal 0.2 ext. static pressure
Nominal 0.5 ext. static pressure



Model No	A B		С		D		Е			
Model No.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
LRP14DF24, 30, 36	36-7/8	937	46-3/4	1187	13-3/8	340	5-7/8	149	16-3/4	425
LRP14DF42, 48, 60	40-7/8	1038	55-1/4	1403	18-1/8	467	4-5/8	117	19-3/4	502
Madal Na	F G		3	Н						
Model No.	in.	mm	in.	mm	in.	mm	•			
LRP14DF24, 30, 36	14	356	30-1/8	765	25-1/2	648	•			
LRP14DF42, 48, 60	19-1/2	495	34-1/8	857	29-1/2	749	•			

## **DIMENSIONS - ACCESSORIES - INCHES (MM)**

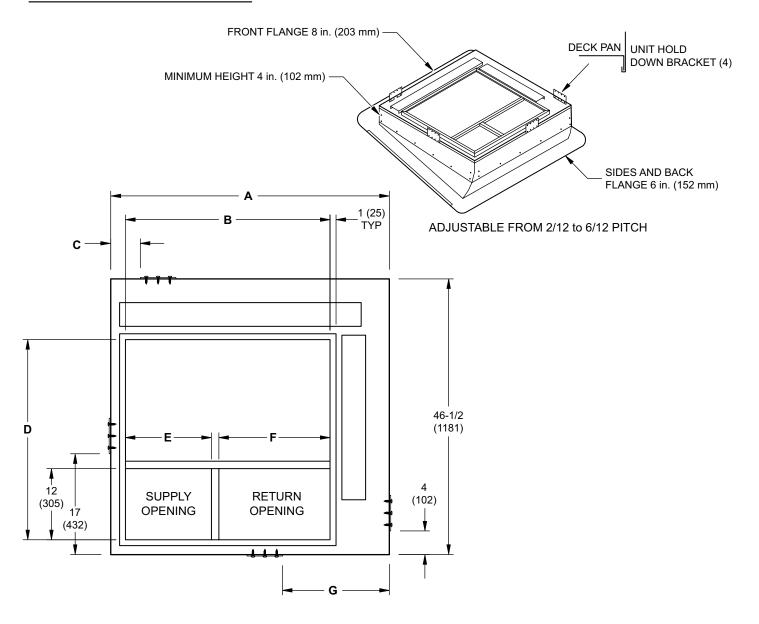
## **CLIP CURB**



Hanna		Α		В		С		D		E	
Usage	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	
24, 30, 36	44-5/8	1133	43	1092	18	457	44	1118	37	940	
42, 48, 60	53-1/8	1349	51	1295	24	610	52-1/2	1334	41	1041	
Henry	ı	=	(	G		•					
Usage	in.	mm	in.	mm	-						
24, 30, 36	14	356	16-3/4	425	-						
42, 48, 60	19-1/2	495	19-3/4	502							

## **DIMENSIONS - ACCESSORIES - INCHES (MM)**

## ADJUSTABLE PITCH ROOF CURB



Hoose	A		E	В		С		D	
Usage	in.	mm	in.	mm	in.	mm	in.	mm	
24, 30, 36	47	1194	34-1/2	876	5	127	33-3/4	857	
42, 48, 60	55-1/4	1403	42-3/8	1076	10	254	33	838	
	E		F		G				
Model No.	in.	mm	in.	mm	in.	mm			
24, 30, 36	14-1/2	368	18-3/4	476	18	457			
42, 48, 60	20	508	21-1/8	537	18-1/4	464	•		

REVISIONS					
Sections	Description of Change				
Approvals	Added statements about South Coast Air Quality Management District (SCAQMD) and San Joaquin Valley Air Pollution Control District (SJVAPCD) rules for furnaces with more than 14 ng/J ratings.				









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