ML14KP1

MERIT® SERIES

Single-Stage | Quantum™ Coil | R-454B | 1-Phase | 60Hz

RESIDENTIAL

PRODUCT SPECIFICATIONS (EHB)



1.5 to 5 Tons SEER2 up to 17.0 HSPF2 up to 8.2 Cooling Capacity | 18,000 to 58,000 Btuh Heating Capacity | 17,400 to 60,000 Btuh



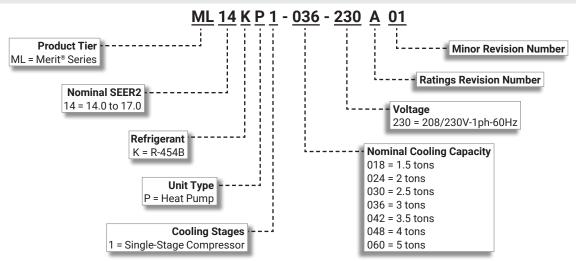








MODEL NUMBER IDENTIFICATION



FEATURE HIGHLIGHTS



- 1. Outdoor Coil Fan
- 2. Quantum™ Coil
- 3. Expansion Valve Outdoor Unit
- 4. High Capacity Liquid Line Drier
- 5. Four-Way Reversing Valve
- 6. Scroll Compressor
- 7. Defrost Control
- 8. Heavy Gauge Steel Cabinet
- 9. Refrigerant Line Access

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APPROVALS AND WARRANTY

APPROVALS

- · AHRI Standard 210-240-2023 certified
- AHRI Certified system match-ups and expanded ratings, visit www.LennoxPros.com
- ENERGY STAR® certified
- Sound rated to AHRI Standard 270-2008 test conditions
- Tested in Lennox' Research Laboratory environmental test room
- Rated According to U.S. Department of Energy (DOE) test procedures
- · Unit and components ETL, NEC and CEC bonded for grounding to meet safety standards for servicing
- ETL certified (U.S. and Canada)
- ISO 9001 Registered Manufacturing Quality System

WARRANTY

- · Compressor:
 - · Limited five years in residential/non-residential installations
- · All other covered components:
 - Limited five years in residential installations
 - Limited one year in non-residential installations

NOTE - Refer to Lennox® Basic Limited Warrenty at www.Lennox.com for additional details.

FEATURES

APPLICATIONS

- 1.5 through 5 tons
- Single phase power supply
- Sound levels low as 74 dBA
- Vertical air discharge
- Applicable to indoor air handlers or gas furnaces with indoor add-on coils
- Shipped completely factory assembled, piped and wired
- **NOTE** When heat pumps are used with gas furnaces, a dual-fuel compatible thermostat or zone control system with dual-fuel capabilities must be used (order separately).
- **NOTE** Installer must set outdoor unit, connect refrigerant lines and make electrical connections to complete job.

REFRIGERATION SYSTEM

R-454B Refrigerant

- Low GWP (Global Warming Potential)
- Zero ODP (Ozone Depletion Potential)
- Low Toxicity/Lower Flammability A2L
- Unit is factory pre-charged
- **NOTE** Total system refrigerant charge is dependent on outdoor unit size, indoor unit size and refrigerant line length.
- **NOTE** Refer to the unit-mounted charging sticker to determine correct amount of charge required.

1 Outdoor Coil Fan

- · Direct drive PSC fan
- · Vertical air discharge
- Louvered steel top fan guard
- · Totally enclosed fan motor
- Ball bearings
- · Inherently protected

2 Quantum™ Coil

- Lennox designed and fabricated coil
- Enhanced aluminum alloy tube/enhanced fin coil
- Superior corrosion resistance
- Ripple-edged aluminum fins
- Aluminum tube construction
- · Lanced fins for maximum fin surface exposure
- · Fin collars grip tubing for maximum contact area
- Flared shoulder tubing connections
- Factory tested under high pressure
- Entire coil is accessible for cleaning

3 Expansion Valve - Outdoor Unit

- Designed and sized for heat pump systems
- Sensing bulb senses suction temperature during heating cycle

High Pressure Switch

- Protects the system from high pressure conditions
- Automatic reset

FEATURES

REFRIGERATION SYSTEM (continued)

Low Pressure Switch

- · Shuts off unit if suction pressure falls below setting
- · Loss of charge and freeze-up protection
- Automatic reset

4 High Capacity Liquid Line Drier

- · Factory installed in the liquid line
- Drier traps moisture or dirt that could contaminate the system
- 100% molecular-sieve, bead type, bi-flow drier

5 Four-Way Reversing Valve

- Rapid changeover of refrigerant flow direction from cooling to heating and vice versa
- Operates on pressure differential between outdoor unit and indoor coil

Optional Accessories

Check/Expansion Valve Kits

- Field installed on indoor units (if required)
- See TXV Usage table
- Chatleff-style fitting

Freezestat

- · Senses suction line temperature
- Cycles compressor off when suction line temperature falls below freezestat setpoint
- Opens at 29°F and closes at 58°F
- Installs on or near the discharge line of the evaporator or on the suction line

Refrigerant Line Kits

- · Refrigerant lines are shipped refrigeration clean
- Lines are cleaned, dried, pressurized and sealed at factory
- Suction line fully insulated
- · Lines are stubbed at both ends

INDOOR REFRIGERANT DETECTION SYSTEM (RDS)

- Complies with UL 60335-2-40 approved standard
- Required for all systems using R-454B refrigerant
- · Factory or field installed on all indoor units
- Consists of a RDS refrigerant detection sensor and a mitigation control in the indoor unit
- Ensures safe operation for systems equipped with R-454B refrigerant
- · Indoor sensor will detect any R-454B refrigerant
- If R-454B refrigerant is detected, the refrigerant detection system will stop compressor operation and operate the blower to reduce concentrations in the conditioned space
- Once safe levels are reached the HVAC system will resume normal operation
- Refer to indoor unit Product Specifications documents for additional details

COMPRESSOR

6 Single-Stage Scroll Compressor

- High efficiency with uniform suction flow
- Constant discharge flow, high volumetric efficiency and quiet operation
- Low gas pulses during compression reduces operational sound levels
- Compressor motor is internally protected from excessive current and temperature
- Muffler in discharge line reduces operating sound levels
- Compressor is installed in the unit on resilient rubber mounts for vibration free operation

Scroll 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

Compressor Crankcase Heater (Factory installed on -036-042-048-060 models)

 Prevents migration of liquid refrigerant into compressor and ensures proper compressor lubrication



FEATURES

COMPRESSOR (Continued)

Optional Accessories

Compressor Crankcase Heater (Optional for -018-024-030 models)

 Prevents migration of liquid refrigerant into compressor and ensures proper compressor lubrication

Compressor Sound Cover

- Reinforced vinyl compressor cover
- 1-1/2 inch thick batt of fiberglass insulation
- · Hook and loop fastening tape on all open edges

CONTROLS



Defrost Control

- · Time/temperature defrost control
- Defrost cycle every 30, 60 or 90 minutes of compressor "on" time at outdoor coil temperatures below 42°F
- Factory setting 90 minutes
- Anti-short cycle, timed-off control 5 minutes
- Compressor delay 30 seconds (field selectable) cycles the compressor in and out of defrost mode
- High and low pressure switch monitoring (five-trip lockout)
- Two diagnostic LEDs furnished for troubleshooting
- · Conveniently located in control box

Optional Accessories

Thermostat

- · Thermostat is not furnished with unit
- · See Page 6

Compressor Low Ambient Cut-Off

- Non-adjustable switch (low ambient cut-out)
- Prevents compressor operation in cooling mode when outdoor temperature is below 35°F

Compressor Hard Start Kit

- Single-phase units are equipped with a PSC compressor motor
- This type of motor normally does not need a potential relay and start capacitor
- For conditions such as low voltage, kit may be required to increase the compressor starting torque

Indoor Blower Off Delay Relay Kit

Delays the indoor blower-off time during the cooling cycle

Low Ambient Kit

- Heat pump can operate in the cooling mode down to 45°F outdoor air temperature without additional controls
- Allows unit to operate properly down to 30°F in the cooling mode
- **NOTE** Crankcase heater and freezestat should be installed on compressors equipped with a low ambient kit.
- **NOTE** A compressor lock-out thermostat should be added to terminate compressor operation below recommended operation conditions.

Mild Weather Kit

- Units can operate in the heating mode at outdoor air temperatures up to 75°F
- Field installed kit allows heating operation above 75°F

Outdoor Thermostat Kit

- Outdoor thermostat locks out some of the electric heating elements on indoor units where two-stage control is applicable
- Outdoor thermostat maintains the heating load on low power input as long as possible before allowing the full power load to come on the line

8 CABINET

- Heavy gauge steel cabinet
- · Pre-painted powder paint cabinet finish
- · Louvered heavy gauge steel panels
- Control box conveniently located with all controls factory wired
- Corner patch plate allows compressor access
- · Drainage holes provided in base section

Zinc-Coated Steel Unit Base

Resists rust and corrosion

Refrigerant Line Connections, Electrical Inlets, Service Valves

- · Sweat connection vapor and liquid lines
- · Located on corner of unit cabinet
- Fully serviceable brass service valves
- Vapor valve can be fully shut off, while liquid valve may be front seated to manage refrigerant charge while servicing system
- Refrigerant line connections and field wiring inlets are located in one central area of cabinet for easy access
- · See dimension drawing

Braze-Free/Press Fitting Flexibility

 Units can accommodate braze-free or press fittings for installation versatility

Optional Accessories

Unit Stand-Off Kit

- · Black high density polyethylene feet
- · Raises unit off mounting surface
- Four feet furnished per order number

CONTROL OPTIONS

E30 Smart Wi-Fi Thermostat

- 4 Htg.-2 Clg.
- 7-day, universal, programmable, touchscreen thermostat
- Controls dehumidification during cooling mode and humidification during heating mode
- 750
- Smooth Setback Recovery and compressor short-cycle protection
- One-Touch Away Mode, Smart Away[™] (geo-fencing), equipment maintenance reminders and scheduling
- Smart home automation compatible with Apple HomeKit[™], Amazon Alexa[®] and Google Assistant
- Lennox® Home App controls temperature, fan operation, set programs/schedules and set Away mode on a smartphone
- Lennox Smart Tech App allows the installer to commission the system and remotely turn the system on and off during setup or service call on a smartphone

L40 Smart Wi-Fi Thermostat

- · 2 Htg.-1 Clg.
- 7-day, universal, programmable, touchscreen thermostat
- Provides temperature control for gas, electric and heat pumps for single-stage heating or cooling systems (including dual-fuel operation)



- One-Touch Away Mode, Smart Away[™] (geo-fencing), equipment maintenance reminders and scheduling
- Smooth Setback Recovery and compressor short-cycle protection
- Smart home automation compatible with Amazon Alexa®, Google Assistant, Control4® and Building36®
- Lennox® Home App controls temperature, fan operation, set programs/schedules and set Away mode on a smartphone
- Lennox Smart Tech App allows the installer to commission the system and remotely turn the system on and off during setup or service call on a smartphone

NOTE - Two-stage heating for Dual-Fuel Heat Pump applications only

M30 Smart Wi-Fi Thermostat

- 4 Htg.-2 Clg.
- 7-day, universal, programmable, touchscreen thermostat
- Humidification / dehumidification / dewpoint measurement and control, Humiditrol ® control



- Smooth Setback Recovery and compressor short-cycle protection
- One-Touch Away Mode, Smart Away[™] (geo-fencing), equipment maintenance reminders and scheduling
- Smart home automation compatible with Apple HomeKit™, Amazon Alexa® and Google Assistant
- Lennox® Home App controls temperature, fan operation, set programs/schedules and set Away mode on a smartphone
- Lennox Smart Tech App allows the installer to commission the system and remotely turn the system on and off during setup or service call on a smartphone

NOTE - Please refer to the individual Product Specifications for these products for full information.

CONTROLS - ORDERING				
E30 Smart Wi-Fi Thermostat	5 x 7-1/2 x 1	20A65		
L40 Smart Wi-Fi Thermostat	2-13/16 x 2-13/16 x 1/4	27V51		
M30 Smart Wi-Fi Thermostat	3-5/16 x 4-5/16 x 7/8	15Z6 9		
Thermostat Accessories				
¹ Discharge Air Temperature Sensor (For E30	88K38			
² Remote Outdoor Air Temperature Sensor (F	X2658			

¹ Optional for service diagnostics (E30).

² Remote Outdoor Air Temperature Sensor is used with conventional (non-Lennox® Communicating) outdoor units (sensor is furnished with Lennox® Communicating outdoor units). Allows the thermostat to display outdoor temperature. Required in dual-fuel and Humiditrol® applications.

Size			018	024	030	036
Nominal Tonnage			1.5	2	2.5	3
Sound Rating Number		dBA	74	74	74	75
Connections Liquid line (OD) - in.			3/8	3/8	3/8	3/8
(sweat) Vapor line (OD) - in.			3/4	3/4	3/4	7/8
Refrigerant (15 ft. Line			4 lbs. 7 oz.	5 lbs. 3 oz.	6 lbs. 7 oz.	7 lbs. 2 oz.
Refrigerant (30 ft. Line			5 lbs. 0 oz.	5 lbs. 12 oz.	7 lbs. 0 oz.	7 lbs. 11 oz.
Indoor Unit Expansion			26Z70	26Z70	26Z70	26Z70
Outdoor	Net face area - ft. ²	Outer coil	24.5	24.5	18.7	22.2
Coil		Inner coil			18.0	21.5
_	Tube dian	neter - in.	5/16	5/16	5/16	5/16
		Rows	1	1	2	2
		Fins - in.	22	22	22	22
Outdoor		HP	1/8	1/8	1/6	1/5
Fan	Dian	neter - in.	22	22	22	26
		Blades	3	3	3	3
		Cfm	2840	2840	2670	3590
		Rpm	825	825	825	839
		Watts	127	127	162	200
Shipping Data - Ibs.			185	185	185	220
ELECTRICAL DA	TA	,			'	
l in	e voltage data (Volts-P	hasa_Hz)	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
	- ,	, ,	15	200/230-1-00	25	35
² Maximum overcurrent protection (MOCP) amps ³ Minimum circuit ampacity (MCA)		9.7	13.6	16.6	22.2	
Compressor	•	, ,	7.2	10.3	12.5	16.7
Compressor Rated Load Amps Locked Rotor Amps		47	60.2	67	93.5	
Fan Motor			0.7	0.7	1.0	1.4
OPTIONAL ACC				0.7	1.0	1
			PARAIELI		I	_
Compressor Crankcas		93M04	•	•	•	Factory
Compressor Hard Star	t Copeland	10J42		•		•
Kit	LG	88M91	•		•	
Compressor Sound Co		18J42	•	•	•	•
Compressor Low Amb	ient Cut-Off	45F08	•	•	•	•
Freezestat	3/8 in.	93G35	•	•	•	•
Indoor Blower Off Dela	y Relay	58M81	•	•	•	•
⁴ Low Ambient Kit		54M89	•	•	•	•
Mild Weather Kit		11B97	•	•	•	•
Outdoor Thermostat K	i	10Z23	•	•	•	•
_	3/8 x 3/4 3/8 20 ft.	89J56				
	3/8 x 3/4 3/8 30 ft.	89J57	•	•	•	
Liquid x Suction OD	3/8 x 3/4 3/8 40 ft.	89J58				
	3/8 x 3/4 3/8 50 ft.	89J59				
	3/8 x 7/8 3/8 30 ft.	89J60				
	3/8 x 7/8 3/8 40 ft.	89J61				•
	3/8 x 7/8 3/8 50 ft.	89J62				
Unit Stand-Off Kit		94J45	•	•	•	•

NOTE - Extremes of operating range are plus 10% and minus 5% of line voltage.

¹ Refrigerant charge sufficient for the line set length listed in parenthesis. For longer line set requirements see the Installation Instructions or unit Charging Label for information about line set length and additional refrigerant charge required.

² HACR type breaker or fuse.

³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

⁴ Crankcase Heater and Freezestat are recommended with Low Ambient Kit.

Nominal Tonnage	SPECIFICATIONS					
Sound Rating Number	Size			042	048	060
Connections	Nominal Tonnage			3.5	4	5
Sweath Vapor line (OD) - in. 7/8 7/8 1-1/8 1-1/8 Refrigerant (15 ft. Line Set) 1-1/4-548 charge furnished 8 lbs. 5 oz. 8 lbs. 6 oz. 9 lbs. 6 oz. 9 lbs. 6 oz. 1-1/8	Sound Rating Number	Sound Rating Number dBA			79	79
Refrigerant (15 ft. Line Set) R-454B charge furnished Refrigerant (30 ft. Refriger	Connections	Liquid line (OD) - in.			3/8	3/8
Refrigerant (30 ft. Line Set)	(sweat)	Vapor line	(OD) - in.	7/8	7/8	1-1/8
Indoor Unit Expansion Valve (TXV)	Refrigerant (15 ft. Line Set)	¹ R-454B charge	furnished	8 lbs. 5 oz.	8 lbs. 6 oz.	9 lbs. 6 oz.
Net face area - ft.2 Outer coil 24.93 24.93 29.09	Refrigerant (30 ft. Line Set)	¹ R-454B charge	furnished	8 lbs. 14 oz.	8 lbs. 15 oz.	9 lbs. 15 oz.
Second	Indoor Unit Expansion Valve	(TXV)		26Z71	26Z71	26Z72
Tube diameter - in. 5/16	Outdoor	Net face area - ft.2	Outer coil	24.93	24.93	29.09
Rows Fins - in. 22 22 22 22 22 22 22	Coil		Inner coil	24.13	24.13	28.16
Fins - in.	-	Tube diar	meter - in.	5/16	5/16	5/16
Parison			Rows	2	2	2
Diameter - in. Blades			Fins - in.	22	22	22
Blades	Outdoor		HP	1/3	1/3	1/3
Cfm	Fan	Diar	meter - in.	26	26	26
Rpm Watts 213 213 214 224 224 235 250 26			Blades	4	4	4
Shipping Data - Ibs. 250 250 250 260			Cfm	4110	4110	4060
Shipping Data - Ibs. 250 250 260			Rpm	825	825	825
Line voltage data (Volts-Phase-Hz)			Watts	213	213	224
Line voltage data (Volts-Phase-Hz) 2 Maximum overcurrent protection (MOCP) amps 3 Minimum circuit ampacity (MCA) Rated Load Amps Locked Rotor Amps Fan Motor Full Load Amps LG 88M91 Compressor Hard Start Kit Copeland LG 88M91 Compressor Low Ambient Cut-Off Compressor Sound Cover 18 J42 Freezestat 3/8 in. 93G35 Indoor Blower Off Delay Relay Albert Mid Weather Kit 11B97 Outdoor Thermostat Kit 3/8 x 7/8 3/8 30 ft. 89J60 Line Sets 3/8 x 7/8 3/8 30 ft. 89J62 Insulation Thickness Length 3/8 x 1-1/8 3/8 50 ft. 89J62 Insulation Thickness Length 3/8 x 1-1/8 3/8 50 ft. 70 S 208/230-1-60 208/230-1-60 208/200 20.6 20.6 20.6 20.6 20.6 20.6 20.6 2	Shipping Data - Ibs.			250	250	260
2 Maximum overcurrent protection (MOCP) amps 35 50 50 3 Minimum circuit ampacity (MCA) 22.3 30.6 32.2 Compressor Rated Load Amps 15.8 22.4 23.7 Locked Rotor Amps 96 126 157 Fan Motor Full Load Amps 2.6 2.6 2.6 OPTIONAL ACCESSORIES - ORDER SEPARATELY Compressor Hard Start Kit Copeland 10J42 • • LG 88M91 • • • Compressor Low Ambient Cut-Off 45F08 • • • Compressor Sound Cover 18J42 • • • Freezestat 3/8 in. 93G35 • • • Indoor Blower Off Delay Relay 58M81 • • • 4Low Ambient Kit 54M89 • • • Mild Weather Kit 11B97 • • • Outdoor Thermostat Kit 10Z23 • • • Refrigerant 3/8 x 7/8 3/8 50 ft. 89J60 •						
Section Sect		Line voltage data (Volts-P	208/230-1-60	208/230-1-60	208/230-1-60	
Rated Load Amps 15.8 22.4 23.7 Locked Rotor Amps 96 126 157 Fan Motor Full Load Amps 2.6 2.6 2.6 OPTIONAL ACCESSORIES - ORDER SEPARATELY Compressor Hard Start Kit Copeland 10J42	² Maximum overcurrent protection (MOCP) amps			35	50	50
Locked Rotor Amps 96 126 157		³ Minimum circuit ampac	ity (MCA)	22.3	30.6	32.2
Fan Motor Full Load Amps 2.6 2.6 2.6	Compressor	Rated Lo	oad Amps	15.8	22.4	23.7
OPTIONAL ACCESSORIES - ORDER SEPARATELY Compressor Hard Start Kit Copeland LG 88M91 LG 88M91 •		Locked Ro	otor Amps	96	126	157
Compressor Hard Start Kit	Fan Motor	Full Lo	oad Amps	2.6	2.6	2.6
LG 88M91 •	OPTIONAL ACCESSO	ORIES - ORDER SE	PARATE	LY		
LG 88M91 •	Compressor Hard Start Kit	Copeland	10J42		•	•
Compressor Sound Cover	•	LG	88M91	•		
Section Freezestat 3/8 in. 93G35 • • • • • • • • • • • • • • • • • •	Compressor Low Ambient C	ut-Off	45F08	•	•	•
Indoor Blower Off Delay Relay	Compressor Sound Cover		18J42	•	•	•
4 Low Ambient Kit 54M89 • • Mild Weather Kit 11B97 • • Outdoor Thermostat Kit 10Z23 • • Refrigerant 3/8 x 7/8 3/8 30 ft. 89J60 Line Sets 3/8 x 7/8 3/8 40 ft. 89J61 • Liquid x Suction OD 3/8 x 7/8 3/8 50 ft. 89J62 Insulation Thickness Length 3/8 x 1-1/8 3/8 50 ft. 73P91	Freezestat	3/8 in.	93G35	•	•	•
Mild Weather Kit 11B97 • • • Outdoor Thermostat Kit 10Z23 • • • Refrigerant 3/8 x 7/8 3/8 30 ft. 89J60 • <td colspan="3">Indoor Blower Off Delay Relay 58M81</td> <td>•</td> <td>•</td> <td>•</td>	Indoor Blower Off Delay Relay 58M81			•	•	•
Outdoor Thermostat Kit 10Z23 • • • Refrigerant 3/8 x 7/8 3/8 30 ft. 89J60 89J60 •	⁴ Low Ambient Kit		54M89	•	•	•
Refrigerant 3/8 x 7/8 3/8 30 ft. 89J60 Line Sets 3/8 x 7/8 3/8 40 ft. 89J61 • Liquid x Suction OD 3/8 x 7/8 3/8 50 ft. 89J62 Insulation Thickness Length 3/8 x 1-1/8 3/8 50 ft. 73P91	Mild Weather Kit		11B97	•	•	•
Line Sets 3/8 x 7/8 3/8 40 ft. 89J61 • Liquid x Suction OD 3/8 x 7/8 3/8 50 ft. 89J62 Insulation Thickness Length 3/8 x 1-1/8 3/8 50 ft. 73P91	Outdoor Thermostat Kit		10Z23	•	•	•
Line Sets 3/8 x 7/8 3/8 40 ft. 89J61 • Liquid x Suction OD 3/8 x 7/8 3/8 50 ft. 89J62 Insulation Thickness Length 3/8 x 1-1/8 3/8 50 ft. 73P91	Refrigerant	3/8 x 7/8 3/8 30 ft.	89J60			
Liquid x Suction OD 3/8 x 7/8 3/8 50 ft. 89J62 Insulation Thickness Length 3/8 x 1-1/8 3/8 50 ft. 73P91 •	Line Sets			•	•	
Insulation Thickness Length 3/8 x 1-1/8 3/8 50 ft. 73P91 •	Liquid x Suction OD					
Unit Stand-Off Kit 94J45 • • •	Insulation Thickness Length					•
	Unit Stand-Off Kit		94J45	•	•	•

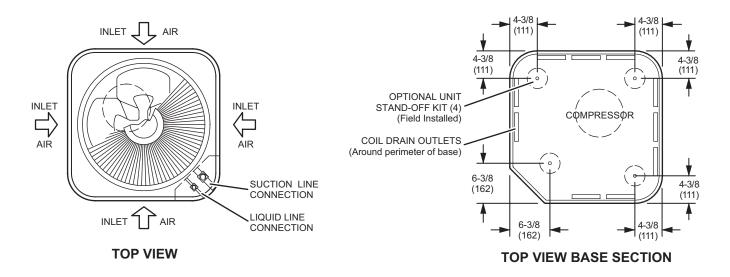
 $[\]ensuremath{\mathsf{NOTE}}$ - Extremes of operating range are plus 10% and minus 5% of line voltage.

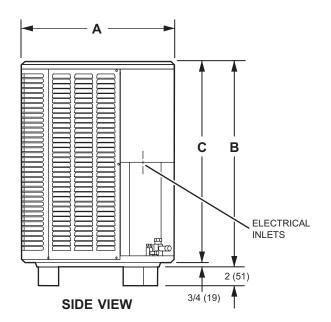
¹ Refrigerant charge sufficient for the line set length listed in parenthesis. For longer line set requirements see the Installation Instructions or unit Charging Label for information about line set length and additional refrigerant charge required.

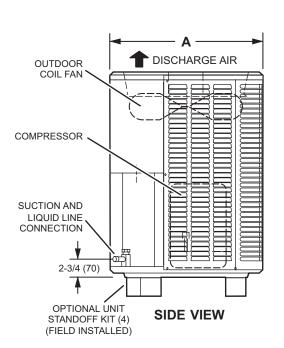
² HACR type breaker or fuse.

³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

⁴ Crankcase Heater and Freezestat are recommended with Low Ambient Kit.







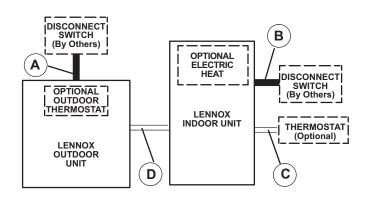
Size	A Width and Depth		B Height		С	
	in.	mm	in.	mm	in.	mm
018	28-1/4	718	43-1/4	1099	42-1/2	1080
024	28-1/4	718	43-1/4	1099	42-1/2	1080
030	28-1/4	718	33-1/4	845	32-1/2	826
036	32-1/4	819	33-1/4	845	32-1/2	826
042	32-1/4	819	37-1/4	946	36-1/2	927
048	32-1/4	819	37-1/4	946	36-1/2	927
060	32-1/4	819	43-1/4	1099	42-1/2	1080

EXPANDED SOUND DATA Octave Band Sound Power Levels dBA, re 10⁻¹² Watts ¹Sound ² Estimated Sound Pressure Level at **Center Frequency - HZ** Rating Distance From Unit (dBA at distance in ft.) Size Number 125 250 1000 2000 4000 8000 500 3 5 10 15 50 (dBA) 56.5 74 018 62 68.0 71.5 66.0 57.0 50 67 62 56 53 42 024 56.0 62 66.5 71.0 66 60 55.0 74 67 62 56 53 42 52.5 42 030 56.0 64 69.5 70.0 65 59 74 67 62 56 53 036 59 68 71.5 68.5 66 61 54 75 68 63 57 54 43 71 042 62 71.0 74.5 72.5 70 63 55.5 78 66 60 57 46 048 61 70.5 75.5 73.0 70 64 56.0 79 72 67 61 58 47 79 060 61.5 70.0 73.0 71 71 68 63 73 68 62 59 48

NOTE - the octave sound power data does not include tonal correction.

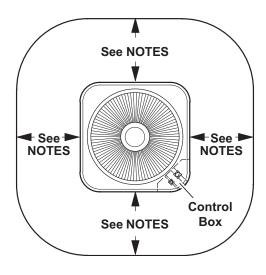
- ¹ Tested according to AHRI Standard 270-2008 test conditions.
- ² Estimated sound pressure level at distance based on AHRI Standard 275-2010 method for equipment located on the ground, roof, or on side of building wall with no adjacent reflective surface within 9.8 feet. Sound pressure levels will increase based on changes to assumptions. For other applications, refer to AHRI Standard 275.

FIELD WIRING



- A Two Wire Power (see Electrical Data)
- B Two or Three Wire Power (size to heater capacity)
- C Twelve Wire Low Voltage 18 ga. minimum Fourteen Wire Low Voltage with Optional Outdoor Thermostat
- D Eight Wire Low Voltage 18 ga. minimum Ten Wire Low Voltage with Optional Outdoor Thermostat NOTE - Field Wiring Not Furnished All wiring must conform to NEC or CEC and local electrical

INSTALLATION CLEARANCES



NOTES:

codes.

- Service Clearance 30 in. (762 mm) on one of the sides adjacent to the Control Box.
- One of other three sides must be 36 in. (914 mm).
- One of the two remaining sides may be 12 in. (305 mm).
- The remaining side may be 6 in. (152 mm).
- 48 in. (1219 mm) clearance required on top of unit
- 24 in. (610 mm) required between two units

TXV USAGE

All Lennox coils and air handlers are shipped with a factory installed TXV. In most cases, no substitution is needed. If a different size TXV is required, it will be listed in the "TXV SUBSTITUTION" table by size. The correct TXV must be ordered separately and field installed.

Size	Order Number
018	26Z70
024	26Z70
030	26Z70
036	26Z70
042	26Z71
048	26Z71
060	26Z72

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Cooling or heating capacities are net values, including the effects of blower motor heat, and do not include supplementary heat. Power input is the total power input to the compressor(s) and fan(s), plus any controls and other items required as part of the system for normal operation.

Units which do not have an indoor air-circulating blower furnished as part of the model, i.e., split system with indoor coil only, is established by subtracting from the total cooling capacity 1250 Btu/h per 1,000 cfm, and by adding the same amount to the heating capacity.

Total power input for both heating and cooling is increased by 365 W per 1,000 cfm of indoor air circulated.

TXV SUBSTITUTION - R-454B

A general guide for replacing the factory installed R-454B TXV if the indoor unit (coil/air handler) is larger or smaller than the outdoor unit.

Outdo	Outdoor Unit Indoor Unit		Indoor	Indoor	
Size	Tons	Size	Tons	TXV	TXV
			_	Furnished	Replacement
018	1.5	42	3.5	26Z71	26Z70
018	1.5	48	4	26Z71	26Z70
018	1.5	49	4	26Z71	26Z70
018	1.5	50/60	4/5	26Z71	26Z70
018	1.5	51/61	4/5	26Z71	26Z70
018	1.5	60	5	26Z72	26Z70
024	2	42	3.5	26Z71	26Z70
024	2	48	4	26Z71	26Z70
024	2	49	4	26Z71	26Z70
024	2	50/60	4/5	26Z71	26Z70
024	2	51/61	4/5	26Z71	26Z70
024	2	60	5	26Z72	26Z70
030	2.5	42	3.5	26Z71	26Z70
030	2.5	48	4	26Z71	26Z70
030	2.5	49	4	26Z71	26Z70
030	2.5	50/60	4/5	26Z71	26Z70
030	2.5	51/61	4/5	26Z71	26Z70
030	2.5	60	5	26Z72	26Z70
036	3	42	3.5	26Z71	26Z70
036	3	48	4	26Z71	26Z70
036	3	49	4	26Z71	26Z70
036	3	50/60	4/5	26Z71	26Z70
036	3	51/61	4/5	26Z71	26Z70
036	3	60	5	26Z72	26Z70
042	3.5	24	2	26Z70	26Z71
042	3.5	30	2.5	26Z70	26Z71
042	3.5	30/36	2.5/3	26Z70	26Z71
042	3.5	36	3	26Z70	26Z71
042	3.5	60	5	26Z72	26Z71
048	4	30/36	2.5/3	26Z70	26Z71
048	4	36	3	26Z70	26Z71
048	4	60	5	26Z72	26Z71
060	5	50/60	4/5	26Z71	26Z72
060	5	51/61	4/5	26Z71	26Z72

TXV Ranges:

- **26Z70** 1.5 to 3 ton systems Use on 3 ton (036) and lower systems.
- **26Z71** 3.5-4 ton systems Use on 4 ton (048) and down to 3.5 ton (042) systems.
- 26Z72 5 ton systems Use on 5 ton (060) systems only.

REVISIONS	
Sections	Description of Change
New Section	Added Control Options.









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