# AIR CONDITIONERS



1.5 to 5 Tons SEER2 up to 17.0 Cooling Capacity | 17,000 to 60,000 Btuh



Single-Stage | Quantum<sup>™</sup> Coil | R-454B | 1-Phase | 60Hz

**PRODUCT SPECIFICATIONS (EHB)** 

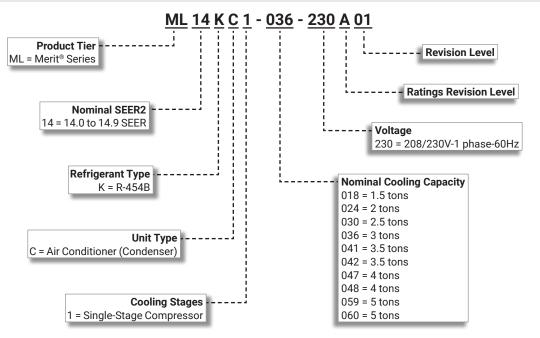


# MODEL NUMBER IDENTIFICATION

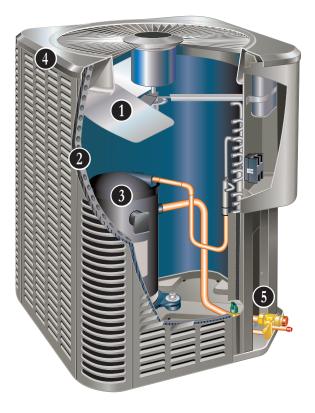
**ML14KC1** 

**MERIT® SERIES** 

RESIDENTIAL



- 1. Outdoor Coil Fan
- 2. Quantum<sup>™</sup> Coil
- 3. Scroll Compressor
- 4. Heavy Gauge Steel Cabinet
- 5. Refrigerant Line Connections and Access



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# APPROVALS AND WARRANTY

# APPROVALS

- AHRI Standard 210/240-2023 certified
- AHRI Certified system match-ups and expanded ratings, visit <u>www.LennoxPros.com</u>
- 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
- Region specific models meet the minimum efficiency requirements for U.S. DOE Federal Regional Standards in that area
- 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 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® Basic Limited Warranty at <u>www.Lennox.com</u> for additional details.

# FEATURES

## **APPLICATIONS**

- 1.5 through 5 tons
- Sound levels as low as 73 dBA
- Single-phase power supply
- Vertical air discharge
- Applicable to indoor air handlers or gas furnaces with indoor add-on coils
- Shipped completely factory assembled, piped and wired

# **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 fan
- Vertical air discharge
- Totally enclosed fan motor
- Ball bearings
- Inherently protected
- Motor rain shield
- Louvered steel fan guard

# 2 Quantum<sup>™</sup> 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

## High Capacity Liquid Line Drier

- Furnished with unit for field installation
- Traps any moisture or dirt that could contaminate the refrigerant system
- 100% molecular-sieve, bead type

#### **High Pressure Switch**

- Protects the system from high pressure conditions that can be a result of fan failure or a blocked/dirty coil
- Automatic reset

## Low Pressure Switch

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

# **FEATURES**

# **REFRIGERATION SYSTEM (Continued)**

#### **Optional Accessories**

- 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

## Loss of Charge Switch Kit

- Protects compressor from damage from low refrigerant charge conditions
- SPST, normally-closed
- Automatic reset

## 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

# 3 Single-Stage Scroll Compressor

- High volumetric efficiency
- Uniform suction flow
- Constant discharge flow
- 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 (041 through 060 Models)

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

## **Optional Accessories**

#### Compressor Crankcase Heater (018 through 036 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 fiberglass insulation
- All open edges are sealed with a one-inch wide hook and loop fastening tape



# **FEATURES**

## **COMPRESSOR** (continued)

## Optional Accessories (continued)

#### 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

#### Compressor Low Ambient Cut-Off Switch

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

#### Compressor Time-Off Control

- Kit prevents compressor short-cycling
- Allows time for suction and discharge pressure to equalize.
- Permits compressor start-up in an unloaded condition.
- Automatic reset with 5 minute delay between compressor shut-off and start-up

## CONTROLS

## **Optional Accessories**

#### M30 Smart Wi-Fi Thermostat

- Wi-Fi-enabled, electronic 7-day, universal, multi-stage, programmable, touchscreen thermostat
- 4 Heat/2 Cool
- Auto-changeover
- Dual-fuel control with optional outdoor sensor
- Controls dehumidification during cooling mode and humidification during heating mode



- Offers enhanced capabilities including humidification / dehumidification / dewpoint measurement and control, Humiditrol<sup>®</sup> 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<sup>™</sup>
- One-Touch Away Mode A quick and easy way to set the cooling and heating setpoints while away

- Smart Away<sup>™</sup> 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
- Wi-Fi remote monitoring and adjustment through a home wireless network for desktop PCs, laptops and apps for smartphones or tablets
- Smart home automation compatible with Amazon Alexa  $^{\rm \tiny B}$  , Google Assistant and IFTTT
- Service Dashboard features online real-time monitoring of installed Lennox® thermostats
- **NOTE** See the M30 Smart Wi-Fi Thermostat Product Specifications document in the Controls section for more information.

#### Remote Outdoor Temperature Sensor

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

#### Thermostat

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

#### Indoor Blower Off Delay Relay

• Delays the indoor blower-off time during the cooling cycle

#### Low Ambient Kit

- Air conditioners can operate down to 45°F outdoor air temperature without additional controls
- Allows unit to operate properly down to 30°F
- **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.



## **FEATURES**

#### CABINET

- 4 Heavy gauge steel construction
  - Louvered heavy gauge steel panels surround unit on all four sides
  - Pre-painted powder paint cabinet finish
  - Control box is conveniently located with all controls factory wired
  - Corner patch plate allows access to compressor components
  - Drainage holes are provided in base section for moisture removal

#### Zinc-Coated Steel Unit Base

Resists rust and corrosion

# 5 Refrigerant Line Connections, Electrical Inlets, Service Valves

- Sweat connection suction and liquid lines
- · Located on corner of unit cabinet
- Suction 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 the cabinet
- 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 raise unit off of mounting surface
- Four feet are furnished per order number

SPECIFICATION	IS					ALL	REGIONS
Size			018	024	030	036	041
Nominal Tonnage			1.5	2	2.5	3	3.5
Sound Rating Numbe	r	dBA	73	75	76	76	75
Connections	Liquid line	(OD) - in.	3/8	3/8	3/8	3/8	3/8
(Sweat)	Suction line	. ,	3/4	3/4	3/4	7/8	7/8
Compressor Type		(02)		1-Stage Scroll		1-Stage Scroll	
Refrigerant	<sup>1</sup> R-454B charge	furnished	4 lbs. 14 oz.	4 lbs. 14 oz.	5 lbs. 10 oz.	6 lbs. 13 oz.	7 lbs. 7 oz.
Indoor Unit Expansion			26Z70	26Z70	26Z70	26Z70	26Z71
Outdoor	Net face area - ft. <sup>2</sup>	Duter coil	16.33	21.00	16.33	21.00	22.17
Coil		Inner coil			15.75	20.25	21.33
-	Tube dian	neter - in.	5/16	5/16	5/16	5/16	5/16
		Rows	1	1	2	2	2
		Fins - in.	26	26	22	22	22
Outdoor		HP	1/8	1/8	1/8	1/6	1/3
Fan	Dian	neter - in.	22	22	22	22	26
		Blades	2	3	3	3	3
		Cfm	2610	2990	2820	3040	3920
		Rpm	825	825	825	825	825
		Watts	160	160	160	190	180
Shipping Data - Ibs.			155	170	180	200	225
ELECTRICAL DA	ATA		,		'	'	
	ine voltage data (Volts-P	hase-Hz)	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
	<sup>2</sup> Maximum overcurrent protection (MOCP) amps				200/200-1-00	30	30
<sup>3</sup> Minimum circuit ampacity (MCA)			15 11.2	20 13.6	16.6	21.8	21
Compressor	ad amps	8.3	10.3	12.7	16.7	14.7	
Compressor	Locked ro		45	60.2	75.6	93.5	109
Fan Motor		ad amps	0.74	0.74	0.74	1.0	2.6
	Locked ro		1.65	1.65	1.65	1.9	
	ITROLS - ORDER		1	1.00	1.00	1.0	
M30 Smart Wi-Fi Ther		15Z69					
Remote Outdoor Tem		X2658		•	•	•	•
	•			•	•	•	•
	ESSORIES - ORD		ARAIELY	1	1	1	
Compressor	Copeland	27V63	•	•	•	•	Factory
Crankcase Heater	LG	27U16	•	•	•	•	Factory
Compressor Hard	Copeland		•				
Start Kit		10J42		•	•	•	•
	LG	10J42	•	•	•	•	•
Compressor Low Am		45F08	•	•	•	•	•
Compressor Sound C		18J42	•	•	•	•	•
Compressor Timed-O		47J27	•	•	•	•	•
Freezestat	3/8 in.	93G35	•	•	•	•	•
Indoor Blower Off Del		58M81	•	•	•	•	•
Loss of Charge Switc		84M23	•	•	•	•	•
<sup>4</sup> Low Ambient Kit (Fa		34M72	•	•	•	•	•
Refrigerant Line Sets	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	•	•	•		
Insulation Thickness   Length	3/8 x 3/4   3/8   50 ft.	89J59					
Lengui –	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	•	•	•	•	•
	1 400/ 1 -	<b>50</b> ( <b>6</b> );		1	I	I	L

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

<sup>1</sup> Refrigerant charge is sufficient for 15 ft. length of refrigerant lines. For longer line set requirements see the Installation Instructions for information about line set length and additional refrigerant charge required.

<sup>2</sup> HACR type breaker or fuse.

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

<sup>4</sup> Crankcase Heater and Freezestat are recommended with Low Ambient Kit.

Tube diar Diar	(OD) - in. furnished Outer coil Inner coil	7 lbs. 2 oz. 26Z71 22.17 21.33 5/16 2 22 1/4 26 3 4060	047 4 76 3/8 7/8 1-Stage Scroll 7 lbs. 13 oz. 26Z71 22.17 21.33 5/16 2 22 1/3 26 3	048 4 78 3/8 7/8 1-Stage Scroll 8 lbs. 14 oz. 26Z71 24.93 24.13 5/16 2 22 1/4 22 4	059 5 78 3/8 1-1/8 1-Stage Scroll 9 lbs. 8 oz. 26Z72 29.09 28.16 5/16 2 22 1/3 22 1/3 26	060 5 80 3/8 1-1/8 1-Stage Scroll 8 lbs. 14 oz. 29.09 28.16 5/16 2 22 22 1/4 26
Suction line <sup>1</sup> R-454B charge /alve (TXV) Net face area - ft. <sup>2</sup> Tube diar Diar	(OD) - in. (OD) - in. furnished Outer coil Inner coil Inner coil meter - in. Rows Fins - in. HP meter - in. Blades Cfm Rpm	76 3/8 7/8 1-Stage Scroll 7 lbs. 2 oz. <b>26Z71</b> 22.17 21.33 5/16 2 22 1/4 26 3 4060	76 3/8 7/8 1-Stage Scroll 7 lbs. 13 oz. <b>26Z71</b> 22.17 21.33 5/16 2 22 1/3 26	78 3/8 7/8 1-Stage Scroll 8 lbs. 14 oz. <b>26Z71</b> 24.93 24.13 5/16 2 22 1/4 22	78 3/8 1-1/8 1-Stage Scroll 9 lbs. 8 oz. <b>26Z72</b> 29.09 28.16 5/16 2 22 22 1/3	80 3/8 1-1/8 1-Stage Scroll 8 lbs. 14 oz. <b>26Z72</b> 29.09 28.16 5/16 2 2 22 1/4
Suction line <sup>1</sup> R-454B charge /alve (TXV) Net face area - ft. <sup>2</sup> Tube diar Diar	(OD) - in. (OD) - in. furnished Outer coil Inner coil Inner coil meter - in. Rows Fins - in. HP meter - in. Blades Cfm Rpm	3/8 7/8 1-Stage Scroll 7 lbs. 2 oz. <b>26Z71</b> 22.17 21.33 5/16 2 22 1/4 26 3 4060	3/8 7/8 1-Stage Scroll 7 lbs. 13 oz. <b>26Z71</b> 22.17 21.33 5/16 2 2 22 1/3 26	3/8 7/8 1-Stage Scroll 8 lbs. 14 oz. <b>26Z71</b> 24.93 24.13 5/16 2 2 22 1/4 22	3/8 1-1/8 1-Stage Scroll 9 lbs. 8 oz. <b>26Z72</b> 29.09 28.16 5/16 2 22 1/3	3/8 1-1/8 1-Stage Scrol 8 lbs. 14 oz. <b>26Z72</b> 29.09 28.16 5/16 2 22 22 1/4
Suction line <sup>1</sup> R-454B charge /alve (TXV) Net face area - ft. <sup>2</sup> Tube diar Diar	(OD) - in. furnished Outer coil Inner coil neter - in. Rows Fins - in. HP meter - in. Blades Cfm Rpm	7/8 1-Stage Scroll 7 lbs. 2 oz. <b>26Z71</b> 22.17 21.33 5/16 2 22 1/4 26 3 4060	7/8 1-Stage Scroll 7 lbs. 13 oz. <b>26Z71</b> 22.17 21.33 5/16 2 22 1/3 26	7/8 1-Stage Scroll 8 lbs. 14 oz. <b>26271</b> 24.93 24.13 5/16 2 22 1/4 22	1-1/8 1-Stage Scroll 9 lbs. 8 oz. 26272 29.09 28.16 5/16 2 22 1/3	1-1/8 1-Stage Scrol 8 lbs. 14 oz. <b>26Z72</b> 29.09 28.16 5/16 2 22 1/4
<sup>1</sup> R-454B charge /alve (TXV) Net face area - ft. <sup>2</sup> Tube diar Diar	furnished Outer coil Inner coil meter - in. Rows Fins - in. HP meter - in. Blades Cfm Rpm	1-Stage Scroll 7 lbs. 2 oz. 26Z71 22.17 21.33 5/16 2 22 1/4 26 3 4060	1-Stage Scroll 7 lbs. 13 oz. <b>26Z71</b> 22.17 21.33 5/16 2 22 1/3 26	1-Stage Scroll 8 lbs. 14 oz. 26271 24.93 24.13 5/16 2 22 1/4 22	1-Stage Scroll 9 lbs. 8 oz. 26Z72 29.09 28.16 5/16 2 2 22 1/3	1-Stage Scrol 8 lbs. 14 oz. 29.09 28.16 5/16 2 22 1/4
<b>/alve (TXV)</b> Net face area - ft. <sup>2</sup> Tube diar Diar	Outer coil Inner coil meter - in. Rows Fins - in. HP meter - in. Blades Cfm Rpm	7 lbs. 2 oz. 26Z71 22.17 21.33 5/16 2 22 1/4 26 3 4060	7 lbs. 13 oz. <b>26Z71</b> 22.17 21.33 5/16 2 22 1/3 26	8 lbs. 14 oz. 26Z71 24.93 24.13 5/16 2 22 1/4 22	9 lbs. 8 oz. 26Z72 29.09 28.16 5/16 2 22 1/3	8 lbs. 14 oz. <b>26Z72</b> 29.09 28.16 5/16 2 22 1/4
<b>/alve (TXV)</b> Net face area - ft. <sup>2</sup> Tube diar Diar	Outer coil Inner coil meter - in. Rows Fins - in. HP meter - in. Blades Cfm Rpm	26Z71 22.17 21.33 5/16 2 22 1/4 26 3 4060	<b>26Z71</b> 22.17 21.33 5/16 2 22 1/3 26	<b>26Z71</b> 24.93 24.13 5/16 2 22 1/4 22	26Z72 29.09 28.16 5/16 2 22 1/3	<b>26Z72</b> 29.09 28.16 5/16 2 22 1/4
Net face area - ft. <sup>2</sup> Tube diar Diar	Inner coil meter - in. Rows Fins - in. HP meter - in. Blades Cfm Rpm	22.17 21.33 5/16 2 22 1/4 26 3 4060	22.17 21.33 5/16 2 22 1/3 26	24.93 24.13 5/16 2 22 1/4 22	29.09 28.16 5/16 2 22 1/3	29.09 28.16 5/16 2 22 1/4
Tube diar Diar	Inner coil meter - in. Rows Fins - in. HP meter - in. Blades Cfm Rpm	21.33 5/16 2 22 1/4 26 3 4060	21.33 5/16 2 22 1/3 26	24.13 5/16 2 22 1/4 22	28.16 5/16 2 22 1/3	28.16 5/16 2 22 1/4
Tube diar Diar	meter - in. Rows Fins - in. HP meter - in. Blades Cfm Rpm	5/16 2 22 1/4 26 3 4060	5/16 2 22 1/3 26	5/16 2 22 1/4 22	5/16 2 22 1/3	5/16 2 22 1/4
Diar	Rows Fins - in. HP meter - in. Blades Cfm Rpm	2 22 1/4 26 3 4060	2 22 1/3 26	2 22 1/4 22	2 22 1/3	2 22 1/4
Ā	Fins - in. HP meter - in. Blades Cfm Rpm	22 1/4 26 3 4060	22 1/3 26	22 1/4 22	22 1/3	22 1/4
Ā	HP meter - in. Blades Cfm Rpm	1/4 26 3 4060	1/3 26	1/4 22	1/3	1/4
Ā	meter - in. Blades Cfm Rpm	26 3 4060	26	22		
Ā	Blades Cfm Rpm	3 4060			26	26
	Cfm Rpm	4060	3	Л		
	Rpm				4	4
	-	~~-	3920	3700	4050	4180
	Watts	825	825	825	825	825
		260	180	290	220	290
	Shipping Data - Ibs.				260	260
voltage data (Volts-P						
Line voltage data (Volts-Phase-Hz)			208/230-1-60	208/230-1-60	208/230-1-60	208/230-1-60
<sup>2</sup> Maximum overcurrent protection (MOCP) amps			40	45	55	50
<sup>3</sup> Minimum circuit ampacity (MCA)			25.2	29.7	31.8	31.2
Rated lo	oad amps	17.3	18.1	22.4	23.3	23.7
Locked ro	otor amps	123	126	126	143	157
	oad amps	1.56	2.6	1.7	2.6	1.56
Locked rotor amps				3.2		3.2
ROLS - ORDER	SEPAR	ATFLY	1			
ostat		•	•	•	•	•
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Loss of Charge Switch Kit84M23 <sup>4</sup> Low Ambient Kit (Fan Cycling)34M72						•
		•	•	•	•	•
/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					
· ·					•	•
x 1 1/0   0/0   00 It.				-		
	rature Sensor SSORIES - ORI Copeland LG LG ent Cut-Off Switch rer Control 3/8 in. Relay Kit Cycling) 5/8 x 7/8   3/8   30 ft. 5/8 x 7/8   3/8   40 ft.	rature Sensor   X2658     SSORIES - ORDER SEF   Copeland   10J42     LG   10J42     LG   10J42     LG   88M91     ent Cut-Off Switch   45F08     eer   18J42     Control   47J27     3/8 in.   93G35     Relay   58M81     Kit   84M23     Cycling)   34M72     /8 x 7/8   3/8   30 ft.   89J60     /8 x 7/8   3/8   50 ft.   89J62	rature Sensor X2658   SSORIES - ORDER SEPARATELY   Copeland 10J42   LG 10J42   LG 10J42   LG 88M91   ent Cut-Off Switch 45F08   er 18J42   Control 47J27   3/8 in. 93G35   Relay 58M81   Cycling) 34M72   3/8 x 7/8   3/8   30 ft. 89J60   /8 x 7/8   3/8   30 ft. 89J61   /8 x 7/8   3/8   50 ft. 89J62   // 8 x 7/8   3/8   50 ft. 73P91	rature Sensor X2658 •   SSORIES - ORDER SEPARATELY   Copeland 10J42 •   LG 10J42 •   LG 10J42 •   LG 88M91 •   ent Cut-Off Switch 45F08 •   eer 18J42 •   3/8 in. 93G35 •   Relay 58M81 •   Xit 84M23 •   Cycling) 34M72 •   i/8 x 7/8   3/8   30 ft. 89J60 •   i/8 x 7/8   3/8   50 ft. 89J62 •   i/8 x 7/8   3/8   50 ft. 73P91 •	rature Sensor X2658 • •   SSORIES - ORDER SEPARATELY Copeland 10J42 • •   LG 10J42 • • •   LG 10J42 • • •   LG 88M91 • • •   er 18J42 • • •   Control 47J27 • • •   3/8 in. 93G35 • • •   Relay 58M81 • • •   Kit 84M23 • • •   Cycling) 34M72 • • •   i/8 x 7/8   3/8   30 ft. 89J60 • • •   i/8 x 7/8   3/8   50 ft. 89J62 • • •	rature Sensor X2658 • • •   SSORIES - ORDER SEPARATELY Copeland 10J42 • • •   LG 10J42 • • • • •   LG 10J42 • • • • •   LG 88M91 • • • • •   ont Cut-Off Switch 45F08 • • • • •   ont Cut-Off Switch 45F08 • • • • •   other 18J42 • • • • • •   Control 47J27 •<

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

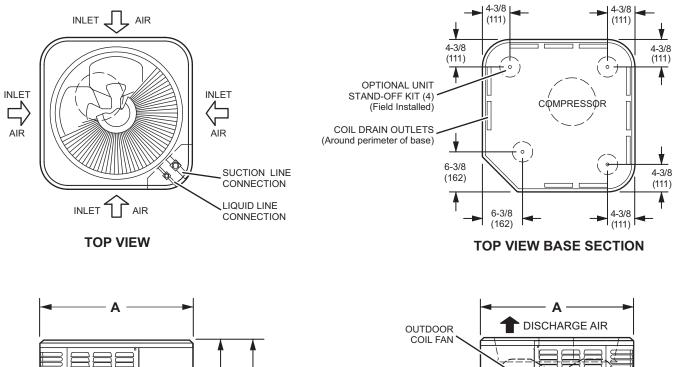
<sup>1</sup> Refrigerant charge is sufficient for 15 ft. length of refrigerant lines. For longer line set requirements see the Installation Instructions for information about line set length and additional refrigerant charge required.

<sup>2</sup> HACR type breaker or fuse.

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

 $^{\scriptscriptstyle 4}$  Crankcase Heater and Freezestat are recommended with Low Ambient Kit.

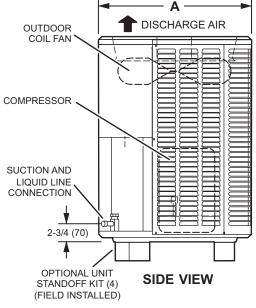
#### **DIMENSIONS - UNIT**



A C B C B ELECTRICAL INLETS

SIDE VIEW

3/4 (19)



Size	ہ Width ar	-	-	3 ght	С	
	inches	mm	inches	mm	inches	mm
018	28-1/4	718	29-1/4	743	28-1/2	724
024	28-1/4	718	37-1/4	946	36-1/2	927
030	28-1/4	718	29-1/4	743	28-1/2	724
036	28-1/4	718	37-1/4	946	36-1/2	927
041	32-1/4	819	33-1/4	845	32-1/2	826
042	32-1/4	819	33-1/4	845	32-1/2	826
047	32-1/4	819	33-1/4	845	32-1/2	826
048	28-1/4	718	43-1/4	1099	42-1/2	1080
059	32-1/4	819	43-1/4	1099	42-1/2	1080
060	32-1/4	819	43-1/4	1099	42-1/2	1080

## **EXPANDED SOUND DATA**

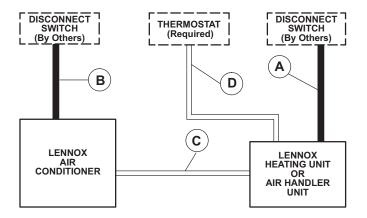
Size	Octave Band Sound Power Levels dBA, re 10 <sup>-12</sup> Watts Center Frequency - HZ				<sup>1</sup> Sound Rating	<sup>2</sup> Estimated Sound Pressure Level at Distance From Unit (dBA at distance in ft.)							
0126	125	250	500	1000	2000	4000	8000	Number (dBA)	3	5	10	15	50
018	55.5	64.5	69	67.5	65	61	56	73	66	61	55	52	41
024	61.5	64	70	69.5	66	62.5	54.5	75	68	63	57	54	43
030	60	67	72	70.5	67.5	62.5	56	76	69	64	58	55	44
036	58	67.5	72.5	71.5	66.5	62	54.5	76	69	64	58	55	44
041	63	66.5	69	69.5	66.5	61	54	75	68	63	57	54	43
042	59.5	67.5	71.5	70	69	63.5	57.5	76	69	64	58	55	44
047	61	66	72	71	66.5	63	63.5	76	69	64	58	55	44
048	60	70.5	73.5	72.5	70.5	67	60.5	78	71	66	60	57	46
059	63	69.5	73.5	71.5	69.5	64.5	56.5	78	71	66	60	57	46
060	63.5	69.5	75	75	73	68	62.5	80	73	68	62	59	48

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

<sup>1</sup> Tested according to AHRI Standard 270-2008 test conditions.

<sup>2</sup> 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 (not furnished). See Indoor Unit Electrical Data
- B Two Wire Power (not furnished). See Electrical Data

C - Four Wire Low Voltage (not furnished). 18 ga. minimum

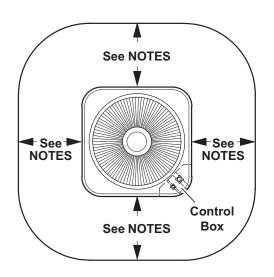
D - Five Wire Low Voltage (not furnished). 18 ga. minimum

All wiring must conform to NEC or CEC and local electrical codes.

# INSTALLATION CLEARANCES

#### NOTES:

- 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
041	26Z71
042	26Z71
047	26 <b>Z</b> 71
048	26Z71
059	26Z72
060	26Z72

# AHRI STANDARD 210/240-2023

Standard Ratings relating to cooling or heating capacities shall be net values, including the effects of circulating-fan heat, but not including supplementary electric heat. Power input used for calculating efficiency shall be the Total Power.

Standard Ratings of units which do not have indoor aircirculating fans furnished as part of the model, i.e., Coilonly System, shall be established by subtracting from the total cooling capacity 1,505 Btu/h per 1,000 SCFM, and by adding the same amount to the heating capacity for nonmobile-home, non-Space Constrained units. Total Power for both heating and cooling shall be increased by 441 W per 1,000 SCFM 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 Furnished	TXV 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.









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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. ©2024 Lennox Industries, Inc.