PLAN REVIEW CONDITION RESPONSE LETTER 2ND REVIEW

Permit No. **PROCOM202001014**
Project Title: Lees Summit Airport- Hanger V
Project address 2751 NE Douglas St. Unit: V, Lees Summit, MO 64064
Comment letter dated June 22, 2020

<u>**Fire Plan Review**</u>

Items 1, 2 noted

Item #3: Plans changed to not show or call out a Knoxbox.

<u>**Building Plan Review**</u>.

Item 1 & 2 Noted

Item #3, Contractor to submit the letter of responsibility for Special Inspections.

Item #6- 2018 IBC 412.3.4 Heating equipment. Heating equipment shall be placed in another room separated by 2-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies in accordance with Section 711, or both. Entrance shall be from the outside or by means of vestibule providing a two-doorway separation. (see code for exceptions)
     Architectural response: the heating elements are electrical appliance and do not have "source of ignition" element. Have attached the Office space HVAC specification sheet for confirmation of electrical appliance application

Item # 8

- Foundation plans sheet S100 updated code reference
- Details for all walls updates and shown on plan and section
- - Wall construction details conflict between Cover and A104, Noted that the UL 305 stud construction of 2x4 in Minimum size
- Fire Rated doors to be rated are noted individually on plan

Item #11, Updated finish schedule for walls to be "Epoxy" paint

Item #12, Noted- to be Field verify

Item #13, Noted – to be Field Verify

Included Specifications Sheet for exterior lighting.

End of Comments

Craig Shaw, AIA
Shaw Hoftra & Associates

E-WLT Series

Full Cutoff LED Wall Pack
Replaces up to 250W MH

Full Cutoff, Full Confidence

cULus listed and certified for wet locations, the E-WLT Series Full Cutoff LED Wall Pack survived aggressive quality tests before ever making it to the marketplace. What does this mean for you? It means that when we say it will last over 100,000 hours of maintenance-free operation, it will. Speaking of endurance, the E-WLT Series comes coated with a UV stabilized powder coat finish, all the while delivering up to 8900 lumens. It's also available in 4000K, 5000K, and an affordable price.

Design
• Full cutoff design, reducing light pollution
• Traditional style with upgraded LED's

Recommended Use
• Security
• Storefronts
• Perimeter
• Commercial

Durable
• Heat & shock-resistant borosilicate glass lens
• Heavy duty, die-cast aluminum housing

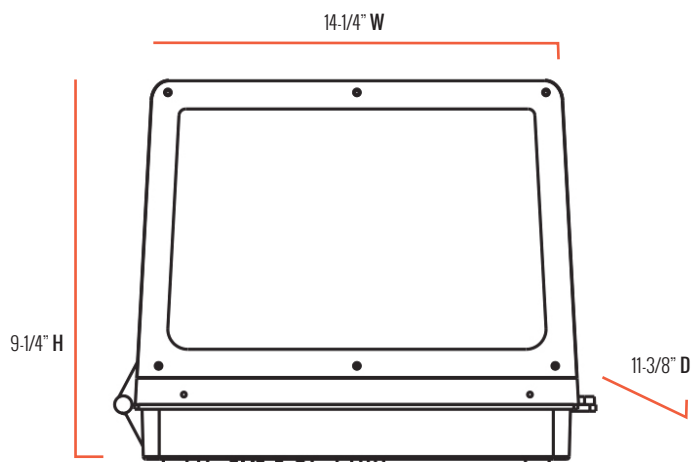## Input Voltage
• Universal (120V through 277V Operation)

Certifications

c UL us LISTED   5 YEAR WARRANTY   WET LOCATION SUITABLE   DLC QPL LISTED

⚠ **"WARNING -** Cancer and Reproductive Harm - www.p65warnings.ca.gov"

e-conolight ®

sidebar: **WALL PACKS**

E–WLT Series

14-1/4" **W**

9-1/4" **H**

11-3/8" **D**

Series Overview

| DIMENSIONS	PRODUCT WEIGHT	MOUNTING HEIGHT
11-3/8"**D** x 14-1/4"**W** x 9-1/4"**H**	**42W** - 10 lbs.	10'- 20'
	54W - 11 lbs.	
	83W - 13 lbs.	

Fixture Specifications

HOUSING	Die-cast aluminum. Dark Bronze, UV stabilized powder coat finish
LENS ASSEMBLY	Heat and impact resistant tempered glass.
MOUNTING	Back plate with a cast-in drill and knock-out template to match any standard recessed junction box. Three 5/16" knock-outs for mounting and three 1/2" NPS tapped holes (on either side and on the top of fixture).

Electrical Performance

OPERATING RANGE	LIFESPAN L_{70} AT 25°C (77°F)	POWER FACTOR	TOTAL HARMONIC DISTORTION	DIMMABLE
-40°C to 40°C (-40°F to 104°F)	100,000 hours	› 0.9	‹ 20%	N/A

CORRELATED COLOR TEMPERATURE (CCT)
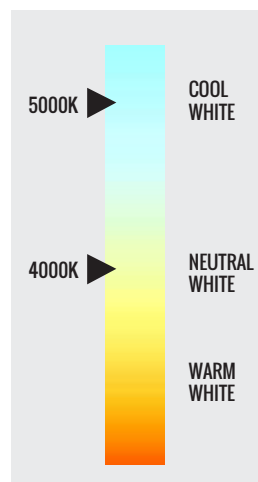
5000K — COOL WHITE
4000K — NEUTRAL WHITE
WARM WHITE

e-conolight

E–WLT Series

INPUT VOLTAGE (AMPS)	120V	208V	240V	277V
E-WLT08B-F50Z	0.656	0.378	0.328	0.284
E-WLT08B-F40Z	0.689	0.397	0.344	0.298
E-WLT05B-F50Z	0.445	0.257	0.223	0.193
E-WLT05B-F40Z	0.448	0.258	0.224	0.194
E-WLT04B-F50Z	0.349	0.201	0.175	0.151
E-WLT04B-F40Z	0.345	0.199	0.173	0.150

Warranty & Certifications

WARRANTY	cULus LISTED	DLC
5-Year Limited	Wet Locations	Standard

Output Specifications

SKU	LIGHT OUTPUT	COLOR TEMP	POWER CONSUMPTION	COLOR ACCURACY	REPLACES
E-WLT08B-F50Z	8900 Lumens	Cool White (5000K)	83W	≥70CRI	250W MH
E-WLT08B-F40Z	8800 Lumens	Neutral White (4000K)	83W	≥70CRI	250W MH
E-WLT05B-F50Z	5600 Lumens	Cool White (5000K)	54W	≥70CRI	150W PSMH
E-WLT05B-F40Z	5750 Lumens	Neutral White (4000K)	54W	≥70CRI	150W PSMH
E-WLT04B-F50Z	4500 Lumens	Cool White (5000K)	42W	≥70CRI	100W PSMH
E-WLT04B-F40Z	4500 Lumens	Neutral White (4000K)	42W	≥70CRI	100W PSMH

Accessories

Photocell - Button, 120V/208V/240V/277V
SKU: E-ACP1 (120V)
       E-ACP2 (208/240/277V)
Use: Photocell is field installed.

RESIDENTIAL
PRODUCT SPECIFICATIONS

MERIT® SERIES

LENNOX QUANTUM™ COIL

Nominal Capacity - 1.5 to 5 Tons
Optional Electric Heat - 5 to 20 kW

MODEL NUMBER IDENTIFICATION

CB A 25 UH - 030 - 230 - 10

Unit Type
CB = Air Handler

Refrigerant Type
A = Aluminum Coil/R-410A

Series

Configuration
UH = Upflow/Horizontal

Minor Revision Number

Voltage
230 = 208/230V-1 phase-60hz

Nominal Cooling Capacity
018 = 1.5 tons
024 = 2 tons
030 = 2.5 tons
036 = 3 tons
042 = 3.5 tons
048 = 4 tons
060 = 5 tons
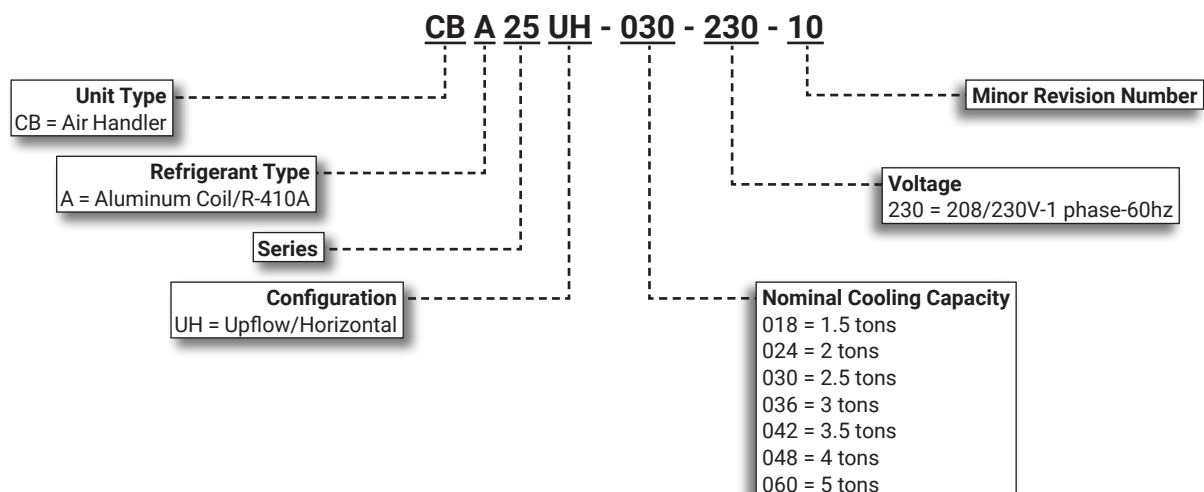
FEATURE HIGHLIGHTS

1. Quantum™ Coil
2. Refrigerant Line Connections
3. Check and Expansion Valve
4. Blower Motor
5. Heavy Gauge Steel Cabinet
6. Anti-Microbial Dual Position Drain Pans
7. Air Filter
8. Transformer and Blower Relay
9. Electric Heat (option)

CONTENTS

APPROVALS AND WARRANTY

APPROVALS

- Tested with matching air conditioners and heat pump units in the Lennox Research Laboratory environmental test room in accordance with AHRI Standard 210/240
- AHRI Certified system match-ups and expanded ratings, visit www.LennoxPros.com
- ETL Listed to US and Canadian safety standards and components within are bonded for grounding to meet safety standards for servicing required by NEC and CEC
- Optional electric heaters are ETL listed and rated in accordance with US Department of Energy (DOE) test procedures and Federal Trade Commission (FTC) labeling regulations
- Blower performance data according to unit tests conducted in Lennox air test chamber
- Approved for installation in manufactured housing and mobile homes.
- ISO 9001 Registered Manufacturing Quality System

WARRANTY

- All covered components
  - Limited five years in residential applications
  - Limited one year in non-residential applications

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

FEATURES

APPLICATIONS

- 1.5 to 5 ton nominal sizes
- Upflow or horizontal applications

NOTE - Downflow applications require optional conversion kit.

- Applicable to R-410A expansion valve systems in cooling applications and check and expansion valve systems in heat pump applications
- Wide-range check and expansion valve is factory installed
- Optional field installed electric heaters available in several sizes for additive heating capacity

REFRIGERANT SYSTEM

1 Quantum™ Coil
- Lennox designed and fabricated coil
- Enhanced aluminum alloy tube/enhanced fin coil for superior corrosion resistance
- Aluminum tubing, hairpins, distributor and header tubes
- Ripple-edged aluminum fins
- Twin coil construction assembled in a "A" configuration for large surface area
- Provides excellent heat transfer and low air resistance for maximum efficiency
- Precise circuiting for uniform refrigerant distribution
- Lanced fins provide maximum exposure of fin surface to air stream
- Rifled tubing provides superior heat transfer
- Coil thoroughly factory tested under high pressure to ensure leakproof construction

2 Refrigerant Line Connections
- Copper refrigerant sweat connections on both liquid and suction lines for easy brazing
- Lines extend outside of the cabinet for ease of connection
- See dimension drawings for locations

3 Check and Expansion Valve
- For use with R-410A systems
- Wide range valve with Chatleff style fitting
- Factory installed on all models, internal to cabinet

BLOWER

4 Permanent Split Capacitor (PSC) Motor
(018 Through 042 Models)
- Multi-speed PSC motor
- Choice of blower speeds
- Speed changes easily accomplished by a simple wiring change
- Blower is easily removed from unit for servicing

Constant Torque Blower Motor
(048 and 060 Models)
- Programmable high efficiency multi-speed blower motor
- By maintaining constant torque output, blower motor can deliver more uniform (but not constant) airflow over the static pressure range
- Programmable multi-speed operation is achieved by the use of an ECM (Electronically Commutated Motor) motor
- Leadless blower motor features simple plug-in connections
- Choice of blower speeds is available

Time Delay Blower Relay
- Relay allows one second blower "on" delay before continuous fan or cooling operation and 45 second blower "off" delay after continuous fan or cooling operation

FEATURES

CABINET

5 • Constructed of heavy gauge galvanized steel
• Pre-painted cabinet finish
• Completely insulated with foil faced fiberglass insulation
• Removable panels provide complete service access
• Filter access door for easy filter replacement
• Thumbscrews hold filter door in place
• Electrical inlets provided in sides and top of cabinet
• See dimension drawing for locations
• Plugs in cabinet for drain connections for upflow (left and right) and horizontal applications
• See dimension drawing

Low Leakage Cabinet
• All models have less than 2% air leakage and meet ANSI/ASHRAE Standard 193-2010 "Method of Test for Determining the Air Tightness of HVAC Equipment"

Upflow/Horizontal Capability (Optional Downflow)
• Shipped for upflow and horizontal left-hand discharge
• May be field converted to horizontal right-hand air discharge by repositioning horizontal drain pan
• Optional downflow kit required for field conversion

6 Anti-Microbial Dual Position Drain Pans
• Anti-Microbial additive resists growth of mold and mildew on drain pan which improves indoor air quality and reduces drain line blockage
• Drain pans designed for upflow or horizontal applications
• Deep, corrosion resistant high temperature engineered polymer drain pans have dual pipe drains
• See dimension drawing

Optional Accessories

Downflow Conversion Kit
• Required for field conversion to downflow position
• Kit consists of insulated downflow drain pan, insulated drain pan drip shields, coil drip shields, seal plates and support brackets for repositioning coil and drain pan

Horizontal Support Frame Kit
• Provides support of unit in horizontal applications
• Consists of (2) 1 x 1-1/2 x 32-5/8 in. and (2) 1 x 3 x 53-7/8 in. painted heavy gauge cold rolled steel support channels with assembly and suspending holes
• Bolts and nuts furnished for field assembly
• Suspending rods must be field provided

Side Return Unit Stand (Upflow Only)
• Raises unit 16 in. above floor for side return air duct connection
• Eliminates need for wooden platform construction
• All aluminum construction
• Two adjustable frames fit all sizes

Wall Hanging Bracket Kit (Upflow Only)
• Allows unit to be hung on wall at any height
• Consists of heavy-gauge steel support brackets (one for air handler, one for wall mount)
• Screws furnished for fastening one bracket to unit
• Bolts for fastening one bracket to wall are field provided

High Performance Economizer (Commercial Applications Only)
• Designed for applications requiring outdoor air to be utilized in a commercial HVAC system
• Allows the entry of fresh outdoor air for free cooling, reducing the requirement for mechanical cooling
• Heavy gauge galvanized steel cabinet lined with thick fiberglass insulation
• Mixed air sensor, outdoor air sensor and 24VAC transformer furnished
• Approved for California Title 24 building standards
• ASHRAE 90.1-2010 compliant
• See separate Product Specifications bulletin for additional information and available control and sensor options

FILTER

7 • Disposable 1 inch filter is furnished
• Filter rack furnished in cabinet for easy filter installation
• See Specifications tables for filter sizes

CONTROLS

8 Transformer and Blower Cooling Relay
- 24 volt transformer and blower cooling relay furnished as standard
- Factory installed in the unit control box
- Terminal strip furnished

Optional Accessories

### iComfort® 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® 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
- 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®, Google Assistant and IFTTT

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 Thermostat
- Outdoor sensor allows thermostat to display outdoor temperature

NOTE - Sensor is required for the Enhanced Dehumidification Accessory (EDA).
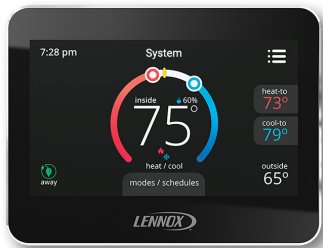
Thermostat
- Thermostat is not furnished with unit
- Lennox Price Book for selection

OPTIONAL ELECTRIC HEAT

9
- ETL listed
- Field install internal to unit cabinet
- Available in several kW sizes
- See Electric Heat tables
- Helix wound nichrome heating elements exposed directly in air stream resulting in instant heat transfer, low element temperatures and long service life
- Each element equipped with accurately located limit control with fixed temperature off setting and automatic reset
- Thermal sequencer relay brings elements on and off line, in sequence and equal increments, with time delay between each
- Initiates and terminates blower operation
- Heating control relay(s) furnished as standard
- Factory assembled with controls installed and wired
- Electric heat control wiring plugs into mating connector on air handler unit

Circuit Breaker (CB) Models
- All "CB" model heaters are equipped with circuit breakers for overload and short circuit protection
- Factory wired and mounted on electric heat unit
- Current sensitive and temperature actuated
- Manual reset
- Flexible plastic circuit breaker cover protects circuit breaker in areas with high humidity or unconditioned areas to prevent nuisance tripping
- Circuit breakers qualify as disconnect means at unit in many areas, eliminate the need for field provided disconnect
- Consult local electrical code in your area

Optional Accessories

Single-Point Power Source Control Box
- Control Box may be used with optional electric heat when single power supply is connected to multi-circuit electric heat
- Field installs external to the unit cabinet on either side or top
- Constructed of heavy gauge steel, baked enamel finish, prepunched mounting holes, electrical inlet knockouts, and terminal strip
- Removeable cover provides easy access
- Dimensions (H x W x D) - 7 x 7 x 4 in.

SPECIFICATIONS

General Data	Model Number	CBA25UH-018	CBA25UH-024	CBA25UH-030	CBA25UH-036
	Nominal tonnage	1.5	2	2.5	3
Connections	Suction/Vapor line (o.d.) - in. sweat	3/4	3/4	3/4	7/8
	Liquid line (o.d.) - in. sweat	3/8	3/8	3/8	3/8
	Condensate - in. fpt	(2) 3/4	(2) 3/4	(2) 3/4	(2) 3/4
Indoor Coil	Net face area - ft.[2]	3.30	3.77	4.72	5.66
	Tube outside diameter - in.	3/8	3/8	3/8	3/8
	Number of rows	3	3	3	3
	Fins per inch	15	15	15	15
Blower	Wheel nominal diameter x width - in.	9 x 6	9 x 6	10 x 8	10 x 8
	Blower motor output - hp	1/5	1/3	1/2	1/3
[1] Filters	Size of filter - in.	15 x 20 x 1	15 x 20 x 1	15 x 20 x 1	18 x 20 x 1
Shipping Data -1 package - lbs.		129	136	143	169

ELECTRICAL DATA

	CBA25UH-018	CBA25UH-024	CBA25UH-030	CBA25UH-036
Voltage - 1 phase (60 hz)	208/230V	208/230V	208/230V	208/230V
[2] Maximum overcurrent protection (unit only)	15	15	15	15
[3] Minimum circuit ampacity (unit only)	5.0	5.0	5.0	5.0
Blower Motor Full Load Amps	1.1	1.6	2.2	2.0

SPECIFICATIONS

General Data	Model Number	CBA25UH-042	CBA25UH-048	CBA25UH-060
	Nominal tonnage	3.5	4	5
Connections	Suction/Vapor line (o.d.) - in. sweat	7/8	7/8	7/8
	Liquid line (o.d.) - in. sweat	3/8	3/8	3/8
	Condensate - in. fpt	(2) 3/4	(2) 3/4	(2) 3/4
Indoor Coil	Net face area - ft.[2]	5.66	6.13	7.08
	Tube outside diameter - in.	3/8	3/8	3/8
	Number of rows	3	3	3
	Fins per inch	15	15	15
Blower	Wheel nominal diameter x width - in.	10 x 8	12 x 10	12 x 10
	Blower motor output - hp	1/2	1	1
[1] Filters	Size of filter - in.	18 x 20 x 1	18 x 20 x 1	18 x 20 x 1
Shipping Data -1 package - lbs.		169	179	190

ELECTRICAL DATA

|	CBA25UH-042	CBA25UH-048	CBA25UH-060
Voltage - 1 phase (60 hz)	208/230V	208/230V	208/230V
[2] Maximum overcurrent protection (unit only)	15	15	15
[3] Minimum circuit ampacity (unit only)	5.0	9.5	9.5
Blower Motor Full Load Amps	2.5	7.6	7.6

[1] Disposable filter.

[2] HACR type circuit breaker or fuse.

[3] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

OPTIONAL ACCESSORIES - ORDER SEPARATELY

Model	-018	-024 -030	-036	-042 -048 -060
iComfort® M30 Smart Wi-Fi Thermostat	15Z69	15Z69	15Z69	15Z69
Remote Outdoor Temperature Sensor	X2658	X2658	X2658	X2658
Downflow Conversion Kit	Y9658	Y9658	Y9659	Y9659
Electric Heat - See Electric Heat Data Tables	5 to 20 kW			
Horizontal Support Frame Kit	56J18	56J18	56J18	56J18
Side Return Unit Stand (Upflow Only)	45K32	45K32	45K32	45K32
Single-Point Power Source Control Box (for Electric Heat)	21H39	21H39	21H39	21H39
Wall Hanging Bracket Kit (Upflow Only)	45K30	45K30	45K30	45K30
High Performance Economizer (Commercial Only)	10U53	10U53	10U53	10U53

SIDE RETURN UNIT STAND
(Upflow Only)

16
(406)

6
(152)

FRONT

SIDE

21-1/4
(540)

ADJUSTABLE
20 (508) to
25 (635)
ALL UNITS
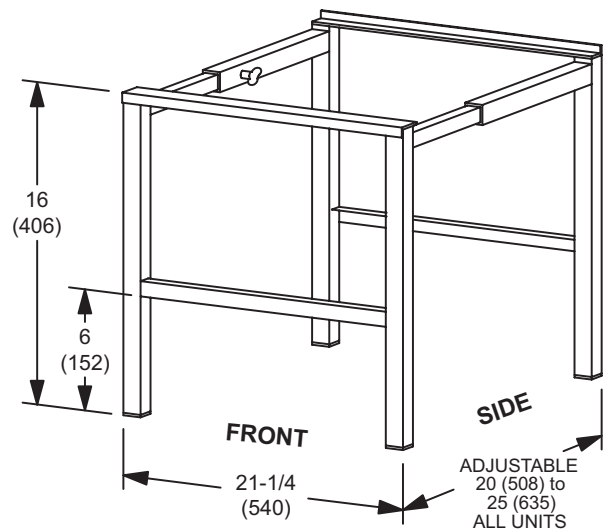
REVISIONS

Sections	Description of Change
Electric Heat	Added Circuit Breaker Cover as standard for all Electric Heat Circuit Breaker (CB) models.

ETL
LISTED
C   US
CM

Intertek

LENNOX®

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