AIR HANDLERS CBX40UHV DAVE LENNOX SIGNATURE® COLLECTION R-410A Ready - Multi-Position - Variable Speed

LENNOX

PRODUCT SPECIFICATIONS

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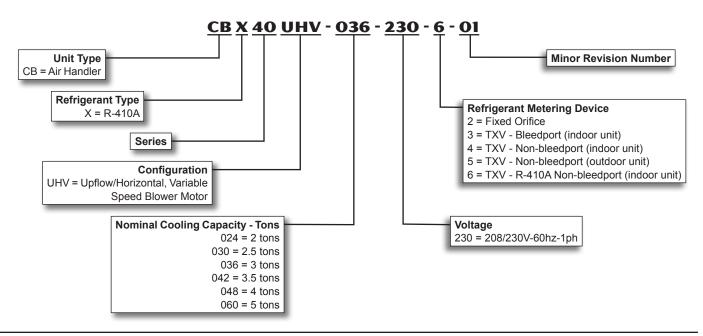






Nominal Capacity - 2 to 5 Tons Optional Electric Heat - 2.5 to 25 kW

MODEL NUMBER IDENTIFICATION



CONTENTS

Blower Data	9
Dimensions - Horizontal	19
Dimensions - Upflow	
Electrical Data	8
Electric Heat Data	14
Features	2
Installation Clearances	8
Model Number Identification	1
Optional Accessories	8
Replacement Circuit Breakers	8
Specifications	8

WARRANTY

All covered components - Limited ten years in residential applications, one year in non-residential applications.

Refer to Lennox Limited Warranty Certificate included with each unit for additional details.

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.

Optional electric heaters are 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.

Air handlers are UL Listed to US and Canadian safety standards and components within are bonded for grounding to meet safety standards for servicing required by CEC and NEC.

Air handler units are approved for installation in manufactured housing and mobile homes.

Air handler units are approved for installation in manufactured housing and mobile homes.

ISO 9001 Registered Manufacturing Quality System.

APPLICATIONS

2 to 5 ton nominal sizes.

Multi-position upflow or horizontal and downflow (with optional kit) applications.

Applicable to expansion valve systems in R-410A cooling applications and check and expansion valve systems in R-410A heat pump applications.

Applicable to Lennox Harmony III[™] zoning system.

Wide-range check and expansion valve is factory installed.

See bulletins in section Air Conditioners for cooling capacities.

See bulletins in section Heat Pump Outdoor Units for cooling and heating capacities.

Optional field installed electric heaters available in several sizes for additive heating capacity.



Zoning Applications

Units can be used with certain zoning systems. Zone control panel MUST be able to interface and communicate with the variable speed motor in the unit.

Lennox iHarmony[®] Zoning System has this capability.

REFRIGERANT SYSTEM

Copper Tube/Enhanced Fin Indoor Coil

Lennox designed and fabricated twin coils.

Assembled in "A" configuration.

Provides extra large surface and contact area, excellent heat transfer and low air resistance for maximum efficiency.

Precise circuiting for uniform refrigerant distribution.

Precisely spaced ripple-edged aluminum fins fitted to durable seamless copper tubes.

Fins are strengthened to resist bending and are equipped with collars that grip tubing for maximum contact area.

Lanced fins provide maximum exposure of fin surface to air stream.

Long life copper tubing is easy to service.

Rifled tubing provides superior heat transfer.

CBX40UHV / Page 2

REFRIGERANT SYSTEM (continued)

Flared shoulder tubing joints and silver soldering provide tight, leakproof joints.

Coil thoroughly factory tested under high pressure to ensure leakproof construction.

2 Refrigerant Line Connections

Suction (vapor) and liquid lines have sweat connections that extended outside of the cabinet for ease of connection.

See dimension drawings for locations.

(3) Check and Expansion Valve Furnished

For use with R-410A systems. Wide range valve with Chatleff style fitting.



Factory installed on all models, internal to cabinet.

CABINET

4 Constructed of heavy-gauge galvanized steel.

Completely insulated with thick fiberglass insulation.

Pre-painted steel cabinets have mildly textured enamel finish with primer coat on unpainted side of all panels.

Units are shipped in one piece but may be disassembled into two separate sections for ease of installation in tight applications. See dimension drawings.

Thick rubber gasket between sections of the two piece cabinets provides an air tight seal.

No external screw heads on sides of cabinet for tight installations without damage to walls or woodwork.

Removable panels provide complete service access.

Electrical inlets provided in sides and top of cabinet. See dimension drawings for locations.

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 right-hand discharge.

May be field converted to horizontal left-hand air discharge by repositioning horizontal drain pan.

Optional downflow kit available for field conversion.

Dual Position Drain Pans

Drain pans designed for upflow, downflow or horizontal applications.

Deep, corrosion resistant plastic drain pans have dual pipe drains.

See dimension drawings.

Optional Accessories

Downflow Combustible Flooring Base

Base is required for models with electric heat installed in downflow position on combustible floors.

Downflow Conversion Kit

Required for field conversion to downflow position. Kit consists of drip shields and 2 brackets for repositioning coil and drain pan. See Specifications table.

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 -018/024 thru -060 models.

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.

NOTE - Economizer is not iComfort[®] Communicating compatible.

CONTROLS

5 iComfort[®] Communicating Control

Advanced control board communicates information about various operating parameters in the air handler to the optional iComfort[®] Communicating Thermostat to constantly maintain the highest level of comfort, performance and efficiency available.



Auto Configuration - On start-up the control board automatically

sends a description of the unit to the optional iComfort[®] Communicating Thermostat to automatically configure the number of stages and features available.

Connections for connecting a conventional heating/ cooling thermostat are also provided on the board.

Board also features:

- Lennox Humiditrol[®] Whole Home Dehumidification System (EDA) compatible.
- EEPROM storage of all local configurations.
- Non-volatile memory storage of 100 alarm codes with display of last 10 codes for troubleshooting.
- Connections for optional outdoor temperature sensor (communicates temperature on RSBUS to thermostat).
- Controls evaporator humidity by controlling blower and compressor staging on two-stage outdoor units.
- Two stages HEAT and COOL (with four different air volume selections for each) are made by simple jumper pins on board.
- ADJUST jumper pin allows approximately 10% higher, normal or 10% lower motor speed selection within HEAT and COOL speeds selected for fine tuning air volume.
- DELAY jumper pin allows selection of blower motor de-humidification profiles during cooling mode.

Option 1 - Motor runs at 100% of capacity until demand met. Once demand is met, motor ramps down to stop.

Option 2 - Cooling: When cool demand is initiated, motor ramps up to 100% and runs at 100% until demand is satisfied. Once demand is met, motor runs at 100% for 45 seconds, then ramps down to stop. Heat Pump: When heat pump demand is initiated, 30 second motor on delay starts. After the motor on delays expires, motor ramps up to 100% and runs at 100% until demand is satisfied. Once demand is met, motor runs at 100% for 45 seconds, then ramps down to stop.

Option 3 - Motor runs at 82% of capacity for approximately 7.5 minutes, then 100% capacity (if needed) until demand is satisfied. Once demand is met, motor ramps down to stop.

Option 4 - Motor runs at 50% capacity for 30 seconds, then 82% capacity for approximately 7.5 minutes. If demand is not satisfied, motor runs at 100% capacity until demand is met. Once demand is met, motor runs at 50% capacity for 30 seconds, then ramps down to stop.

Display LED - Seven segment LED displays alphanumeric information related to diagnostics as well as system operation and status. Diagnostic codes are held in non-volatile memory, immune from power interruptions. Holds up to ten diagnostic codes in order of occurrence for recall on demand. Port on blower door allows for easy viewing.

Dehumidification (Active or Humiditrol® Option) - A jumper on the control board must be clipped to enable active dehumidification and/or operation with a Humiditrol Whole-Home Dehumidification System. A humidity controlling thermostat or device is also required. During a call for cooling, air volume is automatically reduced, forcing humidity removal by the air conditioner or heat pump system. After the humidity has reached the desired set-point the cooling air volume returns to its designed rate. A dehumidification signal from the thermostat reduces the cooling cfm to 70% of the requested cooling cfm.

Electric Heat Operation - Control for up to three electric heat stages.

EvenHeater® Electric Heat Control - Up to four electric heat stages are available when utilizing the EvenHeater® control feature furnished on the iComfort® Communicating control. EVENHEAT jumper position on control board determines target discharge air temperature of 85°F, 100°F, 115°F or 130°F. Default setting is 85°F. An optional Discharge Air Sensor is required.

Heat Pump Operation - A jumper on the control board must be clipped to enable operation with a single or two-stage heat pump. The indoor blower is started without delay when a call for heat is received.

Two-Stage Cooling Operation - A jumper on the control board must be clipped to enable operation with a two-stage air conditioner. The cooling blower speeds for first and second stage cooling will be dictated by the applicable DIP switch settings.

Lennox System Operations Monitor Connection -Monitors outdoor unit operation. (communicating mode).

Continuous Blower Speed - Adjustable continuous blower speed is a percentage of the high cooling speed selection. There are four selectable options (via DIP switch settings) of 28%, 38% (default setting), 70% and 100%.

Transformer - 70VA transformer furnished as standard. Factory installed in the unit control box.

Accessory Terminal - One 24 volt humidifier output is furnished for non-powered humidifiers. Control board is factory installed in the unit control box.

CONTROLS (continued)

Optional Accessories

iComfort[®] S30 Ultra-Smart Thermostat (part of the iComfort[®] Residential Communicating Control System)

The iComfort[®] S30 Thermostat recognizes and connects to all iComfort[®] Communicating products

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



serial number information for iComfort[®] Communicating products to simplify system setup.

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.

Dealer Dashboard features online real-time monitoring of installed iComfort[®] Communicating systems.

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

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

Conventional outdoor units (not iComfort[®] Communicating) can easily be added and controlled by the iComfort[®] S30 Thermostat.

Works with Amazon® Alexa-enabled products.

Installer setup screens allow quick and simple system configuration without a manual, Installer can also run tests on complete system or individual components for easy maintenance and troubleshooting.

Serial communications bus (RSBus), with less wiring than a conventional heating/cooling system, allows system communication. Uses 4-wire, 18-gauge standard thermostat wiring.

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 (part of the iComfort® Residential Communicating Control System) The iComfort Wi-Fi® Thermostat recognizes and

connects to all iComfort® Communicating products

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



recognizes model and serial number information for iComfort[®] Communicating products to simplify system setup.

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.

Dealer Dashboard features online real-time monitoring of installed iComfort[®] Communicating systems.

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

Easy to read 7-inch color screen (measured diagonally).

Conventional outdoor units (not iComfort[®] Communicating) can easily be added and controlled by the iComfort Wi-Fi[®] Thermostat.

Installer setup screens allow quick and simple system configuration without a manual, Installer can also run tests on complete system or individual components for easy maintenance and troubleshooting.

Serial communications bus (RSBus), with less wiring than a conventional heating/cooling system, allows system communication. Uses 4-wire, 18-gauge standard thermostat wiring.

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

CONTROLS (continued)

ComfortSense® 7500 Touchscreen Thermostat

Electronic 7-day, universal, multi-stage, programmable, touchscreen thermostat.

7:28 pm

4 Heat/2 Cool.

Auto-changeover.

Duel-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.

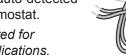
Easy-to-use, menu driven thermostat with a back-lit, LCD touchscreen.

See the ComfortSense[®] 7500 Product Specifications bulletin in the Controls section for more information.

Remote Outdoor Temperature Sensor

Used with the iComfort[®] Communicating Thermostats and ComfortSense[®] 7500 thermostat.

When installed outdoors, sensor allows thermostat to display outdoor temperature. Sensor is auto-detected when connected to thermostat.



- NOTE Sensor is required for Humiditrol® applications.
- NOTE The outdoor sensor is furnished as standard with iComfort[®] Communicating outdoor units, optional for conventional units.

Thermostat

Thermostat (iComfort[®] Communicating Thermostat or programmable/non-programmable) is not furnished with unit.

See Thermostat bulletins in Controls Section and Lennox Price Book for selection.

Hot Water Heat Kit

Air handler kit to control a third-party hot water boiler with a hot water heating coil installed downstream from the air handler.

Kit contains all necessary relays and plug-in wiring harness to control boiler.

NOTE - This kit is only approved for use in systems using either the ComfortSense® 7500 or iComfort® Communicating thermostats.

BLOWER

≣

outside

I FNNOX

6 Variable-Speed Blower Motor

High efficiency multi-speed blower motor maintains specified air volumes up to a maximum of 0.8 in. w.g. total external static.

Multi-speed operation is

achieved by the use of an ECM (Electronically Commutated Motor) motor.

Allows cooling ramping profiles (field selectable) for enhanced dehumidification.



Motor accelerates and decelerates gradually, reducing start-up and shut-down sound.

Leadless blower motor features simple plug-in connections.

Motor is controlled by the iComfort[®] Communicating control that allows blower to operate at two of eight air volumes or speeds available.

Speeds may be field selected on iComfort[®] Communicating control depending on size of air handler and air volume desired.

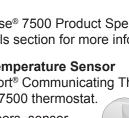
See blower performance tables.

Blower Assembly

Lennox designed and built, direct drive blower.

Each blower is statically and dynamically balanced as an assembly before installation in the unit.

Blower motor is resiliently mounted to blower assembly. Blower slides out of cabinet for servicing.



OPTIONAL ELECTRIC HEAT

8 Field install internal to unit cabinet.

Available in several voltages and 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.

Supplemental thermal cutoff limit control, provides positive protection in case of excessive temperatures.

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.

Control box and access cover constructed of heavy gauge galvanized steel.

Factory assembled with controls installed and wired.

Electric heat low voltage controls plug-in to air handler unit.

Circuit Breaker Models

The following heaters are equipped with circuit breakers for overload and short circuit protection:

ECB40-4CB, -5CB, -6CB, -8CB, -9CB, -12.5CB, -15CB, -20CB and -25CB (208/240V-1ph)

ECB40-15CB, -20CB and -25CB (208/240V-3ph

Factory wired and mounted on electric heat unit.

Current sensitive and temperature actuated.

Manual reset.

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

Circuit Breaker Cover Kit

Flexible plastic cover protects circuit breaker.

Recommended in areas with high humidity or unconditioned areas to prevent nuisance tripping.

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.

Removable cover provides easy access.

Dimensions $(H \times W \times D) - 7 \times 7 \times 4$ in.

INDOOR AIR QUALITY

9 MERV 16 Air Filter

Disposable 5 inch, MERV 16 frame-type filter furnished and factory installed in rails in cabinet.

Tool-less access to filter area for quick and easy servicing.

Unit filter rails also will accommodate a one inch disposable filter.

See Specifications tables for sizes.

Optional Accessories

Healthy Climate® Germicidal UVC Light



Germicidal lamp emits C-Band ultra-violet (UVC) energy at 253.7 nanometers, which is proven to be effective in reducing microbes such as viruses, bacteria, yeasts, and molds. This process either destroys the organism or controls its ability to reproduce. UVC germicidal light greatly reduces the growth and proliferation of mold and other bioaerosols (bacteria and viruses) on illuminated surfaces (particularly coil and drain pan). Surfaces must be cleaned prior to UVC light being installed.

Available in 24 volt and 110/230V-1ph models.

Air handlers have a factory provided knockout in the coil delta plate for mounting light within coil area.

Shielding baffle is required when installing light above a non-UVC resistant component, such as a filter.

Baffle must be ordered separately.

SPECIFICATI	ONS						
General Data	Model Number	CBX40UHV	CBX40UHV	CBX40UHV	CBX40UHV	CBX40UHV	CBX40UHV
		-024	-030	-036	-042	-048	-060
	Nominal tonnage	2	2.5	3	3.5	4	5
	Refrigerant	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
Connections	Suction / vapor (o.d.) line - sweat	5/8	3/4	3/4	7/8	7/8	7/8
in.	Liquid line (o.d.) - sweat	3/8	3/8	3/8	3/8	3/8	3/8
	Condensate drain - in. (fpt)	(2) 3/4	(2) 3/4	(2) 3/4	(2) 3/4	(2) 3/4	(2) 3/4
Indoor	Net face area - ft. ²	5.0	5.0	5.0	7.22	7.22	7.22
Coil	Tube outside diameter - in.	3/8	3/8	3/8	3/8	3/8	3/8
	Number of rows	3	3	3	3	3	3
	Fins per inch	12	12	12	12	12	12
Blower Data	Wheel nominal diameter x width - in.	11 x 8	11 x 8	11 x 8	11-1/2 x 9	11-1/2 x 9	11-1/2 x 9
	Motor output - hp	1/2	1/2	3/4	1	1	1
Filters MERV 16	¹ Size - in.	20 x 20 x 5	20 x 20 x 5	20 x 20 x 5	20 x 25 x 5	20 x 25 x 5	20 x 25 x 5
Shipping Data - 1 P	Package - Ibs.	165	167	172	214	216	216
ELECTRICAL	DATA						
	Voltage - phase - 60hz			208/23	0V-1ph		
² Max	imum overcurrent protection (unit only)	15	15	15	20	20	20
	³ Minimum circuit ampacity (unit only)	5	5	10	10	10	10
CONTROLS		1	1			1	1
iComfort® S30 Ther	mostat	12U67	12U67	12U67	12U67	12U67	12U67
iComfort Wi-Fi® The	ermostat	10F81	10F81	10F81	10F81	10F81	10F81
ComfortSense® 750	00 Thermostat	13H14	13H14	13H14	13H14	13H14	13H14
⁴ Discharge Temper	rature Sensor	88K38	88K38	88K38	88K38	88K38	88K38
⁵ Remote Outdoor S	ensor (for dual fuel and Humiditrol®)	X2658	X2658	X2658	X2658	X2658	X2658
OPTIONAL A	CCESSORIES - ORDER SE	PARATEL	Y			'	'
Circuit Breaker Co	ver Kit	82W01	82W01	82W01	82W01	82W01	82W01
Downflow Combus	tible Flooring Base	44K15	44K15	44K15	44K15	44K15	44K15
Downflow Convers	ion Kit	83M57	83M57	83M57	43W10	43W10	43W10
Electric Heat			2.5 to 25 k	W - See Ele	ectric Heat D	ata tables	
Healthy Climate	UVC-24V (24V)	X9423	X9423	X9423	X9423	X9423	X9423
Germicidal Light	Shielding Baffle (required) 16 in. lamp	Y5171	Y5171	Y5171	Y5171	Y5171	Y5171
Shieldin	g Baffle (required) optional 14 in. lamp	Y5172	Y5172	Y5172	Y5172	Y5172	Y5172
	UVC-41W-S (110/230v-1 ph)	X9424	X9424	X9424	X9424	X9424	X9424
	Shielding Baffle (required) 16 in.	Y5171	Y5171	Y5171	Y5171	Y5171	Y5171
Horizontal Support	Frame Kit	56J18	56J18	56J18	56J18	56J18	56J18
Hot Water Heat Kit		90W84	90W84	90W84	90W84	90W84	90W84
Side Return Unit St	tand (Upflow)	45K31	45K32	45K32	45K31	45K31	45K32
Single-Point Power	r Source Control Box	21H39	21H39	21H39	21H39	21H39	21H39
Wall Hanging Brack	ket Kit (Upflow)	45K30	45K30	45K30	45K30	45K30	45K30
¹ Disposable frame type f	ilter						

¹ Disposable frame type 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.

⁴ Optional for EvenHeater[®] electric heat operation and service diagnostics.

⁵ Remote Outdoor Temperature Sensor is used with conventional (non-iComfort[®] Communicating) outdoor units (sensor is furnished with iComfort[®] Communicating outdoor units). Allows the thermostat to display outdoor temperature. Required in dual-fuel and Humiditrol[®] applications.

REPLACEMENT CIRCUIT BREAKERS

Voltage	Description	Catalog No.
208/240V - 1 Phase	25 amp, 2 pole	41K13
	30 amp, 2 pole	17K70
	35 amp, 2 pole	72K07
	40 amp, 2 pole	49K14
	45 amp, 2 pole	17K71
	50 amp, 2 pole	41K12
	60 amp, 2 pole	17K72
208/240V - 3 Phase	30 amp, 3 pole	64W47
	35 amp, 3 pole	41K14
	40 amp, 3 pole	41K16
	45 amp, 3 pole	18M86
	50 amp, 3 pole	41K15
	60 amp, 3 pole	41K17

INSTALLATION CLEARANCES

WITH ELECTRIC HEAT

Cabinet	0 inch (0 mm)
To Plenum	1 inch (25 mm)
To Outlet Duct within 3 feet (914 mm)	1 inch (25 mm)
Floor	See Note #1
Service / Maintenance	See Note #2

¹ Units installed on combustible floors in the downflow position with electric heat require optional downflow combustible flooring base.

² Front service access - 24 inches (610 mm) minimum.

NOTE - If cabinet depth is more than 24 inches (610 mm), allow a minimum of the cabinet depthn plus 2 inches (51 mm).

CBX40UHV-024 BLOWER PERFORMANCE

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

"ADJUST"	Jumper Speed Positions										
Jumper		"HEAT"	Speed		"COOL" Speed						
Setting	1	2	3	4	1	2	3	4			
	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm			
+	715	855	1000	1130	465	690	900	1050			
NORM	670	770	900	1035	425	620	825	950			
-	580	700	800	930	385	560	735	850			

NOTES - The effect of static pressure, filter and electric heater resistance is included in the air volumes listed.

First stage cooling air volume is 70% of COOL speed setting. Continuous fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 250 cfm.

Lennox iHarmony® Zoning System applications - minimum blower speed is 250 cfm.

CBX40UHV-024 BLOWER MOTOR WATTS

Jumper		Motor Watts @ Various External Static Pressures - in. wg.										
Speed Positi	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8		
"HEAT" Speed	Tap 1	53	68	89	113	143	163	191	214	232		
	Tap 2	73	93	122	141	170	200	234	260	282		
	Tap 3	105	141	168	179	217	248	275	306	348		
	Tap 4	132	159	189	218	248	285	313	349	393		
"COOL" Speed	Tap 1	25	35	56	73	89	98	114	130	143		
	Tap 2	45	64	79	101	130	151	180	211	216		
	Tap 3	75	103	127	146	177	210	243	266	298		
	Tap 4	114	142	175	200	219	258	280	332	363		

AT "NORM" SETTING ("Adjust" Jumper at NORM Setting)

Jumper			Motor Watts @ Various External Static Pressures - in. wg.									
Speed Positions		0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8		
"HEAT" Speed	Tap 1	48	64	79	103	128	156	182	196	207		
	Tap 2	61	80	98	123	149	175	206	233	254		
	Tap 3	77	101	128	151	178	214	239	267	300		
	Tap 4	109	142	171	193	223	245	286	325	359		
"COOL" Speed	Tap 1	23	38	52	68	80	91	111	128	135		
	Tap 2	34	53	76	94	111	142	152	176	203		
	Tap 3	64	87	113	130	158	190	226	247	270		
	Tap 4	89	120	145	166	198	225	258	289	319		

AT "-" (Minus) SETTING ("Adjust" Jumper at "-" Setting)

Jumper Speed Positions			Motor Watts @ Various External Static Pressures - in. wg.										
		0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8			
"HEAT" Speed	Tap 1	38	56	70	94	113	130	154	176	192			
	Tap 2	53	68	88	110	138	163	195	207	234			
	Tap 3	62	84	103	125	155	186	213	246	268			
	Tap 4	89	116	141	165	192	220	250	278	314			
"COOL" Speed	Tap 1	22	33	47	61	71	83	98	110	123			
	Tap 2	30	46	63	86	102	118	138	162	172			
	Tap 3	54	71	91	116	138	171	191	221	247			
	Tap 4	66	86	117	138	159	195	227	253	286			

CBX40UHV-030 BLOWER PERFORMANCE

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

"ADJUST"	Jumper Speed Positions										
Jumper		"HEA	T" Speed			"COOL" Speed					
Setting	1	2	3	4	1	2	3	4			
	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm			
+	800	935	1070	1210	660	880	1100	1320			
NORM	725	850	975	1100	600	800	1000	1200			
-	655	765	880	990	540	720	900	1080			

NOTES - The effect of static pressure, filter and electric heater resistance is included in the air volumes listed.

First stage cooling air volume is 70% of COOL speed setting. Continuous fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 250 cfm.

Lennox iHarmony[®] Zoning System applications - minimum blower speed is 250 cfm.

CBX40UHV-030 BLOWER MOTOR WATTS

AT "+" (Plus) SET	TING ("A	djust" Jum	-	•									
Jumper			M	otor Watts	@ Various	External S	tatic Press	ures - in. w	g.				
Speed Position	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8			
"HEAT" Speed	Tap 1	66	87	114	134	162	185	214	239	268			
	Tap 2	101	124	151	175	192	224	243	273	325			
	Тар 3	134	171	188	212	243	273	296	329	366			
	Tap 4	182	211	245	285	319	353	375	405	444			
'COOL" Speed	Tap 1	47	63	82	101	121	151	175	193	206			
	Tap 2	83	107	131	152	178	202	231	265	296			
	Тар 3	142	170	196	220	251	282	315	345	367			
	Tap 4	209	258	295	345	373	418	452	482	512			
AT "NORM" SETT	ING ("Ad	just" Jump	er at NORM	/ Setting)									
Jumper		Motor Watts @ Various External Static Pressures - in. wg.											
Speed Position	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8			
"HEAT" Speed	Tap 1	57	77	94	115	146	172	195	219	232			
	Tap 2	79	104	123	149	168	196	231	264	294			
	Tap 3	111	139	164	186	209	233	261	298	334			
	Tap 4	148	178	199	231	260	293	314	355	382			
"COOL" Speed	Tap 1	38	53	68	94	113	127	149	169	185			
	Tap 2	67	84	105	131	152	178	207	240	257			
	Tap 3	110	141	164	188	213	240	266	292	330			
	Tap 4	168	197	226	260	302	338	366	400	434			
AT "–" (Minus) SE	TTING ("	Adjust" Ju	mper at "–'	' Setting)									
Jumper			М	otor Watts	@ Various	External S	tatic Press	ures - in. w	g.				
Speed Position	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8			
"HEAT" Speed	Tap 1	48	66	83	107	127	149	171	199	217			
	Tap 2	63	80	103	125	145	178	200	229	246			
	Tap 3	86	113	135	155	179	203	244	270	305			
	Tap 4	109	144	165	191	212	240	264	296	338			
'COOL" Speed	Tap 1	32	47	60	86	101	113	134	151	168			
	Tap 2	54	70	88	107	132	157	188	210	225			
	Tap 3	87	114	137	159	183	206	232	267	302			
	Tap 4	130	165	184	207	245	270	300	326	363			

CBX40UHV-036 BLOWER PERFORMANCE

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

"ADJUST"	Jumper Speed Positions										
Jumper		"HEAT"	Speed			"COOL" Speed					
Setting	1	2	3	4	1	2	3	4			
	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm			
+	1230	1335	1445	1545	900	1225	1380	1545			
NORM	1120	1215	1315	1400	810	1125	1275	1400			
-	1010	1185	1200	1265	730	1000	1135	1265			

NOTES - The effect of static pressure, filter and electric heater resistance is included in the air volumes listed.

First stage cooling air volume is 70% of COOL speed setting. Continuous fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 380 cfm.

Lennox iHarmony[®] Zoning System applications - minimum blower speed is 380 cfm.

CBX40UHV-036 BLOWER MOTOR WATTS

AT "+" (Plus) SET	TING ("A	djust" Jum	per at "+"	Setting)									
Jumper			Motor Watts @ Various External Static Pressures - in. wg.										
Speed Positi	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7				
"HEAT" Speed	Tap 1	189	223	253	271	306	323	359	377				
	Tap 2	238	273	295	316	349	375	417	439				
	Тар 3	279	322	348	384	420	463	486	525				
	Tap 4	327	387	427	451	489	537	566	600				
"COOL" Speed	Tap 1	86	102	124	143	165	193	218	246				
	Tap 2	183	211	232	261	296	314	342	368				
	Тар 3	248	284	315	349	366	407	441	473				
	Tap 4	347	376	418	464	495	531	566	608				

AT "NORM" SETTING ("Adjust" Jumper at NORM Setting)

Jumper			M	otor Watts	@ Various	External S	tatic Press	ures - in. w	g.	
Speed Positi	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
"HEAT" Speed	Tap 1	146	173	199	225	257	279	304	330	364
	Tap 2	186	234	241	264	296	319	340	371	395
	Tap 3	226	263	281	304	341	371	393	435	456
	Tap 4	261	296	321	355	389	423	450	489	519
"COOL" Speed	Tap 1	80	97	115	127	143	178	206	225	251
	Tap 2	144	168	197	223	250	272	299	332	356
	Tap 3		227	265	279	307	340	363	397	431
	Tap 4	255	285	313	346	386	418	454	483	527

AT "-" (Minus) SETTING ("Adjust" Jumper at "-" Setting)

Jumper			Ν	otor Watts	@ Various	External S	tatic Press	ures - in. w	g.	
Speed Positi	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
"HEAT" Speed	Tap 1	110	139	161	185	213	234	263	291	312
	Tap 2	182	210	236	252	293	315	336	356	393
	Tap 3	175	193	224	257	294	312	330	350	382
	Tap 4	199	234	257	291	309	333	366	395	423
"COOL" Speed	Tap 1	62	80	95	113	132	151	177	188	213
	Tap 2	103	130	148	172	192	219	248	277	309
	Tap 3	144	163	192	216	250	275	294	322	357
	Tap 4	196	224	255	287	306	339	371	395	429

CBX40UHV-042 BLOWER PERFORMANCE

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

"ADJUST"			,	Jumper Spe	ed Positions			
Jumper		"HEAT"	Speed			"COOL	" Speed	
Setting	1	2	3	4	1	2	3	4
	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm
+	1100	1320	1540	1760	1100	1320	1540	1760
NORM	1000	1200	1400	1600	1000	1200	1400	1600
-	900	1080	1260	1440	900	1080	1260	1440

NOTES - The effect of static pressure, filter and electric heater resistance is included in the air volumes listed.

First stage cooling air volume is 70% of COOL speed setting. Continuous fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 450 cfm.

Lennox iHarmony[®] Zoning System applications - minimum blower speed is 450 cfm.

CBX40UH-042 BLOWER MOTOR WATTS

AT "+" (Plus) SET	TING ("A	djust" Jur	nper at "+"	Setting)						
Jumper			M	lotor Watts	@ Various	External S	tatic Press	ures - in. w	g.	
Speed Position	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
"HEAT" Speed	Tap 1	124	154	177	204	240	260	296	326	363
	Tap 2	179	227	255	287	336	356	394	451	486
	Tap 3	294	339	387	425	463	489	518	550	600
	Tap 4	405	456	510	553	607	647	686	743	777
'COOL" Speed	Tap 1	122	146	173	198	224	259	292	329	360
	Tap 2	186	230	254	289	332	361	404	438	477
	Tap 3	284	335	387	413	455	483	526	551	600
	Tap 4	413	475	517	570	632	569	715	750	782
AT "NORM" SETT	ING ("Ad	just" Jump	per at NORI	M Setting)					1	
Jumper			Μ	lotor Watts	@ Various	External S	tatic Press	ures - in. w	g.	
Speed Position	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
'HEAT" Speed	Tap 1	97	123	146	179	205	225	258	292	327
	Tap 2	144	180	209	230	266	295	334	375	410
	Тар 3	226	259	307	342	380	405	448	482	525
	Tap 4	323	369	401	449	491	516	563	593	640
"COOL" Speed	Tap 1	93	118	142	166	197	225	247	280	314
	Tap 2	148	179	207	231	268	311	333	377	405
	Тар 3	229	263	298	332	386	408	446	484	534
	Tap 4	327	375	403	448	489	523	557	589	646
AT "–" (Minus) SE	TTING ("	Adjust" Ju	mper at "-	" Setting)						
Jumper			M	lotor Watts	@ Various	External S	tatic Press	ures - in. w	g.	
Speed Position	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
"HEAT" Speed	Tap 1	80	105	128	148	173	206	233	265	287
	Tap 2	113	144	172	193	219	265	286	312	349
	Tap 3	168	198	238	265	293	332	368	415	442
	Tap 4	239	285	315	362	398	428	465	503	544
'COOL" Speed	Tap 1	76	100	123	148	169	203	230	260	279
	Tap 2	115	145	169	190	217	258	288	315	349
	Tap 3	166	199	236	263	296	330	380	415	449
	Tap 4	241	289	321	366	396	431	472	505	544

CBX40UHV-048 AND CBX40UHV-060 BLOWER PERFORMANCE

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

"ADJUST"				Jumper Spe	ed Positions			
Jumper		"HEAT"	Speed			"COOL	" Speed	
Setting	1	2	3	4	1	2	3	4
	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm
+	1850	1960	2090	2150	1625	1820	2055	2145
NORM	1705	1800	1900	2005	1425	1625	1805	2005
-	1560	1625	1720	1770	1205	1375	1555	1725

NOTES - The effect of static pressure, filter and electric heater resistance is included in the air volumes listed.

First stage cooling air volume is 70% of COOL speed setting. Continuous fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 450 cfm.

Lennox iHarmony[®] Zoning System applications - minimum blower speed is 450 cfm.

CBX40uhV-048 AND CBX40UHV-060 BLOWER MOTOR WATTS

AT "+" (Plus) SETTING ("Adjust" Jumper at "+" Setting)

Jumper			Μ	otor Watts	@ Various	External S	tatic Press	ures - in. w	g.	
Speed Positi	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
"HEAT" Speed	Tap 1	418	478	539	551	599	646	675	704	748
	Tap 2	492	540	585	642	684	732	761	797	834
	Tap 3	594	645	721	762	811	863	874	918	976
	Tap 4	653	713	755	809	861	909	941	974	1028
"COOL" Speed	Tap 1	312	342	373	414	443	475	512	558	587
	Tap 2	407	459	503	552	591	627	670	718	752
	Тар 3	581	646	691	737	792	826	863	900	942
	Tap 4	646	695	746	804	873	900	934	976	1032

AT "NORM" SETTING ("Adjust" Jumper at NORM Setting)

Jumper			M	otor Watts	@ Various	External S	tatic Press	ures - in. w	′g.	
Speed Positi	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
"HEAT" Speed	Tap 1	325	366	404	444	475	520	566	598	636
	Tap 2	369	421	465	516	560	587	616	666	717
	Tap 3	436	488	540	586	621	671	710	743	789
	Tap 4	523	581	636	684	738	789	816	852	894
"COOL" Speed	Tap 1	226	259	293	322	350	387	413	446	472
	Tap 2	312	355	382	423	450	492	520	570	615
	Tap 3	388	421	482	523	564	606	641	695	741
	Tap 4	538	599	647	686	718	792	820	853	888

AT "-" (Minus) SETTING ("Adjust" Jumper at "-" Setting)

Jumper			M	lotor Watts	@ Various	External S	tatic Press	ures - in. w	g.	
Speed Positi	ons	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
"HEAT" Speed	Tap 1	271	302	341	368	398	439	473	504	545
	Tap 2	286	329	356	393	423	462	504	550	572
	Тар 3	327	374	407	455	504	526	563	608	638
	Tap 4	355	404	442	496	539	560	602	643	684
"COOL" Speed	Tap 1	124	163	180	209	231	271	300	322	357
	Tap 2	192	233	252	282	321	356	390	422	449
	Tap 3	268	311	336	367	393	432	469	523	538
	Tap 4	328	376	420	463	486	536	572	612	657

ELECTRIC	C HEAT DATA - CBX40	DUHV-	024					
	Model Number	No. of Stages	Volts Input	kW Input	¹ Btuh Input	² Blower Motor Full Load Amps	³ Minimum Circuit Ampacity	⁵ Maximum Overcurrent Protection
SINGLE PHAS	E							
2.5 kW	ECB40-2.5 (12L68)	1	208	1.9	6,400	4.0	17	20
4 lbs.	Terminal Block		220	2.1	7,200	4.0	17	20
			230	2.3	7,800	4.0	18	20
			240	2.5	8,500	4.0	18	20
4 kW	ECB40-4 (12L76)	1	208	3.0	10,250	4.0	23	425
4 lbs.	Terminal Block		220	3.4	11,450	4.0	24	425
	ECB40-4CB (12L78) 30A Circuit breaker		230	3.7	12,550	4.0	25	⁴ 25
			240	4.0	13,650	4.0	26	30
5 kW	ECB40-5 (12L79)	1	208	3.8	12,800	4.0	28	⁴ 30
4 lbs.	Terminal Block		220	4.2	14,300	4.0	29	4 30
	ECB40-5CB (12L88) 35A Circuit breaker		230	4.6	15,700	4.0	30	⁴ 30
			240	5.0	17,100	4.0	31	35
6 kW	ECB40-6 (12L86)	1	208	4.5	15,400	4.0	32	⁴ 35
4 lbs.	Terminal Block		220	5.0	17,100	4.0	33	4 3 5
	ECB40-6CB (12L89) 40A Circuit breaker		230	5.5	18,800	4.0	35	⁴ 35
			240	6.0	20,500	4.0	37	40
8 kW	ECB40-8 (12L87)	2	208	6.0	20,500	4.0	41	⁴ 45
5 lbs.	Terminal Block		220	6.7	22,900	4.0	43	⁴ 45
	ECB40-8CB (12L90) 50A Circuit breaker		230	7.3	25,100	4.0	45	⁴ 45
			240	8.0	27,300	4.0	47	50
9 kW	ECB40-9CB (12L91)	2	208	6.8	23,100	4.0	46	⁴ 50
5 lbs.	60A Circuit breaker		220	7.6	25,800	4.0	48	⁴ 50
			230	8.3	28,200	4.0	50	60
			240	9.0	30,700	4.0	52	60

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

¹ Electric heater capacity only - does not include additional blower motor heat capacity.

² Amps shown are for blower motor only.

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.

⁴ Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Table on Page 8.

⁵ HACR type circuit breaker or fuse.

ELEC	TRIC HEAT DATA ·	- CBX4	40UI	HV-O	30							
	Model Number	No. of	Volts	kW	¹ Btuh	² Blower Motor	Cir	imum cuit acity	Overc	imum urrent ection		e Point Source
	Model Number	Stages	Input	Input	Input	Full Load Amps	Ckt 1	Ckt 2	Ckt 1	Ckt 2	³ Minimum Circuit Ampacity	^₅ Maximum Overcurrent Protection
SINGLE	PHASE											
4 kW	ECB40-4 (12L76)	1	208	3.0	10,250	4.0	23		⁴ 25			
4 lbs.	Terminal Block ECB40-4CB (12L78)		220	3.4	11,450	4.0	24		⁴ 25			
	30A Circuit breaker		230	3.7	12,550	4.0	25		⁴ 25			
			240	4.0	13,650	4.0	26		30			
5 kW	ECB40-5 (12L79)	1	208	3.8	12,800	4.0	28		4 30			
4 lbs.	Terminal Block		220	4.2	14,300	4.0	29		⁴ 30			
	ECB40-5CB (12L88) 35A Circuit breaker		230	4.6	15,700	4.0	30		⁴ 30			
			240	5.0	17,100	4.0	31		35			
6 kW	ECB40-6 (12L86)	1	208	4.5	15,400	4.0	32		⁴ 35			
4 lbs.	Terminal Block		220	5.0	17,100	4.0	33		⁴ 35			
	ECB40-6CB (12L89) 40A Circuit breaker		230	5.5	18,800	4.0	35		⁴ 35			
			240	6.0	20,500	4.0	37		40			
8 kW	ECB40-8 (12L87)	2	208	6.0	20,500	4.0	41		⁴ 45			
5 lbs.	Terminal Block		220	6.7	22,900	4.0	43		⁴ 45			
	ECB40-8CB (12L90) 50A Circuit breaker		230	7.3	25,100	4.0	45		⁴ 45			
			240	8.0	27,300	4.0	47		50			
9 kW	ECB40-9CB (12L91)	2	208	6.8	23,100	4.0	46		⁴ 50			
5 lbs.	60A Circuit breaker		220	7.6	25,800	4.0	48		⁴ 50			
			230	8.3	28,200	4.0	50		60			
			240	9.0	30,700	4.0	52		60			
12.5 kW	ECB40-12.5CB (12L92)	2	208	9.4	32,000	4.0	24	38	⁴ 25	⁴ 40	62	70
10 lbs.	(1) 30A and		220	10.5	35,800	4.0	25	40	⁴ 25	⁴ 40	65	70
	(1) 45A Circuit breaker		230	11.5	39,200	4.0	26	42	30	45	68	70
			240	12.5	42,600	4.0	27	44	30	45	71	80
15 kW	ECB40-15CB (12L93)	2	208	11.3	38,400	4.0	28	45	4 30	⁴ 45	73	80
12 lbs.	(1) 35A and		220	12.6	43,000	4.0	29	48	4 30	⁴ 50	77	80
	(1) 60A Circuit breaker		230	13.8	47,000	4.0	30	50	4 30	⁴ 50	80	80
			240	15.0	51,200	4.0	31	52	35	60	83	90

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

¹ Electric heater capacity only - does not include additional blower motor heat capacity.

 $^{\rm 2}\,{\rm Amps}$ shown are for blower motor only.

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.

⁴ Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Table on Page 8.

 ${}^{\scriptscriptstyle 5}$ HACR type circuit breaker or fuse.

							3	imum	5 M	imum		
						² Blower		rmum cuit	1	urrent		e Point
		No.	Volts	kW	¹ Btuh	Motor		acity		ection	Power	Source
	Model Number	of	Input		Input	Full	7				³ Minimum	⁵ Maximum
		Stages	•		•	Load	Ckt 1	Ckt 2	Ckt 1	Ckt 2	Circuit	Overcurrent
						Amps					Ampacity	Protection
SINGLE	PHASE	1		I					I		. ,	
4 kW	ECB40-4 (12L76)	1	208	3.0	10,250	5.6	25		⁴ 25			
4 lbs.	Terminal Block		220	3.4	11,450	5.6	26		4 30			
	ECB40-4CB (12L78)		230	3.7	12,550	5.6	27		4 30			
	35A Circuit breaker		240	4.0	13,650	5.6	28		4 30			
5 kW	ECB40-5 (12L79)	1	208	3.8	12,800	5.6	30		4 30			
4 lbs.	Terminal Block		220	4.2	14,300	5.6	31		35			
	ECB40-5CB (12L88)		230	4.6	15,700	5.6	32		35			
	35A Circuit breaker		240	5.0	17,100	5.6	34		35			
6 kW	ECB40-6 (12L86)	1	208	4.5	15,400	5.6	35		4 35			
4 lbs.	Terminal Block		220	5.0	17,100	5.6	35		⁴ 35			
	ECB40-6CB (12L89)		230	5.5	18,800	5.6	37		40			
	40A Circuit breaker		240	6.0	20,500	5.6	39		40			
8 kW	ECB40-8 (12L87)	2	208	6.0	20,500	5.6	44		⁴ 45			
5 lbs.	Terminal Block		220	6.7	22,900	5.6	45		⁴ 45			
	ECB40-8CB (12L90)		230	7.3	25,100	5.6	47		50			
	50A Circuit breaker		240	8.0	27,300	5.6	49		50			
9 kW	ECB40-9CB (12L91)	2	208	6.8	23,100	5.6	48		⁴ 50			
5 lbs.	60A Circuit breaker		220	7.6	25,800	5.6	50		⁴ 50			
			230	8.3	28,200	5.6	52		60			
			240	9.0	30,700	5.6	54		60			
12.5 kW	ECB40-12.5CB (12L92)	2	208	9.4	32,000	5.6	26	38	30	⁴ 40	64	70
10 lbs.	(1) 30A and		220	10.5	35,800	5.6	27	40	30	⁴ 40	67	70
	(1) 45A Circuit breaker		230	11.5	39,200	5.6	28	42	30	45	70	80
			240	12.5	42,600	5.6	29	44	30	45	73	80
15 kW	ECB40-15CB (12L93)	2	208	11.3	38,400	5.6	30	45	4 30	⁴ 45	76	80
12 lbs.	(1) 35A and		220	12.6	43,000	5.6	31	48	35	⁴ 50	79	80
	(1) 60A Circuit breaker		230	13.8	47,000	5.6	32	50	35	⁴ 50	82	90
			240	15.0	51,200	5.6	33	52	35	60	86	90
20 kW	ECB40-20CB (12L94)	2	208	15.0	51,200	5.6	48	50	⁴ 50	⁴ 50	98	100
19 lbs.	(2) 60A Circuit breaker		220	16.8	57,300	5.6	50	53	⁴ 50	60	103	125
			230	18.4	62,700	5.6	52	55	60	60	107	125
			240	20.0	68,200	5.6	54	57	60	60	112	125
THREE P		1		1						1		
8 kW	ECB40-8 (12L96)	1	208	6.0	20,500	5.6	28		30			
5 lbs.	Terminal Block		220	6.7	22,900	5.6	29		30			
			230	7.3	25,100	5.6	30		30			
			240	8.0	27,300	5.6	32		35			
10 kW	ECB40-10 (12L97)	1	208	7.5	25,600	5.6	34		35			
6 lbs.	Terminal Block		220	8.4	28,700	5.6	35		35			
			230	9.2	31,400	5.6	36		40			
			240	10.0	34,100	5.6	38		40			
15 kW	ECB40-15CB (12L98)	1	208	11.3	38,400	5.6	47		50			
12 lbs.	50A Circuit breaker		220	12.6	43,000	5.6	48		50			
			230	13.5	47,000	5.6	50		50			
			240	15.0	51,200	5.6	53		⁴ 60			
20 kW	ECB40-20CB (12L99)	2	208	15.0	51,200	5.6	33	26	35	4 30	60	60
19 lbs.	(2) 35A Circuit breaker		220	16.8	57,300	5.6	35	28	35	4 30	63	70
			230	18.4	62,700	5.6	36	29	⁴ 40	4 30	65	70
			240	20.0	68,200 I Load Amp	5.6	37	30	⁴ 40	35	68	70

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps. ¹ Electric heater capacity only - does not include additional blower motor heat capacity.

 $^{\rm 2}\,{\rm Amps}$ shown are for blower motor only.

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.

⁴ Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Table on Page 8.

 ${}^{\scriptscriptstyle 5}$ HACR type circuit breaker or fuse.

Model Number No. of base Voits input Voits input Visual input Visual input <th>ELEC</th> <th>CTRIC HEAT DAT</th> <th>4 - CB</th> <th>SX4(</th> <th>DUH</th> <th>V-042</th> <th>2, CBX</th> <th>40U</th> <th>HV-</th> <th>048</th> <th>, AN</th> <th>D CE</th> <th>3X4(</th> <th>DUHV-0</th> <th>60</th>	ELEC	CTRIC HEAT DAT	4 - CB	SX4 (DUH	V-042	2, CBX	40U	HV-	048	, AN	D CE	3X4(DUHV-0	60
Model Number Stages Input Put Amps Fut Amps Fut Kt Ckt 2 Ckt 3 Ckt 1 Ckt 3 Ckt 1 Ckt 3 Cht 1 Cht 3 Cht 3 </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>²Blower Motor</th> <th>³ N</th> <th>/linimu Circui</th> <th>um t</th> <th>⁵N Ov</th> <th>laximı ercurr</th> <th>um ent</th> <th>Sing</th> <th>le Point</th>							² Blower Motor	³ N	/linimu Circui	um t	⁵N Ov	laximı ercurr	um ent	Sing	le Point
4 kW ECEB0-4 (12).76) 1 208 3.0 10.250 7.4 27 4.30	_	Model Number	Stages	Input	Input	Input	Load				Ckt 1	Ckt 2	Ckt 3	Circuit	Overcurrent
4 lbs. Terminal Block ECR40-4G8 (12.27) 220 3.4 11.450 7.4 28 *30 35A Circuit breaker 5KW EC840-5 (12.28) 2.03 3.7 12.56 7.4 28 *30					,				,			,			
ECR40-4CR (12.78) 230 3.7 12.550 7.4 29 +30 5 kW ECB40-5CR (12.79) 1 208 3.8 12.800 7.4 32 35			1												
35A Circuit breaker 240 4.0 13.650 7.4 30	4 IDS.														
5 kW ECB40-5 (12.79) 1 200 3.8 12.800 7.4 3.2 </td <td></td> <td>· · · · · · · · · · · · · · · · · · ·</td> <td></td>		· · · · · · · · · · · · · · · · · · ·													
4 lbs. Terminal Block EC240-626 (12.4) 220 4.2 14,300 7.4 33 35	5 kW		1												
ECB40-SCB (12L88) 230 4.6 15, 700 7.4 34 35 6 kW ECB40-6C (12L68) 1 200 5.0 7.100 7.4 38 40															
6 kW ECB40-6C (121.66) 1 208 4.5 15.40 7.4 37 40				230	4.6	15,700	7.4	34							
4 lbs. Terminal Block ECB40-60 [214] 220 5.0 17.100 7.4 38 40 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>															
EC640-6CB (12L89) 230 5.5 18,800 7.4 39 4.0		ECB40-6 (12L86)	1												
40A Circuit breaker 240 6.0 20.500 7.4 41	4 lbs.														
8 kW ECB40-8C (12.87) ECB40-8C (12.90) SOA Circuit breaker 2 208 6.0 20,500 7.4 46 50											-				
5 lbs. ECB40-8CB (12140) 220 6.7 22.900 7.4 47 9 kW ECB40-8CB (12191) 2 20 7.3 25.100 7.4 49 60 <td>8 kW</td> <td></td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	8 kW		2						-						
ECB40-8CB (12.90) 230 7.3 25,100 7.4 49			2												<u> </u>
SOA Circuit breaker 240 8.0 27,300 7.4 51	0 103.														
5 lbs. 60A Circuit breaker 220 7.6 28,800 7.4 52 60 230 8.3 28,200 7.4 57 60								51			⁴ 60				
230 8.3 28.200 7.4 54 60 12.5 kW ECB40-12.5CB 2 208 9.4 32,000 7.4 29 38 30 40 666 70 10 lbs. (1) 30A and (1) 45A Circuit breaker (1) 35A and (1) 60A Circuit breaker 208 11.5 38,800 7.4 32 44 30 440 669 70 12.bs. (1) 35A and (1) 60A Circuit breaker 220 12.6 43,000 7.4 32 44 35 45 77 80 21 bs. (1) 35A and (1) 60A Circuit breaker 220 12.6 43,000 7.4 34 50 81 90 230 13.5 17.00 7.4 36 50 400 60 105 125 20 kW ECB40-25CB (12L96) 3 200 7.4 57 5	9 kW	ECB40-9CB (12L91)	2												
240 9.0 30.700 7.4 57 60 12.5 kW ECB40-15CB 2 28 9.4 32,000 7.4 29 38 30 440 66 70 10 lbs. (1)30A and (1)45A Circuit breaker 201 10.5 35,800 7.4 29 40 30 440 66 70 12 lbs. (1)30A and (1)60A Circuit breaker 240 12.5 42,000 7.4 32 45 75 80 20 kW ECB40-20CB (12.94) 2 208 15.3 67,000 7.4 36 52 440 60 88 90 20 kW ECB40-20CB (12.94) 2 208 16.3 67,300 7.4 54 55 100 100 19 lbs. (2) 60A Sand (2) 45A Circuit breaker 220 16.8 7.300 7.4 75	5 lbs.	60A Circuit breaker													
12.5 kW ECB40-12.6CB 2 208 9.4 32.000 7.4 29 38 30 440 66 70 10 lbs. (1) 30A and (1) 45A Circuit breaker 220 10.5 35.800 7.4 29 40 30 440 66 70 12 kw ECB40-15CB (12L93) 2 208 11.3 38.400 7.4 32 44 435 45 72 80 12 kw ECB40-15CB (12L93) 2 208 11.3 38.400 7.4 32 44 435 45 77 80 20 kw ECB40-20CB (12L94) 2 208 15.0 51.200 7.4 36 52 440 60 88 90 20 kw ECB40-25CB (12L94) 2 208 18.5 57.300 7.4 52 53 60 60 105 125 21 kw ECB40-25CB (12L95) 3 208 18.8 </td <td></td>															
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(1) 60A Circuit breaker 230 13.5 47.000 7.4 34 350 84 90 20 kW ECB40-20CB (12L94) 2 208 15.0 51.200 7.4 36 52 450 60 88 90 19 lbs. (2) 60A Circuit breaker 2 208 15.0 51.200 7.4 52 53 60 60 100 100 220 16.8 57.300 7.4 54 55 60 60 113 125 230 18.4 62.700 7.4 47 38 38 450 40 40 122 125 210 71.700 7.4 49 40 40 40 40 122 125 210 71.700 7.4 49 40 40 40 40 122 150 210 73.02 7.4 30 <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4 50</td> <td></td> <td></td> <td></td>			_									4 50			
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25 kW ECB40-25CB (12L95) (1) 60A & and (2) 45A Circuit breaker 3 208 18.8 64.100 7.4 47 38 38 450 440 440 122 125 19 lbs. (2) 45A Circuit breaker (1) 60A & and (2) 45A Circuit breaker 202 21.0 71,700 7.4 49 40 40 40 40 40 40 40 122 125 202 21.0 71,700 7.4 49 40 40 40 40 40 40 40 122 125 204 25.0 85,300 7.4 51 42 42 60 45 45 141 150 THREE PHASE 5 1 208 6.0 20,500 7.4 30 35 40															
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THREE PHASE 8 kW ECB40-8 (12L96) 1 208 6.0 20,500 7.4 30 35 5 lbs. Terminal block 220 6.7 22,900 7.4 31 35											1		i .		î .
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6 lbs. Terminal block 220 8.4 28,700 7.4 37 40 <td>10 kW</td> <td>ECR40 10 (12) 07)</td> <td>1</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>1</td> <td></td> <td></td> <td></td> <td></td>	10 kW	ECR40 10 (12) 07)	1	1						1	1				
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19 lbs. (1) 50A and 220 21.0 71,700 7.4 44 34 45 435 78 80 (1) 40A Circuit breaker 230 23.0 78,300 7.4 45 36 50 40 81 90 240 25.0 85,300 7.4 47 38 50 40 84 90	25 kW	ECB40-25CB (12M75)	2												
(1) 40A Circuit breaker 230 23.0 78,300 7.4 45 36 50 40 81 90 240 25.0 85,300 7.4 47 38 50 40 84 90															
240 25.0 85,300 7.4 47 38 50 40 84 90															
NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps				240	25.0	85,300	7.4	1			i	40			90

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

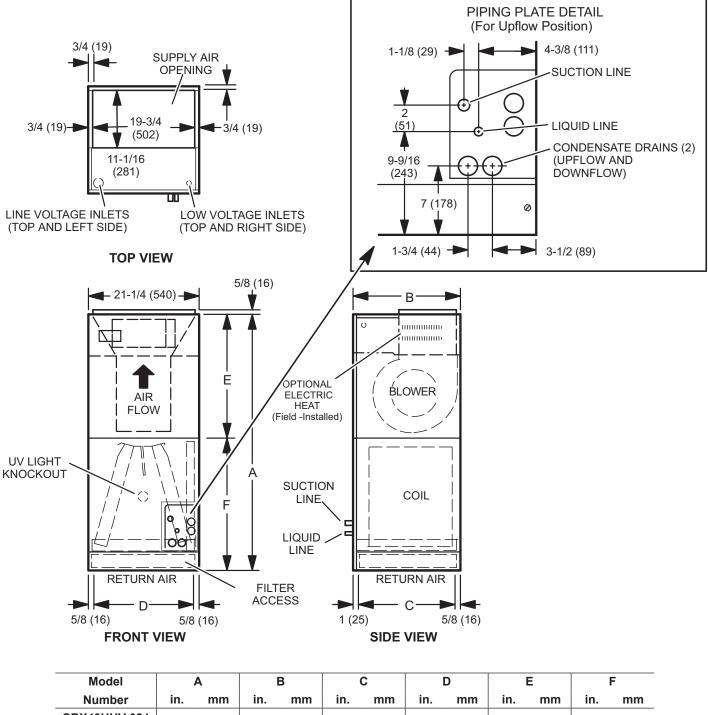
¹ Electric heater capacity only - does not include additional blower motor heat capacity.

² Amps shown are for blower motor only.

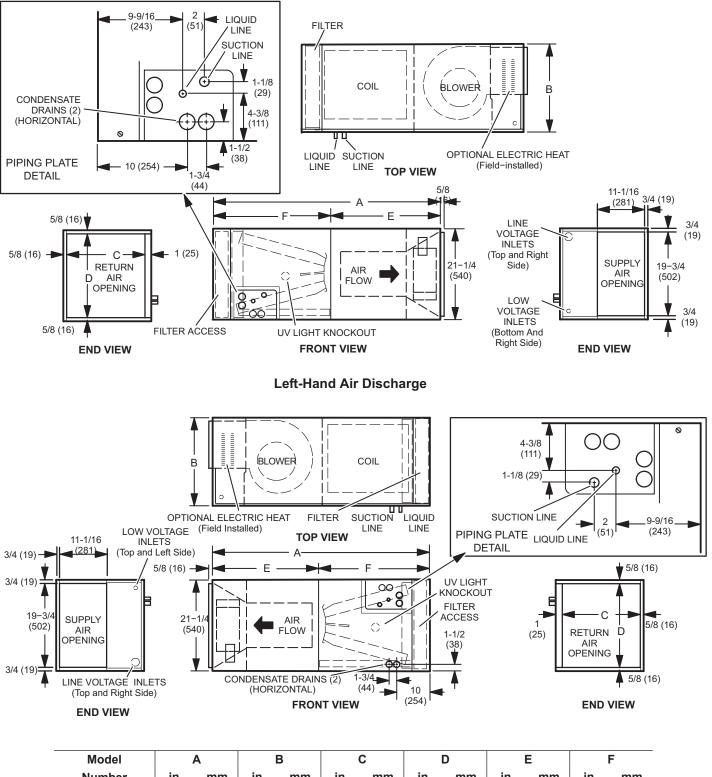
³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.

⁴ Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Table on Page 8.

⁵ HACR type circuit breaker or fuse.

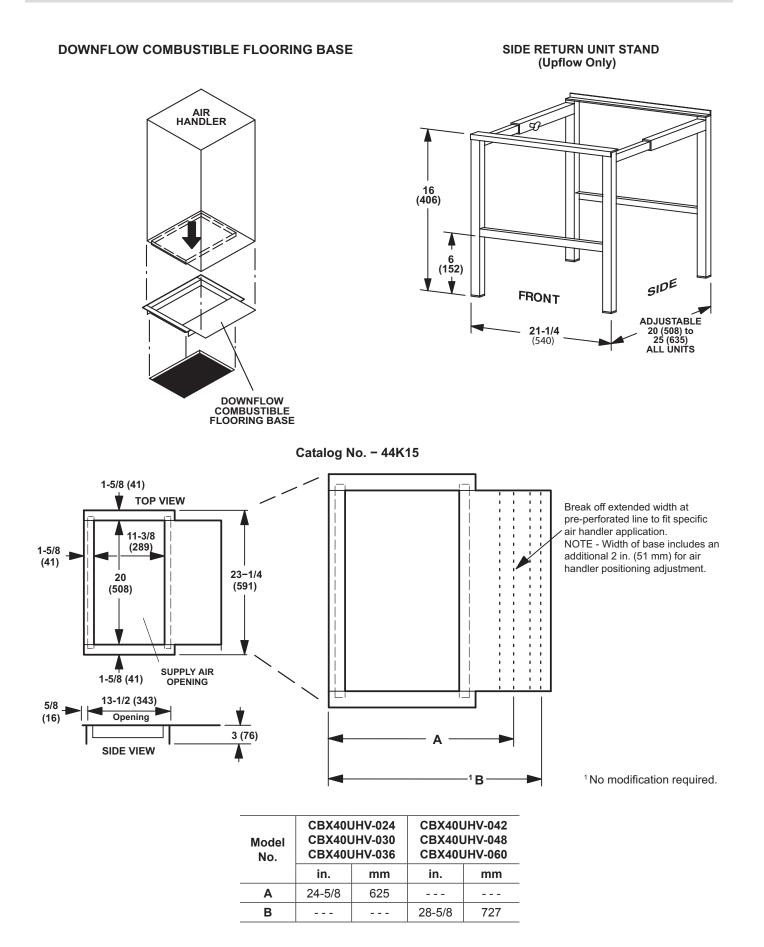


			_		-		-		_		-	
Number	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
CBX40UHV-024 CBX40UHV-030 CBX40UHV-036	55-1/4	1403	22-5/8	575	21	533	20	508	26-3/8	670	28-7/8	733
CBX40UHV-042 CBX40UHV-048 CBX40UHV-060	62-3/4	1594	25-5/8	651	24	610	20	508	27-7/8	708	34-7/8	886



Right-Hand Air Discharge

Model	~											
Number	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
CBX40UHV-024 CBX40UHV-030 CBX40UHV-036	55-1/4	1403	22-5/8	575	21	533	20	508	26-3/8	670	28-7/8	733
CBX40UHV-042 CBX40UHV-048 CBX40UHV-060	62-3/4	1594	25-5/8	651	24	610	20	508	27-7/8	708	34-7/8	886



REVISIONS					
Sections	Description of Change				
Document	Revised <i>iComfort</i> [®] - <i>enabled</i> to <i>iComfort</i> [®] <i>Communicating</i> . iComfort [®] -enabled no longer means communicating with the advent of the E30 and M30 thermostats.				





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