



**AIR HANDLERS**

**CBX40UHV**

**DAVE LENNOX SIGNATURE® COLLECTION**  
**R-410A Ready - Multi-Position - Variable Speed**

**PRODUCT SPECIFICATIONS**

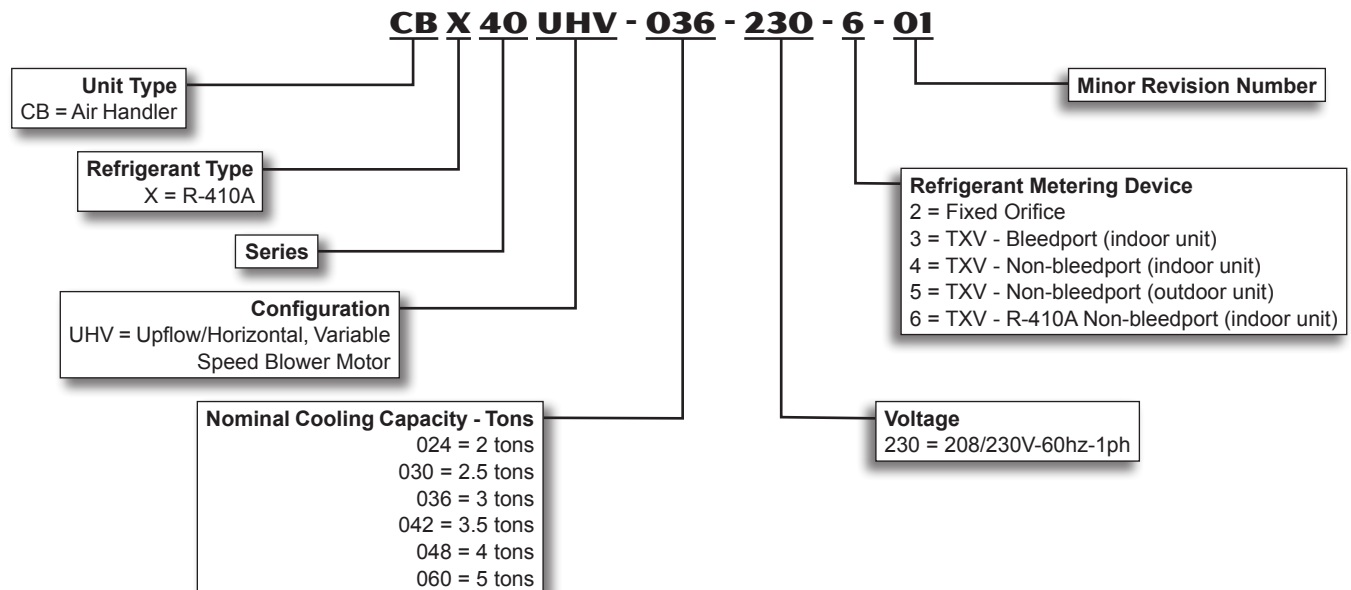
Bulletin No. 210521  
August 2015  
Supersedes March 2015



So simple. So smart. So comfortable.

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

**MODEL NUMBER IDENTIFICATION**



## FEATURES

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### 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.

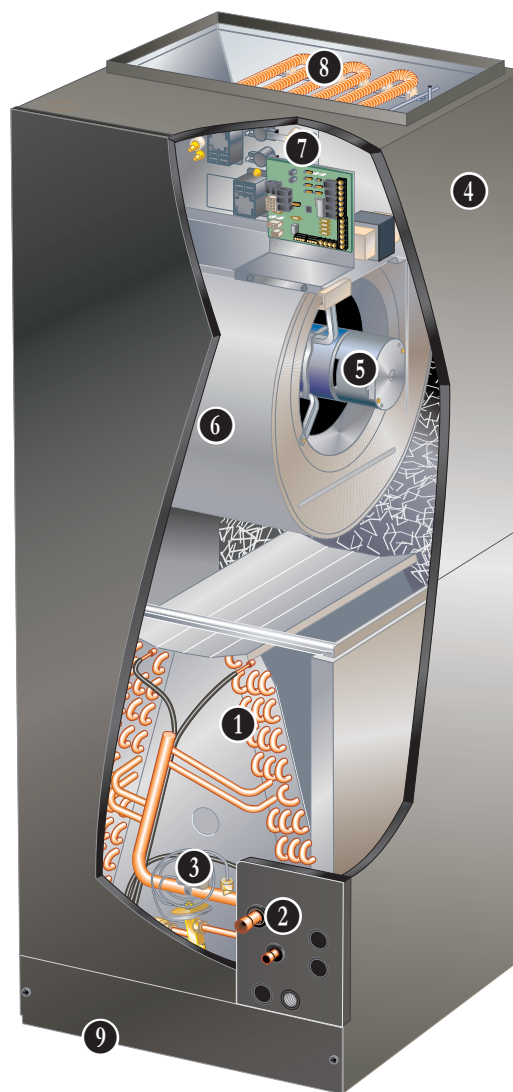
Applicable to Lennox Harmony III™ zoning system.

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

#### 1 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.

## FEATURES

### **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.

### **BLOWER**

#### **5 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*® control that allows blower to operate at two of eight air volumes or speeds available.

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

See blower performance tables.

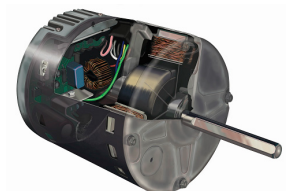
#### **6 Blower Assembly**

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.



## FEATURES

### CONTROLS

#### 7 iComfort® Control

Advanced control board communicates information about various operating parameters in the air handler to the optional *iComfort® S30 Thermostat* or *iComfort Wi-Fi® 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® S30 Thermostat* or *iComfort Wi-Fi® 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:

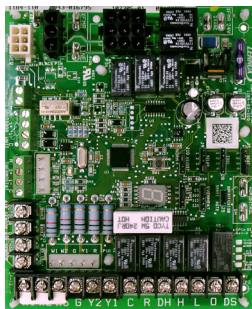
- Lennox Humiditrol® Whole Home Dehumidification System (EDA) compatible.
- EEPROM storage of all local configurations.
- Non-volatile memory storage of 100 alarm codes with display of last 10 codes for troubleshooting.
- Connections for optional outdoor temperature sensor (communicates temperature on 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 alpha-numeric 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®* 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.

## FEATURES

### CONTROLS (continued)

#### Optional Accessories

#### iComfort® S30 Thermostat (part of the iComfort® Residential Communicating Control System)

The *iComfort® S30 Thermostat* recognizes and connects to all *iComfort®*-enabled 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®*-enabled 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®* 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®*-enabled) can easily be added and controlled by the *iComfort® S30* 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.

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®*-enabled 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®*-enabled 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®* 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®*-enabled) 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.

#### Remote Outdoor Temperature Sensor

Used with the *iComfort®*-enabled thermostats.

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®*-enabled outdoor units, optional for conventional units.

## FEATURES

### CONTROLS (continued)

#### ComfortSense® 7500 Touchscreen Thermostat

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

4 Heat/2 Cool.

Auto-changeover.

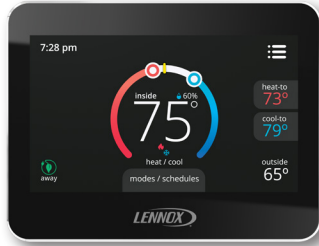
Dual-fuel control with optional outdoor sensor.

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-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 for ComfortSense® 7500 Thermostat

Allows the thermostat to display outdoor temperature. Required in dual-fuel and *Humiditrol*® applications.

#### Thermostat

Thermostat (*iComfort*® S30 Thermostat, *iComfort Wi-Fi*® 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*®-enabled thermostats.

### 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 x W x D) - 7 x 7 x 4 in.

## FEATURES

### **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.

## SPECIFICATIONS

General Data		Model Number	CBX40UHV -024	CBX40UHV -030	CBX40UHV -036	CBX40UHV -042	CBX40UHV -048	CBX40UHV -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 in.	Suction / vapor (o.d.) line - sweat		5/8	3/4	3/4	7/8	7/8	7/8
	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 Coil	Net face area - ft. <sup>2</sup>		5.0	5.0	5.0	7.22	7.22	7.22
	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	<sup>1</sup> 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 Package - lbs.			165	167	172	214	216	216

## ELECTRICAL DATA

Voltage - phase - 60hz		208/230V-1ph					
<sup>2</sup> Maximum overcurrent protection (unit only)		15	15	15	20	20	20
<sup>3</sup> Minimum circuit ampacity (unit only)		5	5	10	10	10	10

## CONTROLS

iComfort® S30 Thermostat	12U67	12U67	12U67	12U67	12U67	12U67
iComfort Wi-Fi® Thermostat	10F81	10F81	10F81	10F81	10F81	10F81
ComfortSense® 7500 Thermostat	13H14	13H14	13H14	13H14	13H14	13H14
<sup>4</sup> Discharge Temperature Sensor	88K38	88K38	88K38	88K38	88K38	88K38
<sup>5</sup> Remote Outdoor Sensor (for dual fuel and Humiditrol®)	X2658	X2658	X2658	X2658	X2658	X2658

## OPTIONAL ACCESSORIES - ORDER SEPARATELY

Circuit Breaker Cover Kit	82W01	82W01	82W01	82W01	82W01	82W01
Downflow Combustible Flooring Base	44K15	44K15	44K15	44K15	44K15	44K15
Downflow Conversion Kit	83M57	83M57	83M57	43W10	43W10	43W10
Electric Heat	2.5 to 25 kW - See Electric Heat Data 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
	Y5172	Y5172	Y5172	Y5172	Y5172	Y5172
	UVC-41W-S (110/230v-1 ph)	X9424	X9424	X9424	X9424	X9424
Shielding Baffle (required) optional 14 in. lamp	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 Stand (Upflow)	45K31	45K32	45K32	45K31	45K31	45K32
Single-Point Power Source Control Box	21H39	21H39	21H39	21H39	21H39	21H39
Wall Hanging Bracket Kit (Upflow)	45K30	45K30	45K30	45K30	45K30	45K30

<sup>1</sup> Disposable frame type filter.

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

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

<sup>4</sup> Optional for EvenHeater® electric heat operation and service diagnostics.

<sup>5</sup> Remote Outdoor Temperature Sensor is used with conventional (non-iComfort®-enabled) outdoor units (sensor is furnished with iComfort®-enabled 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

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

<sup>2</sup> 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 depth plus 2 inches (51 mm).



## BLOWER DATA

### CBX40UHV-024 BLOWER PERFORMANCE

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

"ADJUST" Jumper Setting	Jumper Speed Positions							
	"HEAT" Speed				"COOL" Speed			
	1 cfm	2 cfm	3 cfm	4 cfm	1 cfm	2 cfm	3 cfm	4 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

#### AT "+" (Plus) 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	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 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	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

## BLOWER DATA

### CBX40UHV-030 BLOWER PERFORMANCE

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

"ADJUST" Jumper Setting	Jumper Speed Positions							
	"HEAT" Speed				"COOL" Speed			
	1 cfm	2 cfm	3 cfm	4 cfm	1 cfm	2 cfm	3 cfm	4 cfm
<b>+</b>	800	935	1070	1210	660	880	1100	1320
<b>NORM</b>	725	850	975	1100	600	800	1000	1200
<b>-</b>	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) 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	66	87	114	134	162	185	214	239	268
	Tap 2	101	124	151	175	192	224	243	273	325
	Tap 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
	Tap 3	142	170	196	220	251	282	315	345	367
	Tap 4	209	258	295	345	373	418	452	482	512

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

## BLOWER DATA

### CBX40UHV-036 BLOWER PERFORMANCE

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

"ADJUST" Jumper Setting	Jumper Speed Positions							
	"HEAT" Speed				"COOL" Speed			
	1 cfm	2 cfm	3 cfm	4 cfm	1 cfm	2 cfm	3 cfm	4 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) 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	189	223	253	271	306	323	359	377	409
	Tap 2	238	273	295	316	349	375	417	439	473
	Tap 3	279	322	348	384	420	463	486	525	550
	Tap 4	327	387	427	451	489	537	566	600	643
"COOL" Speed	Tap 1	86	102	124	143	165	193	218	246	270
	Tap 2	183	211	232	261	296	314	342	368	396
	Tap 3	248	284	315	349	366	407	441	473	509
	Tap 4	347	376	418	464	495	531	566	608	632

#### AT "NORM" SETTING ("Adjust" Jumper at NORM 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	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	198	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 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	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

## BLOWER DATA

### CBX40UHV-042 BLOWER PERFORMANCE

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

"ADJUST" Jumper Setting	Jumper Speed Positions							
	"HEAT" Speed				"COOL" Speed			
	1 cfm	2 cfm	3 cfm	4 cfm	1 cfm	2 cfm	3 cfm	4 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) 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	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" SETTING ("Adjust" Jumper at NORM 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	97	123	146	179	205	225	258	292	327
	Tap 2	144	180	209	230	266	295	334	375	410
	Tap 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
	Tap 3	229	263	298	332	386	408	446	484	534
	Tap 4	327	375	403	448	489	523	557	589	646

#### 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	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

## BLOWER DATA

### CBX40UHV-048 AND CBX40UHV-060 BLOWER PERFORMANCE

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

"ADJUST" Jumper Setting	Jumper Speed Positions							
	"HEAT" Speed				"COOL" Speed			
	1 cfm	2 cfm	3 cfm	4 cfm	1 cfm	2 cfm	3 cfm	4 cfm
<b>+</b>	1850	1960	2090	2150	1625	1820	2055	2145
<b>NORM</b>	1705	1800	1900	2005	1425	1625	1805	2005
<b>-</b>	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 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	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
	Tap 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 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	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 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	271	302	341	368	398	439	473	504	545
	Tap 2	286	329	356	393	423	462	504	550	572
	Tap 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 HEAT DATA - CBX40UHV-024

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

<sup>1</sup> Electric heater capacity only - does not include additional blower motor heat capacity.

<sup>2</sup> Amps shown are for blower motor only.

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

<sup>4</sup> Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Table on Page 6.

<sup>5</sup> HACR type circuit breaker or fuse.

## ELECTRIC HEAT DATA - CBX40UHV-030

Model Number	No. of Stages	Volts Input	kW Input	<sup>1</sup> Btuh Input	<sup>2</sup> Blower Motor Full Load Amps	<sup>3</sup> Minimum Circuit Ampacity		<sup>5</sup> Maximum Overcurrent Protection		Single Point Power Source		
						Ckt 1	Ckt 2	Ckt 1	Ckt 2	<sup>3</sup> Minimum Circuit Ampacity	<sup>5</sup> Maximum Overcurrent Protection	
<b>SINGLE PHASE</b>												
<b>4 kW</b> 4 lbs.	ECB40-4 ( <b>12L76</b> ) Terminal Block ECB40-4CB ( <b>12L78</b> ) 30A Circuit breaker	1	208	3.0	10,250	4.0	23	---	<b>425</b>	---	---	---
			220	3.4	11,450	4.0	24	---	<b>425</b>	---	---	---
			230	3.7	12,550	4.0	25	---	<b>425</b>	---	---	---
			240	4.0	13,650	4.0	26	---	30	---	---	---
<b>5 kW</b> 4 lbs.	ECB40-5 ( <b>12L79</b> ) Terminal Block ECB40-5CB ( <b>12L88</b> ) 35A Circuit breaker	1	208	3.8	12,800	4.0	28	---	<b>430</b>	---	---	---
			220	4.2	14,300	4.0	29	---	<b>430</b>	---	---	---
			230	4.6	15,700	4.0	30	---	<b>430</b>	---	---	---
			240	5.0	17,100	4.0	31	---	35	---	---	---
<b>6 kW</b> 4 lbs.	ECB40-6 ( <b>12L86</b> ) Terminal Block ECB40-6CB ( <b>12L89</b> ) 40A Circuit breaker	1	208	4.5	15,400	4.0	32	---	<b>435</b>	---	---	---
			220	5.0	17,100	4.0	33	---	<b>435</b>	---	---	---
			230	5.5	18,800	4.0	35	---	<b>435</b>	---	---	---
			240	6.0	20,500	4.0	37	---	40	---	---	---
<b>8 kW</b> 5 lbs.	ECB40-8 ( <b>12L87</b> ) Terminal Block ECB40-8CB ( <b>12L90</b> ) 50A Circuit breaker	1	208	6.0	20,500	4.0	41	---	<b>445</b>	---	---	---
			220	6.7	22,900	4.0	43	---	<b>445</b>	---	---	---
			230	7.3	25,100	4.0	45	---	<b>445</b>	---	---	---
			240	8.0	27,300	4.0	47	---	50	---	---	---
<b>9 kW</b> 5 lbs.	ECB40-9CB ( <b>12L91</b> ) 60A Circuit breaker	2	208	6.8	23,100	4.0	46	---	<b>450</b>	---	---	---
			220	7.6	25,800	4.0	48	---	<b>450</b>	---	---	---
			230	8.3	28,200	4.0	50	---	60	---	---	---
			240	9.0	30,700	4.0	52	---	60	---	---	---
<b>12.5 kW</b> 10 lbs.	ECB40-12.5CB ( <b>12L92</b> ) (1) 30A and (1) 45A Circuit breaker	2	208	9.4	32,000	4.0	24	38	<b>425</b>	<b>440</b>	62	70
			220	10.5	35,800	4.0	25	40	<b>425</b>	<b>440</b>	65	70
			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
<b>15 kW</b> 12 lbs.	ECB40-15CB ( <b>12L93</b> ) (1) 35A and (1) 60A Circuit breaker	2	208	11.3	38,400	4.0	28	45	<b>430</b>	<b>445</b>	73	80
			220	12.6	43,000	4.0	29	48	<b>430</b>	<b>450</b>	77	80
			230	13.8	47,000	4.0	30	50	<b>430</b>	<b>450</b>	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.

<sup>1</sup> Electric heater capacity only - does not include additional blower motor heat capacity.

<sup>2</sup> Amps shown are for blower motor only.

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

<sup>4</sup> Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Table on Page 6.

<sup>5</sup> HACR type circuit breaker or fuse.

## ELECTRIC HEAT DATA - CBX40UHV-036

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

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

<sup>1</sup> Electric heater capacity only - does not include additional blower motor heat capacity.

<sup>2</sup> Amps shown are for blower motor only.

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

<sup>4</sup> Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted. See Table on Page 6.

<sup>5</sup> HACR type circuit breaker or fuse.



**ELECTRIC HEAT DATA - CBX40UHV-042, CBX40UHV-048, AND CBX40UHV-060**

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 Point Power Source	
						Ckt 1	Ckt 2	Ckt 3	Ckt 1	Ckt 2	Ckt 3	3 Minimum Circuit Ampacity	5 Maximum Overcurrent Protection
<b>SINGLE PHASE</b>													
4 kW 4 lbs. ECB40-4 (12L76) Terminal Block ECB40-4CB (12L78) 35A Circuit breaker	1	208	3.0	10,250	7.4	27	---	---	430	---	---	---	---
		220	3.4	11,450	7.4	28	---	---	430	---	---	---	---
		230	3.7	12,550	7.4	29	---	---	430	---	---	---	---
		240	4.0	13,650	7.4	30	---	---	430	---	---	---	---
5 kW 4 lbs. ECB40-5 (12L79) Terminal Block ECB40-5CB (12L88) 35A Circuit breaker	1	208	3.8	12,800	7.4	32	---	---	35	---	---	---	---
		220	4.2	14,300	7.4	33	---	---	35	---	---	---	---
		230	4.6	15,700	7.4	34	---	---	35	---	---	---	---
		240	5.0	17,100	7.4	36	---	---	35	---	---	---	---
6 kW 4 lbs. ECB40-6 (12L86) Terminal Block ECB40-6CB (12L89) 40A Circuit breaker	1	208	4.5	15,400	7.4	37	---	---	40	---	---	---	---
		220	5.0	17,100	7.4	38	---	---	40	---	---	---	---
		230	5.5	18,800	7.4	39	---	---	40	---	---	---	---
		240	6.0	20,500	7.4	41	---	---	45	---	---	---	---
8 kW 5 lbs. ECB40-8 (12L87) Terminal Block ECB40-8CB (12L90) 50A Circuit breaker	1	208	6.0	20,500	7.4	46	---	---	50	---	---	---	---
		220	6.7	22,900	7.4	47	---	---	50	---	---	---	---
		230	7.3	25,100	7.4	49	---	---	50	---	---	---	---
		240	8.0	27,300	7.4	51	---	---	60	---	---	---	---
9 kW 5 lbs. ECB40-9CB (12L91) 60A Circuit breaker	2	208	6.8	23,100	7.4	51	---	---	60	---	---	---	---
		220	7.6	25,800	7.4	52	---	---	60	---	---	---	---
		230	8.3	28,200	7.4	54	---	---	60	---	---	---	---
		240	9.0	30,700	7.4	57	---	---	60	---	---	---	---
12.5 kW 10 lbs. ECB40-12.5CB (12L92) (1) 30A and (1) 45A Circuit breaker	2	208	9.4	32,000	7.4	29	38	---	30	440	---	66	70
		220	10.5	35,800	7.4	29	40	---	30	440	---	69	70
		230	11.5	39,200	7.4	30	42	---	30	45	---	72	80
		240	12.5	42,600	7.4	32	44	---	435	45	---	75	80
15 kW 12 lbs. ECB40-15CB (12L93) (1) 35A and (1) 60A Circuit breaker	2	208	11.3	38,400	7.4	32	45	---	35	445	---	77	80
		220	12.6	43,000	7.4	33	48	---	35	450	---	81	90
		230	13.5	47,000	7.4	34	50	---	35	450	---	84	90
		240	15.0	51,200	7.4	36	52	---	440	60	---	88	90
20 kW 19 lbs. ECB40-20CB (12L94) (2) 60A Circuit breaker	2	208	15.0	51,200	7.4	50	50	---	450	450	---	100	100
		220	16.8	57,300	7.4	52	53	---	60	60	---	105	125
		230	18.4	62,700	7.4	54	55	---	60	60	---	109	125
		240	20.0	68,200	7.4	57	58	---	60	60	---	113	125
25 kW 19 lbs. ECB40-25CB (12L95) (1) 60A & (2) 45A Circuit breaker	3	208	18.8	64,100	7.4	47	38	38	450	440	440	122	125
		220	21.0	71,700	7.4	49	40	40	450	440	440	129	150
		230	23.0	78,300	7.4	51	42	42	60	45	45	135	150
		240	25.0	85,300	7.4	53	44	44	60	45	45	141	150
<b>THREE PHASE</b>													
8 kW 5 lbs. ECB40-8 (12L96) Terminal block	1	208	6.0	20,500	7.4	30	---	---	35	---	---	---	---
		220	6.7	22,900	7.4	31	---	---	35	---	---	---	---
		230	7.3	25,100	7.4	32	---	---	35	---	---	---	---
		240	8.0	27,300	7.4	33	---	---	35	---	---	---	---
10 kW 6 lbs. ECB40-10 (12L97) Terminal block	1	208	7.5	25,600	7.4	36	---	---	40	---	---	---	---
		220	8.4	28,700	7.4	37	---	---	40	---	---	---	---
		230	9.2	31,400	7.4	38	---	---	40	---	---	---	---
		240	10.0	34,100	7.4	40	---	---	40	---	---	---	---
15 kW 12 lbs. ECB40-15CB (12L98) 50A Circuit breaker	1	208	11.3	38,400	7.4	49	---	---	50	---	---	---	---
		220	12.6	43,000	7.4	51	---	---	460	---	---	---	---
		230	13.5	47,000	7.4	52	---	---	460	---	---	---	---
		240	15.0	51,200	7.4	55	---	---	460	---	---	---	---
20 kW 19 lbs. ECB40-20CB (12L99) (2) 35A Circuit breaker	2	208	15.0	51,200	7.4	36	26	---	440	430	---	62	70
		220	16.8	57,300	7.4	37	28	---	440	430	---	65	70
		230	18.4	62,700	7.4	38	29	---	440	430	---	67	70
		240	20.0	68,200	7.4	40	30	---	440	35	---	70	70
25 kW 19 lbs. ECB40-25CB (12M75) (1) 50A and (1) 40A Circuit breaker	2	208	18.8	64,100	7.4	42	33	---	445	435	---	75	80
		220	21.0	71,700	7.4	44	34	---	445	435	---	78	80
		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

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.

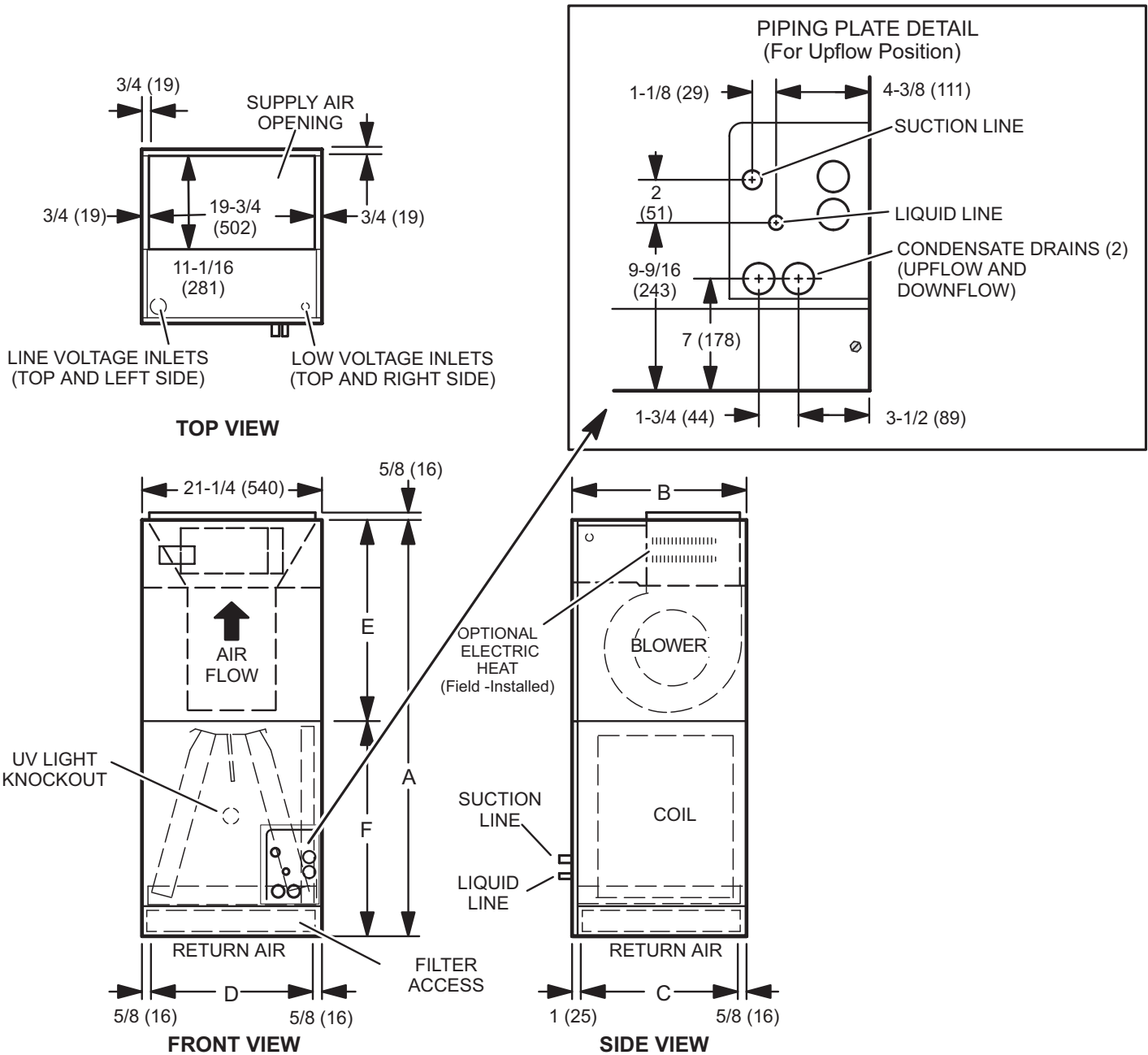
2 Amps shown are for blower motor only.

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 6.

5 HACR type circuit breaker or fuse.

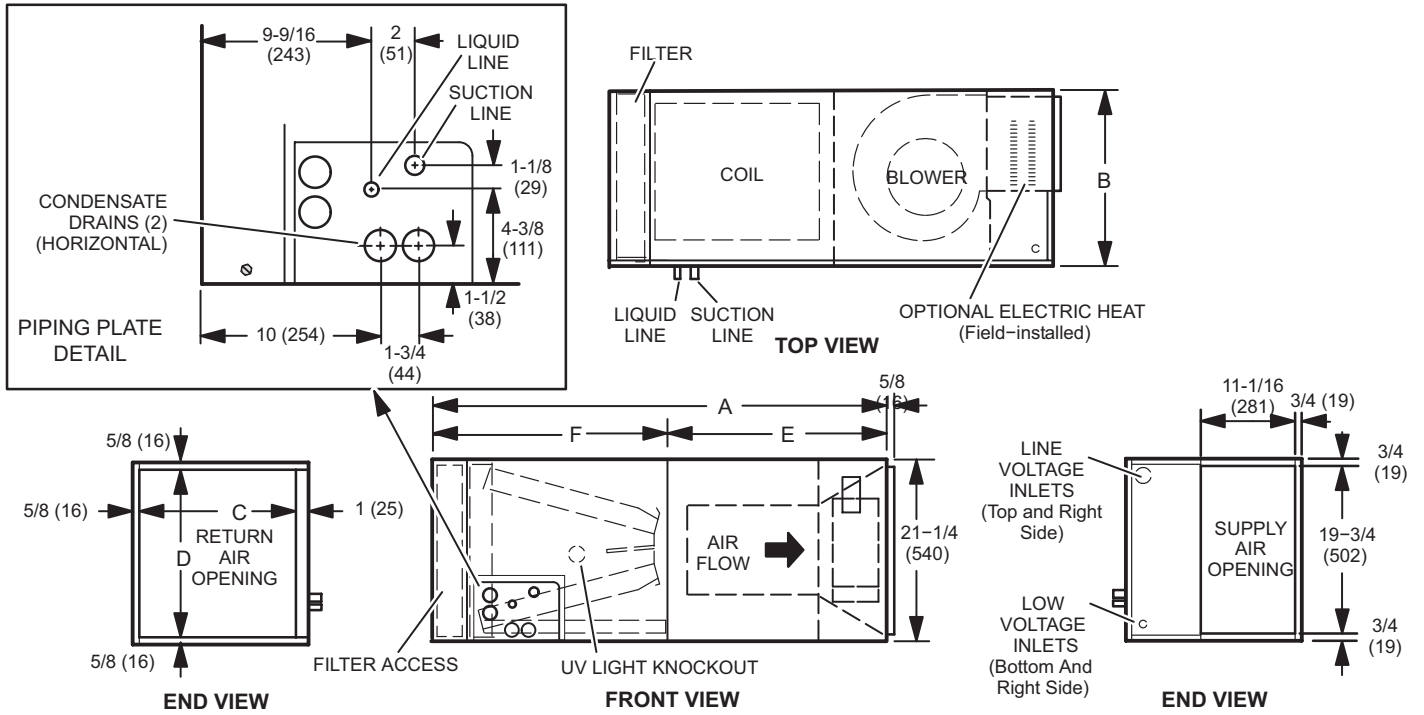
# DIMENSIONS - INCHES (MM) - UPFLOW



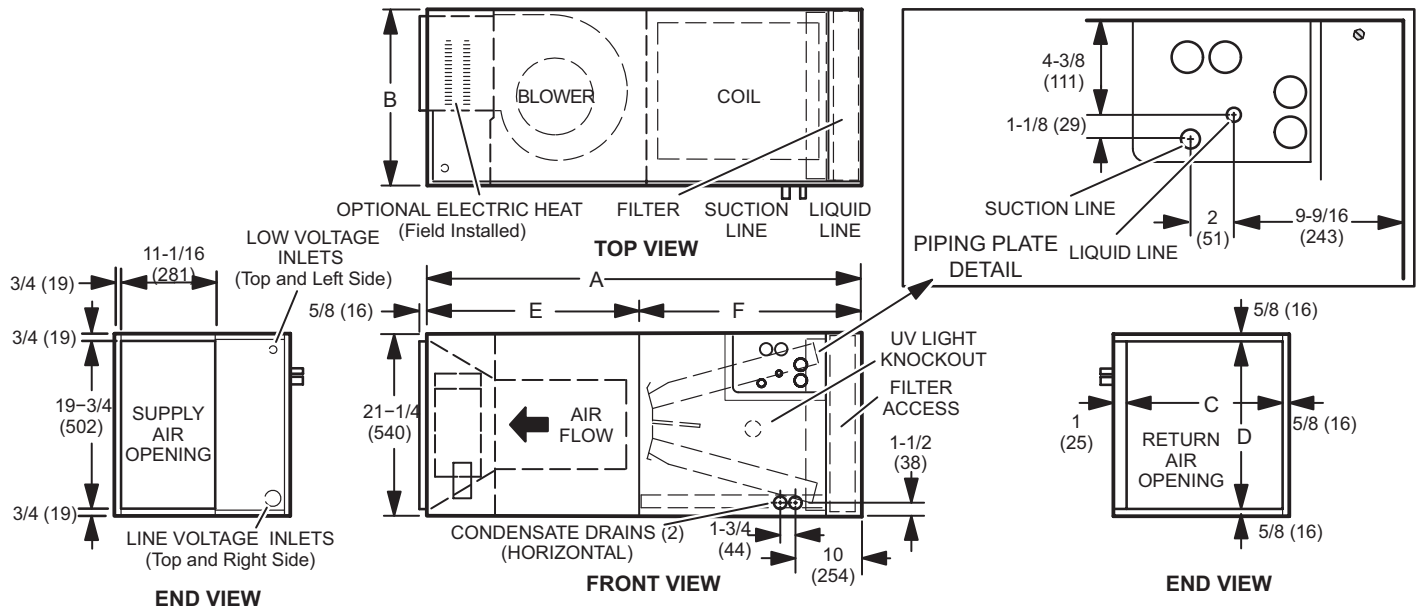
Model Number	A		B		C		D		E		F	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
CBX40UHV-024 CBX40UHV-030 CBX40UHV-036	55-1/4	1403	22-5/8	575	21	533	20	508	26-3/8	670	28-7/8	733
CBX40UHV-042 CBX40UHV-048 CBX40UHV-060	62-3/4	1594	25-5/8	651	24	610	20	508	27-7/8	708	34-7/8	886

# DIMENSIONS - INCHES (MM) - HORIZONTAL

## Right-Hand Air Discharge



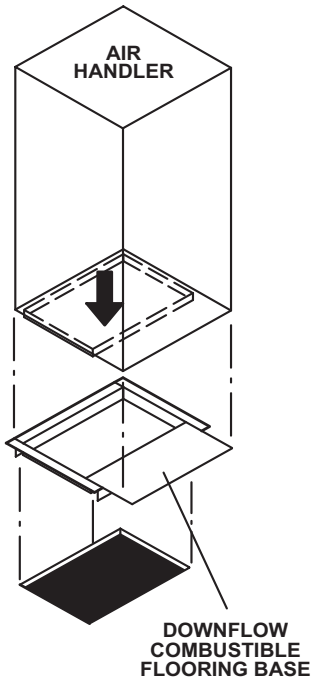
## Left-Hand Air Discharge



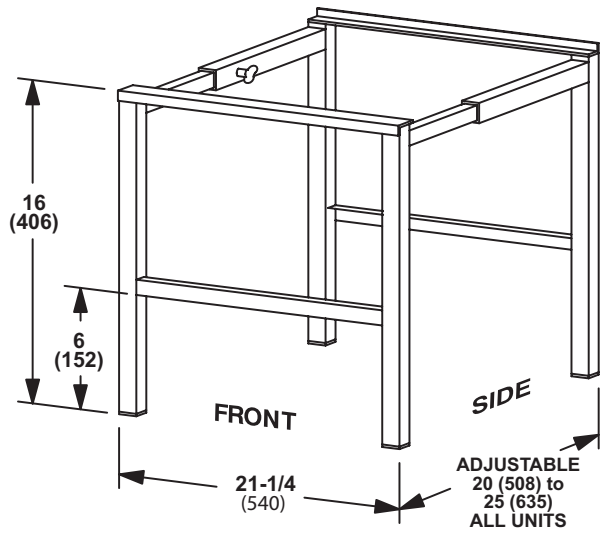
Model Number	A		B		C		D		E		F	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
CBX40UHV-024												
CBX40UHV-030	55-1/4	1403	22-5/8	575	21	533	20	508	26-3/8	670	28-7/8	733
CBX40UHV-036												
CBX40UHV-042												
CBX40UHV-048	62-3/4	1594	25-5/8	651	24	610	20	508	27-7/8	708	34-7/8	886
CBX40UHV-060												

# DIMENSIONS - INCHES (MM)

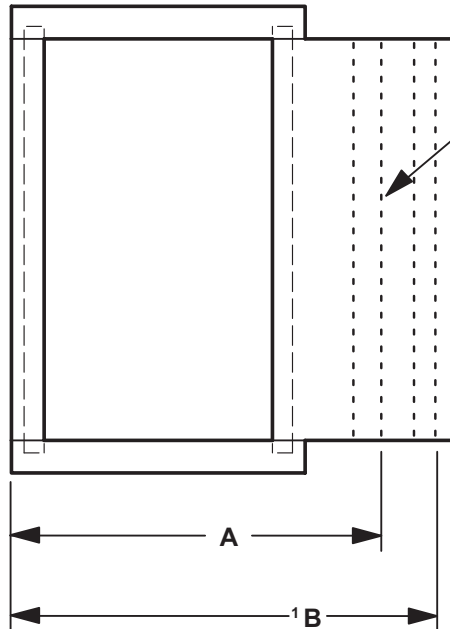
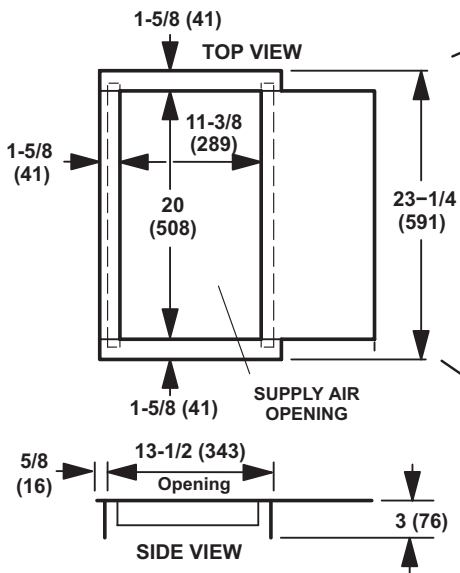
## DOWNFLOW COMBUSTIBLE FLOORING BASE



## SIDE RETURN UNIT STAND (Upflow Only)



Catalog No. - 44K15



Break off extended width at pre-perforated line to fit specific air handler application.  
NOTE - Width of base includes an additional 2 in. (51 mm) for air handler positioning adjustment.

<sup>1</sup>No modification required.

Model No.	CBX40UHV-024 CBX40UHV-030 CBX40UHV-036		CBX40UHV-042 CBX40UHV-048 CBX40UHV-060	
	in.	mm	in.	mm
A	24-5/8	625	---	---
B	---	---	28-5/8	727







## REVISIONS

Sections	Description of Change
Optional Accessories	New thermostats - iComfort® S30 and ComfortSense 7500.



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