

BCE4

PRODUCT SPECIFICATIONS

ENHANCED AIR HANDLER WITH VARIABLE SPEED

FORM NO. BCE4-100 (11/2015)



APPLICATION

- 2 - 5 ton sizes
- Upflow, horizontal, and downflow capable
- Sequenced for demand management
- External access to heater circuit breakers

INSTALLATION

- Shipped in one piece, but may be disassembled into two separate pieces for ease of installation
- Multiposition - Factory ready for upflow, downflow, and horizontal left/right applications
- No external screw heads on the sides of the unit to fit in tight spaces

CABINET

- Thick fiberglass insulation
- Painted, heavy-gauge galvanized cabinet
- Filter rack built into every air handler
- Dual position drain pans designed for upflow, downflow or horizontal applications
- Deep, corrosion resistant plastic drain pans have dual pipe drains
- 2% or less air leakage
- Microban antimicrobial drain pans protect from mold, mildew, and other harmful microbes
- Thick rubber gaskets between each section insure tight seal when converted to downflow

COMPONENTS

- Efficient ECM variable speed motors
- 70 VA transformer
- Field-installed 5-20 kW electric heat kits with easy plug connections
- Built-in indoor time delay for increased efficiency
- Sleeves on distributor tubing to protect tubing

CONTROLS

- Communicating control enabled
- Thermostat flexibility: works with the Comfort T-Stat or a conventional 24V T-Stat
- Self diagnostics saves last 10 fault codes regardless of power interruption

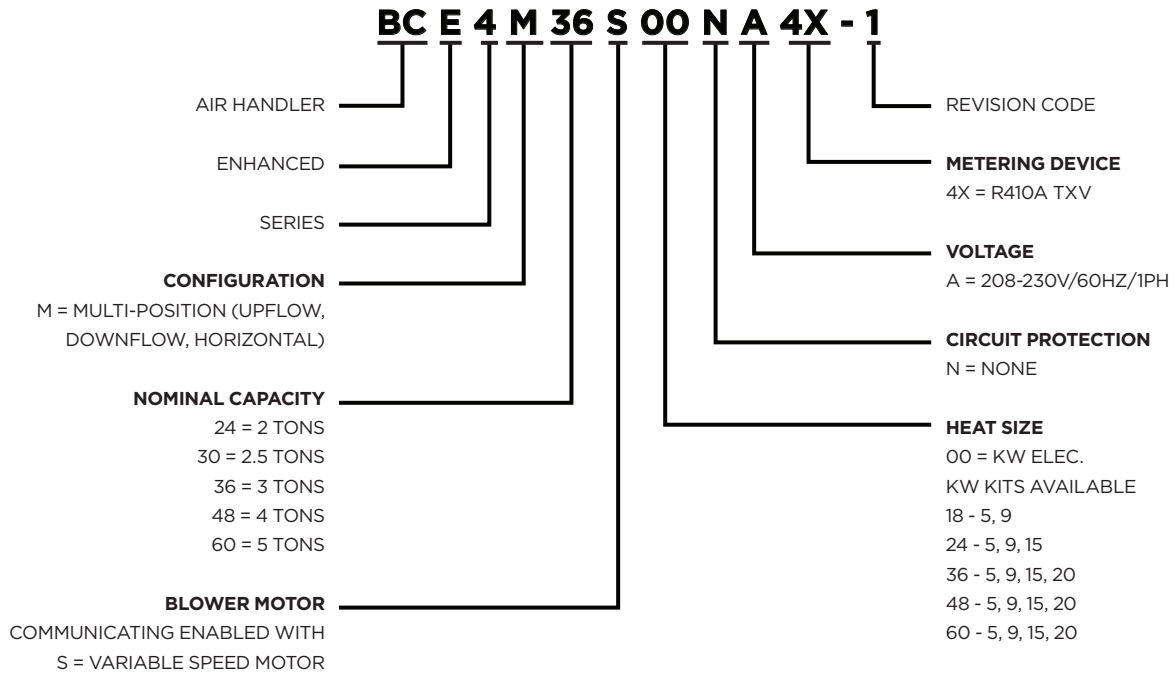
WARRANTY

10-year limited parts warranty available when applied with a system. See limited warranty document for details.



COMFORT SYNC

MODEL NUMBER GUIDE



PHYSICAL

Model	Volts/Hz/Phase	Max. Elec. Heat Available (kW)	Transformer	1" Filter Size (in)	Refrigerant Connection (o.d.)		Metering Device	Shipping Weight	Unit Weight
					Suction (in)	Liquid (in)			
BCE4M24S	208-230/60/1	9	70 VA	15 x 20	5/8	3/8	TXV	126	117
BCE4M30S	208-230/60/1	15	70 VA	20 x 20	3/4	3/8	TXV	152	143
BCE4M36S	208-230/60/1	20	70 VA	20 x 20	3/4	3/8	TXV	160	150
BCE4M48S	208-230/60/1	20	70 VA	20 x 24	7/8	3/8	TXV	201	189
BCE4M60S	208-230/60/1	20	70 VA	20 x 24	7/8	3/8	TXV	201	189

ELECTRICAL

Model	Heater Model	Electric Heat Capacity				Blower Motor Full Load Amps	Minimum Circuit Ampacity (240/208 Volts)		Maximum Overcurrent Protection (240/208 Volts)		Single Point Power Source	
		kW Input		Btuh Input			CKT-1	CKT-2	CKT-1	CKT-2	Min Circuit Amp	Maximum Overcurrent Protection
		240 Volts	208 Volts	240 Volts	208 Volts							
BCE4M24S	NONE	0	-	0	-	4	5/5	-	15/15	-	-	-
	AEHK05CB-1	5.0	3.8	17,100	12,800	4	31/28	-	35/30	-	-	-
	AEHK09CB-1	9.0	6.8	30,700	23,100	4	52/46	-	60/50	-	-	-
BCE4M30S	NONE	0	-	0	-	4	5/5	-	15/15	-	-	-
	AEHK05CB-1	5.0	3.8	17,100	12,800	4	31/28	-	35/30	-	-	-
	AEHK09CB-1	9.0	6.8	30,700	23,100	4	52/46	-	60/50	-	-	-
	AEHK15CB-1	15.0	11.3	51,200	38,400	4	31/28	52/45	35/30	60/45	83/73	90/80
BCE4M36S	NONE	0	-	0	-	4	5/5	-	15/15	-	-	-
	AEHK05CB-1	5.0	3.8	17,100	12,800	4	31/28	-	35/30	-	-	-
	AEHK09CB-1	9.0	6.8	30,700	23,100	4	52/46	-	60/50	-	-	-
	AEHK15CB-1	15.0	11.3	51,200	38,400	4	31/28	52/45	35/30	60/45	83/73	90/80
	AEHK20CB-1	20.0	15.0	68,200	51,200	4	52/46	57/50	60/50	60/50	109/95	110/100
BCE4M48S	NONE	0	-	0	-	7.4	10/10	-	20/20	-	-	-
	AEHK05CB-1	5.0	3.8	17,100	12,800	7.4	36/32	-	40/35	-	-	-
	AEHK09CB-1	9.0	6.8	30,700	23,100	7.4	57/51	-	60/60	-	-	-
	AEHK15CB-1	15.0	11.3	51,200	38,400	7.4	36/32	52/45	40/35	60/45	88/77	90/80
	AEHK20CB-1	20.0	15.0	68,200	51,200	7.4	57/50	58/50	60/50	60/50	113/100	125/100
BCE4M60S	NONE	0	-	0	-	7.4	10/10	-	20/20	-	-	-
	AEHK05CB-1	5.0	3.8	17,100	12,800	7.4	36/32	-	40/35	-	-	-
	AEHK09CB-1	9.0	6.8	30,700	23,100	7.4	57/51	-	60/60	-	-	-
	AEHK15CB-1	15.0	11.3	51,200	38,400	7.4	36/32	52/45	40/35	60/45	88/77	90/80
	AEHK20CB-1	20.0	15.0	68,200	51,200	7.4	57/50	58/50	60/50	60/50	113/100	125/100

BLOWER

BCE4M24S								
"ADJUST" Jumper Setting	Jumper Speed Positions							
	"HEAT" Speed				"COOL" Speed			
	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

BCE4M30S								
"ADJUST" Jumper Setting	Jumper Speed Positions							
	"HEAT" Speed				"COOL" Speed			
	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

BCE4M36S								
"ADJUST" Jumper Setting	Jumper Speed Positions							
	"HEAT" Speed				"COOL" Speed			
	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

BCE4M48S AND BCE4M60S								
"ADJUST" Jumper Setting	Jumper Speed Positions							
	"HEAT" Speed				"COOL" Speed			
	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 450cfm.
 All above data given while air handler is operating with dry coil.
 Humidistat will reduce cooling airflow by 10% in high humidity.
 Adjust tap (+) will increase airflow by 10%, while (-) will decrease by 12%.
 Adjust tap test will cause motor to run at 70% of full airflow. Use this for troubleshooting only.

ACCESSORIES

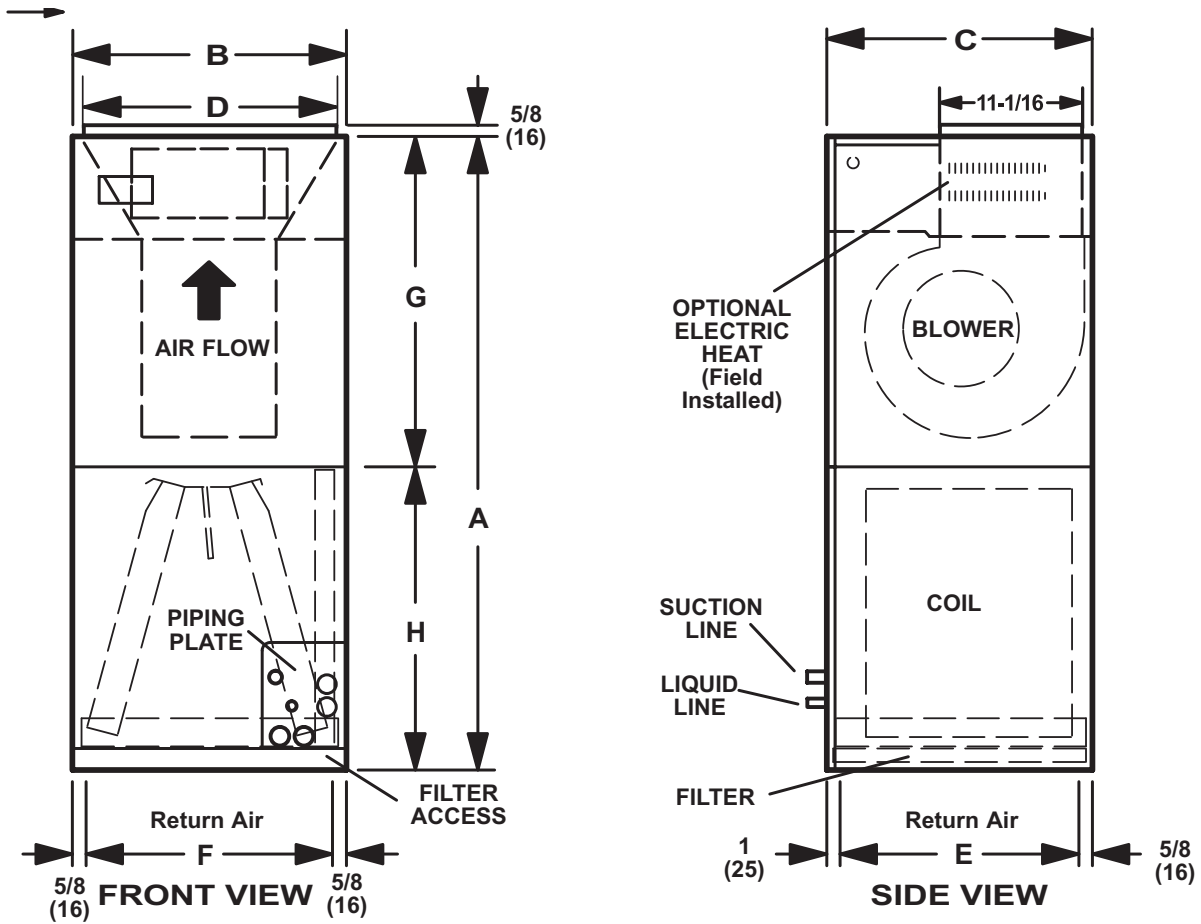
Cat. Number	Description	Used On
44K15	Combustible Flooring Base	30, 36, 48, 60
34J72	Combustible Flooring Base	24
21H39	Single Point Power	All BCE4
82W01	Circuit Breaker Cover Kit	All BCE4
45K30	Wall Hanging Bracket Kit	All BCE4
45K32	Side Return Unit Stand (Upflow)	30, 36, 48, 60
45K31	Side Return Unit Stand (Upflow)	24
56J18	Horizontal Support Frame Kit	All BCE4
X2658	Remote Outdoor Sensor	All BCE4
1.841197	Comfort Sync Thermostat	All BCE4
1.851399	Comfort Sync Zone Controller	All BCE4
CC118	Complete Comfort UVC - 24V Germicidal Light	All BCE4
1.821114	AEHK05CB-1 Electric Heater (5 kw)	All BCE4
1.821115	AEHK09CB-1 Electric Heater (9 kw)	All BCE4
1.821116	AEHK15CB-1 Electric Heater (15 kw)	30, 36, 48, 60
1.821117	AEHK20CB-1 Electric Heater (20 kw)	36, 48, 60

**All electric heaters are equipped with circuit breakers*

DIMENSIONS (IN.)

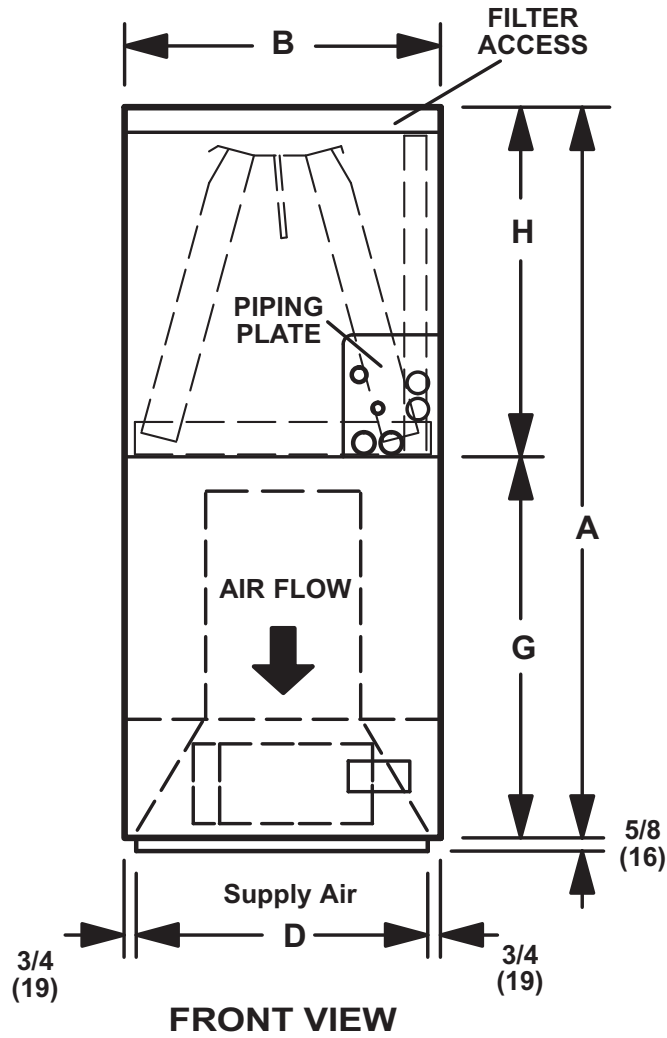
Model No.	BCE4M24S		BCE4M30S		BCE4M36S		BCE4M48S BCE4M60S	
	inch	mm	inch	mm	inch	mm	inch	mm
A	45-1/4	1149	49-1/4	1251	51	1295	58-1/2	1486
B	16-1/4	413	21-1/4	540	21-1/4	540	21-1/4	540
C	20-5/8	524	20-5/8	524	22-5/8	878	24-7/8	625
D	14-3/4	375	19-3/4	502	19-3/4	502	19-3/4	502
E	19	483	19	483	21	533	23	584
F	15	381	20	508	20	508	20	508
G	24-5/8	625	24-5/8	625	26-3/4	640	27-7/8	708
H	20-5/8	524	24-5/8	625	24-5/8	625	30-5/8	778

UPFLOW APPLICATIONS

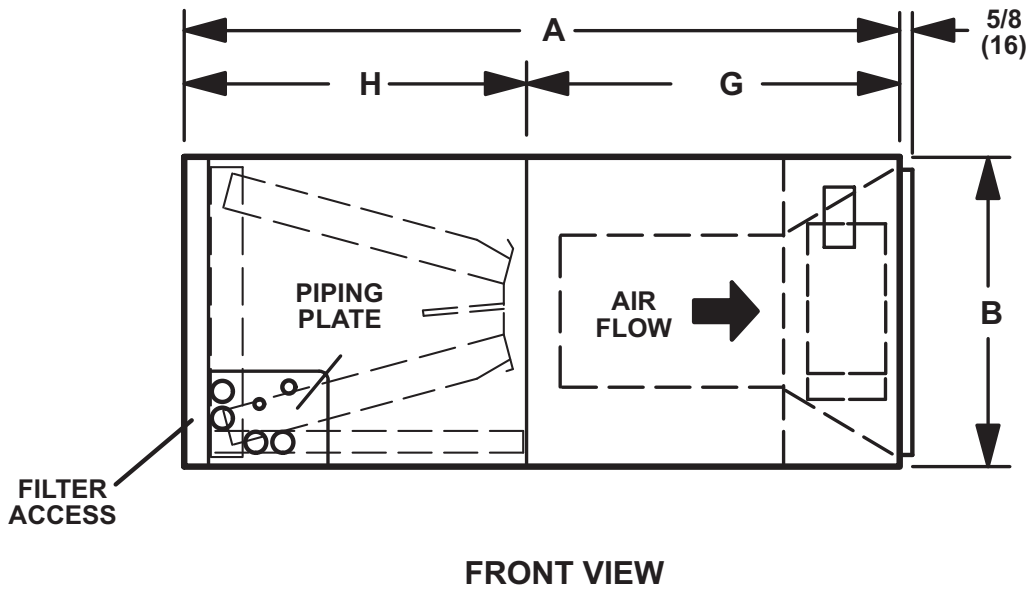


Note: Units are shipped in one piece but may be disassembled into two separate sections for ease of installation

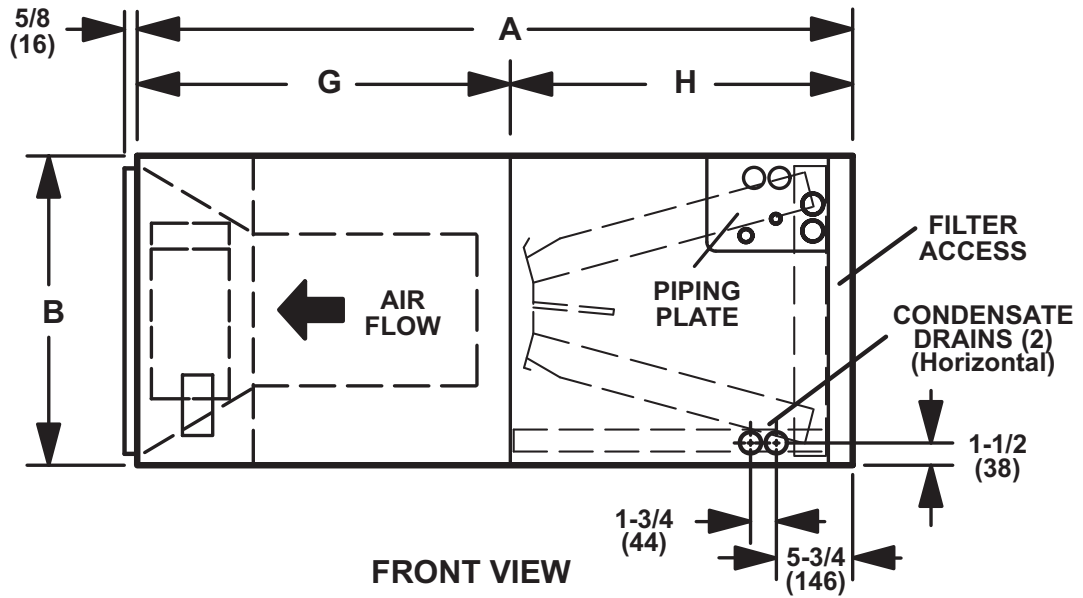
DOWNFLOW APPLICATIONS



RIGHT-HAND HORIZONTAL APPLICATIONS



LEFT-HAND HORIZONTAL APPLICATIONS



1-800-448-5872

All specifications and illustrations subject to change without notice and without incurring obligations.