

BCE3

Enhanced Air Handler

Product Specifications

Form No. BCE3-100 (02/2013)

APPLICATION

- 1 1/2 - 5 ton sizes
- Upflow and horizontal (counterflow capable with kits)
- Sequenced for demand management
- External access to heater circuit breakers

INSTALLATION

- 1 Piece design for easier installation
- Multiposition - Upflow/Horizontal Left/Right

CABINET

- Foil faced insulation
- Painted, heavy-gauge galvanized cabinet
- Filter rack built into every air handler
- High-strength, UV- and heat-resistant plastic drain pan for corrosion resistance
- Microban® antimicrobial built in to drain pan to resist mold and mildew growth and fouling of the drain
- 2% or less air leakage

COMPONENTS

- Efficient PSC blower motors
- Standard transformer and blower relay
- Field-installed 2.5-20 kW electric heat kits with easy plug connections
- Built-in indoor time delay for increased efficiency
- Sleeves on distributor tubing to protect tubing

ACCESSORIES

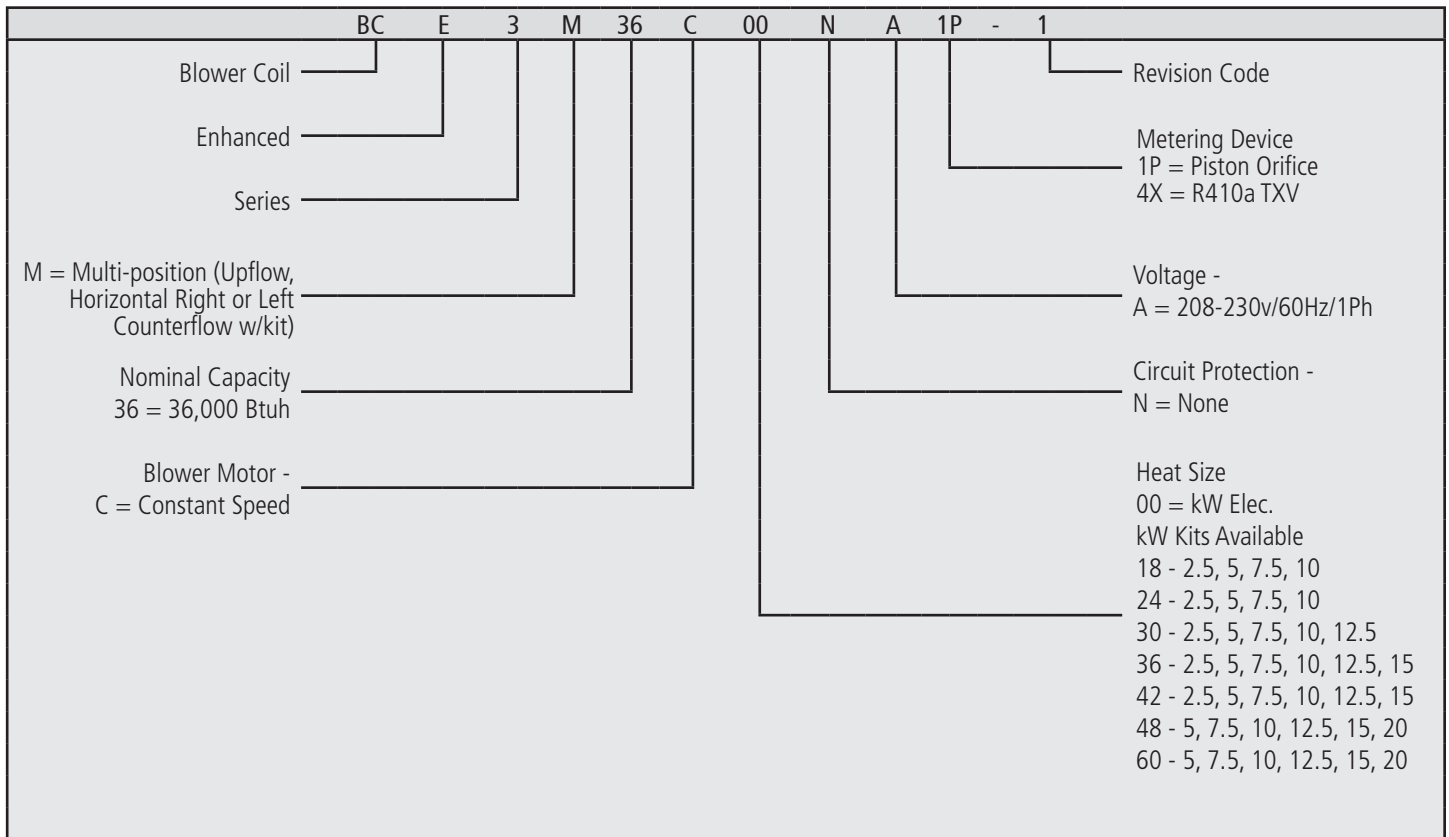
- Counterflow kit
- Single point power kit

WARRANTY

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



Model Number Guide

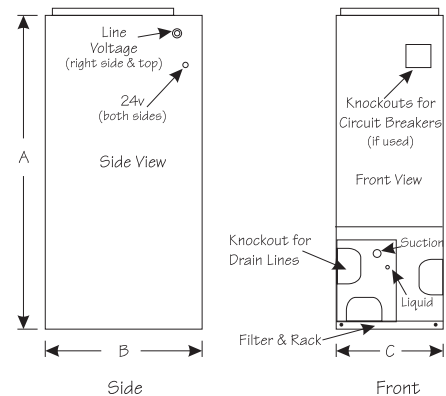


Physical

Model	Volts/Hz/Phase	Max. Elec. Heat Available (kW)	Transformer Size & Type	Filter Size (in.)	Refrigerant Connection (IDS)		Florator Piston Size	Weight (lbs.)
					Suction (in.)	Liquid (in.)		
BCE3M18	208-230/60/1	10kW	40 VA Class 2	12 X 20	3/4	3/8	.053	104
BCE3M24	208-230/60/1	10kW	40 VA Class 2	15 X 20	3/4	3/8	.057	122
BCE3M30	208-230/60/1	12.5kW	40 VA Class 2	15 X 20	3/4	3/8	.062	125
BCE3M36	208-230/60/1	15kW	40 VA Class 2	18 X 20	7/8	3/8	.071	160
BCE3M42	208-230/60/1	15kW	40 VA Class 2	18 X 24	7/8	3/8	.076	162
BCE3M48	208-230/60/1	20kW	40 VA Class 2	18 X 24	7/8	3/8	.080	185
BCE3M60	208-230/60/1	20kW	40 VA Class 2	18 X 24	7/8	3/8	.093	185

Dimensions (in.)

Air Handler Size	A (in.)	B (in.)	C (in.)	Supply Duct Opening		Return Duct Opening	
				Depth (in.)	Width (in.)	Depth (in.)	Width (in.)
BCE3M18	38	22	15	17	13	20 3/4	12 1/2
BCE3M24	40 1/2	22	18 1/2	17	16 1/2	20 3/4	16
BCE3M30	43	22	18 1/2	17	16 1/2	20 3/4	16
BCE3M36	48	22	21 7/8	17	19 7/8	20 3/4	19 3/8
BCE3M42	48	26	21 7/8	21	19 7/8	24 3/4	19 3/8
BCE3M48	52 1/2	26	21 7/8	21	19 7/8	24 3/4	19 3/8
BCE3M60	52 1/2	26	21 7/8	21	19 7/8	24 3/4	19 3/8



Electrical

Blower Size	Elec. Heating Cap.		Blower Amps	(2) (3) Total Amps per Circuit				Total Unit Amps		Circuit Breaker	
	kW	Btuh		208v		240v		208	240	Amps per Stage	
	(1) 240v	(1) 240v		1	2	1	2			1	2
(no heat) BCE3M18	0	0	1.1	-	-	-	-	1.1	1.1	15	-
	2.5	8600	1.1	10.5	-	14.0	-	10.5	14.0	15	-
	5	17100	1.1	20.3	-	27.0	-	20.3	27.0	30	-
	7.5	25600	1.1	30.0	-	40.0	-	30.0	40.0	45	-
	10	34200	1.1	39.8	-	53.0	-	39.8	53.0	60	-
(no heat) BCE3M24	0	0	1.6	-	-	-	-	1.6	1.6	15	-
	2.5	8600	1.6	11.3	-	15.0	-	11.3	15.0	20	-
	5	17100	1.6	21.0	-	28.0	-	21.0	28.0	30	-
	7.5	25600	1.6	30.8	-	41.0	-	30.8	41.0	45	-
	10	34200	1.6	40.6	-	54.0	-	40.6	54.0	60	-
(no heat) BCE3M30	0	0	1.9	-	-	-	-	1.9	1.9	15	-
	2.5	8600	1.9	11.3	-	15.0	-	11.3	15.0	20	-
	5	17100	1.9	21.0	-	28.0	-	21.0	28.0	30	-
	7.5	25600	1.9	30.8	-	41.0	-	30.8	41.0	45	-
	10	34200	1.9	40.6	-	54.0	-	40.6	54.0	60	-
	12.5	42700	1.9	30.8	19.5	41.0	26.0	50.3	67.0	45	30
(no heat) BCE3M36	0	0	2.3	-	-	-	-	2.3	2.3	15	-
	2.5	8600	2.3	12.0	-	16.0	-	12.0	16.0	20	-
	5	17100	2.3	21.8	-	29.0	-	21.8	29.0	30	-
	7.5	25600	2.3	31.5	-	42.0	-	31.5	42.0	45	-
	10	34200	2.3	41.3	-	55.0	-	41.3	55.0	60	-
	12.5	42700	2.3	31.5	19.5	42.0	26.0	51.1	68.0	45	30
	15	51200	2.3	41.3	19.5	55.0	26.0	60.8	81.0	60	30
(no heat) BCE3M42	0	0	1.9	-	-	-	-	1.9	1.9	15	-
	2.5	8600	1.9	11.3	-	15.0	-	11.3	15.0	20	-
	5	17100	1.9	21.0	-	28.0	-	21.0	28.0	30	-
	7.5	25600	1.9	30.8	-	41.0	-	30.8	41.0	45	-
	10	34200	1.9	40.6	-	54.0	-	40.6	54.0	60	-
	12.5	42700	1.9	30.8	19.5	41.0	26.0	50.3	67.0	45	30
	15	51200	1.9	40.6	19.5	54.0	26.0	60.1	80.0	60	30
(no heat) BCE3M48	0	0	3.9	-	-	-	-	3.9	3.9	15	-
	5	17100	3.9	23.3	-	31.0	-	23.3	31.0	35	-
	7.5	25600	3.9	33.0	-	44.0	-	33.0	44.0	45	-
	10	34200	3.9	42.8	-	57.0	-	42.8	57.0	60	-
	12.5	42700	3.9	33.0	19.5	44.0	26.0	52.6	70.0	45	30
	15	51200	3.9	42.8	19.5	57.0	26.0	62.3	83.0	60	30
	20	68300	3.9	42.8	39.1	57.0	52.0	81.9	109.0	60	60
(no heat) BCE3M60	0	0	3.9	-	-	-	-	3.9	3.9	15	-
	5	17100	3.9	23.3	-	31.0	-	23.3	31.0	35	-
	7.5	25600	3.9	33.0	-	44.0	-	33.0	44.0	45	-
	10	34200	3.9	42.8	-	57.0	-	42.8	57.0	60	-
	12.5	42700	3.9	33.0	19.5	44.0	26.0	52.6	70.0	45	30
	15	51200	3.9	42.8	19.5	57.0	26.0	62.3	83.0	60	30
	20	68300	3.9	42.8	39.1	57.0	52.0	81.9	109.0	60	60

1. For 208 volt use .751 correction factor for kW and Btuh
2. 15 and 20kW (2 stage models) require 2 supply circuits
3. Circuit #1 includes blower motor amps

Blower

Model	Motor Size (hp)	Blower Size (in.)	Speed	CFM @ ESP - in. W.C.				
				0.1	0.2	0.3	0.4	0.5
BCE3M18	1/5	9 x 6	Low (Red)	510	495	475	420	325
			<i>Med (Blue)</i>	670	650	630	595	505
			High (Black)	905	865	820	770	705
BCE3M24	1/3	9 x 6	Low (Red)	630	625	615	610	580
			<i>Med (Blue)</i>	885	875	850	820	780
			High (Black)	1130	1100	1070	1010	950
BCE3M30	1/3	10 x 8	Low (Red)	900	865	830	780	740
			<i>Med (Blue)</i>	1075	1060	1030	985	940
			High (Black)	1240	1210	1170	1135	1085
BCE3M36	1/2	10 x 9	Low (Red)	1160	1140	1115	1085	990
			<i>Med (Blue)</i>	1500	1445	1385	1300	1200
			High (Black)	1660	1575	1495	1405	1390
BCE3M42	1/2	11 x 8	Low (Red)	1325	1315	1300	1275	1225
			<i>Med (Blue)</i>	1490	1465	1440	1395	1315
			High (Black)	1820	1770	1690	1600	1500
BCE3M48	1/2	11.5 x 9	Low (Red)	1775	1710	1645	1565	1470
			<i>Med (Blue)</i>	1995	1895	1800	1685	1560
			High (Black)	2070	1970	1850	1719	1595
BCE3M60	1/2	12 x 9	Low (Red)	1675	1630	1580	1520	1450
			<i>Med (Blue)</i>	1965	1925	1875	1800	1695
			High (Black)	2140	2085	2000	1895	1795

All data given while air handler is operating with a wet DX coil and air filter installed.

Speeds marked in italics with an asterisk are the factory settings for both heating and cooling.*

Cooling speeds should not be reduced below factory settings.

Different speeds can be set for heating mode.

Accessories

Description	Where Used	Kit Number
Counterflow Kit	18	96W37
	24, 30	96W38
	36	97W95
	42, 48, 60	97W96
Single Point Power Kit	ALL BCS3	21H39

Electric Heat Kits

Description	Where used	Kit Number
ECB25-2.5-P 2.5 kW Electric Heater with Terminal Block	BCE3*18, 24, 30, 36, 42	89W42
ECB25-5-P 5 kW Electric Heater with Terminal Block	BCE3*18, 24, 30, 36, 42, 48, 60	89W43
ECB25-5CB-P 5 kW Electric Heater with Circuit Breaker	BCE3*18, 24, 30, 36, 42, 48, 60	89W44
ECB25-7-P 7.5 kW Electric Heater with Terminal Block	BCE3*18, 24, 30, 36, 42, 48, 60	89W45
ECB25-7CB-P 7.5 kW Electric Heater with Circuit Breaker	BCE3*18, 24, 30, 36, 42, 48, 60	89W46
ECB25-10-P 10 kW Electric Heater with Terminal Block	BCE3*18, 24, 30, 36, 42, 48, 60	89W47
ECB25-10CB-P 10 kW Electric Heater with Circuit Breaker	BCE3*18, 24, 30, 36, 42, 48, 60	89W48
ECB25-12.5CB-P 12.5 kW Electric Heater with Circuit Breaker	BCE3*30, 36, 42, 48, 60	89W49
ECB25-15CB-P 15 kW Electric Heater with Circuit Breaker	BCE3*36, 42, 48, 60	89W50
ECB25-20CB-P 20 kW Electric Heater with Circuit Breaker	BCE3*48, 60	89W51

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

