



Air Handlers BCS3

PRODUCT SPECIFICATIONS

- Minimum efficiency of 13 SEER when matched with appropriate outdoor models
- Suitable for use with R-22 and R-410A refrigerants
- Upflow and Horizontal (Counterflow with optional kit)
- Pre-painted cabinets with foil faced insulation
- Electrical connections from top or right side of unit
- 2% or less cabinet air leakage (meets ANSI/ASHRAE Standard 193-2010)
- Microban® anti-microbial additive for drain pans resists mold and mildew growth which improves indoor air quality and reduces drain line blockage.
- Drain pans are also UV and heat resistant for corrosion protection
- Filter racks pre-installed
- Transformer and blower relay
- Indoor blower time delay for increased efficiency
- External access to electric heat circuit breaker (if equipped)
- Optional electric heat available from 2.5kW to 20kW ranges
- ACCESSORIES
 - Counterflow kit
 - Single Point Power Source Kit

13 SEER
1.5 to 5 Tons

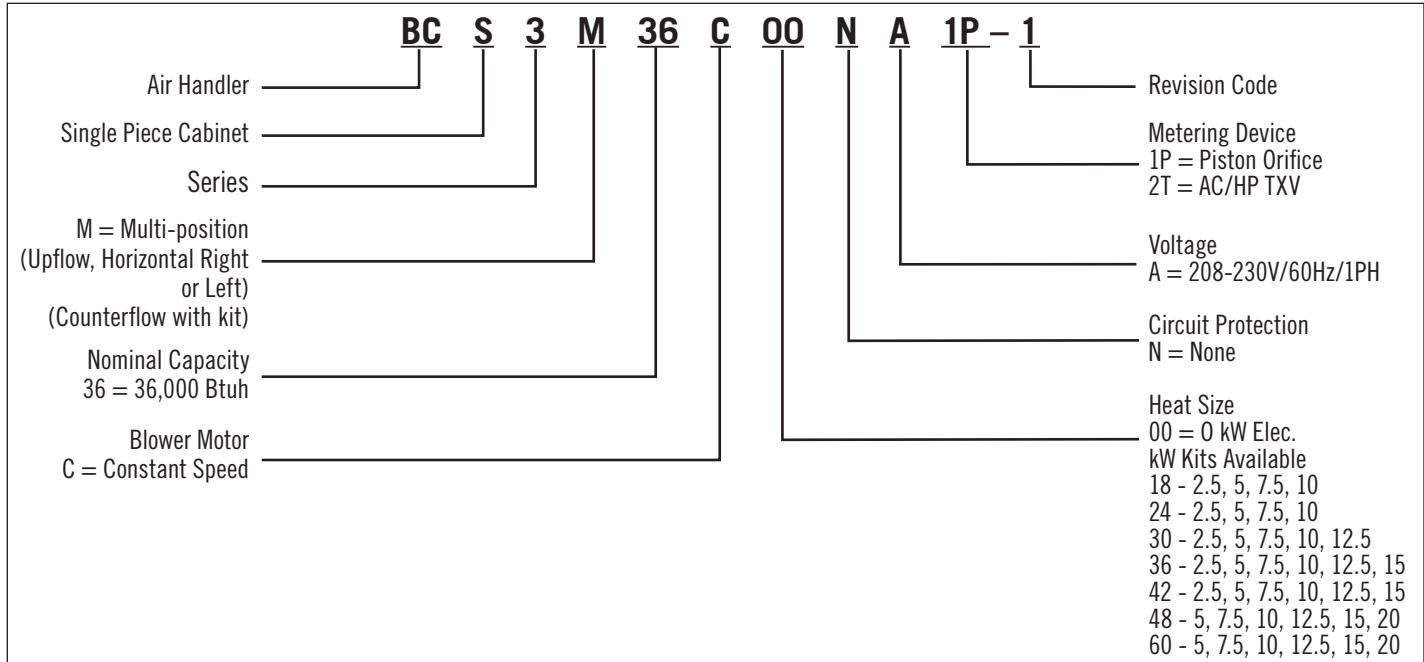


Warranty
Parts - 5 Year Limited

Air Handlers

BCS3

Model Number Identification



Specifications

Model No.	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.)		
BCS3M18	208-230/60/1	10	40 VA, Class 2	(1) 12 x 20	3/4	3/8	0.053	104
BCS3M24	208-230/60/1	10	40 VA, Class 2	(1) 15 x 20	3/4	3/8	0.057	122
BCS3M30	208-230/60/1	12.5	40 VA, Class 2	(1) 15 x 20	3/4	3/8	0.062	125
BCS3M36	208-230/60/1	15	40 VA, Class 2	(1) 18 x 20	7/8	3/8	0.071	160
BCS3M42	208-230/60/1	15	40 VA, Class 2	(1) 18 x 24	7/8	3/8	0.076	162
BCS3M48	208-230/60/1	20	40 VA, Class 2	(1) 18 x 24	7/8	3/8	0.080	185
BCS3M60	208-230/60/1	20	40 VA, Class 2	(1) 18 x 24	7/8	3/8	0.093	185

Accessories

Description	Catalog No.	Usage
Counterflow Kit	96W37	18
Counterflow Kit	96W38	24, 30
Counterflow Kit	97W95	36
Counterflow Kit	97W96	42, 48, 60
Single Point Power Source Kit	21H39	All models

Electric Heat Kits

Model Number	Description	Catalog Number	Used On
ECB25-2.5-P	2.5 kW with Wire Lead	89W42	BCS3 18, 24, 30, 36, 42
ECB25-5-P	5 kW with Terminal Block	89W43	BCS3 18, 24, 30, 36, 42, 48, 60
ECB25-5CB-P	5 kW with Circuit Breaker	89W44	BCS3 18, 24, 30, 36, 42, 48, 60
ECB25-7-P	7.5 kW with Circuit Breaker	89W45	BCS3 18, 24, 30, 36, 42, 48, 60
ECB25-7CB-P	7.5 kW with Terminal Block	89W46	BCS3 18, 24, 30, 36, 42, 48, 60
ECB25-10-P	10 kW with Terminal Block	89W47	BCS3 18, 24, 30, 36, 42, 48, 60
ECB25-10CB-P	10 kW with Circuit Breaker	89W48	BCS3 18, 24, 30, 36, 42, 48, 60
ECB25-12.5CB-P	12.5 kW with Circuit Breaker	89W49	BCS3 30, 36, 42, 48, 60
ECB25-15CB-P	15 kW with Circuit Breaker	89W50	BCS3 36, 42, 48, 60
ECB25-20CB-P	20 kW with Circuit Breaker	89W51	BCS3 48, 60

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Blower Data

Model	Motor Size (hp)	Blower Size (in.)	CFM vs. External Static Pressure (in. w.c.)					
			Speed	.10	.20	.30	.40	.50
BCS3M18	1/4	9 x 6	¹ Low (Red)	510	495	475	420	325
			Med (Blue)	670	650	630	595	505
			High (Black)	905	865	820	770	705
BCS3M24	1/3	9 x 6	Low (Red)	630	625	615	610	580
			¹ Med (Blue)	885	875	850	820	780
			High (Black)	1130	1100	1070	1010	950
BCS3M30	1/3	10 x 8	Low (Red)	900	865	830	780	740
			¹ Med (Blue)	1075	1060	1030	985	940
			High (Black)	1240	1210	1170	1135	1085
BCS3M36	1/2	10 x 9	¹ Low (Red)	1160	1140	1115	1085	990
			Med (Blue)	1500	1445	1385	1300	1200
			High (Black)	1660	1575	1495	1405	1390
BCS3M42	1/2	11 x 8	Low (Red)	1325	1315	1300	1275	1225
			¹ Med (Blue)	1490	1465	1440	1395	1315
			High (Black)	1820	1770	1690	1600	1500
BCS3M48	1/2	11-1/2 x 9	Low (Red)	1775	1710	1645	1565	1470
			¹ Med (Blue)	1995	1895	1800	1685	1560
			High (Black)	2070	1970	1850	1719	1595
BCS3M60	1/2	12 x 9	Low (Red)	1675	1630	1580	1520	1450
			¹ Med (Blue)	1965	1925	1875	1800	1695
			High (Black)	2140	2085	2000	1895	1795

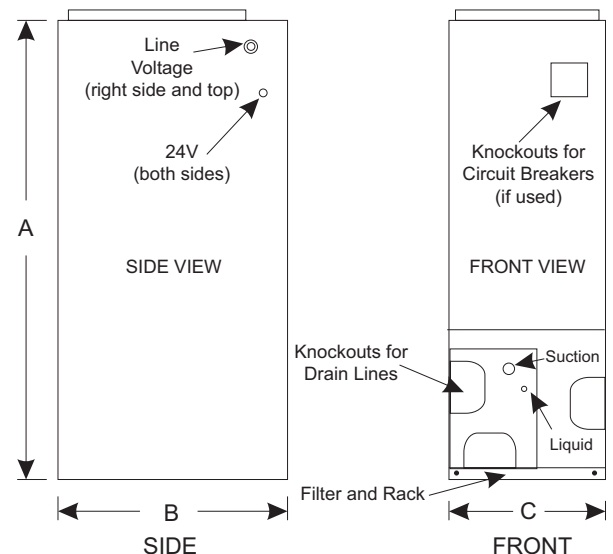
¹ Factory setting - All models.

NOTE - Air data measured with wet coil and filter installed.

NOTE - Cooling speeds should not be reduced below factory setting. Different speeds can be used for heating.

Dimensions (in.)

Model No.	A	B	C	Supply Duct Opening		Return Duct Opening	
				Depth	Width	Depth	Width
BCS3M18	38	22	15	17	13	20 -3/4	12 1/2
BCS3M24	40-1/2	22	18 -1/2	17	16 -1/2	20 -3/4	16
BCS3M30	43	22	18 -1/2	17	16 -1/2	20 -3/4	16
BCS3M36	48	22	21 -7/8	17	19 -7/8	20 -3/4	19 -3/8
BCS3M42	48	26	21 -7/8	21	19 -7/8	24 -3/4	19 -3/8
BCS3M48	52-1/2	26	21 -7/8	21	19 -7/8	24 -3/4	19 -3/8
BCS3M60	52-1/2	26	21 -7/8	21	19 -7/8	24 -3/4	19 -3/8



Air Handlers

BCS3

Electrical / Electric Heat Data

Air Handler Size	Elec. Heating Capacity		Blower Amps	2, 3 Total Amps Per Circuit				Minimum Circuit Ampacity		Circuit Breaker Amps Per Stage	
	kW	BTUH		208v		240v		208v	240v	1	2
	¹ 240v	¹ 240v		1	2	1	2				
18 (No Heat)	0	0	1.1	---	---	---	---	1.1	1.1	15	---
18	2.5	8,600	1.1	10.2	---	11.5	---	12.6	14.4	15	---
18	5	17,100	1.1	19.2	---	22.0	---	23.9	27.4	30	---
18	7.5	25,600	1.1	28.2	---	32.4	---	35.2	40.4	50	---
18	10	34,200	1.1	37.2	---	43.0	---	46.5	53.5	60	---
24 (No Heat)	0	0	1.6	---	---	---	---	1.6	1.6	15	---
24	2.5	8,600	1.6	10.6	---	12.0	---	13.3	15.0	20	---
24	5	17,100	1.6	19.7	---	22.4	---	24.6	28.0	30	---
24	7.5	25,600	1.6	28.7	---	32.9	---	35.9	41.1	45	---
24	10	34,200	1.6	37.7	---	43.3	---	47.1	54.1	60	---
30 (No Heat)	0	0	1.9	---	---	---	---	1.9	1.9	15	---
30	2.5	8,600	1.9	10.9	---	12.3	---	13.6	15.4	20	---
30	5	17,100	1.9	20.0	---	22.7	---	24.9	28.4	30	---
30	7.5	25,600	1.9	29.0	---	33.2	---	36.2	41.4	45	---
30	10	34,200	1.9	38.0	---	43.6	---	47.5	54.5	60	---
30	12.5	42,700	1.9	31.9	15.2	36.5	19.4	47.0	55.9	50	25
36 (No Heat)	0	0	2.3	---	---	---	---	2.3	2.3	15	---
36	2.5	8,600	2.3	11.3	---	12.7	---	14.1	15.9	20	---
36	5	17,100	2.3	20.4	---	23.1	---	25.4	28.9	30	---
36	7.5	25,600	2.3	29.4	---	33.6	---	36.7	41.9	45	---
36	10	34,200	2.3	38.4	---	44.0	---	48.0	55.0	60	---
36	12.5	42,700	2.3	32.3	15.2	36.9	19.8	47.4	56.7	50	25
36	15	51,200	2.3	38.4	18.1	44.0	23.1	56.5	67.1	60	30
42 (No Heat)	0	0	1.9	---	---	---	---	1.9	1.9	15	---
42	2.5	8,600	1.9	10.9	---	12.3	---	13.6	15.4	20	---
42	5	17,100	1.9	20.0	---	22.7	---	24.9	28.4	30	---
42	7.5	25,600	1.9	29.0	---	33.2	---	36.2	41.4	45	---
42	10	34,200	1.9	38.0	---	43.6	---	47.5	54.5	60	---
42	12.5	42,700	1.9	31.9	15.2	36.5	19.4	47.0	55.9	50	25
42	15	51,200	1.9	38.0	18.1	43.6	22.7	56.1	66.3	60	30
48 & 60 (No Heat)	0	0	3.9	---	---	---	---	3.9	3.9	15	---
48 & 60	5	17,100	3.9	22.0	---	24.7	---	27.4	30.9	35	---
48 & 60	7.5	25,600	3.9	31.0	---	35.2	---	38.7	43.9	45	---
48 & 60	10	34,200	3.9	40.0	---	45.6	---	50.0	57.0	60	---
48 & 60	12.5	42,700	3.9	33.9	15.2	38.5	21.4	49.0	59.9	50	25
48 & 60	15	51,200	3.9	40.0	18.1	45.6	24.7	58.1	70.3	60	30
48 & 60	20	68,300	3.9	40.0	36.1	45.6	45.6	76.1	91.1	60	60

¹ For 208 volt use .751 correction factor for kW & BTUH.

² 12.5, 15 and 20 kW (2 stage models) require two supply circuits.

³ Circuit #1 includes blower motor amps.

⁴ Circuit breaker on CB" circuit breaker model must be replaced with size noted.

