

# BCS3

## PRODUCT SPECIFICATIONS

## STANDARD AIR HANDLER

FORM NO. BCS3-100 (04/2014)



### 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
- Unit approved for installation in manufactured housing and mobile homes

### CABINET

- Foil faced insulation
- Painted, heavy-gauge galvanized cabinet
- High-strength, UV- and heat-resistant plastic drain pan for corrosion resistance
- 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

### ACCESSORIES

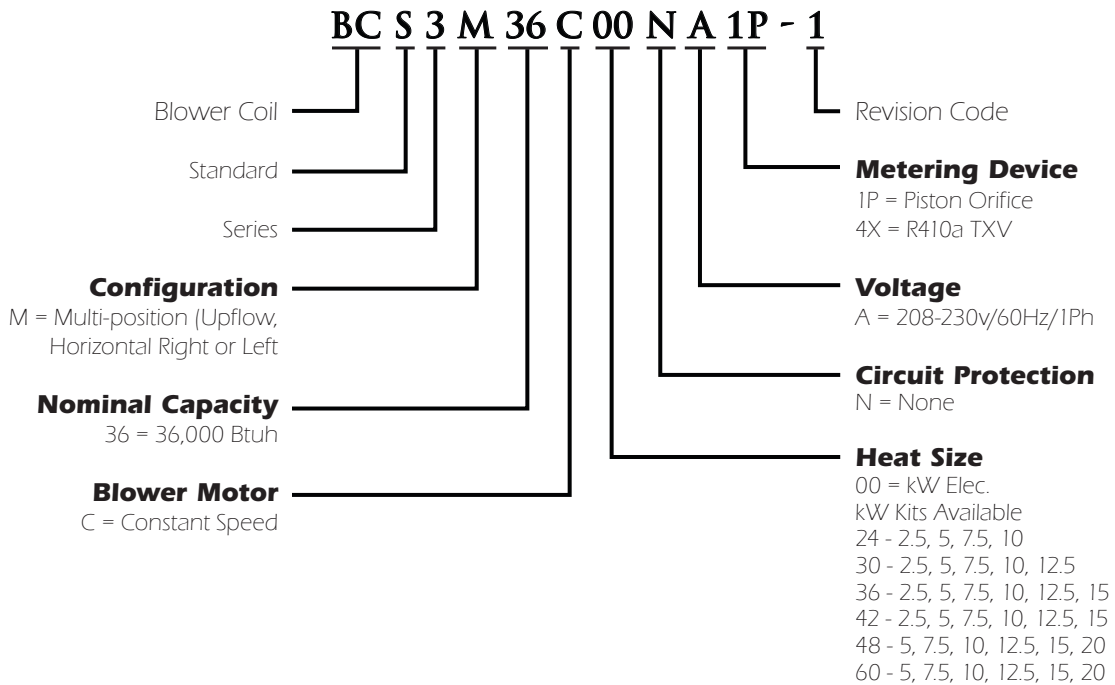
- Counter flow Kit
- Single point power kit

### WARRANTY

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



### Model Number Guide

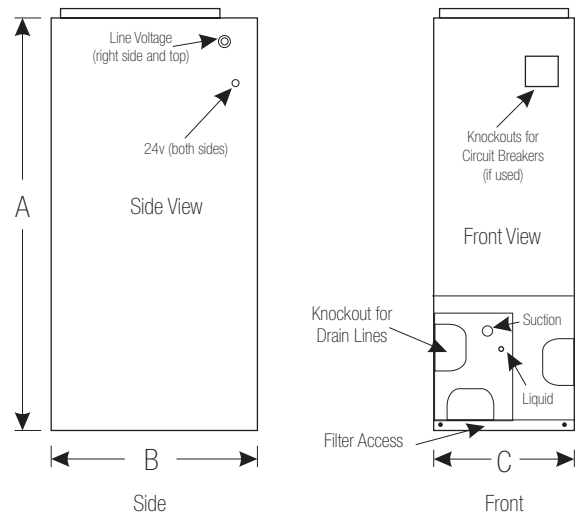


### Physical

Model	Volts/Hz/Phase	Max. Elec. Heat Available (kW)	Transformer Size & Type	Filter Size (in.)	Refrigerant Connection (IDS)		Installed TXV Size	Weight (lbs.)
					Suction (in.)	Liquid (in.)		
BCS3M18	208-230/60/1	10kW	40 VA Class 2	12 X 20	3/4	3/8	0.053	104
BCS3M24	208-230/60/1	10kW	40 VA Class 2	15 X 20	3/4	3/8	0.057	122
BCS3M30	208-230/60/1	12.5kW	40 VA Class 2	15 X 20	3/4	3/8	0.062	125
BCS3M36	208-230/60/1	15kW	40 VA Class 2	18 X 20	7/8	3/8	0.071	160
BCS3M42	208-230/60/1	15kW	40 VA Class 2	18 X 24	7/8	3/8	0.076	162
BCS3M48	208-230/60/1	20kW	40 VA Class 2	18 X 24	7/8	3/8	0.080	185
BCS3M60	208-230/60/1	20kW	40 VA Class 2	18 X 24	7/8	3/8	0.093	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.)
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



# Electrical

Blower Size	Elec. Heating Cap.		Blower Amps	Total Ampacity per Circuit				Circuit Breaker Size				Single Point Power Circuit Breaker Size				
	kW	Btuh		208v		240v		208v		240v		208v		240v		
	240v	240v		1	2	1	2	1	2	1	2	Amps	Breakers	Amps	Breakers	
BCS3M18	0	0	1.1	-	-	-	-	15	-	15	-	-	-	-	-	-
	2.5	8600	1.1	13.0	-	14.0	-	15	-	15	-	-	-	-	-	-
	5	17100	1.1	24.0	-	27.0	-	25	-	30	-	-	-	-	-	-
	7.5	25600	1.1	35.0	-	40.0	-	40	-	45	-	-	-	-	-	-
	10	34200	1.1	46.0	-	53.0	-	50	-	60	-	-	-	-	-	-
BCS3M24	0	0	1.6	-	-	-	-	15	-	15	-	-	-	-	-	-
	2.5	8600	1.6	13.0	-	15.0	-	15	-	15	-	-	-	-	-	-
	5	17100	1.6	25.0	-	28.0	-	25	-	30	-	-	-	-	-	-
	7.5	25600	1.6	35.0	-	41.0	-	40	-	45	-	-	-	-	-	-
	10	34200	1.6	47.0	-	54.0	-	50	-	60	-	-	-	-	-	-
BCS3M30	0	0	1.9	-	-	-	-	15	-	15	-	-	-	-	-	-
	2.5	8600	1.9	14.0	-	15.0	-	15	-	15	-	-	-	-	-	-
	5	17100	1.9	25.0	-	28.0	-	25	-	30	-	-	-	-	-	-
	7.5	25600	1.9	36.0	-	41.0	-	40	-	45	-	-	-	-	-	-
	10	34200	1.9	47.0	-	54.0	-	50	-	60	-	-	-	-	-	-
	12.5	42700	1.9	40.0	19.0	46.0	22.0	40	20	50	25	58	60	66	70	
BCS3M36	0	0	2.3	-	-	-	-	15	-	15	-	-	-	-	-	-
	2.5	8600	2.3	14.0	-	16.0	-	15	-	20	-	-	-	-	-	-
	5	17100	2.3	25.0	-	29.0	-	25	-	30	-	-	-	-	-	-
	7.5	25600	2.3	37.0	-	42.0	-	40	-	45	-	-	-	-	-	-
	10	34200	2.3	48.0	-	55.0	-	50	-	60	-	-	-	-	-	-
	12.5	42700	2.3	40.0	19.0	46.0	22.0	40	20	50	25	59	60	68	70	
BCS3M42	0	0	1.9	-	-	-	-	15	-	15	-	-	-	-	-	-
	2.5	8600	1.9	14.0	-	15.0	-	15	-	15	-	-	-	-	-	-
	5	17100	1.9	25.0	-	28.0	-	25	-	30	-	-	-	-	-	-
	7.5	25600	1.9	36.0	-	41.0	-	40	-	45	-	-	-	-	-	-
	10	34200	1.9	47.0	-	54.0	-	50	-	60	-	-	-	-	-	-
	12.5	42700	1.9	40.0	19.0	46.0	22.0	40	20	50	25	54	60	67	70	
	15	51200	1.9	25.0	45.0	54.0	26.0	25	50	30	60	70	70	81	90	
BCS3M48	0	0	3.9	-	-	-	-	15	-	15	-	-	-	-	-	-
	5	17100	3.9	27.0	-	31.0	-	30	-	35	-	-	-	-	-	-
	7.5	25600	3.9	39.0	-	44.0	-	40	-	45	-	-	-	-	-	-
	10	34200	3.9	50.0	-	57.0	-	50	-	60	-	-	-	-	-	-
	12.5	42700	3.9	42.0	19.0	48.0	22.0	45	20	50	25	61	70	70	70	
	15	51200	3.9	27.0	45.0	31.0	52.0	30	50	35	60	72	80	83	90	
	20	68300	3.9	45.0	50.0	52.0	57.0	45	50	60	60	95	100	109	110	
BCS3M60	0	0	3.9	-	-	-	-	15	-	15	-	-	-	-	-	-
	5	17100	3.9	27.0	-	31.0	-	30	-	35	-	-	-	-	-	-
	7.5	25600	3.9	39.0	-	44.0	-	40	-	45	-	-	-	-	-	-
	10	34200	3.9	50.0	-	57.0	-	50	-	60	-	-	-	-	-	-
	12.5	42700	3.9	42.0	19.0	48.0	22.0	45	20	50	25	61	70	70	70	
	15	51200	3.9	27.0	45.0	31.0	52.0	30	50	35	60	72	80	83	90	
	20	68300	3.9	45.0	50.0	52.0	57.0	45	50	60	60	95	100	109	110	

For 208 volt use .751 correction factor for kW and Btuh  
 12.5kW, 15 and 20kW (2 stage models) require 2 supply circuits  
 Circuit #1 includes blower motor amps except 20kW models

## Blower

Model	Motor Size (hp)	Blower Size (in.)	Speed Tap	CFM @ ESP - in. W.C.				
				0.1	0.2	0.3	0.4	0.5
BCS3M18	1/5	9 x 6	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
			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
			Med (Blue)	1075	1060	1030	985	940
			High (Black)	1240	1210	1170	1135	1085
BCS3M36	1/2	10 x 9	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
			Med (Blue)	1490	1465	1440	1395	1315
			High (Black)	1820	1770	1690	1600	1500
BCS3M48	1/2	11.5 x 9	Low (Red)	1775	1710	1645	1565	1470
			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
			Med (Blue)	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	BCS3*18, 24, 30, 36, 42	89W42
ECB25-5-P 5 kW Electric Heater with Terminal Block	BCS3*18, 24, 30, 36, 42, 48, 60	89W43
ECB25-5CB-P 5 kW Electric Heater with Circuit Breaker	BCS3*18, 24, 30, 36, 42, 48, 60	89W44
ECB25-7-P 7.5 kW Electric Heater with Terminal Block	BCS3*18, 24, 30, 36, 42, 48, 60	89W45
ECB25-7CB-P 7.5 kW Electric Heater with Circuit Breaker	BCS3*18, 24, 30, 36, 42, 48, 60	89W46
ECB25-10-P Electric Heater/10 kW	BCS3*18, 24, 30, 36, 42, 48, 60	89W47
ECB25-10CB-P Electric Heater/10 kW w/breaker	BCS3*18, 24, 30, 36, 42, 48, 60	89W48
ECB25-12.5CB-P 12.5 kW Electric Heater with Circuit Breaker	BCS3*30, 36, 42, 48, 60	89W49
ECB25-15CB-P Electric Heater/15 kW	BCS3*36, 42, 48, 60	10T14
ECB25-15CB-P Electric Heater/20 kW	BCS3*48, 60	10T35



1-800-448-5872

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