

BCE5C

PRODUCT SPECIFICATIONS

COMPACT AIR HANDLER

FORM NO. BCE5C-100 (03/2020)



APPLICATION

- 1 1/2 - 5 ton systems
- Sequenced for demand management
- External access to heater circuit breakers

INSTALLATION

- 1 piece design
- Smaller profile for tight application areas
- Multiposition - Factory ready for upflow, downflow, and horizontal left/right applications
- Approved for installation in manufactured housing and mobile homes

CABINET

- Foil faced insulation for enhanced indoor air quality
- Double hemmed technology for increased structural rigidity
- Improved gasketing on doors to prevent air leaks
- Filter rack with thumb screws for easy access and removal
- Polymer plugs on drain locations for easy installation
- Baked polyester paint finished over galvanized steel for maximum durability
- High-strength, UV and heat resistant polymer drain pan designed for corrosion resistance
- Antimicrobial polymer drain pan built to resist mold and mildew growth
- 2% or less air leakage

COILS

- Omniguard™ total corrosion protection technology designed coil
- Enhanced tube-and-fin coil design featuring MHT™ Technology
- Lanced fins for maximum heat transfer
- Factory leak tested and pre-charged with nitrogen holding charge

COMPONENTS

- Efficient PSC blower motors (4 and 5 ton units utilize constant torque motor)
- Standard transformer and blower relay
- Field installed 5 - 20kW electric heat kits with easy plug connections
- Blower time delay for increased efficiency
- Sleeves on distributor tubing to protect tubes

WARRANTY

10 year limited warranty on all parts, extended warranty available*

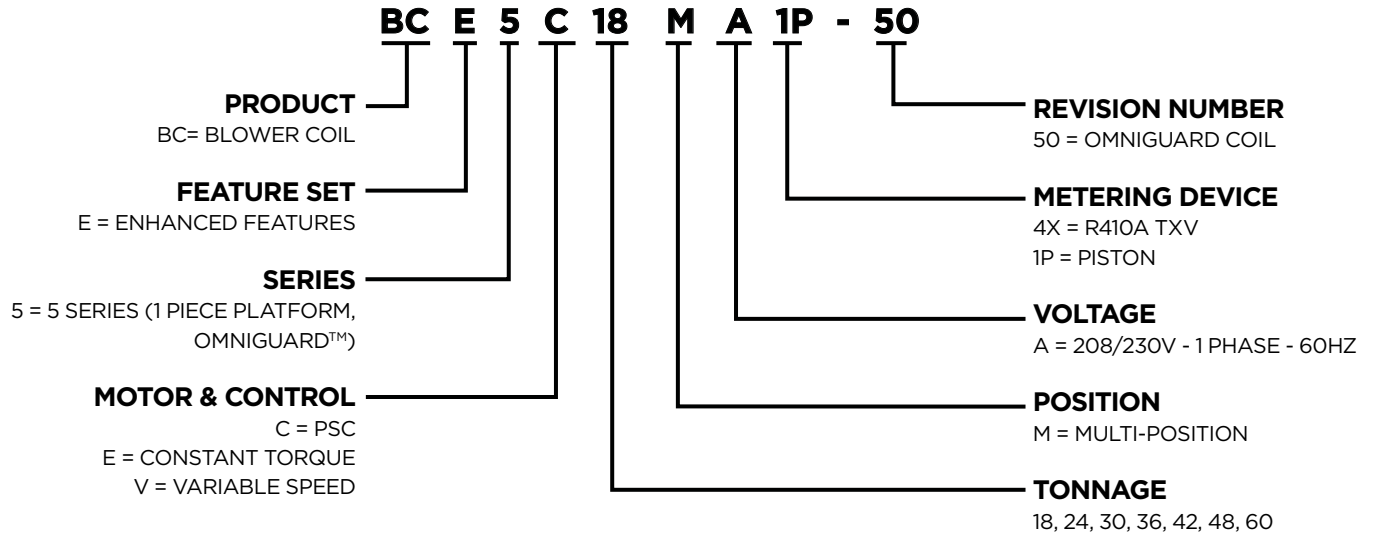
*Warranty provides for a total of 10 years of limited warranty coverage (Standard 5-year limited parts warranty plus an additional 5-year limited extended parts warranty). Warranty must be registered online within 60 days of installation to qualify for 10-year coverage. Unregistered equipment defaults to 5-year coverage. See full warranty at www.alliedair.com for terms, conditions, and exclusions.



NOTE:

For the latest AHRI system matches, please visit www.alliedratings.com or www.AHRIdirectory.org

MODEL NUMBER GUIDE



PHYSICAL

Model	Volts/Hz/Phase	Max. Elec. Heat Available (kW)	Transformer Size & Type	Filter Size (in.)	Refrigerant Connection (IDS)		Weight (lbs.)
					Suction (in.)	Liquid (in.)	
BCE5C18	208-230/60/1	7.5	40 VA Class 2	15X20	3/4	3/8	109
BCE5C24	208-230/60/1	10	40 VA Class 2	15X20	3/4	3/8	127
BCE5C30	208-230/60/1	15	40 VA Class 2	15X20	3/4	3/8	133
BCE5C36	208-230/60/1	15	40 VA Class 2	18X20	7/8	3/8	163
BCE5C42	208-230/60/1	15	40 VA Class 2	18x20	7/8	3/8	168
BCE5C48	208-230/60/1	20	40 VA Class 2	18x20	7/8	3/8	186
BCE5C60	208-230/60/1	20	40 VA Class 2	18x20	7/8	3/8	186

INSTALLATION CLEARANCES WITH ELECTRIC HEAT

Cabinet	0 in. (0 mm)
To Plenum	0 in. (0mm)
To Outlet Duct within 3 ft. (914mm)	0 in. (0 mm)
Floor	0 in. (0 mm) See Note #1
Service / Maintenance	See Note #2

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

2 Front service access - 24 in. (610 mm) minimum.

Note - If cabinet depth is more than 24 in. (610mm), allow a minimum of the cabinet depth plus 2 in. (51 mm).

ACCESSORIES

Description	Where Used	Kit Number
TXV Kit	18, 24, 30	12J18
	36, 42, 48	12J19
	60	12J20
Downflow Kit	18, 24, 30	Y9658
	36, 42, 48, 60	Y9659
Downflow Combustible Floor Base Kit	18, 24, 30	12W95
	36, 42, 48, 60	12W96
Horizontal Support Frame kit	All Models	56J18
Side Return Unit Stand (upflow only)	All Models	45K32
Single Point Power Kit	All Models	21H39
Wall Hanging Bracket Kit (upflow only)	All Models	45K30
High Performance Economizer (Commercial Only)	All Models	10U53

ELECTRIC HEAT

Electric Heat Kits with Terminal Block				
Size	Model	C/B Size *	Where Used	Cat #
5 kW	ECBA25-5	NA	18, 24, 30, 36, 42, 48, 60	16Y36
7.5 kW	ECBA25-7.5	NA	18, 24, 30, 36, 42, 48, 60	16Y37
10 kW	ECBA25-10	NA	18, 24, 30, 36, 42, 48, 60	16Y38
Electric Heat Kits with Circuit Breaker				
5 kW	ECBA25-5CB	30A	18, 24, 30, 36, 42, 48, 60	16Y39
7.5 kW	ECBA25-7.5CB	45A	18, 24, 30, 36, 42, 48, 60	16Y41
10 kW	ECBA25-10CB	60A	18, 24, 30, 36, 42, 48, 60	16Y42
12.5 kW	ECBA25-12.5CB	50A + 25A	30, 36, 42, 48, 60	16Y43
15 kW	ECBA25-15CB	60A + 25A	30, 36, 42, 48, 60	16Y44
20 kW	ECBA25-20CB	60A + 50A	48, 60	16Y46
Replacement Circuit Breakers (2 pole)				
Volts	Size		Cat #	
208/240V- 1 phase	25A		41K13	
	30A		17K70	
	35A		72K07	
	40A		49K14	
	45A		17K71	
	50A		41K12	
	60A		17K72	

* Circuit breaker must match rated "Max C/B Size"; replace breaker as necessary.

ELECTRICAL

Model	Heating Capacity (240V)			Blower Amps	Min. Circuit Ampacity				Max. Circuit Breaker Size				Single Point Power Supply				
	Nominal Heater Size kW	kW	Btuh		208V		240V		208V		240V		208V		240V		
					1	2	1	2	1	2	1	2	Amps	Fuse	Amps	Fuse	
BCE5C18	0	0	0	1.1	5		5		15		15						
	5	4.8	16400		23		26		25		30						
	7.5	7.5	25600		35		40		35		40						
	10	9.6	32700		45		51		45		60						
BCE5C24	0	0	0	1.6	5		5		15		15						
	5	4.8	16400		24		27		25		30						
	7.5	7.5	25600		36		41		40		45						
	10	9.6	32700		45		52		45		60						
BCE5C30	0	0	0	2.2	5.0		5		15		15						
	5	4.8	16400		24		28		25		30						
	7.5	7.5	25600		37		42		40		45						
	10	9.6	32700		46		53		50		60						
	12.5	12.5	42600		40	19	46	22	40	20	50	25	59	60	68	70	
	15	14.4	49100		46	22	53	25	50	25	60	25	68	70	78	80	
BCE5C36	0	0	0	2	5		5		15		15						
	5	4.8	16400		24		28		25		30						
	7.5	7.5	25600		36		42		40		45						
	10	9.6	32700		46		53		50		60						
	12.5	12.5	42600		40	19	46	22	40	20	50	25	59	60	68	70	
	15	14.4	49100		46	22	53	25	50	25	60	25	68	70	78	80	
BCE5C42	0	0	0	2.5	5.0		5.0		15		15						
	5	4.8	16400		25		28		25		30						
	7.5	7.5	25600		37		42		40		45						
	10	9.6	32700		46		53		50		60						
	12.5	12.5	42600		41	19	47	22	45	20	50	25	60	60	68	70	
	15	14.4	49100		46	22	53	25	50	25	60	25	68	70	78	80	
BCE5C48	0	0	0	7.6	9.5		9.5		15		15						
	5	4.8	16400		31		35		35		35						
	7.5	7.5	25600		43		49		45		50						
	10	9.6	32700		53		60		60		60						
	12.5	12.5	42600		47	19	53	22	50	20	60	25	66	70	75	80	
	15	14.4	49100		53	22	60	25	60	25	60	25	75	80	85	90	
	20	19.2	65500		53	43	60	50	60	45	60	50	96	100	110	110	
BCE5C60	0	0	0	7.6	9.5		9.5		15		15						
	5	4.8	16400		31		35		35		35						
	7.5	7.5	25600		43		49		45		50						
	10	9.6	32700		53		60		60		60						
	12.5	12.5	42600		47	19	53	22	50	20	60	25	66	70	75	80	
	15	14.4	49100		53	22	60	25	60	25	60	25	75	80	85	90	
	20	19.2	65500		53	43	60	50	60	45	60	50	96	100	110	110	

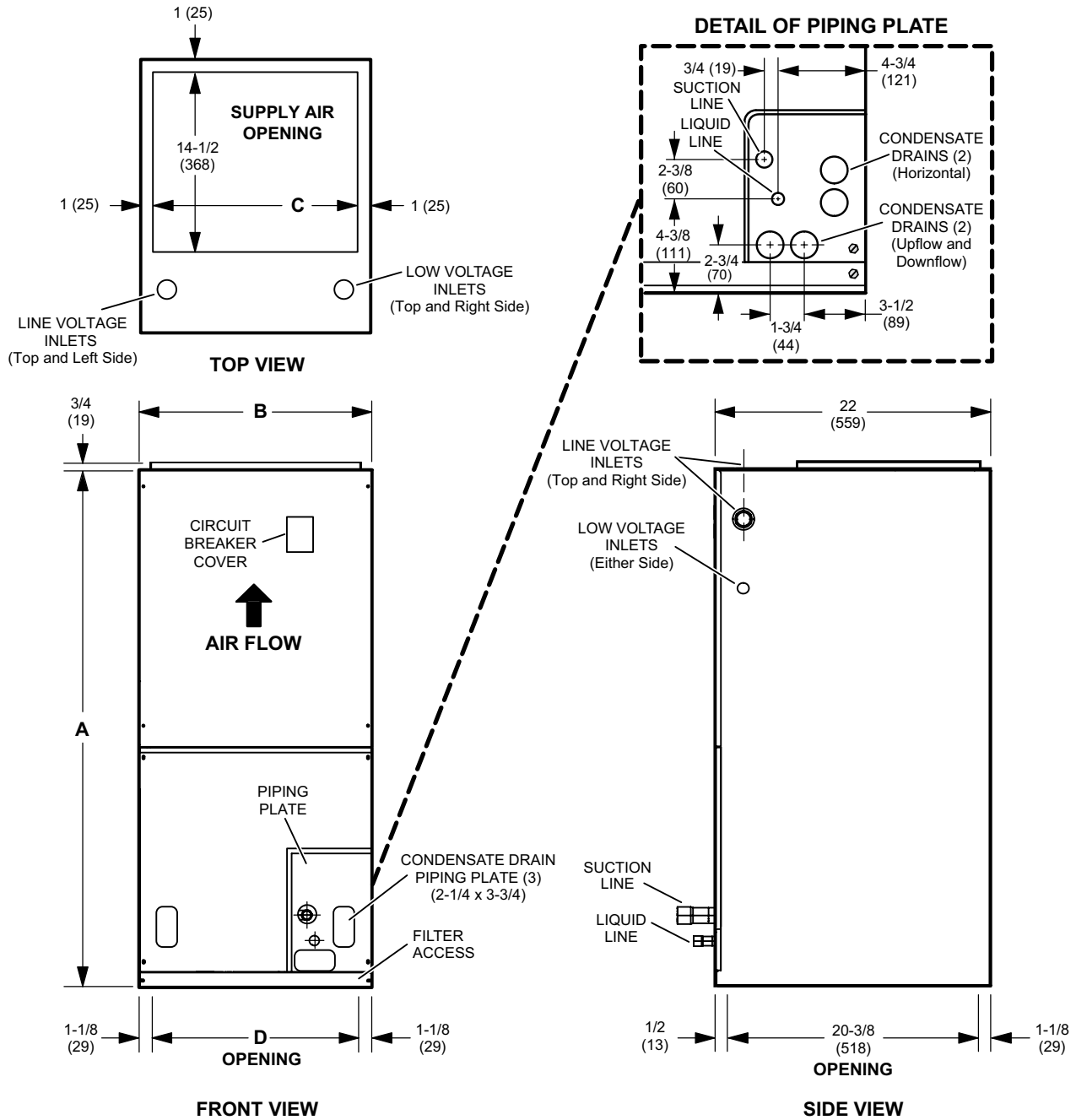
1. For 208 volt use .751 correction factor for kW and Btuh
2. 12.5kW, 15 and 20kW (2 stage models) require 2 supply circuits
3. Circuit #1 includes blower motor amps except 20kW models

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
BCE5C18	1/5	9X6	Low (Red)	540	525	505	470	420
			Med (Blue)	690	670	640	605	550
			High (Black)	920	880	855	790	710
BCE5C24	1/3	9X6	Low (Red)	675	675	655	630	590
			Med (Blue)	1010	980	940	805	740
			High (Black)	1105	1045	1000	915	855
BCE5C30	1/2	10X8	Low (Red)	870	870	855	810	770
			Med (Blue)	1080	1055	1025	985	935
			High (Black)	1310	1260	1255	1155	1085
BCE5C36	1/3	10X8	Low (Red)	1020	970	955	910	805
			Med (Blue)	1275	1240	1190	1150	1085
			High (Black)	1560	1520	1445	1395	1325
BCE5C42	1/2	10X8	Low (Red)	1300	1275	1250	1210	1155
			Med (Blue)	1525	1495	1450	1390	1345
			High (Black)	1815	1755	1695	1605	1530
BCE5C48	1	12X10	Low (Red)	1250	1210	1185	1130	1110
			Med-Low	1500	1465	1435	1400	1360
			Med (Blue)	1715	1670	1635	1615	1575
			Med-High	1770	1735	1700	1670	1650
			High (Black)	1895	1860	1835	1795	1760
BCE5C60	1	12X10	Low (Red)	1100	1050	1000	925	830
			Med-Low	1625	1595	1565	1520	1490
			Med (Blue)	1815	1785	1760	1730	1685
			Med-High	1905	1870	1835	1810	1765
			High (Black)	1980	1955	1925	1895	1860

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.

UNIT DIMENSIONS - IN. (MM)



Dimension	18		24		30		36-42		48		60	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
A	43.5	1105	45.5	1156	47	1194	53.63	1362	55	1397	59.75	1518
B	18.5	470	18.5	470	18.5	470	21.5	546	21.5	546	21.5	546
C	16.5	419	16.5	419	16.5	419	19.5	495	19.5	495	19.5	495
D	16.25	413	16.25	413	16.25	413	19.25	489	19.25	489	19.25	489

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



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