COMPACT AIR HANDLER

BCE5V

FORM NO. BCE5V-100 (4/2023)

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

- Variable speed blower motor (constant air flow)
- Standard transformer and blower relay
- Field installed 5 - 20kW electric heat kits with easy plug connections
- Built-in indoor time delay for increased efficiency
- Sleeves on distributor tubing to protect tubes

WARRANTY

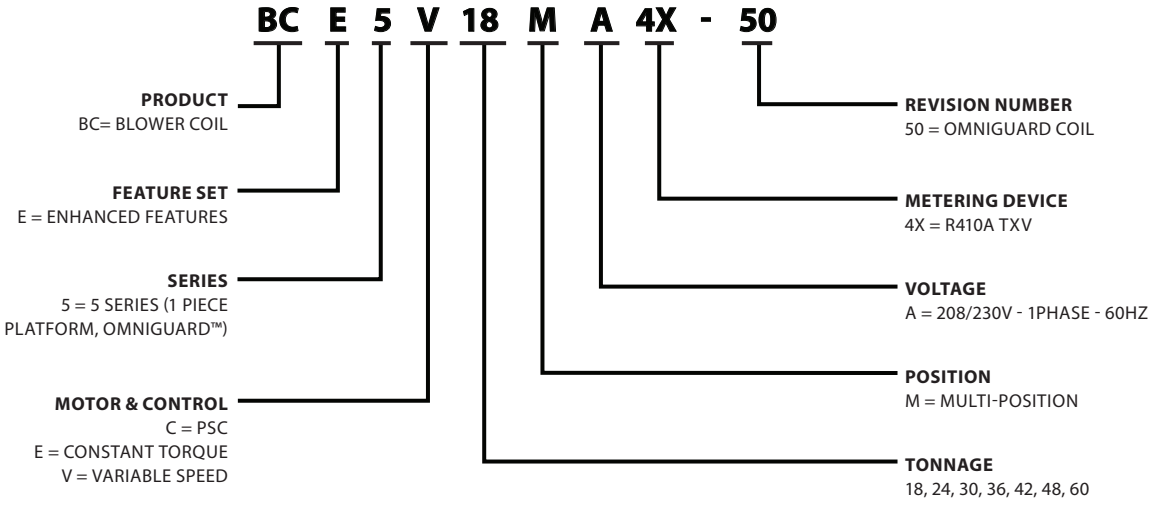
10 year limited warranty on all parts, extended warranty available*

**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.breeze33.com for terms, conditions, and exclusions.*

NOTE:

For the latest AHRI system matches, please visit 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)		Installed TXV Size	Weight (lbs.)
					Suction (in.)	Liquid (in.)		
BCE5V24	208-230/60/1	10	40 VA Class 2	15 x 20 x 1	3/4	3/8	H4TXV01	127

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
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 SizekW	kW	Btuh		208V		240V		208V		240V		208V		240V	
					1	2	1	2	1	2	1	2	Amps	Fuse	Amps	Fuse
BCE5V24	0	0	0	3.9	4.9		4.9		15		15					
	5	4.8	16400		27		30		30		30					
	7.5	7.5	25600		39		44		40		45					
	10	9.6	32700		48		55		50		60					

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

BCE5V24 BLOWER PERFORMANCE
0 through 0.80 in. w.g. External Static Pressure Range

"ADJUST" Jumper Setting	Jumper Speed Positions											
	"HEAT" Speed (W)				First Stage "COOL" Speed (Y1)				Second Stage "COOL" Speed (Y1 + Y2)			
	1	2	3	4	1	2	3	4	1	2	3	4
	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm	cfm
+	450	670	900	1120	340	450	650	770	450	670	900	1120
NORM	420	620	820	1050	300	400	600	700	420	620	820	1050
–	390	570	750	915	280	390	500	650	390	570	750	915

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 blower speed is approximately 50% of COOL speed setting. Lennox Harmony III™ Zoning System applications - minimum blower speed is 250 cfm.

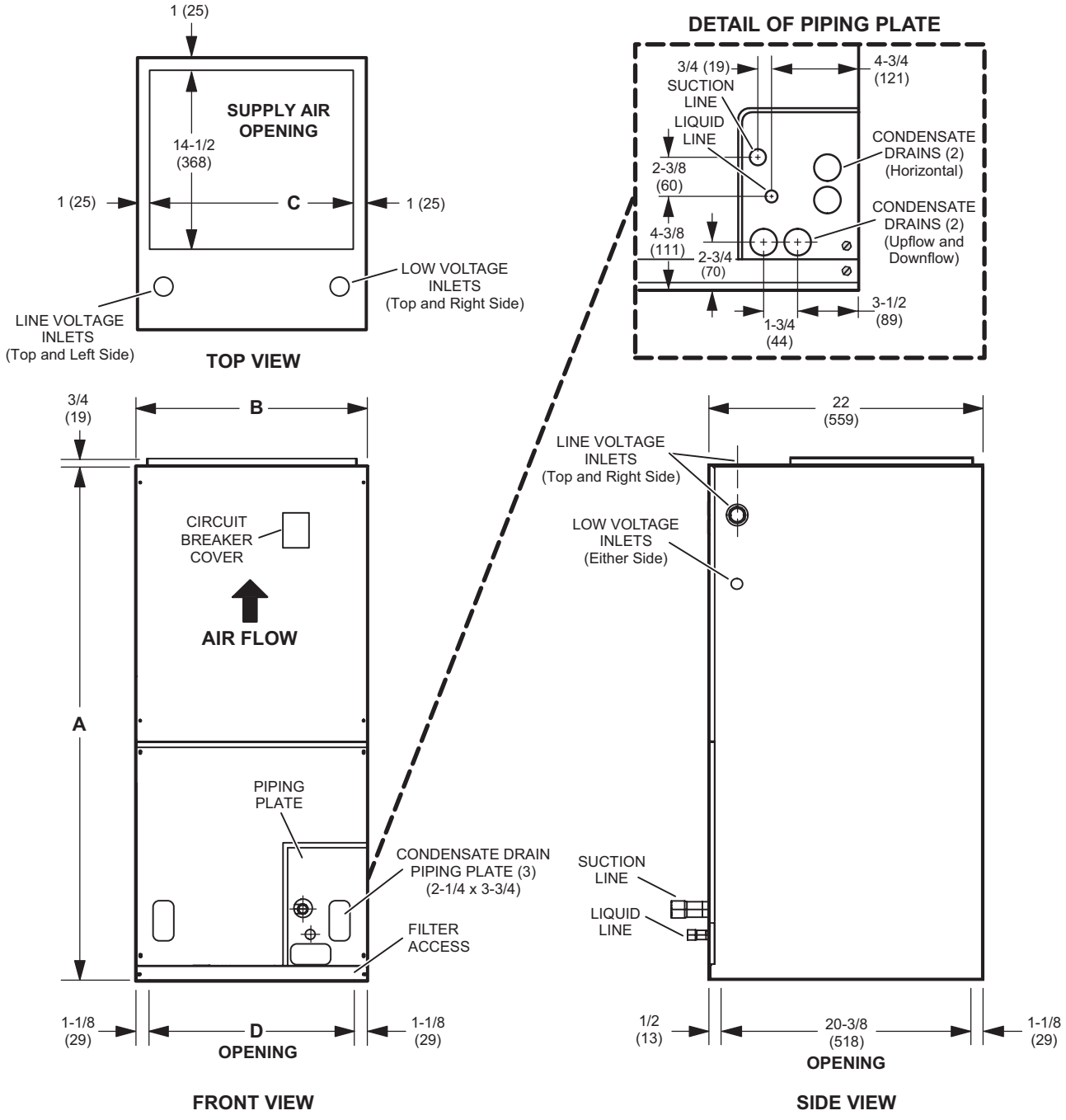
BCE5V24 BLOWER MOTOR WATTS
AT "+" (Plus) SETTING ("Adjust" Jumper at "+" Setting)

Jumper Speed Positions		Motor Watts @ Various External Static Pressures - in. wg.							
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
"HEAT" Speed	Tap 1	40	50	60	74	86	95	112	124
	Tap 2	82	100	116	136	151	163	185	197
	Tap 3	173	190	213	236	257	283	300	316
	Tap 4	290	318	339	363	379	407	447	463
First Stage "COOL" Speed	Tap 1	27	37	46	57	68	76	88	104
	Tap 2	41	54	62	75	87	97	108	121
	Tap 3	75	94	109	127	145	161	173	191
	Tap 4	113	133	146	168	189	205	222	244
Second Stage "COOL" Speed	Tap 1	40	50	60	74	86	95	112	124
	Tap 2	82	100	116	136	151	163	185	197
	Tap 3	173	190	213	236	257	283	300	316
	Tap 4	290	318	339	363	379	407	447	463

AT "NORM" SETTING ("Adjust" Jumper at NORM Setting)									
Jumper Speed Positions	Motor Watts @ Various External Static Pressures - in. wg.								
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
"HEAT" Speed	Tap 1	33	45	57	68	78	89	101	115
	Tap 2	64	81	96	113	132	145	159	179
	Tap 3	133	152	172	190	211	231	252	270
	Tap 4	253	278	307	325	348	374	397	415
First Stage "COOL" Speed	Tap 1	26	36	39	52	62	73	93	102
	Tap 2	37	45	57	66	76	90	100	113
	Tap 3	62	80	94	108	123	135	152	171
	Tap 4	88	108	128	145	162	181	195	214
Second Stage "COOL" Speed	Tap 1	33	45	57	68	78	89	101	115
	Tap 2	64	81	96	113	132	145	159	179
	Tap 3	133	152	172	190	211	231	252	270
	Tap 4	253	278	307	325	348	374	397	415

AT "–" (Minus) SETTING ("Adjust" Jumper at "–" Setting)									
Jumper Speed Positions	Motor Watts @ Various External Static Pressures - in. wg.								
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
"HEAT" Speed	Tap 1	30	43	54	62	73	84	97	109
	Tap 2	52	71	87	99	117	128	145	157
	Tap 3	100	118	138	161	179	193	204	228
	Tap 4	167	185	206	230	256	280	295	316
First Stage "COOL" Speed	Tap 1	23	29	42	48	60	75	88	93
	Tap 2	31	39	54	62	76	86	96	105
	Tap 3	46	56	70	84	93	107	115	133
	Tap 4	72	87	105	121	141	158	175	188
Second Stage "COOL" Speed	Tap 1	30	43	54	62	73	84	97	109
	Tap 2	52	71	87	99	117	128	145	157
	Tap 3	100	118	138	161	179	193	204	228
	Tap 4	167	185	206	230	256	280	295	316

UNIT DIMENSIONS - IN. (MM)



Dimension	24	
	in.	mm
A	45.5	1156
B	18.5	470
C	16.5	419
D	16.25	413

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