

BCE7S

PRODUCT SPECIFICATIONS

ENHANCED AIR HANDLER WITH VARIABLE SPEED AND COMMUNICATING CONTROLS

FORM NO. BCE7S-100 (03/2020)



APPLICATION

- 2 - 5 ton systems
- Upflow, horizontal, and downflow capable
- Sequenced for demand management
- External access to heater circuit breakers

INSTALLATION

- Shipped in one piece, but may be disassembled into two separate pieces for ease of installation
- Multiposition - Factory ready for upflow, downflow, and horizontal left/right applications
- No external screw heads on the sides of the unit to fit in tight spaces

CABINET

- Thick foil faced insulation
- Improved gasketing on doors for better fit
- Filter rack with thumb screws for easy access and removal
- Baked polyester paint finished over galvanized steel for maximum durability
- Thick rubber gaskets between each section insure tight seal when converted to downflow
- 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 tested for leakproof construction and precharged with nitrogen holding charge

COMPONENTS

- Efficient ECM variable speed motor
- 70 VA transformer
- Field installed 5 - 25kW electric heat kits with easy plug connections
- Built-in blower time delay for increased efficiency
- Sleeves on distributor tubing for added protection

CONTROLS

- Communicating control enabled
- Thermostat flexibility: works with the ComfortSync T-Stat or a conventional 24V T-Stat
- Self diagnostics saves last 10 fault codes regardless of power interruption

WARRANTY

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

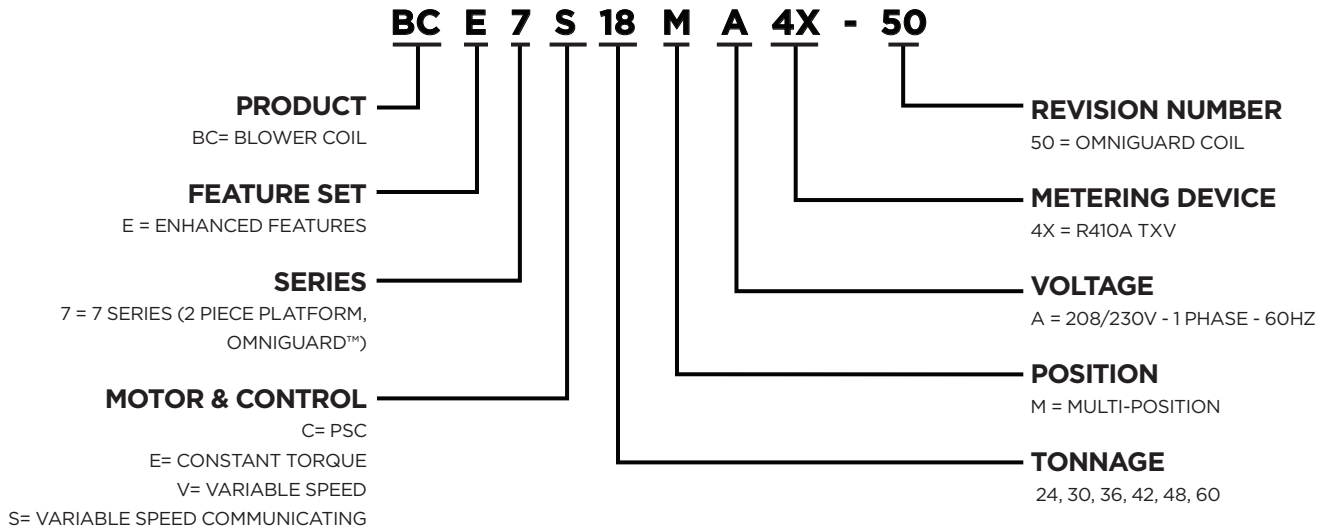
*Warranty provides for a total of 10 years of limited warranty coverage (Standard 5-year limited parts warranty plus an additional 5-year limited extended parts warranty). Warranty must be registered online within 60 days of installation to qualify for 10-year coverage. Unregistered equipment defaults 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) | | Installed TXV Size | Weight (lbs.) |
|---------|----------------|--------------------------------|-------------------------|-------------------|------------------------------|--------------|--------------------|---------------|
| | | | | | Suction (in.) | Liquid (in.) | | |
| BCE7S24 | 208/230/60/1 | 9 | 70VA | (1) 20 x 20 x 1 | 3/4 | 3/8 | 12J18 | 141 |
| BCE7S30 | 208/230/60/1 | 15 | 70VA | (1) 20 x 20 x 1 | 3/4 | 3/8 | 12J18 | 154 |
| BCE7S36 | 208/230/60/1 | 20 | 70VA | (1) 20 x 20 x 1 | 3/4 | 3/8 | 12J19 | 159 |
| BCE7S42 | 208/230/60/1 | 20 | 70VA | (1) 20 x 24 x 1 | 7/8 | 3/8 | 12J20 | 189 |
| BCE7S48 | 208/230/60/1 | 25 | 70VA | (1) 20 x 24 x 1 | 7/8 | 3/8 | 12J20 | 189 |
| BCE7S60 | 208/230/60/1 | 25 | 70VA | (1) 20 x 24 x 1 | 7/8 | 3/8 | 12J20 | 199 |

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 | 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 | CAT. NUMBER |
|---------------------------------------|------------|-------------|
| Circuit Breaker Cover Kit | All Models | 82W01 |
| Downflow Combustible Flooring Base | All Models | 44K15 |
| Horizontal Support Frame Kit | All Models | 56J18 |
| Side Return Unit Stand (Upflow) | All Models | 45K32 |
| Single-Point Power Source Control Box | All Models | 21H39 |
| Wall Hanging Bracket Kit (Upflow) | All Models | 45K30 |
| Remote Outdoor Sensor | All Models | X2658 |
| Comfort Sync Thermostat | All Models | 1.841197 |
| Comfort Sync Zone Controller | All Models | 1.851399 |

ELECTRIC HEAT

| Size | Model | C/B Size * | WHERE USED | Cat # |
|--|----------------|-----------------|------------------------|-------|
| Electric Heat Kits with Circuit Breaker | | | | |
| 5 kW | ECB27-5CB-P | 35A | 24, 30, 36, 42, 48, 60 | 17D47 |
| 9 kW | ECB27-9CB-P | 60A | 24, 30, 36, 42, 48, 60 | 17D52 |
| 12.5 kW | ECB27-12.5CB-P | 30A + 45A | 30, 36, 42, 48, 60 | 17D53 |
| 15 kW | ECB27-15CB-P | 35A + 60A | 30, 36, 42, 48, 60 | 17D54 |
| 20 kW | ECB27-20CB-P | 60A + 60A | 36, 42, 48, 60 | 17D55 |
| 25 kW | ECB27-25CB-P | 60A + 45A + 45A | 48, 60 | 17D56 |

| 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 | Heater Model | Electric Heat Capacity | | | | Blower Motor Full Load Amps ² | Minimum Circuit Ampacity (240/208 Volts) ³ | | | Maximum Overcurrent Protection (240/208 Volts) ^{4,5} | | | Single Point Power Source | | |
|-----------------|----------------|------------------------|-----------|-------------------------|-----------|--|---|-------|-------|---|-------|-------|----------------------------------|---|---------|
| | | kW Input | | Btuh Input ¹ | | | CKT-1 | CKT-2 | CKT-3 | CKT-1 | CKT-2 | CKT-3 | Minimum Circuit Amp ⁵ | Maximum Overcurrent Protection ⁵ | |
| | | 240 Volts | 208 Volts | 240 Volts | 208 Volts | | | | | | | | | | |
| BCE7S-24MA4X-50 | NONE | --- | --- | --- | --- | 4 | 5/5 | --- | --- | 15/15 | --- | --- | --- | --- | |
| | ECB27-5CB-P | 5 | 3.8 | 17100 | 12,800 | | 31/28 | --- | --- | 35/30 | --- | --- | 31/28 | 35/30 | |
| | ECB27-9CB-P | 9 | 6.8 | 30700 | 23,100 | | 52/46 | --- | --- | 60/50 | --- | --- | 52/46 | 60/50 | |
| BCE7S-30MA4X-50 | NONE | --- | --- | --- | --- | 3.9 | 5/5 | --- | --- | 15/15 | --- | --- | --- | --- | |
| | ECB27-5CB-P | 5 | 3.8 | 17100 | 12800 | | | 31/28 | --- | --- | 35/30 | --- | --- | 31/28 | 35/30 |
| | ECB27-9CB-P | 9 | 6.8 | 30700 | 23100 | | | 52/46 | --- | --- | 60/50 | --- | --- | 52/46 | 35/30 |
| | ECB27-12.5CB-P | 12.5 | 9.4 | 42600 | 32000 | | | 27/24 | 44/38 | --- | 30/25 | 45/40 | --- | 71/61 | 80/70 |
| | ECB27-15CB-P | 15 | 11.3 | 51200 | 38400 | | | 31/28 | 52/45 | --- | 35/30 | 60/45 | --- | 83/72 | 90/80 |
| BCE7S-36MA4X-50 | NONE | --- | --- | --- | --- | 5.2 | 5/5 | --- | --- | 15/15 | --- | --- | --- | --- | |
| | ECB27-5CB-P | 5 | 3.8 | 17100 | 12800 | | | 33/29 | --- | --- | 35/30 | --- | --- | 33/29 | 35/30 |
| | ECB27-9CB-P | 9 | 6.8 | 30700 | 23100 | | | 53/47 | --- | --- | 60/50 | --- | --- | 53/47 | 60/50 |
| | ECB27-12.5CB-P | 12.5 | 9.4 | 42600 | 32000 | | | 28/25 | 44/38 | --- | 35/30 | 45/40 | --- | 72/63 | 80/70 |
| | ECB27-15CB-P | 15 | 11.3 | 51200 | 38400 | | | 33/29 | 52/45 | --- | 35/30 | 60/45 | --- | 85/74 | 90/80 |
| | ECB27-20CB-P | 20 | 15 | 68200 | 51200 | | | 53/47 | 57/50 | --- | 60/50 | 60/50 | --- | 111/97 | 125/100 |
| BCE7S-42MA4X-50 | NONE | --- | --- | --- | --- | 7.4 | 10/10 | --- | --- | 20/20 | --- | --- | --- | --- | |
| | ECB27-5CB-P | 5 | 3.8 | 17100 | 12800 | | | 35/31 | --- | --- | 35/35 | --- | --- | 35/31 | 35/35 |
| | ECB27-9CB-P | 9 | 6.8 | 30700 | 23100 | | | 56/49 | --- | --- | 60/50 | --- | --- | 56/49 | 60/50 |
| | ECB27-12.5CB-P | 12.5 | 9.4 | 42600 | 32000 | | | 31/27 | 44/38 | --- | 35/30 | 45/40 | --- | 74/65 | 80/70 |
| | ECB27-15CB-P | 15 | 11.3 | 51200 | 38400 | | | 35/31 | 52/45 | --- | 35/35 | 60/45 | --- | 87/76 | 90/80 |
| | ECB27-20CB-P | 20 | 15 | 68200 | 51200 | | | 56/49 | 57/50 | --- | 60/50 | 60/50 | --- | 113/99 | 125/100 |
| BCE7S-48MA4X-50 | NONE | --- | --- | --- | --- | 6.9 | 10/10 | --- | --- | 20/20 | --- | --- | --- | --- | |
| | ECB27-5CB-P | 5 | 3.8 | 17100 | 12800 | | | 35/31 | --- | --- | 35/35 | --- | --- | 35/31 | 35/35 |
| | ECB27-9CB-P | 9 | 6.8 | 30700 | 23100 | | | 56/49 | --- | --- | 60/50 | --- | --- | 56/49 | 60/50 |
| | ECB27-12.5CB-P | 12.5 | 9.4 | 42600 | 32000 | | | 31/27 | 44/38 | --- | 35/30 | 45/40 | --- | 74/65 | 80/70 |
| | ECB27-15CB-P | 15 | 11.3 | 51200 | 38400 | | | 35/31 | 52/45 | --- | 35/35 | 60/45 | --- | 87/76 | 90/80 |
| | ECB27-20CB-P | 20 | 15 | 68200 | 51200 | | | 56/49 | 57/50 | --- | 60/50 | 60/50 | --- | 113/99 | 125/100 |
| | ECB27-25CB-P | 25 | 18.8 | 85300 | 64100 | | | 52/46 | 44/38 | 44/38 | 60/50 | 45/40 | 45/40 | 140/122 | 150/125 |
| BCE7S-60MA4X-50 | NONE | --- | --- | --- | --- | 6.9 | 10/10 | --- | --- | 20/20 | --- | --- | --- | --- | |
| | ECB27-5CB-P | 5 | 3.8 | 17100 | 12800 | | | 35/31 | --- | --- | 35/35 | --- | --- | 35/31 | 35/35 |
| | ECB27-9CB-P | 9 | 6.8 | 30700 | 23100 | | | 56/49 | --- | --- | 60/50 | --- | --- | 56/49 | 60/50 |
| | ECB27-12.5CB-P | 12.5 | 9.4 | 42600 | 32000 | | | 31/27 | 44/38 | --- | 35/30 | 45/40 | --- | 74/65 | 80/70 |
| | ECB27-15CB-P | 15 | 11.3 | 51200 | 38400 | | | 35/31 | 52/45 | --- | 35/35 | 60/45 | --- | 87/76 | 90/80 |
| | ECB27-20CB-P | 20 | 15 | 68200 | 51200 | | | 56/49 | 57/50 | --- | 60/50 | 60/50 | --- | 113/99 | 125/100 |
| | ECB27-25CB-P | 25 | 18.8 | 85300 | 64100 | | | 52/46 | 44/38 | 44/38 | 60/50 | 45/40 | 45/40 | 140/122 | 150/125 |

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.
¹ Electric heater capacity only - does not include additional blower motor heat capacity.
² Amps shown are for blower motor only
³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F.
⁴ 208 Volt applications must replace circuit breakers with size noted in table.
⁵ HACR type circuit breaker or fuse.

BLOWER

| BCE7S24 BLOWER PERFORMANCE | | | | | | | | |
|--|------------------------|----------|----------|----------|--------------|----------|----------|----------|
| 0 through 0.80 In. w.g. External Static Pressure Range | | | | | | | | |
| "ADJUST" Jumper Setting | Jumper Speed Positions | | | | | | | |
| | "HEAT" Speed | | | | "COOL" Speed | | | |
| | 1 cfm | 2 cfm | 3 cfm | 4 cfm | 1 cfm | 2 cfm | 3 cfm | 4 cfm |
| + | 460 | 685 | 885 | 1050 | 460 | 685 | 885 | 1050 |
| NORM | 400 | 575 | 795 | 940 | 400 | 575 | 795 | 940 |
| - | 365 | 515 | 715 | 830 | 365 | 515 | 715 | 830 |

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 fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 250 cfm. Zoning System applications - minimum blower speed is 250 cfm.

| BCE7S24 BLOWER WATTS | | | | | | | | | |
|--|-------|--|-----|-----|-----|-----|-----|-----|-----|
| AT "+" (Plus) SETTING ("Adjust" Jumper at "+" Setting) | | | | | | | | | |
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 32 | 44 | 58 | 71 | 90 | 104 | 131 | 145 |
| | Tap 2 | 56 | 85 | 103 | 121 | 139 | 165 | 190 | 207 |
| | Tap 3 | 105 | 131 | 161 | 183 | 202 | 241 | 263 | 292 |
| | Tap 4 | 164 | 194 | 220 | 253 | 277 | 310 | 330 | 360 |
| "COOL" Speed | Tap 1 | 32 | 44 | 58 | 71 | 90 | 104 | 131 | 145 |
| | Tap 2 | 56 | 85 | 103 | 121 | 139 | 165 | 190 | 207 |
| | Tap 3 | 105 | 131 | 161 | 183 | 202 | 241 | 263 | 292 |
| | Tap 4 | 164 | 194 | 220 | 253 | 277 | 310 | 330 | 360 |

| AT "NORM" SETTING ("Adjust" Jumper at "NORM" Setting) | | | | | | | | | |
|---|-------|--|-----|-----|-----|-----|-----|-----|-----|
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 27 | 42 | 52 | 59 | 79 | 99 | 114 | 133 |
| | Tap 2 | 44 | 59 | 77 | 95 | 117 | 137 | 152 | 183 |
| | Tap 3 | 79 | 108 | 126 | 159 | 181 | 199 | 231 | 252 |
| | Tap 4 | 117 | 145 | 167 | 197 | 228 | 254 | 273 | 313 |
| "COOL" Speed | Tap 1 | 27 | 42 | 52 | 69 | 79 | 99 | 114 | 133 |
| | Tap 2 | 44 | 59 | 77 | 95 | 117 | 137 | 152 | 183 |
| | Tap 3 | 79 | 108 | 126 | 159 | 181 | 199 | 231 | 252 |
| | Tap 4 | 117 | 145 | 167 | 197 | 228 | 254 | 273 | 313 |

| AT "-" (Minus) SETTING ("Adjust" Jumper at "-" Setting) | | | | | | | | | |
|---|-------|--|-----|-----|-----|-----|-----|-----|-----|
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 24 | 40 | 48 | 60 | 76 | 94 | 106 | 117 |
| | Tap 2 | 37 | 48 | 68 | 93 | 106 | 129 | 145 | 157 |
| | Tap 3 | 70 | 85 | 106 | 129 | 153 | 181 | 203 | 222 |
| | Tap 4 | 90 | 117 | 138 | 162 | 190 | 216 | 236 | 265 |
| "COOL" Speed | Tap 1 | 24 | 40 | 48 | 60 | 76 | 94 | 106 | 117 |
| | Tap 2 | 37 | 48 | 68 | 93 | 106 | 129 | 145 | 157 |
| | Tap 3 | 70 | 85 | 106 | 129 | 153 | 181 | 203 | 222 |
| | Tap 4 | 90 | 117 | 138 | 162 | 190 | 216 | 236 | 265 |

BLOWER

| BCE7S30 BLOWER PERFORMANCE | | | | | | | | |
|--|------------------------|----------|----------|----------|--------------|----------|----------|----------|
| 0 through 0.80 In. w.g. External Static Pressure Range | | | | | | | | |
| "ADJUST" Jumper Setting | Jumper Speed Positions | | | | | | | |
| | "HEAT" Speed | | | | "COOL" Speed | | | |
| | 1 cfm | 2 cfm | 3 cfm | 4 cfm | 1 cfm | 2 cfm | 3 cfm | 4 cfm |
| + | 630 | 875 | 1095 | 1315 | 630 | 875 | 1095 | 1315 |
| NORM | 545 | 785 | 995 | 1195 | 545 | 785 | 995 | 1195 |
| - | 510 | 700 | 890 | 1075 | 510 | 700 | 890 | 1075 |

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 fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 250 cfm. Zoning System applications - minimum blower speed is 250 cfm.

| BCE7S30 BLOWER WATTS | | | | | | | | | |
|--|-------|--|-----|-----|-----|-----|-----|-----|-----|
| AT "+" (Plus) SETTING ("Adjust" Jumper at "+" Setting) | | | | | | | | | |
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 35 | 55 | 76 | 95 | 116 | 138 | 164 | 179 |
| | Tap 2 | 80 | 100 | 122 | 148 | 171 | 194 | 214 | 239 |
| | Tap 3 | 140 | 167 | 189 | 216 | 237 | 273 | 291 | 322 |
| | Tap 4 | 231 | 262 | 295 | 328 | 355 | 377 | 412 | 441 |
| "COOL" Speed | Tap 1 | 35 | 55 | 76 | 95 | 116 | 138 | 164 | 179 |
| | Tap 2 | 80 | 100 | 122 | 148 | 171 | 194 | 214 | 239 |
| | Tap 3 | 140 | 167 | 189 | 216 | 237 | 273 | 291 | 322 |
| | Tap 4 | 231 | 262 | 295 | 328 | 355 | 377 | 412 | 441 |

| AT "NORM" SETTING ("Adjust" Jumper at "NORM" Setting) | | | | | | | | | |
|---|-------|--|-----|-----|-----|-----|-----|-----|-----|
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 36 | 48 | 61 | 80 | 92 | 114 | 124 | 139 |
| | Tap 2 | 61 | 84 | 104 | 122 | 143 | 169 | 186 | 210 |
| | Tap 3 | 109 | 134 | 153 | 178 | 203 | 231 | 254 | 281 |
| | Tap 4 | 174 | 205 | 238 | 264 | 284 | 310 | 338 | 372 |
| "COOL" Speed | Tap 1 | 36 | 48 | 61 | 80 | 92 | 114 | 124 | 139 |
| | Tap 2 | 61 | 84 | 104 | 122 | 143 | 169 | 186 | 210 |
| | Tap 3 | 109 | 134 | 153 | 178 | 203 | 231 | 254 | 281 |
| | Tap 4 | 174 | 205 | 238 | 264 | 284 | 310 | 338 | 372 |

| AT "-" (Minus) SETTING ("Adjust" Jumper at "-" Setting) | | | | | | | | | |
|---|-------|--|-----|-----|-----|-----|-----|-----|-----|
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 29 | 43 | 58 | 77 | 88 | 102 | 119 | 134 |
| | Tap 2 | 44 | 64 | 89 | 106 | 125 | 157 | 174 | 202 |
| | Tap 3 | 85 | 104 | 129 | 152 | 176 | 199 | 219 | 239 |
| | Tap 4 | 133 | 157 | 185 | 207 | 231 | 258 | 285 | 317 |
| "COOL" Speed | Tap 1 | 29 | 43 | 58 | 77 | 88 | 102 | 119 | 134 |
| | Tap 2 | 44 | 64 | 89 | 106 | 125 | 157 | 174 | 202 |
| | Tap 3 | 85 | 104 | 129 | 152 | 176 | 199 | 219 | 239 |
| | Tap 4 | 133 | 157 | 185 | 207 | 231 | 258 | 285 | 317 |

BLOWER

| BCE7S36 BLOWER PERFORMANCE | | | | | | | | |
|--|------------------------|----------|----------|----------|--------------|----------|----------|----------|
| 0 through 0.80 In. w.g. External Static Pressure Range | | | | | | | | |
| "ADJUST" Jumper Setting | Jumper Speed Positions | | | | | | | |
| | "HEAT" Speed | | | | "COOL" Speed | | | |
| | 1 cfm | 2 cfm | 3 cfm | 4 cfm | 1 cfm | 2 cfm | 3 cfm | 4 cfm |
| + | 920 | 1255 | 1410 | 1580 | 920 | 1255 | 1410 | 1580 |
| NORM | 815 | 1165 | 1315 | 1435 | 815 | 1165 | 1315 | 1435 |
| - | 720 | 1010 | 1155 | 1285 | 720 | 1010 | 1155 | 1285 |

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 fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 250 cfm. Zoning System applications - minimum blower speed is 250 cfm.

| BCE7S36 BLOWER WATTS | | | | | | | | | |
|--|-------|--|-----|-----|-----|-----|-----|-----|-----|
| AT "+" (Plus) SETTING ("Adjust" Jumper at "+" Setting) | | | | | | | | | |
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 88 | 108 | 132 | 161 | 190 | 208 | 234 | 248 |
| | Tap 2 | 174 | 212 | 237 | 269 | 304 | 328 | 370 | 385 |
| | Tap 3 | 232 | 282 | 314 | 341 | 374 | 410 | 343 | 473 |
| | Tap 4 | 332 | 365 | 409 | 438 | 480 | 520 | 546 | 576 |
| "COOL" Speed | Tap 1 | 88 | 108 | 132 | 161 | 190 | 208 | 234 | 248 |
| | Tap 2 | 174 | 212 | 237 | 269 | 304 | 328 | 370 | 386 |
| | Tap 3 | 232 | 282 | 314 | 341 | 374 | 410 | 434 | 473 |
| | Tap 4 | 332 | 365 | 409 | 438 | 480 | 520 | 546 | 576 |

| AT "NORM" SETTING ("Adjust" Jumper at "NORM" Setting) | | | | | | | | | |
|---|-------|--|-----|-----|-----|-----|-----|-----|-----|
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 70 | 89 | 113 | 137 | 155 | 188 | 199 | 233 |
| | Tap 2 | 145 | 168 | 201 | 221 | 258 | 279 | 316 | 348 |
| | Tap 3 | 200 | 223 | 265 | 293 | 316 | 359 | 374 | 403 |
| | Tap 4 | 259 | 291 | 309 | 251 | 390 | 429 | 447 | 488 |
| "COOL" Speed | Tap 1 | 70 | 89 | 113 | 137 | 155 | 188 | 199 | 233 |
| | Tap 2 | 145 | 168 | 201 | 221 | 258 | 279 | 316 | 348 |
| | Tap 3 | 200 | 223 | 265 | 293 | 316 | 359 | 374 | 403 |
| | Tap 4 | 259 | 291 | 309 | 351 | 390 | 429 | 447 | 488 |

| AT "-" (Minus) SETTING ("Adjust" Jumper at "-" Setting) | | | | | | | | | |
|---|-------|--|-----|-----|-----|-----|-----|-----|-----|
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 50 | 78 | 97 | 119 | 144 | 163 | 185 | 199 |
| | Tap 2 | 105 | 130 | 156 | 177 | 212 | 239 | 264 | 280 |
| | Tap 3 | 144 | 167 | 197 | 224 | 255 | 281 | 316 | 340 |
| | Tap 4 | 191 | 229 | 253 | 283 | 310 | 339 | 366 | 398 |
| "COOL" Speed | Tap 1 | 50 | 78 | 97 | 119 | 144 | 163 | 185 | 199 |
| | Tap 2 | 105 | 130 | 156 | 177 | 212 | 239 | 264 | 280 |
| | Tap 3 | 144 | 167 | 197 | 224 | 255 | 281 | 316 | 340 |
| | Tap 4 | 191 | 229 | 253 | 283 | 310 | 339 | 366 | 398 |

BLOWER

| BCE7S42 BLOWER PERFORMANCE | | | | | | | | |
|--|------------------------|----------|----------|----------|--------------|----------|----------|----------|
| 0 through 0.80 In. w.g. External Static Pressure Range | | | | | | | | |
| "ADJUST" Jumper Setting | Jumper Speed Positions | | | | | | | |
| | "HEAT" Speed | | | | "COOL" Speed | | | |
| | 1 cfm | 2 cfm | 3 cfm | 4 cfm | 1 cfm | 2 cfm | 3 cfm | 4 cfm |
| + | 1100 | 1320 | 1540 | 1760 | 1100 | 1320 | 1540 | 1760 |
| NORM | 1000 | 1200 | 1400 | 1600 | 1000 | 1200 | 1400 | 1600 |
| - | 900 | 1080 | 1260 | 1440 | 900 | 1080 | 1260 | 1440 |

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 fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 250 cfm. Zoning System applications - minimum blower speed is 250 cfm.

| BCE7S42 BLOWER WATTS | | | | | | | | | |
|--|-------|--|-----|-----|-----|-----|-----|-----|-----|
| AT "+" (Plus) SETTING ("Adjust" Jumper at "+" Setting) | | | | | | | | | |
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 121 | 154 | 177 | 199 | 233 | 252 | 283 | 315 |
| | Tap 2 | 189 | 221 | 247 | 282 | 310 | 344 | 370 | 403 |
| | Tap 3 | 283 | 312 | 341 | 382 | 422 | 454 | 481 | 515 |
| | Tap 4 | 407 | 446 | 488 | 528 | 567 | 583 | 646 | 671 |
| "COOL" Speed | Tap 1 | 121 | 154 | 177 | 199 | 233 | 252 | 283 | 315 |
| | Tap 2 | 189 | 221 | 247 | 282 | 310 | 344 | 370 | 403 |
| | Tap 3 | 283 | 312 | 341 | 382 | 422 | 454 | 481 | 515 |
| | Tap 4 | 407 | 446 | 488 | 528 | 567 | 583 | 646 | 671 |

| AT "NORM" SETTING ("Adjust" Jumper at "NORM" Setting) | | | | | | | | | |
|---|-------|--|-----|-----|-----|-----|-----|-----|-----|
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 104 | 134 | 153 | 184 | 207 | 236 | 257 | 286 |
| | Tap 2 | 142 | 171 | 203 | 234 | 253 | 298 | 327 | 351 |
| | Tap 3 | 212 | 240 | 269 | 308 | 337 | 371 | 408 | 429 |
| | Tap 4 | 309 | 341 | 367 | 406 | 441 | 476 | 516 | 559 |
| "COOL" Speed | Tap 1 | 104 | 134 | 153 | 184 | 207 | 236 | 257 | 286 |
| | Tap 2 | 142 | 171 | 203 | 234 | 253 | 298 | 327 | 351 |
| | Tap 3 | 212 | 240 | 269 | 308 | 337 | 371 | 408 | 429 |
| | Tap 4 | 309 | 341 | 367 | 406 | 441 | 476 | 516 | 559 |

| AT "-" (Minus) SETTING ("Adjust" Jumper at "-" Setting) | | | | | | | | | |
|---|-------|--|-----|-----|-----|-----|-----|-----|-----|
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 78 | 104 | 126 | 155 | 175 | 199 | 209 | 247 |
| | Tap 2 | 115 | 139 | 168 | 196 | 218 | 247 | 274 | 309 |
| | Tap 3 | 165 | 192 | 220 | 247 | 290 | 316 | 360 | 376 |
| | Tap 4 | 237 | 269 | 301 | 327 | 356 | 407 | 430 | 481 |
| "COOL" Speed | Tap 1 | 78 | 104 | 126 | 155 | 175 | 199 | 209 | 247 |
| | Tap 2 | 115 | 139 | 168 | 196 | 218 | 247 | 274 | 309 |
| | Tap 3 | 165 | 192 | 220 | 247 | 290 | 316 | 360 | 376 |
| | Tap 4 | 237 | 269 | 301 | 327 | 356 | 407 | 430 | 481 |

BLOWER

| BCE7S48 BLOWER PERFORMANCE | | | | | | | | |
|--|------------------------|----------|----------|----------|--------------|----------|----------|----------|
| 0 through 0.80 In. w.g. External Static Pressure Range | | | | | | | | |
| "ADJUST" Jumper Setting | Jumper Speed Positions | | | | | | | |
| | "HEAT" Speed | | | | "COOL" Speed | | | |
| | 1 cfm | 2 cfm | 3 cfm | 4 cfm | 1 cfm | 2 cfm | 3 cfm | 4 cfm |
| + | 1670 | 1870 | 2100 | 2200 | 1670 | 1870 | 2100 | 2200 |
| NORM | 1460 | 1670 | 1870 | 2100 | 1460 | 1670 | 1870 | 2100 |
| - | 1230 | 1410 | 1600 | 1800 | 1230 | 1410 | 1600 | 1800 |

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 fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 250 cfm. Zoning System applications - minimum blower speed is 250 cfm.

| BCE7S48 BLOWER WATTS | | | | | | | | | |
|--|-------|--|-----|-----|-----|------|------|------|------|
| AT "+" (Plus) SETTING ("Adjust" Jumper at "+" Setting) | | | | | | | | | |
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 335 | 374 | 399 | 436 | 495 | 518 | 572 | 611 |
| | Tap 2 | 459 | 502 | 537 | 586 | 644 | 689 | 724 | 759 |
| | Tap 3 | 668 | 738 | 778 | 845 | 881 | 957 | 996 | 1019 |
| | Tap 4 | 808 | 865 | 922 | 975 | 1003 | 1025 | 1017 | 987 |
| "COOL" Speed | Tap 1 | 335 | 374 | 399 | 463 | 495 | 518 | 572 | 611 |
| | Tap 2 | 459 | 502 | 537 | 586 | 644 | 689 | 724 | 759 |
| | Tap 3 | 668 | 738 | 778 | 845 | 881 | 957 | 996 | 1019 |
| | Tap 4 | 808 | 865 | 922 | 975 | 1003 | 1025 | 1017 | 987 |

| AT "NORM" SETTING ("Adjust" Jumper at "NORM" Setting) | | | | | | | | | |
|---|-------|--|-----|-----|-----|-----|-----|-----|-----|
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 225 | 264 | 289 | 336 | 358 | 396 | 432 | 464 |
| | Tap 2 | 320 | 374 | 398 | 434 | 484 | 523 | 558 | 610 |
| | Tap 3 | 451 | 489 | 529 | 583 | 619 | 682 | 721 | 768 |
| | Tap 4 | 643 | 699 | 731 | 795 | 848 | 919 | 966 | 998 |
| "COOL" Speed | Tap 1 | 225 | 264 | 289 | 336 | 358 | 396 | 432 | 464 |
| | Tap 2 | 320 | 374 | 398 | 434 | 484 | 523 | 558 | 610 |
| | Tap 3 | 451 | 489 | 529 | 583 | 619 | 682 | 721 | 768 |
| | Tap 4 | 643 | 699 | 731 | 795 | 848 | 919 | 966 | 998 |

| AT "-" (Minus) SETTING ("Adjust" Jumper at "-" Setting) | | | | | | | | | |
|---|-------|--|-----|-----|-----|-----|-----|-----|-----|
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 146 | 178 | 207 | 227 | 265 | 299 | 317 | 359 |
| | Tap 2 | 207 | 243 | 272 | 305 | 345 | 371 | 419 | 438 |
| | Tap 3 | 290 | 347 | 383 | 412 | 447 | 486 | 525 | 548 |
| | Tap 4 | 410 | 440 | 491 | 528 | 572 | 613 | 651 | 694 |
| "COOL" Speed | Tap 1 | 146 | 178 | 207 | 227 | 265 | 299 | 317 | 359 |
| | Tap 2 | 207 | 243 | 272 | 305 | 345 | 371 | 419 | 438 |
| | Tap 3 | 290 | 347 | 383 | 412 | 447 | 486 | 525 | 548 |
| | Tap 4 | 410 | 440 | 491 | 528 | 572 | 613 | 651 | 694 |

BLOWER

| BCE7S60 BLOWER PERFORMANCE | | | | | | | | |
|--|------------------------|----------|----------|----------|--------------|----------|----------|----------|
| 0 through 0.80 In. w.g. External Static Pressure Range | | | | | | | | |
| "ADJUST" Jumper Setting | Jumper Speed Positions | | | | | | | |
| | "HEAT" Speed | | | | "COOL" Speed | | | |
| | 1 cfm | 2 cfm | 3 cfm | 4 cfm | 1 cfm | 2 cfm | 3 cfm | 4 cfm |
| + | 1695 | 1890 | 2140 | 2210 | 1695 | 1890 | 2140 | 2210 |
| NORM | 1525 | 1680 | 1850 | 2075 | 1525 | 1680 | 1850 | 2075 |
| - | 1300 | 1450 | 1630 | 1800 | 1300 | 1450 | 1630 | 1800 |

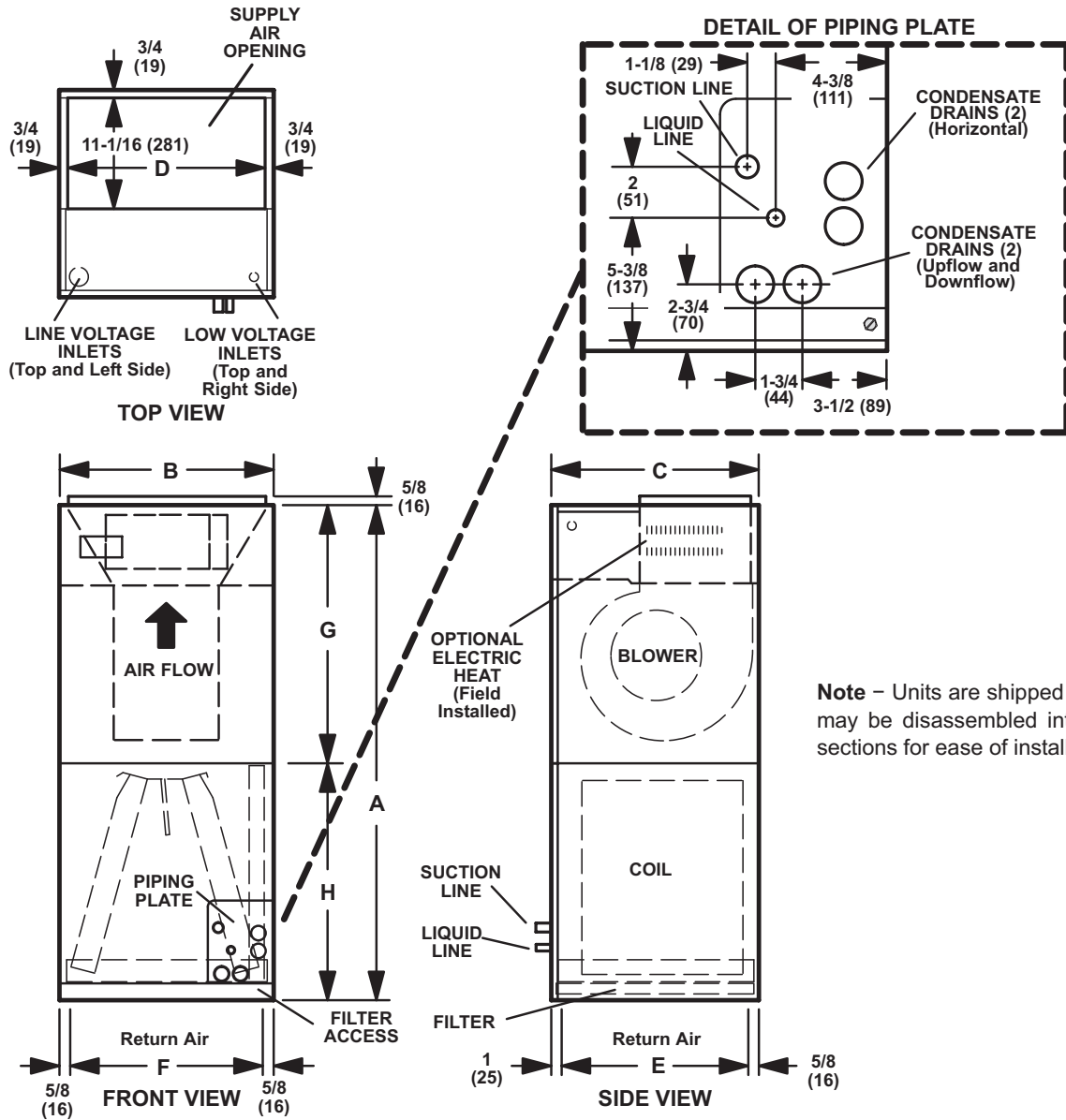
NOTES - The effect of static pressure, filter and electric heater resistance is included in the air volumes listed. First stage cooling air volume is 70% of COOL speed setting. Continuous fan speed is approximately 28%, 38%, 70% and 100% (Jumper selectable) of the same second-stage COOL speed selected, minimum 250 cfm. Zoning System applications - minimum blower speed is 250 cfm.

| BCE7S60 BLOWER WATTS | | | | | | | | | |
|--|-------|--|-----|-----|-----|-----|------|------|------|
| AT "+" (Plus) SETTING ("Adjust" Jumper at "+" Setting) | | | | | | | | | |
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 334 | 368 | 412 | 449 | 491 | 532 | 557 | 603 |
| | Tap 2 | 462 | 511 | 549 | 601 | 640 | 681 | 720 | 762 |
| | Tap 3 | 670 | 710 | 765 | 820 | 868 | 921 | 963 | 1005 |
| | Tap 4 | 757 | 810 | 853 | 909 | 961 | 1001 | 1034 | 1026 |
| "COOL" Speed | Tap 1 | 334 | 368 | 412 | 449 | 491 | 532 | 557 | 603 |
| | Tap 2 | 462 | 511 | 549 | 601 | 640 | 681 | 720 | 762 |
| | Tap 3 | 670 | 710 | 765 | 820 | 868 | 921 | 963 | 1005 |
| | Tap 4 | 757 | 810 | 853 | 909 | 961 | 1001 | 1034 | 1026 |

| AT "NORM" SETTING ("Adjust" Jumper at "NORM" Setting) | | | | | | | | | |
|---|-------|--|-----|-----|-----|-----|-----|-----|-----|
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 245 | 285 | 319 | 350 | 398 | 425 | 462 | 497 |
| | Tap 2 | 330 | 368 | 414 | 443 | 469 | 505 | 558 | 600 |
| | Tap 3 | 442 | 497 | 515 | 554 | 603 | 643 | 685 | 735 |
| | Tap 4 | 600 | 653 | 701 | 752 | 798 | 842 | 889 | 935 |
| "COOL" Speed | Tap 1 | 245 | 285 | 319 | 350 | 398 | 425 | 462 | 497 |
| | Tap 2 | 330 | 368 | 414 | 443 | 469 | 505 | 558 | 600 |
| | Tap 3 | 442 | 497 | 515 | 554 | 603 | 643 | 685 | 735 |
| | Tap 4 | 600 | 653 | 701 | 752 | 798 | 842 | 889 | 935 |

| AT "-" (Minus) SETTING ("Adjust" Jumper at "-" Setting) | | | | | | | | | |
|---|-------|--|-----|-----|-----|-----|-----|-----|-----|
| Jumper Speed Positions | | Motor Watts @ Various External Static Pressures - In. w.g. | | | | | | | |
| | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| "HEAT" Speed | Tap 1 | 181 | 204 | 235 | 261 | 304 | 332 | 357 | 383 |
| | Tap 2 | 218 | 259 | 283 | 315 | 357 | 390 | 422 | 457 |
| | Tap 3 | 300 | 333 | 365 | 395 | 443 | 476 | 527 | 559 |
| | Tap 4 | 400 | 430 | 470 | 515 | 543 | 592 | 639 | 678 |
| "COOL" Speed | Tap 1 | 181 | 204 | 235 | 261 | 304 | 332 | 357 | 383 |
| | Tap 2 | 218 | 259 | 283 | 315 | 357 | 390 | 422 | 457 |
| | Tap 3 | 300 | 333 | 365 | 395 | 443 | 476 | 527 | 559 |
| | Tap 4 | 400 | 430 | 470 | 515 | 543 | 592 | 639 | 678 |

UNIT DIMENSIONS - IN. (MM)



Note – Units are shipped in one piece but may be disassembled into two separate sections for ease of installation.

| Dimension | 24 | | 30 | | 36 | | 42/48 | | 60 | |
|-----------|--------|------|--------|------|--------|------|--------|------|--------|------|
| | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm |
| A | 49.25 | 1251 | 51 | 1295 | 51 | 1295 | 58.5 | 1486 | 62.5 | 1588 |
| B | 21.25 | 540 | 21.25 | 540 | 21.25 | 540 | 21.25 | 540 | 21.25 | 540 |
| C | 20.63 | 524 | 22.625 | 575 | 22.625 | 575 | 24.625 | 625 | 24.625 | 625 |
| D | 19.75 | 502 | 19.75 | 502 | 19.75 | 502 | 19.75 | 502 | 19.75 | 502 |
| E | 19 | 483 | 21 | 533 | 21 | 533 | 23 | 584 | 23 | 584 |
| F | 20 | 508 | 20 | 508 | 20 | 508 | 20 | 508 | 20 | 508 |
| G | 24.625 | 625 | 26.375 | 670 | 26.375 | 670 | 27.875 | 708 | 27.875 | 708 |
| H | 24.625 | 625 | 24.625 | 625 | 24.625 | 625 | 30.625 | 778 | 34.625 | 879 |

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