

MV

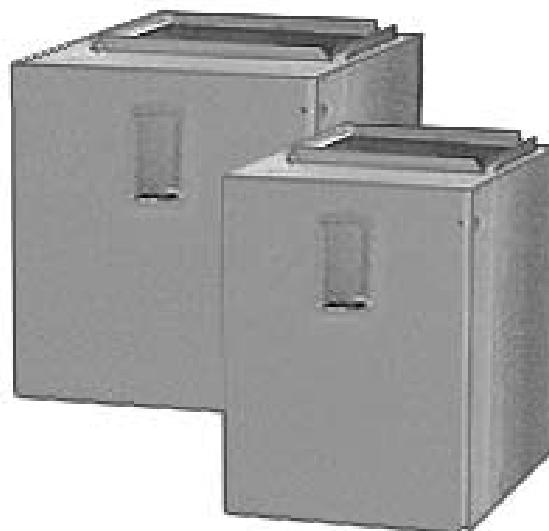
Product Specifications

MODULAR VARIABLE SPEED BLOWER CABINET

2, 3, 4, and 5 TONS

FEATURES

- Variable Speed modular blower
- Supports two-stage outdoor units
- Dehumidification Speed: 80% Airflow
- Efficient low continuous fan selection: 50% Airflow
- Upflow, horizontal right or left applications
- Downflow requires sub-base accessory
- Electronic fan control board
- Adjustable Blower time delay
- Accepts accessory two stage outdoor thermostats
- Matches with AC and HP cased coils (Hot water coil may be used, but doesn't match case size)
- 208/230-1-60 supply voltage
- Requires a "NO HEAT KIT" if installed without electric heat.
- Field installed electric heater packages from 5kW-25kW, single or three phase available separately



SERVICE

- Direct drive slide-out blower assembly

QUALITY

- Internally lined with 1/2 inch Tuf-Skin insulation
- Thermosetting powder coated steel cabinet

WARRANTY

- 5 year parts limited warranty



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.



| Model | Nominal Tons | Nominal CFM | Motor HP | Dimensions H x W x D in (mm) | Unit Weight lbs/kg | Ship Weight lbs/Kg |
|-----------|--------------|-------------|----------|--|--------------------|--------------------|
| MV080014C | 2 | 800 | 1/2 | 24 x 14-3/16 x 20-1/2 (610 x 360 x 521) | 54/25 | 58/26 |
| MV120017C | 3 | 1200 | 1/2 | 24 x 17-1/2 x 20-1/2 (610 x 445 x 521) | 58/26 | 62/28 |
| MV160021C | 4 | 1600 | 3/4 | 25 x 21 x 20-1/2 (635 x 533 x 521) | 70/32 | 75/34 |
| MV200024C | 5 | 2000 | 3/4 | 25 x 24-1/2 x 20-1/2 (635 x 622 x 521) | 73/33 | 79/36 |

| UNIT SPECIFICATIONS - BLOWER COILS | | | | |
|------------------------------------|----------------------------------|----------------------------|---------------|---------------|
| Model Number | MV080014C | MV120017C | MV160021C | MV200024C |
| Application | Upflow / Downflow / Horizontal * | | | |
| Electrical | 208 / 230 - 1 - 60 | | | |
| Data** | Volt - Phase - Hz. | | | |
| | Minimum Circuit Ampacity | 6.3 | 6.3 | 9.1 |
| | Time Delay Fuse (Amps) | 15 | | |
| | Maximum Fuse or Breaker Size | 15 | | |
| Blower Data | Size | DD10 - 7 | DD10 - 8 | DD10 - 9 |
| | Horsepower - Speed | 1/2 - VAR | 1/2 - VAR | 3/4 - VAR |
| | Full Load Amps | 5.0 | 5.0 | 7.3 |
| Transformer | Primary / Secondary - VA | (208-230 / 24 - VAC) 40 VA | | |
| Weight | Unit / Shipping Lbs. (Kg.) | 54/58 (25/26) | 58/62 (26/28) | 70/75 (32/34) |

* Accessory subbase kit required for downflow application.

** Disregard if electric heat is added. Refer to Electric Heat table

Dimensions and Clearances – in (mm)

| CLEARANCES | |
|--|-------------|
| NO HEATERS | |
| ALL Sides..... | 0" |
| From Supply Duct..... | 0" |
| Recommended Service From Front..... | 20" (508mm) |
| (Service for blower, filter if installed) | |
| WITH HEATERS | |
| ALL Sides..... | 0" |
| From First Three Feet of Supply Duct to Combustibles.... | 1" (26mm) |
| From Duct after Three Feet | 0" |
| Recommended Service From Front..... | 20" (508mm) |
| (Service for blower, heaters if installed) | |

ALL DIMENSIONS IN (MM)

MODEL NUMBER IDENTIFICATION GUIDE

| | 1 | 2 | 3,4 | 5,6 | 7,8 | 9 | 10 |
|--|--|---|-----|-----|-----|---|----|
| | M | V | 08 | 00 | 14 | C | 1 |
| M = Cased Modular Blower | | | | | | | |
| V = Variable Speed ECM Motor - 208/230-1-60 | | | | | | | |
| F = PSC Motor - 208/230-1-60 | | | | | | | |
| B = PSC Motor - 115-1-60 | | | | | | | |
| | TYPE | | | | | | |
| 08 = 800 | | | | | | | |
| 12 = 1200 | | | | | | | |
| 16 = 1600 | | | | | | | |
| 20 = 2000 | | | | | | | |
| | NOMINAL MAX CFM | | | | | | |
| 00 = No Electric Heat | FACTORY INSTALLED ELECTRIC HEAT | | | | | | |
| 14 = 14.5" | | | | | | | |
| 17 = 17.5" | | | | | | | |
| 21 = 21" | | | | | | | |
| 24 = 24.5" | | | | | | | |
| | CABINET WIDTH | | | | | | |
| Sales Digit (Major Revision) | | | | | | | |
| Engineering Digit (Minor Revision) | | | | | | | |

| AIRFLOW ADJUST TABLE | | | | |
|-----------------------|-------------------------|--------------|------|--------------|
| MODEL # | AUX HEAT RANGE (KW/CFM) | | | |
| VIOLET Wire Selection | A | B | C | D |
| MV08 | 15kw | -- | 10kw | 5 thru 7.5kw |
| MV12 | -- | 15 thru 20kw | 10kw | 5 thru 7.5kw |
| MV16 | -- | 25kw | -- | 5 thru 20kw |
| MV20 | -- | -- | 25kw | 5 thru 20kw |

| OUTDOOR UNIT SIZE | | | | |
|---------------------|----------------------------|-----|-----|-----|
| MODEL # | OUTDOOR UNIT SIZE IN BTU'S | | | |
| BLUE Wire Selection | A | B | C | D |
| MV08 | 036 | 030 | 024 | 018 |
| MV12 | 042 | 036 | 030 | 024 |
| MV16 | 060 | 048 | 042 | 036 |
| MV20 | 060 | 048 | 042 | 036 |

| CFM RANGE | | |
|-------------------|-------------------|------------|
| Modular Unit Size | Outdoor Unit Size | CFM Range |
| MV08 | 018 | 350 - 1200 |
| | 024 | |
| | 030 | |
| | 036 | |
| MV12 | 024 | 415 - 1400 |
| | 030 | |
| | 036 | |
| | 042 | |
| MV16 | 036 | 540 - 2000 |
| | 042 | |
| | 048 | |
| | 060 | |
| MV20 | 036 | 540 - 2000 |
| | 042 | |
| | 048 | |
| | 060 | |

MV AIRFLOW DELIVERY (CFM) IN COOLING (EITHER A/C HP)

| Modular Unit Size | Outdoor Unit Size | Single-Stage A/C Cooling | | Two-Stage Cooling | | | | Fan Only | | |
|-------------------|-------------------|--------------------------|-------|--------------------|-------|-------------------|-------|----------|------|------|
| | | Nominal | Dehum | A/C Cooling - High | | A/C Cooling - Low | | LOW | MED | HI |
| | | | | Nominal | Dehum | Nominal | Dehum | | | |
| MV08** | 18 | 525 | 420 | -- | -- | -- | -- | 350 | 420 | 525 |
| | 24 | 700 | 560 | 700 | 560 | 560 | 450 | 350 | 560 | 700 |
| | 30 | 875 | 700 | -- | -- | -- | -- | 440 | 700 | 875 |
| | 36 | 1050 | 840 | 1050 | 840 | 840 | 670 | 525 | 840 | 1050 |
| MV12** | 24 | 700 | 560 | 700 | 560 | 560 | 450 | 415 | 560 | 700 |
| | 30 | 875 | 700 | -- | -- | -- | -- | 440 | 700 | 875 |
| | 36 | 1050 | 840 | 1050 | 840 | 840 | 670 | 525 | 840 | 1050 |
| | 42 | 1225 | 980 | -- | -- | -- | -- | 615 | 980 | 1225 |
| MV16** | 30 | 1050 | 840 | 1050 | 840 | 840 | 670 | 540 | 840 | 1050 |
| | 36 | 1225 | 980 | -- | -- | -- | -- | 615 | 980 | 1225 |
| | 42 | 1400 | 1120 | 1400 | 1120 | 1120 | 900 | 700 | 1120 | 1400 |
| | 48 | 1750 | 1400 | 1750 | 1400 | 1400 | 1120 | 875 | 1400 | 1750 |
| MV20** | 36 | 1050 | 840 | 1050 | 840 | 840 | 670 | 540 | 840 | 1050 |
| | 42 | 1225 | 980 | -- | -- | -- | -- | 615 | 980 | 1225 |
| | 48 | 1400 | 1120 | 1400 | 1120 | 1120 | 900 | 700 | 1120 | 1400 |
| | 60 | 1750 | 1400 | 1750 | 1400 | 1400 | 1120 | 875 | 1400 | 1750 |

NOTES:

1. The above airflows result with the AC/HP CFM ADJUST select jumper set on NOM.
 2. Airflow can be adjusted +15% or -10% by selecting Hi or Lo respectively for all modes except fan only.
 3. Dry coil at 230 volts and with 10 kW heater and filter installed.
 4. Airflows shown are valid for systems with total static pressure between 0.1 and 0.7 in. wc.
- ** Unit without electric heat installed

UNIT SPECIFICATIONS – No Heat Kit

| No Heat Kit Model | Cabinet | Volts | Phase | Hertz | Supply circuit No. | H.P. | Maximum Motor Amps | MCA Branch Circuit Ampacity | Maximum Overcurrent Protection (Amps) | Recommended | | | | |
|-------------------|---------|-------|-------|-------|--------------------|------|--------------------|-----------------------------|---------------------------------------|-------------------------|-----------|-----------------|--------------|-----------|
| | | | | | | | | | | Supply Wire 75°C copper | | | Ground Wire | |
| | | | | | | | | | | No. of Wires | Wire Size | Max. Ft. Length | No. of Wires | Wire Size |
| EHIA00KN10* | MV08** | 208 | 1 | 60 | Single | 1/2 | 5.0 | 6.3 | 15 | 2 | 14 | 118 | 1 | 14 |
| | | 230 | | | | | | | | | | (36 m) | | |
| | MV12** | 208 | 1 | 60 | Single | 1/2 | 5.0 | 6.3 | 15 | 2 | 14 | 118 | 1 | 14 |
| | | 230 | | | | | | | | | | (36 m) | | |
| | MV16** | 208 | 1 | 60 | Single | 3/4 | 7.3 | 9.1 | 15 | 2 | 14 | 82 | 1 | 14 |
| | | 230 | | | | | | | | | | (25 m) | | |
| | MV20** | 208 | 1 | 60 | Single | 3/4 | 7.3 | 9.1 | 15 | 2 | 14 | 82 | 1 | 14 |
| | | 230 | | | | | | | | | | (25 m) | | |

* No Heat Kit

** Unit without electric heat installed

MV AIRFLOW DELIVERY (CFM) IN HEAT PUMP HEATING MODE ONLY

| Modular Unit Size | Outdoor Unit Size | Tap | Single-Stage HP Heating | | Two-Stage Heating | | | | Fan Only | | |
|-------------------|-------------------|-----|-------------------------|------|-------------------|------|------------------|------|----------|------|------|
| | | | Comf | Eff | HP Heating - High | | HP Heating - Low | | LOW | MED | HI |
| | | | | | Comf | Eff | Comf | Eff | | | |
| MV08** | 18 | D | 475 | 525 | -- | -- | -- | -- | 350 | 380 | 475 |
| | 24 | C | 630 | 700 | 630 | 700 | 505 | 560 | 350 | 505 | 630 |
| | 30 | B | 785 | 875 | -- | -- | -- | -- | 440 | 630 | 785 |
| | 36 | A | 945 | 1050 | 945 | 1050 | 755 | 840 | 525 | 755 | 945 |
| MV12** | 24 | D | 630 | 700 | 630 | 700 | 505 | 560 | 415 | 505 | 630 |
| | 30 | C | 785 | 875 | -- | -- | -- | -- | 440 | 630 | 785 |
| | 36 | B | 945 | 1050 | 945 | 1050 | 755 | 840 | 525 | 755 | 945 |
| | 42 | A | 1100 | 1225 | -- | -- | -- | -- | 615 | 880 | 1100 |
| MV16** | 30 | D | 945 | 1050 | 945 | 1050 | 755 | 840 | 540 | 755 | 945 |
| | 36 | C | 1100 | 1225 | -- | -- | -- | -- | 615 | 880 | 1100 |
| | 42 | B | 1260 | 1400 | 1260 | 1400 | 1010 | 1120 | 700 | 1010 | 1260 |
| | 48 | A | 1575 | 1750 | 1575 | 1750 | 1260 | 1400 | 875 | 1260 | 1575 |
| MV20** | 36 | D | 945 | 1050 | 945 | 1050 | 755 | 840 | 540 | 755 | 945 |
| | 42 | C | 1100 | 1225 | -- | -- | -- | -- | 615 | 880 | 1100 |
| | 48 | B | 1260 | 1400 | 1260 | 1400 | 1010 | 1120 | 700 | 1010 | 1260 |
| | 60 | A | 1575 | 1750 | 1575 | 1750 | 1260 | 1400 | 875 | 1260 | 1575 |

NOTES:

1. The above airflows result with the AC/HP CFM ADJUST select jumper set on NOM.
2. Airflow can be adjusted +15% or -10% by selecting Hi or Lo respectively for all modes except fan only.
3. Dry coil at 230 volts and with 10 kW heater and filter installed.
4. Airflows shown are valid for systems with total static pressure between 0.1 and 0.7 in. wc.

** Unit without electric heat installed

ELECTRIC HEATER STATIC DROP IN. W.C.

| Single-Phase | | | | | | |
|---------------------|---|---------------|---------------|---------------|---------------|---------------|
| CFM | EHIA05 | EHIA07 | EHIA10 | EHIA15 | EHIA20 | EHIA25 |
| 600 | 0.01 | 0.01 | 0.01 | -- -- | -- -- | -- -- |
| 700 | 0.01 | 0.01 | 0.01 | -- -- | -- -- | -- -- |
| 800 | 0.01 | 0.01 | 0.01 | 0.01 | -- -- | -- -- |
| 900 | 0.01 | 0.01 | 0.01 | 0.01 | -- -- | -- -- |
| 1000 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | -- -- |
| 1100 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | -- -- |
| 1200 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | -- -- |
| 1300 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | -- -- |
| 1400 | 0.01 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 |
| 1500 | 0.01 | 0.02 | 0.02 | 0.02 | 0.03 | 0.04 |
| 1600 | 0.01 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 |
| 1700 | 0.01 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 |
| 1800 | 0.01 | 0.02 | 0.02 | 0.03 | 0.04 | 0.04 |
| 1900 | 0.01 | 0.02 | 0.02 | 0.03 | 0.04 | 0.05 |
| 2000 | 0.01 | 0.02 | 0.02 | 0.03 | 0.04 | 0.05 |
| Three-Phase | | | | | | |
| CFM | -- -- | -- -- | EHIA10 | EHIA15 | EHIA20 | EHIA25 |
| 600 | -- -- | -- -- | 0.01 | -- -- | -- -- | -- -- |
| 700 | -- -- | -- -- | 0.01 | -- -- | -- -- | -- -- |
| 800 | -- -- | -- -- | 0.01 | 0.01 | -- -- | -- -- |
| 900 | -- -- | -- -- | 0.01 | 0.01 | -- -- | -- -- |
| 1000 | -- -- | -- -- | 0.01 | 0.01 | 0.02 | -- -- |
| 1100 | -- -- | -- -- | 0.01 | 0.02 | 0.02 | -- -- |
| 1200 | -- -- | -- -- | 0.01 | 0.02 | 0.02 | -- -- |
| 1300 | -- -- | -- -- | 0.02 | 0.02 | 0.02 | -- -- |
| 1400 | -- -- | -- -- | 0.02 | 0.02 | 0.03 | 0.03 |
| 1500 | -- -- | -- -- | 0.02 | 0.02 | 0.03 | 0.04 |
| 1600 | -- -- | -- -- | 0.02 | 0.03 | 0.03 | 0.04 |
| 1700 | -- -- | -- -- | 0.02 | 0.03 | 0.03 | 0.04 |
| 1800 | -- -- | -- -- | 0.02 | 0.03 | 0.04 | 0.04 |
| 1900 | -- -- | -- -- | 0.02 | 0.03 | 0.04 | 0.05 |
| 2000 | -- -- | -- -- | 0.02 | 0.03 | 0.04 | 0.05 |
| -- -- | DO NOT OPERATE IN THIS AREA CFM / KW LIMIT EXCEEDED | | | | | |

TECHNICAL DATA (MV only) Single Phase with Circuit Breaker

| Heater Model | Supply Volt- | Nom. Heat-BTUH | Heat KW | kW Per Element | Supply Circuit No. | Heater kW Per Circuit | Heater AMPS. | Max Motor AMPS. | FLA Total AMPS. | MCA Min Circuit Ampacity | Maximum Overcurrent Protective Device (AMPS.) | Recommended** | | | | |
|--------------|--------------|----------------|---------|----------------|--------------------|-----------------------|--------------|-----------------|-----------------|--------------------------|---|----------------------------|-----------|------------------|-------------|----------|
| | | | | | | | | | | | | Supply Wire 75 ° C. Copper | | | Ground Wire | |
| | | | | | | | | | | | | # of Wires | Wire Size | Max. Length (Ft) | # of Wires | Min Size |
| EHIA05KB10 | 240 | 16378 | 4.8 | 4.8 | Single | 4.8 | 20.0 | 7.3 | 27.3 | 34.1 | 35 | 2 | 8 | 108 | 1 | 10 |
| | 208 | 12283 | 3.6 | 3.6 | Single | 3.6 | 17.3 | 7.3 | 24.6 | 30.8 | 35 | 2 | 8 | 119 | 1 | 10 |
| EHIA07KB10 | 240 | 24567 | 7.2 | 3.6 | Single | 7.2 | 30.0 | 7.3 | 37.3 | 46.6 | 50 | 2 | 8 | 79 | 1 | 10 |
| | 208 | 18425 | 5.4 | 2.7 | Single | 5.4 | 26.0 | 7.3 | 33.3 | 41.6 | 45 | 2 | 8 | 88 | 1 | 10 |
| EHIA10KB10 | 240 | 32756 | 9.6 | 4.8 | Single | 9.6 | 40.0 | 7.3 | 47.3 | 59.1 | 60 | 2 | 6 | 99 | 1 | 10 |
| | 208 | 24567 | 7.2 | 3.6 | Single | 7.2 | 34.6 | 7.3 | 41.9 | 52.4 | 60 | 2 | 6 | 111 | 1 | 10 |
| EHIA15KB10 | 240 | 49134 | 14.4 | 4.8 | Single | 14.4 | 60.0 | 7.3 | 67.3 | 84.1 | 90 | 2 | 4 | 110 | 1 | 8 |
| | | | | | Mult. 1 | 9.6 | 40.0 | 7.3 | 47.3 | 59.1 | 60 | 2 | 6 | 99 | 1 | 10 |
| | | | | | Mult. 2 | 4.8 | 20.0 | 0 | 20.0 | 25.0 | 25 | 2 | 10 | 95 | 1 | 10 |
| | 208 | 36851 | 10.8 | 3.6 | Single | 10.8 | 51.9 | 7.3 | 59.2 | 74.0 | 80 | 2 | 4 | 126 | 1 | 8 |
| | | | | | Mult. 1 | 7.2 | 34.6 | 7.3 | 41.9 | 52.4 | 60 | 2 | 6 | 111 | 1 | 10 |
| Mult. 2 | 3.6 | 17.3 | 0 | 17.3 | 21.6 | 25 | 2 | 10 | 109 | 1 | 10 | | | | | |
| EHIA20KB10 | 240 | 65513 | 19.2 | 4.8 | Single | 19.2 | 80.0 | 7.3 | 87.3 | 109.1 | 110 | 2 | 2 | 135 | 1 | 6 |
| | | | | | Mult. 1 | 9.6 | 40.0 | 7.3 | 47.3 | 59.1 | 60 | 2 | 6 | 99 | 1 | 10 |
| | | | | | Mult. 2 | 9.6 | 40.0 | 0 | 40.0 | 50.0 | 50 | 2 | 8 | 73 | 1 | 10 |
| | 208 | 49134 | 14.4 | 3.6 | Single | 14.4 | 69.2 | 7.3 | 76.5 | 95.7 | 100 | 2 | 3 | 122 | 1 | 6 |
| | | | | | Mult. 1 | 7.2 | 34.6 | 7.3 | 41.9 | 52.4 | 60 | 2 | 6 | 111 | 1 | 10 |
| Mult. 2 | 7.2 | 34.6 | 0 | 34.6 | 43.3 | 45 | 2 | 8 | 85 | 1 | 10 | | | | | |
| EHIA25KB10 | 240 | 81891 | 24 | 4.8 | Single | 24 | 100.0 | 7.3 | 107.3 | 134.1 | 150 | 2 | 10 | 175 | 1 | 6 |
| | | | | | Mult. 1 | 9.6 | 40.0 | 6.0 | 46.0 | 57.5 | 60 | 2 | 6 | 102 | 1 | 10 |
| | | | | | Mult. 2 | 9.6 | 40.0 | 0 | 40.0 | 50.0 | 50 | 2 | 8 | 74 | 1 | 10 |
| | 208 | 61418 | 18 | 3.6 | Single | 18 | 86.5 | 7.3 | 93.8 | 117.3 | 125 | 2 | 1 | 159 | 1 | 6 |
| | | | | | Mult. 1 | 7.2 | 34.7 | 6.0 | 40.7 | 50.8 | 60 | 2 | 6 | 104 | 1 | 10 |
| | | | | | Mult. 2 | 7.2 | 34.7 | 0 | 34.7 | 43.3 | 45 | 2 | 8 | 77 | 1 | 10 |
| Mult. 3 | 3.6 | 17.3 | 0 | 17.3 | 21.7 | 25 | 2 | 12 | 62 | 1 | 10 | | | | | |

TECHNICAL DATA (MV only) Single-Phase with Terminal Block

| Heater Model | Supply Volt- | Nom. Heat-BTUH | Heat KW | kW Per Element | Supply Circuit No. | Heater kW Per Circuit | Heater AMPS. | Max Motor AMPS. | FLA Total AMPS. | MCA Min Circuit Ampacity | Maximum Overcurrent Protective Device (AMPS.) | Recommended** | | | | |
|--------------|--------------|----------------|---------|----------------|--------------------|-----------------------|--------------|-----------------|-----------------|--------------------------|---|----------------------------|-----------|------------------|-------------|----------|
| | | | | | | | | | | | | Supply Wire 75 ° C. Copper | | | Ground Wire | |
| | | | | | | | | | | | | # of Wire | Wire Size | Max. Length (Ft) | # of Wires | Min Size |
| EHIA05KN10 | 240 | 16378 | 4.8 | 4.8 | Single | 4.8 | 20.0 | 7.3 | 27.3 | 34.1 | 35 | 2 | 8 | 108 | 1 | 10 |
| | 208 | 12283 | 3.6 | 3.6 | Single | 3.6 | 17.3 | 7.3 | 24.6 | 30.8 | 35 | 2 | 8 | 119 | 1 | 10 |
| EHIA07KN10 | 240 | 24567 | 7.2 | 3.6 | Single | 7.2 | 30.0 | 7.3 | 37.3 | 46.6 | 50 | 2 | 8 | 79 | 1 | 10 |
| | 208 | 18425 | 5.4 | 2.7 | Single | 5.4 | 26.0 | 7.3 | 33.3 | 41.6 | 45 | 2 | 8 | 88 | 1 | 10 |
| EHIA10KN10 | 240 | 32756 | 9.6 | 4.8 | Single | 9.6 | 40.0 | 7.3 | 47.3 | 59.1 | 60 | 2 | 6 | 99 | 1 | 10 |
| | 208 | 24567 | 7.2 | 3.6 | Single | 7.2 | 34.6 | 7.3 | 41.9 | 52.4 | 60 | 2 | 6 | 111 | 1 | 10 |

TECHNICAL DATA (MV only) Three-Phase with Circuit Breaker

| Heater Model | Supply Volt- | Nom. Heat-BTUH | Heat KW | kW Per Element | Supply Circuit No. | Heater kW Per Circuit | Heater AMPS. | Max Motor AMPS. | FLA Total AMPS. | MCA Min Circuit Ampacity | Maximum Overcurrent Protective Device (AMPS.) | Recommended** | | | | |
|--------------|--------------|----------------|---------|----------------|--------------------|-----------------------|--------------|-----------------|-----------------|--------------------------|---|----------------------------|-----------|------------------|-------------|----------|
| | | | | | | | | | | | | Supply Wire 75 ° C. Copper | | | Ground Wire | |
| | | | | | | | | | | | | # of Wires | Wire Size | Max. Length (Ft) | # of Wires | Min Size |
| EHIA10HB10 | 240 | 32756 | 9.6 | 3.2 | Single | 9.6 | 23.1 | 7.3 | 30.4 | 38.0 | 40 | 3 | 8 | 112 | 1 | 10 |
| | 208 | 24567 | 7.2 | 2.4 | Single | 7.2 | 20.0 | 7.3 | 27.3 | 34.1 | 35 | 3 | 8 | 125 | 1 | 10 |
| EHIA15HB10 | 240 | 49134 | 14.4 | 4.8 | Single | 14.4 | 34.7 | 7.3 | 42.0 | 52.5 | 60 | 3 | 6 | 128 | 1 | 10 |
| | 208 | 36851 | 10.8 | 3.6 | Single | 10.8 | 30.0 | 7.3 | 37.3 | 46.6 | 50 | 3 | 8 | 91 | 1 | 10 |
| EHIA20HB10 | 240 | 65513 | 19.2 | 3.2 | Single | 19.2 | 46.2 | 7.3 | 53.5 | 66.9 | 70 | 3 | 4 | 161 | 1 | 8 |
| | | | | | Mult. 1 | 6.4 | 15.4 | 7.3 | 22.7 | 28.4 | 30 | 3 | 10 | 96 | 1 | 10 |
| | | | | | Mult. 2 | 12.8 | 30.8 | 0 | 30.8 | 38.5 | 40 | 3 | 8 | 110 | 1 | 10 |
| | 208 | 49134 | 14.4 | 2.4 | Single | 14.4 | 40.0 | 7.3 | 47.3 | 59.1 | 60 | 3 | 6 | 114 | 1 | 10 |
| | | | | | Mult. 1 | 4.8 | 13.3 | 7.3 | 20.6 | 25.8 | 30 | 3 | 10 | 106 | 1 | 10 |
| Mult. 2 | 9.6 | 26.7 | 0 | 26.7 | 33.3 | 35 | 3 | 8 | 127 | 1 | 10 | | | | | |
| EHIA25HB10 | 240 | 81891 | 24 | 4 | Single | 24 | 57.8 | 7.3 | 65.1 | 81.4 | 90 | 3 | 4 | 132 | 1 | 8 |
| | | | | | Mult. 1 | 8 | 19.3 | 7.3 | 26.6 | 33.2 | 35 | 3 | 8 | 128 | 1 | 10 |
| | | | | | Mult. 2 | 16 | 38.5 | 0 | 38.5 | 48.2 | 50 | 3 | 8 | 88 | 1 | 10 |
| | 208 | 61418 | 18 | 3 | Single | 18 | 50.0 | 7.3 | 57.3 | 71.7 | 80 | 3 | 4 | 150 | 1 | 8 |
| | | | | | Mult. 1 | 6 | 16.7 | 7.3 | 24.0 | 30.0 | 30 | 3 | 10 | 91 | 1 | 10 |
| Mult. 2 | 12 | 33.3 | 0 | 33.3 | 41.7 | 45 | 3 | 8 | 102 | 1 | 10 | | | | | |

Conversion: 1 foot = .3048 meters

** Must conform to local building codes and national standards

USA: National Electrical Code (NEC) ANSI/NFPA 70-2011

CANADA: Canadian Electrical Code CSA C22.1

HEAT STRIP STAGING

| | Single-Stage Operation (no staging – all electric heat together) | Two-Stage Capable | Three-Stage Capable (with ODS only) |
|--------------|---|--|--|
| Single-Phase | EHIA05KB / KN EHIA07KB / KN EHIA10KB / KN EHIA15KB EHIA20KB EHIA25KB | EHIA15KB EHIA20KB EHIA25KB | EHIA25KB |
| Three-Phase | EHIA10HB EHIA15HB EHIA20HB EHIA25HB | EHIA10HB EHIA15HB EHIA20HB EHIA25HB | EHIA20HB EHIA25HB |

HEATER STAGING Single-Phase

| ELECTRIC HEATER | VOLTAGE | TOTAL HEAT KW | | 1st STAGE KW (W1) | | 2nd STAGE KW (W2) | |
|-----------------|--------------|---------------|------|-------------------|------|-------------------|------|
| | | 208V | 240V | 208V | 240V | 208V | 240V |
| EHIA05KB10 | 208-240/1/60 | 3.6 | 4.8 | 3.6 | 4.8 | - | - |
| EHIA07KB10 | 208-240/1/60 | 5.4 | 7.2 | 5.4 | 7.2 | - | - |
| EHIA10KB10 | 208-240/1/60 | 7.2 | 9.6 | 7.2 | 9.6 | - | - |
| EHIA15KB10 | 208-240/1/60 | 10.8 | 14.4 | 7.2 | 9.6 | 3.6 | 4.8 |
| EHIA20KB10 | 208-240/1/60 | 14.4 | 19.2 | 7.2 | 9.6 | 7.2 | 9.6 |
| EHIA25KB10 | 208-240/1/60 | 18 | 24 | 7.2 | 9.6 | 10.8 | 14.4 |
| EHIA05KN10 | 208-240/1/60 | 3.6 | 4.8 | 3.6 | 4.8 | - | - |
| EHIA07KN10 | 208-240/1/60 | 5.4 | 7.2 | 5.4 | 7.2 | - | - |
| EHIA10KN10 | 208-240/1/60 | 7.2 | 9.6 | 7.2 | 9.6 | - | - |

HEATER STAGING Three-Phase

| ELECTRIC HEATER | VOLTAGE | TOTAL HEAT KW | | 1st STAGE KW (W1) | | 2nd STAGE KW (W2) | |
|-----------------|--------------|---------------|------|-------------------|------|-------------------|------|
| | | 208v | 240v | 208v | 240v | 208v | 240v |
| EHIA10HB10 | 208-240/3/60 | 7.2 | 9.6 | 7.2 | 9.6 | - | - |
| EHIA15HB10 | 208-240/3/60 | 10.8 | 14.4 | 10.8 | 14.4 | - | - |
| EHIA20HB10 | 208-240/3/60 | 14.4 | 19.2 | 4.8 | 6.4 | 9.6 | 12.8 |
| EHIA25HB10 | 208-240/3/60 | 18 | 24 | 6 | 8 | 12 | 16 |

ACCESSORIES

| Model | Description | Used with MV Model |
|------------|-----------------------|--------------------|
| EHIA00KN10 | No Heat Kit | 08, 12, 16, 20 |
| EHIA05KB10 | 5 kW 1-Phase w/C.B. | 08, 12, 16, 20 |
| EHIA05KN10 | 5 kW 1-Phase w/T.B. | 08, 12, 16, 20 |
| EHIA07KB10 | 7.5 kW 1-Phase w/C.B. | 08, 12, 16, 20 |
| EHIA07KN10 | 7.5 kW 1-Phase w/T.B. | 08, 12, 16, 20 |
| EHIA10KB10 | 10 kW 1-Phase w/C.B. | 08, 12, 16, 20 |
| EHIA10KN10 | 10 kW 1-Phase w/T.B. | 08, 12, 16, 20 |
| EHIA15KB10 | 15 kW 1-Phase w/C.B. | 08, 12, 16, 20 |
| EHIA20KB10 | 20 kW 1-Phase w/C.B. | 12, 16, 20 |
| EHIA25KB10 | 25 kW 1-Phase w/C.B. | 16, 20 |
| EHIA10HB10 | 10 kW 3-Phase w/C.B. | 12, 16, 20 |
| EHIA15HB10 | 15 kW 3-Phase w/C.B. | 12, 16, 20 |
| EHIA20HB10 | 20 kW 3-Phase w/C.B. | 16, 20 |
| EHIA25HB10 | 25 kW 3-Phase w/C.B. | 16, 20 |

KN = 1-phase T.B. = terminal block
 KB = 1-phase C.B. = circuit breaker
 HB = 3-phase

SINGLE POINT WIRING KIT

| Model | Description | Used with Heater size |
|-----------|----------------------------------|-----------------------|
| AMFK20SPA | Single Point Wiring Kit (4-pole) | 15-20 kW |
| AMFK30SPA | Single Point Wiring Kit (6-pole) | 25 kW |

OUTDOOR THERMOSTAT

| Model | Description | Used with Heater size |
|-----------|-------------|-----------------------|
| AMF002OTA | 2-Stage ODS | 15 kW and above |

DOWNFLOW KIT

| Model | Description | Used with MV Model |
|------------|--------------|--------------------|
| AMF008DFB1 | Downflow kit | 08 |
| AMF012DFB1 | Downflow kit | 12 |
| AMF016DFB1 | Downflow kit | 16 |
| AMF020DFB1 | Downflow kit | 20 |

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