

**NOTES:**

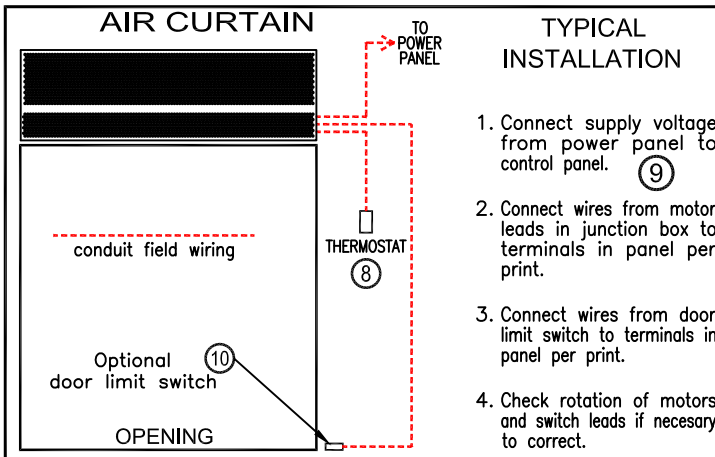
- ① This product is designed to comply with the National Electric Code (NEC), ETL listed for US & Canada, and bear the CE mark.
- ② 7/16" mounting holes, (4) provided, (2) on each end. for Wall Mount, (2) on each end for Top Mount.
- ③ All units have a self contained one piece cabinet, with fire retardant and corrosion proof paint lock metal, double protected with baked on gray color, rust preventative, electrostatic, polyurethane powdercoating.
- ④ Cabinet has sufficient strength for suspension from both ends without intermediate support.
- ⑤ Control panel to be internally mounted to the unit. Please specify for alternate exterior location.
- ⑥ Internal J-Box(es) for electrical wiring.
- ⑦ Unit is to be installed such that air flow is unobstructed. Air discharge nozzle contains adjustable air directional vanes with 40° sweep front to back.
- ⑧ Wall mounted 24 volt thermostat with remote "heat/off" switch is shipped loose and field installed. Terminal block provided inside control panel.
- ⑨ Branch circuit protected as per NEC by others.
- ⑩ Optional door limit switch is field installed. Switch to be mounted such that the air curtain turns on as door begins to open. A time delay is highly recommended with the optional door limit switch.



-2 & -3 designates the number of motors.

\*NOTE: Intake screen size and number varies with unit length.

| MODEL NUMBER | MOUNTING CENTERS A | OVERALL LENGTH B |
|--------------|--------------------|------------------|
| HV2 42-1E    | --                 | 41 1/8"          |
| HV2 48-1E    | EP2 48-1E          | 47 1/8"          |
| HV2 60-1E    | EP2 60-1E          | 59 1/8"          |
| HV2 72-2E    | EP2 72-2E          | 71 1/8"          |
| HV2 84-2E    | EP2 84-2E          | 83 1/8"          |
| HV2 96-2E    | EP2 96-2E          | 95 1/8"          |
| HV2 108-2E   | EP2 108-2E         | 107 1/8"         |
| HV2 108-3E   | EP2 108-3E         | 107 1/8"         |
| HV2 120-2E   | EP2 120-2E         | 119 1/8"         |
| HV2 120-3E   | EP2 120-3E         | 119 1/8"         |
| HV2 144-3E   | EP2 144-3E         | 143 1/8"         |



|           |              |
|-----------|--------------|
| PROJECT   | Model No.:   |
| LOCATION  | Drawing No.: |
| ARCHITECT | Date         |
| ENGINEER  | Sheet of     |
|           | Drawn By:    |
|           | Checked By:  |



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**HIGH VELOCITY2 (HV2) 1 HP & EXTRA POWER2 (EP2) 3HP ELECTRIC HEATED MODELS**

**JOB:**

**ARCHITECT/ENGINEER:  
CONTRACTOR:**

**DRWG.:** \_\_\_\_\_  
**SHEET** \_\_\_\_\_ **of** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**MOTOR FAN DATA**

| MARK | HEATED MODEL NUMBER<br>① | NO. REQ'D | LENGTH | WEIGHT (LBS) |          |              |                    |                       |              |                   |                        |                        | REMARKS |                                  |  |
|------|--------------------------|-----------|--------|--------------|----------|--------------|--------------------|-----------------------|--------------|-------------------|------------------------|------------------------|---------|----------------------------------|--|
|      |                          |           |        |              | MOTOR HP | MOTOR RPM ** | VOLTS / PHASE<br>② | HEATER INPUT, kW<br>② | AMPS **<br>② | TEMP RISE °F<br>② | MAX FPM **<br>@ NOZZLE | MAX CFM **<br>@ NOZZLE |         | dBA Measured<br>10 ft. fr Nozzle |  |
|      | HV2 42-1E                |           | 3'6"   | 125          | 1        | 1750         |                    |                       |              |                   |                        | 4000                   | 3500    | 70                               |  |
|      | HV2 48-1E                |           | 4'     | 145          | 1        | 1750         |                    |                       |              |                   |                        | 4000                   | 4000    | 70                               |  |
|      | HV2 60-1E                |           | 5'     | 155          | 1        | 1750         |                    |                       |              |                   |                        | 3200                   | 4000    | 70                               |  |
|      | HV2 72-2E                |           | 6'     | 315          | Two      | 1750         |                    |                       |              |                   |                        | 5140                   | 8000    | 73                               |  |
|      | HV2 84-2E                |           | 7'     | 335          | Two      | 1750         |                    |                       |              |                   |                        | 4570                   | 8000    | 73                               |  |
|      | HV2 96-2E                |           | 8'     | 340          | Two      | 1750         |                    |                       |              |                   |                        | 4000                   | 8000    | 73                               |  |
|      | HV2 108-2E               |           | 9'     | 350          | Two      | 1750         |                    |                       |              |                   |                        | 3600                   | 8000    | 73                               |  |
|      | HV2 108-3E               |           | 9'     | 425          | Three    | 1750         |                    |                       |              |                   |                        | 5500                   | 12,000  | 75                               |  |
|      | HV2 120-2E               |           | 10'    | 365          | Two      | 1750         |                    |                       |              |                   |                        | 3200                   | 8000    | 73                               |  |
|      | HV2 120-3E               |           | 10'    | 440          | Three    | 1750         |                    |                       |              |                   |                        | 4200                   | 12,000  | 75                               |  |
|      | HV2 144-3E               |           | 12'    | 465          | Three    | 1750         |                    |                       |              |                   |                        | 4000                   | 12,000  | 75                               |  |
|      | EP2 48-1E                |           | 4'     | 145          | 3        | 3450         |                    |                       |              |                   |                        | 4800                   | 4800    | 76                               |  |
|      | EP2 60-1E                |           | 5'     | 155          | 3        | 3450         |                    |                       |              |                   |                        | 3840                   | 4800    | 76                               |  |
|      | EP2 84-2E                |           | 7'     | 335          | Two      | 3450         |                    |                       |              |                   |                        | 5485                   | 9600    | 79                               |  |
|      | EP2 96-2E                |           | 8'     | 340          | Two      | 3450         |                    |                       |              |                   |                        | 4800                   | 9600    | 79                               |  |
|      | EP2 108-2E               |           | 9'     | 350          | Two      | 3450         |                    |                       |              |                   |                        | 4200                   | 9600    | 79                               |  |
|      | EP2 108-3E               |           | 9'     | 425          | Three    | 3450         |                    |                       |              |                   |                        | 6222                   | 14,000  | 81                               |  |
|      | EP2 120-2E               |           | 10'    | 365          | Two      | 3450         |                    |                       |              |                   |                        | 3840                   | 9600    | 79                               |  |
|      | EP2 120-3E               |           | 10'    | 440          | Three    | 3450         |                    |                       |              |                   |                        | 5760                   | 14,000  | 81                               |  |
|      | EP2 144-3E               |           | 12'    | 465          | Three    | 3450         |                    |                       |              |                   |                        | 4800                   | 14,000  | 81                               |  |

**NOTES:** ① Refer to model chart. ② Refer to heater availability chart for parameter values.

**EQUIPMENT SPECIFICATIONS** - Standard Features

**GENERAL:** Air curtain shall be a Mars® Air Doors brand air curtain: Type High Velocity or Extra Power Electric Heated.

**APPROVALS:** Air curtain shall meet the requirements of the National Electric Code (N.E.C.) and shall be Canadian and U.S. Engineering Testing Laboratories (ETL) Certified and bear the CE mark.

**CABINET**

Cabinets shall be a self contained one piece housing with sufficient strength for fastening to wall on both ends without intermediate support. Cabinet constructed of fire retardant, corrosion proof paint lock metal and double protected by gray baked rust preventative electrostatic polyurethane powder coating. Discharge air outlet nozzle shall be wedge shaped containing adjustable air directional vanes with a 40° sweep front to back. Motor/Fan assembly to be easily accessible for maintenance.

**ELECTRIC HEATER COIL**

The heating coils shall be an open coil type for rapid temperature rise to be located in the air curtain nozzle directly in the air stream. Thermal overload protection shall be provided by manual reset protectors, which shall directly disconnect the electric power from the heaters in the event of an overload. Secondary protectors in the heating contactor shall not be substituted.

**MOTORS AND BLOWER WHEELS**

Motor(s) shall be totally enclosed air over (TEAO) type suitable for continuous heavy duty, all angle operation. Construction shall include sealed lifetime pre-lubricated ball bearings, resilient mounted and protected by an automatic reset thermal overload switch. Motor(s) to have quick disconnect plug for fast and easy removal of motor/fan assembly for inspection and cleaning. Motor(s) to have double extended shaft and direct drive, double inlet, dynamically balanced, forward curved squirrel cage blower wheels.

**ELECTRIC WIRING**

Air curtain shall contain prewired, control panel ready for power connection. Panel is internal mounted or on right hand side of unit unless otherwise specified. If panel is mounted external, control panel adds 4 inches to unit's overall length and requires an additional 20 inches of clearance from the end of the cabinet for access to panel. Unit shall include a 24 volt thermostat with "heat/off" switch, shipped loose and field installed. Terminal block provided inside panel.

**GUARANTEE**

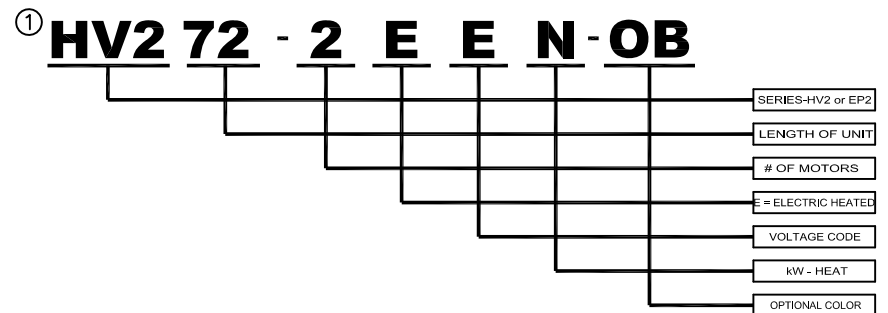
Shall be 18 months on all parts.

**ACCESSORIES**

Refer to the optimal feature and accessories page.

**\*\* 17% REDUCTION IN PERFORMANCE WITH UNITS WITH 50Hz.**

**EXAMPLE**



| SIZE     | VOLTAGE  | CODE |
|----------|----------|------|
| 48"-144" | 208/3/60 | E    |
| 48"-144" | 230/3/60 | F    |
| 48"-144" | 460/3/60 | H    |
| 48"-144" | 575/3/60 | I    |

| KW | CODE |
|----|------|
| 12 | H    |
| 24 | N    |
| 36 | S    |

| COLOR           | CODE |
|-----------------|------|
| OBSIDIAN BLACK  | OB   |
| TITANIUM SILVER | TS   |
| PEARL WHITE     | PW   |
| SPARTAN BRONZE  | SB   |
| BATTLESHIP GRAY | BG   |

**MADE WITH PRIDE IN THE USA**

**HIGH VELOCITY2 (HV2) 1 HP & EXTRA POWER2 (EP2) 3HP ELECTRIC HEATED MODELS**



# HIGH VELOCITY<sup>2</sup> (HV<sup>2</sup>) & EXTRA POWER<sup>2</sup> (EP<sup>2</sup>) MODEL HEATER CHART

## ELECTRIC HEATER DATA

UNITS AVAILABLE ONLY IN THREE PHASE

| MODEL          | kW | 208V, 3Ø<br>Amp (Ampacity)        | 230V, 3Ø<br>Amp (Ampacity)       | 460V, 3Ø<br>Amp (Ampacity)     | 575V, 3Ø<br>Amp (Ampacity)     | TEMP RISE °F<br>HV/EP |
|----------------|----|-----------------------------------|----------------------------------|--------------------------------|--------------------------------|-----------------------|
| HV2/EP2 48-1E  | 12 | 36.6 / 41.6<br>(45.8) / (52.0)    | 33.3 / 37.7<br>(41.6) / (47.1)   | 16.6 / 18.8<br>(20.8) / (23.5) | 13.3 / 15.0<br>(16.6) / (18.8) | 9.5/8                 |
| HV2/EP2 60-1E  | 12 | 36.6 / 41.6<br>(45.8) / (52.0)    | 33.3 / 37.7<br>(41.6) / (47.1)   | 16.6 / 18.8<br>(20.8) / (23.5) | 13.3 / 15.0<br>(16.6) / (18.8) | 9.5/8                 |
| HV2 72-2E      | 24 | 73.2<br>(89.6)                    | 66.6<br>(83.3)                   | 33.2<br>(41.5)                 | 26.6<br>(33.3)                 | 9.5/--                |
| HV2/EP2 84-2E  | 24 | 73.2 / 83.2<br>(91.5) / (104)     | 66.6 / 75.4<br>(83.3) / (94.3)   | 33.2 / 37.6<br>(41.5) / (47.0) | 26.6 / 30.0<br>(33.3) / (37.8) | 9.5/8                 |
| HV2/EP2 84-2E  | 32 | 95.4 / 108.5<br>(119.3) / (135.6) | 86.7 / 98.6<br>(108.4) / (123.2) | 43.4 / 49.3<br>(54.2) / (61.6) | 34.7 / 39.5<br>(43.4) / (49.3) | 12.6/10.5             |
| HV2/EP2 96-2E  | 24 | 73.2 / 83.2<br>(91.5) / (104)     | 66.6 / 75.4<br>(83.3) / (94.3)   | 33.2 / 37.6<br>(41.5) / (47.0) | 26.6 / 30.0<br>(33.3) / (37.8) | 9.5/8                 |
| HV2/EP2 108-2E | 24 | 73.2 / 83.2<br>(91.5) / (104)     | 66.6 / 75.4<br>(83.3) / (94.3)   | 33.2 / 37.6<br>(41.5) / (47.0) | 26.6 / 30.0<br>(33.3) / (37.8) | 9.5/8                 |
| HV2/EP2 108-3E | 36 | 109.8 / 124.8<br>(137) / (156)    | 99.9 / 113<br>(125) / (141)      | 49.8 / 56.4<br>(62.3) / (70.5) | 39.9 / 45.0<br>(49.9) / (56.3) | 9.5/8                 |
| HV2/EP2 120-2E | 24 | 73.2 / 83.2<br>(91.5) / (104)     | 66.6 / 75.4<br>(83.3) / (94.3)   | 33.2 / 37.6<br>(41.5) / (47.0) | 26.6 / 30.0<br>(33.3) / (37.8) | 9.5/8                 |
| HV2/EP2 120-3E | 36 | CONSULT FACTORY                   | CONSULT FACTORY                  | 49.8 / 56.4<br>(62.3) / (70.5) | 39.9 / 45.0<br>(49.9) / (56.3) | 9.5/8                 |
| HV2/EP2 144-3E | 36 | CONSULT FACTORY                   | CONSULT FACTORY                  | 49.8 / 56.4<br>(62.3) / (70.5) | 39.9 / 45.0<br>(49.9) / (56.3) | 9.5/8                 |

**For Other Wattages Available Consult Factory**

**HIGH VELOCITY<sup>2</sup> (HV<sup>2</sup>) 1HP & EXTRA POWER<sup>2</sup> (EP<sup>2</sup>) 3HP ELECTRIC HEATED MODELS**