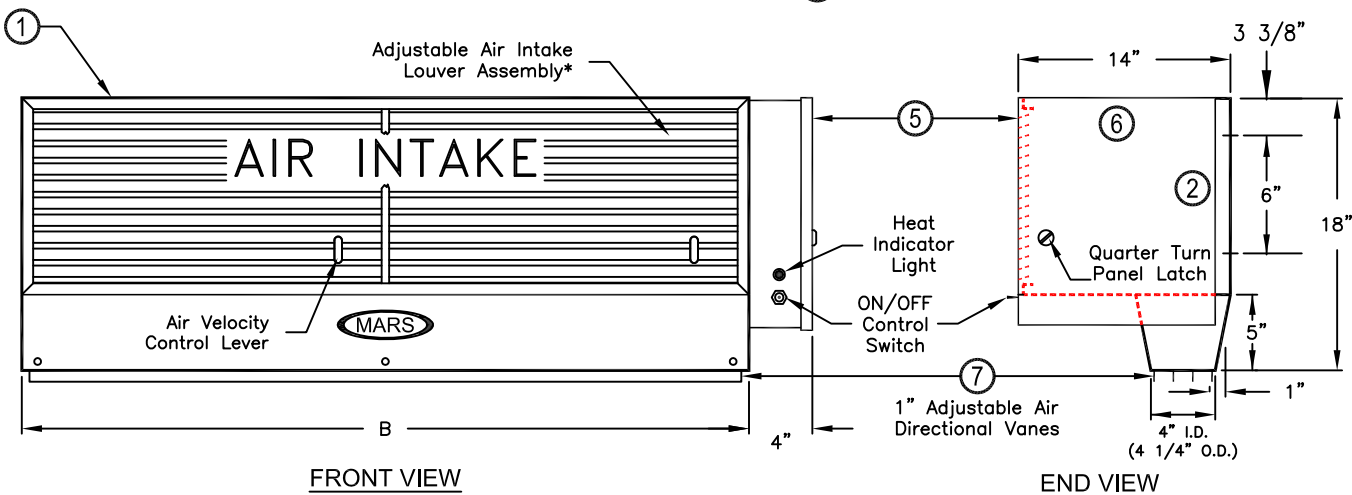


REAR VIEW



FRONT VIEW

END VIEW

NOTES:

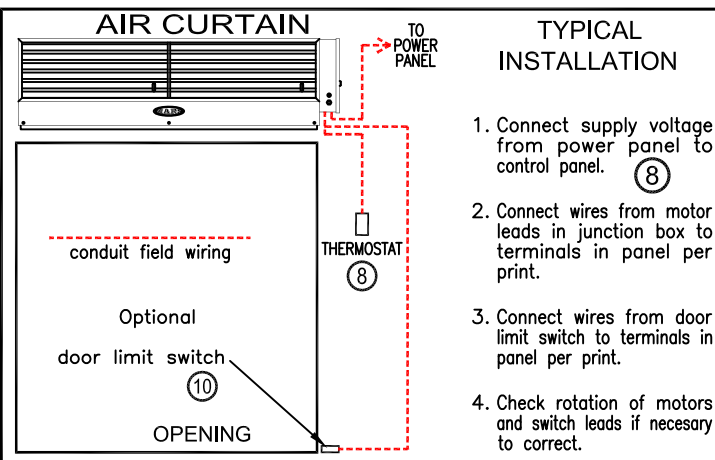
- ① This product is designed to comply with the National Electric Code (NEC), ETL listed for US & Canada, and bear the CE mark.
- ② 7/16" mounting holes, (4) provided, (2) on each end for Wall Mount, (2) on each end for Top Mount.
- ③ All units have a self contained one piece cabinet, with fire retardant 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 Allow a minimum of 17" clearance for access to control panel door for installation and maintenance.
- ⑥ Control panel is prewired and premounted on right hand side of cabinet. Specify for alternate location.
- 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/fan" 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: Louver assembly size and number varies with unit length.

MODEL NUMBER	MOUNTING CENTERS A	OVERALL LENGTH B
HV48-1E EP48-1E	47 1/8"	48"
HV60-1E EP60-1E	59 1/8"	60"
HV72-2E	71 1/8"	72"
HV84-2E EP84-2E	83 1/8"	84"
HV96-2E EP96-2E	95 1/8"	96"
HV108-2E EP108-2E	107 1/8"	108"
HV108-3E EP108-3E	107 1/8"	108"
HV120-2E EP120-2E	119 1/8"	120"
HV120-3E EP120-3E	119 1/8"	120"
HV144-3E EP144-3E	143 1/8"	144"



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



14716 S. BROADWAY • GARDENA, CA 90248 • USA
 TEL:(310) 532-1555 • (800) 421-1266 • FAX:(310) 324-3030
 Web Site: www.marsair.com • E-mail: info@marsair.com

HIGH VELOCITY (HV) 1 HP & EXTRA POWER (EP) 3HP ELECTRIC HEATED MODELS

JOB: _____

ARCHITECT/ENGINEER:
CONTRACTOR:

DRWG.: _____
SHEET _____ **of** _____ **DATE:** _____

MARK	HEATED MODEL NUMBER ①	NO. REQ'D	LENGTH	WEIGHT (LBS)	MOTOR FAN DATA								REMARKS		
					MOTOR HP	MOTOR RPM **	VOLTS / PHASE ②	HEATER INPUT, kW ②	AMPS ** ②	TEMP RISE °F ②	MAX FPM ** @ NOZZLE	MAX CFM ** @ NOZZLE		dBA Measured 10 ft. fr Nozzle	
	HV48-1E		4'	145	1	1750						4000	4000	70	
	HV60-1E		5'	155	1	1750						3200	4000	70	
	HV72-2E		6'	315	Two 1	1750						5140	8000	73	
	HV84-2E		7'	335	Two 1	1750						4570	8000	73	
	HV96-2E		8'	340	Two 1	1750						4000	8000	73	
	HV96-3E		8'	420	Three 1	1750						5000	10,000	75	
	HV108-2E		9'	350	Two 1	1750						3600	8000	73	
	HV108-3E		9'	425	Three 1	1750						5500	12,000	75	
	HV120-2E		10'	365	Two 1	1750						3200	8000	73	
	HV120-3E		10'	440	Three 1	1750						4200	12,000	75	
	HV144-3E		12'	465	Three 1	1750						4000	12,000	75	
	EP48-1E		4'	145	3	3450						4800	4800	76	
	EP60-1E		5'	155	3	3450						3840	4800	76	
	EP84-2E		7'	335	Two 3	3450						5485	9600	79	
	EP96-2E		8'	340	Two 3	3450						4800	9600	79	
	EP108-2E		9'	350	Two 3	3450						4200	9600	79	
	EP108-3E		9'	425	Three 3	3450						6222	14,000	81	
	EP120-2E		10'	365	Two 3	3450						3840	9600	79	
	EP120-3E		10'	440	Three 3	3450						5760	14,000	81	
	EP144-3E		12'	465	Three 3	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 powdercoating. Cabinet to have mechanically field adjustable air intake louver assembly, capable of reducing outlet air velocity up to 60% with louvers in totally closed position. 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 shipped loose, ready for power connection. Panel to be mounted on right hand side of unit unless otherwise specified. 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/fan" switch, shipped loose and field installed. Terminal block provided inside panel.

GUARANTEE

Shall be 18 months on all parts.

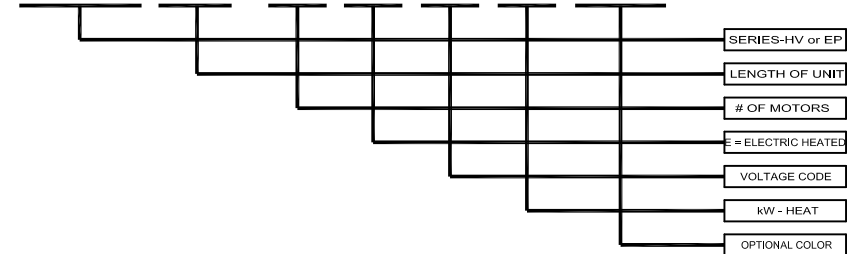
ACCESSORIES

Refer to the optional feature and accessories page.

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

EXAMPLE

① **HV 144 - 3 E E S - OB**



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 VELOCITY (HV) 1 HP & EXTRA POWER (EP) 3HP ELECTRIC HEATED MODELS



HIGH VELOCITY (HV) & EXTRA POWER (EP) MODEL HEATER CHART

ELECTRIC HEATER DATA

UNITS AVAILABLE ONLY IN THREE PHASE

MODEL	kW	208V, 3Ø Amp (Ampacity)	230V, 3Ø Amp (Ampacity)	460V, 3Ø Amp (Ampacity)	575V, 3Ø Amp (Ampacity)	TEMP RISE °F HV/EP
HV/EP48-1E	12	36.6 / 41.6 (45.8) / (52.0)	33.3 / 37.7 (41.6) / (47.1)	16.6 / 18.8 (20.8) / (23.5)	13.3 / 15.0 (16.6) / (18.8)	9.5/8
HV/EP60-1E	12	36.6 / 41.6 (45.8) / (52.0)	33.3 / 37.7 (41.6) / (47.1)	16.6 / 18.8 (20.8) / (23.5)	13.3 / 15.0 (16.6) / (18.8)	9.5/8
HV72-2E	24	73.2 (89.6)	66.6 (83.3)	33.2 (41.5)	26.6 (33.3)	9.5/--
HV/EP84-2E	24	73.2 / 83.2 (91.5) / (104)	66.6 / 75.4 (83.3) / (94.3)	33.2 / 37.6 (41.5) / (47.0)	26.6 / 30.0 (33.3) / (31.3)	9.5/8
HV/EP84-2E	24	73.2 / 83.2 (91.5) / (104)	66.6 / 75.4 (83.3) / (94.3)	33.2 / 37.6 (41.5) / (47.0)	26.6 / 30.0 (33.3) / (31.3)	9.5/8
HV/EP96-2E	24	73.2 / 83.2 (91.5) / (104)	66.6 / 75.4 (83.3) / (94.3)	33.2 / 37.6 (41.5) / (47.0)	26.6 / 30.0 (33.3) / (31.3)	9.5/8
HV/EP108-2E	24	73.2 / 83.2 (91.5) / (104)	66.6 / 75.4 (83.3) / (94.3)	33.2 / 37.6 (41.5) / (47.0)	26.6 / 30.0 (33.3) / (31.3)	9.5/8
HV/EP108-3E	36	109.8 / 124.8 (137) / (156)	99.9 / 113 (125) / (141)	49.8 / 56.4 (62.3) / (70.5)	39.9 / 45.0 (49.9) / (56.3)	9.5/8
HV/EP120-2E	24	73.2 / 83.2 (91.5) / (104)	66.6 / 75.4 (83.3) / (94.3)	33.2 / 37.6 (41.5) / (47.0)	26.6 / 30.0 (33.3) / (31.3)	9.5/8
HV/EP120-3E	36	CONSULT FACTORY	CONSULT FACTORY	49.8 / 56.4 (62.3) / (70.5)	39.9 / 45.0 (49.9) / (56.3)	9.5/8
HV/EP144-3E	36	CONSULT FACTORY	CONSULT FACTORY	49.8 / 56.4 (62.3) / (70.5)	39.9 / 45.0 (49.9) / (56.3)	9.5/8

For Other Wattages Available Consult Factory

HIGH VELOCITY (HV) 1HP & EXTRA POWER (EP) 3HP ELECTRIC HEATED MODELS