



atmosphere is everything

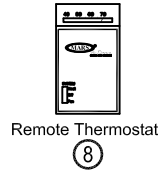
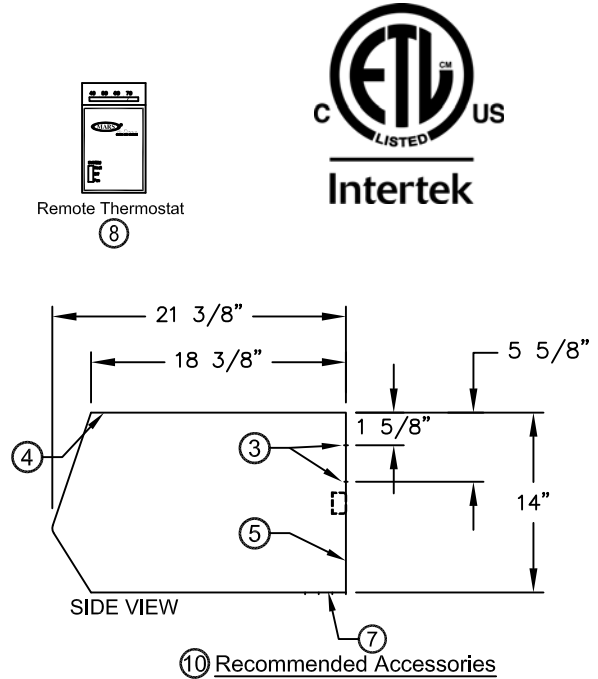
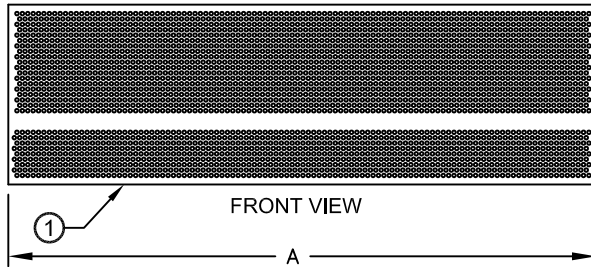
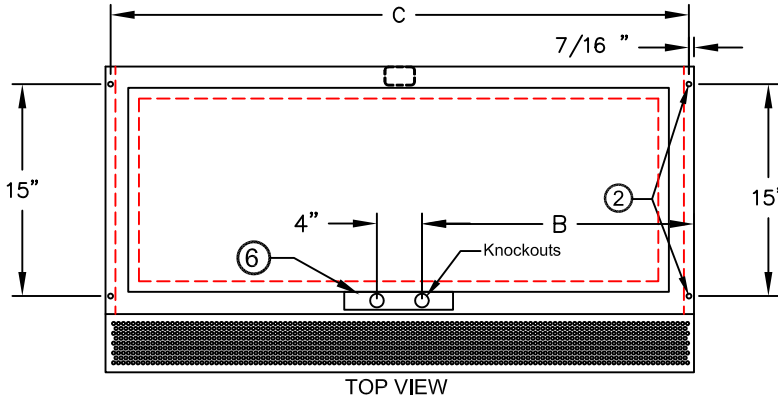
14716 S. Broadway • Gardena, CA 90248 • USA  
 TEL: (310) 532-1555 • (800) 421-1266 • FAX: (310) 324-3030  
 Web Site: www.marsair.com • E-mail: info@marsair.com

PROJECT		OPTIONS/ITEMS	
TITLE			
COMMENTS		DATE 4/14/15	PAGE
		REV. NO	
MODEL NO. HV2 Series	DRAWING NO HV2ELEC-F	DRAWN BY TVN	CHECKED BY
		FILE NAME	

# Electric Heated Drawing

## HV2

(High Velocity 2 Series)



\*- Use corresponding letters in "Voltage Code" then "Wattage Code" columns to complete the model numbers

Note: MARS reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements additions or replacements for previously purchased equipment.

Notes:

MODEL NUMBER	OVERALL LENGTH A (in)	KNOCKOUT LOCATION B (in)	REAR MOUNTING CENTER C (in)
HV248-1E**-TS	48	22	47 1/8
HV260-1E**-TS	60	13	59 1/8
HV272-2E**-TS	72	16	71 1/8
HV284-2E**-TS	84	19	83 1/8
HV296-2E**-TS	96	22	95 1/8
HV2108-3E**-TS	108	25	107 1/8
HV2120-2E**-TS	120	28	119 1/8
HV2120-3E**-TS	120	58	119 1/8
HV2144-3E**-TS	144	70	143 1/8

- This product is designed to meet the National Electric Code (NEC) and is ETL listed for the US and Canada (UL 2021 and CSA 22.2).
- (4) 7/16" mounting holes provided on for overhead mounting provided, (2) on each end.
- (2) 1/2" key hole slots and (2) 7/16" mounting holes are provided on each end of the back side for wall mounting.
- All units have a self contained one piece cabinet, fire retardant and corrosion proof paint lock metal double protected with baked on Titanium Silver color, rust preventative electrostatic polyurethane powder coating.
- Cabinet is to be mounted from overhead or fastened to a wall and has sufficient strength for suspension from both ends without intermediate support.
- Control panel is pre-wired and pre-mounted inside the cabinet.
- Unit is to be installed such that air flow is unobstructed. Unit has a 3" air discharge nozzle containing adjustable air directional vanes with 40° sweep front to back.
- Wall mounted 24 volt thermostat with remote "heat/off/fan" switch is shipped loose and field installed. Terminal block provided inside control panel.
- Circuit protection as per NEC by others.
- Door limit switch and mounting brackets are field installed and/or wired by others. The door limit switch is to be mounted such that the air curtain turns on as door begins to open. To prevent unit damage, the mounting brackets must be installed such that the bottom of the air curtain is not below the door header.



Door Limit Switches

9

# HV2 (High Velocity 2) Series

Electric Heated

Model Lengths 48" – 144"



atmosphere is everything

14716 S. BROADWAY, GARDENA, CA 90248 • Ph: (310)532-1555 Fax: (310)532-3030 • [www.marsair.com](http://www.marsair.com)  
© Copyright Mars Air Systems, LLC 2014

## Electric Heated Data Sheet

Applications: Environmental Separation: Max Height 14' / Insect Control: Max Height 12'

HV2 (High Velocity) Series 2	Mechanical Data						Lab Data				
	Model Number	Nozzle Length (in)	Length (in)	Depth (in)	Height (in)	Motor (hp)	Weight (lbs)	Max Core Velocity at Nozzle (fpm)	Avg Velocity (fpm)	Volume (cfm)	Uniformity (%)
HV248-1E**-TS	48	48	21.5	14	1	145	6144	2447	2447	88	1360
HV260-1E**-TS	60	60	21.5	14	1	155	6330	2208	2760	80	1560
HV272-2E**-TS	72	72	21.5	14	Two 1	315	5722	2389	3584	92	1930
HV284-2E**-TS	84	84	21.5	14	Two 1	335	6051	2654	4644	93	2610
HV296-2E**-TS	96	96	21.5	14	Two 1	340	6144	2447	4894	88	2720
HV2108-3E**-TS	108	108	21.5	14	Three 1	425	5722	2389	5376	92	2895
HV2120-2E**-TS	120	120	21.5	14	Two 1	365	6330	2208	5519	80	3120
HV2120-3E**-TS	120	120	21.5	14	Three 1	440	6060	2678	6693	93	3615
HV2144-3E**-TS	144	144	21.5	14	Three 1	465	6144	2447	7341	88	4080

\* - Use corresponding letters in "Electrical Data" & "Heater Wattage Data" columns to complete the model numbers.

Note: Data above for 1725 RPM at 60 Hz, 50 Hz is 1425 RPM with a 17% reduction in the performance data.

### Features:

- Air Curtain
- 1 HP Continuous Duty TEAO Motors
- Sleek self-contained one piece heavy gauge corrosion proof paint lock metal design
- ETL Certified to conform to UL 2021 (US) and CSA 22.2 (Canada) Standards
- (4) 7/16" Top and wall mounting holes provided
- Cabinet has sufficient strength for fastening to wall on both ends without intermediate support
- Adjustable air directional vanes with 40° sweep front to back
- Standard color is Titanium Silver
- Rust preventative electrostatic polyurethane powder coating
- 18 months parts warranty
- Freight Included (FOB Continental USA)
- Proudly Made in the USA

Three Phase Electrical Data (FLA)	Unit Voltage (Voltage Code) Amperage				Heater Kilowatts (Wattage Code) kW			Temp Rise
	208v/3Ø (E)	230v/3Ø (F)	460v/3Ø (H)	575v (I)	12 kW (H)	24 kW (N)	36 kW (S)	°F
HV248-1E**-TS	37	34	17	14	12	-	-	15
HV260-1E**-TS	37	34	17	14	12	-	-	14
HV272-2E**-TS	74	67	34	27	-	24	-	21
HV284-2E**-TS	74	67	34	27	-	24	-	16
HV296-2E**-TS	74	67	34	27	-	24	-	15
HV2108-3E**-TS	110	100	50	41	-	-	36	21
HV2120-2E**-TS	74	67	34	27	-	24	-	14
HV2120-3E**-TS	110	100	50	41	-	-	36	17
HV2144-3E**-TS	110	100	50	41	-	-	36	15

\* - Use corresponding letters in "Voltage Code and Wattage Code" to complete the model numbers

For Ampacity Multiply FLA X 1.25

Motor amps per motor: 9A @ 115v; 5A @ 208/230v/1Ø; 3.3A @ 208v/3Ø, 3.2A @ 230v/3Ø, 1.6A @ 460v/3Ø; 1.3A @ 575v/3Ø.

### Electric Heater Coil and Wiring

- Coils are an open type for rapid temperature rise to be located in the air curtain's intake directly in the air stream
- Manual reset thermal overload protection provided
- Controls internally mounted, prewired ready for power connection and accessible through the intake or top access panels
- 3/4" knockouts are provided on the top and the ends
- A on/off switch is unit mounted at the bottom and the control voltage is 24 volts
- A wall mounted 24 volt thermostat is included (field wired and installed by others)

Single Phase Electrical Data (FLA)	Unit Voltage (Voltage Code) Amperage		Heater Kilowatts (Wattage Code) kW			Temp Rise
	208v/1Ø (B)	230v/1Ø (C)	(B)	(H)	(K)	°F
HV248-1E**-TS	34	32	6	-	-	8
HV260-1E**-TS	34	32	6	-	-	7
HV272-2E**-TS	68	63	-	12	-	11
HV284-2E**-TS	68	63	-	12	-	8
HV296-2E**-TS	68	63	-	12	-	8
HV2108-3E**-TS	102	94	-	-	18	11
HV2120-2E**-TS	68	63	-	12	-	7
HV2120-3E**-TS	102	94	-	-	18	8
HV2144-3E**-TS	102	94	-	-	18	8

\* - Use corresponding letters in "Voltage Code and Wattage Code" to complete the model numbers

For Ampacity Multiply FLA X 1.25

Motor amps per motor: 5A @ 208/230v/1Ø

### Options and Accessories: (see Accessories Brochure)

- SimpleLink Controller
  - For 2 speed, separate 115V or 208/230V, 1Ph power required for 460 & 575V
- Variable Frequency Drive (VFD) mounted and wired on the right-hand side of unit. Minimum 20" service clearance required.
- Adjustable time delay (1 sec to 17 min)
- Remote mounted fused or non-fused disconnects
- Hi-Lo Heat
- Heat on Demand
- Master + Slave Control Kit
- 2 speed controls (Separate 115V or 208/230V, 1Ph power required for 460 & 575V)
- Wall and Overhead Bracket
- 1/4" Aluminum Mesh Filters
- Vertical Mounting Kit
- Custom colors and finishes (304SS, 316SS)

### Sound Levels: (measured at 10' in an open field)

1 Motor Unit = 70 dBA, 2 Motor Unit = 73 dBA, 3 & 4 Motor Unit = 75 dBA

NOTE: MARS AIR SYSTEMS, LLC reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions or replacements for previously purchased equipment.

