



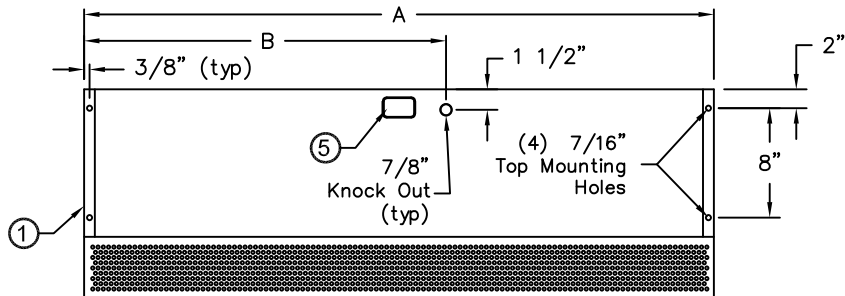
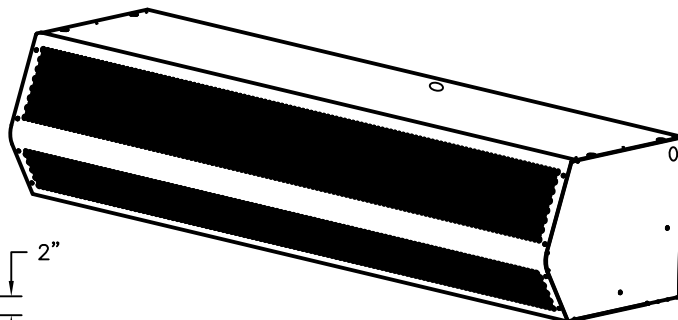
atmosphere is everything

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

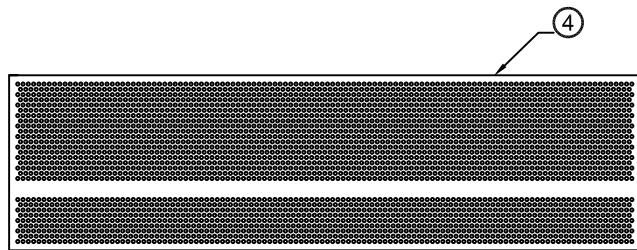
PROJECT		OPTIONS/ITEMS	
TITLE			
COMMENTS		DATE 7/24/15	PAGE
		REV. NO	
MODEL NO. HV2 Series	DRAWING NO HV2U-F	DRAWN BY FRC	CHECKED BY
		FILE NAME	

# Unheated Drawing

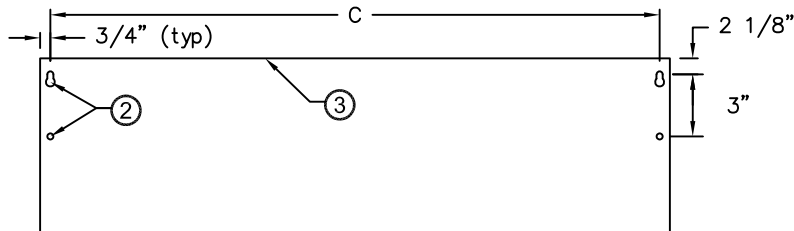
## HV2 (High Velocity 2) Series



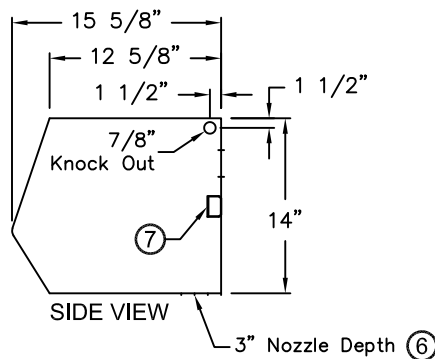
TOP VIEW



FRONT VIEW



REAR VIEW



SIDE VIEW

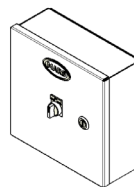


Note: Models HV260-1 & HV2120-2 are not AMCA Certified.

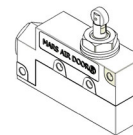


Intertek

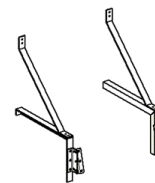
### (8) Recommended Accessories



Control Panels



Door Limit Switches



Brackets

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

MODEL NUMBER	OVERALL LENGTH A (in)	KNOCKOUT LOCATION B (in)	REAR MOUNTING CENTER C (in)
HV236-1U*-TS	36	25 1/2	34 1/2
HV242-1U*-TS	42	28 1/2	40 1/2
HV248-1U*-TS	48	31 1/2	46 1/2
HV272-2U*-TS	72	40	70 1/2
HV284-2U*-TS	84	46	82 1/2
HV296-2U*-TS	96	52	94 1/2
HV2108-3U*-TS	108	58	106 1/2
HV2120-3U*-TS	120	64	118 1/2
HV2144-3U*-TS	144	76	142 1/2
The following models are not licensed to bear the AMCA seal.			
HV260-1U*-TS	60	37 1/2	58 1/2
HV2120-2U*-TS	120	64	118 1/2

### Notes:

- This product is designed to meet the National Electric Code (NEC), ETL Listed (UL 507 and CSA 22.2) and AMCA 211 Certified.
- (2) 1/2" key hole slots and (2) 7/16" mounting holes provided on for wall mounting and (4) 7/16" mounting holes for overhead mounting provided, (2) on each end.
- 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 has sufficient strength for fastening to wall on both ends without intermediate support.
- Internal J-Box(es) for electrical wiring: one motor-(1) 2"x 4"; two motors-(1) 4"x 4"; three motors-(2) 4"x 4".
- Unit is to be installed such that air flow is unobstructed. Air discharge nozzle containing adjustable air directional vanes with 40° sweep front to back.
- Circuit protection as per NEC by others.
- Optional motor control panel, 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.

# HV2 (High Velocity 2) Series

Unheated

Model Lengths 36" – 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

## Unheated Data Sheet

Applications: Environmental Separation (up to 14') and Insect Control (up to 12')

HV2 (High Velocity) Series 2	Mechanical Data						AMCA Certified 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 (%)	Power Rating (watts)
HV236-1U*-TS	36	36	16.0	14	1	115	6000	2745	2059	90	1245	
HV242-1U*-TS	42	42	16.0	14	1	120	6051	2654	2322	93	1305	
HV248-1U*-TS	48	48	16.0	14	1	125	6144	2447	2447	88	1360	
HV272-2U*-TS	72	72	16.0	14	Two 1	220	6000	2745	4118	90	2490	
HV284-2U*-TS	84	84	16.0	14	Two 1	235	6051	2654	4644	93	2610	
HV296-2U*-TS	96	96	16.0	14	Two 1	250	6144	2447	4894	88	2720	
HV2108-3U*-TS	108	108	16.0	14	Three 1	330	6000	2745	6177	90	3735	
HV2120-3U*-TS	120	120	16.0	14	Three 1	345	6060	2678	6693	93	3615	
HV2144-3U*-TS	144	144	16.0	14	Three 1	375	6144	2447	7341	88	4080	
The following models are not licensed to bear the AMCA seal.												
HV260-1U*-TS	60	60	16.0	14	1	140	6330	2208	2760	80	1560	
HV2120-2U*-TS	120	120	16.0	14	Two 1	275	6330	2208	5519	80	3120	

\* - Use corresponding letters in "Electrical 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.

1. The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only.

2. Rated data shown are only for base (unheated) units, as shown.

### Features:

- ❖ 1 HP Continuous Duty TEAO Motors (NEMA 1)
  - ❖ Sleek self-contained one-piece heavy gauge corrosion proof paint lock metal design
  - ❖ AMCA Certified to AMCA 211 (see table above for models available)
  - ❖ (4) 7/16" top and wall mounting holes provided, (2) on each end
  - ❖ ETL Certified to conform to UL 507 (US) and CSA 22.2 (Canada) Standards (Indoor/Outdoor Use)
  - ❖ 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
  - ❖ 5-year parts warranty
  - ❖ Freight Included (FOB Continental USA)
  - ❖ Proudly Made in the USA
- Note: All HV2 units, the Motor Fan Assemblies (MFA) are shipped loose to minimize freight damage

### Mars Recommended Accessories (See Submittals for additional details):

- ❖ Door Limit Switches
    - 99-014, Combination mechanical switch, 250v, 1HP Max
    - 99-125, Industrial surface mounted magnetic switch (controller required)
  - ❖ Controllers
    - MCPB-+U\*, Motor Control Panel, 120V control voltage (+ = # of Motors, \* = Voltage Code)
      - MCP-TD, Adjustable time delay, 1sec-100hr (panel required)
      - MCP-24V, Low voltage control option (panel required)
      - BMS-303, BMS for monitor and control (panel required with MCP-24V)
    - Note: Dry contact provided in panel for monitoring motor. 24Vac signal provided from panel for controlling motor
  - ❖ Brackets
    - B0004, Adjustable mounting bracket set, 3 1/2" clearance
    - B0008 to B0011, Extended wall mounting bracket, 10", 16", 19" 23" clearance respectively
  - ❖ Severe Duty and Finish
    - HSG-304SS-HV/EP, 304 Stainless steel housing construction
    - INS-WD-HV2, Washdown motor fan assembly, IP54
    - INS-XP-HV2, Explosion resistant motor fan assembly, Class 1, Division 1, Group D (TENV)
- Note: Washdown and explosion proof units will require higher motor amperage. Control panel will require OL/MP with higher amperage range (Use MCP-MWD or MCP-MXP accessory)

### 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

Model	Projection Velocity	
	Distance from nozzle (in)	Avg. Core Velocity (FPM)
HV236-1U*	40	2002
	80	1238
	120	1088
	160	1039
	200	967

Electrical Data Full Load Amp (FLA)	Unit Voltage (Voltage Code)				
	Single Phase		Three Phase		
	115v/1Ø (A)	208/230v/1Ø (D)	208/230v/3Ø (G)	460v/3Ø (H)	575v/3Ø (I)
HV236-1U*-TS	9.0	5.0	3.3/3.2	1.6	1.3
HV242-1U*-TS	9.0	5.0	3.3/3.2	1.6	1.3
HV248-1U*-TS	9.0	5.0	3.3/3.2	1.6	1.3
HV272-2U*-TS	18.0	10.0	6.6/6.4	3.2	2.6
HV284-2U*-TS	18.0	10.0	6.6/6.4	3.2	2.6
HV296-2U*-TS	18.0	10.0	6.6/6.4	3.2	2.6
HV2108-3U*-TS	27.0	15.0	9.9/9.6	4.8	3.9
HV2120-3U*-TS	27.0	15.0	9.9/9.6	4.8	3.9
HV2144-3U*-TS	27.0	15.0	9.9/9.6	4.8	3.9
HV260-1U*-TS	9.0	5.0	3.3/3.2	1.6	1.3
HV2120-2U*-TS	18.0	10.0	6.6/6.4	3.2	2.6

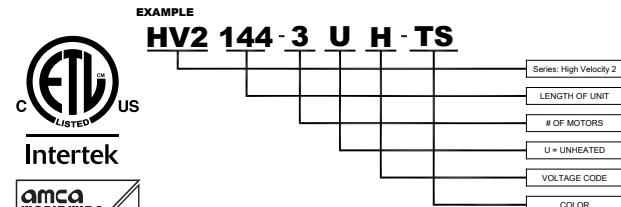
\* - Use corresponding letters in "Electrical Data" columns to complete the model numbers.

Alternate voltage codes with FLA data:  
277v/1Ø/60Hz (L) - 5.2A per motor  
220v/1Ø/50Hz (U) - 7.1A per motor  
380/415v/3Ø/50Hz (W) - 1.8A per motor

Explosion proof motor FLA data (INS-XP-HV2):  
115v/1Ø/60Hz (A) - 12.8A per motor  
208/230v/1Ø/60Hz (D) - 6.4A per motor  
208/230v/3Ø/60Hz (G) - 3.5/3.2A per motor  
460v/3Ø/60Hz (H) - 1.6A per motor

Washdown motor FLA data (INS-WD-HV2):  
115v/1Ø/60Hz (A) - 12A per motor  
208/230v/1Ø/60Hz (D) - 6.4/6A per motor  
208/230v/3Ø/60Hz (G) - 3.3A per motor  
460v/3Ø/60Hz (H) - 1.5A per motor

For total FLA, multiply motor FLA by # of motors; Ampacity (MCA) = total FLA X 1.25



MARS Air Systems, LLC certifies that the Air Curtains shown on this data sheet are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only.

NOTE: Models HV260-1 & HV2120-2 are not AMCA Certified.

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.