# **HV2 (High Velocity 2) Series**

Electric heated

Model Lengths: 48"-144"

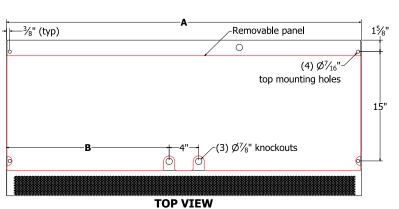
Environmental Separation (up to 14')

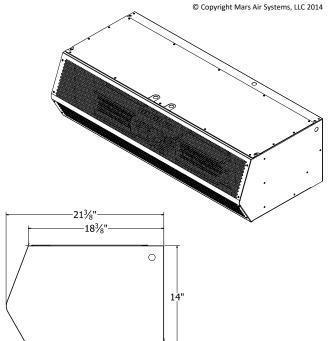
Insect Control (up to 12')



## atmosphere is everything

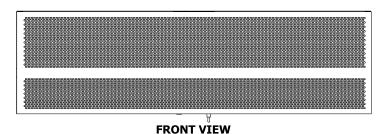
14716 S. BROADWAY, GARDENA, CA 90248 ● Ph: (310)532-1555 ● Fax: (310)-532-3030 ● <u>www.marsair.com</u>





-3" nozzle depth

**SIDE VIEW** 



 $(2) \ \emptyset^{3}/_{16}" \ \text{mounting holes}$ 



## Notes:

- $1. \ Recommended \ service \ clearances \ are \ 2"\ to \ the \ left \ and \ right \ sides, \ 24"\ on \ top, \ and \ 24"\ in \ front \ of \ the \ unit.$
- 2. Circuit protection (per NEC) to be installed by others.
- 3. To prevent accidental damage during operation, unit must be installed so that the bottom of the air curtain does not extend below the door header.
- 4. Unit can be fastened to wall on both ends without intermediate support.

**REAR VIEW** 

5. Units are shipped with Motor-Fan Assembly (MFA) factory-installed.

	Mechanical Data					Lab Data				
Model Number	Overall Length A (in)	Nozzle Length (in)	Top Knockout Location B (in)	Motor (hp)	Weight (lb)	Max Core Velocity at Nozzle (in)	Avg Velocity (fpm)	Volume (cfm)	Uniformity (%)	Power Rating (watt)
☐ HV248-1E**-TS	48	48	22	1	145	6144	2447	2447	88	1360
☐ HV260-1E**-TS	60	60	13	1	155	6100	2285	2856	80	1485
☐ HV272-2E**-TS	72	72	16	(2) 1	315	6000	2745	4118	90	2490
☐ HV284-2E**-TS	84	84	19	(2) 1	335	6051	2654	4644	93	2610
☐ HV296-2E**-TS	96	96	22	(2) 1	340	6144	2447	4894	88	2720
☐ HV2108-3E**-TS	108	108	16	(3) 1	425	6000	2745	6177	90	3735
☐ HV2120-2E**-TS	120	120	18	(2) 1	365	6100	2285	5711	80	2971
☐ HV2120-3E**-TS	120	120	18	(3) 1	440	6060	2678	6693	93	3615
☐ HV2144-3E**-TS	144	144	22	(3) 1	465	6144	2447	7341	88	4080

\* – Use corresponding letters in "Electrical Data" (see page 2) column headers, "Voltage Code" followed by "Wattage Code," to complete the model numbers.

Note: above data is for 60 Hz at 1725 RPM. For 50 Hz, RPM is 1450 with a 17% reduction in performance.

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Three Phase Electrical Data			oltage e Code)	Hea (W	Temp Rise			
Full Load Amp (FLA)	208V/3Ø □ (E)	230V/3Ø	460V/3Ø □ (H)	575V/3Ø □ (I)	(H)	(N)	(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

<sup>\* -</sup> Use corresponding letters in "Voltage Code" and "Wattage Code" column headers to complete the model numbers.

Ampacity (MCA) = total FLA x 1.25

Amps per motor for alternate voltages: 9A @ 115V; 5A @ 208-230V/1Ø; 3.3A @ 208V/3Ø; 3.2A @ 230/3Ø; 1.6A @ 460V/3Ø; 1.3A @ 575V/3Ø.

#### **Standard Features:**

#### Air curtain

- ETL-certified to conform to UL 2021 (US) and CSA 22.2 (Canada) standards for indoor use
- AMCA-certified to AMCA 211
- Sleek self-contained one-piece heavy-gauge and corrosion-proof paint lock metal design
- Fire retardant and rust preventative electrostatic polyurethane powder coating
  - Standard color is Obsidian Black (OB)
- ❖ 1 HP continuous duty Totally Enclosed Air Over (TEAO) motors (NEMA 1)
- ❖ Adjustable air directional vanes with 40° sweep front to back
- 18-month parts warranty
- Freight included (FOB continental USA)
- \* Proudly made in the USA

#### Electric heater coil and wiring

- Coils are open type (for rapid temperature rise) and are located directly in the air curtain's intake air stream
- Manual reset thermal overload protection provided
- On/off switch mounted on bottom (unit control voltage is 24V)
- Controls are internally mounted and prewired to receive power connection accessible through the intake or top access panels
- 24-volt thermostat with "heat/off/fan" capability is shipped loose for field installation

#### Mars Recommended Accessories (see catalog for complete listing):

- Door Limit Switches (§)
  - 99-014, Combination mechanical switch, 250V, 1HP Max
  - 99-125, Commercial surface mounted magnetic switch, 24V
- Factory Mounted Control Options
  - ☐ INS-TD, Adjustable Time Delay (1 sec to 17 min)
  - ☐ INS-2S, Unit mounted 2 speed switch (460-575V, 3PH needs additional 115-230V, 1PH power)
- Disconnects (§)
  - 99-122 & 99-123, Non-Fused Disconnect, remote mounted, 600V, 32A & 80A respectively, 3 Pole. IP65
  - ☐ 99-\*\*\*-\*\*, Fused Disconnect, remote mounted, 240V-600V, 30A-100A, 3 Pole, NEMA3R (see disconnect submittals for complete part numbers)
- Brackets (§)
  - ☐ B0005, Adjustable mounting bracket set, 7"-13" clearance
  - ☐ B0008 to B0011, Extended wall mounting bracket, 10", 16", 19" 23" clearance respectively
- ☐ 09-520, Vertical mounting kit (Not applicable for units with 16kW/motor, 208V & 230V, 3PH)
- Filters
- ☐ J22\*\*- †, ¼" aluminum pressed frame bank filters (\*\* = Model Length, † = # of Motors)

(§) = Shipped loose

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

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

Single Phase Electrical Data	1	nperage e Code)	Hea (W	Temp Rise				
Full Load Amp (FLA)	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		
* 11								

<sup>\* -</sup> Use corresponding letters in "Voltage Code" and "Wattage Code" column

headers to complete the model numbers.

Ampacity (MCA) = total FLA x 1.25

Amps per motor for alternate voltages: 5A @ 208-230V/1Ø

#### EXAMPLE

