# STD2 (Standard 2) Series

Unheated

Model Lengths: 36"-144"

Environmental Separation (up to 12')

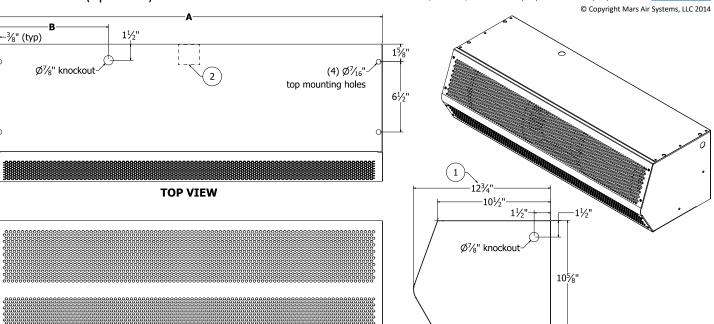
Insect Control (up to 10')

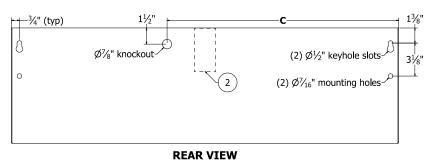


## atmosphere is everything

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**SIDE VIEW** 





**FRONT VIEW** 



-2½" nozzle depth



## Notes:

- 1. Overall depth is 17 1/4" for STD2 units with SimpleLink option.
- 2. Internal junction boxes provided for electrical wiring: (1) 2"x4" box for one-motor units, (1) 4"x4" box for two-motor units, (2) 4"x4" box for three-motor units.
- 3. Recommended service clearances are 2" to the left and right sides, 6" on top, and 18" in front of the unit.
- 4. Circuit protection (per NEC) to be installed by others.
- 5. 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.
- 6. Unit can be fastened to wall on both ends without intermediate support.
- 7. One-motor units up to 48" are shipped with Motor-Fan Assembly (MFA) factory-installed. All other models, MFAs are shipped loose to minimize freight damage.

	Mechanical Data					AMCA Certified Lab Data					
Model Number	Overall Length	Nozzle Length	Top Knockout	Rear Knockout	Motor	Weight	Max Core Velocity	Avg Velocity	Volume	Uniformity	Power Rating
	A (in)	(in)	Location B (in)	Location C (in)	(hp)	(lb)	at Nozzle (in)	(fpm)	(cfm)	(%)	(watt)
☐ STD236-1U*-OB	36	36	10 ½	21 ½	1/2	60	5960	2206	1379	84	500
☐ STD240-1U*-OB	40	40	12 ½	23 ½	1/2	65	4660	2084	1447	92	523
☐ STD242-1U*-OB	42	42	13 ½	24 ½	1/2	65	4865	1945	1418	87	506
☐ STD248-1U*-OB	48	48	16 ½	27 ½	1/2	70	4247	1730	1442	85	549
☐ STD272-2U*-OB	72	72	31 ½	40 ½	(2) 1/2	120	5960	2206	2758	84	1000
☐ STD284-2U*-OB	84	84	37 ½	46 ½	(2) 1/2	125	4865	1945	2836	87	1012
☐ STD296-2U*-OB	96	96	43 ½	52 ½	(2) ½	135	4247	1730	2884	85	1098
☐ STD2108-3U*-OB	108	108	31 ½	40 ½	(3) 1/2	175	5960	2206	4137	84	1500
☐ STD2120-3U*-OB	120	120	35 ½	44 ½	(3) 1/2	185	4660	2084	4341	92	1569
☐ STD2144-3U*-OB	144	144	43 ½	52 ½	(3) 1/2	200	4247	1730	4326	85	1647
The following model is not licensed to bear the AMCA seal											
☐ STD260-2U*-OB	60	60	22 ½	33 ½	(2) ½	90	6000	2633	2743	93	951

<sup>\* -</sup> Use corresponding letters in "Electrical Data" column headers (see page 2) to complete the model numbers.

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

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

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## **Standard Features:**

- ETL-certified to conform to UL 507 (US) and CSA 22.2 (Canada) standards, for indoor/outdoor use
- ❖ AMCA-certified to AMCA 211
- Sleek self-contained one-piece heavy-gauge corrosion-proof paint lock metal design
- Fire retardant and rust preventative electrostatic polyurethane powder coating
  - Standard color is Obsidian Black (OB)
- ❖ ½ HP continuous duty Totally Enclosed Air Over (TEAO) motors (NEMA 1)
- ❖ Adjustable air directional vanes with 40° sweep front to back
- ❖ 5-year parts warranty
- Freight included (FOB continental USA)
- \* Proudly made in the USA

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

*	Door I	imit	Switches	(8)

99-014, Combination mechanical switch, 250V, 1HP Max

99-125, Industrial surface mounted magnetic switch (controller required)

Controllers

☐ MCPA-†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 with MCP-24V required)

 $\textbf{Note:} \ \textit{Dry contact provided in panel for monitoring motor.} \ 24 \textit{Vac signal provided from panel for controlling motor.}$ 

SK-UU, SimpleLink, 115V-230V, 1PH, 2Mtr & 1HP max, Integral Control, NEMA 1, requires protection from direct elements for outdoor use (housing depth will be 17 3/8" deep)

Brackets (§)

☐ B0004, Adjustable mounting bracket set, 3½" clearance

☐ B0005, Adjustable mounting bracket set, 7"-13" clearance

☐ B0041, Transom mounting bracket set for STD2

Filters

 $\Box$  J21‡-†, ¼" aluminum pressed frame bank filters (‡ = Model Length, † = # of Motors)

Severe Duty and Finish

☐ HSG-304SS-STD, 304 Stainless steel housing construction

INS-WD-STD2, Washdown motor fan assembly, IP54

INS-XP-STD2, Explosion resistant motor fan assembly, Class 1, Division 1, Group D (TENV)

**Note:** Washdown and explosion proof units draw higher motor amperage (see electrical data table). Control panels for these units require OL/MP with higher amperage range (use MCP-MWD or MCP-MXP accessory).

(§) = Shipped loose

## Sound Levels (measured at 10' in a free field):

1 Motor Unit = 66 dBA, 2 Motor Unit = 68 dBA, 3 Motor Unit = 71 dBA, 4 Motor Unit = 73 dBA

Electrical Data		Unit Amperage (Voltage Code)					
	Singl	e Phase	Three Phase				
Full Load Amp	115V/1Ø	208-230V/1Ø	208-230V/3Ø	460V/3Ø			
(FLA)	□ (A)	□ (D)	□ (G)	☐ (H)			
☐ STD236-1U*-OB	5.1	2.5	1.8/1.6	0.8			
☐ STD240-1U*-OB	5.1	2.5	1.8/1.6	0.8			
☐ STD242-1U*-OB	5.1	2.5	1.8/1.6	0.8			
☐ STD248-1U*-OB	5.1	2.5	1.8/1.6	0.8			
☐ STD260-2U*-OB	10.2	5.0	3.6/3.2	1.6			
☐ STD272-2U*-OB	10.2	5.0	3.6/3.2	1.6			
☐ STD284-2U*-OB	10.2	5.0	3.6/3.2	1.6			
☐ STD296-2U*-OB	10.2	5.0	3.6/3.2	1.6			
☐ STD2108-3U*-OB	15.3	7.5	5.4/4.8	2.4			
☐ STD2120-3U*-OB	15.3	7.5	5.4/4.8	2.4			
☐ STD2144-3U*-OB	15.3	7.5	5.4/4.8	2.4			

– Use corresponding letters in "Voltage Code" column headers to complete the model numbers

Ampacity (MCA) = total FLA x 1.25

### Alternate voltage codes with FLA data:

·277V/1Ø/60Hz (L) – 2.7A per motor ·220V/1Ø/50Hz (U) – 2.5A per motor ·380-415V/3Ø/50Hz (W) – 1.1A per motol

### Washdown motor FLA data (INS-WD-STD2):

·115V/1Ø/60Hz (A) – 7.4A per motor ·208-230V/1Ø/60Hz (D) – 3.9/3.7A per motor ·208-230V/3Ø/60Hz (G) – 2.0/2.1A per motor ·460V/3Ø/60Hz (H) – 1.0A per motor Explosion proof motor FLA data (INS-XP-STD2):

·115V/1Ø/60Hz (A) – 7.4A per motor ·208-230V/1Ø/60Hz (D) – 3.7A per motor ·208-230V/3Ø/60Hz (G) – 1.8/1.6A per motor ·460V/3Ø/60Hz (H) – 0.8A per motor

AMCA Certified Projection Velocity						
Model	Distance from Nozzle (in)	Average Core Velocity (fpm)				
	40	1207				
	80	856				
STD236-1U*	120	710				
	160	637				
1						

# STD2 72 -2 U H - OB Series: Standard 2 LENGTH OF UNIT # OF MOTORS U = UNHEATED



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.

VOLTAGE CODE

COLOR

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NOTE: Model STD260-2 is not AMCA-certified.