

STD2 (Standard 2) Series

Hot Water/Steam Heated

Model Lengths: 36"–144"

Environmental Separation (up to 12')

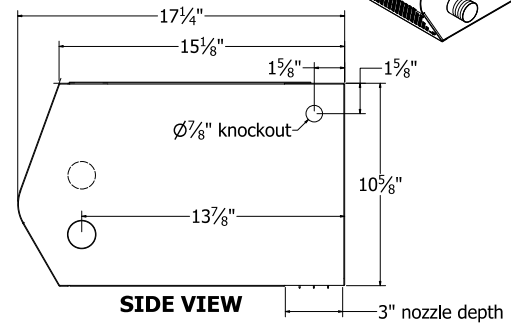
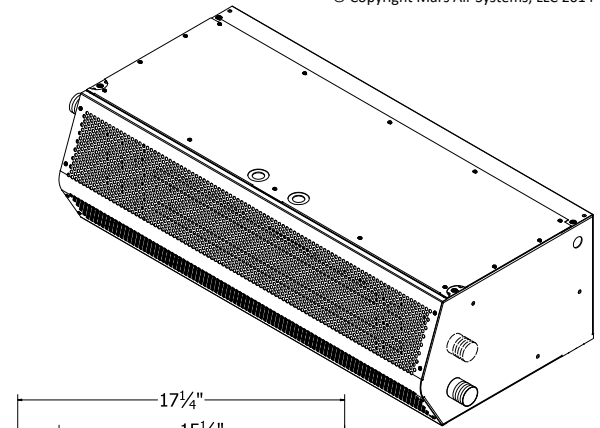
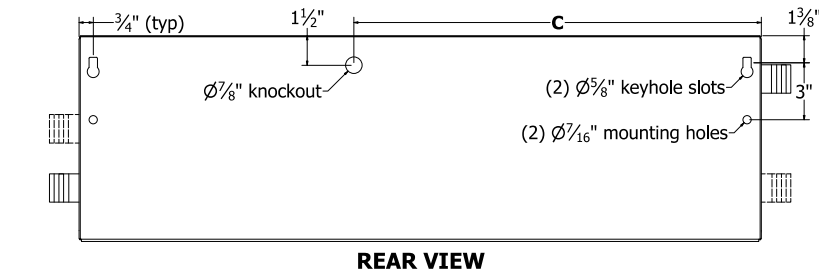
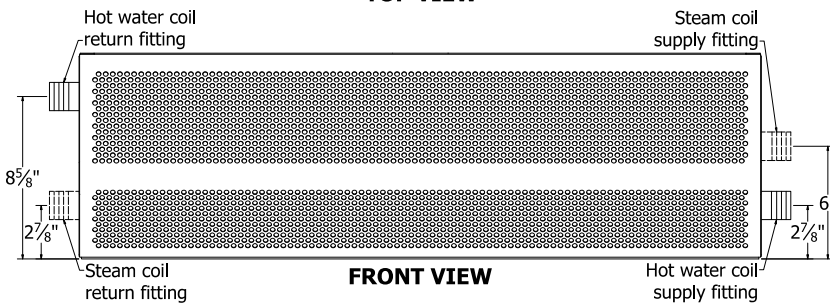
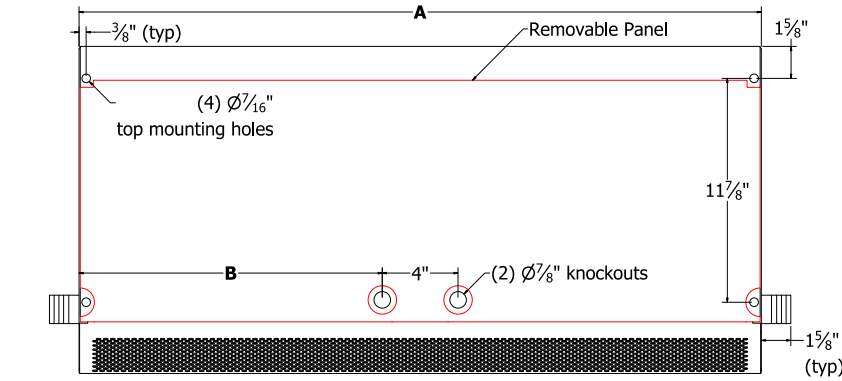
Insect Control (up to 10')



atmosphere is everything

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- Notes:**
1. 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.
 2. Recommended service clearances are 12" to the left and right sides, 24" on top, and 24" in front of the unit.
 3. Circuit protection (per NEC) to be installed by others.
 4. 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.
 5. Unit can be fastened to wall on both ends without intermediate support.

Model Number	Mechanical Data						Lab Data				
	Overall Length A (in)	Nozzle Length (in)	Top Knockout Location B (in)	Rear Knockout Location C (in)	Motor (hp)	Weight (lb)	Max Core Velocity at Nozzle (in)	Avg Velocity (fpm)	Volume (cfm)	Uniformity (%)	Power Rating (watt)
<input type="checkbox"/> STD236-1**-OB	36	36	10 ½	21 ½	½	80	5960	2206	1379	84	500
<input type="checkbox"/> STD242-1**-OB	42	42	13 ½	24 ½	½	95	4865	1945	1418	87	506
<input type="checkbox"/> STD248-1**-OB	48	48	16 ½	27 ½	½	110	4247	1730	1442	85	549
<input type="checkbox"/> STD260-2**-OB	60	60	22 ½	33 ½	(2) ½	140	6000	2633	2743	93	951
<input type="checkbox"/> STD272-2**-OB	72	72	31 ½	40 ½	(2) ½	175	5960	2206	2758	84	1000
<input type="checkbox"/> STD284-2**-OB	84	84	37 ½	46 ½	(2) ½	205	4865	1945	2836	87	1012
<input type="checkbox"/> STD296-2**-OB	96	96	43 ½	52 ½	(2) ½	225	4247	1730	2884	85	1098
<input type="checkbox"/> STD2108-3**-OB	108	108	31 ½	40 ½	(3) ½	255	5960	2206	4137	84	1500
<input type="checkbox"/> STD2120-3**-OB	120	120	35 ½	44 ½	(3) ½	275	4660	2084	4341	92	1569
<input type="checkbox"/> STD2144-3**-OB	144	144	43 ½	52 ½	(3) ½	300	4247	1730	4326	85	1647

* – 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.

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Standard Features:

- Air Curtain**
 - ❖ ETL-certified to conform to UL 1995 (US) and CSA 22.2 (Canada) standards for indoor use
 - ❖ 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
 - ❖ 18-months parts warranty
 - ❖ Freight included (FOB continental USA)
 - ❖ Proudly made in the USA

Coil Data	Hot Water				Steam		
	Coil Code (W)	GPM	MBH	Temp Rise (°F)	Coil Code (Y)	MBH	Temp Rise (°F)
<input type="checkbox"/> STD236-1**-OB	1 Row	8	37	25	1 Row	48	32
<input type="checkbox"/> STD242-1**-OB	1 Row	9	43	28	1 Row	55	36
<input type="checkbox"/> STD248-1**-OB	1 Row	8	46	30	1 Row	60	39
<input type="checkbox"/> STD260-2**-OB	1 Row	7	69	24	1 Row	96	33
<input type="checkbox"/> STD272-2**-OB	1 Row	7	77	26	1 Row	108	37
<input type="checkbox"/> STD284-2**-OB	1 Row	9	88	29	1 Row	120	39
<input type="checkbox"/> STD296-2**-OB	1 Row	9	95	31	1 Row	131	42
<input type="checkbox"/> STD2108-3**-OB	1 Row	8	116	26	1 Row	168	38
<input type="checkbox"/> STD2120-3**-OB	1 Row	10	129	28	1 Row	183	39
<input type="checkbox"/> STD2144-3**-OB	1 Row	9	138	30	1 Row	201	43

* - Use corresponding letters in "Coil Code" and "Voltage Code" column headers to complete the model numbers.

EAT: 70 F, EWT: 200 F, Steam pressure: 5 PSI

Hot Water and Steam Coils

- ❖ Coil casings shall not be less than 16-gauge galvanized steel with tube holes formed with extruded collars
- ❖ Fins are die formed 0.006" aluminum (1 row – 10 FPI, 2 row – 8 FPI)
- ❖ Coil tubes constructed of heavy wall, 5/8" OD seamless copper (Steam – 0.035" & Hot Water – 0.025")
- ❖ Coil tubes arranged in a staggered pattern and mechanically expanded into fins to ensure a uniform pressure bond
- ❖ Manifolds shall be of heavy seamless copper construction
- ❖ All joints shall be brazed with high temperature silver brazing alloy (Steam – 7% & Hot Water – 3%), max steam operating pressure: 30 PSI
- ❖ Fittings shall be of wrought copper or similar construction such that the entire fluid circuit shall be of compatible nonferrous materials
- ❖ Manifold shall be fitted with 1/4" vent or drain fittings
- ❖ Supply fitting is on the right side of coil. Return fitting is on the left side
 - Same end connections available (see Coil Options below)

Electrical Data Full Load Amp (FLA)	Unit Voltage (Voltage Code)			
	Single Phase		Three Phase	
	115V/1Ø <input type="checkbox"/> (A)	208-230V/1Ø <input type="checkbox"/> (D)	208-230V/3Ø <input type="checkbox"/> (G)	460V/3Ø <input type="checkbox"/> (H)
<input type="checkbox"/> STD236-1**-OB	5.1	2.5	1.8/1.6	0.8
<input type="checkbox"/> STD242-1**-OB	5.1	2.5	1.8/1.6	0.8
<input type="checkbox"/> STD248-1**-OB	5.1	2.5	1.8/1.6	0.8
<input type="checkbox"/> STD260-2**-OB	10.2	5.0	3.6/3.2	1.6
<input type="checkbox"/> STD272-2**-OB	10.2	5.0	3.6/3.2	1.6
<input type="checkbox"/> STD284-2**-OB	10.2	5.0	3.6/3.2	1.6
<input type="checkbox"/> STD296-2**-OB	10.2	5.0	3.6/3.2	1.6
<input type="checkbox"/> STD2108-3**-OB	15.3	7.5	5.4/4.8	2.4
<input type="checkbox"/> STD2120-3**-OB	15.3	7.5	5.4/4.8	2.4
<input type="checkbox"/> STD2144-3**-OB	15.3	7.5	5.4/4.8	2.4

* - Use corresponding letters in "Coil Code" and "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 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

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

Mars Recommended Accessories (see catalog for complete listing):

- ❖ **Door Limit Switches** (\$)
 - 99-014, Combination mechanical switch, 250V, 1HP Max
- ❖ **Controllers**
 - MCPB-†V*, [Motor Control Panel](#), 120V control voltage († = # of Motors, * = Voltage Code) (\$)
 - MCP-TD, Adjustable time delay, 1sec-100hr (panel required)
 - MCP-HD, Heat on Demand, Hot water/steam (thermostat included)
 - MCP-24V, Low voltage control option (panel required)
 - BMS-306, BMS for monitor and control (panel with MCP-24V required)

Note: Dry contact provided in panel for monitoring motor. 24Vac signal provided from panel for controlling motor.

- ❖ **Thermostats** (\$)
 - 99-063, Thermostat, line voltage up to 250V max, single stage, single pole

- ❖ **Brackets** (\$)
 - B0004, Adjustable mounting bracket set, 3½" clearance
 - B0041, Transom mounting bracket set for STD2

- ❖ **Severe Duty and Finish**
 - 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).

- ❖ **Coil Options**
 - HSG-COIL-LH, Accessory, Left Hand HW/S Coil Connection Adder
 - HSG-COIL-RH, Accessory, Right Hand HW/S Coil Connection Adder

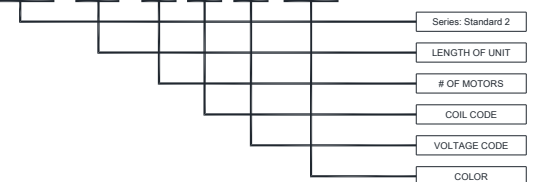
(S) = Shipped loose

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

EXAMPLE

STD2144-3 W H -OB



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