

# PH8 (Phantom 8) Series

Electric heated

Model Lengths: 36"–144"

Environmental Separation (up to 8')

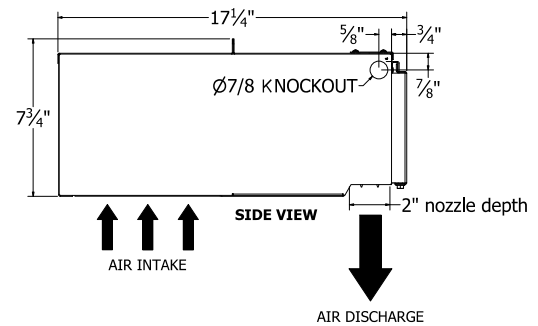
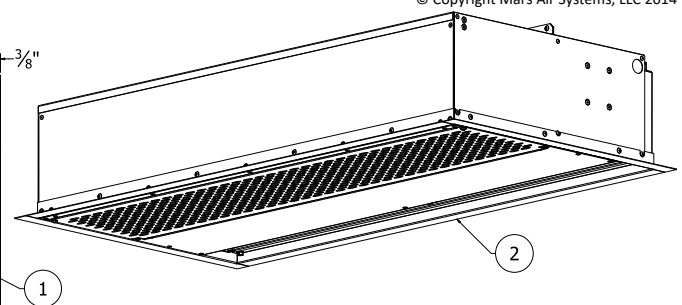
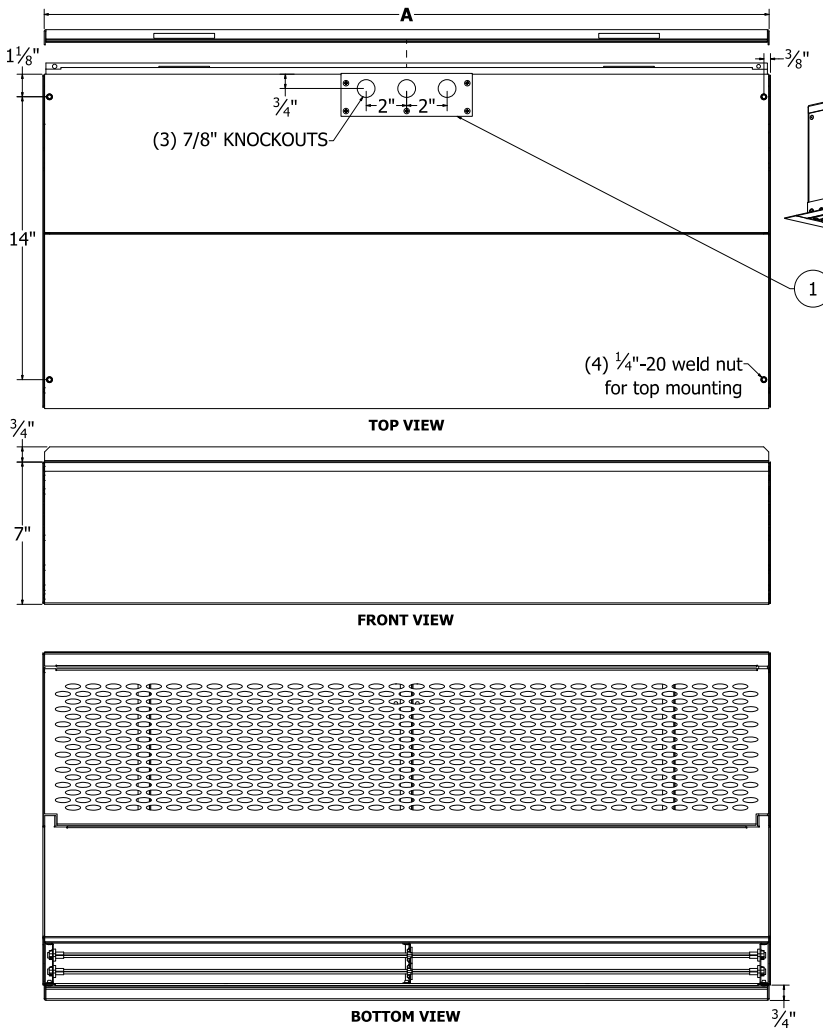
Insect Control (up to 7')



atmosphere is everything

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## Notes:

1. Internal junction box (underneath removable access cover) provided for electrical wiring.
2. (4) 1" wide matching trim pieces are included and shipped loose for optional installation
3. Recommended service clearances are 2" to the left and right sides, 2" on top, and 2" 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. Units up to 72" in width can be fastened to wall on both ends without intermediate support. Longer units are double units joined together and must be supported in the center.



Model Number	Mechanical Data					AMCA Certified Lab Data				
	Overall Length A (in)	Nozzle Length (in)	Rear Mounting Distance B (in)	Motor (hp)	Weight (lb)	Max Core Velocity at Nozzle (fpm)	Avg Velocity (fpm)	Volume (cfm)	Uniformity (%)	Power Rating (watt)
<input type="checkbox"/> PH836-1E**-PW	36	36	16	1/6	50	2133	1064	515	59	124
<input type="checkbox"/> PH842-1E**-PW	42	42	19	1/6	56	1951	1102	626	54	132
<input type="checkbox"/> PH848-1E**-PW	48	48	22	1/6	62	2005	1175	765	62	142
<input type="checkbox"/> PH860-1E**-PW	60	60	28	1/6	72	2299	1233	1009	64	172
<input type="checkbox"/> PH872-2E**-PW	72	72	34	1/6	82	2304	1328	1307	65	186
<input type="checkbox"/> PH884-2E**-PW	84	84	19	(2) 1/6	112	1951	1102	1252	54	264
<input type="checkbox"/> PH896-2E**-PW	96	96	22	(2) 1/6	123	2005	1175	1530	62	284
<input type="checkbox"/> PH8108-2E**-PW	108	108	25	(2) 1/6	133	2299	1207	1774	64	314
<input type="checkbox"/> PH8120-2E**-PW	120	120	28	(2) 1/6	144	2299	1233	2018	64	344
<input type="checkbox"/> PH8144-2E**-PW	144	144	34	(2) 1/6	164	2304	1328	2614	65	372

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

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

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## 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 (includes performance testing per AMCA 220)
  - Certified models are approved for use as alternate to vestibules (per ASHRAE 90.1, IECC, and IgCC)
- ❖ Sleek aluminum shell over heavy gauge steel core
- ❖ Fire retardant and rust preventative electrostatic polyurethane powder coating
  - Standard color is Pearl White (PW)
- ❖ 1/6 HP continuous duty motors (NEMA 1)
- ❖ Variable speed controller
- ❖ Adjustable air directional vane with 40° sweep front to back
- ❖ Removable wall mounting bracket for easy installation
- ❖ 18 months 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
- ❖ Automatic and 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 top access panels
- ❖ 24-volt thermostat with "heat/off/fan" capability is shipped loose for field installation
  - Not applicable for units with SimpleLink

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

- ❖ [Door Limit Switches](#) (§)
  - ☐ 99-014, Combination mechanical switch, 250V, 1HP Max
- ❖ [Controllers](#)
  - ☐ SK-EU, [SimpleLink](#), 208-575V (460-575V, 3PH needs additional 115-230V, 1PH power), Integral Control, NEMA1
- ❖ [Factory Mounted Control Options](#)
  - ☐ INS-TD, Adjustable time delay (1 sec to 17 min)
  - ☐ INS-HD, Heat on demand
  - ☐ BMS-300, BMS for monitor and control

*Note: dry contact provided in panel for monitoring motor and heater. 24Vac signal provided from panel for controlling motor and heater*

(§) = Shipped loose

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

25-36" Units = 49 dBA, 42" Unit = 50 dBA, 48" Unit = 52 dBA, 60-96" Units = 53 dBA, 108-144" Unit = 54 dBA

Three Phase Electrical Data Full Load Amp (FLA)	Unit Voltage (Voltage Code)				Heater Kilowatts (Wattage Code)				Temp Rise
	208V/3Ø	230V/3Ø	460V/3Ø	575V/3Ø†	(G)	(I)	(M)	(O)	
	□ (E)	□ (F)	□ (O)†	□ (Q)†					
<input type="checkbox"/> PH836-1E**-PW	29.2	27.2	13	11	10	-	-	-	36
<input type="checkbox"/> PH842-1E**-PW	29.2	27.2	13	11	10	-	-	-	31
<input type="checkbox"/> PH848-1E**-PW	38.2	34.2	17	14	-	13	-	-	35
<input type="checkbox"/> PH860-1E**-PW	38.2	34.2	17	14	-	13	-	-	28
<input type="checkbox"/> PH872-1E**-PW	38.2	34.2	17	14	-	13	-	-	23
<input type="checkbox"/> PH884-2E**-PW	58.4	53.4	26	21	-	-	20	-	31
<input type="checkbox"/> PH896-2E**-PW	75.4	68.4	33	27	-	-	-	26	35
<input type="checkbox"/> PH8108-2E**-PW	75.4	68.4	33	27	-	-	-	26	31
<input type="checkbox"/> PH8120-2E**-PW	75.4	68.4	33	27	-	-	-	26	28
<input type="checkbox"/> PH8144-2E**-PW	75.4	68.4	33	27	-	-	-	26	23

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

† - Models with 575V/3Ø electric heater are not ETL-certified for UL/CSA safety standards.

† - For units with 460V/3Ø and 575V/3Ø power, an additional 115V/1Ø power supply is required. (Motor amps not included in given FLA.)

Ampacity (MCA) = total FLA x 1.25

Amps per motor: 2.4A @ 115V; 1.2A @ 208-230V/1Ø

Single Phase Electrical Data Full Load Amp (FLA)	Unit Amperage (Voltage Code)		Heater Kilowatts (Wattage Code)			Temp Rise
	208V/1Ø	230V/1Ø	(C)	(D)	(F)	
	□ (B)	□ (C)				
<input type="checkbox"/> PH836-1E**-PW	31.2	28.2	6.1	-	-	22
<input type="checkbox"/> PH842-1E**-PW	40.2	36.2	-	8	-	25
<input type="checkbox"/> PH848-1E**-PW	40.2	36.2	-	8	-	22
<input type="checkbox"/> PH860-1E**-PW	47.2	43.2	-	-	9.5	21
<input type="checkbox"/> PH872-1E**-PW	47.2	43.2	-	-	9.5	17
<input type="checkbox"/> PH884-2E**-PW	-	-	-	-	-	-
<input type="checkbox"/> PH896-2E**-PW	-	-	-	-	-	-
<input type="checkbox"/> PH8108-2E**-PW	-	-	-	-	-	-
<input type="checkbox"/> PH8120-2E**-PW	-	-	-	-	-	-
<input type="checkbox"/> PH8144-2E**-PW	-	-	-	-	-	-

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

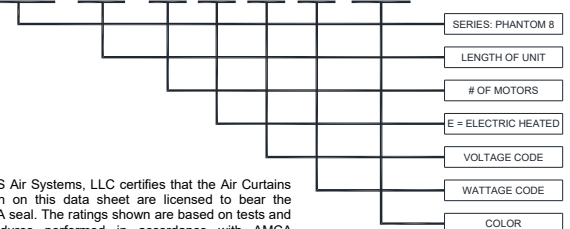
Ampacity (MCA) = total FLA x 1.25

Amps per motor (included in values above): 1.2A @ 208-230V/1Ø

AMCA Certified Projection Velocity		
Model	Distance from Nozzle (in)	Average Core Velocity (fpm)
PH836-1E**	40	721
	80	518
	120	442
	160	384

## EXAMPLE

**PH8 36 - 1 E O G - PW**



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.

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