PH8 (Phantom 8) Series

Electric heated

Model Lengths: 36"-144"

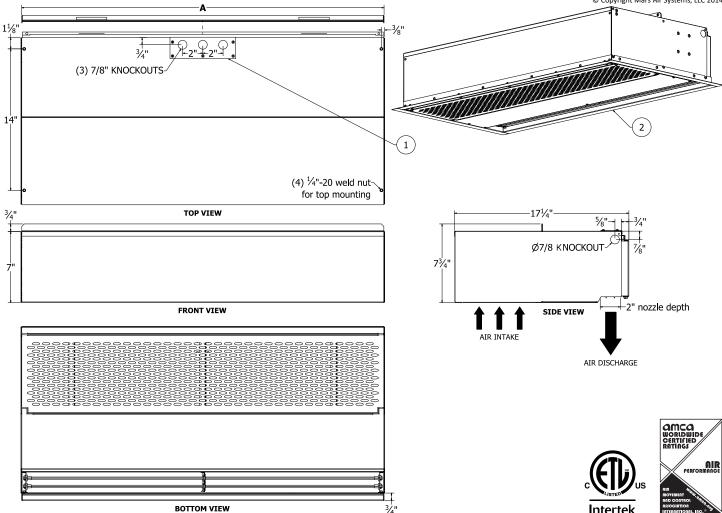
Environmental Separation (up to 8')

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.

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

^{* –} Use corresponding letters in "Electrical Data" column headers (see page 2) to complete the model numbers. Note: above data is for 60 Hz at 1550 RPM. For 50 Hz, RPM is 1300 with a 17% reduction in performance.

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.

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

PH8 (Phantom 8) Series

Electric heated

Model Lengths: 36"-144"

Environmental Separation (up to 8')

Insect Control (up to 7')



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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
 - 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

						_			
Three Phase Electrical Data	Unit Voltage (Voltage Code)					Heater Kilowatts (Wattage Code)			
Full Load Amp (FLA)	208V/3Ø □ (E)	230V/3Ø □ (F)	460V/3Ø □ (O)†	575V/3؇ □ (Q)†	(G)	(1)	(M)	(0)	°F
☐ PH825-1E**-PW	-	-	-		-	-	-		-
☐ PH836-1E**-PW	29.2	27.2	13	11	10	-	-	-	36
☐ PH842-1E**-PW	29.2	27.2	13	11	10	-	-	-	31
☐ PH848-1E**-PW	38.2	34.2	17	14	-	13	-	-	35
☐ PH860-1E**-PW	38.2	34.2	17	14	-	13	-	-	28
☐ PH872-1E**-PW	38.2	34.2	17	14	-	13	-	-	23
☐ PH884-2E**-PW	58.4	53.4	26	21	-	-	20	-	31
☐ PH896-2E**-PW	75.4	68.4	33	27	-	-	-	26	35
☐ PH8108-2E**-PW	75.4	68.4	33	27	-	-	-	26	31
☐ PH8120-2E**-PW	75.4	68.4	33	27	-	-	-	26	28
☐ 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
- ‡ Models with 575V/3Ø electric heater are not ETL-certified for UL/CSA safety standards.
- \dagger 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

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

Single Phase Electrical Data	Unit An (Voltag	Heat (Wa	Temp Rise			
Full Load Amp (FLA)	208V/1Ø □ (B)	230V/1Ø	(C)	(D)	(F)	°F
☐ PH825-1E**-PW	31.2	28.2	6.1	ı	-	31
☐ PH836-1E**-PW	31.2	28.2	6.1	ı	-	22
☐ PH842-1E**-PW	40.2	36.2	ı	8	-	25
☐ PH848-1E**-PW	40.2	36.2	-	8	-	22
☐ PH860-1E**-PW	47.2	43.2	-	-	9.5	21
☐ PH872-1E**-PW	47.2	43.2	-	-	9.5	17
☐ PH884-2E**-PW	-	-	-	-	-	-
☐ PH896-2E**-PW	-	-	-	-	-	-
☐ PH8108-2E**-PW	-	-	-	-	-	-
☐ PH8120-2E**-PW	-	-	-	-	-	-
☐ 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/10

AMCA Certified Projection Velocity								
Model	Distance from	Average Core						
iviodei	Nozzle (in)	Velocity (fpm)						
	40	721						
PH836-1E**	80	518						
NU930-1E.	120	442						
	160	384						

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

PH8	<u>3</u>	<u>6</u>	<u>1 1</u>	<u> </u>	<u> </u>	<u> </u>	W	
								SERIES: PHANTOM 8
								LENGTH OF UNIT
								# OF MOTORS E = ELECTRIC HEATED
								VOLTAGE CODE





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.



WATTAGE CODE