



atmosphere is everything

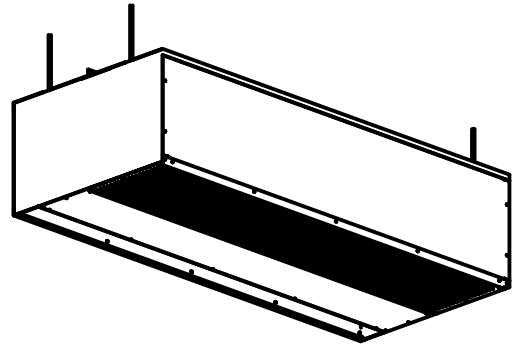
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PROJECT		OPTIONS/ITEMS		
TITLE				
COMMENTS		DATE 4/17/15	PAGE	
		REV. NO		
MODEL NO. PH10 Series	DRAWING NO PH10ELC-F	DRAWN BY TVN	CHECKED BY	FILE NAME

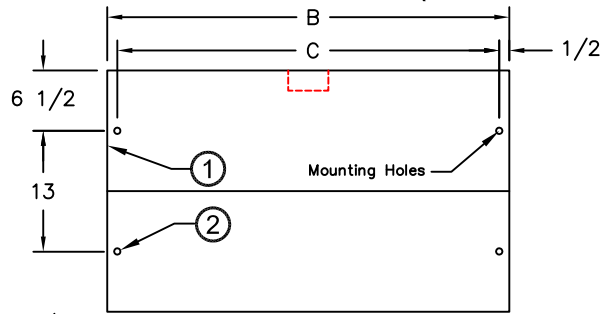
Electric Heated Drawing

PH10

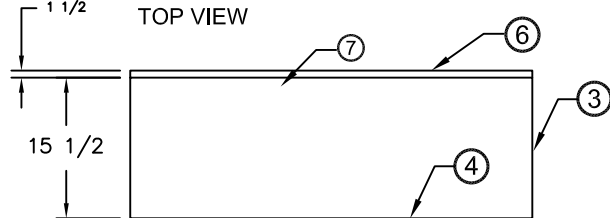
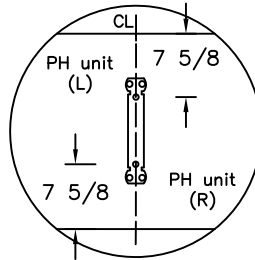
(Phantom 10 Series)



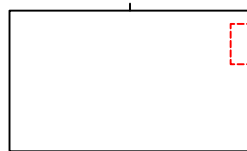
For tandem mounted units, center support required. The (2) center mounting holes are centerline of unit and 7 5/8" from front and rear of unit.



TOP VIEW



FRONT VIEW



SIDE VIEW

↑
**INTAKE
AIR**

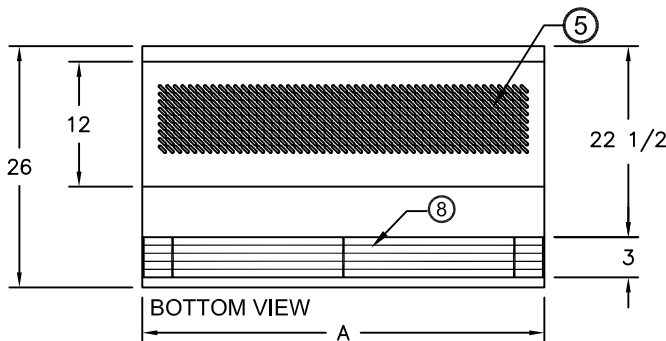
↓
**DISCHARGE
AIR**



Remote Thermostat

(9)

Recommended Accessories (11)



BOTTOM VIEW



Door Limit Switches

*- Use corresponding letters in "Voltage Code" then "Wattage Code" columns to complete the model numbers.

Note: MARS 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.

Notes:

1. This product is designed to meet the National Electric Code (NEC) and is ETL listed for the US and Canada (UL 2021 and CSA 22.2).
2. (4) 3/8" threaded rod required for overhead installation.
3. All units have a self contained one piece cabinet, fire retardant with brushed aluminum housing. The exposed bottom surface is protected with baked on Pearl White color, rust preventative electrostatic polyurethane powder coating.
4. Four (4) 1" x 1" pearl white trim pieces included to match air curatins and ceilings. (Does not increase unite size)
5. Cleanable polyester filters included as standard. Optional aluminum or throwaway pleated filters available.
6. Cabinet has sufficient strength for fastening to wall on both ends without intermediate support. Tandem mounted units longer than 72" require center support.
7. Control panel is pre-wired and pre-mounted inside the cabinet. Optional remote mounted available.
8. Unit is to be installed such that air flow is unobstructed. Unit has a 3" air discharge nozzle containing adjustable air directional vanes with 40° sweep front to back.
9. Wall mounted 24 volt thermostat with remote "heat/off/fan" switch is shipped loose and field installed by others. Terminal block provided inside control panel.
10. Circuit protection as per NEC by others.
11. Optional door limit switch and mounting brackets are field installed and/or wired by others. The door limit switch is to be mounted such that the air curtain turns on as door begins to open. To prevent unit damage, the mounting brackets must be installed such that the bottom of the air curtain is not below the door header.

MODEL NUMBER	NOZZLE WIDTH A (in)	OVERALL LENGTH B (in)	MOUNTING CENTER C (in)
PH1036-1E**-PW	36	36 1/8	35 1/8
PH1042-1E**-PW	42	42 1/8	41 1/8
PH1048-1E**-PW	48	48 1/8	47 1/8
PH1060-2E**-PW	60	60 1/8	59 1/8
PH1072-2E**-PW	72	72 1/8	71 1/8
PH1084-2E**-PW	84	84 1/4	83 1/4
PH1096-2E**-PW	96	96 1/4	95 1/4
PH10108-3E**-PW	108	108 1/4	107 1/4
PH10120-4E**-PW	120	120 1/4	119 1/4
PH10144-4E**-PW	144	144 1/4	143 1/4

PH10 (Phantom 10) Series

Electric Heated

Model Lengths 36" – 144"



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Electric Heated Data Sheet

Applications: Environmental Separation up to 12' and Insect Control up to 10'

PH10 (Phantom 10)	Mechanical Data						AMCA Certified Lab Data				
Model Number	Nozzle Length (in)	Length (in)	Depth (in)	Height (in)	Motor (hp)	Weight (lbs)	Max Core Velocity at Nozzle (fpm)	Avg Velocity (fpm)	Volume (cfm)	Uniformity (%)	Power Rating (watts)
PH1036-1E**-PW	36	36	26	17	1/2	65	3500	1623	1217	86	455
PH1042-1E**-PW	42	42	26	17	1/2	70	4500	1643	1437	82	462
PH1048-1E**-PW	48	48	26	17	1/2	75	3400	1383	1383	93	467
PH1060-2E**-PW	60	60	26	17	Two 1/2	115	3750	1678	2097	93	898
PH1072-2E**-PW	72	72	26	17	Two 1/2	120	3500	1623	2434	86	910
PH1084-2E**-PW	84	84	26	17	Two 1/2	140	4500	1643	2874	82	924
PH1096-2E**-PW	96	96	26	17	Two 1/2	145	3400	1383	2766	93	934
PH10108-3E**-PW	108	108	26	17	Three 1/2	195	3500	1623	3651	86	1365
PH10120-4E**-PW	120	120	26	17	Four 1/2	230	3750	1678	4194	93	1796
PH10144-4E**-PW	144	144	26	17	Four 1/2	260	3500	1623	4868	86	1820

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

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

1. The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only.
2. Rated data shown are only for electric heated units, as shown.

Features:

- Air Curtain
- ❖ 1/2 HP Continuous Duty TEAO Motors
- ❖ Recessed mounted in ceiling for invisible coverage
- ❖ ETL Certified to conform to UL 2021 (US) and CSA 22.2 (Canada) Standards
- ❖ (4) 3/8" top mounting holes provided
- ❖ Utilized in premium design concepts
- ❖ Durable aluminum construction
- ❖ Cabinet has sufficient strength for fastening to wall on both ends without intermediate support. (Tandem mounted units longer than 72" require center support)
- ❖ Cleanable polyester filters included as standard
- ❖ Adjustable air directional vanes with 40° sweep front to back
- ❖ Standard color is Pearl White
- ❖ Rust preventative electrostatic polyurethane powder coating
- ❖ 18-month parts warranty
- ❖ Freight Included (FOB Continental USA)
- ❖ Proudly Made in the USA

Electric Heater Coil and Wiring

- ❖ Coils are an open type for rapid temperature rise to be located in the air curtain's intake directly in the air stream
- ❖ Manual reset thermal overload protection provided
- ❖ Controls internally mounted, prewired ready for power connection and accessible through the bottom intake or top access panels
- ❖ Control voltage is 24 volts
- ❖ A wall mounted 24-volt thermostat is included (field wired and installed by others)

Mars Recommended Accessories (See Submittals for additional details):

- ❖ Door Limit Switches
 - o 99-018, Commercial surface mounted magnetic switch, 24v
- ❖ Controllers
 - o SK-EU, SimpleLink, 208V-575V, (460-575V, 3PH needs additional 115-230V, 1PH power), Integral Control, Nema1
- ❖ Factory Mounted Options
 - o INS-TD, Adjustable time delay (1 sec to 17 min)
 - o INS-HD, Heat on demand
 - o INS-2S, Unit mounted 2 speed switch (460-575V, 3PH needs additional 115-230V, 1PH power)
 - o 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.
- ❖ Disconnects
 - o 99-122 & 99-123, Non-Fused Disconnect, remote mounted, 600V, 32A & 80A respectively, 3 Pole, IP65
 - o 99-***, Fused Disconnect, remote mounted, 240V-600V, 30A-100A, 3 Pole, Nema3R (See disconnect submittals for complete part numbers)

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

- ❖ 1 Motor Unit = 66 dBA; 2 Motor Unit = 68 dBA; 3 Motor Unit = 71 dBA; 4 Motor Unit = 73 dBA

Projection Velocity		
Model	Distance from nozzle (in)	Avg. Core Velocity (FPM)
PH1036-1E	40	961
	80	840
	120	772
	160	714



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.

NOTE: Models PH1060-2 & PH10120-4 are not AMCA Certified.

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.

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VM, 10/02/20

Three Phase Electrical Data (FLA)	Unit Voltage (Voltage Code) Amperage				Heater kilowatts (Wattage Code) kW				Temp Rise °F
	208v/3Ø (E)	230v/3Ø (F)	460v/3Ø (H)	575v/3Ø (I)	(H)	(N)	(S)	(T)	
PH1036-1E**-PW	36.0	33.0	16.0	13.0	12	-	-	-	27
PH1042-1E**-PW	36.0	33.0	16.0	13.0	12	-	-	-	27
PH1048-1E**-PW	36.0	33.0	16.0	13.0	12	-	-	-	26
PH1060-2E**-PW	72.0	66.0	32.0	26.0	-	24	-	-	28
PH1072-2E**-PW	72.0	66.0	32.0	26.0	-	24	-	-	27
PH1084-2E**-PW	72.0	66.0	32.0	26.0	-	24	-	-	27
PH1096-2E**-PW	72.0	66.0	32.0	26.0	-	24	-	-	26
PH10108-3E**-PW	108.0	98.0	48.0	39.0	-	-	36	-	27
PH10120-4E**-PW	144.0	131.0	64.0	51.0	-	-	-	48	26
PH10144-4E**-PW	144.0	131.0	64.0	51.0	-	-	-	48	26

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

Note: For ampacity, multiply FLA X 1.25

Motor amps per motor: 5.1A @ 115v; 2.5A @ 208/230v/1Ø; 0.8A @ 460v/3Ø; 0.7A @ 575v/3Ø.

Single Phase Electrical Data (FLA)	Unit Voltage (Voltage Code) Amperage		Heater kilowatts (Wattage Code) kW				Temp Rise °F
	208v/1Ø (B)	230v/1Ø (C)	(B)	(H)	(K)	(N)	
PH1036-1E**-PW	32.0	29.0	6	-	-	-	14
PH1042-1E**-PW	32.0	29.0	6	-	-	-	13
PH1048-1E**-PW	32.0	29.0	6	-	-	-	13
PH1060-2E**-PW	63.0	58.0	-	12	-	-	14
PH1072-2E**-PW	63.0	58.0	-	12	-	-	14
PH1084-2E**-PW	63.0	58.0	-	12	-	-	13
PH1096-2E**-PW	63.0	58.0	-	12	-	-	13
PH10108-3E**-PW	95.0	86.0	-	-	18	-	14
PH10120-4E**-PW	126.0	115.0	-	-	-	24	13
PH10144-4E**-PW	126.0	115.0	-	-	-	24	13

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

For ampacity, multiply FLA X 1.25

Motor amps per motor: 2.5A @ 208/230v/1Ø

EXAMPLE
PH10 72 - 2 E H N - PW

