



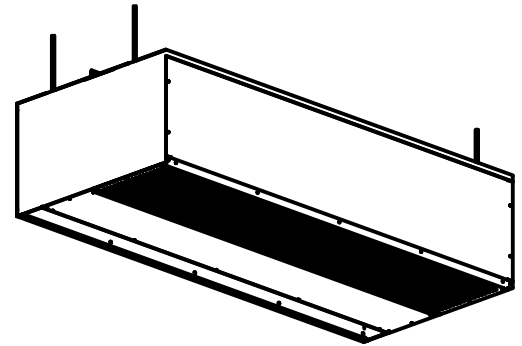
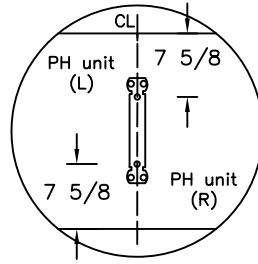
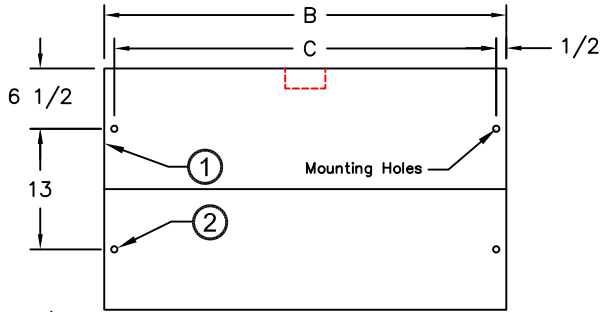
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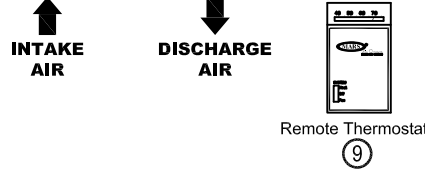
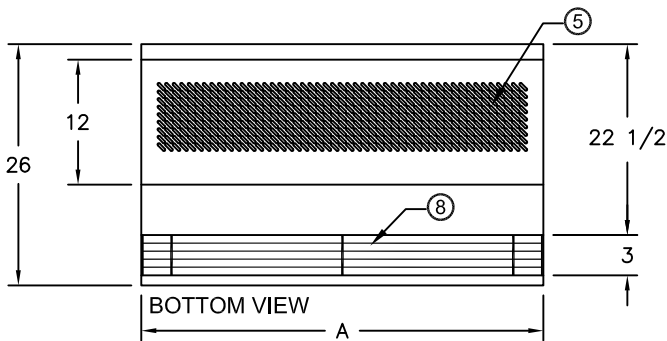
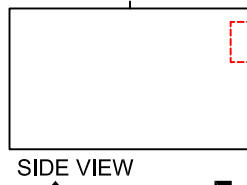
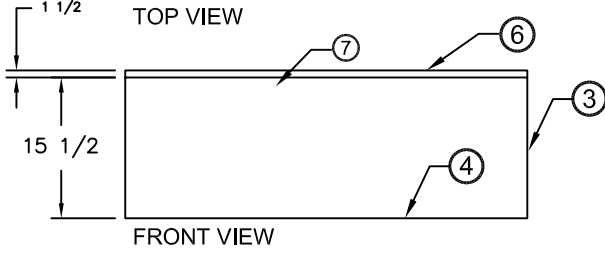
PROJECT		OPTIONS/ITEMS	
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MODEL NO. PH12 Series	DRAWING NO PH12ELC-F	DRAWN BY NT	CHECKED BY
		FILE NAME	

Electric Heated Drawing

PH12 (Phantom 12 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.



Recommended Accessories (11)



*- 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:

- 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).
- (4) 3/8" threaded rod required for overhead installation.
- 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.
- Four (4) pearl white trim pieces included to match air curtains and ceilings. (Does not increase unit size)
- Cleanable polyester filters included as standard. Optional aluminum or throwaway pleated filters available.
- Cabinet has sufficient strength for fastening to wall on both ends without intermediate support. Tandem mounted units longer than 72" require center support.
- Control panel is pre-wired and pre-mounted inside the cabinet. Optional remote mounted available.
- 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.
- Wall mounted 24 volt thermostat with remote "heat/off/fan" switch is shipped loose and field installed. Terminal block provided inside control panel.
- Circuit protection as per NEC by others.
- Optional remote 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)
PH1248-1E**-PW	48	48 1/8	47 1/8
PH1260-1E**-PW	60	60 1/8	59 1/8
PH1272-2E**-PW	72	72 1/8	71 1/8
PH1284-2E**-PW	84	84 1/4	83 1/4
PH1296-2E**-PW	96	96 1/4	95 1/4
PH12120-2E**-PW	120	120 1/4	119 1/4
PH12144-4E**-PW	144	144 1/4	143 1/4

PH12 (Phantom 12) Series

Electric Heated

Model Lengths 36" – 144"



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Electric Heated Data Sheet

Applications: Environmental Separation: Max Height 16' / Insect Control: Max Height 14'

PH12 (Phantom 12)	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)
	PH1248-1E**-PW	48	48	26	17	1	100	5203	3164	2373	91	1190
	PH1260-1E**-PW	60	60	26	17	1	105	5055	3539	2654	90	1290
	PH1272-2E**-PW	72	72	26	17	Two 1	170	5500	2789	4184	80	2180
	PH1284-2E**-PW	84	84	26	17	Two 1	190	5250	3089	4634	89	2190
	PH1296-2E**-PW	96	96	26	17	Two 1	195	5203	3164	4746	91	2380
	PH12120-2E**-PW	120	120	26	17	Two 1	210	5055	3539	5308	90	2580
	PH12144-4E**-PW	144	144	26	17	Four 1	340	5500	2789	8368	80	4360

* - Use corresponding letters in "Electrical Data" & "Heater Wattage Data" columns 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 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
- ❖ A heat/off/fan switch is unit mounted at the bottom and the 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 = 70 dBA; 2 Motor Unit = 73 dBA; 3 & 4 Motor Unit = 75 dBA

Projection Velocity		
Model	Distance from nozzle (in)	Avg. Core Velocity (FPM)
PH1236-1E*	40	1494
	80	1053
	120	986
	160	953
	200	948

Three Phase Electrical Data (FLA)	Unit Voltage (Voltage Code) Amperage				Heater Kilowatts (Wattage Code) kW			Temp Rise
	208v/3Ø (E)	230v/3Ø (F)	460v/3Ø (H)	575v/3Ø (I)	(H)	(N)	(T)	°F
PH1248-1E**-PW	37	34	17	14	12	-	-	15
PH1260-1E**-PW	37	34	17	14	12	-	-	14
PH1272-2E**-PW	74	67	34	27	-	24	-	16
PH1284-2E**-PW	74	67	34	27	-	24	-	15
PH1296-2E**-PW	74	67	34	27	-	24	-	15
PH12120-2E**-PW	74	67	34	27	-	24	-	14
PH12144-4E**-PW	147	134	67	54	-	-	48	16

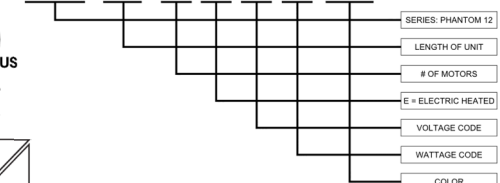
* - Use corresponding letters in "Voltage Code" and "Wattage Code" to complete the model numbers. For ampacity, multiply FLA X 1.25
Motor amps per motor: 9A @ 115v; 5A @ 208v/230v/1Ø; 3.3A @ 208v/3Ø; 3.2A @ 230v/3Ø; 1.6A @ 460v; 1.3A @ 575v/3Ø

Single Phase Electrical Data (FLA)	Unit Voltage (Voltage Code) Amperage		Heater kilowatts (Wattage Code) kW			Temp Rise
	208v/1Ø (B)	230v/1Ø (C)	(B)	(H)	(N)	°F
PH1248-1E**-PW	34	32	6	-	-	7
PH1260-1E**-PW	34	32	6	-	-	7
PH1272-2E**-PW	68	63	-	12	-	8
PH1284-2E**-PW	68	63	-	12	-	8
PH1296-2E**-PW	68	63	-	12	-	7
PH12120-2E**-PW	68	63	-	12	-	7
PH12144-4E**-PW	136	125	-	-	24	8

* - 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: 5A @ 208/230v/1Ø

EXAMPLE

PH12 72 - 2 E H N - PW



Intertek



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 PH1260-1 & PH12120-2 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.