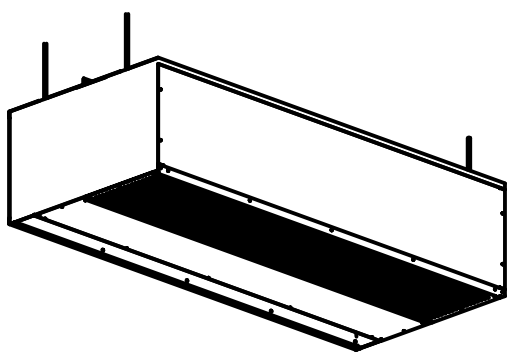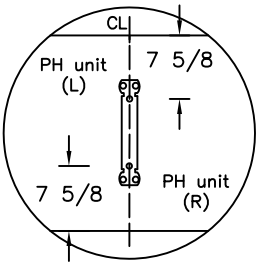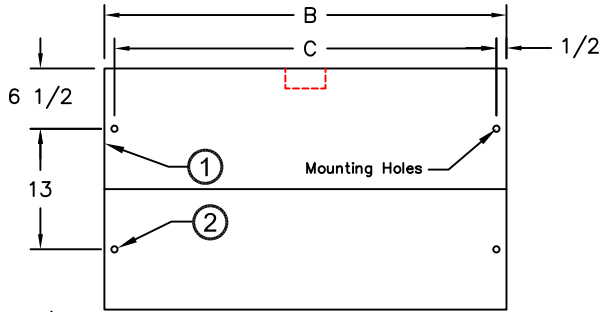# mars
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TEL:(310) 532-1555 • (800) 421-1266 • FAX:(310) 324-3030
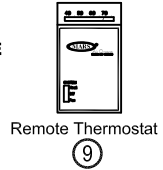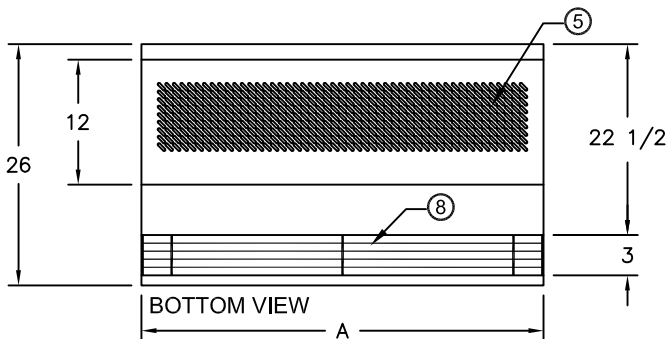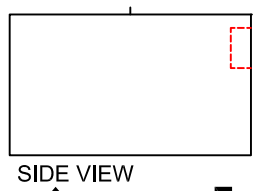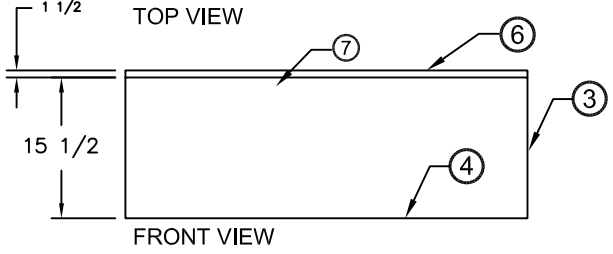Web Site: www.marsalr.com • E-mall:Info@marsalr.com

PROJECT		OPTIONS/ITEMS	
TITLE			
COMMENTS		DATE 9/21/15	PAGE
		REV. NO	

| MODEL NO. PH12 Series | DRAWING NO PH12ELC—F | DRAWN BY NT | CHECKED BY | FILE NAME |

Electric Heated Drawing

PH12
(Phantom 12 Series)

B
C
1/2
6 1/2
13
1 1/2

Mounting Holes
TOP VIEW

CL
7 5/8
PH unit (L)
7 5/8
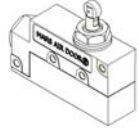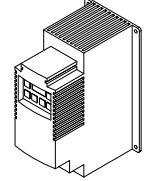PH unit (R)

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.

15 1/2

FRONT VIEW

SIDE VIEW

INTAKE AIR

DISCHARGE AIR

ETL LISTED c us
Intertek

Remote Thermostat ⑨

12
26
22 1/2
3
A
BOTTOM VIEW

Recommended Accessories ⑪

Variable Frequency Drive

Remote Control Panel ⑩

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.

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

Notes:

1. This product is designed to meet the National Electric Code (NEC) and is ETL listed for the US and Canada (UL 1995 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. Pearl White trim pieces included to match air curtains and ceilings.

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. Terminal block provided inside control panel.

10. Circuit protection as per NEC by others.

11. Optional remote control panel, 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.

PH12 (Phantom 12) Series

Electric Heated

Model Lengths 36" – 144"

mars

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Electric Heated Data Sheet

Applications: Environmental Separation (up to 12')

PH12 (Phantom 12) Model Number	Mechanical Data						Lab Data				
	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	6450	2534	2534	89	1345
PH1260-1E**-PW	60	60	26	17	1	105	6866	2207	2759	86	1535
PH1272-2E**-PW	72	72	26	17	Two 1	170	6050	3097	4646	93	2316
PH1284-2E**-PW	84	84	26	17	Two 1	190	6300	2824	4942	90	2520
PH1296-2E**-PW	96	96	26	17	Two 1	195	6300	2534	5068	89	2690
PH12120-2E**-PW	120	120	26	17	Two 1	210	6866	2207	5518	86	3070
PH12144-4E**-PW	144	144	26	17	Four 1	340	6050	3097	9292	93	4632

* - 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.

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)

Options and Accessories: (see Accessories Brochure)
- ❖ Remote mounted control panel
- ❖ Adjustable time delay (1 sec to 17 min)
- ❖ Remote mounted fused or non-fused disconnects
- ❖ Hi-Lo Heat
- ❖ Heat on Demand
- ❖ Master + Slave Control Kit
- ❖ 2 speed controls
- ❖ Wall and Overhead Bracket
- ❖ 1/4" and 1" Aluminum Mesh Filters
- ❖ Custom colors and finishes (304SS, 316SS)

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

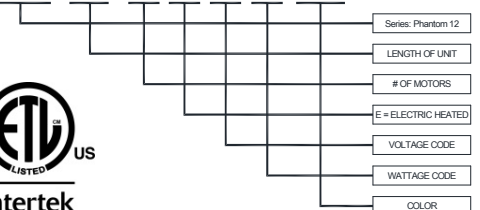* - Use corresponding letters in "Voltage Code and Wattage Code" to complete the model numbers. For Ampacity Multiply FLA X 1.25

Motor amps per motor: 9A @ 115v; 5A @ 208/230v/1Ø; 3.3A @ 208v/3Ø; 3.2A @ 230v/3Ø; 1.6A @ 460v/3Ø; 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

EXAMPLE

PH12 72 - 2 E H N -PW

- Series: Phantom 12
- LENGTH OF UNIT
- # OF MOTORS
- E = ELECTRIC HEATED
- VOLTAGE CODE
- WATTAGE CODE
- COLOR

ETL LISTED c us
Intertek

Sound Levels: (measured at 10' in an open field)
1 Motor Unit = 70 dBA, 2 Motor Unit = 73 dBA, 3 Motor Unit = 75 dBA & 4 Motor Unit = 77 dBA

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.