



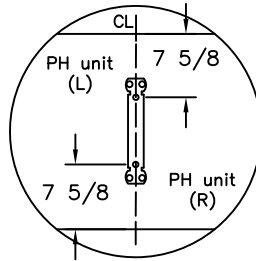
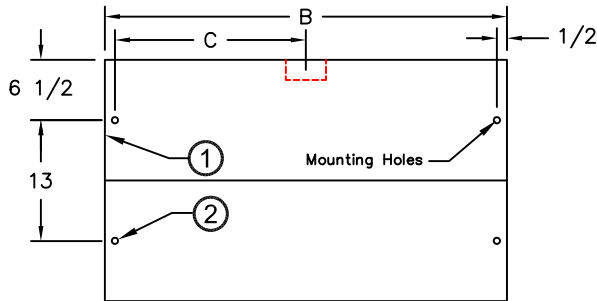
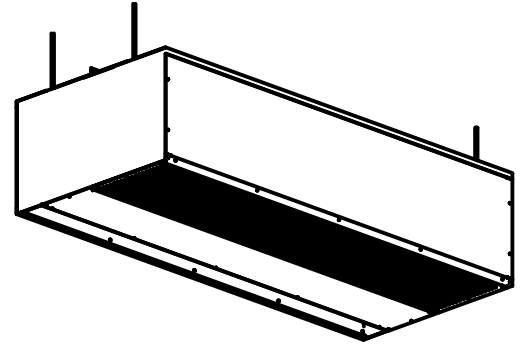
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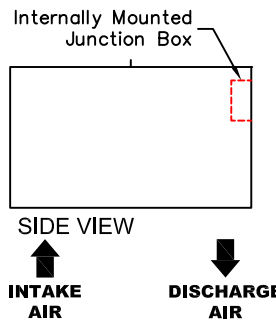
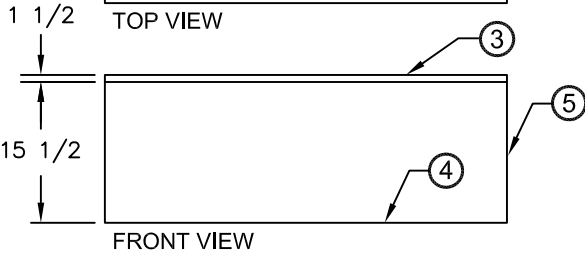
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MODEL NO. PH12 Series	DRAWING NO PH12U-F	DRAWN BY TVN	CHECKED BY
		FILE NAME	

# Unheated Drawing

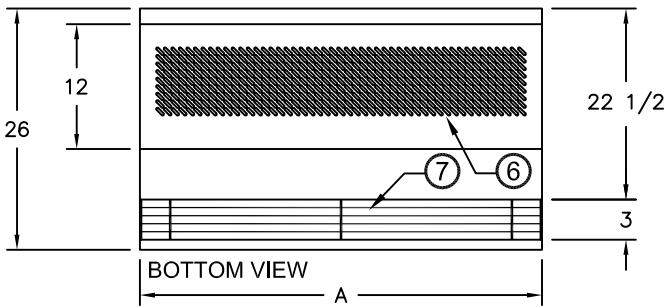
## PH12 (Phantom 12) Series



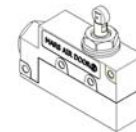
For tandem mounted units, center support required. The (2) center mounting holes are centerline of unit and 7 5/8" from front and rear of unit.



Note: Models PH1260-1 & PH12120-2 are not AMCA Certified.



### Recommended Accessories



Door Limit Switches

Control Panels

\*- Use corresponding letters in "Electrical Data" columns to complete the model numbers.

### Notes:

- This product is designed to meet the National Electric Code (NEC) and is ETL Listed for the US and Canada, AMCA Certified and bear the CE mark.
- (4) 3/8" threaded rod required for overhead installation.
- Cabinet has sufficient strength for fastening to wall on both ends without intermediate support.
- Four(4) 1" x 1" pearl white trim pieces included to match air curtains and ceilings. (Does not increase unite size)
- Tandem mounted units longer than 72" require center support.
- Cleanable polyester filters included as standard. Optional aluminum or throwaway pleated filters available.
- Unit is to be installed such that air flow is unobstructed. Air discharge nozzle containing adjustable air directional vanes with 40° sweep front to back.
- Circuit protection as per NEC by others.
- Optional motor 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.

MODEL NUMBER	NOZZLE WIDTH A (in)	OVERALL LENGTH B (in)	JUNCTION BOX LOCATION C (in)
PH1242-1U*-PW	42	42 1/8	21**
PH1248-1U*-PW	48	48 1/8	24**
PH1260-1U*-PW	60	60 1/8	30**
PH1272-2U*-PW	72	72 1/8	36**
PH1284-2U*-PW	84	84 1/4	42**
PH1296-2U*-PW	96	96 1/4	24**
PH12120-2U*-PW	120	120 1/4	30**
PH12144-4U*-PW	144	144 1/4	36**

\*\* - Measurements from edge of each unit, when tandem mounted.

# PH12 (Phantom 12) Series

Unheated

Model Lengths 42" – 144"



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## Unheated 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)
PH1242-1U*-PW	42	42	26	17	1	90	6300	2824	2471	90	1260
PH1248-1U*-PW	48	48	26	17	1	90	6450	2534	2534	89	1345
PH1260-1U*-PW	60	60	26	17	1	95	6866	2207	2759	86	1535
PH1272-2U*-PW	72	72	26	17	Two 1	155	6050	3097	4646	93	2316
PH1284-2U*-PW	84	84	26	17	Two 1	175	6300	2824	4942	90	2520
PH1296-2U*-PW	96	96	26	17	Two 1	180	6300	2534	5068	89	2690
PH12120-2U*-PW	120	120	26	17	Two 1	270	6866	2207	5518	86	3070
PH12144-4U*-PW	144	144	26	17	Four 1	310	6050	3097	9292	93	4632

\* - Use corresponding letters in "Electrical 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 base (unheated) units, as shown.

### Features:

- ❖ 1 HP Continuous Duty TEAO Motors
- ❖ Recessed mounted in ceiling for invisible coverage
- ❖ AMCA Certified to AMCA 211 Standards (see table above for models available)
- ❖ ETL Certified to conform to UL 507 (US) and CSA 22.2 (Canada) Standards (Indoor/Outdoor Use)
- ❖ 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
- ❖ 5 year parts warranty
- ❖ Freight Included (FOB Continental USA)
- ❖ Proudly Made in the USA

### Mars Recommended Accessories (See Submittals for additional details):

- ❖ Door Limit Switches
  - o 99-014, Combination mechanical switch, 250V, 1HP Max
  - o 99-125, Industrial surface mounted magnetic switch (controller required)
- ❖ Controllers
  - o MCPB-+U\*, Motor Control Panel, 120V control voltage († = # of Motors, \* = Voltage Code)
    - o MCP-TD, Adjustable time delay, 1sec-100hr (panel required)
    - o MCP-24V, Low voltage control option (panel required)
    - o BMS-303, BMS for monitor and control (panel required with MCP-24V)
  - Note: Dry contact provided in panel for monitoring motor. 24Vac signal provided from panel for controlling motor
  - o SK-URV, SimpleLink, 115V-575V, 4Mtr (1.5HP max @115V), Integral Control, Remote VFD for 3Ø, Nema1
- ❖ Severe Duty and Finish
  - o HSG-304SS-PH, 304 Stainless steel housing construction

### 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

Model	Projection Velocity	
	Distance from nozzle (in)	Avg. Core Velocity (FPM)
PH1236-1U*	40	2039
	80	1217
	120	1122
	160	1033
	200	983



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.

Note: Models PH1260-1 & PH12120-2 are not AMCA Certified. The AMCA Certified Ratings Seal applies to airflow rate, average outlet velocity, outlet velocity uniformity, velocity projection and power rating at free delivery only.

Electrical Data (FLA)	Unit Voltage (Voltage Code)				
	115v/1Ø (A)	208-230v/1Ø (D)	208-230v/3Ø (G)	460v/3Ø (H)	575v/3Ø (I)
PH1242-1U*-PW	9.0	5.0	3.3/3.2	1.6	1.3
PH1248-1U*-PW	9.0	5.0	3.3/3.2	1.6	1.3
PH1260-1U*-PW	9.0	5.0	3.3/3.2	1.6	1.3
PH1272-2U*-PW	18.0	10.0	6.6/6.4	3.2	2.6
PH1284-2U*-PW	18.0	10.0	6.6/6.4	3.2	2.6
PH1296-2U*-PW	18.0	10.0	6.6/6.4	3.2	2.6
PH12120-2U*-PW	18.0	10.0	6.6/6.4	3.2	2.6
PH12144-4U*-PW	36.0	20.0	13.2/12.8	6.4	5.2

\* - Use corresponding letters in "Electrical Data" columns to complete the model numbers.

Alternate voltage codes with FLA (Full Load Amp) data:

277v/1Ø/60Hz (L) - 5.2A per motor

380-415v/3Ø/50Hz (W) - 1.8A per motor

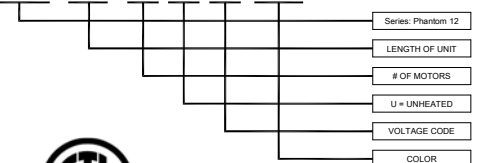
220v/1Ø/50Hz (U) - 7.1A per motor

For total FLA, multiply motor FLA by # of motors.

Ampacity (MCA) = total FLA X 1.25

EXAMPLE

PH12 72 -2 U H -PW



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.