

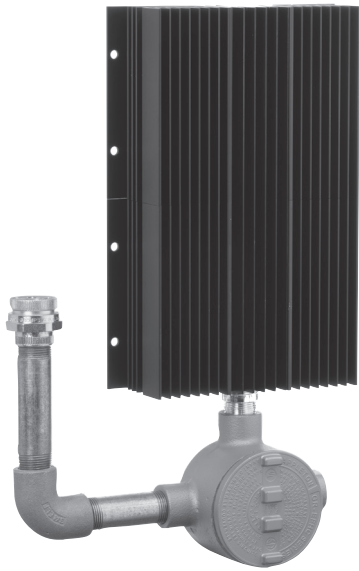
# Installation Instructions

## Type XPMC Air Heater for Hazardous Locations

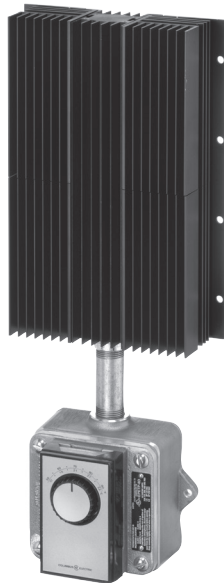


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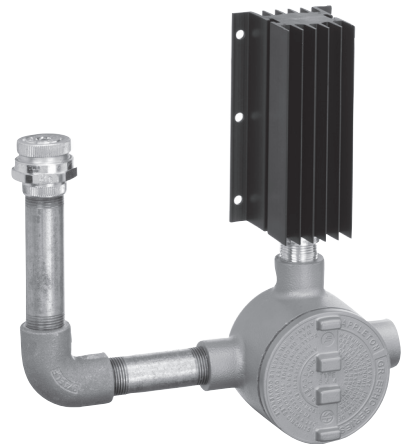
# XPMC Air Heater for Hazardous Locations



12", 2 Heat Sinks  
with Fixed Thermostat



12", 2 Heat Sinks  
with Adjustable Thermostat



6", No Heat Sinks  
with Fixed Thermostat

**Note: Carefully remove heater from carton and check for shipping damage. Any damage claims should be entered immediately with the carrier.**

## General

### **⚠ WARNING**

**Read and understand all instructions before installing, servicing or operating product. Failure to do so could result in personal injury or property damage.**

Type XPMC Heaters are designed for use in Class I, Div I hazardous environments. 120VAC and 240VAC units are suitable for areas classified as Groups B, C & D. Refer to classification stamped on heater nameplate.

### **⚠ WARNING**

**FIRE/EXPLOSION HAZARD. To prevent ignition of hazardous atmospheres, this heater should not be installed in areas where vapors or gases having an ignition temperature less than 300°C (572°F)(T2) for T2 rated units or 200°C (392°F) (T3) at for T3 rated units are present. These heaters must not be operated in ambient temperatures exceeding 40°C (176°F).**

1. Connect air heaters to the same line voltage as on heater nameplate.
2. Heaters can be mounted directly on any type of non-combustible surface masonry, concrete, block, plastered walls, metal framework, etc. using appropriate hardware.

3. All auxiliary controls such as thermostat and contactor, when required must have the same explosion-proof rating as heater.
4. Do not install one unit above the other.
5. Never recess heater into wall.
6. NOTE: Article 500 of the National Electric Code (NEC) outlines requirements for installation of electrical equipment in hazardous (Classified) locations.
7. All unit electrical installation fittings, conduit, wiring and seals must meet NEC and local codes for hazardous locations. External line fusing or circuit breaker protection is required.
8. Failure to understand and follow these installation instructions and the "WARNING" notes contained therein may result in severe personal injury, death or substantial property damage.

### **⚠ WARNING**

**ELECTRIC SHOCK HAZARD. Any installation involving electric heaters must be performed by a qualified person and must be effectively grounded in accordance with the National Electrical Code to eliminate shock hazard.**

## Installation

### **⚠ WARNING**

**ELECTRIC SHOCK HAZARD. Disconnect all power before installing or servicing heater. Failure to do so could result in personal injury or property damage. Heater must be installed by a qualified person in accordance with the National Electrical Code, NFPA 70.**

1. Locate desired heater position on wall. Recommended 2" minimum spacing between heating element and other components.

2. Locate mounting holes for assembly.
3. Refer to Figure 1 for mounting hole layout for each assembly configuration.
4. Drill a pilot hole in wall mounting surface at each mounting hole location. Use a convenient small size drill.
5. Drill the mounting holes in accordance with size in Table 1. Insert anchors where applicable.
6. Fasten heater to wall with screws noted in Table 1.

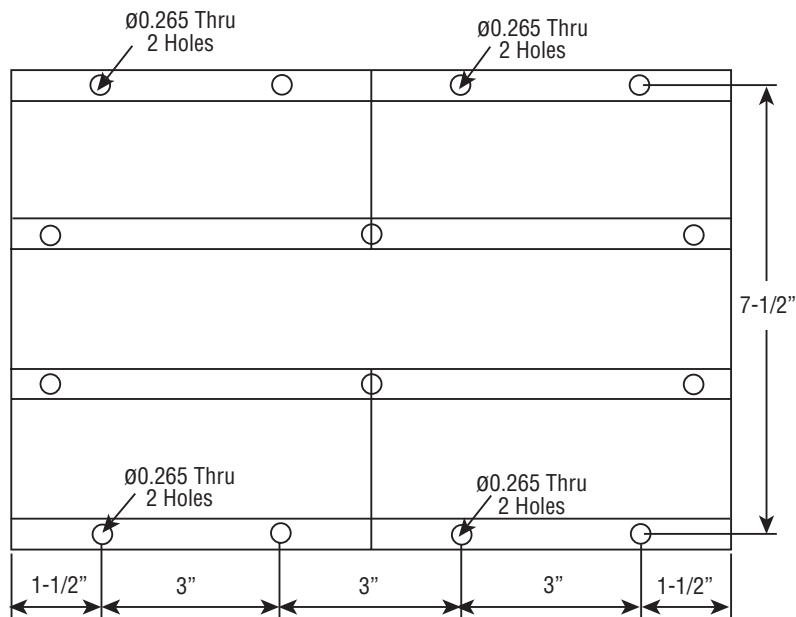
**Table 1 – Suggested Heater Mounting Screws (Types and Sizes)**

Type of Mounting Surface	**Accessory Hardware	Screw Type	Drill Size and Type	Screw Size to Fit Mtg. Hole Size
Concrete Block Masonry	Ackerman	Round Head, Machined Steel	1/2" Masonry	† 1/4" x 20 x.....lg
	Lead Anchor	Round Head, Machined Steel or Pan Head, Metal (Self Tapping)	5/16" Masonry	† # 1/4" x 20.....lg
Wood Studs	— —	Wood or Metal (Self Tapping)	— —	† # 1/4" x .....lg
Plaster wall Hollow or Similar Type	— —	Toggle Bolt	#7 Twist	† 1/4" x 20 x.....lg
*Metal Beam, Channel, etc.	Nuts Washers	Round Head, Machined Steel	#7 Twist	† 1/4" x 20 x.....lg

\* If clearance permits use washer, lockwasher and nut; otherwise drill and tap to these lengths add thickness of beam, washers, nut, etc.

\*\* If mounting structure permits. Except plastered hollow walls explosive type anchors can be used. Suggested size noted in Table and/or sketches be used to determine size of anchors.

† Select overall length of screw to provide a minimum penetration of 1 inch into base wall material.



**Figure 1**

Optional mounting bracket kit is available and consists of 4 "Z" brackets with 1/4-20 bolts, lock washers & nuts.

## Wiring

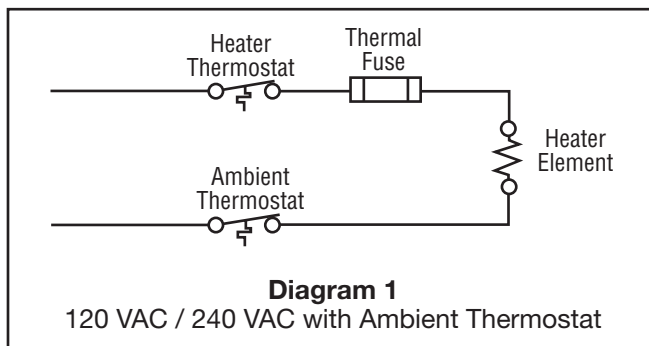
### **⚠ WARNING**

**ELECTRIC SHOCK HAZARD. Any installation involving electric heaters must be performed by a qualified person and must be effectively grounded in accordance with the National Electrical Code to eliminate shock hazard.**

1. All wiring should be done in accordance with local codes and the National Electrical Code by a qualified person as defined in the NEC.

**CAUTION: Use copper conductor rated 125°C minimum only.**

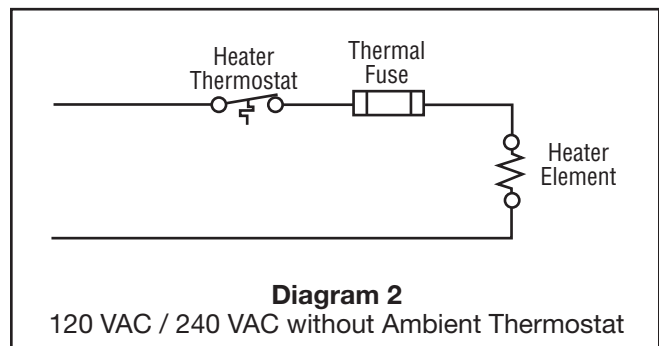
2. Rough-in-line-wiring to unit in manner approved for hazardous locations. (See warning below.)
3. Wire per diagrams 1 through 2 based on the rating and control options listed in table 2. Refer to table 3 for amperage specifications.



4. Remove cover of conduit box for connections. Use either opening and plug the other with the plug provided.
5. Re-assemble cover with a minimum of 7 turns.

### **⚠ WARNING**

**FIRE/EXPLOSION HAZARD. (Group B atmospheres) To prevent ignition of Group B atmospheres, conduit runs must not exceed 3/4" in size and all conduit runs 1/2" size and larger must have a sealing fitting connected within 2" of the terminal enclosure For correct placement, refer to data located on the enclosure label.**



## Operation

### **⚠ WARNING**

**The system designer is responsible for the safety of this equipment and should install adequate back-up controls and safety devices with their electric heating equipment. Where the consequences of failure could result in personal injury or property damage, back-up controls are essential.**

1. Do not operate heater at voltages in excess of that stamped on the heater since excess voltage will shorten heater life and cause high element temperatures which may exceed allowable temperatures of operation in a hazardous atmosphere.

## Maintenance

### **⚠ WARNING**

**ELECTRIC SHOCK HAZARD. Disconnect all power before installing or servicing heater. Failure to do so could result in personal injury or property damage. Heater must be installed or serviced by a qualified person in accordance with the National Electrical Code, NFPA 70.**

1. Before activating for next heating season, vacuum or use compressed air to remove accumulated dust or lint, which otherwise may restrict proper air flow.
2. Periodically check all electrical connections and re-tighten to avoid electrical wiring difficulties.
3. Check to ensure terminal cover is tightly closed, before energizing.

## Renewal Parts Identification

Manufacturer Model Number Breakdown  
(located on unit nameplate).

<b>XPMC- Explosion Proof Convection Heater</b>						
	<b>Code</b>	<b>Length</b>				
	6	6"				
	12	12"				
		<b>Code</b>	<b>Voltage</b>			
		1	120V			
		2	240V			
			<b>Code</b>	<b># of Fins</b>		
			0	None		
			1	1 side		
			2	2 sides		
				<b>Code</b>	<b>Ambient T-stat</b>	
				1	70	
				2	100	
				3	Adjustable	
				<b>Code</b>	<b>T-Rating</b>	
				T2	T2 RATED	
				T3*	T3 RATED	
<b>XPMC-</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>T2</b>	<b>Typical Model Number</b>

**Limited Warranty:**

Please refer to the Chromalox limited warranty applicable to this product at  
<http://www.chromalox.com/customer-service/policies/termsofsale.aspx>.

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