



# INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS FOR INDEECO INDUSTRIAL GRADE UNIT HEATERS

## I. GENERAL

INDEECO industrial grade unit heaters are designed to provide years of trouble free operation if properly installed and maintained. Please read and follow these instructions in installing and maintaining the heater.

II. INSTALLATION This unit heater should only be installed by personnel qualified to make suspended over head mechanical installations and NEC/CEC qualified electrical installations.

### A. Site selection

1. INDEECO industrial grade unit heaters are designed for permanent wall or ceiling mounting.
2. The heaters are designed to operate in a horizontal position only.
3. The heaters should be mounted in an indoor non-hazardous location conforming to UL/Nema Type 1.
4. The installation site must allow sufficient free space around the heater for installation and maintenance access.
5. The heater throw distance should be considered in positioning the heater in the space to be heated.
6. The location must be capable of safely supporting the heaters' weight. Refer to the installation drawings for the weight.

### B. Mechanical Installation

1. Install the heater as shown on the installation drawing using either the wall or ceiling mounting brackets.
2. The installation must comply with all minimum-mounting dimensions as shown on the installation drawing.
3. When using the wall-mounting bracket the unit may be rotated from side to side in a full 180° arc to the desired throw direction, but do not direct the airflow towards the wall.
4. The louvered outlet grill may be manually adjusted to a straighter throw with a downward pitch of less than 45°. Do not close the louvers more than 45°.
5. To complete the installation make sure all connections are tight and secure.

### C. Electrical Installation

1. Wiring to the heater should be permanently installed in metallic or non-metallic electrical grade tubing, and should include a grounding conductor if non-metallic tubing is used.
2. Wiring to the heater should have adequate strain relief.
3. The conduit and wiring connections should not support any of the heaters' weight.

4. Follow the wiring diagram located inside the heater terminal box.
5. Field supply wiring must be rated for 600Vac and a minimum of 75°C.
6. Field wiring to the heater must comply with all branch circuit requirements of any local codes, the National Electrical code, NEC or the Canadian electrical code, CEC, as applicable.
7. A properly sized branch circuit disconnect switch and branch circuit protective device, fuses or circuit breaker, should be provided to protect the supply wires.
8. Field supply conductors must be sized for at least 125% of the circuit current. The circuit current in amps is calculated as follows:

$$\text{Single Phase Amperage} = \frac{\text{Circuit kW} \times 1000}{\text{Circuit Voltage}}$$

$$\text{Three Phase Amperage} = \frac{\text{Circuit kW} \times 1000}{1.732 \times \text{Circuit Voltage}}$$

9. Refer to the heater data label for circuit ratings.
10. To complete the installation make sure all connections are tight and secure.

## III. OPERATION AND MAINTENANCE

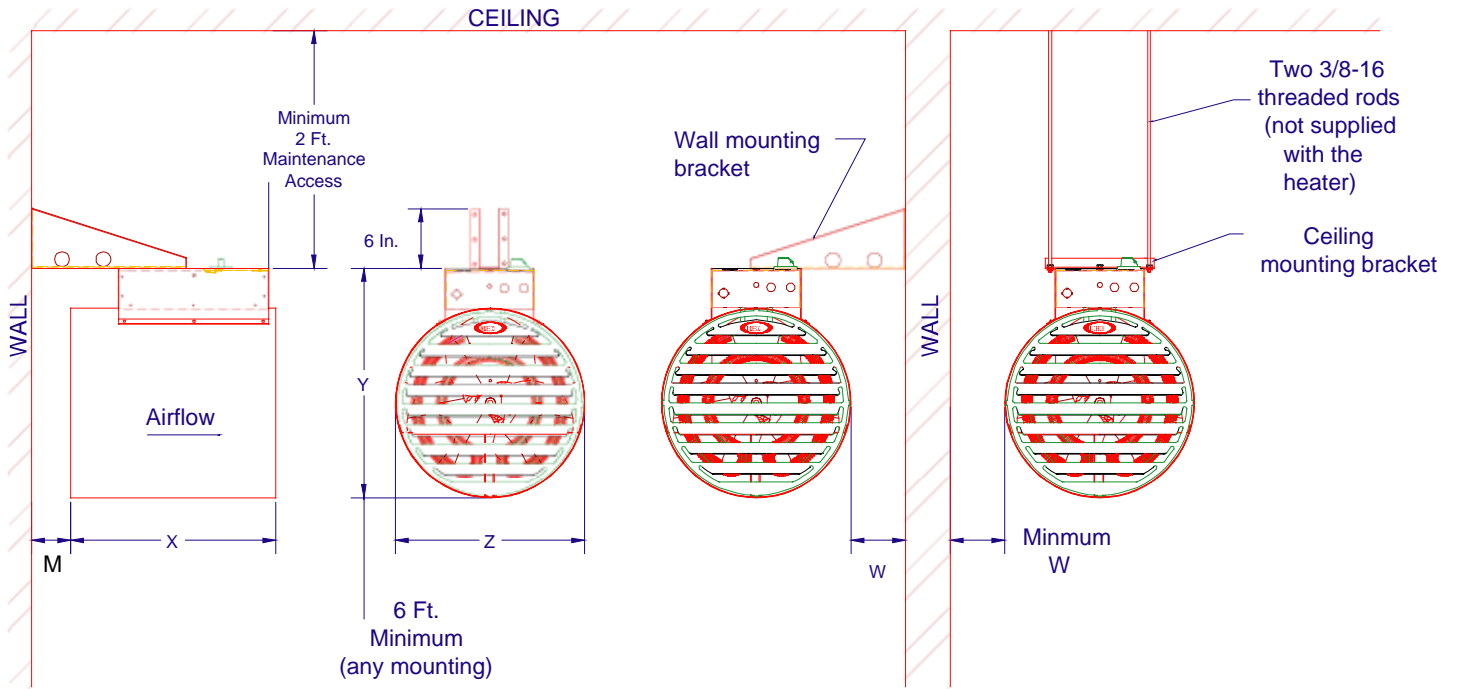
1. The heater has a fan On/Off thermostat that automatically turns the fan on after the heater has warmed up and keeps the fan running after the heater has been turned off until the heating elements have cooled down.
2. The heater has a safety high temperature shut off switch that will shut the heater off if high outlet temperatures develop. It will automatically reset when the heater cools down below the safety limit temperature setting.
3. Refer to the heaters' wiring diagram for other possible optional control components.

### **WARNING**

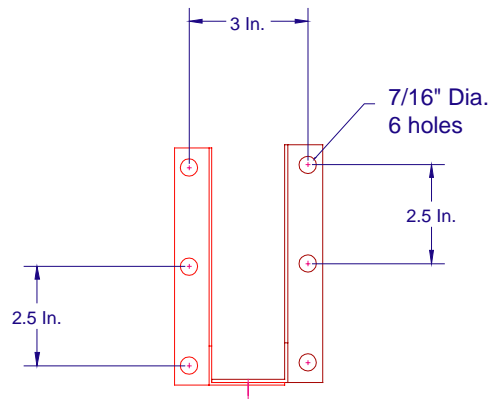
Hazardous voltages are present. Be sure to lock out and tag the branch circuit disconnect switch before working on this heater.

4. At least once each year, check all electrical and mounting connections for tightness and re-tighten as required.
5. Keep the inlet free of dirt and debris that could collect on the heating element fins. Periodically remove the inlet and outlet grills and use compressed air to blow out any dirt and debris that may have collected.

**Keep These Instructions With The Heater**



KW Ratings	DIMENSIONS (INCHES)					Weight (Lbs)	Air Throw (Ft.)
	M	W	X	Y	Z		
1-12	8 1/4	8 3/4	15	17	13	45	15
12.5-20	7	5 1/2	16 1/4	23 1/2	19 1/4	60	50
25-38.4	4	5 1/2	20 3/4	23 1/2	19 1/4	80	50



Mounting hole detail  
rear view of wall  
mounting bracket

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