OPERATION AND INSTALLATION INSTRUCTIONS

Industrial Control Panel / Enclosure Heaters

INSTALLATION

A.1 The industrial control panel enclosure heater is fan forced, and designed to maintain a suitable temperature inside a control panel or metal enclosure.

A.2 The following factors must be taken into consideration when selecting the proper heater; surface area, insulation properties, enclosure location, and difference in temperature between the ambient and the enclosure.

A.3 The intended use of the heating unit is to protect against the effect of low temperatures, such as freezing and condensation from damaging critical components inside a control enclosure.

A.4 The heater unit is not designed for use as a comfort or space heater and should not be installed in hazardous, corrosive, dusty, or wet environments.

A.5 Operating surface temperatures of these heaters is substantial enough to cause burns upon contact with bare skin.

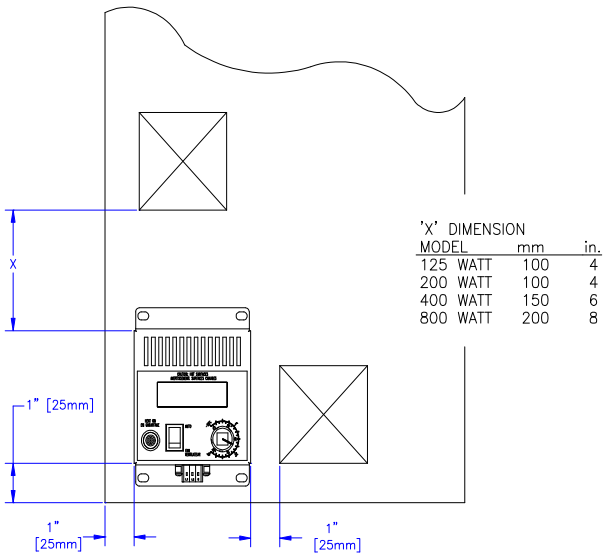
A.6 Before servicing, ensure to disconnect the heater from the supplied power and allow approximately 10 to 15 minutes for the heater unit to cool.

MOUNTING AND WIRING

B.1 The heater is to be mounted inside a metal enclosure on a metal surface only and should be mounted in the center of the enclosure as low as possible for best heat distribution.

B.2 The heater is to be mounted in a vertical position as intended, so the wiring terminal block is at the bottom, and the heated air discharge vents are at the top. Mount the heater to the enclosure or control panel using four #10 metal screws.

B.3 In order to ensure unrestricted airflow through the enclosure heater and avoid high temperatures on surrounding surfaces, heat sensitive components should be positioned away from the heated air discharge vents as shown below.



B.4 Disconnect power before installation or servicing the heater.

B.5 The heater must be wired by qualified personnel to the applicable local electric code requirements. Please note that the heater does not have an OFF position, so to fully shut down the heater; power must be disconnected from the supply.

B.6 Check the supply voltage requirements with the heater label voltage rating prior to installation. Use wires suitable for no less than a temperature rating of 90°C.

OVERHEAT PROTECTION

C.1 The enclosure heaters are equipped with a temperature limit switch. In the event of fan failure or an overheat condition, the automatic reset temperature limit switch will open, breaking power to the heating element.

OPERATION AND MAINTENANCE

D.1 Apply power to the heating unit by way of the terminal block as indicated and then set the thermostat to the desired temperature for the enclosure or control panel.

D.2 Please allow a suitable amount of time for the thermostat to cycle and the temperature in the enclosure to stabilize. Due to system variances, you may need to re-adjust the thermostat to achieve the desired temperature.

D.3 The internal fan motor has permanently lubricated bearings and should not require maintenance.

D.4 To achieve proper airflow through the heater unit, ensure to periodically check and clean the air vent openings from any dust or debris.

D.5 The enclosure heaters have a built in indicator light to indicate when the heat is on, and equipped with a switch function which will allow the fan to run continuously for more uniform temperature distribution.

D.6 In "*FAN*" mode the fan will run continuously, and the heater unit will still provide heat when the temperature drops below the set point on the thermostat. In "*AUTO*" mode the fan will cycle on only when the heating element is energized.