



PTC Heater Systems



GENERAL DESCRIPTION

The High Voltage Supply Positive Temperature Coefficient (PTC) Heater improves the reliability of your electrical equipment by maintaining an enclosure temperature only slightly higher than the outside ambient temperature. The system offers unparalleled reliability due to the elimination of a thermostat or other controls. In addition, standard PTC Heaters use an integrated fan assembly that assures even heat distribution throughout the enclosure.

CONSTRUCTION

PTC Heaters feature a heating element constructed with a variable resistance material that automatically controls cabinet temperature. A fan (if equipped) is attached to the heat guard and provides forced conduction of the heat as well as uniform enclosure distribution. Mounting brackets allow easy cabinet or panel installation. A twelve foot wiring harness is also included to make installation as easy as possible.

Options

The PTC heaters are available in the following configurations:

1. 50 Watt, 120V panel mount convection
2. 200 Watt, 120V fan forced
3. 200 Watt, 240V fan forced
4. 400 Watt, 120V fan forced
5. 400 Watt, 240V fan forced

INSTALLATION

Electrical Connections

To connect harness to Heater/Blower plug black wire lead with (3) terminals into heater terminal block #1, Then the next lead is plugged into Heater terminal block #3, and the remaining lead is plugged into the bottom terminal on the fan motor. Plug remaining black wire lead with (2) terminals into heater terminal block #2, then the remaining lead is plugged into the top terminal on the fan motor.

OPERATION

Operation of the heater assembly is automatic and requires no adjustment. As the heat level in the enclosure increases, the resistance of the heater element also increases, resulting in a decrease of the

output wattage. Eventually, the enclosure reaches an equilibrium temperature slightly above ambient.

MAINTENANCE

The PTC heater is essentially maintenance free, with only a few necessary checks to ensure that the unit is operating normally.

Annual Inspection:

CAUTION: *The surface of the heater element is very hot and can cause burns. Never cut or remove the heat shield.*

- Visually inspect that the fan is running quietly and that no foreign material has entered the assembly.
- Inspect that heater element shield is warm to the touch.

TROUBLESHOOTING

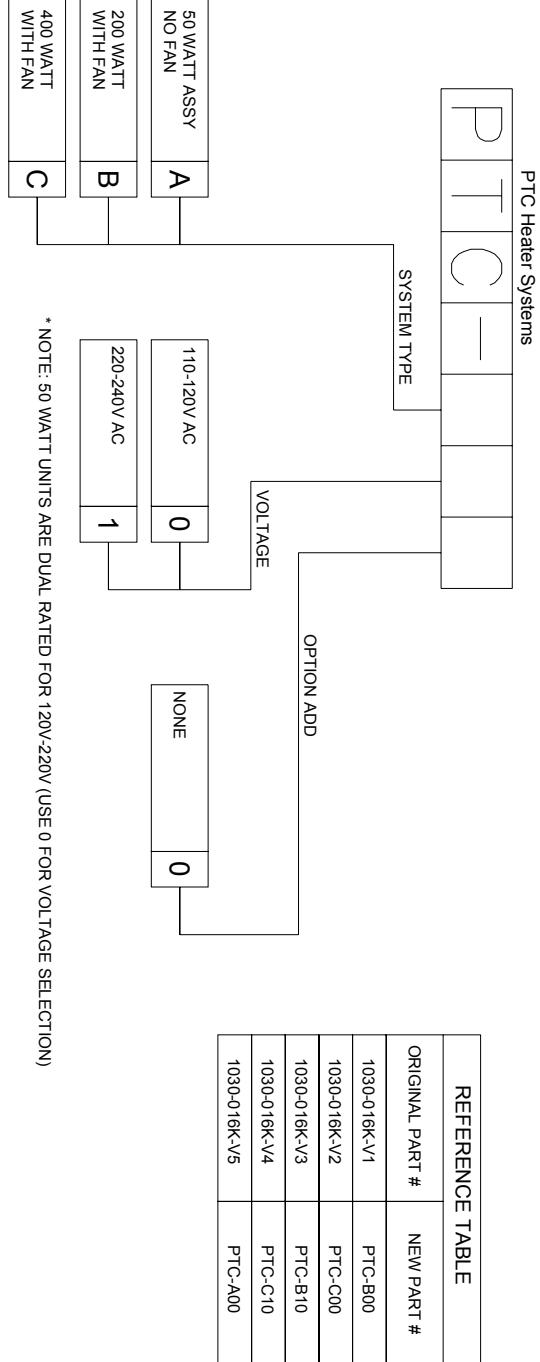
- 1) The fan or heater is not operating
 - Confirm that the voltage input to the PTC assembly is the correct voltage.
 - Check fan and heater plug-in terminals to ensure that none have become unplugged.
 - Check wiring harness for cuts or bare insulation

REPLACEMENT PARTS AND SERVICE

Please contact High Voltage Supply for parts and service at 800-338-5526 for replacement parts and/or service.

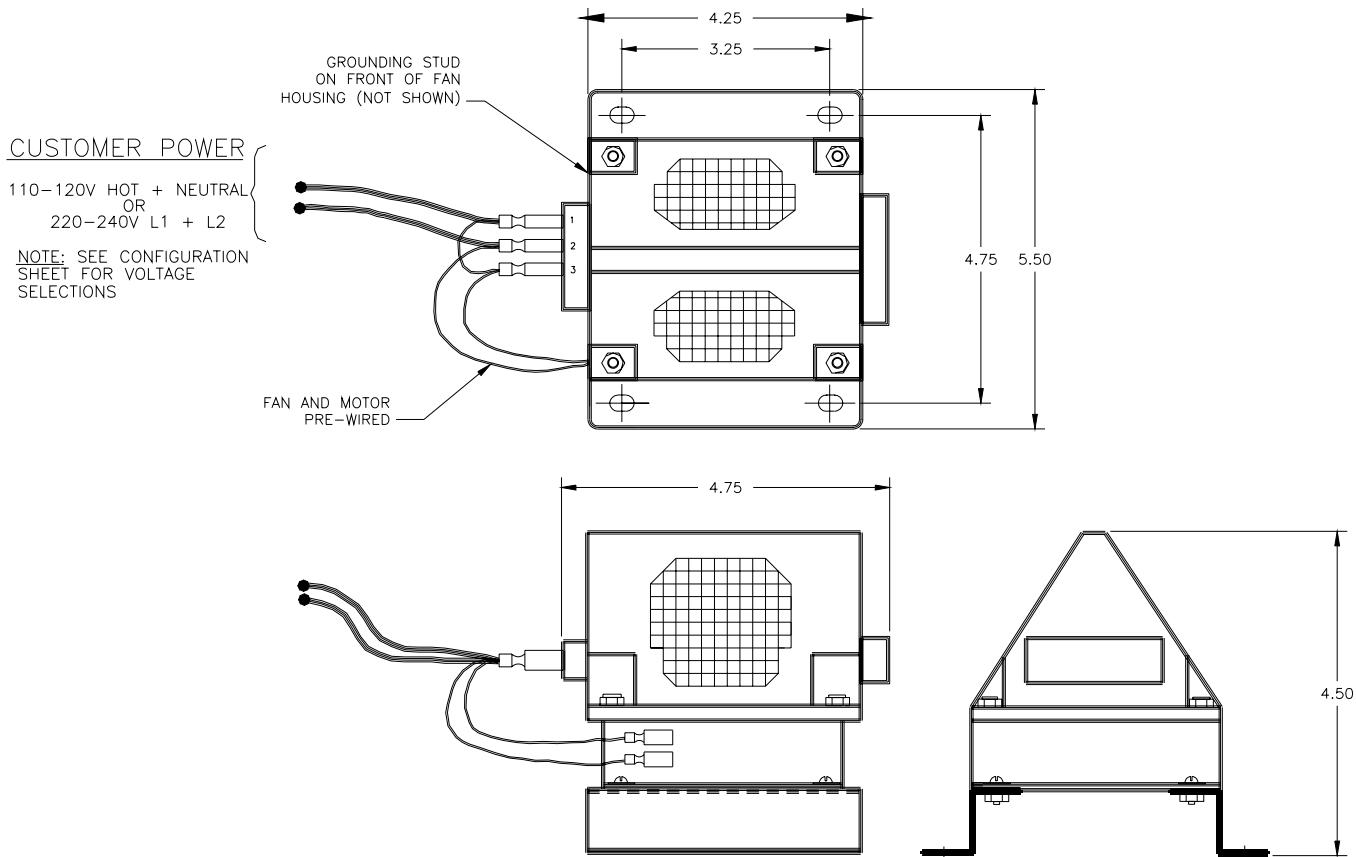


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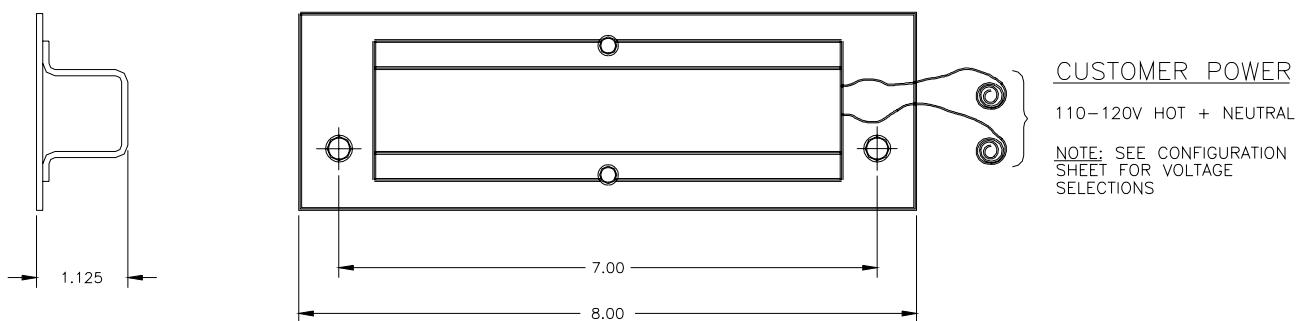




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FAN FORCED UNITS



CONVECTION UNITS