ELECTRIC HEATING ELEMENTS • TEMPERATURE CONTROLS • SENSORS • PROCESS HEATING SYSTEMS

# Instructions for Tempco Model PCT-2000 Electronic Temperature Control

Electronic "on-off" temperature control with 4°F (1.7°C) hysteresis using ANSI type "J" or type "K" thermocouple sensor. With aluminum housing, 5ft. long, 14 gauge 3-conductor line cord with ground, red "Heater-On" pilot light, 15 amp fuse, and straight-blade heater receptacle with ground.

Part Number	Thermocouple Type	Voltage	Amps (fused)	Maximum Wattage	Temperature Range
PCT20001	J	120	15	1440	32-1000°F (0-550°C)
PCT20002	K	120	15	1440	32-1000°F (0-550°C)
PCT20003	J	240	15	2880	32-1000°F (0-550°C)
PCT20004	K	240	15	2880	32-1000°F (0-550°C)
PCT20006	K	120	15	1600	32-175°F (0-79.4°C)
PCT20007	K	240	15	3200	32-175°F (0-79.4°C)

## **WARNINGS**

- 1. Dangerous voltage capable of causing injury or death is present within this controller. Call Tempco for an RMA and return any units suspected of not operating correctly.
- 2. To minimize the possibility of fire or shock, do not expose this console to rain or excessive moisture.
- 3. Do not use this enclosure in areas where hazardous conditions exist such as excessive shock, vibration, dirt, corrosive gases, oil or where explosive gases or vapors are present.

#### **MOUNTING**

The mounting hole centers are 6 3/4" (171mm) C/C. Mount in a convenient location noting above information. The holes accept size # 8.



#### CONNECTIONS

- 1. Noting correct orientation, connect your thermocouple sensor with the flat blade mini-plug into the color-coded T/C connector located on the bottom surface of the control. A type "J" connector is color-coded black and a type "K" is yellow. When making T/C connections, note the polarity of the RED wire is negative (-). For a type "J" T/C, the white lead is the positive (+) lead. For a type "K" T/C, the yellow lead is the positive (+) lead.
- 2. Turn the set point knob counter-clockwise to the lowest setting. Note the maximum voltage and heater wattage ratings indicated in the above chart. Plug your heater into the receptacle located on the bottom surface of the controller.
- 3. Plug the line cord into a standard outlet of the correct voltage.
- 4. NOTE: This control does not have an "off" switch. Power must be disconnected from your power source if the heater is to be completely de-energized

#### **OPERATION**

Set dial at a lower temperature at first to test your system for control characteristics. Adjust to your final setpoint temperature. Check wiring for overheating.

## **HIGH LIMIT**

There is no high limit control with this unit. This must only be used where an over-temperature condition can be noted and the heater disconnected before any damage can be caused.

### REPLACEMENT FUSE

If a fuse has blown, check the heater for a fault condition or other wiring damage. The replacement fuse is Buss type ABC-15, 1/4" x 1 1/4", rated 15 amps, 250 volts. Tempco Part Number EHD-124-148. This fuse is located inside the round fuse holder (2 fuses for 240VAC models).

**NOTES**