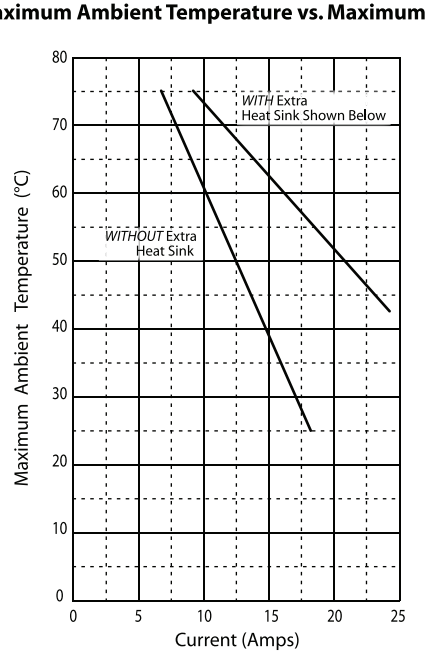
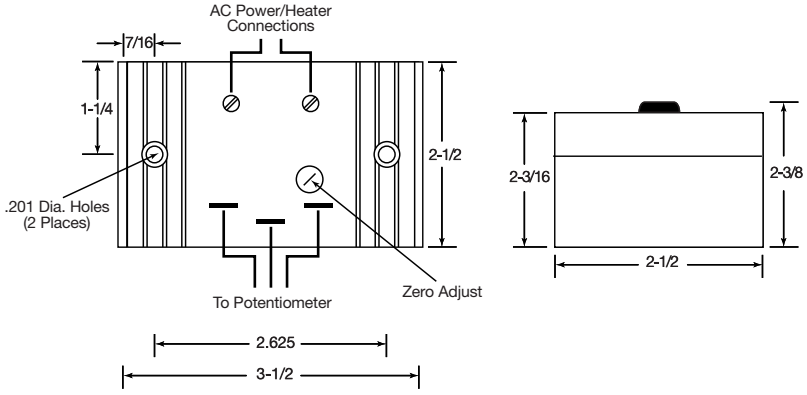
OPTIONAL HEAT SINK PERFORMANCE CURVE:



POWER CONTROLLER LINE DRAWING:



TEMPCO ELECTRIC HEATER CORPORATION
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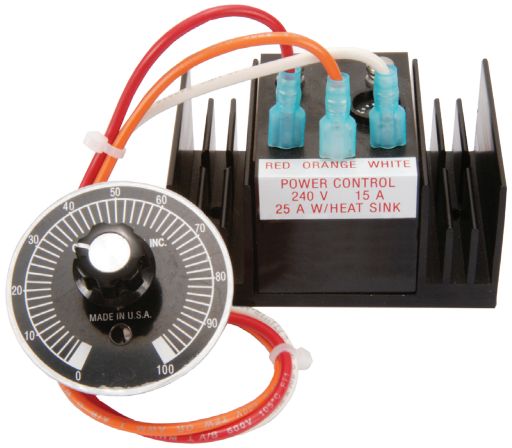
TEMPCO®

USER MANUAL

Operating Instructions: SRS00030

Solid State Variable Power Controllers



DESCRIPTION:

This power controller was designed exclusively for the operation and performance of heaters in an Open Loop control system. An external potentiometer is provided to control the output voltage supplied to the heater.

FEATURES:

- Designed to be operated without a temperature controller for OPEN LOOP control.
- Phase angle fired operation.
- External potentiometer control.
- Usable for 100 to 240VAC line voltage.
- Additional heat sinking available.

INSTALLATION:

WARNING: Check nameplate voltage and current rating of this unit against ACTUAL line voltage and heater current*. **Excessive voltage will damage this controller, and excessive current will damage triacs and blow fuses.**

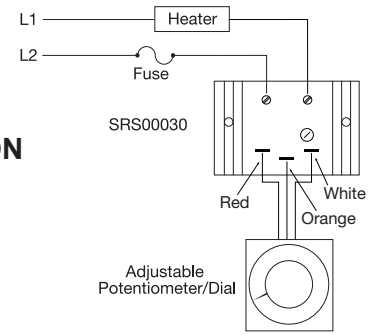
This controller **should NOT** be used to control the following:

- High inrush heaters
- Inductive loads
- Motors
- Transformers

***Heater current = Line voltage / Heater resistance**

- For optimum performance and life expectancy, install in a cool, dry location with adequate ventilation to prevent excessive heat build-up. Mount unit flat to a metal panel, with heat sink fins vertical if possible.
- Install in a fused circuit for maximum protection, 120% of maximum load current or 30 amperes maximum. I^2T fused are required.
- Wiring should follow electrical code requirements. Use wire rated to handle maximum current, and route power through a grounded conduit away from signal and communication lines. If possible, run separate lines from individual circuit breakers to each unit.
- Power line filters are advisable when unit is installed in an electrically noisy area or in noise sensitive equipment.
- More than one heater may be used with this power controller as long as the current draw through the control does not exceed 15/25 amps in either a series or parallel installation.

TYPICAL INSTALLATION DRAWING:



SPECIFICATIONS:

Input Control Signal	Potentiometer, [control knob requires a 3/8" hole for panel mounting]
Supply Voltage	100/240 VAC Single Phase 50/60 HZ
Output Voltage	Adjustable from 17% to 99% of supply voltage
Power Consumption	50W maximum
Current Rating	15A / 25A with optional Heatsink
Maximum Ambient	See graph on page 4 for temperature rated current
Potentiometer Wire Length	21" (533 mm)
Power Lead Wire – Length	12 ga. – 15" (381 mm)
Weight	1 lb. 2.0 oz. (338 g)

OPTIONAL HEAT SINK (SRS00035):

An additional heat sink is recommended for the following conditions:

- Control not mounted to a metal surface
- Installed in a confined area
- Elevated ambient temperature
- Control operated at or near full rated current

Size: 3"W x 5.2"L x 2.375"H
Pre-drilled and taped for 8-32 Screws

Note: Thermal compound must be used between power control and the heat sink.

Continued on page 4