

OPERATION MANUAL

MODEL NUMBER 057081

SYLVANIA POWER CONTROLLER

SYLVANIA Portsmouth Ave, Exeter NH 03833 (603) 772-4331

DESCRIPTION

This power controller was designed exclusively for the operation and performance of Sylvania heaters in an OPEN LOOP control system. An external potentiometer is provided to control the output voltage applied to the Sylvania heater.

FEATURES

- Designed to be operated without a temperature controller for OPEN LOOP control.
- Phase angle fired operation.
- External potentiometer control.
- Line voltages up to 277.
- 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:

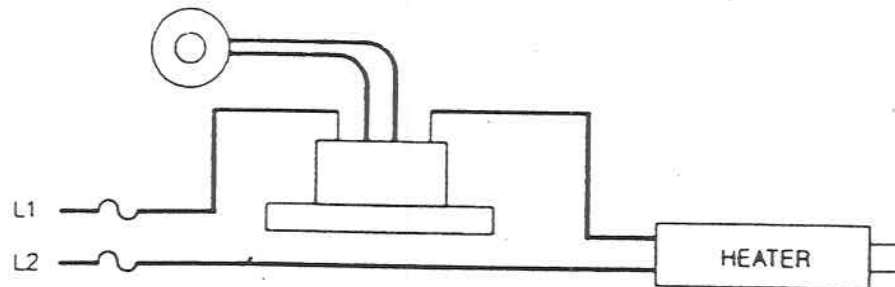
- High inrush heaters
- Inductive loads
- Motors
- Transformers

* Heater current = Line voltage / Heater resistance

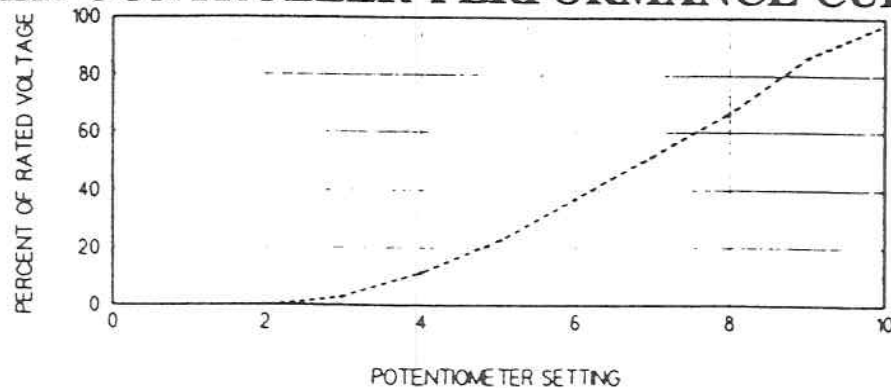
INSTALLATION cont.

- 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. I²T fuses 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 a electrically noisy area or in noise sensitive equipment.
- More than one Sylvania heater may be used with this power controller as long as the current draw through the control does not exceed 25 amps in either a series or parallel installation.

TYPICAL INSTALLATION DRAWING



POWER CONTROLLER PERFORMANCE CURVE



SPECIFICATIONS

Input Control Signal	Potentiometer, [control knob requires a 3/8" hole]
Supply Voltage	100/240 VAC Single Phase 50/60 Hz
Output Voltage	Adjustable from 1% to 98% of supply voltage
Power Consumption	50W maximum
Current Rating	25A
Maximum Ambient	See graph below for temperatures at rated current
Potentiometer Wire Length	12 inches (305 mm.)
Weight	1 lb. 2.0 oz. (338 g.)

OPTIONAL HEAT SINK

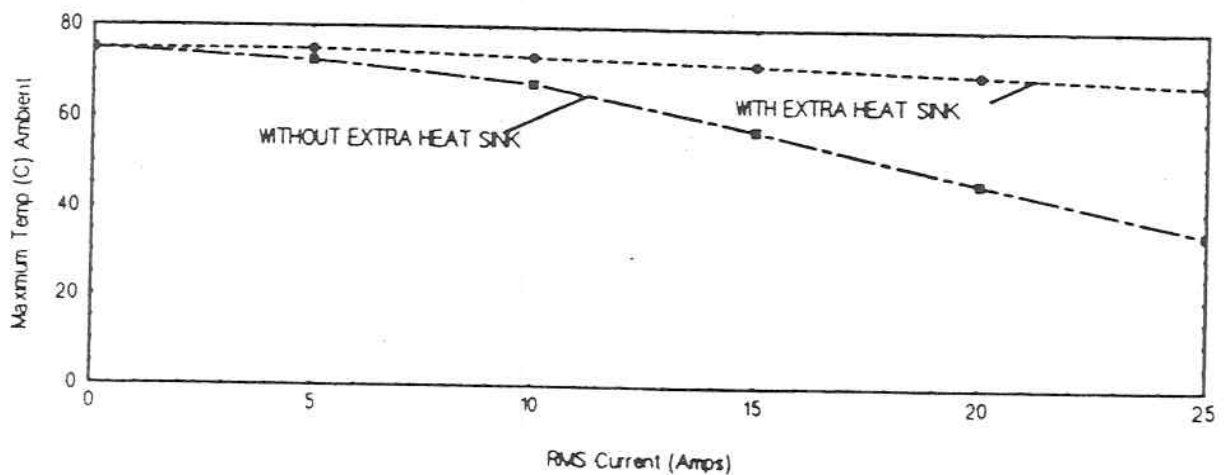
An additional heat sink (part # 043857) is recommended for the following conditions:

- Control not mounted to a metal surface.
- Installed in a confined area.
- Elevated ambient temperature.
- Control operated at or near full rated current.
- Reference graph below for heat sink performance.

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

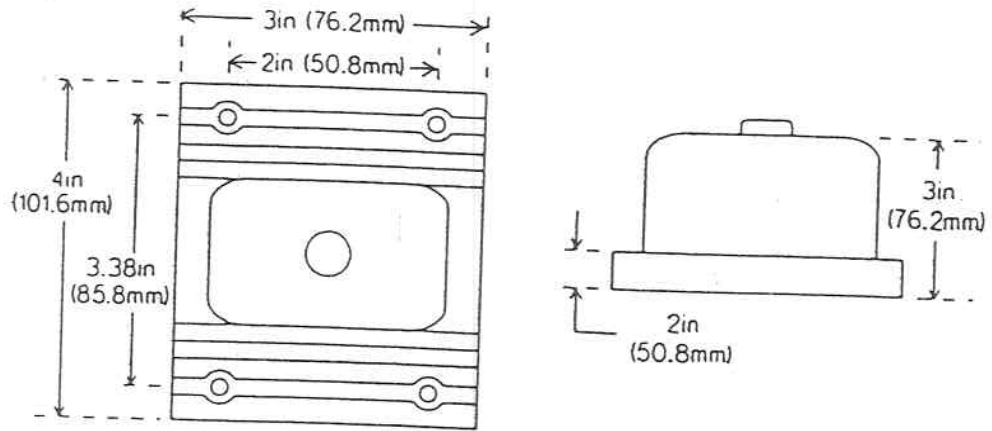
OPTIONAL HEAT SINK PERFORMANCE CURVE

Maximum Ambient Temperature vs Maximum Current



OUTLINE DRAWINGS

▶ POWER CONTROLLER



▶ OPTIONAL HEAT SINK

