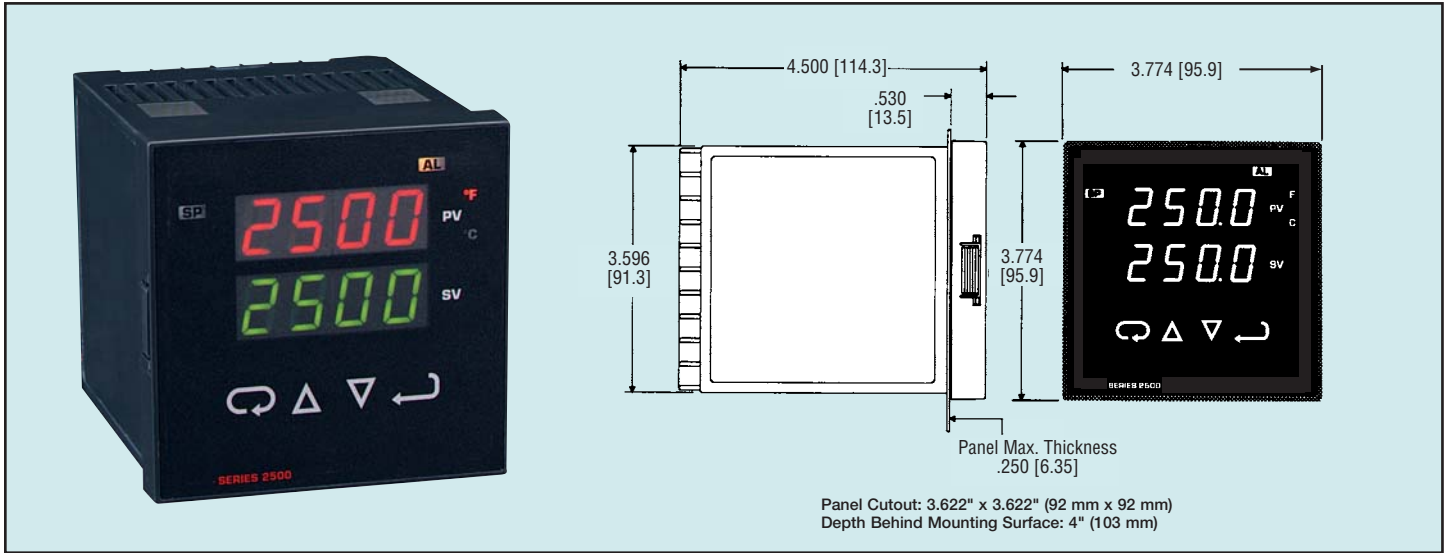




Series
2500

Temperature/Controller

1/4 DIN Fully Programmable, Self-Tune® PID



The Love Series 2500 Temperature Control provides an impressive array of features in an economical 1/4 DIN package. Features include on-off, time proportioning, proportional, PI, PD, or full PID control, programmable from the front panel, or use Self-Tune® PID. Input types are selectable from a variety of thermocouple types (J, K, T, E, N or L) or DIN, NIST or Ni RTD's. Outputs include solid state relay, mechanical relay, 5 VDC (ideal for driving an external SSR) or isolated 4-20 mA proportional current. Programmable alarm can act as high or low or high/low guardband alarm.

A water and corrosion resistant front panel (NEMA 4X; IP 65), input fault timer, digital input filter, Self-Tune® ramp to setpoint, four password protected security levels and °F or °C display selection are all standard. Entire electronics package is field replaceable without wiring changes thanks to removable front panel.

MODELS

MODEL NO.	ALARM	INPUT	OUTPUT*
25111	Yes	Thermocouple	SSR
25112	Yes	Thermocouple	5 VDC
25113	Yes	Thermocouple	Relay
25115	Yes	Thermocouple	4-20 mA
25125	Yes	RTD	4-20 mA

*When ordering a control to operate contactor or solenoid loads greater than 100 mA, select the SSR output instead of the Relay. If the Relay is selected, also order P/N A-600 R/C Snubber.

SPECIFICATIONS

Inputs: Thermocouple or RTD.

Input Impedance: Thermocouple = 3 megohms minimum, RTD current = 200 µA maximum.

Display: Two-4 digit, 7 segment, 0.56" high LED. Resolution: 1 degree or 0.1 degree.

Accuracy: ±0.25% of span, ±1 degree.

Supply Voltage: 100-240 VAC nominal, ±10%, 50-400 Hz, single phase; 132-240 VDC nominal, ±10%.

Power Consumption: 5 VA maximum.

Operating Temperature: 14 to 131°F (-10 to 55°C).

Memory Backup: Non-volatile memory. No batteries required.

Control Output Ratings:

SSR: 2.5A @ 240 VAC resistive at 77°F (25°C). De-rates to 1.25A @ 130°F (55°C).

Relay: SPDT, 10 A @ 240 VAC resistive.

Switched Voltage (non-isolated): 5 VDC @ 20 mA.

Proportional Isolated Current: 0-20 mA, selectable, into 600 Ohms maximum.

Control Action: Selectable for reverse (usually heating) or direct (usually cooling).

Ramp: One ramp time adjustable from 0-100 hours.

Isolation: Relay and SSR outputs; 1500 VAC. 0-20 mA output; 500 VAC. 5 VDC output is not isolated.

Weight: 13 oz (369 g).

Front Panel Rating: NEMA 4X (IP65).

Temperature