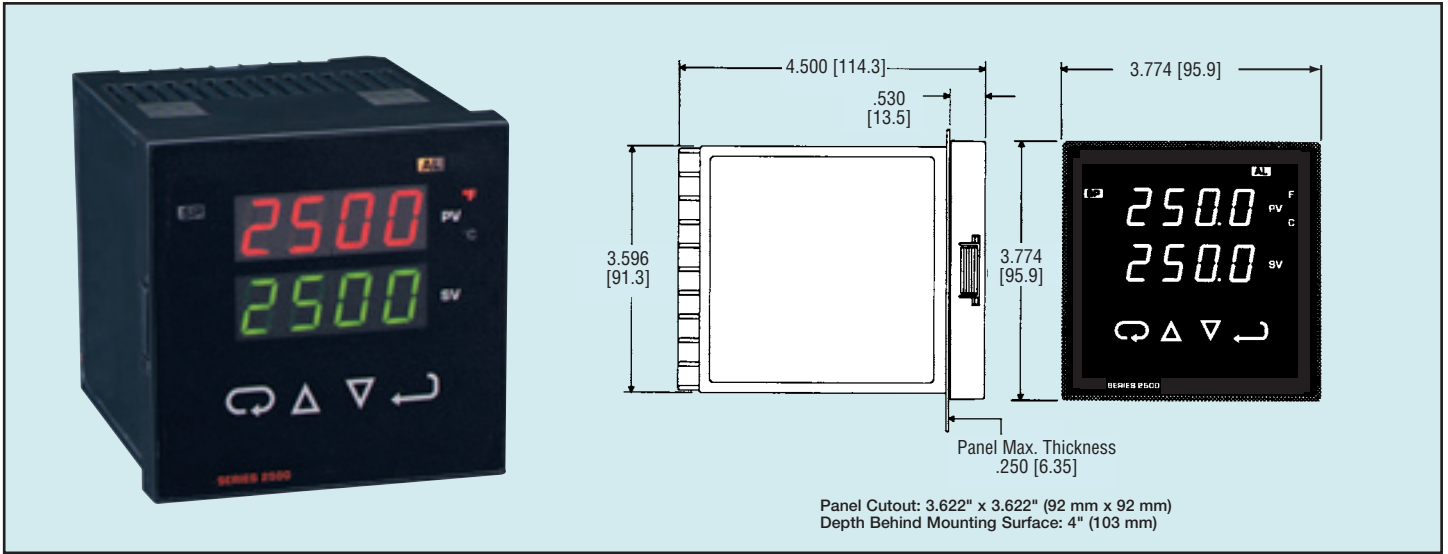




Series
2500

Temperature/Controller

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



Panel Cutout: 3.622" x 3.622" (92 mm x 92 mm)
Depth Behind Mounting Surface: 4" (103 mm)

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. Optional 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.

STOCKED MODELS in bold

MODEL NO.	ALARM	INPUT	OUTPUT*
25011	No	Thermocouple	SSR
25012	No	Thermocouple	5 VDC
25013	No	Thermocouple	Relay
25015	No	Thermocouple	4-20 mA
25021	No	RTD	SSR
25022	No	RTD	5 VDC
25023	No	RTD	Relay
25025	No	RTD	4-20 mA
25111	Yes	Thermocouple	SSR
25112	Yes	Thermocouple	5 VDC
25113	Yes	Thermocouple	Relay
25115	Yes	Thermocouple	4-20 mA
25121	Yes	RTD	SSR
25122	Yes	RTD	5 VDC
25123	Yes	RTD	Relay
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).

Suggested Specification:

Temperature/Process Controller shall be 1/4 DIN microprocessor based with two 4 digit LED displays for setpoint, alarm status and °F or °C. Input shall be (selectable J, K, T, E, N or L thermocouple)(DIN-RTD). Output shall be (SSR)(5 VDC)(Relay)(Isolated 4-20 mA) programmable for manual or automatic Self-Tune® PID control (with) (without) alarm. Front panel shall be designed to meet NEMA-4X, IP65 ratings for weather and corrosion resistance. Accuracy shall be ±0.25% of span, ±1 degree. Temperature/Process Controller shall be Love Controls Model No. 25_____.

Temperature