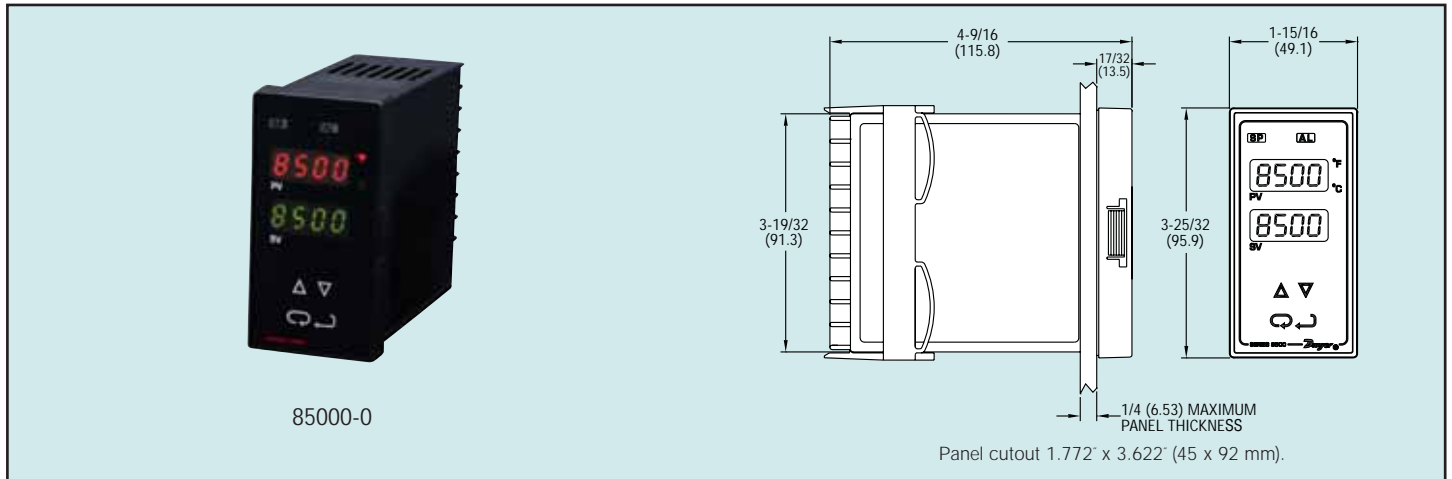




Series
8500

Temperature/Controller

1/8 DIN, Fully Programmable, Self-Tune PID



85000-0

Temperature

The Love Series 8500 Temperature/Process Control provides an impressive selection of features in a compact, economical 1/8 DIN package. Features include on-off, time proportioning, proportional, PI, PD or full PID control – fully programmable from the front panel – or use Self-Tune PID. Inputs are selectable from a variety of thermocouple types including J, K, T, E, N or L; DIN NIST or Ni RTD's. Output choices include solid state relay, mechanical relay, 5 VDC – ideal for driving an external SSR – or isolated 4-20 mA proportional current. An optional programmable alarm provides a full array of alarm action configurations including high alarm, low alarm and high/low guardband alarm. Manual reset, power-up inhibit and power interrupt reset provide additional alarm flexibility.

A water and corrosion resistant front panel (NEMA 4X, IP65), 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 easily field replaceable without wiring changes thanks to the removable front panel.

MODELS

Model Number	Input	Output
85111-0	Thermocouple	SSR
85112-0	Thermocouple	5 VDC
85113-0	Thermocouple	Relay
85115-0	Thermocouple	4-20 mA
85121-0	RTD	SSR
85122-0	RTD	5 VDC
85123-0	RTD	Relay
85125-0	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, order part number A-600. R/C snubber

SPECIFICATIONS

Inputs: Thermocouple or RTD.

Display: Two 4 digit, 7 segment LED; models; 0.3" (7.62 mm) high.

Resolution: 1 degree or 0.1 degree.

Accuracy: ±0.25% of span, ±1 degree.

Supply Voltage: 100 to 240 VAC nominal, +10%-15%, 50-400 Hz, single phase; 132-240 VDC nominal, +10%-20%.

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-rate to 1.25A @ 130°F (55°C).

Relay: SPDT, 10A @ 240 VAC resistive.

Alarm Relay: SPST, 3A @ 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 to 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).