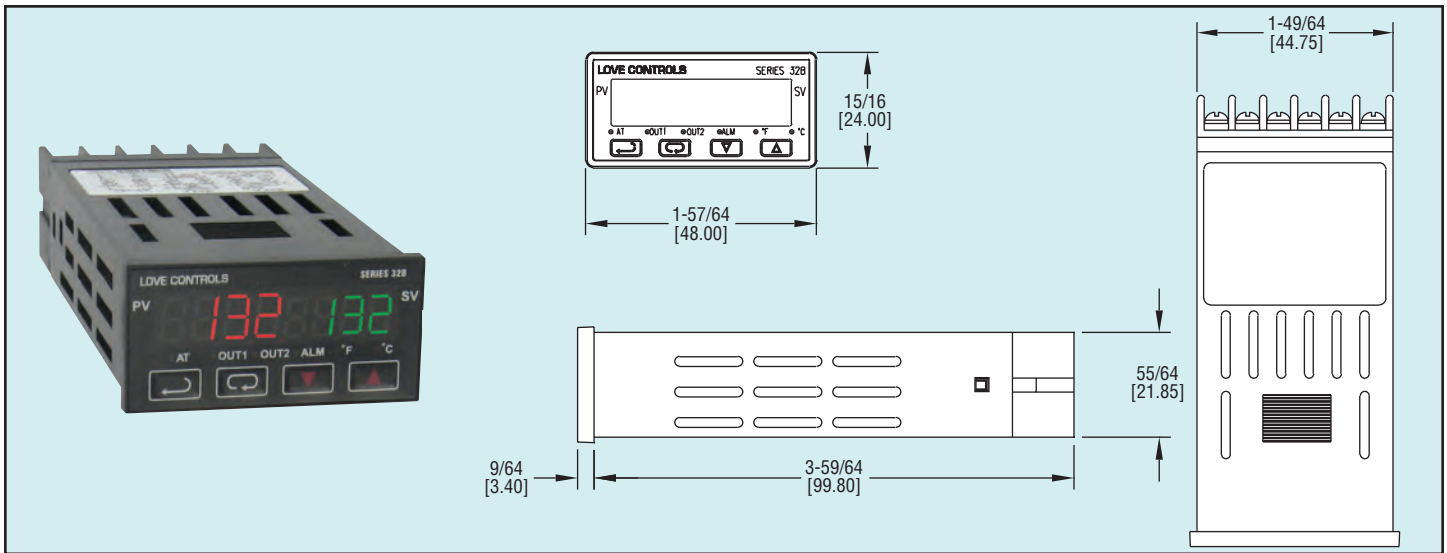# 1/32 DIN Temperature/Process Controller

Universal Input, Dual Temperature Output Control, RS-485 Communication

CE RoHS cULus LISTED

The compact Series 32B Temperature/Process Controller offers advanced control features for the most demanding temperature or process applications. Enclosed in a 1/32 DIN housing, the Series 32B is designed with dual, 4-digit LED displays for local indication of process value and setpoint. Control methods include ON/OFF, PID, self-tune, and manual tune. PID control is supported with 64 temperature and time (ramp/soak) control actions. The dual loop output control allows simultaneous heating and cooling control. The second output can be configured as an alarm mode using one of the thirteen built-in alarm functions.

RS-485 communication is standard on the Series 32B. Up to 247 communication addresses are available with transmission speeds of 2400 to 38,400 bps. The controller also features universal input, selectable temperature units (°F/°C), selectable resolution, quick sampling rate and security protection.

Model	Output 1	Output 2
32B-23	Voltage Pulse	Relay
32B-33	Relay	Relay
32B-53	Current	Relay

Add -LV to end of model number for 24 VDC supply power.

ACCESSORIES
SCD-SW, Configuration Software
A-277, 250 Ω Precision Resistor
MN-1, Mini-Node™ USB/RS-485 converter
A-600, R/C snubber

SPECIFICATIONS
Inputs: Thermocouple, RTD, DC voltages or DC current.
Display: Two 4-digit, 7 segment .25″ H (6.35 mm) LED's. PV: red; SV: green.
Accuracy: ±0.25% span, ±1 least significant digit.
Supply Voltage: 100 to 240 VAC, 50/60 Hz or 24 VDC (depending on model).
Power Consumption: 5 VA max.
Operating Temperature: 32 to 122°F (0 to 50°C).
Memory Backup: Nonvolatile memory.
Control Output Ratings:
    Relay: SPST, 5A @ 250 VAC resistive;
    Voltage pulse: 14V, 10% to -20% (max. 40 mA);
    Current: 4 to 20 mA.
Communication: RS-485 Modbus® A-5-11/RTU communication protocol.
Weight: 4 oz (114 g).
Agency Approvals: CE, RoHS, cUL, UL.
Front Panel Rating: IP56.

Input Types	Range
Type K T/C	-328 to 2372°F (-200 to 1300°C)
Type J T/C	-148 to 2192°F (-100 to 1200°C)
Type T T/C	-328 to 752°F (-200 to 400°C)
Type E T/C	32 to 1112°F (0 to 600°C)
Type W T/C	-328 to 2372°F (-200 to 1300°C)
Type R T/C	32 to 3092°F (0 to 1700°C)
Type S T/C	32 to 3092°F (0 to 1700°C)
Type B T/C	212 to 3272°F (100 to 1800°C)
Type L T/C	-328 to 1562°F (-200 to 850°C)
Type U T/C	-328 to 932°F (-200 to 500°C)
Pt 100 RTD	-328 to 1112°F (-200 to 600°C)
0 to 50 mV	-999 to 9999
0 to 5 V	-999 to 9999
0 to 10 V	-999 to 9999
0 to 20 mA*	-999 to 9999
4 to 20 mA*	-999 to 9999

*Requires 250 Ohm Precision Resistor.

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