

Series **4B** 

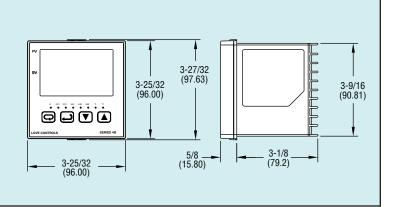
## 1/4 DIN Temper ature/ Process Controller

Dual Control Output, RS-485 Communication, Auto-Tuning









The Series 4B 1/4 DIN Temperature/Process Controller is designed to accept thermocouple, RTD, current or voltage input and provide dual outputs for control. Available outputs include relay/relay, voltage pulse/relay, current/relay, or linear voltage/relay.

The units can be programmed for ON/OFF, PID, auto-tuning, or manual tuning control methods. The PID control is supported by 64 ramp/soak actions. The Series 4B also includes two additional alarm outputs. The second relay output can be reconfigured as a third alarm output. The alarm type can be selected from 13 different preprogrammed alarm functions. The controller features dual LED displays for local indication of process and setpoint values.

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)
0-50 mV	-999 to 9999
0-5 V	-999 to 9999
0-10 V	-999 to 9999
0-20 mA*	-999 to 9999
4-20 mA*	-999 to 9999

<sup>\*</sup>Requires 250 Ohm Precision Resistor.

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## **SPECIFICATIONS**

Inputs: Thermocouple, RTD, DC voltages or DC current.

Display: Two 4-digit, 7 segment. PV: 3/4" H (19 mm) red; SV: 1/2"

H (12.7 mm) green.

Accuracy: ±0.25% span, ±1 least significant digit. Supply Voltage: 100 to 240 VAC, 50/60 Hz.

Power Consumption: 5 VA max.

Operating Temperature: 32 to 122°F (0 to 50°C).

Memory Backup: Nonvolatile memory.

**Control Output Ratings:** 

Relay: SPDT, 5A @ 250 VAC resistive.

Voltage Pulse: 14V, 10% to -20% (max 40 mA).

Current: 4 to 20 mA. Linear Voltage: 0-10V.

Communication: RS-485 Modbus® A-5-11/RTU communication

protocol.

Weight: 15 oz (425 g).

Agency Approvals: CE, UL, cUL. Front Panel Rating: IP66.

Model Number	Output 1	Output 2		
4B-23	Voltage Pulse	Relay		
4B-33	Relay	Relay		
4B-53	Current	Relay		
4B-63	Linear Voltage	Relay		

## **ACCESSORIES**

SCD-SW, Configuration Software A-277, 250 Ohm Precision Resistor MN-1, Mini-Node™ USB/RS-485 converter