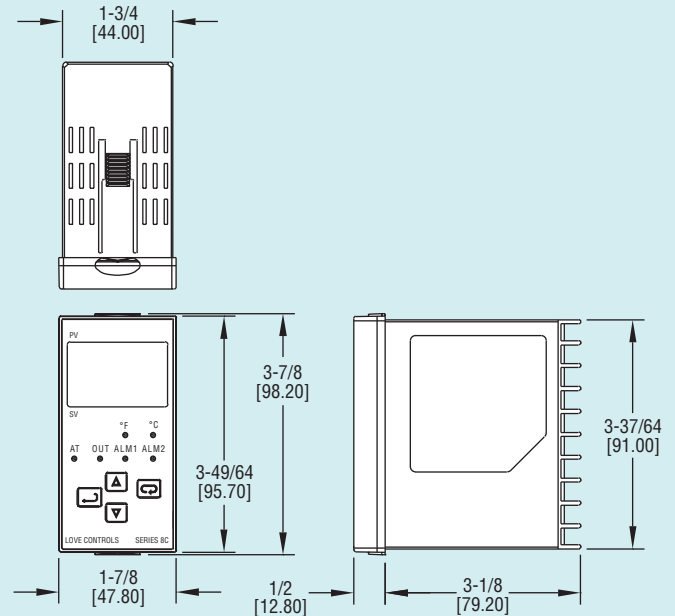




Series  
8C

# 1/8 DIN Temperature Controller

ON/OFF or PID Control, Auto-Tuning, RS-485 Communication



The Series 8C Temperature Controller offers easy-to-use programming menus designed for quick installation. The unit is designed for direct or reverse acting (cooling or heating) control. The Series 8C can be programmed for simple ON/OFF or more complex PID control functions. PID control is supported with manual or auto-tuning. Select relay, voltage pulse, or current output control methods. The controller also includes two additional alarm outputs. The alarm outputs can be configured from 12 different preprogrammed settings.

The temperature controller accepts a variety of thermocouple and RTD inputs. The process value and setpoint value are displayed simultaneously on the large dual LED. Auto-tuning, engineering units (°F or °C) and alarm status is also indicated on the faceplate.

Model	Output
8C-2	Voltage Pulse
8C-3	Relay
8C-5	Current

## ACCESSORIES

SCD-SW, Configuration Software

MN-1, Mini-Node™ USB/RS-485 converter

A-600, R/C snubber

## SPECIFICATIONS

**Inputs:** Thermocouple & RTD (see chart).

**Display:** Two 4-digit, 7 segment .38" H (9.53 mm) LED's. PV: red; SV: 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;

Communication: RS-485 Modbus® communication protocol.

**Weight:** 15 oz (425 g).

**Agency Approvals:** CE, RoHS, cUL, UL.

**Front Panel Rating:** NEMA 4X (IP66).

Input Types	Range
Pt100Ω RTD	32 to 212°F (0 to 100°C) -4 to 932°F (-20 to 500°C) -328 to 1112°F (-200 to 600°C)
T/C type B	212 to 3272°F (100 to 1800°C)
T/C type S	32 to 3092°F (0 to 1700°C)
T/C type R	32 to 3092°F (0 to 1700°C)
T/C type N	-328 to 2372°F (-200 to 1300°C)
T/C type E	32 to 1112°F (0 to 600°C)
T/C type T	-4 to 752°F (-20 to 400°C) -328 to 752°F (-200 to 400°C)
T/C type J	-4 to 752°F (-20 to 400°C) -148 to 1562°F (-100 to 850°C)
T/C type K	-328 to 2372°F (-200 to 1300°C) -328 to 932°F (-200 to 500°C)
T/C type L	-328 to 932°F (-200 to 500°C)
T/C type U	-328 to 1472°F (-200 to 800°C)

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