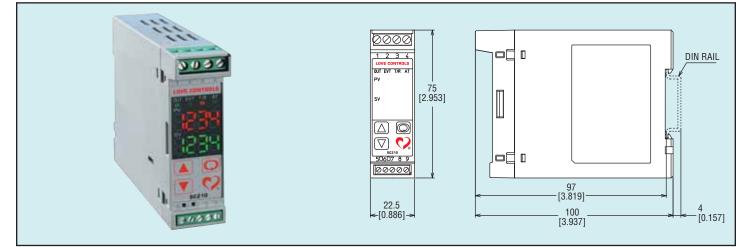


# **DIN Rail Mount Temperature/Process Control** Universal Input, Two-Color Dual Display



The Series SCZ10 has its own dual display and keypad, making process monitoring and programming a snap. The universal input allows field programming for a wide variety of sensors, making the SCZ10 one of the most flexible controls or transmitters available today. When used as a control, the SCZ10 is available with mechanical relay, switched (pulsed) DC for SSRs, or proportional current (4-20 mA) to drive motor actuators or proportional power units (SCRs). When used as a transmitter, the 4-20 mA output may be scaled virtually anywhere on the input scale, allowing for the greatest application flexibility.

Range °C

-200 to 10001

-200 to 13701

-200 to 4001

-200 to 800

-17 to 1760

-17 to 1760

-200 to 800

-200 to 8501

-200 to 5001

### FEATURES

- Dual display
- · Control or transmitter
- · Self-Tune and PID
- · Directly programmable from self contained keypad
- Universal input

TEMPERATURE

Temperature/Process Controllers

In second 1

· Compact DIN rail mount

Model	Supply Voltage	Output
SCZ10-1000-00		Relay
SCZ10-2000-00	120 to 240 VAC	Switched Voltage
SCZ10-3000-00		Current
SCZ10-3100-00	24 VAC/DC	Current

	Input Type	Range °F	Range °C	
	Type J Thermocouple	-320 to 1800	-200 to 10	
	Type K Thermocouple	-320 to 25001	-200 to 13	
	Type T Thermocouple	-200 to 7501	-200 to 40	
	Type E Thermocouple	-320 to 1500	-200 to 80	
	Type R Thermocouple	0 to 3200	-17 to 176	
	Type S Thermocouple	0 to 3200	-17 to 176	
	Type B Thermocouple	0 to 3300	0 to 1820	
:	Type C Thermocouple	0 to 4200	0 to 2315	
	Type PL-II Thermocouple	0 to 2500	0 to 1390	
	Type N Thermocouple	-320 to 1500	-200 to 80	
3	100Ω Plt. 0.00385 DIN RTD	-300 to 15001	-200 to 85	
	100Ω Plt. 0.003916 JIS1 RTD	-300 to 9001	-200 to 50	
	Current/Voltage/ $\Delta$ Voltage <sup>2</sup> Scalable Units from -1999 to +9999			

<sup>1</sup> These input ranges can be set for 0.1° display. Range may be limited to no greater than 999.9° or less than -199.9°.

<sup>2</sup> The 0 to 20 mADC, 4 to 20 mADC, 0 to 5 VDC, 1 to 5 VDC, and 0 to 10 VDC inputs are fully scalable from a minimum of 100 counts span placed anywhere within the range of -1999 to +9999. Decimal point position is adjustable from the zero place (9999), tenths (999.9) place, or hundredths (99.99) place.

## ACCESSORY

A-600, R/C snubber

### SPECIFICATIONS

#### Input:

Thermocouple: K, J, R, S, E, T, N, PL-II, C (W/Re5-26); External resistance: 100Ω or less; B thermocouple: External resistance: 40Ω or less; RTD: Pt100, JPt100 3-wire system. Allowable input wire resistance  $(10\Omega \text{ or less per wire});$ DC current: 0 to 20 mADC, 4 to 20 mA input impedance 50Ω (50Ω shunt resistor sold separately); DC voltage: 0 to 1 VDC; Input impedance: 1MQ or greater. Output Ratings: Relay contact: 3A @ 250 VAC, Resistive; 1A @ 250 VAC Inductive (CØS =0.4), electric life 100,000 cycles. Switched voltage (for SSR drive): 12 VDC @ 40 mA max. (short-circuit protected) DC current: 4 to 20 mADC, Load resistance: Max. 550 output accuracy: ±0.3% of output span. Resolution: 12,000 counts. Control Type: P, PI, PD, PID, Self Tune, on-off, process retransmission. Proportional Band: 0.0 to 110.0% (ON/OFF when set to 0.0). Integral Time: 0 to 1000 seconds (Off when set to 0). Derivative Time: 0 to 300 seconds (Off when set to 0). Proportional Cycle: 1 to 120 seconds. Manual Reset: Proportional band converted value. Output Limit: 0 to 100% (DC current output type: -5 to 105%). Hysteresis: Thermocouple and RTD input: 0.1 to 100.0 degrees DC voltage and current input: 1 to 1000 (decimal point place follows the selection). Power Requirements: 120-240 VAC, 50-60 Hz, 24 VAC 50-60 Hz optional. Power Consumption: Approximately 6VA. Accuracy: Thermocouple input: ±0.2% of input span, ±1 digit or 4°F (2°C), whichever is greater. R, S input: 0 to 400°F (0 to 200°C): ±6°C (12°F). B input: 0 to 600°F (0 to 300°C): Accuracy is not guaranteed. K, J, E, N input less than 32°F (0°C): ±0.4% of input span ±1 digit. RTD input: ±0.1% of input span ±1 digit or ±2°F (1°C), whichever is greater. DC voltage input: ±0.2% of input span ±1 digit. DC current input: ±0.2% of input span ±1 digit. Input Sampling Period: 0.25 seconds, 4 Hz. PV Display: Red LED 4-digit character size: 7.5 x 4.1 mm (H x W). SV Display: Green LED 4-digit character size 7.5 x 4.1 mm (H x W). Display Resolution: 1 count, 1 degree, or 0.1 degree, depending on selected range Memory Backup: Nonvolatile memory, no battery used. Ambient Temperature: 32 to 131°F (0 to 50°C). Ambient Humidity: 35 to 85%RH (non-condensing). Weight: Approx. 5.3 oz (150 g). Agency Approvals: CE, UL, cUL. Front Panel Rating: NEMA 4X (IP66).