



Features :

- 3 Digits, 7 Segment LED single display
- TC / RTD Inputs
- ON - OFF / PID Control
- Auto Tuning / Self Tuning
- Single Set Point
- oC / oF Selectable
- Field selectable Control Output (Relay or SSR)

Certifications :

Display Specifications

Display	3 Digits, 7 Segment LED single display
LED Indications	Height of Display 10mm R : Control output ON

Input Specifications

Inputs	Thermocouple (J, K, T, R, S) / RTD (PT100)
Resolution	Fixed 1o
Indication Accuracy	For J, K & T inputs : 0.25% of F.S. $\pm 1^{\circ}\text{C}$ For R & S inputs : 0.5% of F.S. $\pm 2^{\circ}\text{C}$ (20 min of warm up time for TC inputs) For RTD inputs : 0.1% of F.S. $\pm 1^{\circ}\text{C}$ (F.S. = Full Scale)
Temperature Unit	$^{\circ}\text{C}$ / oF selectable
Input Filter (FTC)	0.2 to 10.0 sec
Sampling time	250 ms

Output Specifications

Relay Contact (SPDT)	10A @ 250V AC / 30V DC, resistive
SSR Drive (Voltage Pulse)	12V DC, 30mA

Functional Specifications

Control Action	1) PID Control with Auto or self tuning 2) ON - OFF Control
Proportional Band (P)	1 to 400oC, 1.0 to 752.0 oF
Integral Time (I)	0.0 to 99.9 min
Derivative Time (D)	0 to 999 sec
Cycle Time	0.1 to 99.9 sec
Hysteresis Width	0.1 to 99.9oC
Manual Reset Value	-19.9 to 19.9oC / oF

Auxiliary Supply Specifications

Supply Voltage	85 to 270V AC / DC (50 / 60Hz) 6
Power Consumption	VA max @ 230V AC

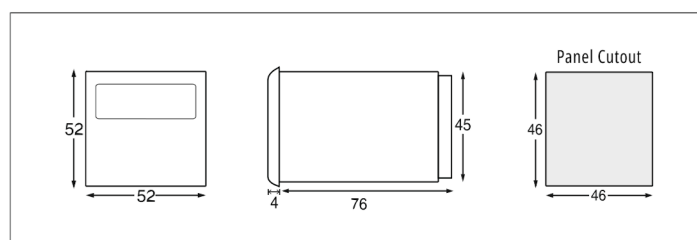
Environmental Specifications

Temperature	Operating : 0 to 50oC (32 to 122oF) Storage : 20 to 75oC (-4 to 167oF)
Humidity (non - condensing)	95% RH

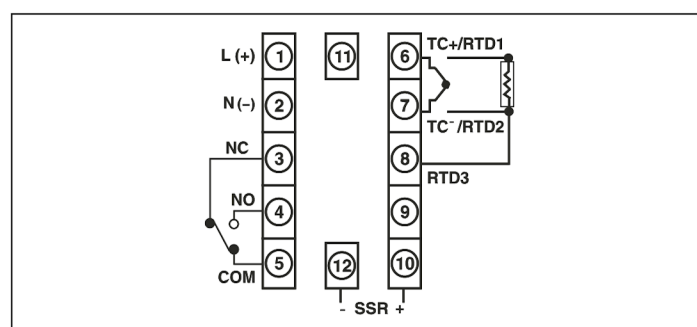
Mechanical

Specifications	Mounting	Panel
Weight		111 gms

Dimensions



Terminal Connections



Compliance

Applicable EMI / EMC Standards		
Product Standard : IEC 61326-1		
Category		Standards Compliance
ESD Immunity	IEC 61000-4-2	Level III
Surge Immunity	IEC 61000-4-5	+/- 2 kV common mode, +/- 1 kV differential mode
Radiated Susceptibility	IEC 61000-4-3	Level III, 80 to 1000MHz Level II, 1.4GHz to 2GHz Level I, 2GHz to 2.7GHz
Conducted Susceptibility	IEC 61000-4-6	Level II
Voltage Dips and Interruptions	IEC 61000-4-11	Dips : 0% residual voltage / 1 cycle (Criteria B), 40% residual voltage / 10 cycles 50Hz / 12 cycles 60Hz (Criteria C) 70% residual voltage / 25 cycles 50Hz / 30 cycles 60Hz (Criteria C) Interruptions : 0% residual voltage / 250 cycles 50Hz / 300 cycles 60Hz (Criteria C)
Conducted Emission	CISPR-11	
Radiated Emission	CISPR-11	
Electrical Fast Transient	IEC 61000-4-4	Level III

Ordering Information

PRODUCT CODE	OUTPUT 1	SUPPLY VOLTAGE	CERTIFICATION	85-
TC513BX	RELAY SSR	270V AC / DC-		
TC513BX-CER	RELAY SSR	85-270V AC / DC in process		

Accessories (Optional)

Standard SELEC accessories that can be used with this product.

Adapter plate
1) AP7248 : Plastic adapter plate, used to mount 1/16 DIN (cutout size 48 x 48) Instrument into existing (72 x 72) cutout size.
2) AP9648 : Plastic adapter plate, used to mount 1/16 DIN (cutout size 48 x 48) Instrument into existing (96 x 96) cutout size.
3) AP4896-4848-G-C : Plastic adapter plate, used to mount 1/16 DIN (cutout size 48 x 48) Instrument into existing (48 x 96) cutout size.

Mounting Accessories (Supplied with units)

For 48 x 48 Collar clamp	ACL4802
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Input Sensor Ranges

Resolution		Ranges
Sensor type		1
Pt100	C	-150 to 850
	F	-199 to 999
J	C	-199 to 750
	F	-199 to 999
K	C	-199 to 999
	F	-199 to 999
T	C	-199 to 400
	F	-199 to 750
R & S	C	0 to 999
	F	32 to 999