



**Features:**

- Dual Display, 4 digit, 7 segment LED
- TC / RTD Input
- PID, ON/OFF Control
- Two Setpoints
- °C / °F Selectable
- Field selectable Control Output (Relay or SSR)
- Auxiliary Output : Relay / SSR
- Easy to use

Size: 48mm x 48mm, 72mm x 72mm, 96mm x 96mm

Certifications: CE c UL<sup>®</sup> US

**Technical Specifications**

**Display**

Digits	4 digit 7 Segment LED, Dual display <b>TC544</b> : Height of Upper Display : 0.3785" Height of Lower Display : 0.2720" <b>TC244</b> : Height of Upper Display : 0.5385" Height of Lower Display : 0.3755" <b>TC344</b> : Height of Upper Display : 0.5510" Height of Lower Display : 0.3830"
LED Indication	Relay ON, Tune, Soak Time

**Input Specifications**

Inputs	Thermocouple (J,K,T,R,S) / RTD (Pt100)
Sampling time	250 ms
Input Filter (FTC)	0.2 to 10.0sec
Resolution	0.1/1° for TC/RTD inputs (fixed 1° for R & S type TC input)
Temperature Unit	°C / °F selectable
Indication Accuracy	For J, K & T inputs: 0.25% of F.S. ±1° For R & S inputs: 0.5% of F.S. ±2° (20 min of warm up time for TC inputs) For RTD inputs: 0.1% of F.S. ±1° (F.S. = Full Scale)

**Output Specifications**

<b>Control</b>	1
Contact Rating	5A @ 250V AC / 30V DC, resistive
SSR Drive (Voltage Pulse)	12V DC ±10%, 50mA
<b>Alarm</b>	1
Contact Rating	5A @ 230V AC / 30V DC, resistive

**Functional Specifications:**

Control Action	1) PID 2) ON-OFF
Proportional Band (P)	1.0 to 400.0°
Integral Time (I)	0 to 9999 sec
Derivative Time (D)	0 to 9999 sec
Cycle Time	0.1 to 99.9 sec
Hysteresis Width	0.1 to 99.9°
Manual Reset Value	-19.9 to 19.9°

**Functional Specifications:**

<b>Heat-cool</b>	
Control Action	PID (with auto-tuning)
Proportional Band-Cool	0.0 to 400.0°
Cycle Time-Cool	0.1 to 99.9 sec
Dead Band	Programmable from setpoint low limit to setpoint high limit.
<b>Settings for Alarm Output</b>	
Modes	Deviation, Absolute
Hysteresis	0.1 to 99.9°

**Supply Voltage**

Supply Voltage	85 to 270V AC/DC (50 / 60Hz) OPTIONAL - 24V AC/DC, ±10%
Power Consumption	6VA max @ 230V AC

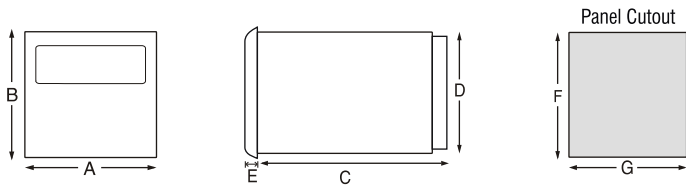
**Environmental Specifications**

Temperature	Operating: 0 to 50°C (32 to 122°F) Storage: -20 to 75°C (-4 to 167°F)
Humidity (non-condensing)	95% RH
Weight	<b>TC544</b> : 142 gms <b>TC244</b> : 190 gms <b>TC344</b> : 252 gms
Protection Level	IP65 for faceplate

**Compliance**

IEC/EN 61326 (EMI/EMC)
IEC/EN 61010 Revision3 2010 Edition (Safety)
UL 61010 Revision3 2010 Edition (Safety)

### Dimensions



MODELS	DIM	A	B	C	D	E	F	G
TC544A		52	52	94	45	4	46	46
TC244AX		72	72	83.7	67	4.5	69	69
TC344AX		96	96	73	90.5	5	92	92

All dimensions are in mm

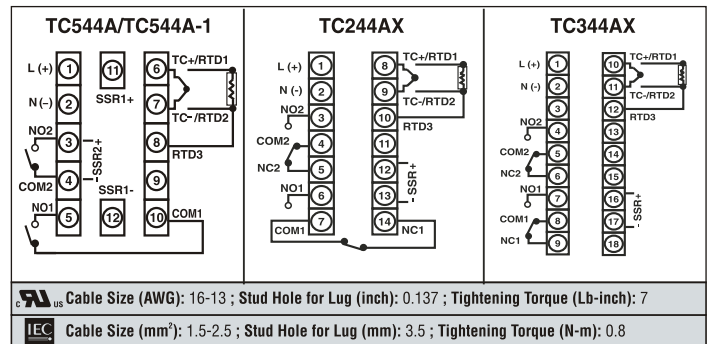
### Mounting Accessories (Supplied with units)

For TC544 : 48 X 48 Collar clamp ACL4802  
 For TC244/TC344 : Clamp side with screw assembled

### Input Sensor Ranges

Sensor type	Resolution	Ranges	
		1	0.1
Pt100	°C	-150 to 850	-150 to 850
	°F	-238 to 1562	-199 to 999
J	°C	-199 to 750	-199 to 750
	°F	-328 to 1382	-199 to 999
K	°C	-199 to 1350	-199 to 999
	°F	-328 to 2462	-199 to 999
T	°C	-199 to 400	-199 to 400
	°F	-328 to 750	-199 to 750
R & S	°C	0 to 1750	N/A
	°F	32 to 3182	N/A

### Terminal Connections



### Ordering Information

This product is CE certified. Also available with UL marking against order. Please order as per the requirement.

Part No.	Control Output		Auxiliary Output	Supply Voltage
	Relay	12V DC SSR		
TC544A	Relay	12V DC SSR	Relay	85 - 270V AC/DC
TC544A-1	Relay	12V DC SSR	12V DC SSR	85 - 270V AC/DC
TC544A-24V	Relay	12V DC SSR	Relay	24V AC/DC
TC544A-1-24V	Relay	12V DC SSR	12V DC SSR	24V AC/DC
TC244AX	Relay	12V DC SSR	Relay	85 - 270V AC/DC
TC244AX-24V	Relay	12V DC SSR	Relay	24V AC/DC
TC344AX	Relay	12V DC SSR	Relay	85 - 270V AC/DC
TC344AX-24V	Relay	12V DC SSR	Relay	24V AC/DC

### UL approved part numbers

Part No.	Control Output		Auxiliary Output	Supply Voltage	Certification
	Relay	12V DC SSR			
TC544A-CU	Relay	12V DC SSR	Relay	85 - 270V AC/DC	CE 
TC544A-1-CU	Relay	12V DC SSR	12V DC SSR	85 - 270V AC/DC	CE 
TC544A-24V-CU	Relay	12V DC SSR	Relay	24V AC/DC	CE 
TC544A-1-24V-CU	Relay	12V DC SSR	12V DC SSR	24V AC/DC	CE 
TC244AX-CU	Relay	12V DC SSR	Relay	85 - 270V AC/DC	CE 
TC244AX-24V-CU	Relay	12V DC SSR	Relay	24V AC/DC	CE 
TC344AX-CU	Relay	12V DC SSR	Relay	85 - 270V AC/DC	CE 
TC344AX-24V-CU	Relay	12V DC SSR	Relay	24V AC/DC	CE 

### 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) AP9672 : Plastic adapter plate, used to mount 72 x72mm size instrument into existing (96 x 96) cutout size.
- 4) 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.