



Features :

- 3 digits, 7 segment LED single display
- TC / RTD inputs
- ON - OFF / PID control
- Single set point
- °C / F selectable
- Field selectable control output (Relay or SSR)
- IDM Applicable

Display specifications

Display	3 digits (White), 7 segment digital display
Height of display	TC203CX & TC303CX : 21mm
LED indications	OUT : Control output ON

Input specifications

Inputs	Thermocouple (J, K, T, R, S) / RTD (PT100)
Resolution	Fixed 1°
Indication accuracy	For TC inputs: 0.25% of F.S. ±1° For R & S inputs : 0.5% of FS ±1° (30 min of warm up time) For RTD inputs : 0.1% of FS ±1° (F.S. = Full scale)
Temperature unit	°C / °F selectable
Input filter (FTC)	0.2 to 10.0sec
Sampling time	250ms

Output specifications

Control output (Relay or SSR user selectable)	
Relay contact (SPDT)	(For TC303CX) 10A @ 250V AC / 30V DC, resistive
Relay contact (SPDT)	(For TC203CX) 10A @ 250V AC / 30V DC, resistive
SSR drive (Voltage pulse)	12V DC, 50 mA

Functional specifications

Control action	1) PID control with auto tuning 2) ON - OFF control
Proportional band (P)	1 to 400°
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 99.9°
Manual reset value	-19.9 to 19.9°

Auxiliary supply specifications

Supply voltage	90 to 270V AC / DC (AC : 50 / 60 Hz)
Power consumption	5 VA max @ 230V AC

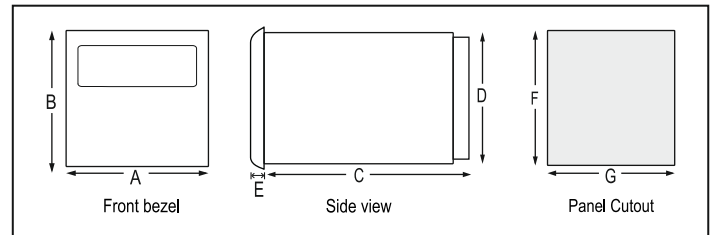
Environmental specifications

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

Mechanical specifications

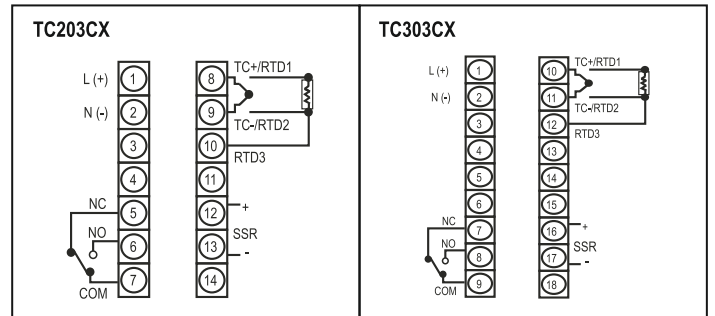
Mounting	Panel
Weight	TC203CX : 180 gms TC303CX : 240 gms

Dimensions (All are in mm)



MODELS	DIM	A	B	C	D	E	F	G
TC203CX		76	76	83.7	67	4.5	69	69
TC303CX		100	100	73	90.5	5	92	92

Terminal connections



UL Cable size (AWG): 16-13 ; Stud hole for lug (inch): 0.137 ; Tightening torque (Lb-inch): 7

IEC Cable size (mm): 1.5-2.5 ; Stud hole for lug (mm): 3.5 ; Tightening torque (N-m): 0.8

Ordering information

Product code	Output		Supply voltage	Certification
TC203CX	RELAY	SSR	90 - 270V AC / DC	---
TC303CX	RELAY	SSR	90 - 270V AC / DC	---

Accessories (Optional)

Standard SELEC accessories that can be used with this product.

Adapter plate

- AP7248 : Plastic adapter plate, used to mount 1 / 16 DIN (cutout size 48 x 48) Instrument into existing (72 x 72) cutout size.
- AP9648 : Plastic adapter plate, used to mount 1 / 16 DIN (cutout size 48 x 48) Instrument into existing (96 x 96) cutout size.
- AP9672 : Plastic adapter plate, used to mount 72 x 72mm size instrument into existing (96 x 96) cutout size.
- 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.

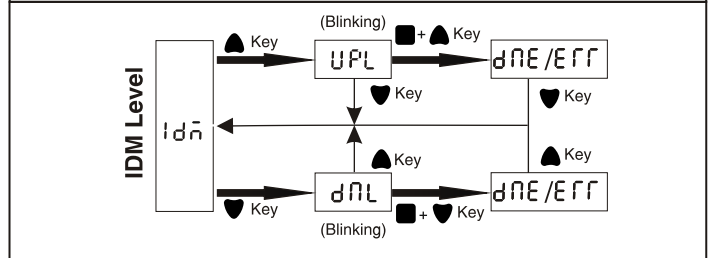
Mounting accessories (Supplied with units)

For TC203CX / TC303CX : Clamp side with screw assembled

Input sensor ranges For TC / RTD Inputs)

Sensor type	Resolution	Ranges
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

Independent Downloader Module (IDM)



IDM Level	
Display	Parameter Description
Idn	Independent Downloader Module
UPL	Upload from product to IDM
dnl	Download from IDM to product
dne	Operation Successful
err	Operation unsuccessful