Temperature Controller

TC513CX

48 x 48mm

Features :

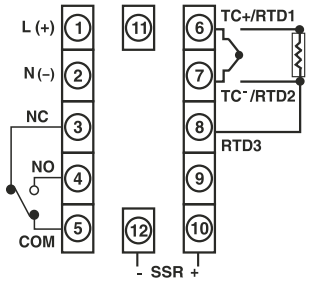
- 3 Digits, 7 Segment LED single display
- TC/ RTD inputs
- ON - OFF/ PID control
- Auto tuning/ Self tuning
- Single set point
- °C/°F selectable
- Field selectable control output (Relay or SSR)
- IDM applicable

Certificate : CE

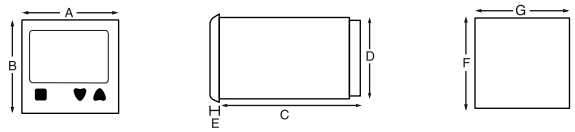
Technical specifications

Display specifications	
Display	3 digits, 7 Segment LED single display
Height of display	10 mm
LED indication	R: Control output ON
Input specifications	
Inputs	Thermocouple (J, K, T, R, S)/ RTD (PT100)
Resolution	Fixed 1°
Indication accuracy	For J, K & T inputs: 0.25% of F.S. ±1°C For R & S inputs: 0.5% of F.S. ±2°C (20 min of warm up time for TC inputs) For RTD inputs: 0.1% of F.S. ±1°C (F. S. = Full scale)
Temperature unit	°C/°F selectable
Input filter (FTC)	0.2 to 10.0 sec
Sampling time	250 ms
Output specifications	
Control output (Relay or SSR user selectable)	
Relay contact (SPDT)	Main Output: NO: 10A 250 VAC/ 24 VDC NO/ NC: 5A/ 5A 250 VAC/ 24 VDC
SSR drive (Voltage pulse)	12 VDC, 30 mA
Functional specifications	
Control action	1) PID Control with auto or self tuning 2) ON-OFF control
Proportional band (P)	1 to 400°C
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°C
Manual reset value	- 19.9 to 19.9°C/°F
Auxiliary supply specifications	
Supply voltage	90 to 270 VAC/ DC (50/ 60Hz)
Power consumption	6 VA max @ 230 VAC
Environment 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	111 gms

Terminal connections



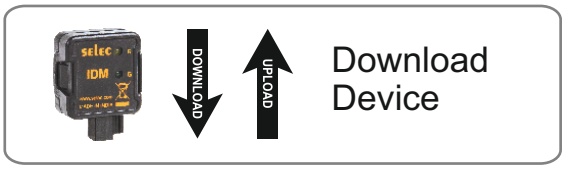
Dimensions (All are in mm)

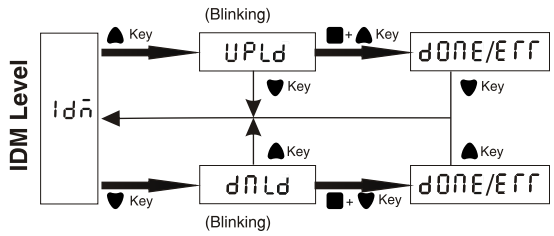


Front bezel | Side view | Panel Cutout

MODELS / DIM	A	B	C	D	E	F	G
TC513CX	52	52	76	90.5	3.5	46	46

Independent Downloader module (IDM)





IDM Level	
Display	Parameter Description
Idn	Independent Downloader Module
UPLd	Upload from product to IDM
dNLd	Download from IDM to product
dONE	Operation Successful
ERR	Operation unsuccessful

Ordering information

Product code	Output		Supply voltage	Certification
	Relay	SSR		
TC513CX	RELAY (10A)	SSR (12 VDC)	90 to 270 VAC/ DC	CE