Temperature Controller

TC244CX, TC344CX



72 x 72mm

96 x 96mm

Features :

- 4+4 digits, 7 segment LED dual display
- Auto tune/ Self tune PID
- PID/ ON - OFF control
- TC/ RTD input
- Two set points
- Field selectable control output (Relay or SSR)
- Dwell timer
- IDM applicable
- Auxiliary output: Relay

Certifications: CE

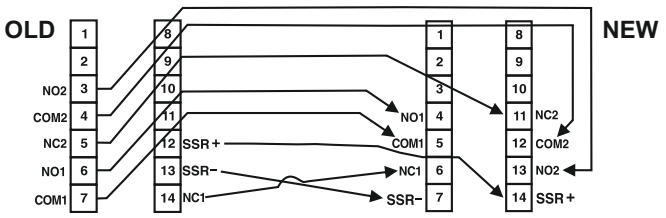
Technical specifications

Display specifications	
Display	4+4 digits, 7 Segment LED dual display
Height of display	White display: 16.7mm, Green display : 9mm
LED indication	AT: Auto Tune OUT 1: ON S:Dwell timer OUT 2: ON
Keys	3 keys of digital setting
Input specifications	
Inputs	Thermocouple (J, K, T, R, S)/ RTD (PT100)
Resolution	0.1/ 1° for TC/ RTD inputs (fixed 1° for R & S inputs)
Indication accuracy	For TC inputs : 0.25% of F.S. ±1° For R & S inputs : 0.5% of F.S. ±1° (30 min of warm up time) For RTD inputs : 0.1% of F.S. ±1° (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 contact (SPDT)	Main Output: NO :10A 250 VAC/ 24 VDC NO/ NC : 5A/5A 250 VAC/ 24V DC
SSR drive (Voltage pulse)	12 VDC, 50 mA
Auxiliary output	
Relay contact (SPDT)	Alarm Output: NO :10A 250 VAC/ 24VDC NO/ NC : 5A/5A 250 VAC/ 24 VDC
Functional specifications	
Control action	1) PID Control with auto tuning 2) ON-OFF control 3) Heat cool with auto tuning
Proportional band (P)	1.0 to 400.0°C
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°
Heat-cool	
Control action	PID
Proportional band-cool	0.0 to 400.0°
Cycle time-cool	0.1 to 99.9 sec
Dead band	SPLL to SPHL (Programmable)
Settings for alarm output	
Modes	Deviation, Absolute
Hysteresis	0.1 to 99.9°

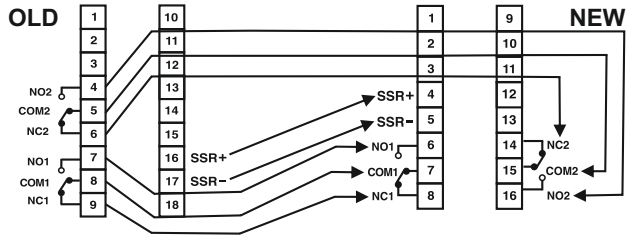
Auxiliary supply specifications	
Supply voltage	90 to 270V AC / DC (50 / 60Hz)
Power consumption	5 VA max @ 230V AC
Environment specifications	
Temperature	Operating : 0°C to 50°C; Storage : -20°C to 75°C
Humidity (non - condensing)	95% RH
Mechanical specifications	
Mounting	Panel
Weight	TC244CX - 164 gms ; TC344CX - 217 gms

Cross-wiring old v/s new

TC244CX

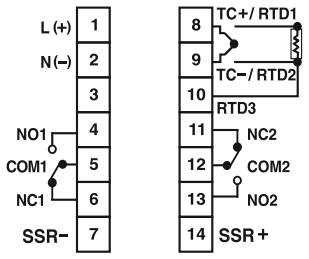


TC344CX

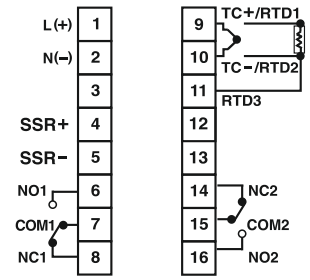


Terminal connections

TC244CX

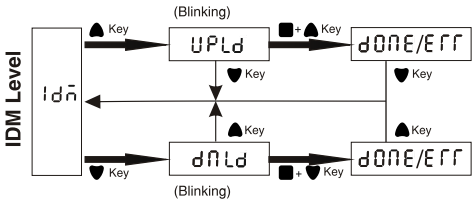


TC344CX



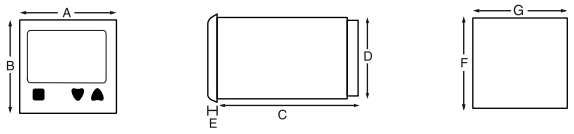
Independent downloader module (IDM)





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

Dimensions (All are in mm)



Front bezel Side view Panel Cutout

MODELS / DIM	A	B	C	D	E	F	G
TC244CX	76	76	44	67	4.5	69	69
TC344CX	99	99	39	90.5	3.5	92	92

Ordering information

Product Code	Output 1		Output 2	Supply Voltage	Certification
	Relay	SSR			
TC244CX	RELAY (5A)	SSR (12V DC)	RELAY (5A)	90 to 270V AC / DC	CE
TC344CX	RELAY (5A)	SSR (12V DC)	RELAY (5A)	90 to 270V AC / DC	CE