



Features :

- 4+4 Digits, 7 Segment LED dual display
- TC / RTD input
- ON - OFF / PID control
- Two set points
- °C / F selectable
- Field selectable control output (Relay or SSR)
- Auxiliary output : Relay
- IDM applicable

Display specifications

| | |
|----------------|--|
| Digits | 4+4 digits, 7 segment digital display |
| Height | White display : 16.7mm Green display : 9mm |
| LED indication | OUT 1 : ON, AT : Auto tune OUT 2 : ON, SOAK : Dwell timer |
| Keys | 3 keys for 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 input) |
| 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 input : 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) | 5A @ 250V AC / 30V DC, resistive |
| SSR drive (Voltage pulse) | 12V DC, 50 mA |
| Auxiliary output (Relay or SSR user selectable) | |
| Relay contact (SPDT) | 5A @ 250V AC / 30V DC, resistive |

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° |
| 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° |

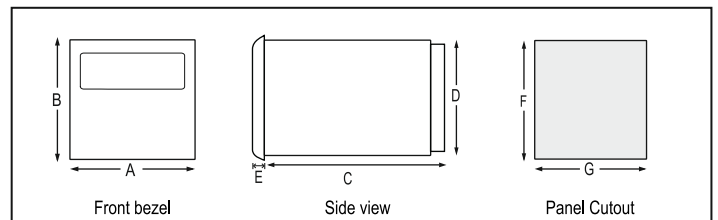
Auxiliary supply specifications

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

Environmental specifications

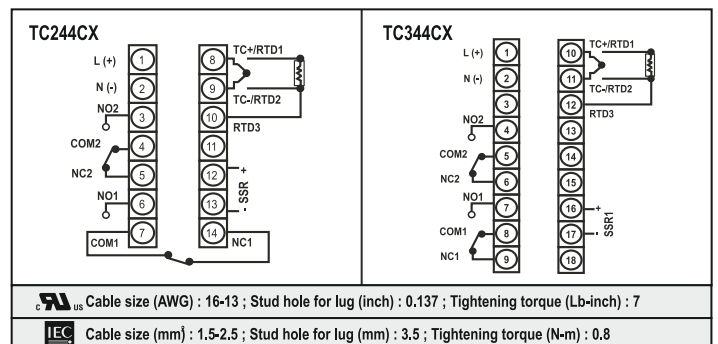
| | |
|-----------------------------|--|
| Temperature | Operating : 0°C to 50°C Storage : -20°C to 75°C |
| Humidity (non - condensing) | 95% RH |
| Weight | TC244CX : 200 gms TC344CX : 252 gms |

Dimensions (All are in mm)



| MODELS | DIM | A | B | C | D | E | F | G |
|---------|-----|-----|-----|------|------|-----|----|----|
| TC244CX | | 76 | 76 | 83.7 | 67 | 4.5 | 69 | 69 |
| TC344CX | | 100 | 100 | 73 | 90.5 | 5 | 92 | 92 |

Terminal connections



Ordering information

| Product code | Output 1 | Output 2 | Supply voltage | Certification |
|--------------|--------------------------|----------|-------------------|---------------|
| TC244CX | RELAY SSR (12V DC) | RELAY | 90 - 270V AC / DC | — |
| TC344CX | RELAY SSR (12V DC) | RELAY | 90 - 270V AC / DC | — |

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 x 72mm 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.


Mounting accessories (Supplied with units)

For TC244CX / TC344CX : Clamp side with screw assembled

Input sensor ranges (For TC / RTD inputs)

| 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 |

Independent Downloader Module (IDM)



TC344CX TC244CX

Download Device

(Blinking)

Key UPLd Key dONE/ERR

Key dNLD Key dONE/ERR

(Blinking)

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 |