

### Features :

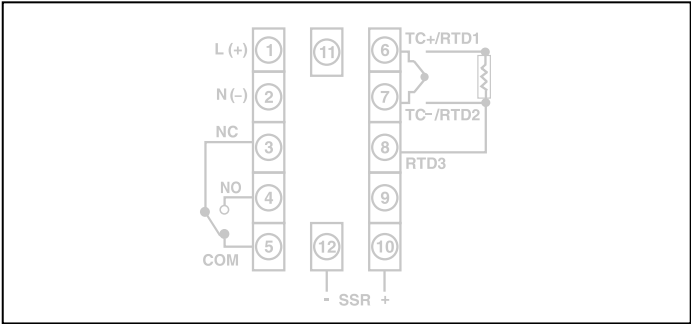
- ▶ 3+3 Digits, 7 Segment LED Dual Display
- ▶ TC/ RTD input
- ▶ PID/ ON - OFF control
- ▶ Single set point
- ▶ °C/°F selectable
- ▶ Field selectable control output (Relay or SSR)

48 x 48mm

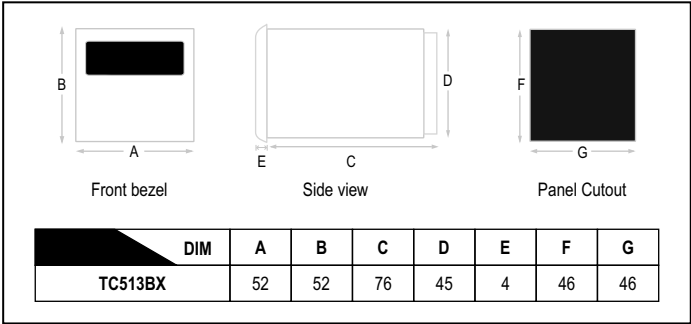
## Technical specifications

|                             |                                                                                                                                                                                                                                         |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Display                     | 3+3 Digits 7 Segment LED Dual Display                                                                                                                                                                                                   |
| Height of display           | Upper display: 10 mm, Lower display: 7 mm                                                                                                                                                                                               |
| LED indication              | R: Control output ON                                                                                                                                                                                                                    |
| Inputs                      | Thermocouple (J, K, T, R, S) / RTD (PT100)                                                                                                                                                                                              |
| Resolution                  | Fixed 1°                                                                                                                                                                                                                                |
| Indication accuracy         | For J, K & T inputs: 0.25% of F.S. $\pm 1^{\circ}\text{C}$<br>For R & S inputs: 0.5% of F.S. $\pm 2^{\circ}\text{C}$ (20 min of warm up time for TC inputs)<br>For RTD inputs: 0.1% of F.S. $\pm 1^{\circ}\text{C}$ (F.S. = Full scale) |
| Temperature unit            | °C/°F selectable                                                                                                                                                                                                                        |
| Input filter (FTC)          | 0.2 to 10.0sec                                                                                                                                                                                                                          |
| Sampling time               | 250 ms                                                                                                                                                                                                                                  |
| Relay contact (SPDT)        | Main Output: NO: 10A 250 VAC/ 24 VDC<br>NO/ NC: 5A/ 5A 250 VAC/ 24 VDC                                                                                                                                                                  |
| SSR drive (Voltage pulse)   | 12 VDC, 50 mA                                                                                                                                                                                                                           |
| Control action              | 1) PID Control with auto tuning<br>2) ON-OFF control                                                                                                                                                                                    |
| Proportional band (P)       | 1.0 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                                                                                                                                                                                                                             |
| Manual reset value          | -19.9 to 19.9°C                                                                                                                                                                                                                         |
| Supply voltage              | 90 to 270 VAC/ DC (50/ 60Hz)                                                                                                                                                                                                            |
| Power consumption           | 5 VA max @ 230 VAC                                                                                                                                                                                                                      |
| 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                                                                                                                                                                                                                                  |
| Mounting                    | Panel                                                                                                                                                                                                                                   |
| Weight                      | 129 gms                                                                                                                                                                                                                                 |

Terminal connections



Dimensions (All are in mm)



Ordering information

|         |             |              |                   |       |
|---------|-------------|--------------|-------------------|-------|
|         |             |              |                   |       |
| TC533AX | RELAY (10A) | SSR (12 VDC) | 90 to 270 VAC/ DC | - - - |