



THERMAX CONTROLS

Reliable Monitoring...

DIGITAL OIL & WINDING TEMPERATURE INDICATOR

MODEL: TC23



Technical specification

Model TC23

Temperature sensor	RTD (PT-100 DIN 43760)
Operating temperature	- 20°C to 60°C
No. of sensor input	One (PT 100 sensor)
CT secondary current input	1A – 5A (User Selectable)
Temperature Rise	1°C – 45°C (User Selectable)
No. of Set-points OTI	Two independent output relays for alarm & trip
No. of Set-points WTI	Four independent output relays for fan 1, fan 2, alarm & trip
Range	0 – 150°C (User Selectable)
Resolution	0.1°C
Accuracy	± 1% of FSD
Display	Four-digit seven segment LED's for displaying OTI & WTI
Communication	RS-485 MODBUS RTU (Optical)
Indications	4 Nos RED LEDs to indicate <ul style="list-style-type: none">a. OTI alarmb. OTI Tripc. WTI alarmd. WTI Trip
	4 Nos YELLOW LEDs to indicate <ul style="list-style-type: none">a. WTI fan 1 ONb. WTI fan 2 ONc. Controller is in gradient moded. Controller is in maximum mode
	1 No GREEN LEDs to indicate <ul style="list-style-type: none">a. Controller is in program mode

Electrical specification

Model TC23

Supply voltage	90 – 260V AC/DC
Current Outputs	Two analog DC o/p for 1 no. each OTI & WTI (4-20mA suitable for 600 ohms burden)
Contact Rating	5A @ 220V AC / 5A @30V DC resistive load
Terminals	Screwed caged suitable for one 2.5 SQ.mm wire
Insulations	Insulation resistance will be greater than 100MΩ when 500V. DC is applied between each terminal and earth at room temperature. Equipment will with stand 2KV rms at 50/60 Hz for 1 min, applied between all terminals shorted together to earth.
Power consumption	7.5 Watts (Max)

Mechanical specification		Model: TC23
Overall Dimensions	205(H) x 265(W) x 130(D) mm	
Mounting	Wall mounting with Anti-Vibration pads and M6 screws	
Weight	Approx. 2 Kg without packing box.	
Enclosure	IP-55	

SOFTWARE

The 4 No's of Key's are used to change the settings Manually or through RS-485.

1. Contacts settings of the following OTI Relay's
 - Set values of OTI Alarm & Trip
2. Contacts Setting of the following WTI Relay's
 - Set values of WTI Alarm, Trip, Fan1 & Fan2
3. Differential settings of the Relay for the above.
4. Winding Temperature Gradient Settings.
 - CT Secondary Current.
 - Winding Temperature Rise.

Information For Ordering / Enquiring

Model no	TC23
Type Of Instrument	OTI & WTI
Range	0 – 150 °C 20 – 140 °C 30 – 150 °C
PT100	Simplex Duplex
Cannels	OTI 2C OTI 4C WTI 2C WTI 4C OTI 2C + WTI 2C OTI 2C + WTI 4C OTI 3C + WRI 3C