

# Temperature Controller 72X72mm

- Flush Mounting 72x72 mm
- Lower Depth of 65mm
- Universal Input
- Single and Dual LED Display
- Configurable Output: Relay or SSR Drive
- °C & °F temperature unit selectable
- Multiple device programming with Memory card support
- Rapid Set Point change feature
- Alarm Functionality
- Single/Dual acting PID controllers
- IP 65 (for Front Panel) IP 20 (for Terminals & Enclosure)
- Auto-tuning PID with provision for Soft-Start
- CE, UKCA, ROHS Certified



## Ordering Information

Cat. No.	Description
TCM3T100	Temp. controller, 4 digit single display, RTD & thermocouple input, 10A SPDT relay or SSR
TCM2T100	Temp. controller, 3 digit dual display, RTD & thermocouple input, 10A SPDT relay or SSR
TCM4T600	Temp. controller, 4 digit dual display, RTD & thermocouple input, 10A SPDT relay, SSR & 5A SPDT relay



# Temperature Controller 72X72mm

Cat. No.	TCM3T100	TCM2T100	TCM4T600
<b>Display</b>			
Display	4 Digit, Single display	3 Digit, Dual display	4 Digit, Dual display
Display Color	RED	White + Green	White + Green
Display Size	14mm	Upper Display : 18mm Lower Display : 13mm	Upper Display : 18mm Lower Display : 13mm
LED Indications	Output 1, Autotune, (last Segment of SSD for AT,ST)	Output 1, Autotune,	Output 1,2,3, Autotune, Timer
Programming method	Front Keys, Memory Card		
Multiple Device Programming	Memory card		
<b>Input</b>			
Thermocouples (TC)	J, K, T, R, S	J, K, T, R, S	J, K, T, R, S
RTD	PT-100	PT-100	PT-100
mV			-5 to 60mV
Voltage (V)			
Current (mA)			
<b>Output</b>			
Output 1	10A SPDT/ SSR (12Vdc,50mA)	10A SPDT/ SSR (12Vdc,50mA)	10A SPDT
Output 2			SSR (12Vdc,50mA)
Output 3			5A SPDT
Output 4 (Voltage,Current)			
<b>Communication, CT input &amp; Sensor Supply</b>			
RS-485			
CT input			
<b>Mechanical parameters</b>			
Dimension (WXHxD) mm	72X72X65		
Panel cutout mm	68X68		
<b>Indication Accuracy</b>			
RTD	±0.5% of PV or ±3°C (Which ever is higher one),±1 digit at room temp		
TC	±0.5% of PV or ±2°C (Which ever is higher one),±1 digit at room temp		
Mounting	±0.5% of PV or ±3°C (Which ever is higher one),±1 digit at room temp		
<b>Resolution</b>			
TC : J,K,T (all TC)	1°C	1°C	0.1°C/ 1°C
TC: R & S	1°C	1°C	1°C
PT-100	1°C	1°C	0.1°C/ 1°C
mV			0.001
Analog (Voltage,Current)			
CT input			
Ambient conditions			
Operating temperature	0 to 60°C	0 to 60°C	0 to 60°C
Relative humidity	85% RH	85% RH	85% RH

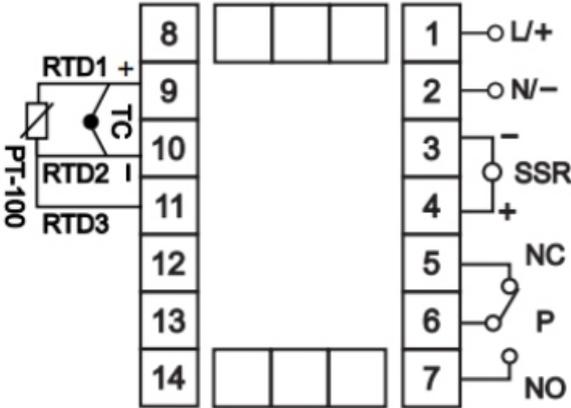


# Temperature Controller 72X72mm

Cat. No.	TCM3T100	TCM2T100	TCM4T600
<b>Power Supply Characteristics</b>			
Supply Input	90 to 270 VAC/DC		
Frequency	47 to 63Hz		
Power Consumption (Aprox)	≈ 6VA @ 240V AC		
<b>Functional features</b>			
Alarm functionality			Applicable
Type of Alarm			Absolute low ("AbLO") / Absolute high ("AbHl") / - Absolute band ("AbbA") / Deviation low ("dELo") / Deviation high("dEHi") / Deviation band ("dEbA")
Ramp & Soak			
Hour Meter			Applicable
Dwell Timer			Applicable
Control method	ON-OFF/PID	ON-OFF/PID	ON-OFF/PID
Controlling action	Heat/Cool	Heat/Cool	Heat/Cool/Heat-cool
Tune method	Autotune		
<b>Measurement Ranges</b>			
J type	-199 to 750°C	-199 to 750°C	-199 to 750°C
K type	-199 to 999°C	-199 to 999°C	-199 to 1350°C
T type	-199 to 400°C	-199 to 400°C	-199 to 400°C
R & S	0 to 999°C	0 to 999°C	0 to 1750°C
PT-100	-150 to 850°C	-150 to 850°C	-200 to 850°C
<b>Compliance &amp; certification</b>			
Product standard	IEC 61326		
Certification			

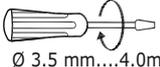


# Temperature Controller 72X72mm

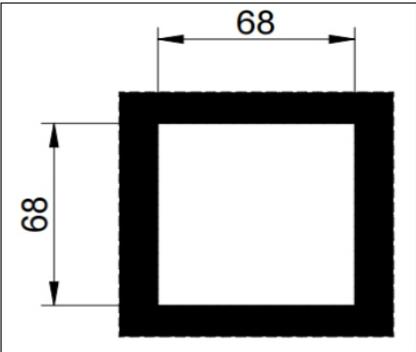


**Note:** This connection diagram is applicable for TCM3T100

## TERMINAL TORQUE & CAPACITY

 Ø 3.5 mm....4.0mm	0.6 N.m (5.3 Lb.in)
	1 x 4.0 mm <sup>2</sup> Solid/Stranded Wire
AWG	1 x 20 to 10

## MOUNTING DIMENSION (mm)



RECOMMENDED PANEL CUTOUT  
68 mmX 68 mm +0.5 mm

