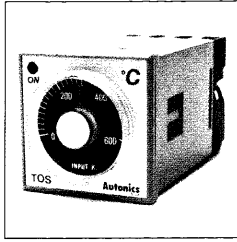


# ANALOGUE TEMPERATURE CONTROLLERS

## TOS ON/OFF OR PROPORTIONAL TEMPERATURE CONTROLLERS



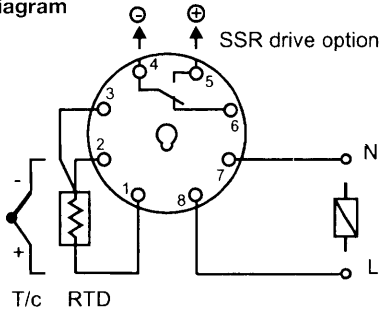
The TOS range of Temperature Controllers offer an extremely cost effective analogue solution for simple On/Off or Proportional control. Options for J/K Thermocouples and PT100 RTDs are available with either Relay or SSR drive outputs.

- Selectable On/Off or Proportional action
- Up to 1200°C scale ranges
- J, K T/couple or PT100 input options
- Relay or SSR drive output options
- 90 to 240Vac universal supply inputs

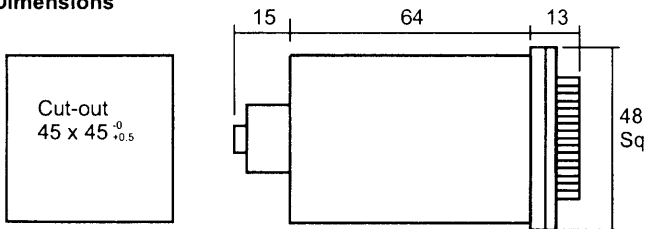
### Specification

Supply Voltage: 90 to 264Vac/dc @ 50/60 Hz  
 Power drain: 3VA max.  
 Scale Accuracy: +/- 2% of FSD  
 Scale Range: See 'standard items' below  
 Input sensor: J or K T/couple or PT100 - 3 wire  
 Max ext. resist: T/couple: 100 Ω, PT100: 5 W per wire  
 Control band: On/Off: Hysteresis = 0.5 +/- 0.2% of Scale Range  
 Propl: Proportional Band = 3% of Scale Range  
 Output rating: Relay: 3A/240Vac resistive  
 SSR: 20mA/12Vdc  
 Electrical life: 100,000 ops at rated load  
 Ambient range: -10 to 50°C non-condensing  
 Weight: 180gms

### Connection Diagram



### Dimensions

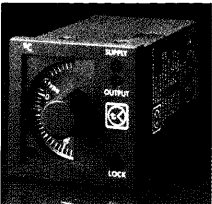


### Standard Items

Input	Output	Range	Part Number
J T/c	Relay	0 to 100°C	TOS-B4RJ1C
		0 to 200°C	TOS-B4RJ2C
K T/c	Relay	0 to 200°C	TOS-B4RK2C
		0 to 400°C	TOS-B4RK4C
		0 to 800°C	TOS-B4RK8C
PT100	Relay	0 to 100°C	TOS-B4RP1C
		0 to 200°C	TOS-B4RP2C

For a suitable panel mounting or DIN-rail wiring socket see page 26

## TC4800 DIAL LOCKABLE ON/OFF/PD TEMPERATURE CONTROLLERS



The TC4800 range of Temperature Controllers is available in On/Off or Proportional + Derivative (PD) control options, operating from a range of sensors. A 4-20mA input type also enables them to be used for the control of processes other than temperature. Of particular note is the dial lock which prevents tampering.

- Dial lock
- On/Off or PD control action
- Deviation leds plus meter output
- J, K T/couple, PT100 or 4-20mA input options
- Relay or SSR drive output options
- Dual 110/230Vac supply input

### Specification

Supply Voltage: 110/230(220-240)Vac @ 50/60 Hz or 24Vac/dc  
 Power drain: 4VA max.  
 Scale Accuracy: +/- 2% of FSD (Scale Range)  
 Scale Range: See part number below  
 Input sensor: J, K, R or T T/couple, 3-wire PT100 or 4-20mA  
 Max ext. resist: T/couple: 100 Ω, PT100: 5 Ω per wire  
 Control band: On/Off: Hyst. = 0.5% (1% TC486\*) of FSD  
 Propl: PB = 4% to 10% of FSD  
 Cycle Time: 20 secs (PB model only)  
 Output rating: Relay: SPCO, 5A/240Vac resistive  
 SSR: 30mA/24Vdc  
 Electrical life: 100,000 ops at rated load  
 Deviation Output: +/- 50 μAmps  
 Ambient range: -10 to 50°C non-condensing  
 Approvals: Conform to CE emc EN50081-1 & EN50082-1 plus low voltage EN6010-1 directives  
 Weight: 200gms

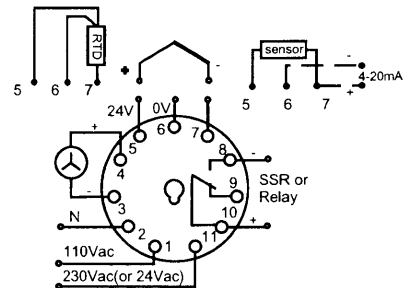
### Part Numbering Options

Number TC4831-02-110/240VAC  
 Field 1 2 3 4 5

Field	Function	Parameter	Code
1	Series	48x48 mm case	TC48
2	Control Mode	On/Off	1
		PD	3
		Latch	5
		On/Off 4-20mA	6
3	Action/Output	Reverse/Relay	0
		Direct/SSR	1
		Reverse/Relay	2
		Direct/SSR	3
4	Sensor type	K T/couple	0
		J T/couple	1
		T T/couple	2
		R T/couple	3
		Pt100 - 3 wire	5
		4-20 mA	6
5	Scale Range	J, K 0 to 200°C	1
		J, K 0 to 400°C	2
		K 0 to 600°C	3
		K 0 to 800°C	4
		K 0 to 1200°C	5
		T -100 to 200°C	0
		T -170 to 30°C	6
		R 0 to 1600°C	0
		PT100 -100 to 200°C	0
		PT100 -50 to 150°C	1
		PT100 0 to 100°C	2
		PT100 0 to 200°C	3
		PT100 -50 to 100°C	4
		4-20 mA 0 to 100%	6

For other temperature ranges, please contact our Sales Office

### Connection Diagram



### Dimensions

