

The TC 09 is a proportionate temperature controller with dual display and digital calibration. This proportionate controller decreases the average power supplied to the heater as the temperature approaches set point. This ensures that it will not overshoot the set point and maintain a stable temperature.

This proportionate temperature controller maintains a stable temperature due to the inbuilt proportionate band which has two fixed parameters and these are PB and PT. PB is set at 5 degrees and PT is fixed for 30 seconds.

If the set temperature is 100 degrees, the PB & PT will activate at 95 degrees. At this point, the ON time of the heating is 60% of PT and OFF time is 40%. This means an ON period of 18 seconds and off time of 12 seconds. When the temperature reaches 99 degrees, the ON time of the heating will be 40% and off time 60%.

The controller has two displays. The first one indicates actual temperature and other indicates set temperature. The main advantage of this controller is the calibration which has been done digitally through software. There is no need to calibrate the controller every year and nobody can alter the setting as it is protected with password.

The temperature can be set by pressing the  /  key.

Other Specification

- 1) Input supply: 150-270 VAC.
- 2) Details of output relay: SPDT, Goodsky RWH-SH-112D, Contact rating 1Amp/240VAC.
- 3) Size of the enclosure: 96x96x85, Cut out of panel 92x92.
- 4) Temperature range: 0 – 300 degree.
- 5) Display: 6 digits, size 1/2 x 3/4 inch and 7 segment with red color.
- 6) Temperature sensing probe: PT 100
- 7) Resolution: 1 degree
- 8) Status indication: LED for relay status
- 9) Sensor break protection: Auto switch off on sensor break, "OPEN / SHORT will be displayed.

Wiring Diagram

C	NO	NC				S1	S2	
P	N	E						

C : RELAY COMMON S2 : PT100 SENSOR
NO : NORMALLY OPEN P : PHASE
NC : NORMALLY CLOSED N : NEUTRAL
S1 : PT100 SENSOR E : EARTH