



J, K, Pt100  
 0 / 1 / 2 setpoints  
 85~265 V AC SMPS  
 Functions : ONOFF and Time Proportional  
 Accuracy : 0.1% of full scale 1 C, typical  
 Sensor break indication

**SPECIFICATIONS** All specifications at ambient of 25 °C, unless specified otherwise

**INPUT**

**Input types**  
 Thermocouple J, K  
 RTD Pt100  
**Range limits** See Table 1  
**Accuracy** See Table 1  
**Temperature coefficient of accuracy** ± 0.5% of span / 25 °C  
**Cold junction compensation** Automatic  
**Units** °C (For °F, contact us)  
 Pt100, Thermocouple

**OUTPUTS**

**No. of relays** 0/1/2 electromagnetic relays  
**Relay contact type** NO-C-NC (RL1)  
 NO-C (RL2)  
**Relay contact rating** 5A / 230V AC, resistive  
**SSR drive** 12 V DC drive signal for external SSR  
**Mutual isolation between input/output/supply** 1 KV AC / 1 minute

**INDICATION**

**Display** Upper : 4 digit, 7 segment 0.56" (14.2 mm) red LED display  
 Lower : 4 digit, 7 segment 0.39" (9.9 mm) green LED display  
**Status indication** 2 LEDs for relay status

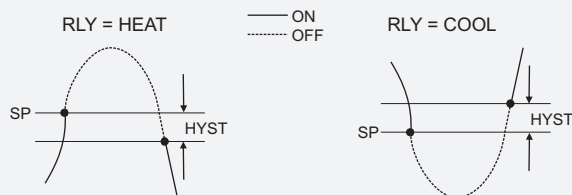
**PROGRAMMABLE PARAMETERS**

**Setpoint** Full range (See Table 1)  
**Hysteresis / band** 0.1 to 99.9 °C  
**Resolution** 1 for TC  
 0.1, 1 for Pt100  
**High scale** Full range (See Table 1)  
**Low scale** Full range (See Table 1)  
**Control functions** ONOFF, Time Proportional Control (TPC) (RLY1), ONOFF (RLY2)  
**Cycle time for TPC** 1 ~ 99 seconds  
**Relay logic** a. Heat b. Cool  
**Proportional offset** -99.9 to 99.9 °C (RLY1)

**OTHER**

**Keyboard** Tactile, 3 keys  
**Enclosure construction** Plug-in (circuit removable without affecting terminal wiring)  
**Dimensions (in mm)** 72(H) x 72(W) x 100(D)  
**Mounting** Panel mount  
**Panel cutout** 68 x 68 mm  
**Supply voltage** 85~265 V AC, 50/60 Hz  
**Power consumption** 3 watts maximum  
**Operating ambient temperature** 0 ~ 50 °C  
**Relative humidity** Below 90%, non condensing

**RELAY LOGIC**



ONOFF CONTROL (Relay1, Relay2)



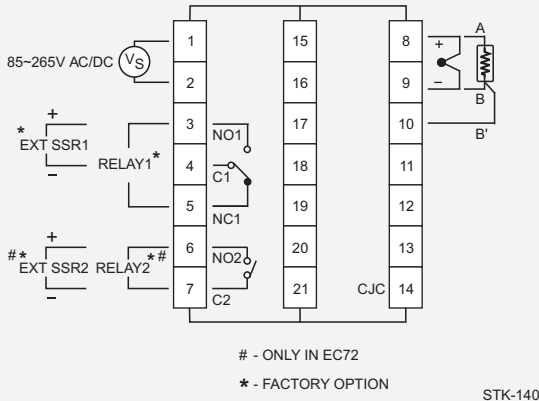
TIME PROPORTIONAL CONTROL (Relay1 only)

**TABLE 1**

| SENSOR / INPUT        | RANGE LIMITS (°C / EU) |            | RANGE IN WHICH ACCURACY IS SPECIFIED |            | TYPICAL ACCURACY AT 30 °C (°C / EU) | WORST CASE ACCURACY (°C / EU) |
|-----------------------|------------------------|------------|--------------------------------------|------------|-------------------------------------|-------------------------------|
|                       | LOW SCALE              | HIGH SCALE | LOW SCALE                            | HIGH SCALE |                                     |                               |
| Iron / Constantan (J) | -99                    | 750        | 0                                    | 750        | ± 1                                 | ± 3                           |
| Chromel / Alumel (K)  | -99                    | 1350       | -50                                  | 1200       | ± 1                                 | ± 3                           |
| Pt100, 3-wire         | -99                    | 850        | -50                                  | 850        | ± 0.5 *                             | ± 2                           |

\* ± 0.1°C in the range -50 to +400 °C

### CONNECTION DIAGRAM



2022 A

| A  | Configuration |           |
|----|---------------|-----------|
|    | Relay         | SSR drive |
| 00 | 1             | 0         |
| 01 | 2             | 0         |
| 02 | 1             | 1         |

Product url : [www.radix.co.in/ptc.htm](http://www.radix.co.in/ptc.htm)

### OTHER PRODUCTS

#### ONOFF CONTROLLER EC48

48x48x100 2 SETPOINTS



#### ONOFF CONTROLLER TC49SU

48x96x100 2 SETPOINTS



#### PID CONTROLLER P48

48x48x100 2 SETPOINTS



#### ONOFF CONTROLLER TC96

96x96x100 2 SETPOINTS



#### ONOFF CONTROLLER EC96S

96x96x100 2 SETPOINTS



#### PID CONTROLLER P96

96x96x100 2 SETPOINTS



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INSTRUMENTS T : + 91 22 26730101 x 701 F : + 91 22 26731891 E : sales@radix.co.in  
SENSORS T : + 91 22 26731826 x 732 F : + 91 22 66910029 E : sensors@radix.co.in  
GAUGES T : + 91 22 26731826 x 733 F : + 91 22 66910029 E : gauges@radix.co.in  
AUTOMATION C : 0-9322405471 E : automation@radix.co.in

SALES INQUIRIES

**1800-22-radix**  
**1800-22-7234**

Radix Electrosystems Pvt Ltd, B-14, 2nd Floor, Ghanshyam Indl Estate, Veera Desai Road, Andheri (West), Mumbai - 400 053, India  
Tel : + 91 22 26730101 Fax : + 91 22 26731891 Email : sales@radix.co.in www.radix.co.in

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