



- Different combinations of 3 inputs from 8 thermocouple types, Pt100, 0/4~20 mA
- 0 / 1 / 2 setpoints
- Isolated 0/4~20 mA or 0~10 V DC retransmission output
- 85~265 V AC SMPS
- Functions : ONOFF and Time Proportional
- Accuracy : $\pm 0.1\%$ of full scale $\pm 1^\circ\text{C}$, typical
- Sensor break indication

SPECIFICATIONS

Input

Input types

Thermocouple B, E, J, K, N, R, S, T
 RTD Pt100
 Linear input 4~20 mA, 0~20 mA
 Load resistance for 0/4~20 mA input 250 Ω , internally provided

Input type groups

Transmitter supply 22 V DC, Nominal, 30 mA max
 Range limits See Table 1
 Accuracy See Table 1
 Cold junction compensation Automatic

Temperature coefficient of accuracy

$\pm 0.5\%$ of span / 25°C

Units

Pt100, Thermocouple $^\circ\text{C}$ (For $^\circ\text{F}$, contact us)
 Linear EU

Outputs

No. of relays 0/1/2 electromagnetic relays
 Relay contact type NO-C-NC
 Relay contact rating 5A / 230V AC, resistive
 SSR drive 12 V DC drive signal for external SSR
 Retransmission output Current or voltage
 Current output 4~20 mA / 0~20 mA isolated from input
 Maximum load for current output 600 ohms
 Voltage output 0~10 V DC isolated from input
 Load for voltage output >10 Kohms
 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 0.56" (14.2 mm) green LED display
 2 LEDs for relay status

Status indication

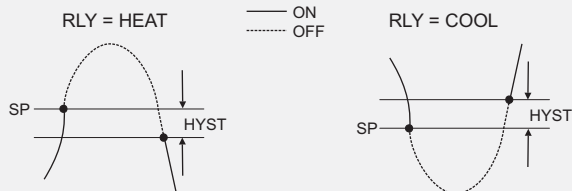
Programmable Parameters

Setpoint Full range (See Table 1)
 Hysteresis / band 0.1 to 99.9 $^\circ\text{C}$
 Resolution 0.1, 1
 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 $^\circ\text{C}$ (RLY1)

Other

Keyboard Tactile, 3 keys
 Enclosure construction Plug-in (circuit removable without affecting terminal wiring)
 Dimensions (in mm) 96(H) x 96(W) x 100(D)
 Mounting Panel mount
 Panel cutout 92 x 92 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



TIME PROPORTIONAL CONTROL

TABLE 1

SENSOR / INPUT	RANGE LIMITS (°C / EU)		RANGE IN WHICH ACCURACY IS SPECIFIED		TYPICAL ACCURACY AT 30 °C (°C / EU)	WORST CASE ACCURACY AT 30 °C (°C / EU)
	LOW SCALE	HIGH SCALE	LOW SCALE	HIGH SCALE		
Iron / Constantan (J)	-99	760	0	760	± 1	± 3
Chromel / Alumel (K)	-99	1372	-50	1200	± 1	± 3
Pt / Pt - 13% Rh (R)	0	1760	0	1760	± 2	± 5
Pt / Pt - 10% Rh (S)	0	1760	0	1760	± 2	± 5
Copper / Constantan (T)	-99	400	-50	400	± 1	± 3
Nicrosil / Nisil (N)	-99	1300	-50	1200	± 1	± 3
Pt - 6% Rh / Pt - 30% Rh (B)	400	1820	400	1820	± 3	± 5
Chromel / Constantan (E)	-99	900	0	800	± 1	± 3
Pt100, 3-wire	-99	850	-50	850	± 0.5 *	± 2.0
Linear 0~20 mA, 4~20 mA	-1999	9999	-1999	9999	± 5 EU	± 20 EU

* ± 0.1°C in the range -50 to +400 °C

CONNECTION DIAGRAM

