



J, K, Pt100
 0 / 1 / 2 setpoints
 85~265 V AC SMPS
 Function : 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 (RLY1)
 NO-C (RLY2)
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 0.3" (7.6 mm) red LED display
 Lower : 4 digit, 7 segment 0.3" (7.6 mm) green LED display
Status indication 2 LEDs for relay status

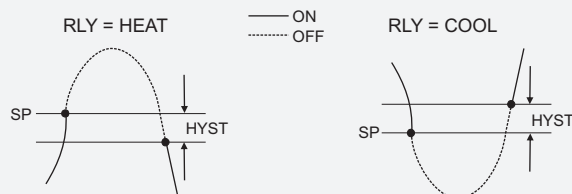
PROGRAMMABLE PARAMETERS

Setpoint Full range (See Table 1)
Hysteresis / band 0.1 to 99.9 °C
Resolution User selectable
 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)

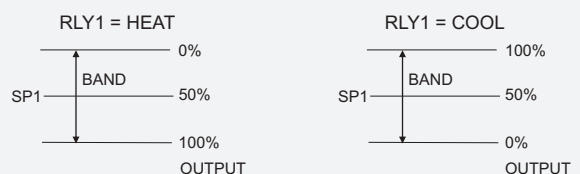
OTHER

Keyboard Tactile, 3 keys
Enclosure construction Plug-in (circuit removable without affecting terminal wiring)
Dimensions (in mm) 48(H) x 48(W) x 100(D)
Mounting Panel mount
Panel cutout 44 x 44 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 and Relay2)



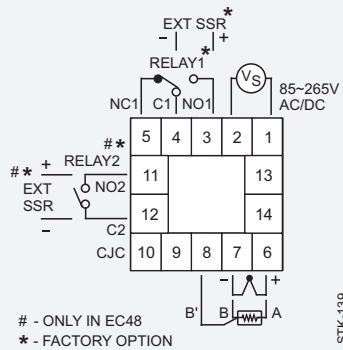
TIME PROPORTIONAL CONTROL (Relay1 only)

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

* ± 0.1°C in the range -50 to +400 °C

CONNECTION DIAGRAM



STK-139

ORDERING INFORMATION

2020 A

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

OTHER PRODUCTS

ONOFF CONTROLLER TC48
48x48x100 2 SETPOINTS



ONOFF CONTROLLER TC49SU
48x96x100 2 SETPOINTS



PID CONTROLLER P48
48x48x100 2 SETPOINTS



ONOFF CONTROLLER TC96
96x96x100 2 SETPOINTS ANALOG OUTPUT



ONOFF CONTROLLER EC96S
96x96x100 2 SETPOINTS



PID CONTROLLER P96
96x96x100 2 SETPOINTS



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