



Inputs : J, K, Pt100
0 / 1 setpoint
85~265 V AC SMPS
Control : 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
Cold junction compensation Automatic
Temperature coefficient of accuracy ± 0.5% of span / 25 °C
Units °C (For °F, contact us)

OUTPUTS

No. of relays 0/1 electromagnetic relay
Relay contact type NO-C-NC
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 4 digit, 7 segment 0.56" (14.2 mm) red LED display
Status indication LED for relay status

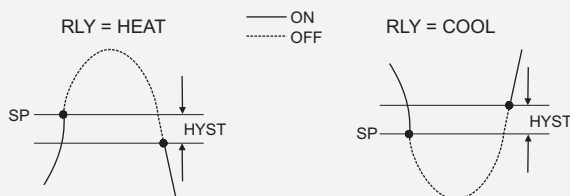
PROGRAMMABLE PARAMETERS

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

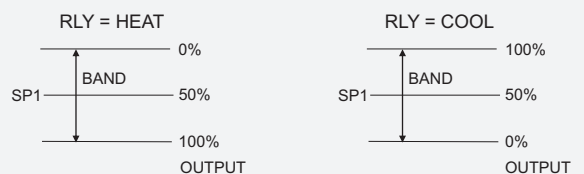
OTHER

Keyboard Tactile, 3 keys
Enclosure construction Plug-in (circuit removable without affecting terminal wiring)
Dimensions (in mm) 48(H) x 96(W) x 100(D)
Mounting Panel mount
Panel cutout 44(+0.8 mm) 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



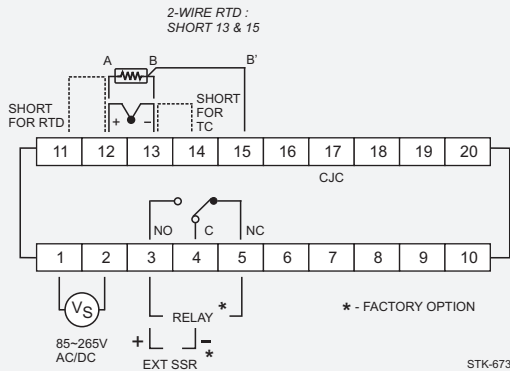
TIME PROPORTIONAL CONTROL

TABLE 1

SENSOR / INPUT	RANGE LIMITS (°C / EU)		RANGE IN WHICH ACCURACY IS SPECIFIED		TYPICAL ACCURACY AT 30 °C (°C / EU)	WORST CASE ACCURACY (°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



ORDERING INFORMATION

2172 A

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

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 EC48S

48x48x100 1 SETPOINT



PID CONTROLLER P96

96x96x100 2 SETPOINTS



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