



TEMPERATURE CONTROLLER

TC -44

APPLICATIONS

Packaging Machinery

Extrusion Machinery

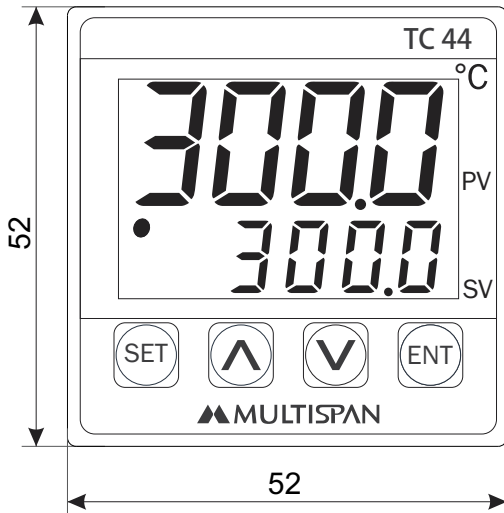
Furnace & Boilers

Ovens & Incubators

Food Industry

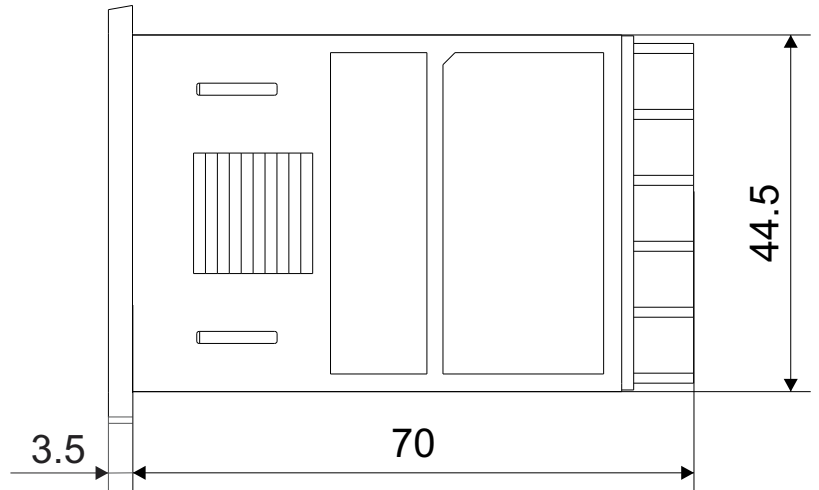
Mechanical Dimensions

Body Dimensions



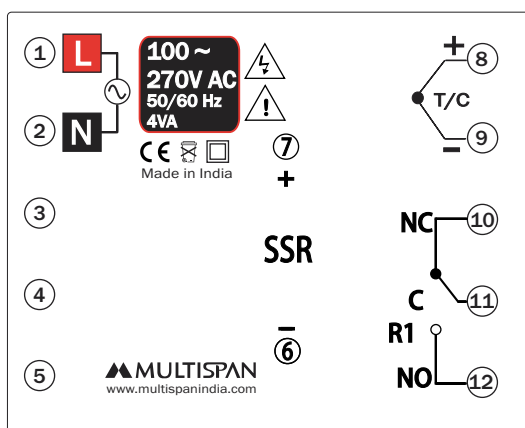
FRONT VIEW

All dimensions are in mm

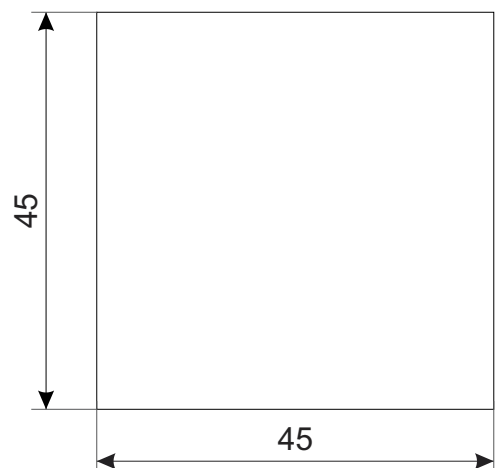


RIGHT SIDE VIEW

Connection Diagram



Panel Cutout



TECHNICAL DATA

Input	Thermocouple : J/K (Configurable) or PT 100/3W, PT.1
Range	J: 0 To 600° C, K: 0 To 1200° C PT 100: -50 To 400° C, PT.1 -50.0 To 400.0° C
Output	1 Relay 1 C/O, 5A, 230V AC for Resistive Load & SSR 12V DC Approx (30mA DC)
Control Action	PID / TP / ON-OFF (Configurable)
Mode	Heating / Cooling
Power Supply	100-270V AC, 50/60 HZ
Certification	CE

Input	
Input Type	Thermocouple : (J, K) RTD : (PT-100), PT.1
Display Range	Refer (Table 1)
Accuracy	± 1% of FSD
ADC Resolution	10 Bits
Display Resolution	Thermocouple : 1° C RTD : 1° C / PT.1 : 0.1° C
Sample Rate	6 Sample / Sec
CJC Error	± 2° C
Sensor Open	All Input
Sensor Burnout Current	1.10uA
RTD Excitation Current	0.2mA
CMRR	>120 db (Typical)
Input Impedance	>1M
Max Voltage	20V DC

Output	
Control Output	
Control Type	ON-OFF, Auto tune PID, TP
Proportional Band	0000 to 999.9
Integral Time	0000 to 9999
Derivative Time	0000 to 9999
Cycl Time For SSR For Relay / Both	1 sec to 99 sec 4 sec to 99 sec
Relay Control Output	
Relay	1 Relay (NO-C-NC)
Rating	5A @230V AC / 28V DC Resistive Load
SSR Control Output	
Rating	12V DC @30mA

Power Supply	
Standard	100 - 270V AC @ 50/60 Hz
Optional	24V DC
Consumption	4VA

Table 1 (Sensor Range)	
J	0 to 600° C
k	0 to 1200° C
PT-100	-50° C to 400° C
PT.1	-50.0° C to 400.0° C

Display (Table 1)

Process Value	UPPER:- 4 Digit 7 seg 0.39", RED LED Display
Set Value	LOWER:- 4 Digit 7 seg 0.28", GREEN LED Display
Keys	SET, INC, DEC, ENT
LED Indication	Relay OR SSR

Environmental Characteristics

Working Temperature	0 to 55° C
Storage Temperature	0 to 55° C
Relative Humidity	95% RH Non-condensing
Protection	IP 65 (Front Side)

Mechanical Characteristics

Mounting Type	Panel Mount
Dimension (HxWxD) mm	52 x 52 x 70
Panel Cutout (HxW) mm	45 x 45
Material Body	Polycarbonate (PC)
Terminal Screw Size	M3.5
Screw Torque (N.m)	0.5
Wire Gauge (AWG)	26-14
Weight (Approx) gms	Unpacked : 115 Packed : 145
Accessories	1 Mounting Clamp