



PROCESS TEMPERATURE CONTROLLER

PTC-L12

APPLICATIONS

Pharmaceutical Industries

Extrusion Machinery

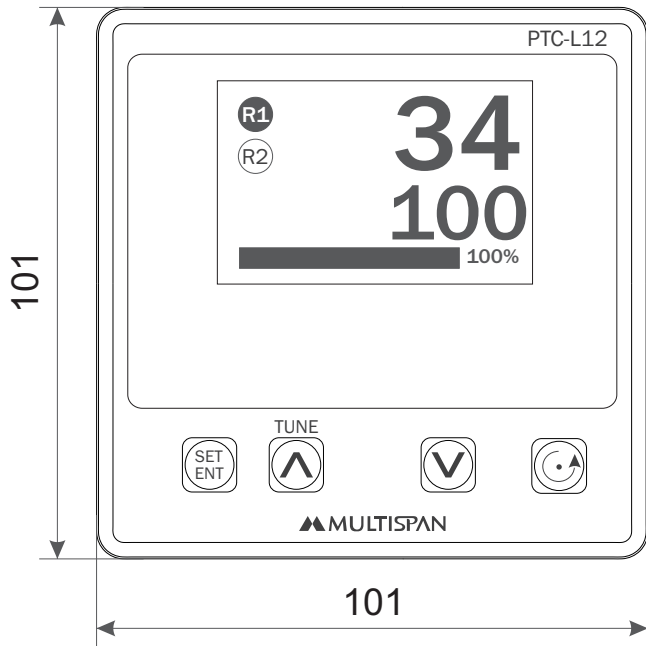
Furnace & Boilers

Ovens & Incubators

Process Industry

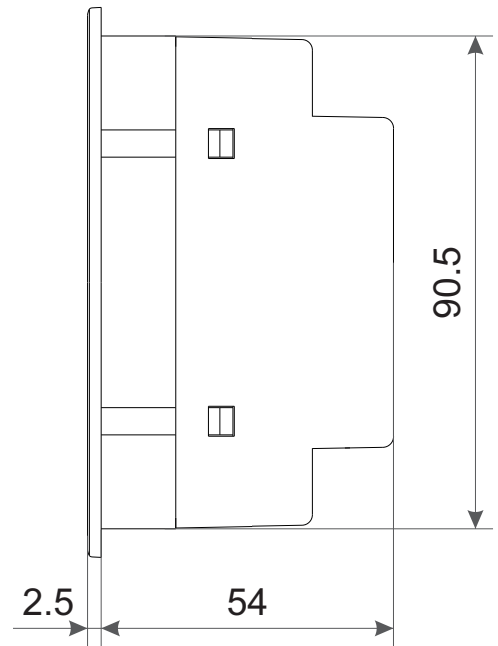
Mechanical Dimensions

Body Dimensions



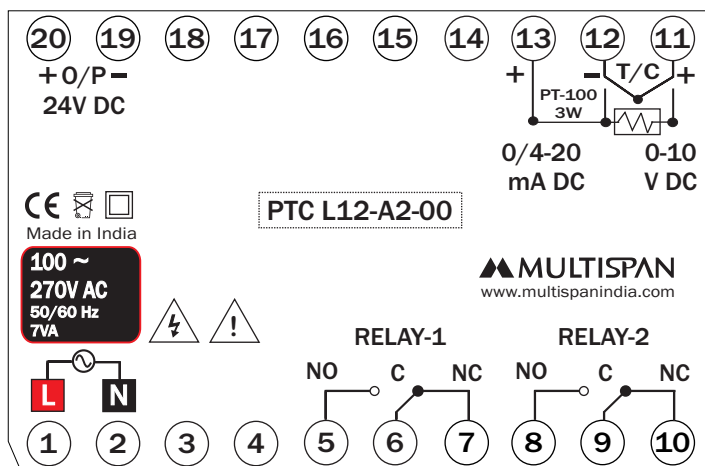
FRONT VIEW

All dimensions are in mm

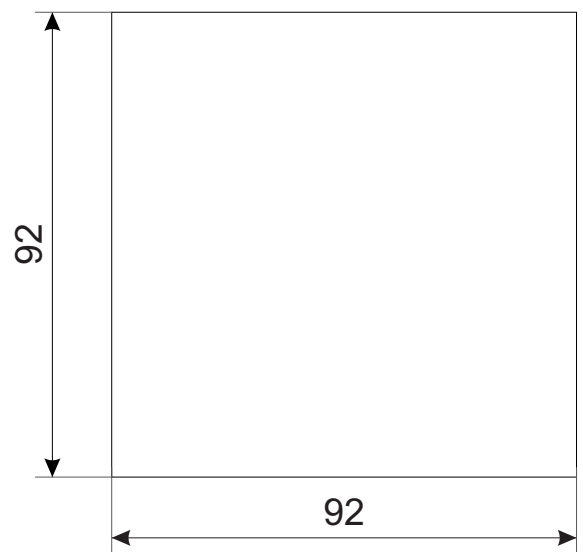


RIGHT SIDE VIEW

Connection Diagram



Panel Cutout



TECHNICAL DATA

Input	Thermocouple	J / K (Configurable)
	RTD	PT-100/ 2Wire/ 3Wire (Configurable)
	Analog	0-10V DC, 4-20mA DC , 0-20mA DC (Configurable)
Range	Thermocouple	J: (0 to 600 °C), K: (0 to 1200 °C)
	RTD	PT-100: (-99 to 400 °C)/ PT.1: (-99.9 to 400.0 °C)
	Analog	-999 to 9999
Output	Output 1	Relay 1 C/O, 5A@230V AC For Resistive Load or SSR 12V DC, 20mA
	Output 2	Relay 1 C/O, 5A@230V AC For Resistive Load
	Output 3	24V DC Transmitter supply
Control Action		Heating : PID / ON-OFF (Configurable) Cooling : ON-OFF / Blower TP (Configurable)
Power Supply		100-270V AC, 50/60 Hz, Approx 7VA
Certification		CE

Input Table

Input Type	Range
J	0 to 600 °C
K	0 to 1200 °C
PT-100	-99 to 400 °C
PT.1	-99.9 to 400.0 °C
0-10V DC	-999 to 9999
4-20mA DC	-999 to 9999
0-20mA DC	-999 to 9999

Power Supply

Standard	100 - 270V AC @ 50/60Hz
Optional	24V DC
Consumption	7VA

Display & Keys

128 x 64 Bit Graphical LCD
4 Controlling Keys for configuration and operation SET/ENT , UP , DOWN , SCROLL

Input

Input Type	Thermocouple : J, K RTD : PT-100, PT.1 Analog : 0-10V DC 4-20mA DC 0-20mA DC
Display Range	Refer (Table 1)
Accuracy	± 1% of FSD
ADC Resolution	12 Bit
Display Resolution	Thermocouple :- 1 °C RTD :- For PT: 1 °C For PT.1: 0.1 °C
Sample Time	600 msec
Sample Rate For Analog I/P	0.1 Sec To 10 Sec (Configurable)
CJC Error	± 2 °C
Sensor Open	Thermocouple:- J, K, RTD:- PT, Analog: 4 to 20mA (Over)

Output

Control Output	
Control Type	Auto tune PID,ON-OFF
Proportional Band	0000 to 999.9
Integral Time	0000 to 9999
Derivative Time	0000 to 9999
Cycle Time For SSR and Relay	4 sec to 99 sec
Relay Control Output	
Relay	2Nos, 1C/O , NO-C-NC
Rating	Relay 1: 5A @230V AC/ 30V DC Resistive Load Relay 2: 5A @230V AC/ 30V DC Resistive Load
SSR Control Output (Optional)	
Rating	12V DC @20mA

Environmental Characteristics

Operating Temperature	0 to 55 °C
Storage Temperature	0 to 70 °C
Humidity	95% RH Non-condensing
Protection Level	IP - 65 (Front Side)

Mechanical Characteristics

Mounting Type	Panel Mount
Dimension (HxWxD) mm	101 x 101 x 54
Panel Cutout (HxW) mm	92 x 92
Material	Front Enclosure Polycarbonate (PC) ABS
Terminal Screw Size	M3.5
Screw Torque (N.m)	1
Wire Gauge (AWG)	26-14
Weight (Approx) gms	Unpacked : 260 Packed : 315
Accessories	1 Pair of Clamps