



TEMPERATURE CONTROLLER

UTC 121P

APPLICATIONS

Packaging Machinery

Extrusion Machinery

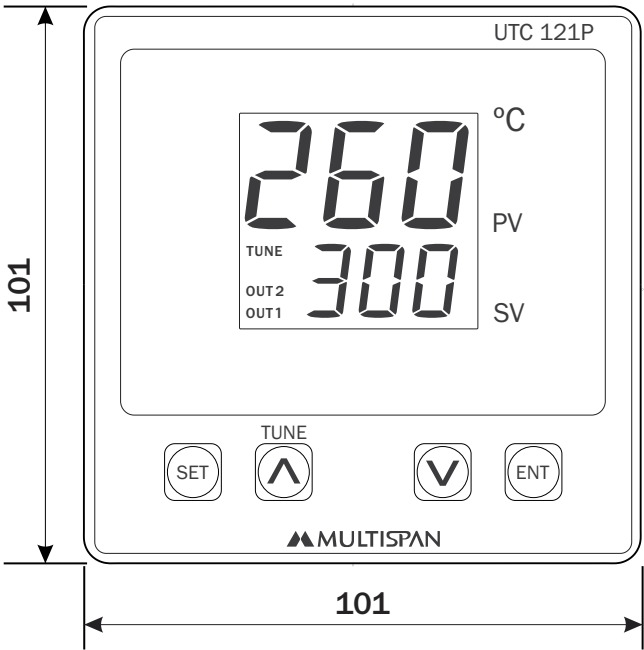
Furnaces & Boilers

Ovens & Incubators

Food Industry

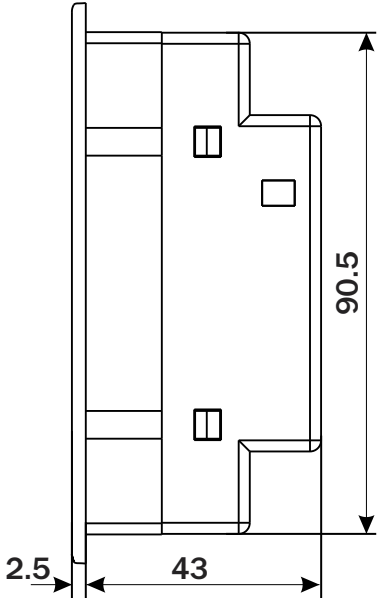
Mechanical Dimensions

Body Dimensions



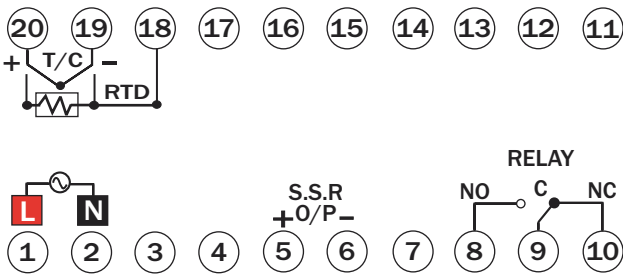
FRONT VIEW

All dimensions are in mm

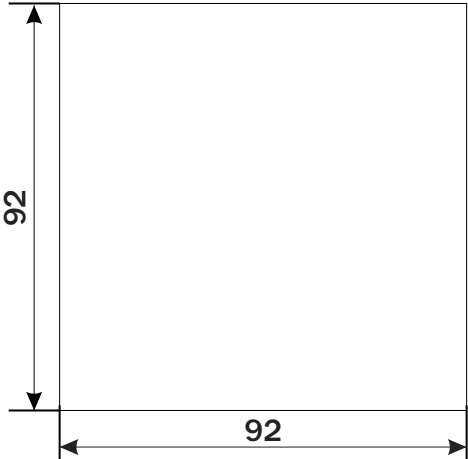


RIGHT SIDE VIEW

Connection Diagram



Panel Cutout



TECHNICAL DATA

Input	J/K/PT-100 2W/3W (Configurable)
Range	J: 0 to 600° C, K: 0 to 999° C RTD (PT-100): -99° C to 400° C/ -19.9° C to 99.9° C
Output	1 Relay 1 C/O, 5A, 230V AC & SSR 12V DC Parallel (1 Set point)
Control Action	PID / TP / ON-OFF (Configurable)
Mode	Heating / Cooling (Configurable)
Power Supply	100-270V AC, 50/60 HZ

Input	
Input Type	Thermocouple : (J, K) RTD : (PT-100)
Display Range	Refer (Table 1)
Accuracy	± 1% of FSD
ADC Resolution	10 Bits
Display Resolution	Thermocouple : 1° C RTD : 1° C / 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	0.0 to 999
Integral Time	0 to 999
Derivative Time	0 to 999
Cycle Time For SSR For Relay	1 sec to 99 sec 4 sec to 99 sec
Relay Control Output	
Relay	1 Nos.
Rating	5A @230V AC / 28V DC Resistive Load
SSR Control Output	
Rating	12V DC @30mA

Display		
Display	Upper	3 digit, 7 segment, 0.75"
	Lower	3 digit, 7 segment, 0.51"
Key		SET,INC, DEC & ENT

Table 1 (Sensor Range)	
J	0 to 600° C
K	0 to 999° C
PT-100	-99 to 400° C
PT.1	-19.9 to 99.9° C

Environmental Characteristics

Working Temperature	0 to 55 °C
Storage Temperature	0 to 55 °C
Relative Humidity	95% RH Non-condensing
Warm up time	5 minutes

Mechanical Characteristics

Mounting Type	Panel Mount
Dimension (HxWxD) mm	101 x 101 x 43
Panel Cutout (HxW) mm	92 x 92
Material	Front Enclosure
	Polycarbonate (PC) ABS
Terminal Screw Size	M3.5
Screw Torque (N.m)	0.5
Wire Gauge (AWG)	26-14
Weight (Approx) gms	Unpacked : 150 Packed : 180
Accessories	1 Pair of Mounting Clamps