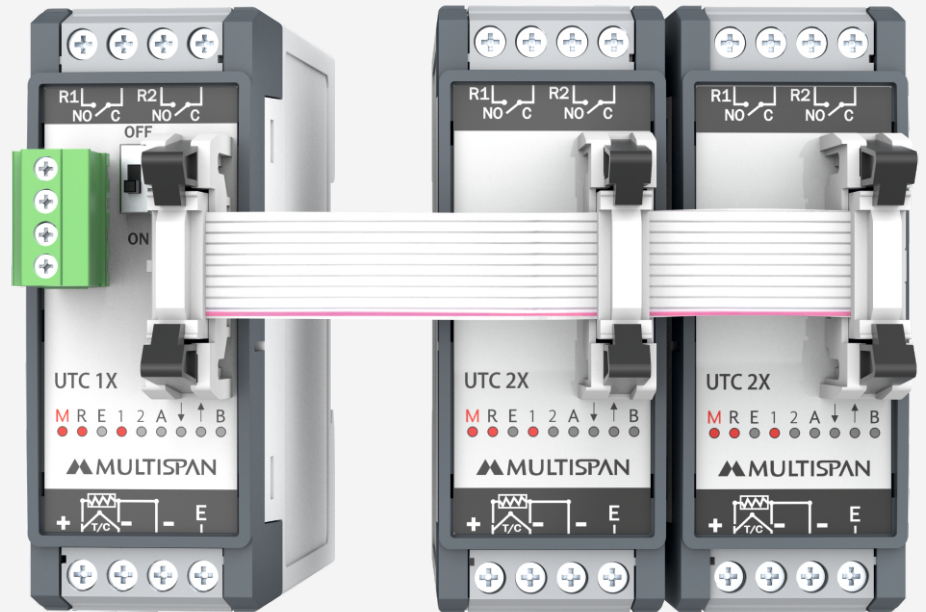




MODULER TEMPERATURE CONTROLLER

UTC-1X & UTC-2X

APPLICATIONS

Packaging Machinery

Extrusion Machinery

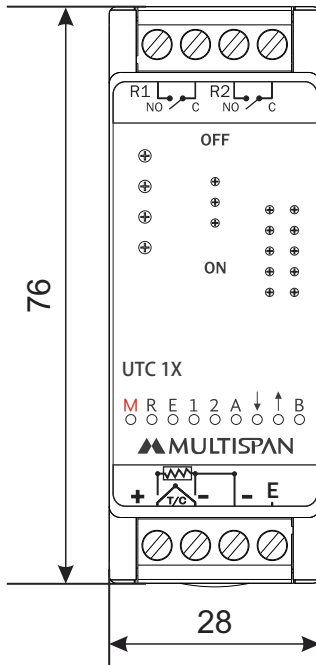
Furnace & Boilers

Ovens & Incubators

Food Industry

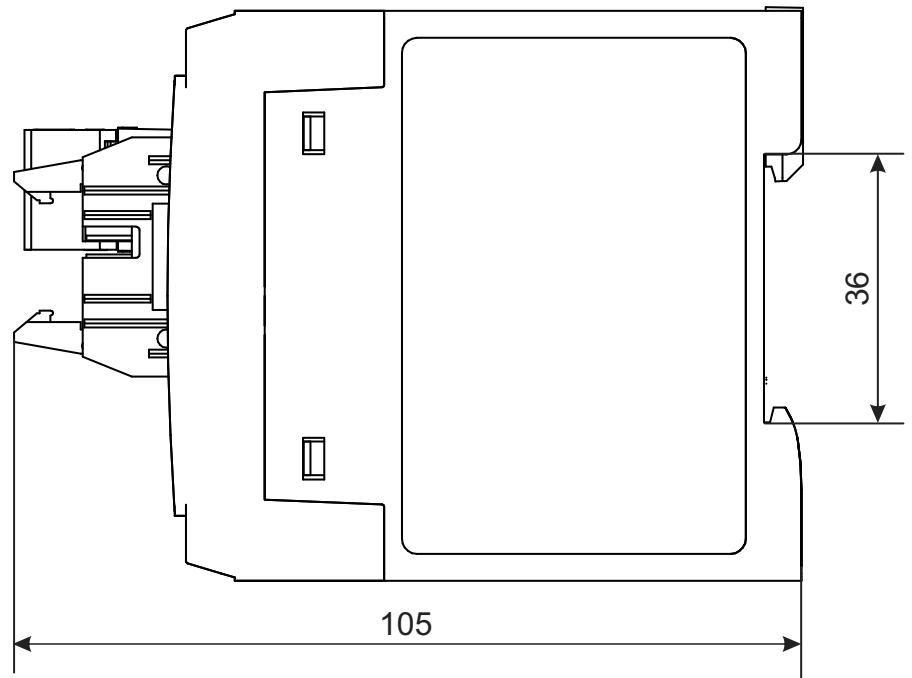
Mechanical Dimensions

Body Dimensions



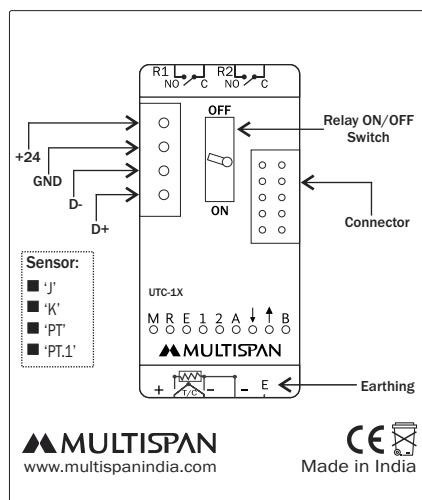
FRONT VIEW

All dimensions are in mm

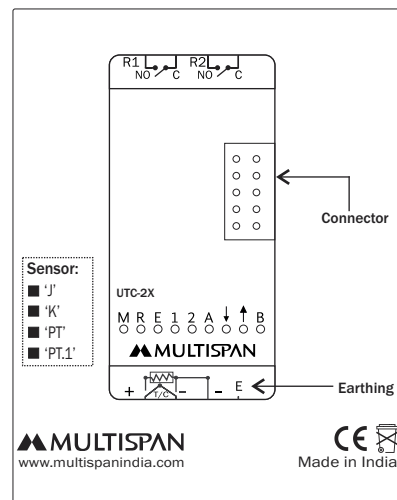


RIGHT SIDE VIEW

Connection Diagram



UTC-1X



UTC-2X

TECHNICAL DATA

Input	J / K / PT-100 / PT.1
Range	J: 0 to 600°C , K: 0 to 1200°C, PT 100: -99 to 400°C, PT.1 -99.0 to 400.0°C
Output	2 Relay, 1 C/O contact, 230V AC, 5A With RS 485 Modbus
Control Action	PID / TP / ON-OFF (Configurable)
Mode	Heating / Cooling
Power Supply	24V DC

Input	
Input Type	J, K, PT 100, PT.1
Accuracy	± 1% of FSD
ADC Resolution	12 Bit
Display Resolution	Thermocouple : 1°C RTD : 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 Type	PID , TP , ON-OFF
Relay Control Output	
Relay	2 Nos. (NO - C)
Rating	5A @230V AC/ 24V DC Resistive Load

Modbus Communication	
Slave Address	1 to 127
Baud Rate	2400, 4800, 9600, 19200, 38400
Parity	None, Even, Odd
Datatype	Sign, Integer, Float

Power Supply	
Standard	24V DC

Table 1 (Sensor Range)	
J	0 to 600°C
K	0 to 1200°C
PT 100	-99 to 400°C
PT.1	-99.0 to 400.0°C

Environmental

Ambient Temperature	0 to 55 °C
Relative Humidity	95% RH Non-Condensing
Protection	Conformal Coating on PCB

Mechanical Characteristics

Mounting Type	DIN Rail Mount
Dimension (HxWxD) mm	76 x 28 x 105
Material	Front Enclosure
	Polycarbonate (PC) ABS
Terminal Screw Size	M3
Screw Torque (N.m)	0.5
Wire Gauge (AWG)	28 - 12
Weight (Approx) gms	Unpacked : 110 Packed : 140