

MT-RTD RTD CONVERTER & ISOLATOR

FEATURE

- 4 Popular Input and Output Ranges Programmable by dip switches
- Changeable Input Module Between V/mA, Pt100Ω, Potentiometer, Strain Gauge, easy maintain and save stock
- Low cost and high stability
- CE Approved



SPECIFICATION

Input Range	Input Impedance	Output Range	Load Resistance
Pt100Ω -100 ~ 800°C	≥ 10M ohm	0 ~ 100 mV	≥ 100K ohm
		0 ~ 1 V	≥ 50 ohm
		0 ~ 5 V	≥ 250 ohm
		0 ~ 10 V	≥ 500ohm
		1 ~ 5 V	≥ 250 ohm
		2 ~ 10 V	≥ 500ohm
		-10 ~ 0 ~ +10 V	≥ 1K ohm
		0 ~ 1 mA	≤ 15K ohm
		0 ~ 10 mA	≤ 1500 ohm
		0 ~ 20 mA	≤ 750 ohm
		4 ~ 20 mA	≤ 750ohm

Accuracy:	±0.1% of F.S.
RTD type:	DIN Pt100Ω, JIS Pt100Ω Option: other RTD type likes Cu10, Ni120...
Sensing current:	About 1.5 mA
Response time:	≤ 250 msec.
Span adjustment:	≤ 10% of F.S.
Zero adjustment:	≤ 5% of F.S.
Output ripple:	≤ 0.1% of F.S.
Sensor break protection:	Upscale standard
Power Supply:	AC 115 or 230V ±10%, 50/60 Hz AC 380 or 415V ±10%, 50/60 Hz Option: DC 12V, 24V, 48V ±10%, (Isolated)
Power consumption:	DC 5W, AC 6.5VA
Operating temperature:	0~60 °C
Operating relative humidity:	20~95 %RH, non-condensing
Temperature coefficient:	≤ 100 PPM/°C
Storage temperature:	-10~70 °C
Isolation:	Between Power / Input / Output
Insulation resistance:	≥ 100M ohm at 500Vdc
Surge test:	4 KV, 1.2 x 50 μsec. Common mode & differential mode
Dielectric Strength:	AC 2.0 KV for 1 min Between Power / Input / Output / Case
Standard:	Comply with EN50081-1, EN50082-2
Dimensions:	50mm(W) x 87mm(H) x 123mm(D)-with socket

Mounting: Surface and DIN rail 35mm wide
Weight: 500g

ADJUSTMENT

Dip Switch: Programming for O/P 1 - 6 Ranges selectable
 O/P 1 Span Adjust Pot (Clockwise: o/p1 increase)
 O/P 1 Zero Adjust Pot (Clockwise: o/p1 increase)

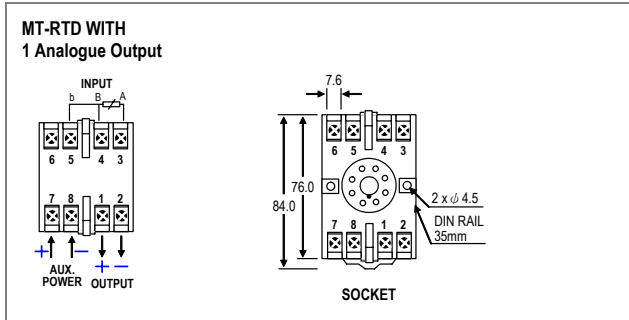
Programming for input (on input module)

INPUT Pt100Ω : (CODE: P1)				
SIGNAL RANGE	SW1	SW2	SW3	SW4
-50 ~ 0 °C	on			
-50 ~ +50 °C		on		
-50 ~ +100 °C			on	
-50 ~ +200 °C				on

INPUT Pt100Ω : (CODE: P2)				
SIGNAL RANGE	SW1	SW2	SW3	SW4
0 ~ 50 °C	on			
0 ~ 100 °C		on		
0 ~ 200 °C			on	
0 ~ 400 °C				on

OUTPUT V / mA : (CODE: P)					
SIGNAL RANGE	SW1	SW2	SW3	SW4	SW5
0 ~ 5 V		on	on	on	
1 ~ 5 V		on	on	on	
0 ~ 10 V		on	on	on	
2 ~ 10 V		on	on	on	
0 ~ 20 mA					on
4 ~ 20 mA	on				on

CONNECTION DIAGRAM & SOCKET



ORDERING INFORMATION

MT-RTD- [Input Range] - [Output Range] - [Aux. Power]

Remark:

- > When you select coding P1, P2, P3 or P for input and output range, please specify initial range.
- > After change input or output range by dip switches (D.S), re-calibration is to be requested.

CODE		INPUT RANGE	CODE		INPUT RANGE	Current		OUTPUT	CODE		Voltage	OUTPUT	CODE		Aux. Power	
A		-50 ~ +50 °C	H		-50 ~ +100 °C	A		0 ~ 1 mA	1			0 ~ 100 mV	A1		AC 115 V	
B		0 ~ 50 °C	I		-100 ~ +100 °C	B		0 ~ 10 mA	2			0 ~ 1 V	A2		AC 230 V	
C		0 ~ 100 °C	J		-100 ~ +600 °C	C		0 ~ 20 mA	3			0 ~ 5 V	A3		AC 380 V	
D		0 ~ 200 °C	O		Specify temp. range	D		4 ~ 20 mA	4			0 ~ 10 V	A4		AC 415 V	
E		0 ~ 400 °C	P1		Programmable 4 Ranges (by D-S) -50/0/-50/-100/-200 °C	E		Excitation	5			1 ~ 5 V	D12		DC 12 V	
F		0 ~ 600 °C					F		Specify (mA o/p)	6			2 ~ 10 V	D24		DC 24 V
G		0 ~ 800 °C					G		Specify (mA o/p)	7			-10 ~ +10 V	D48		DC 48 V
									Specify (mA o/p)	V			Specify (Vo/p)	D11		DC 110 V
			P2		Programmable 4 Ranges (by D-S) 0-50/-100/-200/-400 °C			4-20/0-20 mA				N		None	DO	Specify DC
				P3			Programmable 4 Ranges (by D-S) 0-200/-400/-600/-800 °C			0-50/-101/-5/2-10 V						AO

MT-RTD