Standard Specification Sheet Model: MS2902

MS2900

Chassis-mounting RTD Transmitter with Isolated Dual-output

OVERVIEW

The MS2902 is an instrument to perform linearization, amplification of mV signals from 3-wire RTD sensor and to convert them into two channels of mutually isolated DC output signals, while supplying regulated current to the sensor.

- ▽ Cold-junction compensation, liniarization and burn-out protection.
- ▽ Multi-unit-mountable chassis for ease of maintenance and high density installation.
- ▽ Perfect isolation mutually between Input — Output No.1 — Output No.2 — Power line.
- ▽ Fuse protection for power line.

ORDERING INFORMATION

Ordering Code
MS2902—□ (□～□) —8□□ ① ②③

SPECIFICATIONS

POWER SECTION

Power Requirement	24V DC±10%
Power Sensitivity	±0.1% max. of output (@10% variation)
Power Fuse	2.2Ω 1/4W Fuse resister on power line
Power Consumption	50mA max.

INPUT SECTION

Input Signal (Specify at ① when ordering)	RTD Input (3-wire type, JIS etc.) For non-JIS T/C, EMF table shall be submitted. ■ Pt100 (JIS-C-1604-1997) ····· Pt100 ■ JPt100 (JIS-C-1604-1989) ·····JPt100 ■ Pt10 (JIS-C-1607-1997) ·····Pt10 ■ RTD except above ····· X Specify symbol mark of RTD. Specifying Form X=□□□
Measurement Temperature Range (Specify at ② when ordering)	* Specify in ℃ within the range of the resistance-temperature table.
RTD Excitation Current	Approx. 1mA
Input Lead-wire Resistance	200Ω max./1 wire
Lead-Wire Resistance Sensitivity	0.1%F.S/5Ω max.

OUTPUT SECTION

Output Signal (Specify at ③ when ordering)	1st Output Signal/2nd Output Signal ··Order Code ■ 1～5V DC/1～5V DC ·····V1 ■ 0～5V DC/0～5V DC ·····V5 ■ 0～10V DC/0～10V DC ·····V6 ■ 1～5V DC/4～20mA DC·····C1 ＊The above combination only.
Maximum Output Load	Voltage output:2mA Current output:300Ω
Zero Adjustment	Approx.±2% of span (Adjustable by front-accessible trimmer)
Span Adjustment	Approx.±2% of span (Adjustable by front-accessible trimmer)
Burnout Protection	Up scale

PERFORMANCE

Accuracy Rating	±(0.15%F.S+0.1℃) max. (25℃±5℃)
Temperature Effect	±0.2% max. of span (@10℃ variation)
Burn-out Time	30msec max.
Standard Response Time	Approx. 2Hz-3dB
Insulation Resistance	100MΩ min. (@500V DC) Input—Output-1—Output-2—Power
Dielectric Strength	Input—[Output-1, Output-2, Power]: 1500V AC for 1 minute Output-1—Output-2—Power: 500V AC for 1 minute
Surge Withstand Capability	Tested for ANSI/IEEE C37.90.1-1989
Operating Environment	Ambient temperature:0～50℃ Humidity:90%RH max. (Non-condensation)
Storage Temperature	−10～60℃

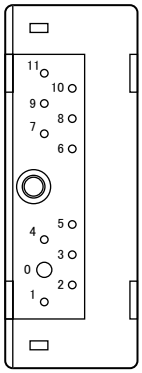
PHYSICAL

Mounting Method	Mountable on chassis (RC2900)
Wiring Method	Wired to chassis (RC2900)
Outer Dimension	W17.5×H48×D65mm (Including socket terminal block and fixing screws.)
Weight	Approx. 70g

MATERIAL

Case	ABS Resin UL94, flame resistant
PC Board	Glass Fabric Epoxy Resin

TERMINAL ASSIGNMENT



Terminal	Signal
①	A RTD
②	B RTD
③	N.C.
④	B' RTD
⑤	N.C.
⑥	+ OUTPUT 1
⑦	− OUTPUT 1
⑧	+ OUTPUT 2
⑨	− OUTPUT 2
⑩	+ DC24V
⑪	− POWER

BLOCK DIAGRAM