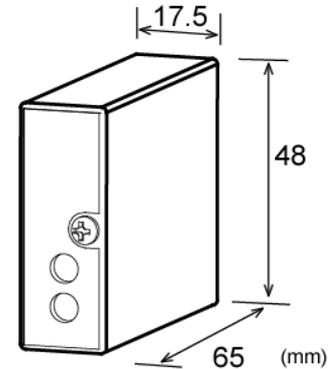




DESCRIPTION

The MS2954 is a chassis-mount high-level signal conditioner (isolator) that converts high-level DC input signals into isolated single channel DC output signals.

- ▽ A multi-slot chassis provides ease of maintenance and high-density mounting.
- ▽ Input, output, and power circuits are all isolated from each other.
- ▽ Equipped with a fuse on the DC power line as standard.



ORDERING INFORMATION

Ordering Code
MS2954-1□□-8□□
[1] [2]

SPECIFICATIONS

POWER SECTION

Power Requirement	24V DC±10%
Power Sensitivity	Better than ±0.1% of span per 10% change in supply voltage
Power Line Fuse	300mA fuse
Current Consumption	45mA max.

INPUT SECTION

Input (Specify a code in the field [1].)	<ul style="list-style-type: none"> ■ 4–20mA DC C1 ■ 1–5V DC V1 ■ 0–5V DC V5 ■ 0–10V DC V6
Input Resistance	Voltage input: 1MΩ min. (10kΩ min. without power) Current input: 250Ω
Allowable Input Voltage	Voltage input: 30V DC max., continuous. Current input: 40mA DC max., continuous.

OUTPUT SECTION

Output (Specify a code in the field [2].)	<ul style="list-style-type: none"> ■ 1–5V DC V1 ■ 0–5V DC V5 ■ 0–10V DC V6 ■ 4–20mA DC C1
Allowable Output Load	Voltage output: 2mA max. Current output: 550Ω max.
Zero Adjustment	Approx. ±2% of span (Adjustable by front-accessible trimmer)
Span Adjustment	Approx. ±2% of span (Adjustable by front-accessible trimmer)

PERFORMANCE

Accuracy Rating	Better than ±0.1% of span (at 25°C±5°C)
Temperature Effect	Better than ±0.2% of span per 10°C change in ambient.
Standard Response Time	Approx. 30Hz–3dB
Isolation	Isolation between input, output, and power.
Insulation Resistance	100MΩ min. (@ 500V DC) between input, output, and power.
Dielectric Strength	Output / [Input, Power]: 1500V AC for 1 minute (Cutoff current: 0.5mA) Input / Power: 500V AC for 1 minute (Cutoff current: 0.5mA)
Surge Withstand Capability	Tested as per ANSI/IEEE C37.90.1-1989.
Operating Environment	Ambient temperature: 0 to 55°C Humidity: 5 to 90% RH (non-condensing)
Storage Temperature	–10 to 60°C

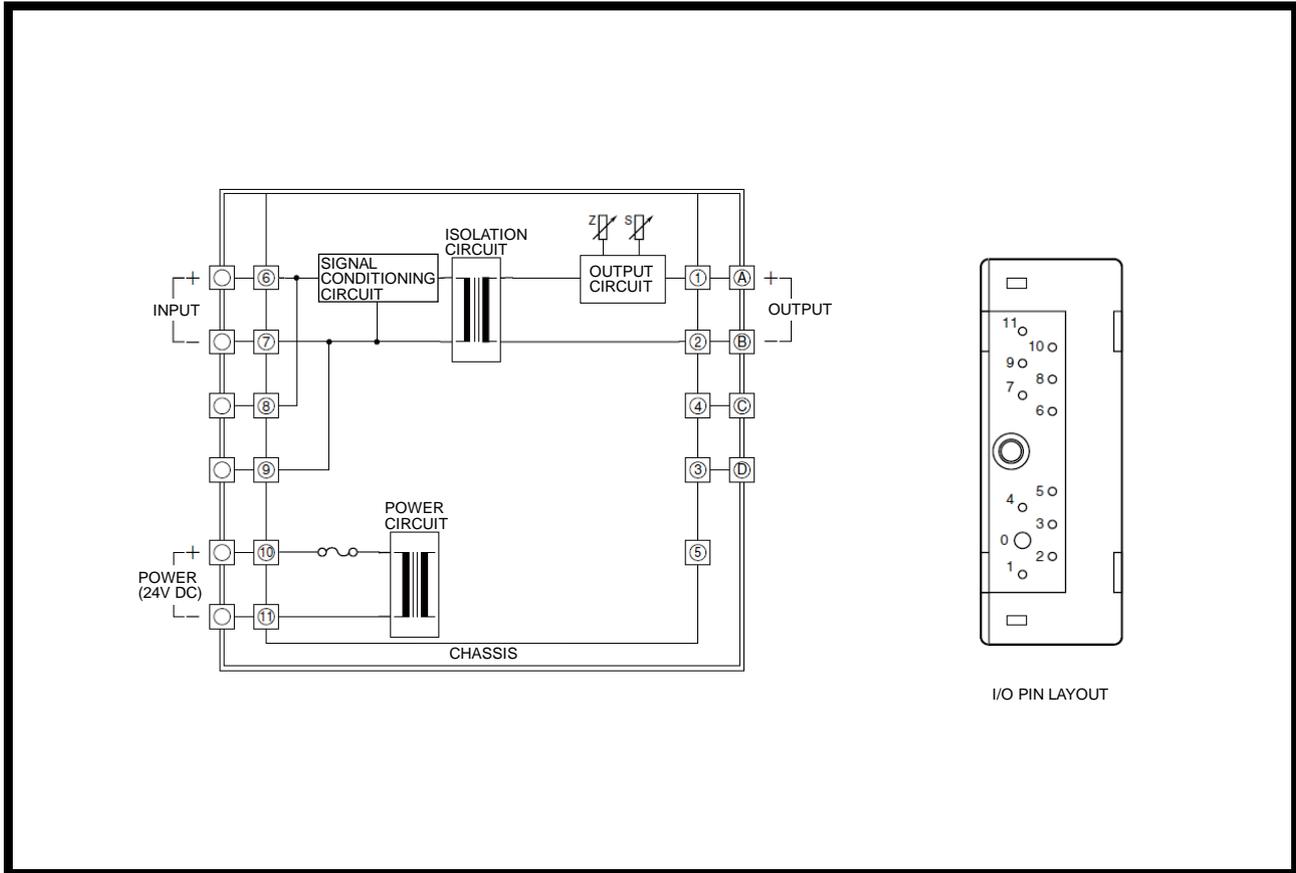
PHYSICAL

Installation	Mounted in an optional chassis (RC2900).
Wiring	Wired to an optional chassis (RC2900).
External Dimensions	W17.5 × H48 × D65 mm
Weight	70g max.

MATERIAL

Housing	ABS resin (UL 94V-0)
PC Board	Glass fabric, epoxy resin (FR-4: UL 94V-0)
Potting Agent	Polyurethane

BLOCK DIAGRAM AND CONNECTION DIAGRAM



I/O PIN LAYOUT