



Standard Specification Sheet Model: MS3954 AREX-39
Chassis-mounting High-level Signal Conditioner for Output Isolation

OVERVIEW



This is chassis-mounting isolator that converts high-level voltage or electric current input signal into 4~20mA electrical current output. This model is specifically designed for isolating output signal.

- ▽ Anti-humid coatings on PCB are standard for improved environmental protection.
- ▽ Multiple installations on chassis provide ease of maintenance and high-density population.
- ▽ Self pop-up screws on chassis provide ease of wiring.
- ▽ Fuse on DC power line is installed standard.

ORDERING INFORMATION

Ordering Code	Standard Price
MS3954 1	OPEN

SPECIFICATIONS

POWER SECTION

Power Requirement	24V DC ±10%
Power Sensitivity	±0.1% of span max. @10% variance
Power Line Fuse	300mA fuse is installed, (standard)
Power Consumption	45mA max.

INPUT SECTION

Input Signal (Specify at ① when ordering)	■ 4~20mA DC	C1
	■ 1~5V DC	V1
	■ 0.4~2V DC	V7
Input Resistance	Voltage input: 1MΩ min. (10kΩ minimum without power) Current input: 250Ω (Standard for 4~20mA)	
Allowable Input Voltage	Voltage input: 30V DC max. continuous Current input: 40mA DC max. continuous	

OUTPUT SECTION

Output Signal	4~20mA DC
Maximum Output Load	550Ω max.
Zero Adjustment	Approx. ±2% of span (Adjustable by front-access trimmer)
Span Adjustment	Approx. ±2% of span (Adjustable by front-access trimmer)

PERFORMANCE

Accuracy Rating	±0.1%/F.S (25°C ±5°C)
Temperature Effect	±0.2% of span @10°C variance
Response Time	15msec max. (0→90%) @100% step input
Output Wire Open Detection	Open-collector output (Maximum ratings: 35V, 4mA) Transistor turns on when output goes below detection level.
Detection Voltage Level	About 10% of full scale output
Detection Voltage Time Constant	About 1sec (0~63%)
CMRR	100dB min. (500V AC, 50/60Hz)
Isolation	Across Input, Output and Power input mutually
Insulation Resistance	100MΩ min. (@500V DC) Across Input, Output and Power input mutually
Dielectric Strength	Across Input and Power input: 500V AC for 1 minute Across Output and [Input + Power input]: 1500V AC for 1 minute
Surge Withstand Capability	Tested for ANSI/IEEE C37.90.1-1989
Operating Environment	Ambient temperature: 0~55°C Humidity: 90% max. (Non-condensation)
Storage Temperature	-10~60°C

PHYSICAL

Installation	Installed on mounting base (RC3900-□□AO)
External Connection	Wired to mounting base (RC3900-□□AO)
Dimension	W19.5×H53×D84mm
Weight	Approx. 70g

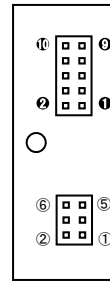
MATERIAL

Housing	ABS Resin (UL94V-0)
PC Board	Glass Fabric, Epoxy Resin (CEM-3)
Anti-humidity	HumiSeal 1A27NS (Polyurethane)
Coating	

ADDITIONAL

Other Options	Please consult our sales representatives for the availability of the following options before ordering: 〈Items〉 〈How to specify〉 Change response frequency $F_c = \square\square\square\text{Hz}$ (Up to 200Hz) ■ Change response time ... $T_c = \square\square\square\text{sec}$ (Up to 2msec @90%)
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TERMINAL ASSIGNMENT



端子	信 号	端子	信 号
①	+ INPUT	⑦	+ OUTPUT 1
②	- INPUT	⑧	- OUTPUT 1
③	N. C.	⑨	+ OUTPUT 2
④	N. C.	⑩	- OUTPUT 2
⑤	N. C.	⑪	+ POWER DC24V
⑥	N. C.	⑫	- POWER DC24V
		⑬	N. C.
		⑭	N. C.
		⑮	F. G.
		⑯	N. C.

BLOCK DIAGRAM

