



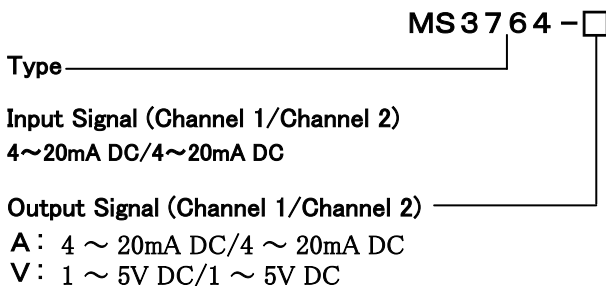
Standard Specifications Type: MS3764
Slim-shaped Plug-in Loop-powered Isolator
(Two-Channel Model)

MS3700

Overview

MS3764 is a slim-shaped plug-in loop-powered isolator (two-channel model) to draw power from amplifier driving from input current signals. (RoHS-conformed)

Ordering Format



Please specify upon ordering

•Product Model Number
 (Example) MS3764-V

Input Resistance Calculation

•To calculate input resistance for current output type.

Input Resistance=Approx. 230 Ω + Load Resistance (20mA DC input)

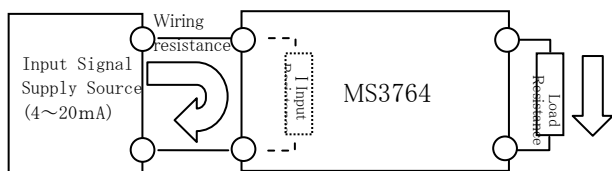
☞ Max. Output Load: 350 Ω max.

(Allowable Load Resistance 50~350 Ω)

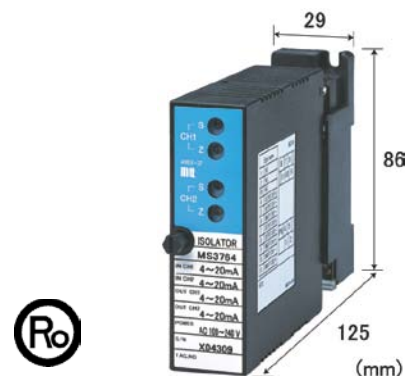
(e.g.) Input resistance when load resistance is 250 Ω.

Input Resistance = Approx. 230 Ω + 250 Ω = Approx. 480 Ω (for 20mA DC input)

☞The allowable load resistance of input signal source must be bigger than the total value of resistance calculated as the above Plus(+) the wiring resistance.



*Input resistance for voltage output type is fixed to Approx. 250 Ω (for 20mA DC input).



Specifications

● Input Section

Input Signal	4~20mA DC
Input Resistance	
Voltage Output	Approx. 250 Ω (for 20mA DC input)
Current Output	Approx. 230 Ω + Load Resistance (for 20mA DC input)
Allowable Input Current	30mA DC max.

● Output Section

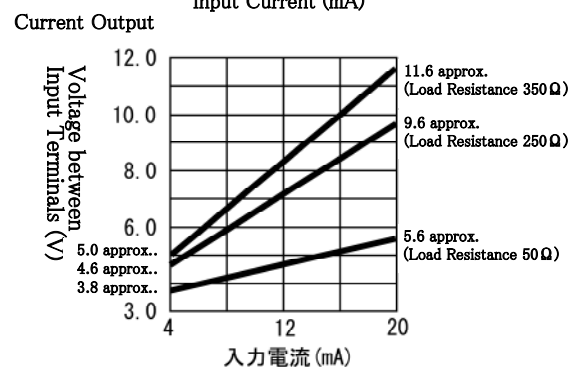
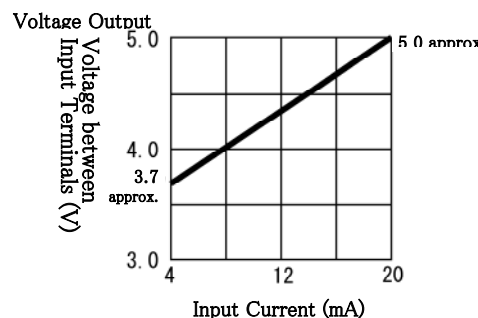
Maximum Output Load	
Voltage Output(DC)	50k Ω min.
Current Output(DC)	4~20mA 350 Ω max.
	(Allowable load resistance 50~350 Ω)

Zero Adjustment Range

Voltage Output	Approx. ±2.5% of Span
Current Output	Approx. ±0.5% of Span
	(Adjustable by Trimmer on front panel)

Span Adjustment Range

Voltage Output	Approx. ±2.5% of Span
Current Output	Approx. ±1.5% of Span
	(Adjustable by Trimmer on front panel)



● Standard Performance

Conversion Accuracy	Within $\pm 0.15\%$ /F.S.
Temp. Characteristics	Within $\pm 0.2\%$ of Span with every 10°C variation
Response Time	15msec max. (0~90%) @100% step input
Output variation due to load variation	0.01%/Ω (50~150Ω) 0.005%/Ω (150~350Ω) *Factory setting: Adjusted to 250Ω.
CMRR	100dB min. (500V AC, 50/60Hz)
Signal Isolation	Between Input-Output, Channels
Isolation Resistance	100MΩ min. (@500V DC) Between Input-Output, Channels
Dielectric Strength	Between Input-Output :1500V AC Shut Down Current 0.5mA for 1min. Between Channels :1500V AC Shut Down Current 0.5mA for 1 min.
Measures against SWC	Conform to ANSI/IEEE C37.90.1-1989
Operating Environment	Temperature : -5~55°C Humidity : 5~90%RH(Non-Condensing)
Storage Temp.	-10~60°C

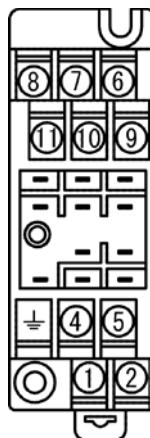
● Installation / Physical Specifications

Installation	Wall mounting &/or DIN-rail mounting
Wiring	M3.5 screw terminal connection (with P.S. terminal cover & screw drop-protection)
Screw Tightening Torque	0.8~1[N·m] Recommendable
Outer Dimension	W29×H86×D125mm (incl. set screws & terminal block)
Mass	Main unit 100g max., Terminal Block 80g max.

● Materials Input Current (mA)

Housing	ABS Resin (UL-94V-0)
Terminal Block	ABS Resin (UL-94V-0)
Terminal Screws	Iron/Nickel-plated
Terminal Surface Treatment	0.2 μm / Gold plated
P.C. Board	Glass-Epoxy (FR-4:UL-94V-0)
Moisture-proof Coating	HumiSeal Coating :HumiSeal 1A27NS(Polyurethane Resin)

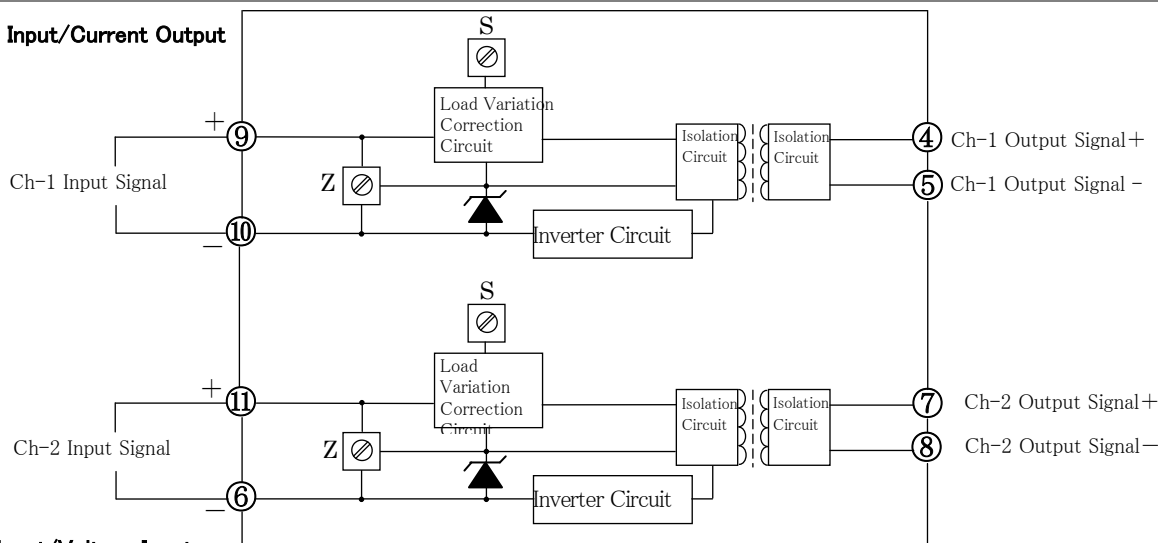
Terminal Arrangement / Signal Assignment



①	N. C
②	N. C
③	N. C
④	+ OUTPUT Channel 1
⑤	- OUTPUT Channel 1
⑥	- INPUT Channel 2
⑦	+ OUTPUT Channel 2
⑧	- OUTPUT Channel 2
⑨	+ INPUT Channel 1
⑩	- INPUT Channel 1
⑪	+ INPUT Channel 2

Block Diagram

Current Input/Current Output Type



Current Input/Voltage Input Type

