



Standard Specifications Type: MS3064

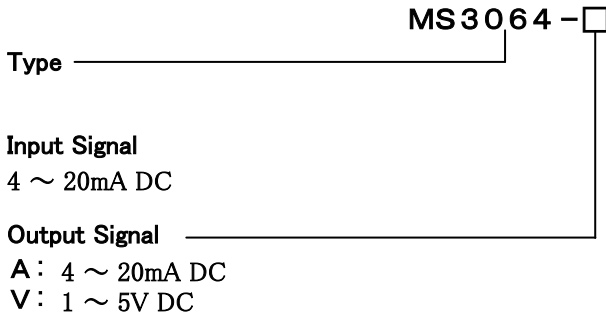
MS3000

Terminal Block Type Loop-powered Isolator with an Isolated Single Output

Overview

MS3064 is a terminal block type loop-powered isolator with an isolated single output to draw amplifier driving power from input current signals.

Ordering Format



Please specify upon ordering

•Product Model Number
 (Example) MS3064-V

Input Resistance Calculation

•To calculate input resistance for current output type.

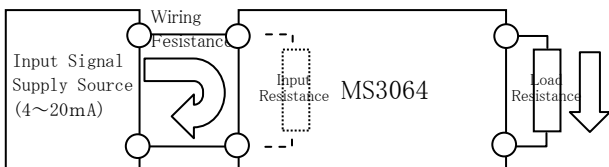
Input Resistance = Approx. 230 Ω + Load Resistance (for 20mA DC input)

☞Max. Output Load: 350 Ω max. (Allowable load resistance 50~350 Ω)

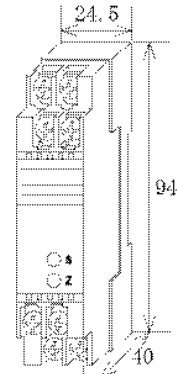
(E.g.) Input resistance when load resistance is 250 Ω.

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)
Input Current Allowable	30mA DC max.

●Output Section

Maximum Output Load

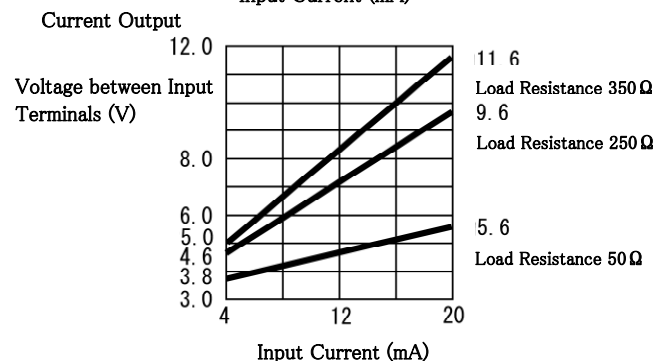
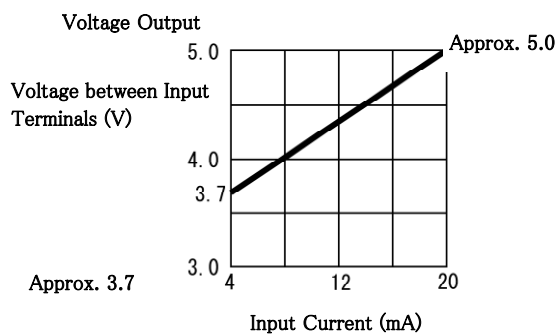
Voltage Output(DC)	50k Ω min.
Current Output(DC)	350 Ω max.
	(Allowable load resistance 50~350 Ω)

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 $\pm 0.1\%$ /F.S.
Temp. Characteristics	Within $\pm 0.15\%$ 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
Isolation Resistance	100MΩ min. (@500V DC)
Dielectric Strength	Between Input - Output :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	DIN-rail mounting
Wiring	M3.5 screw terminal connection (Screw drop-protection)
Screw Tightening Torque	0.8~1[N·m] Recommendable
Outer Dimension	W24.5×H94.0×D40.0mm
Mass	70g max.

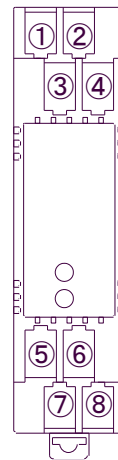
● **Materials**

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

● **Compatible Standards**

Compatible EC Directive	EMC Directive (2004/108/EC) EN61326-1:2006
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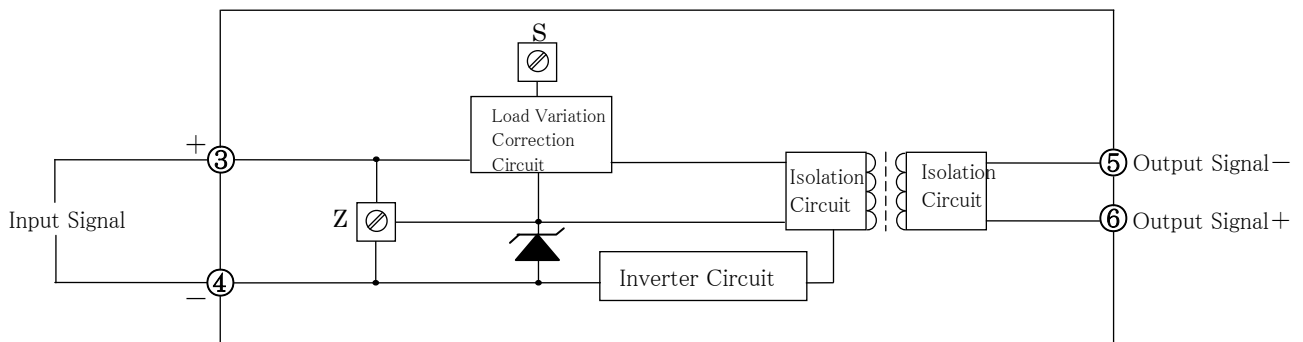
Terminal Arrangement / Signal Assignment



①	N. C
②	N. C
③	INPUT +
④	INPUT -
⑤	OUTPUT +
⑥	OUTPUT -
⑦	N. C
⑧	N. C

Block Diagram

Current Input / Current Output Type



Current Input / Voltage Output Type

