



Standard Specifications Type: MS3737LC
Slim-shaped Plug-in Distributor with Dual Outputs
(Non-isolation between input and output)

MS3700

Overview

MS3737LC is a slim-shaped plug-in distributor with dual outputs to supply power to 2-wire transmitter and convert the 4~20mA signals of the feedback loop to various DC signals as selected. This is a low-cost model that provides no isolation between the input and the output. (Without power supply switch for transmitter.) (RoHS-conformed)

Ordering Format

Type **MS3737LC-□**
 Power Supply **A : AC 85 ~ 264V P : DC 85 ~ 264V**

Input Signal
 4~20mA DC from 2-wire transmitter

Output-1
 1~5V DC

Output-2
 4~20mA DC

Please specify when ordering

•Product Model Number
 (Example) MS3737LC-A



Specifications

●Power Supply Section

Power Supply	AC85~264V (Rating 100~240V) 47~63Hz DC85~264V (Rating 100~240V)
Power Sensitivity	Within ±0.1% of Span for each power supply voltage.
Power Supply Fuse	160mA Fuse
Maximum Power Consumption	AC85~264V DC85~264V 3.5VA max. / 4.8W max.

●Input Section

Input Signal	4~20mA DC from 2-wire transmitters.
Input Resistance	250 Ω
Power Supply for Transmitter	Output voltage: 25V (typical) / No load~18V (typical) /Input 100% (when Out-2 short-circuited) Max. current: 25mA (typical)
Limited Current for Short Circuit protection	26mA (typical)

Allowable Short Circuit Duration Indefinite

* When using the power for transmitter to power the sensor as well, it must be used in the lines between IN+~OUT2- by releasing the ones between OUT2+ and Out2-.

●Output Section

Output Signal	Out 1: 1~5V DC Out 2: 4~20mA DC
Allowable Load Resistance	Out 1: 250k Ω min. Out 2: 10 Ω max. (Up to 260 Ω available when Out-1 is short circuited.)

● **Standard Performance**

Conversion Accuracy	Within $\pm 0.1\%$ (Accuracy of input resistance)
Temperature Characteristics	Within $\pm 0.03\%$ of Span with every 10°C variation (Temperature coefficient of input resistance)
Signal Isolation	Between [Input, Out1, Out2]—Power Supply—Ground
Isolation Resistance	100M Ω min. (@500V DC) Between [Input, Out1, Out2]—Power Supply—Ground
Dielectric Strength	Between [Input, Out1, Out2]—[Power Supply, Ground] : 2000V AC Shut Down Current 0.5mA for 1 min. Between Power Supply—Ground : 2000V AC Shut Down Current 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

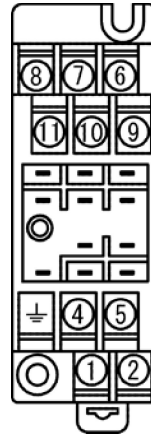
● **Installation / Physical Specifications**

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 body 110g max., Terminal Block 80g max.

● **Materials**

Housing	ABS Resin (UL-94V-0)
Terminal Block	ABS Resin (UL-94V-0)
Terminal Screws	Iron/Nickel-plated
Terminal Surface Treatment	0.2 μ m / 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	P(+)	POWER
②	N(-)	
③	GND	
④	+ OUTPUT 1	
⑤	- OUTPUT 1	
⑥	N. C	
⑦	+ OUTPUT 2	
⑧	- OUTPUT 2	
⑨	+ INPUT	
⑩	- INPUT	
⑪	N. C	

Block Diagram

