

Product Specification Sheet

Model: MS3737

MS3700

Slim Plug-In Distributor with Dual Output (Non-Isolation between Input and Output)

DESCRIPTION

The MS3737 is a slim plug-in distributor that powers a two-wire transmitter, converts its 4 to 20mA signals into commonly used DC signals, and provides a dual output. This model has no isolation between the input and output, providing a low-cost design. (The unit includes a transmitter power ON/OFF switch.)

ORDERING CODE

MS3737 -
Model _____

Power Supply -

A: 100 to 240V AC (50 to 60Hz)

D: 24V DC **P**: 100 to 240V DC

Input

4 to 20mA DC from 2-wire transmitters

Output 1

1 to 5V DC

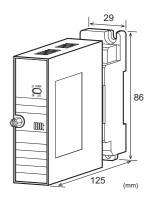
Output 2

4 to 20mA DC

ORDERING INFORMATION

To place an order, please use the ordering code format as shown above.

(e.g.) MS3737-A





SPECIFICATIONS

■POWER SECTION	_						
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Power		100 to 24	0V AC: 85 to	264V AC (47
Requirements	S	to 63Hz)		
•		24V DC:	24V DC±109	%
		100 to 24	0V DC: 85 to	264V DC
Power Sensit	ivity	Better tha	$n \pm 0.1\%$ of s	pan for each
	-	power sup	oply range.	
Power Line F	use	160mA fu	ise is installe	d (standard).
Power Consu	mptior	1		
Power	100	-240V AC	24V DC	100-240V DC
	5.0	OVA max	1.5W max	5.8W max

INPUT SECTION

Input Signal	4 to 20mA DC from 2-wire
	transmitters
Input Resistance	250Ω
Transmitter Power	Output voltage:
Supply	26.4V, typical. with 0% input
	21.6V, typical. with 100% input
	(Output 2: short)
	Maximum current: 22mA, typical.
Limit Current for	40mA max.
Short-Circuit	
Protection	
Permissible	Continuous.
Short-Circuit	
Duration	
27 70.1	1 ' 10

Note: If the transmitter power supply is used for sensor excitation, the sensor should be connected between the terminals INPUT (+) and OUTPUT-2 (-), while the OUTPUT-2 terminals (+) and (-) should be kept open.

OUTPUT SECTION

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Output Signal	Output 1: 1 to 5V DC
	Output 2: 4 to 20mA DC
Allowable Load	Output 1: 250kΩ min.
Resistance	Output 2: 10Ω max.
	(Up to 260Ω is allowable if the plus
	and minus terminals of OUTPUT-1
	are short connected.)

Recuracy Rating Better than ±0.1%. (Accuracy of the shunt resistor)	•PERFORMANO	CE
Change in ambient. (Temperature coefficient of the shunt resistor) Isolation 3-way isolation between [Input, Output 1, Output 2], power, and ground. Insulation 100MΩ min. (@ 500V DC) between [Input, Output 1, Output 2], power, and ground. Dielectric Strength Input, Output 1, Output 2] / [Power, Ground]: 2000V AC for 1 minute (Cutoff current: 0.5mA) Power / Ground: 2000V AC for 1 minute (Cutoff current: 5mA) Surge Withstand Capability C37.90.1-1989. Operating Ambient temperature: -5 to 55°C Humidity: 5 to 90% RH (non-condensing) Storage Temperature Tem	Accuracy Rating	`
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Housing ABS resin (UL 94V-0) Terminal Block PBT resin (UL 94V-0)		Socket: 80g max.
Terminal Block PBT resin (UL 94V-0)	•MATERIALS	
	Housing	
Terminal Block PC resin (UL 94V-2)		
	Terminal Block	PC resin (UL 94V-2)

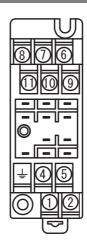
DIN Rail Stopper	PP resin (UL 94HB)
Screw Terminal	Nickel-plated steel
Contacts Material	Brass with 0.2µm gold plating
and Finish	
Printed Circuit	Glass fabric epoxy resin
Board	(FR-4: UL 94V-0)
Anti-Humidity	HumiSeal® 1A27NS (Polyurethane)
Coating	

^{*} HumiSeal® is a registered trademark of Chase Corporation.

OSTANDARDS CONFORMITY

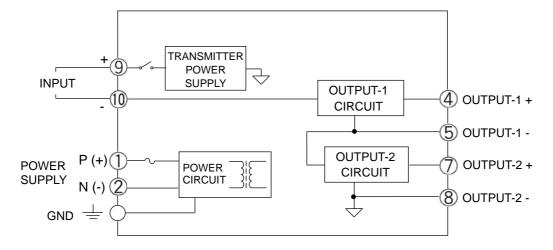
EC Directive	EMC Directive (2014/30/EU)
Conformity	EN61326-1: 2013
	Low Voltage Directive (2014/35/EU)
	IEC61010-1/EN61010-1: 2010
	Installation Category II
	Pollution Degree 2
	Maximum operating voltage 300V
	Reinforced insulation between
	[input/output/GND] and power.

TERMINAL ASSIGNMENT



1	P (+) POWER
2	N (-)
4	GND
4	+ OUTPUT 1
(5)	- OUTPUT 1
6	N.C.
	+ OUTPUT 2
8	- OUTPUT 2
9	+ INPUT
10	- INPUT
11	N.C.

BLOCK DIAGRAM



Note: If the OUTPUT-1 is only used for distributor applications, the OUTPUT-2 terminals #7 and #8 should be short connected. If these terminals are open, the OUTPUT-1 gives no output.

Cover