

## SELF POWERED CURRENT LOOP ISOLATOR

**Z110S - 1 Channel**  
**Z110D - 2 Channel**

### GENERAL SPECIFICATIONS

- 4-20 mA current input
- Retransmission of input as an isolated 4-20 mA output
- Input/output isolation 1500 VAC
- Channel-to-channel isolation 1500 VAC (2 channel model Z110D only)

### TECHNICAL SPECIFICATIONS

Power supply:	Self Powered from the input (primary) loop			
Input:	Current: 4-20 mA Min. voltage drop at 20 mA: 7 V (all loads up to 160 Ohms) Max. voltage drop at 20 mA: 3.8 V + (load resistance) x 0.02 V			
Output:	4-20 mA (active), max load resistance 500 Ohms			
Operating Conditions:	Temperature: 0-50°C, Humidity min: 30%, max 90% @ 40°C non condensing.			
Input measurement error:	Calibration Error	Thermal Coefficient	Linearity error	Load variation effect
	0.1% FS	0.02% FS/°C	0.1% FS	0.1% FS
Response Time:	<100 mS to reach 90% of final value			
Input Protection:	Protected up to 35 VDC max.			
Output Protection:	Protected up to 35VDC max.			
Standards:	This instrument meets or exceeds the requirements of EN50081-2 (electromagnetic emissions, industrial environment) EN50082-2 (electromagnetic susceptibility, industrial environment) EN61010-1 (safety)			

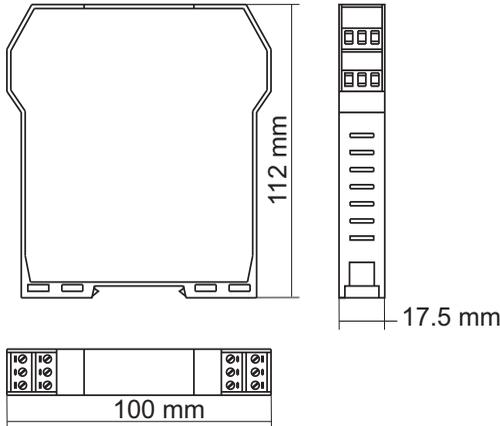


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### DIMENSIONS



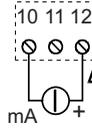
### INSTALLATION

The Z110S and Z110D are designed for easy mounting on 35mm DIN rail.

### ELECTRICAL CONNECTIONS

Shielded cable is recommended for signal connections and the shield should be connected to the instrument earth.  
 It is good practice to separate signal cables from power cables and to avoid potential sources of interference such as electric motors, variable speed drives, microwave ovens and induction heaters.

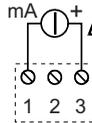
#### CHANNEL 1 INPUT (Z110S and Z110D)



**PASSIVE INPUT:** Connect the module to the current loop as shown.  
 The module is powered by the 4-20 mA current loop.

Voltage drop at 20 mA: 3.8 V plus Load Volt drop (0.02 x load resistance), minimum 7 V  
 (e.g. with load of 250 Ohms, Volt Drop is : 3.8 V + (0.02 x 250) = 8.80 V)

#### CHANNEL 1 OUTPUT (Z110S and Z110D)



**ACTIVE OUTPUT:** The module generates a current in the output loop identical to the current in the input loop.

It is capable of driving into a maximum load of 500 Ohms.

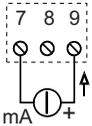
The output loop must NOT be powered.

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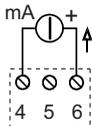
#### CHANNEL 2 INPUT (Z110D only)



**PASSIVE INPUT:** Connect the module to the current loop as shown.  
 The module is powered by the 4-20 mA current loop.

Voltage drop at 20 mA: 3.8 V plus Load Volt drop (0.02 x load resistance), minimum 7 V  
 (e.g. with load of 250 Ohms, Volt Drop is : 3.8V + (0.02 x 250) = 8.80V)

#### CHANNEL 2 OUTPUT (Z110D only)



**ACTIVE OUTPUT:** The module generates a current in the output loop identical to the current in the input loop. It is capable of driving into a maximum load of 500 Ohms.

The output loop must NOT be powered.



Disposal of Electrical & Electronic Equipment (Applicable throughout the European Union and other European countries with separate collection programs)

This symbol, found on your product or on its packaging, indicates that this product should not be treated as household waste when you wish to dispose of it. Instead, it should be handed over to an applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences to the environment and human health, which could otherwise be caused by inappropriate disposal of this product. The recycling of materials will help to conserve natural resources. For more detailed information about the recycling of this product, please contact your local city office, waste disposal service or the retail store where you purchased this product.

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