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# Z-LINE

## Z109REG

Universal Converter with galvanic isolation

Z-LINE

Standard converters

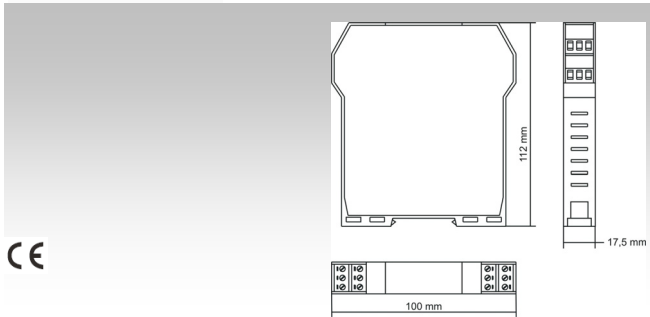


- ▶ INPUT: Voltage, Current, TC (J,K,R,S,T,B,E,N), PT100, Potentiometer
- ▶ OUTPUT: current 0..20, 4 . 20 mA  
voltage 0..5, 1..5, 0..10, 2..10 Vdc (scale inversion also)
- ▶ DIP-SWITCHES for selecting: input type, zero and span, output mode (zero elevation, scale inversion), output span
- ▶ Galvanic isolation @ 3-way
- ▶ Screw-fit terminals removable
- ▶ Din rail mounting
- ▶ Power supply: 19..40 Vdc, 19..28 Vac



## TECHNICAL DATA

### Z109REG – Universal Converter



#### ORDER CODE

**Cod. Z109REG**

**Cod. Z109REG-ER** With square root extraction

#### Accessories

**SENECA-TOOL** Configuration Kit (software + cable)

**Z-SETUP** Configuration software (downloading from [www.seneca.it](http://www.seneca.it))

**PM001600** Configuration cable

#### GENERAL FEATURES

|                              |   |
|------------------------------|---|
| <b>Power supply</b>          | 19÷40Vdc, 19÷28 Vac                                       |
| <b>Channels</b>              | N.1   |
| <b>Status indicators</b>     | - Power<br>- Setting error<br>- Off scale                 |
| <b>Galvanic Isolation</b>    | Power supply // input // output at 1500 Vac, digital      |
| <b>Hot swapping</b>          | Yes   |
| <b>Power consumption</b>     | 2,5 W   |
| <b>Sampling frequency</b>    | 3 samples / second  |
| <b>Protections</b>           | Surges: 400W/ms. Loop supply short-circuit protected      |
| <b>Protection for inputs</b> | Except current: 60V continuous; current 200mA continuous. |
| <b>Humidity</b>              | 30..90% a +40°C (not condensing)                          |

|                              |  |
|------------------------------|--|
| <b>Design</b>                | Terminal housing for mounting on 35 mm DIN 46277                     |
| <b>Data memory</b>           | EEPROM for all configuration data; storage time: 10 years.           |
| <b>DIP Switch</b>            | - Inputs signal setup<br>- Output signal setup                       |
| <b>Enclosure</b>             | "V0" self-extinguishing glass filled nylon case                      |
| <b>Dimensions</b>            | 17,5 x 100 x 112 mm (w x h x d)                                      |
| <b>Weight</b>                | 140 g  |
| <b>Operating temperature</b> | 0..50 °C   |
| <b>Connections</b>           | Plug-in screw clamp terminal blocks, wires up to 2.5 mm <sup>2</sup> |
| <b>Standards</b>             | EN50081-2<br>EN50082-2<br>EN61010-1                                  |
| <b>Approvals</b>             | CE   |

#### INPUT

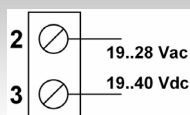
**Current:** bipolar up to 20mA<sub>cc</sub>, input impedance 2.5 ohm, resolution 2uA  
**Voltage:** bipolar up to 10V<sub>cc</sub> in 4 scales: 200mV, 2V, 5V, 10V, input impedance 1 Mohm, resolution 0.01%  
**PT100:** 3-wire measurement, range -200..+600 °C, energising current 0.56mA, resolution 0.035 ohm, automatic detection of cable interruption or RTD  
**Thermocouple:** type J,K,R,S,T,B,E,N; resolution 5uV, automatic detection of TC interruption.  
**Potentiometer:** full scale min 500 ohm, max 15 Kohm, resolution 0.01%.

#### OUTPUT

**Current:** 0..20 mA, 4..20 mA, 20..0 mA e 20..4 mA  
 Higher load resistance: 600 Ohm  
**Voltage:** 0..5 Vdc, 1..5 Vdc, 0..10 Vdc and 10..0 Vdc  
 Lower load resistance: 2,5 KOhm

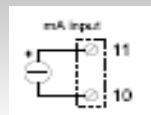
#### DIMENSIONS AND INSTALLATION

##### Power supply

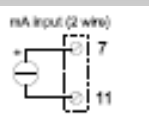


##### Input

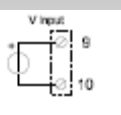
##### Current – passive input



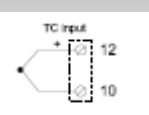
##### Current – active input



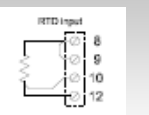
##### Voltage



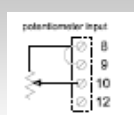
##### Thermocouple



##### RTD

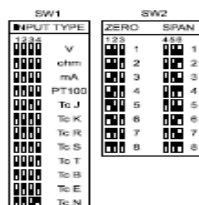


##### Potentiometer



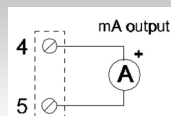
##### Setting

Dip switches configuration (input signal)

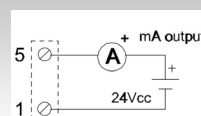


##### Output

##### Current – active output



##### Current – passive output



##### Voltage

