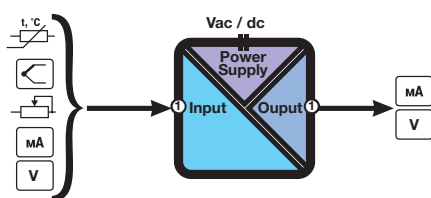




Z109REG2

HIGH PERFORMANCE UNIVERSAL CONVERTER



Z109REG2 is an advanced universal converter able to manage all analog signals (mA, V, PT100, Pt1000, Pt500, Ni100, TCs, Ohm) and convert / isolate it into mA/V standard signals. The device can be configured through dip-switches, PC software or handheld device. A digital contact is available as ALARM or STROBE (multiplexing). It can be requested with low or high power supply. A 3-way galvanic isolation among Power supply // input // output circuits assures the integrity of your datas.

TECHNICAL SPECIFICATIONS

Electrical Specifications

Power supply	10..40 Vdc / 19..28 Vac / 50-60 Hz
Power consumption	2,5 W
Isolation	1.500 Vac (3 way)
Power transducers	Yes
Status Indicators	Power supply, error, data transmission, data reception, input status
Protection Degree	IP20

Thermomechanical Specifications

Operating Temperature	-10..+60 °C
Dimension (W x H x D)	17.5 x 100 x 112 mm
Accuracy	0,1%
Response time	35 ms (11 bit)..140 ms (16 bit)
Setting	Dip- switches EASY_Z109 (PC software) Test-3 (hand held calibrator)
Mounting	35 mm DIN rail guide

Input

Channel Numbers	1
Voltage	(mV, V) Bipolar from 75 mV to 20 V Resolution 15 bit + sign
Current	Bipolar up to 20 mA Resolution 1 µA
Rtd	Pt100, Pt500, Pt1000, Ni100, KTY81, KTY84, NTC Measure 3, 4 wires Range: -200..600 °C Resolution 0,1°C
Thermocouple	Type J, K, R, S, T, E, B, N Resolution 2,5 µV
Potentiometer	500 Ω ..10 kΩ
Rheostat	500 Ω..25 kΩ
Strobe	Alternative to the relay output

Output

Channel Numbers	1
Voltage	4 scales: 0..1, 0..5, 0..10, 2..10 V Min load resistance: 2.000 Ω
Current	2 scales: 0/4..20 mA (active/passive) Max load resistance: 600 Ω
Relay	Alternative to the strobe NC / NA in case of alarm

Standard

Approval	CE, UL-CSA
Norms	EN 50081-2; EN 55011; EN 50082-2; EN 61000-2-2/4; EN 50140/141; EN 61010-1

ORDER CODES

Code	Description
Z109REG2	High performance universal converter, Power supply 10..40 Vdc / 19..28 Vac
Z109REG2-H	High performance universal converter, Power supply 85..265 Vac/Vdc

ACCESSORIES & SOFTWARE

		
PM001601 Programming cable pg. 98	TEST-3 Handheld configurator pg. 133	EASY SETUP Programming software pg. 98

SIMILAR PRODUCTS

		
K121 Loop powered isolator / universal converter pg. 102	Z109UI2 DC current / voltage converter pg. 80	T121 Isolated loop powered temperature transmitter pg. 117

ANALOG UNIVERSAL INPUT

mA, V, Ohm,
RTD, TC

HIGH CLASS ACCURACY

0,1%

FAST RESPONSE TIME

35 ms
(11 bit + segno)

WIDE OPERATING TEMPERATURE

-20..+60°C

TRANSDUCER POWER SUPPLY

20 Vcd, 20 mA

HIGH RESOLUTION

16 bit

AUXILIARY CONTACTS

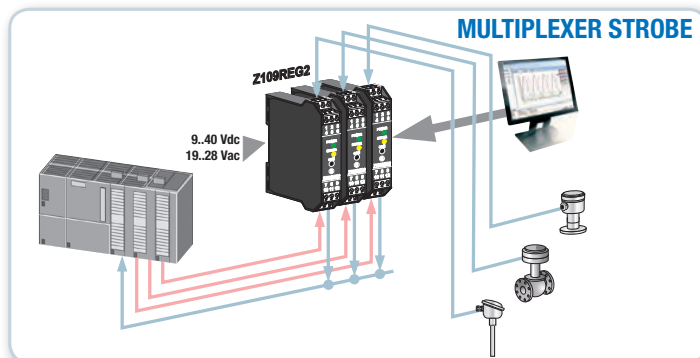
Strobe Input SPDT
relay Output

APPROVALS

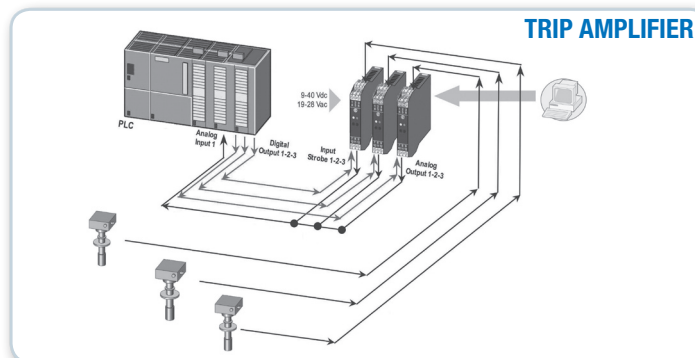


APPLICATION NOTE

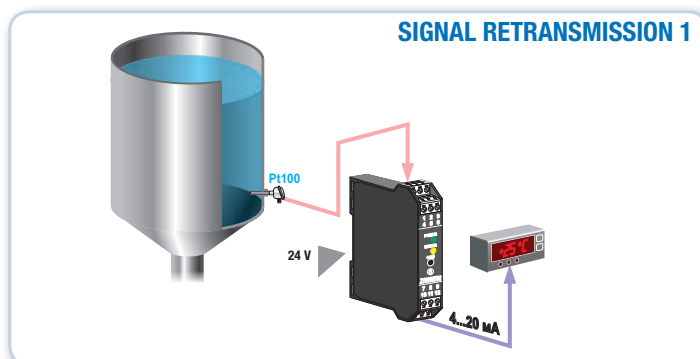
MULTIPLEXER STROBE



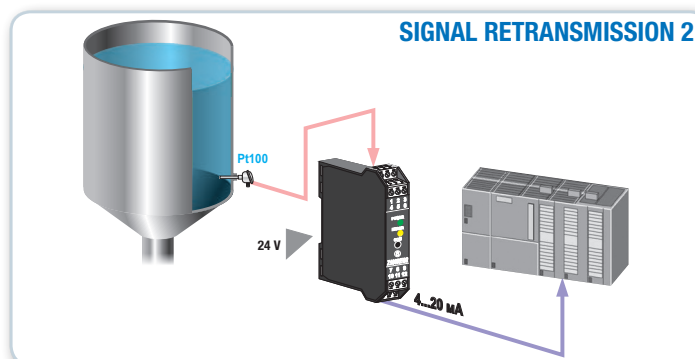
TRIP AMPLIFIER



SIGNAL RETRANSMISSION 1



SIGNAL RETRANSMISSION 2



CONFIGURATION

1- DIP-SWITCHES

- Input type
- Zero and Span
- Output type
- Scale inversion



2- HANDHELD

- Min / max range scale; digital filter; square root extraction
- Fault sensor
- Analog scale; error analog output value
- Rejection frequency (50 – 60 Hz)
- Sampling time / Resolution
- Measure 2, 3, 4 wires for RTD
- Relay alarm control, strobe configuration



3 - SOFTWARE

- Min / max range scale; digital filter; square root extraction
- Fault sensor
- Analog scale; error analog output value
- Rejection frequency (50 – 60 Hz)
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- Measure 2, 3, 4 wires for RTD
- Relay alarm control, strobe configuration

