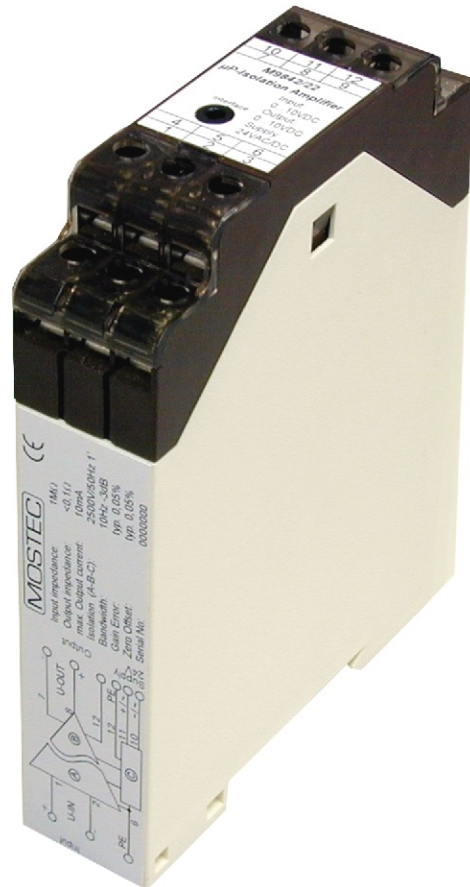


Programmable Isolation Amplifier Type M9842/22



Technical description

The M9842-22 series "snap-on" isolation amplifier and line conditioner separates and/or converts an analog process signal for computers and industrial control equipment. Also, a computer or control equipment's analog signal can be adapted to the process environment. Isolation amplifiers are also installed where signals need to separate different signal grounds to avoid ground loops or when signals with different electrical grounds has to be isolated from each other or to convert one signal to an other.

Example: To convert and isolate a 4...20mA process signal to a 0...10V signal connected to a computer interface.

An additional application is to extract and isolate the measuring signal out of 2-wire transmitter's power supply.

The amplifier is field programmable by means of a serial data cable connected to a personal computer or to a laptop. The set-up software is free of charge and is distributed via the Mostec home page at www.mostec.ch. The range of the amplifier is also factory set free of charge.

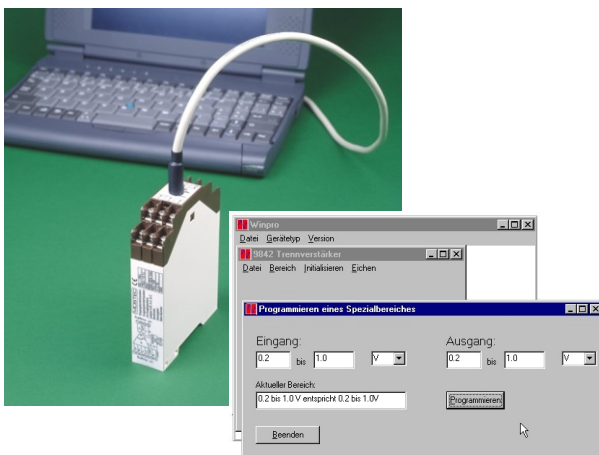
The isolation amplifier consists of the following elements: Input circuit and amplifier, signal processor, demodulator, voltage/current source and the power supply.

Power supply:
Universal supply 20 to 253VAC/DC.

Technical Data:

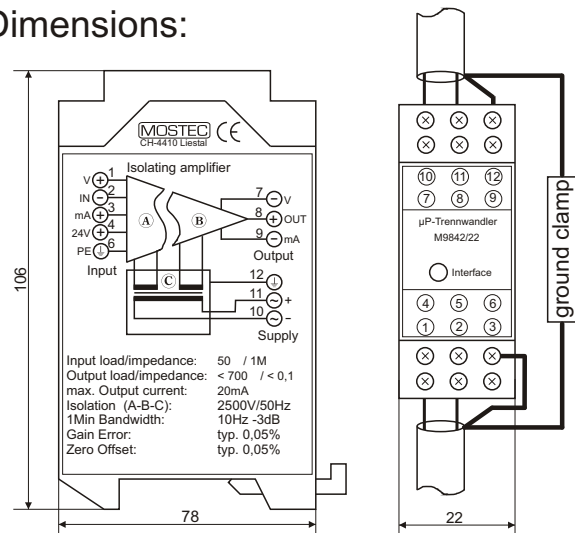
Input:	programmable
Output:	programmable
Input impedance:	– Current input = 51 (= input load) – Voltage input 1M
Output impedance:	– Current output 1M – Voltage output, max. load = 700 – Voltage output < 0,1
Max. output current limit:	30mA, short circuit proof (voltage output only)
Special signal range:	– Voltage input: $\pm 100\text{mV}$ to $\pm 100\text{VDC}$, others on request – Current input: $\pm 2\text{mA}$ to $\pm 20\text{mADC}$, others on request – Voltage output: 0...10VDC, others on request – Current output: 0...20mADC, others on request
Test isolation voltage:	2500VAC/1 minute (Input Output power supply)
Common mode rejection ratio:	Min. 140dB @ 1000VDC min. 100dB @ 1000VAC/50 Hz
Gain error:	Max. 0,05% of full scale
Zero offset:	Max. 0,05% of full scale
Working temperature range:	-5...+55°C
Power supply:	20 to 253 VDC or AC, isolated
Power supply load:	2.4W@ $I_{\text{output}} = 25\text{mA}$
CE-conformity:	fulfilled
Mounting:	35mm mounting rail, EN50022-35
Weight:	160g
Terminals:	screw terminals for 1.5mm ² wire
Terminal description:	1 = Signal input V(+) 2 = Signal input (-) 3 = Signal input mA(+) 4 = +24V (2-wire) 5 = not used 6 = Signal input PE 7 = Signal output V(-) 8 = Signal output (+) 9 = Signal output mA(-) 10 = Power Supply AC~/DC(-) 11 = Power Supply AC~/DC(+) 12 = PE
Warranty:	2 years
Options:	- USB programming unit for MOSTEC devices with cable and software - Customer modifications, special ranges

Programming by Laptop:



Note:
- Connect to the USB interface by a Mostec programming unit
- Download free programming software: www.mostec.ch

Dimensions:



Wiring instructions:
- Install into metallic panels only.
- Shields: All signal lines must be grounded on both sides of the cable.

MOSTEC

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