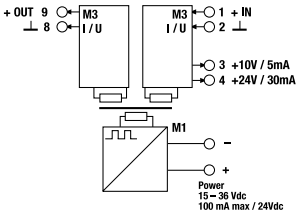
ANALOG SIGNAL CONVERTERS
PROGRAMMABLE GALVANIC ISOLATOR

- **Input: 19 selectable ranges**
- **Output: 7 selectable ranges**
- **Insulation: 3.0 kVac, 3-way isolation**
- **Auxiliary supply for loop powered sensors**
- **Auxiliary supply for potentiometer**

NOTE
Factoy setting: 0...10 V Input / 0...10 V output



CODE TYPE	XCAPIP03 CAPIP03
INPUT TECHNICAL DATA	
Signal type IN	analogue
Input range IN	19 programmable ranges (see tab. 1)
Maximum voltage current signal IN	15 V / 30 A
Input impedance IN	1 MΩ (voltage input) / 50 Ω (current input)
Parametrization IN	DIP switch
OUTPUT TECHNICAL DATA	
Signal type OUT	analogue
Output range OUT	7 programmable steps (see tab. 2)
Maximum output signal OUT	12 V / 25 mA
Load impedance OUT	⩾ 10 kΩ (voltage output) / ⩽ 500 Ω (current output)
Ripple OUT	—
Status indication OUT	LED
Parametrization OUT	DIP switch
GENERAL TECHNICAL DATA	
Power supply voltage	24 Vdc (15...36 Vdc)
Current consumption	100 mA (24 Vdc)
Accuracy	0.1% FSR (23°C)
Linearity error	< 0.1% FS
Temperature coefficient	—
Setting time	—
Transmission frequency	400Hz...1kHz
Resolution	—
Rise time	—
Operating temperature range	-10...+65°C
Insulation	3.0 kVac / 60 s
Insulation type	3-way (IN / OUT1 / power)
Standard approvals	IEC 664-1, DIN VDE0110.1
EMC Standards	EN 50081-2, EN 50082-2
Overvoltage category / Pollution degree	II / 2
Protection degree	IP 20
Connection terminal IN / OUT	2.5 mm² / 2.5 mm² (screw)
Housing material	UL94V-0 plastic material
Dimensions	22.5x108x119 mm
Approximate weight	150 g
Mounting informations	vertical on a rail, distance 5 mm from adjacent components
APPROVALS	CE
ACCESSORIES	
Mounting rail (IEC60715/TH35-7.5)	PR/3/AC, PR/3/AC/ZB, PR/3/AS, PR/3/AS/ZB
Mounting rail (IEC60715/TH35-15)	—
Marking tag	—
Plugin jumper red	—
Plugin jumper white	—
Plugin jumper blue	—
Programming kit	—

TAB.1 - INPUT SELECTION TABLE

INPUT RANGE		SW1 (INPUT)							
UNIPOLAR	BIPOLAR	1	2	3	4	5	6	7	8
0 – 60 mV	± 60 mV								
0 – 100 mV	± 100 mV		●						
0 – 500 mV	± 500 mV			●					
0 – 1 V	± 1 V				●				
0 – 2 V	± 2 V						●		
0 – 5 V	± 5 V			●	●	●	●		
0 – 10 V	± 10 V							●	
0 – 5 mA	± 5 mA	●		●					
0 – 10 mA	± 10 mA	●			●				
0 – 20 mA	± 20 mA	●					●		
4 – 20 mA	—	●				●			●

TAB.2 - OUTPUT SELECTION TABLE

OUTPUT RANGE	INPUT TYPE	SW2 (OUTPUT)								SW3
		1	2	3	4	5	6	7	8	
0 – 5 V	UNIP.	X		●				●		U
	BIP.	X	●	●				●	●	U
± 5 V	UNIP.	X			●			●		U
	BIP.	X		●				●		U
0 – 10 V	UNIP.	X		●						U
	BIP.	X	●	●					●	U
± 10 V	UNIP.	X			●					U
	BIP.	X		●						U
0 – 20 mA	UNIP.	X		●				X		I
	BIP.	X	●	●				X	●	I
± 20 mA	UNIP.	X			●			X		I
	BIP.	X		●				X		I
4 – 20 mA	UNIP.	X				●	●	X		I
	BIP.	X	●			●	●	X	●	I

● = ON
= OFF
X = ANY

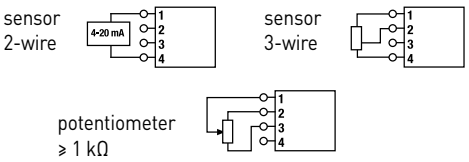
INPUT STAGE

The module can manage single-pole and two-pole inputs selecting between steps (see TAB. 1):

- 0...60 mV ± 60 mV
- 0...100 mV ± 100 mV
- 0...500 mV ± 500 mV
- 0...1 V ± 1 V
- 0...5 V ± 5 V
- 0...10 V ± 10 V
- 0...5 mA ± 5 mA
- 0...10 mA ± 10 mA
- 0...20 mA ± 20 mA
- 4...20 mA

The input stage provides two power supplies (10 V and 24 V) for remote sensors. It is possible to run potentiometers and directly power 4...20 mA two-wire loop sensors.

Connection examples:



OUTPUT STAGE

The module provides single-pole and two-pole output signals with the following steps (see Tab. 2):

- 0...5 V ± 5 V
- 0...10 V ± 10 V
- 0...20 mA ± 20 mA
- 4...20 mA