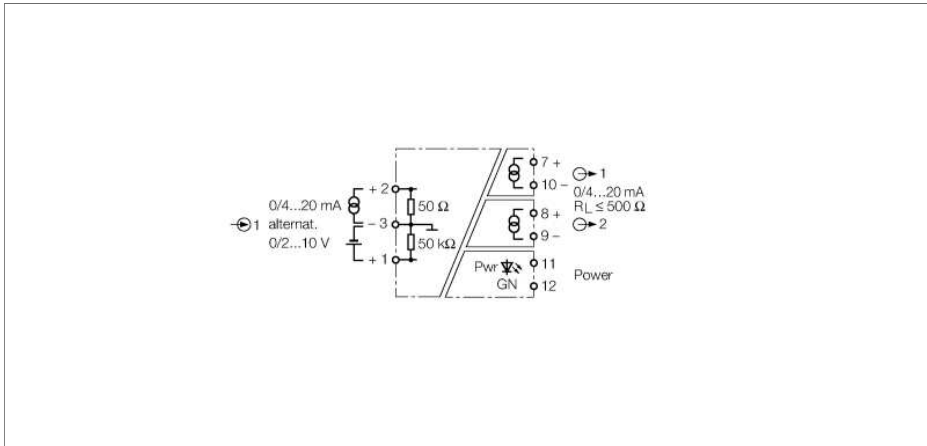


**Analog signal isolator
1-channel
IM31-12-I**

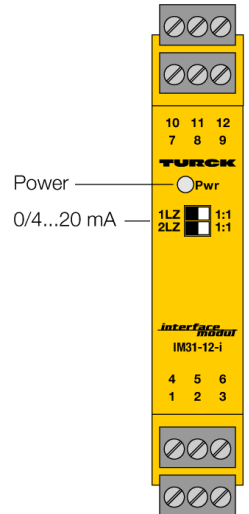


Standard active voltage or current signals are galvanically separated and transferred via the 1-channel analog signal isolator IM31-12-I. The signal is duplicated and provided at both outputs.

The device is equipped with one input circuit of 0/2...10 V or 0/4...20 mA and two short-circuit proof output circuits of 0/4...20 mA.

The transfer characteristic is adjusted via a DIP switch at the front. In "1:1" switch position, the input signal is transferred unattenuated to the outputs. In "LZ" switch position, a dead-zero signal at the input (0...10 V / 0...20 mA) is converted and provided as a live-zero signal at the output (4...20 mA).

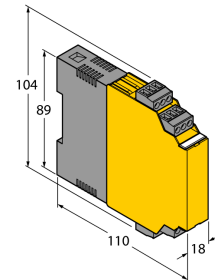
The green LED indicates operational readiness.



- **Transfer of standard analog signals**
- **Input circuit: 0/2...10 V or 0/4...20 mA**
- **Output circuit: 2 x 0/4...20 mA**
- **Removable terminal blocks**
- **Complete galvanic separation**

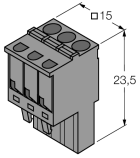
**Analog signal isolator
1-channel
IM31-12-I**

Dimensions



| | |
|--------------------------------|------------------------------------------------------------------------------------|
| Type code | IM31-12-I |
| Ident no. | 7506324 |
| Nominal voltage | Universal voltage supply unit |
| Operating voltage | 20...250 VAC |
| Frequency | 40...70 Hz |
| Operating voltage range | 20...125 VDC |
| Power consumption | ≤ 2.2 W |
| Voltage input | 0/2...10 VDC |
| Input resistance (voltage) | 50 kΩ |
| Current input | 0/4...20 mA |
| Input resistance (current) | 50 Ω |
| Output circuits | |
| Output current | 0/4...20 mA |
| Load resistance current output | ≤ 0.5 kΩ |
| Limit frequency | ≤ 30 Hz |
| Rise time (10-90%) | ≤ 50 ms |
| Dropout time (90...10%) | ≤ 50 ms |
| Measuring accuracy | ≤ 0.2 % of full scale |
| Reference temperature | 23 °C |
| Temperature drift | ≤ 0.005 % / K |
| Galvanic separation | |
| Test voltage | 2.5 kV |
| Rated voltage | 250 V |
| MTTF | 100 years acc. to SN 29500 (Ed. 99) 40 °C |
| Indication | |
| Operational readiness | green |
| Protection class | IP20 |
| Ambient temperature | -25...+70 °C |
| Storage temperature | -40...+80 °C |
| Relative humidity | ≤ 95% |
| Dimensions | 104x 18x 110 mm |
| Weight | 131 g |
| Mounting instruction | For mounting on DIN rail or mounting panel |
| Housing material | Polycarbonate/ABS |
| Electrical connection | 4 x 3-pole removable terminal blocks, reverse polarity protected, screw connection |
| Terminal cross-section | 1 x 2.5 mm ² / 2 x 1.5 mm ² |
| Tightening torque | 0.5 Nm |

Accessories

| Type code | Ident no. | Description | Dimension drawing |
|-----------------|-----------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| IM-CC-3X2BK/2BK | 7541218 | Cage clamps for IM modules (non-Ex devices, width 18 mm): 4 black, 3-pin, included in delivery |  |