Isolating switching amplifier
2-channel
IMC-DI-22EX-PNO/24VDC

The 2-channel IMC-Di22Ex-PNO/24VDC isolating switching amplifier is equipped with intrinsically safe input circuits. Sensors according to EN 60947-5-6 (NAMUR), variable resistors or potential free contacts can be connected to the device.

The output circuits feature 2 NO transistors. A green LED indicates operational readiness. The device must be protected against mechanical load on connector and housing when mounted in zone 2 or 22. For this, use the TURCK cover plate IMC-SG (ident no.7560016).

- ATEX, IECEx, FM, TR CU
- Installation in zone 2/22
- Isolating switching amplifier, 2-channel
- Line monitoring for wire break / short circuit
- PNP transistor output NO
- Complete galvanic isolation
- Input reverse-polarity protected
- Protection class IP67
- Cable with M12 connectors
## Isolating switching amplifier

### 2-channel

**IMC-DI-22EX-PNO/24VDC**

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<table>
<thead>
<tr>
<th><strong>Type designation</strong></th>
<th>IMC-DI-22EX-PNO/24VDC</th>
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<tbody>
<tr>
<td><strong>Ident-No.</strong></td>
<td>7560003</td>
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<tr>
<th><strong>Nominal voltage</strong></th>
<th>24 VDC</th>
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<tr>
<td><strong>Operating voltage range</strong></td>
<td>20…30 VDC</td>
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</tbody>
</table>

**NAMUR**

- **EN-60947-5-6**
  - **No-load voltage** 8.2 VDC
  - **Short-circuit current** 8.2 mA

**Input resistance** 1 kΩ

**Cable resistance** ≤ 50 Ω

**Switch-on threshold** 1.55 mA

**Switch-off threshold** 1.75 mA

**Voltage drop** ≤ 2.5 V

**Semiconductor output circuit(s)**

- 2 x transistors (pnp, short-circuit proof)

**Switching voltage** ≤ 30 VDC

**Switching current per output** ≤ 0.05 A

**Switching frequency** ≤ 3000 Hz

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**Galvanic isolation**

- **Test voltage** 2.5 kV

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### Important note

For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.

**Ex approval acc. to conformity certificate** TÜV 07 ATEX 553447

**Application area** II (1) GD

**Ignition protection category** [Ex ia] IIC/IIB

**Ex approval acc. to conformity certificate** TÜV 07 ATEX 554027 X

**Application area** II 3 GD

**Ignition protection type** Ex nA [nL] IIC/IIB T4 or rather Ex tD A22 IP67 T96 °C

**Characteristic** linear

**Ex approval acc. to conformity certificate** TÜV 07 ATEX 554027 X

**Approval**

- SIL2 acc. to EXIDA FMEDA
- SIL2 acc. to EXIDA FMEDA

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**Indication**

- **Operational readiness** green
- **Switching state** yellow
- **Error indication** red

**Protection class** IP67

- **Ambient temperature** -25…+70 °C
- **Storage temperature** -40…+80 °C
- **Dimensions** 100 x 32 x 25 mm
- **Weight** 153 g
- **Mounting instructions** panel
- **Housing material** Polycarbonate/ABS
- **Electrical connection** M12 receptacle
- **Tightening torque** 3.5 Nm

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### Dimensions

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**Pin assignment male M12**

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**Pin assignment female M12 (intrinsically safe end)**

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## Accessories

<table>
<thead>
<tr>
<th>Type code</th>
<th>Ident-No.</th>
<th>Description</th>
<th>Dimension drawing</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMC-SG</td>
<td>7560016</td>
<td>Metal cover plate for IMC modules (required for application in zones 2/22)</td>
<td><img src="image1.png" alt="IMC-SG Dimension Drawing" /></td>
</tr>
<tr>
<td>SC-M12/3GD</td>
<td>6900390</td>
<td>Captive safety clip for sensors with M12 x 1 connectors and approval acc. to ATEX II 3 G or II 3 D.</td>
<td><img src="image2.png" alt="SC-M12/3GD Dimension Drawing" /></td>
</tr>
</tbody>
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