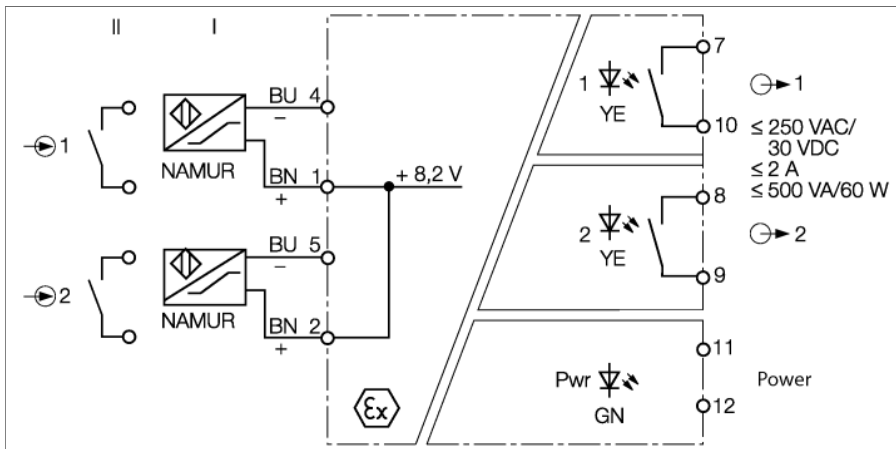


**Isolating switching amplifier**  
**2-channel**  
**IM12-22EX-R**



The 2-channel IM12-22EX-R isolating switching amplifier is equipped with intrinsically safe input circuits.

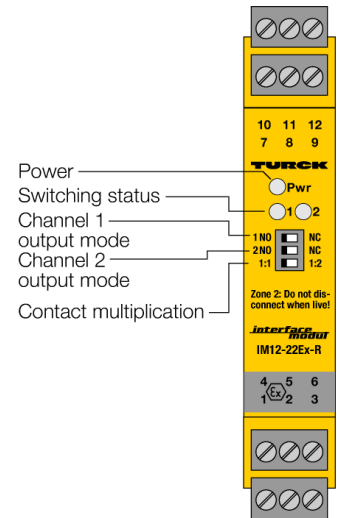
Sensors according to EN 60947-5-6 (NAMUR) or potential-free contact transmitters can be connected to the device.

The output circuits feature 2 relays, each with 1 NO contact.

You can toggle between working or closed current, resp. NO or NC mode via three switches at the front. The switching state of channel 1 is thereby transmitted to the outputs 1 and 2.

The Pwr LED lights green to indicate operational readiness. LED 1 lights yellow to indicate the switching status of the output.

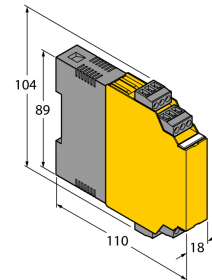
- 2 relay outputs (NO)
- Output mode adjustable (NO/NC mode)
- Multiplexing of signals possible
- Complete galvanic isolation
- Input reverse-polarity protected



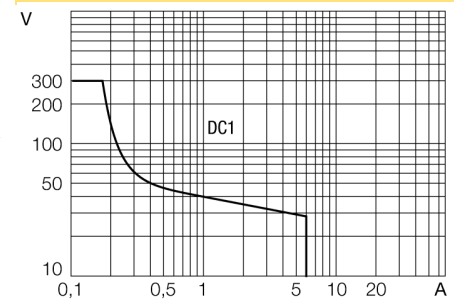
**Isolating switching amplifier  
2-channel  
IM12-22EX-R**

<b>Type designation</b>	IM12-22EX-R
Ident no.	7541233
<b>Nominal voltage</b>	Universal voltage supply unit
Operating voltage	20...250 VAC
Frequency	40...70 Hz
Operating voltage range	20...125 VDC
Power consumption	≤ 3 W
<b>Input</b>	2-channel or 1-channel with signal doubling
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
<b>Output circuits (digital)</b>	2 x relays (NO)
Output switching voltage relay	≤ 30 VDC / ≤ 250 VAC
Switching current per output	≤ 2 A
Switching capacity per output	≤ 500 VA/60 W
Switching frequency	≤ 10 Hz
Contact quality	AgNi, 3μ Au
<b>Galvanic isolation</b>	
Test voltage	2.5 kV
<b>Important note</b>	For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Ex approval acc. to conformity certificate	TÜV 04 ATEX 2553
Application area	II (1) G, II (1) D
Ignition protection category	[Ex ia Ga] IIC; [Ex ia Da] IIIC
Ex approval acc. to conformity certificate	TÜV 06 ATEX 552968 X
Application area	II 3 G
Ignition protection type	Ex nA nC [ic Gc] IIC/IIB T4 Gc
Characteristic	linear
<b>Indication</b>	
Operational readiness	green
Switching state	Yellow
Error indication	red
<b>Mechanical Data</b>	
Protection class	IP20
Flammability class acc. to UL 94	V-0
Ambient temperature (min.)	-25 °C
Ambient temperature (max.)	70 °C
Storage temperature	-25 ... +60 °C für UL, FM, TIIS
Relative humidity	-40...+80 °C
Dimensions	≤ 95 %
Weight	104 x 18 x 110 mm
Mounting instructions	155 g
Housing material	DIN rail (NS35) or panel
Electrical connection	Polycarbonate/ABS
Terminal cross-section	4 x 3-pin removable terminal blocks, reverse polarity protected, screw terminal
Tightening torque	1 x 2.5 mm <sup>2</sup> / 2 x 1.5 mm <sup>2</sup>
	0.5 Nm

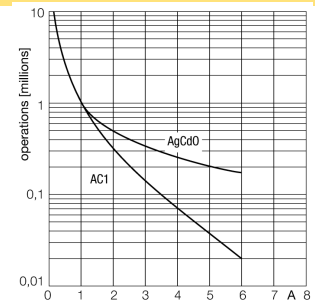
**Dimensions**



**Output relay – Load curve**

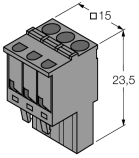


**Output relay – Electrical lifetime**



**Isolating switching amplifier  
2-channel  
IM12-22EX-R**

**Accessories**

Type code	Ident no.	Description	Dimension drawing
IM-CC-3X2BU/2BK	6900475	Cage clamp terminals for IM modules (Ex-devices with 18 mm overall width); includes: 2 pcs. 3-pin blue terminals and 2 pcs. 3-pin black terminals.	
IM-CC-3X2BU/2BK	-	Spring-type terminals for IM modules (Ex devices with 18 mm overall width); includes: 2 pcs. 3-pin blue terminals and 2 pcs. 3-pin black terminals.	