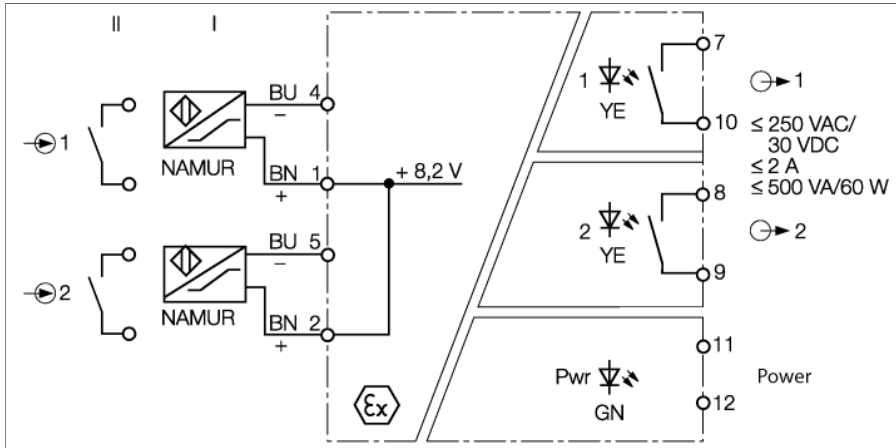


# Isolating switching amplifier

## 2-channel

### IM12-22EX-R



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

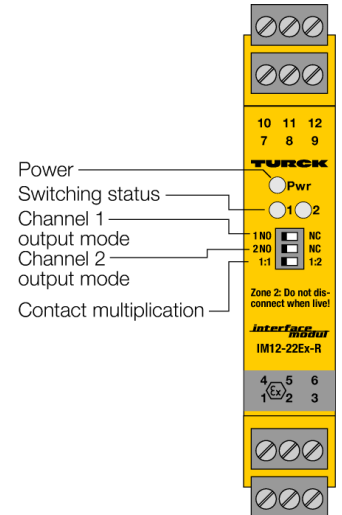
Sensors according to EN 60947-5-6 (NAMUR) or potential-free contact transmitters can be connected to the device.

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
- ATEX, IECEx, cUL, cFM, CSA, TR CU, NEPSI, KOSHA, TIIS, CCOE, INMETRO
- Installation in zone 2



Type	IM12-22EX-R
ID	7541233
Nominal voltage	Universal voltage supply unit
Operating voltage	20...250 VAC
Frequency	40...70 Hz
Operating voltage	20...125 VDC
Power consumption	≤ 3 W

Input	2-channel or 1-channel with signal doubling
NAMUR input	
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

Output circuits	
Output circuits (digital)	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

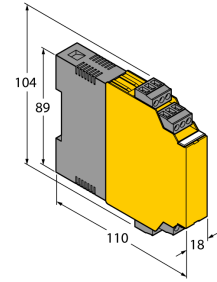
Galvanic isolation	
Test voltage	2.5 kV RMS

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 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

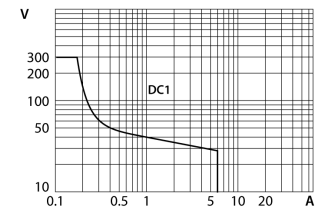
Displays/Operating elements	
Operational readiness	Green
Switching state	Yellow
Error indication	red

Mechanical data	
Protection class	IP20
Flammability class acc. to UL 94	V-0
Ambient temperature	-25...+70 °C
	-25 ... +60 °C für UL, FM, TIIS
Storage temperature	-40...+80 °C
Dimensions	104 x 18 x 110 mm
Weight	155 g
Mounting instructions	DIN rail (NS35) or panel
Housing material	Polycarbonate/ABS
Electrical connection	4 x 3-pin removable terminal blocks, reverse polarity protected, screw terminal
Terminal cross-section	1 x 2.5 mm <sup>2</sup> /2 x 1.5 mm <sup>2</sup>
Tightening torque	0.5 Nm

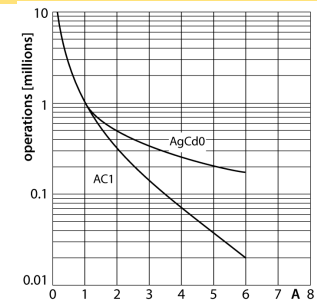
## Dimensions



## Output relay – Load curve



## Output relay – Electrical lifetime



**Accessories**

Type code	Ident no.		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.	