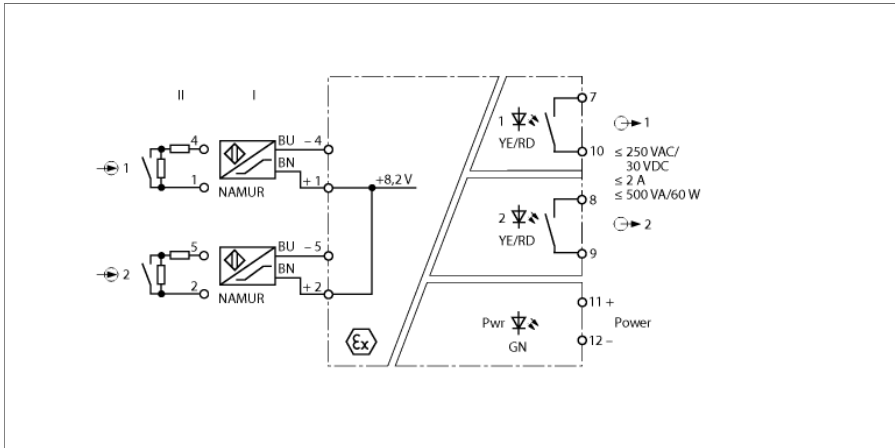


Isolating switching amplifier

2-channel

IM1-22EX-R/24VDC



The 2-channel IM1-22EX-R/24VDC 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.

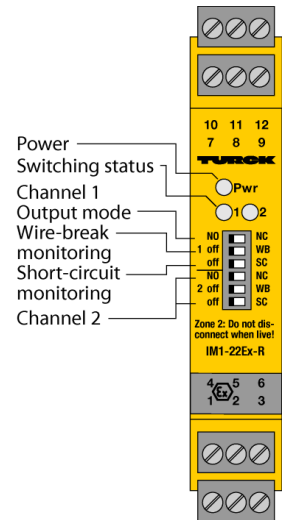
The output circuits feature 2 relays, each with 1 NO contact.

Via six switches on the front, you can set the operating behaviour for each channel separately (work or quiescent current behavior, i.e. NO/NC) as well as switch wire-break (WB) and short-circuit monitoring (SC) on and off.

When using mechanical contacts, wire-break and short-circuit monitoring must be switched off or the contacts must be wired to resistors (II) (see circuit diagram).

The Pwr LED lights green to indicate operational readiness. The 2-color LEDs 1 and 2 below light yellow to indicate the switching status of the corresponding output. In the event of an input circuit error, the 2-color LED of the assigned faulty input turns red, with the input circuit monitoring being switched on. Thereupon the belonging output relay is de-energized.

- Adjustable output mode (NO/NC)
- Input circuits monitored for wire-break/short-circuit (ON/OFF switchable)
- Complete galvanic isolation
- ATEX, FM_{us} , TR CU



Isolating switching amplifier

2-channel

IM1-22EX-R/24VDC

Type	IM1-22EX-R/24VDC
ID	7541210
Nominal voltage	24 VDC
Operating voltage	10...30 VDC
Power dissipation, typical	≤ 0.99 W

NAMUR input	
NAMUR	EN 60947-5-6
Input circuit monitoring	on/off switchable
No-load voltage	8 VDC
Short-circuit current	8 mA
Input resistance	1 kΩ
Cable resistance	≤ 50 Ω
Switch-on threshold	1.75 mA
Switch-off threshold	1.55 mA
Wire breakage threshold	≤ 0.06 mA
Short-circuit threshold	≥ 6.4 mA

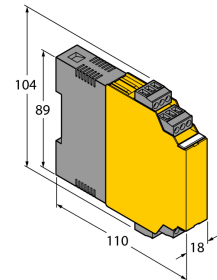
Output circuits	
Output circuits (digital)	2 x relays (NO)
Output switching voltage relay	≤ 30 VDC / ≤ 250 VAC
Switching current per output	≤ 2 A
Switching capacity per output	≤ 500 VA/60 W
Switching frequency	≤ 10 Hz

Important note	For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Ex approval acc. to conformity certificate	PTB 00 ATEX 2033
Application area	II (1) G, II (1) D
Ignition protection category	[Ex ia Ga] IIC; [Ex ia Da] IIIC

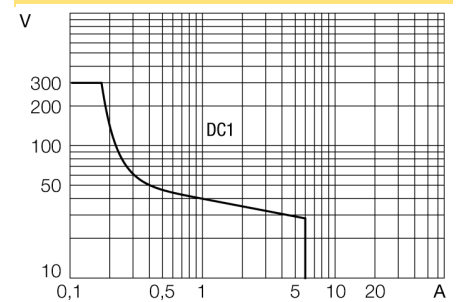
Displays/Operating elements	
Switching state	Yellow
State/ Fault	2 x yellow/red
Error indication	red

Mechanical data	
Protection class	IP20
Flammability class acc. to UL 94	V-0
Ambient temperature	-25...+60 °C
	-25 ... +60 °C für FM
Storage temperature	-40...+80 °C
Dimensions	104 x 18 x 110 mm
Weight	151 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 ² /2 x 1.5 mm ²
Tightening torque	0.5 Nm

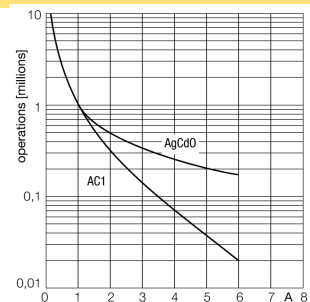
Dimensions



Output relay – Load curve

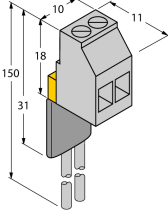


Output relay – Electrical lifetime



Isolating switching amplifier
2-channel
IM1-22EX-R/24VDC

Accessories

Type code	Ident-No.		Dimension drawing
WM1 WIDER-STANDSMODUL	0912101	The resistor module WM1 meets the requirements for line monitoring between a mechanical contact and a TURCK signal processor. The input circuit of the signal processor is designed for sensors acc. to EN60947-5-6 (NAMUR) and equipped with a wire-break and short-circuit monitoring function.	
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.	