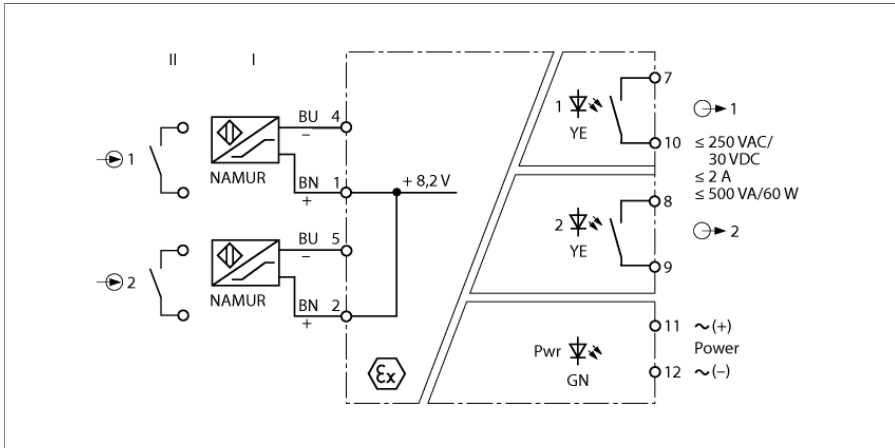


# Isolating switching amplifier 2-channel IM12-22EX-R/24VDC



The 2-channel IM12-22EX-R/24VDC isolating switching amplifier is equipped with intrinsically safe input circuits.

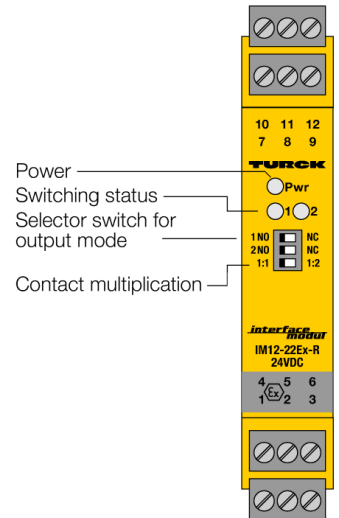
Sensors according to EN 60947-5-6 (NAMUR) or potential-free contactors can be connected to the device.

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

The output mode (working or quiescent current behavior, i.e. NO/NC) can be set via three switches on the front. The switching state of channel 1 is thereby transmitted to 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.

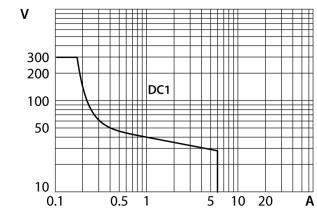
- Output mode adjustable (NO/NC mode)
- Multiplexing of signals possible
- Complete galvanic isolation
- Input reverse-polarity protected
- ATEX, <sub>us</sub> TR CU



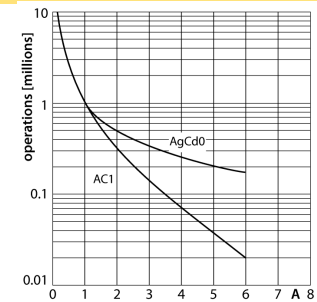
## Dimensions



## Output relay – Load curve



## Output relay – Electrical lifetime



Type	IM12-22EX-R/24VDC
ID	7505640
Nominal voltage	24 VDC
Operating voltage $U_s$	10...30 VDC
Power consumption	$\leq 1.5$ 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 k $\Omega$
Cable resistance	$\leq 50$ $\Omega$
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	$\leq 30$ VDC / $\leq 250$ VAC
Switching current per output	$\leq 2$ A
Switching capacity per output	$\leq 500$ VA/60 W
Switching frequency	$\leq 10$ 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	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	
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...+60 °C
Storage temperature	-40...+80 °C
Dimensions	104 x 18 x 110 mm
Weight	143 g
Mounting instructions	DIN rail (NS35) or panel
Housing material	Plastic, 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

**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.	