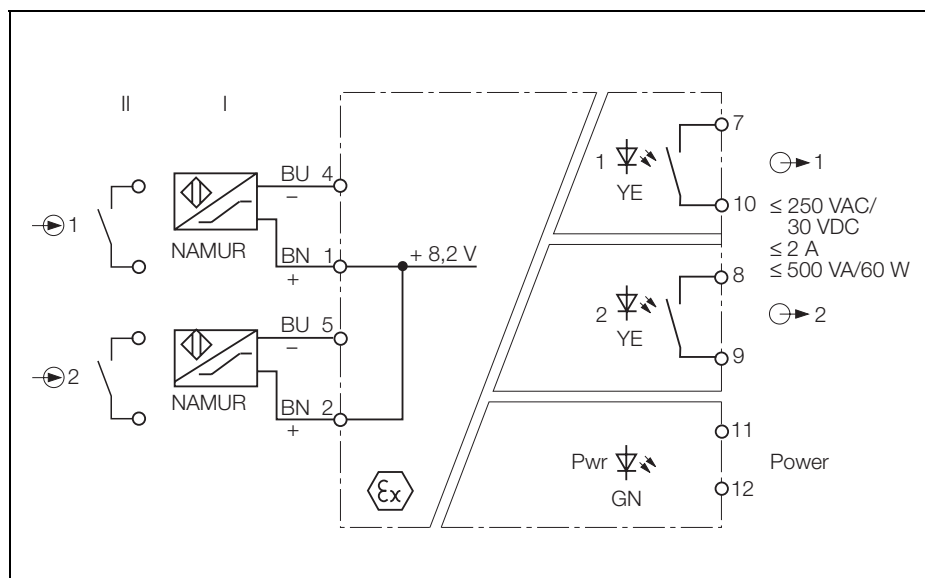


Isolating switching amplifier 2-channel IM12-22EX-R



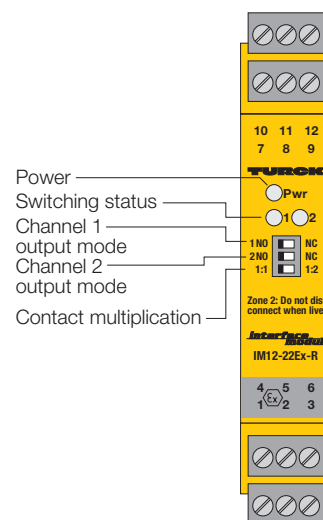
The 2-channel isolating switching amplifier IM12-22EX-R is equipped with an intrinsically safe input circuit.

The device can be connected to sensors according to EN 60947-5-6 (NAMUR) or potential-free contacts.

The output circuits feature two relays, each with one normally open contact.

Three front panel programming switches select the output function (NO or NC mode) and enable separate activation and de-activation of wire-break (WB) and shortcircuit (SC) monitoring.

The green LED indicates operational readiness. The two yellow LEDs indicate the switching status of the corresponding output.



- **Intrinsically safe input circuits Ex ia**
- **For application in zone 2**
- **FM, NEPSI**
- **SIL 2**
- **Application areas [Exia] IIC/IIB and Ex nA nC [nL] IIC/IIB T4**
- **selectable output mode (N.O./N.C. mode)**
- **Signal fan-out possible**
- **Removable terminal blocks**
- **Universal operating voltage (20...250VAC/ 20...125VDC)**
- **Galvanic isolation of input circuits to output circuits and supply voltage**

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

Type	IM12-22EX-R
Ident-No.	7541233
Nominal voltage	Universal voltage supply unit
Operational voltage range:	20 ... 250 VAC
Frequency	$\geq 40 \dots \leq 70$ Hz
Operational voltage range:	20 ... 125 VDC
Power consumption	≤ 3 W
NAMUR	EN-60947-5-6
No-load voltage	8.2 VDC
Short-circuit current	8.2 mA
Input resistance	1 k Ω
Output resistance	$\leq 50 \Omega$
Switch-on threshold:	1.55 mA
Switch-off threshold:	1.75 mA
Output circuits (digital)	2 x relay (normally open)
Relay switching voltage	≤ 250 VAC/120 VDC
Switching current per output	≤ 2 A
Switching capacity per output	≤ 500 VA/60 W
Switching frequency	≤ 10 Hz
Contact quality	AgNi, 3 μ Au
Test voltage	2.5 kV
Constant voltage supply	250 V

Ex approval acc. to conformity certificate

Ex approval acc. to conformity certificate	TÜV 04 ATEX 2553
Application area	II (1) GD
Protection type	[EEx ia] IIC
Max. output voltage U_o	≤ 9.6 V
Max. output current I_o	≤ 11 mA
Max. output power P_o	≤ 26 mW
Characteristic	Linear
External inductance/capacitance L_o/C_o	

	EEx ia IIC			EEx ia IIB		
L_o [mH]	1,0	5,0	10,0	2,0	10,0	20,0
C_o [μ F]	1,1	0,83	0,74	5,2	3,8	3,4

Ex approval acc. to conformity certificate	TÜV 06 ATEX 552968 X
Application area	II 3 G
Max. output voltage U_o	≤ 9.6 V
Max. output current I_o	≤ 11 mA
Max. output power P_o	≤ 26
External inductance/capacitance L_o/C_o	

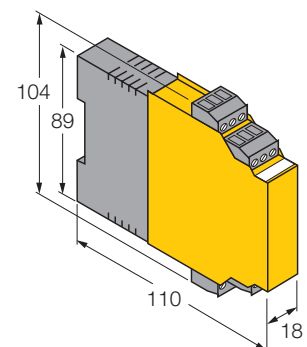
	Ex nL IIC			Ex nLIIB		
L_o [mH]	1,0	5,0	10,0	1,0	5,0	10,0
C_o [μ F]	1,9	1,4	1,2	11	7,5	6,6

Ex approval acc. to conformity certificate	FM3019329
Ex approval acc. to conformity certificate	IECEx TUN 06.0006 X
Application area	[Ex ia] IIC/IIB , Ex nA nC [nL] //C/IIB T4
Protection type	EEx nA nC [nL] IIC/IIB T4
Ex approval acc. to conformity certificate	GYJ04436

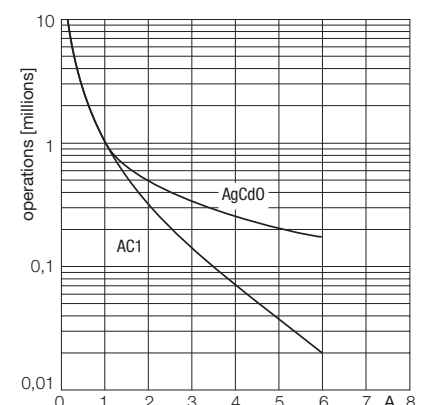
Indication

Operational readiness	green
Switching status	yellow

Dimensions



Output relay electrical lifetime



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

Mechanical Data

Degree of protection	IP20
Ambient temperature	-25 ...+ 60 °C
Housing length	104 mm
Housing width	18 mm
Housing height	110 mm
Weight	135 g
Mounting instruction	Mounting on DIN rail or mounting panel
Housing material	polycarbonate/ABS
Electrical connection	4 x 3-pole removable terminal blocks, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm ² / 2 x 1.5 mm ²