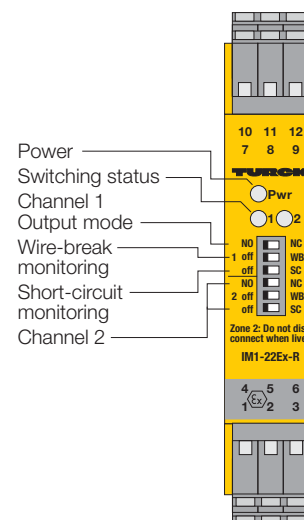
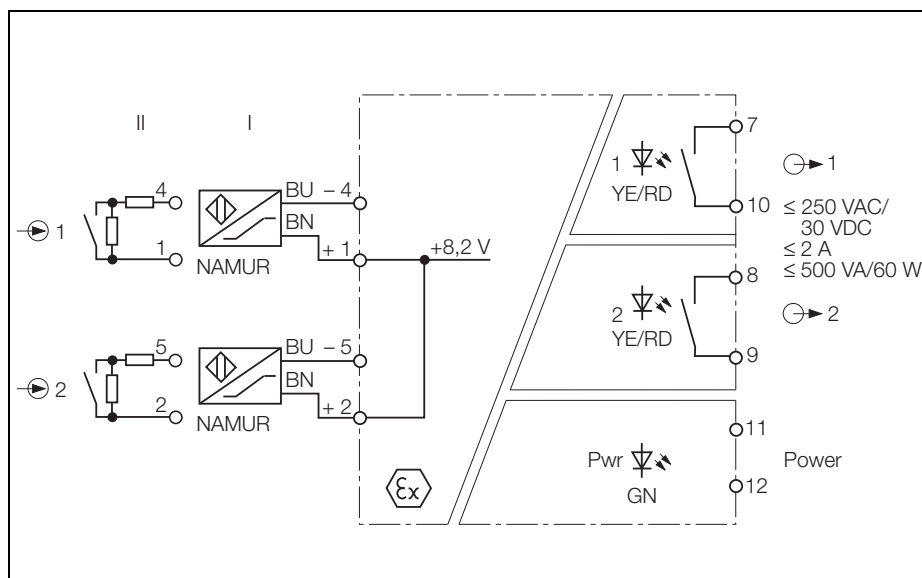


**Isolating switching amplifier
dual-channel
IM1-22EX-R-CC**



The dual-channel isolating switching amplifier IM1-22EX-R-CC is equipped with an intrinsically safe input circuit.

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 NO contact.

Three front panel switches are used to set the output mode separately for each channel (NO or NC mode), as well as to enable/disable

wire-break (WB) and short-circuit (SC) monitoring separately.

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

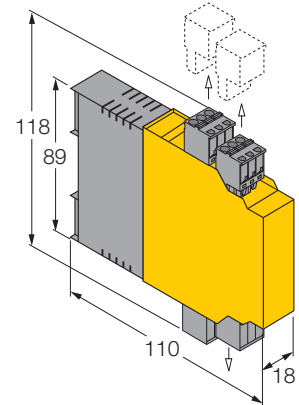
The green LED indicates operational readiness. The yellow LEDs indicate the switching status of the corresponding output. The device is equipped with removable cage clamp terminals.

- **Intrinsically safe input circuits EEx ia**
- **For application in zone 2**
- **FM, NEPSI**
- **SIL 2**
- **Application areas [Exia] IIC/IIB und Ex nA nC [nL] IIC/IIB T4**
- **Adjustable output mode (NO/NC)**
- **Monitoring of input circuits for wire-break/short-circuit (ON/OFF mode)2**
- **Removable cage clamp terminals**
- **Universal operating voltage (20...250VAC/ 20...125VDC)**
- **Galvanic isolation of input circuits to output circuits and supply voltage**

**Isolating switching amplifier
dual-channel
IM1-22EX-R-CC**

Type	IM1-22EX-R-CC																					
Ident-No.	7541236																					
Nominal voltage	Universal voltage supply unit																					
Operational voltage range:	20 ... 250 VAC																					
Frequency	≥ 40 ... ≤ 70 Hz																					
Operational voltage range:	20 ... 125 VDC																					
Power consumption	≤ 3W																					
NAMUR	EN-60947-5-6																					
No-load voltage	8.2VDC																					
Short-circuit current	8.2mA																					
Input resistance	1kΩ																					
Cable resistance	≤ 50Ω																					
Switch-on threshold:	1.55mA																					
Switch-off threshold:	1.75mA																					
Wire breakage threshold	≤ 0.1mA																					
Short-circuit threshold	≥ 6mA																					
Output circuits (digital)	2 x relay (NO)																					
Relay switching voltage	≤ 250 VAC/120 VDC																					
Switching current per output	≤ 2 A																					
Switching capacity per output	≤ 500 VA/60 W																					
Switching frequency	≤ 10Hz																					
Contact quality	AgNi, 3μ Au																					
Galvanic isolation																						
Test voltage	2.5 kV																					
Exapproval acc. to conformity certificate	TÜV 04 ATEX 2553																					
Application area	II (1) GD																					
Protection type	[EEx ia] IIC																					
Max. output voltage U_o	≤ 9.6V																					
Max. output current I_o	≤ 11mA																					
Max. output power P_o	≤ 26mW																					
Rated voltage	250V																					
Characteristic	linear																					
External inductance/capacitance L_o/C_o																						
	<table border="1"> <thead> <tr> <th></th> <th colspan="3">EEx ia IIC</th> <th colspan="3">EEx ia IIB</th> </tr> </thead> <tbody> <tr> <td>L_o [mH]</td> <td>1,0</td> <td>5,0</td> <td>10,0</td> <td>2,0</td> <td>10,0</td> <td>20,0</td> </tr> <tr> <td>C_o [μF]</td> <td>1,1</td> <td>0,83</td> <td>0,74</td> <td>5,2</td> <td>3,8</td> <td>3,4</td> </tr> </tbody> </table>		EEx ia IIC			EEx ia IIB			L_o [mH]	1,0	5,0	10,0	2,0	10,0	20,0	C_o [μF]	1,1	0,83	0,74	5,2	3,8	3,4
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C_o [μF]	1,1	0,83	0,74	5,2	3,8	3,4																
Exapproval acc. to conformity certificate	TÜV 06 ATEX 552968 X																					
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	Ex nL IIC			Ex nLIIB																		
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Exapproval acc. to conformity certificate	FM3019329																					
Protection type	EEx nA nC [nL] IIC/IIB T4																					
Approval	SIL 2																					
Approval																						

Dimensions



**Isolating switching amplifier
dual-channel
IM1-22EX-R-CC**

Indication

Operational readiness	green
Switching state	yellow
Error indication	red

Mechanical Data

Protection class	IP20
Ambient temperature	-25 ...+ 70 °C
Dimensions	104 x 18 x 110 mm
Mounting instruction	Mounting on DIN rail or mounting panel
Housing material	Polycarbonate/ABS
Electrical connection	4 x 3-pole removable terminal blocks with test socket, reverse polarity protected,coded, cage clamp terminal
Terminal cross-section	1 x 2.5 mm ² / 2 x 1.5 mm ²