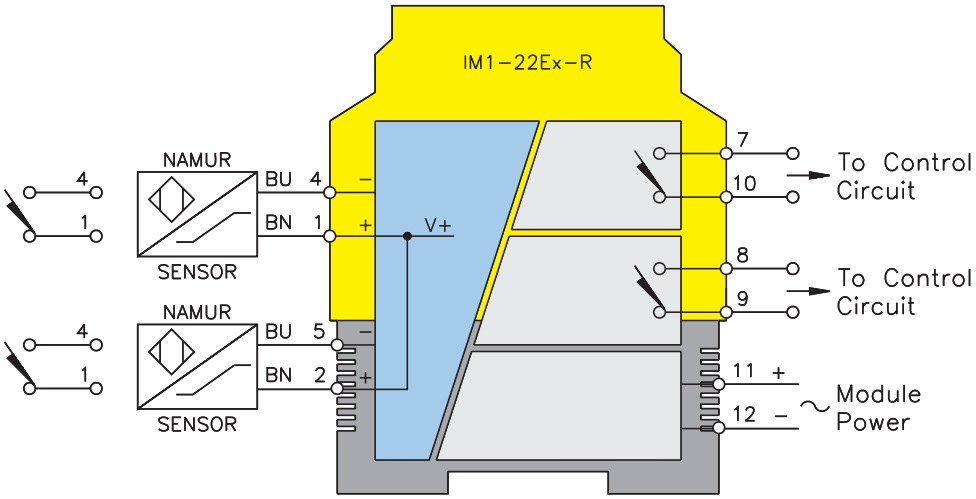
IM1-22Ex-R — Isolation Switch Relays



Functional Description:

This 2 channel intrinsically safe interface device is designed to accommodate two switches or NAMUR proximity sensor inputs from a hazardous area and repeat the change of state of the field circuits to a control system located in a non-hazardous area.

The non-hazardous area outputs are two separate SPST switches reflecting the corresponding change of state from each individual input of the field circuit.

Features:

- 2 channel input for NAMUR sensors or mechanical switches
- Monitoring of field wiring for open or short-circuit (if required)
- Configuration switches on top of unit for easy access
- 2 SPST non-hazardous area outputs; 1 for each channel
- Selectable N.O./N.C. outputs

Electrical Parameters:

Inputs: Hazardous Area

Supply Voltage - (20-250 VAC or 20-125 VDC)

Inputs	(8.2 V, 8.2 mA)
Switching Threshold	1.55 mA
Hysteresis	Typical 0.2 mA
Open-circuit Threshold	≤0.1 mA
Short-circuit Threshold	≥6.0 mA

Outputs: Non-Hazardous Area

2 Relays, 1 N.O. Contact Each

Voltage	≥250 VAC/120 VDC
Current	≥2 A per channel
Capacity	≥500 VA / 60 W per channel
Switch Frequency	≥10 Hz
Contacts	Silver-Alloy + Au (3 micro μ)

For entity parameters see control drawings on pages B86 - B91.

Isolation Switch Relays — IM1-22Ex-R

Pin #	Terminal Function
1	(+) to Field Device #1
2	(+) to Field Device #2
3	No Connection
4	(-) to Field Device #1
5	(-) to Field Device #2
6	No Connection
7	Non-Hazardous Area Switch #1
8	Non-Hazardous Area Switch #2
9	Non-Hazardous Area Switch #2
10	Non-Hazardous Area Switch #1
11	Module Power (+) or AC
12	Module Power (-) or AC