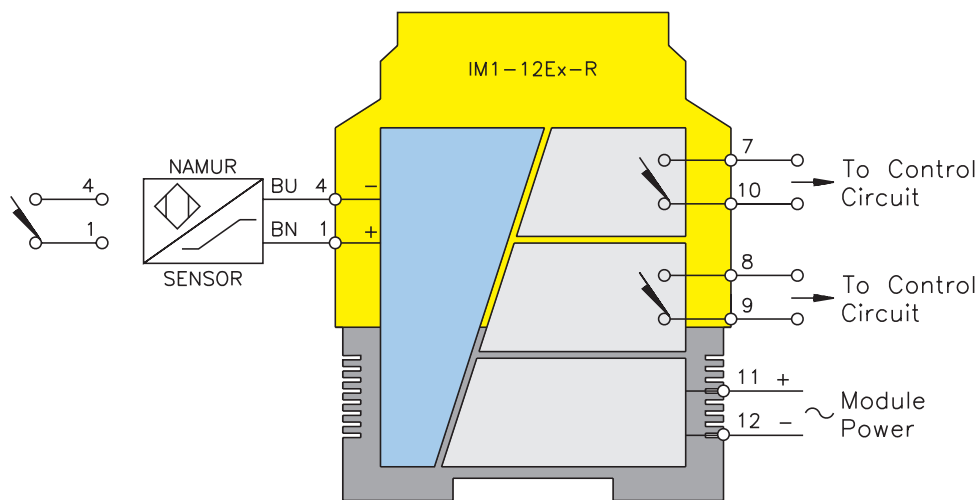


IM1-12Ex-R

Isolation Switch Relays



Functional Description:

This 1 channel intrinsically safe interface device is designed to accommodate 1 switch or NAMUR proximity sensor input 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 input change of state from the field circuit.

Features:

- 1 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 non-hazardous area switch outputs; 1 for alarm function
- 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 IM1-12Ex-R

Pin #	Terminal Function
1	(+) to Field Device
2	No Connection
3	No Connection
4	(-) to Field Device
5	No Connection
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

