



Functional Description:

This 2 channel intrinsically safe interface device is designed to accommodate two switches or NAMUR proximity sensors 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 open collector transistors reflecting the corresponding change of state from each individual input of the field circuit when properly configured.

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 isolated short-circuit protected open collector transistor 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 Transistors, Potential Free Short-Circuit Protected
 Switching Voltage ≤30 VDC
 Switch Current ≤50 mA per channel
 Switch Frequency ≤5 kHz
 Voltage Drop. ≤1.3 V

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

Isolation Switch Relays IM1-22Ex-T

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 Transistor #1 (+)
8	Non-Hazardous Area Transistor #2 (+)
9	Non-Hazardous Area Transistor #2 (-)
10	Non-Hazardous Area Transistor #1 (-)
11	Module Power (+) or AC
12	Module Power (-) or AC

