

Galvanic Isolator



Description

The galvanic isolators are active protective interface assemblies to isolate intrinsically safe circuits from non intrinsically safe circuits to worldwide standards. Galvanic isolators offer economical solutions for instrumentation and control systems in hazardous locations. Unlike zener diode barriers, galvanic isolators do not require grounding.

Allen-Bradley's galvanic isolators provide 1500 volt isolation between hazardous area and non hazardous area terminals and 500 volt isolation between input/output and external power terminals. DIP switches provide convenient programming for output or diagnostic functions. Multiple LEDs allow easy visual indication of module and circuit status.

Wiring for intrinsically safe systems must be identified as such through the use of light blue jacketing and/or through appropriate labels. Such labels are required by NEC Article 504 and ANSI/ISA RP-12.6 to be placed at no more than 25 foot intervals. When installing intrinsically safe equipment the user should refer to all relevant national standards and/or those standards set forth by the "authority having jurisdiction" at the installation site.

Features

- Galvanic isolation input-to-output
- Reverse polarity protected
- 500V isolation between input and output
- No separate intrinsically safe grounding required
- 18mm (0.71in) wide housing
- 35mm Din rail mount

Specifications

Standards	EN50020-EN50039, FM3610, CSA22.2 No.157, UL913
Approvals	FM, CSA, UL, CENELEC (PTB) approved and CE marked for all applicable directives
Power Supply	32mA @ 18-35V DC
Number of Inputs	2
Signal Range	8V @ 8.2mA
Input Switching Current	On > 2.1mA Off < 1.2mA
Input Resistance	1000 ohms
Isolation Protection	1500V
Output	2 x SPST
Output Contact Rating	2A/250V AC, 2A/120V AC, 2A/24V DC
Switching Frequency	15Hz
Switch Delay	On to Off 15ms Off to On 15ms
Indication LEDs	Green = Power Yellow = Output Closed Red = Wire Break/Short
Operating Temperature	-20°C to +65°C (-4°F to +149°F)
Humidity	95% RH
Housing Material	Polyamide 6GF
Enclosure Protection	IP30
Mounting	35mm Din rail
Conductor Size	0.2-2.5mm ² (24-14AWG)
Weight	120g (0.26lbs)
Mechanical Contact Life	20,000,000 cycles

Entity Table

Groups	Voc	Isc	Ca	La
A, B	10.6V	29.7mA	2.5uF	40mH
C, D, E, F, G			15uF	150mH

Hazardous Location & Pneumatic Switches Galvanic Isolator

Product Selection

Product	External Power	Output type	Catalog Number
Galvanic Isolator	32mA @ 18-35VDC	SPST 2A @ 250V AC	897H-G231

Approximate Dimensions—mm (inches) Block Diagram



Typical Wiring Diagrams

