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 500volt 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

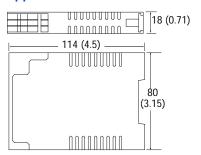
Groups	Voc	Isc	Ca	La
A, B	10.6V	29.7mA	2.5uF	40mH
C, D, E,F, G	10.0 V		15uF	150mH

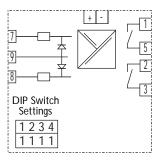


Product Selection

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

