

## INTRINSICALLY SAFE RELAY (ISR-A)

### Electrical Protection

#### Description

Ampcontrol's I.S. Relay (ISR-A) is designed for use in Intrinsically Safe switching and indication applications. The Relay provides two Intrinsically Safe relay outputs with normally open and normally closed outputs. These outputs may pass into hazardous area through appropriately rated glands.

Three variants of the I.S. Relay are available. These support 12 VDC, 24 VDC and 110 VAC supplies. The input terminals of the 12 VDC version are certified intrinsically safe.

The ISRA must be installed in an enclosure rated no less than IP54 as per IEC60529.



#### Features

- Intrinsically Safe Ex ia Group 1 Ma
- Designed and tested to AS/NZS 60079.11
- 2 relay outputs
- Standard DIN rail mounting
- Compact design

#### CAUTION!

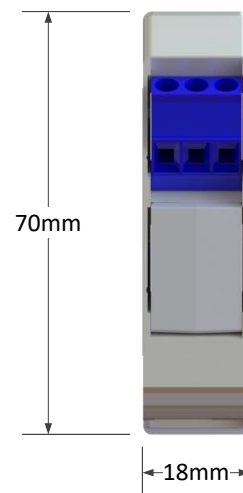


Modules used in Non-I.S. systems shall not be reused in I.S. systems (as the integrity of internal components upon which intrinsic safety depends may have been compromised).

#### WARNING!



I.S. parameters must be observed. Refer to the Conditions of Certification Section for more information.



### Specifications

Certification / Approvals			
Type	[Ex ia Ma] I		
Certificate Number	IECEX ExTC 20.0021X		
Power Supply (External)	ISRA-12	ISRA-24	ISRA-110
Coil Input Voltage	12 VDC	24 VDC	110 VAC
Must Operate Voltage	70 % max of rated	70 % max of rated	80 % max of rated
Must Release Voltage	15 % min of rated	15 % min of rated	30 % min of rated
Coil Side I.S. Circuit	Ui = 16.5 VDC	-	-
Maximum Value of Um	-	Um = 132 VAC	Um = 127.6 VAC
Rated Current	43.6 mA	21.8 mA	11 mA @ 50 Hz
Power Consumption	Approx. 530 mW	Approx. 530 mW	Approx. 0.9 VA
Relay Outputs			
Contact Rating	Each switching contact is a separate IS circuit with the following parameters: Ui = 32.5 VDC Ii = 3 A Ci = Negligible Li = Negligible		
Mechanical & Environmental			
IP Rating	ISRA to be installed in an enclosure rated to not less than IP54		
Operating Temperature Range	-20 °C to 60 °C		
Dimensions	91 x 18 x 70 mm (H x W x D) (Refer to dimensional drawings)		
Mounting	Standard 35 mm DIN rail (Top Hat Rail – EN50022)		
Terminal Wire Gauge (Max)	2.5 mm <sup>2</sup> (with bootlace ferrule)		
Weight	67.5 g		
Find Out More			
For more information on this product, contact Ampcontrol Customer Service on +61 1300 267 373 or <a href="mailto:customerservice@ampcontrolgroup.com">customerservice@ampcontrolgroup.com</a> or visit the Ampcontrol website: <a href="http://www.ampcontrolgroup.com">www.ampcontrolgroup.com</a>			

### Ordering

Part Number	Description
195915	RELAY INTRINSICALLY SAFE 12 VOLTS DC
196258	RELAY INTRINSICALLY SAFE 24 VOLTS DC
196255	RELAY INTRINSICALLY SAFE 110 VOLTS AC

#### DISCLAIMER

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