Version:210300171010

Instruction Manual of EA-IS Loop Isolator

-----Please read this Manual carefully before installing and using the product.------

I. Overview

EA-IS loop isolator (hereinafter referred to as EA-IS), mainly used to isolate a portion of a short circuit on the bus, other devices on the bus to ensure normal operation. Upon elimination of the short circuit fault, EA-IS can be isolated out their own part back into the system. It is worth noting: EA-IS using the bus to facilitate the determination of the location of a short circuit.

II. Feature

- In the event of a short circuit isolates faulty parts of the loop
- Automatically resetting once the fault has cleared
- LED lights indicate status

III. Technical parameters

1159g/01

0832-CPR-F2122

1.Executive Standard: EN54-17.

2.Working voltage: 24VDC (pulse modulation) loop voltage.

3.Indicator: Yellow (flashes when polling, illuminates in action.)

4.Use of the environment:

Temperature: -10 ℃ ~ +55 ℃

Relative humidity: ≤ 95%, non-condensing.

5.Application: Indoor use.

6.Dimensions: 86mm × 86mm × 41mm(with base).

7.Material and color: ABS, ivory.

8.Weight: about 122g (with base).

9.Mounting hole distance:60.5mm.

IV. Structural characteristics and working principle

1. Main Body of a EA-IS shown in Fig.1.

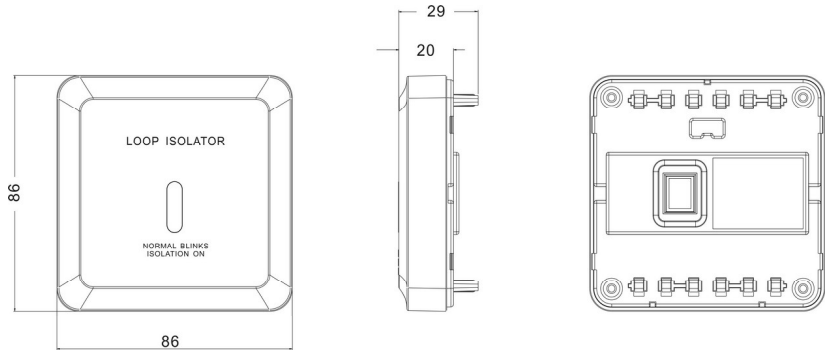

Fig. 1 Main part

2.Working principle

In the event of short circuit on the detector loop the EA-IS Isolators either side of the loop will defect the problem and open circuit and isolates the faulty part of the loop, enabling other devices on the unaffected part of the loop to operate normally.

The module will continue to monitor for the fault to be repaired, once the fault is cleared the isolator will automatically reinstate the effected part of the loop.

V. Installation and wiring

1.Use two M4 screws to fix the isolator base via the two elliptic screw holes shown in Fig.3, and then insert the main body of the isolator into the isolator base.

2.Wires from the base of the center hole penetration, and connected to the corresponding terminals. Figure 3 shows a schematic base terminal.

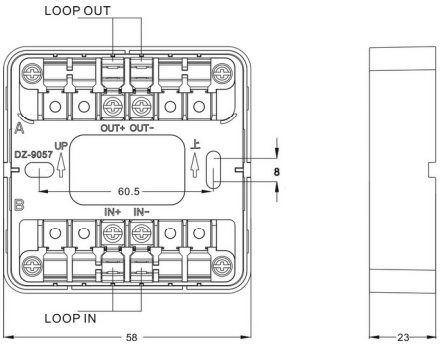

Fig. 3 Base and wiring diagram

3.Wiring requirements: The cable must be fire rated type and the size depends on the distance and application.Minimum size gauge 1.0mm² RVS twisted pair.

VI. Instructions for use

1.The EA-IS series to the bus;

2.IN +, IN- as a group, OUT +, OUT- for another group, each group can be used as an input or output signal bus and, when a group of the input signal bus, another group is that the output signal bus.

VII. Precautions

Please note when wiring the input and output signals need to distinguish the polarity of the bus.

VII.Specification

Nominal Line Voltage (V_{NOM})	24V
Standby Current	＜3mA
Capacity	32 devices
Maximum Line Voltage (V_{MAX})	28V
Minimum Line Voltage (V_{MIN})	16V
Maximum voltage at which the device isolates ($V_{SO\ MAX}$)	11V
Minimum voltage at which the device isolates ($V_{SO\ MIN}$)	8V
Maximum voltage at which the device reconnects ($V_{SC\ MAX}$)	4V
Minimum voltage at which the device reconnects ($V_{SC\ MIN}$)	1.4V
Maximum rated continuous current with the switch closed ($I_{C\ MAX}$)	1A
Maximum rated switching current ($I_{S\ MAX}$)	3A
Maximum leakage current with the switch open ($I_{L\ MAX}$)	15mA
Maximum series impedance with the switch closed ($Z_{C\ MAX}$)	0.15Ω

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