Instruction Manual of AW-D115 Isolator Base

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

I. Overview

AW-D115 isolator base (hereinafter referred to as AW-D115), mainly used to isolate a short circuit on the detector, other devices on the bus to ensure normal operation. Upon elimination of the short circuit fault, AW-D115 can be isolated out their own part back into the system.

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

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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: Φ130mm*31.2mm.
7.Weight: About 145g.

IV. Structural characteristics and working principle

1. Main Body of a AW-D115 shown in Fig.1.

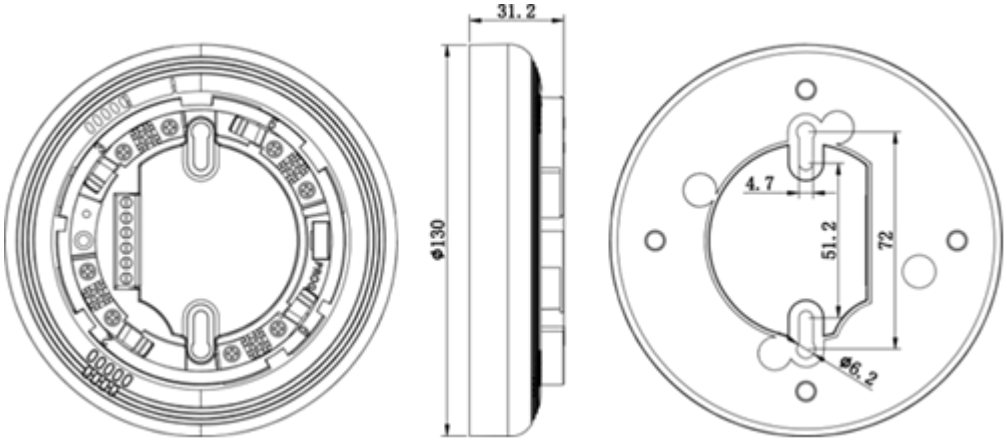

Fig. 1 Main part

2.Working principle
In the event of short circuit on the detector , the AW-D115 Isolator base 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.

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V. Installation and wiring

1.Use two screws to fix the isolator base via the two elliptic screw holes shown in Fig.1, and then insert the detector into the isolator base.
2.Wires from the base of the center hole penetration, and connected to the corresponding terminals. Fig.2 shows a schematic base terminal.

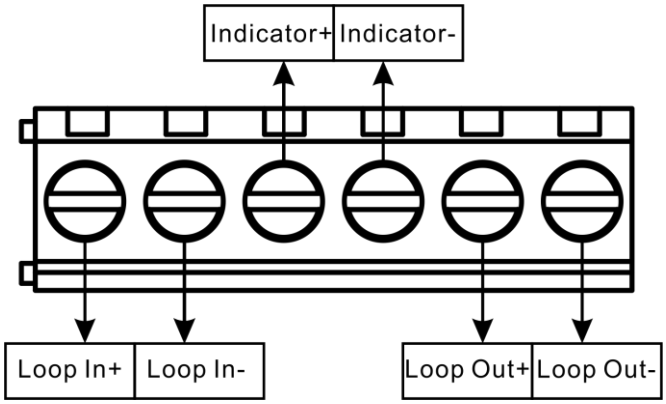

Fig. 2 Isolator base and wiring diagram

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

IN +, IN- as a group, OUT +, OUT- for another group, each group can be used as an input or output.

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	＜5mA
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 ($I_{L\ MAX}$)	20mA
Maximum series impedance with the switch closed ($Z_{C\ MAX}$)	0.15Ω

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