Instruction Manual of AW-D310 Zone Module

Read through these instructions before using this device to ensure correct installation and use!

1. Overview

The AW-D310 Zone module (AW-D310 module for short) can be used with an addressable fire alarm control panel. It can be connected with conventional photoelectric smoke detector, conventional heat fire detector or other conventional devices. When the conventional devices give an alarm, the AW-D310 module will send an alarm signal to the fire alarm control panel through a signal loop.

2. Features and technical parameters

1) Loop type: Nonpolar two-wire system
2) Quiescent current: loop current < 0.5mA ; power current < 15mA
3) Action current: loop current < 2mA ; power current < 35mA
4) Loop operating voltage: Loop 20~28V for terminal L1 & L2(non-polar wiring)
5) Power operating voltage: DC 20~28V for terminal +24V & GND
6) Operation indicator: The inspection indicator will blink once about every 12 seconds in the inspection status or remain lit in the operation status.
7) Operating environment: Temperature: $-10\,℃\sim50\,℃$; Relative humidity: ≤95% (40℃±2℃, without condensation)
8) End-Of-Line resistor: 4.7kΩ resistor
9) External dimensions: 86 × 86 × 40(mm)
10) Weight: about 119g
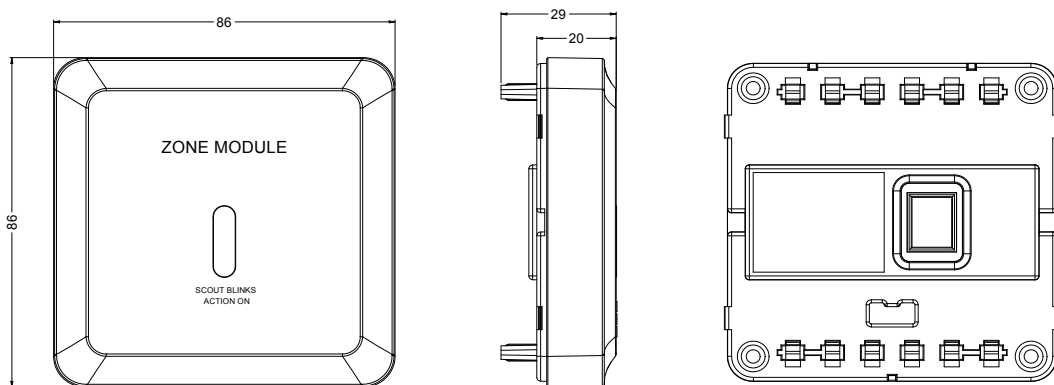11) Executive standard: EN 54-18

3. Instructions for use

Fig.1 Main part of the AW-D310 Module (unit: mm)

1) Terminal description for the AW-D310 module (see Fig.2)
   Terminal description:

| Terminal	Description	Terminal No.	Description
L1	Loop connection to the fire alarm control panel , non-polarized	L2	Loop connection to the fire alarm control panel , non-polarized
+24V	DC24V access terminal (positive)	GND	DC24V access terminal (negative)
TO+	Load access terminal (positive) for the conventional devices	TO-	Load access terminal (negative) for the conventional devices
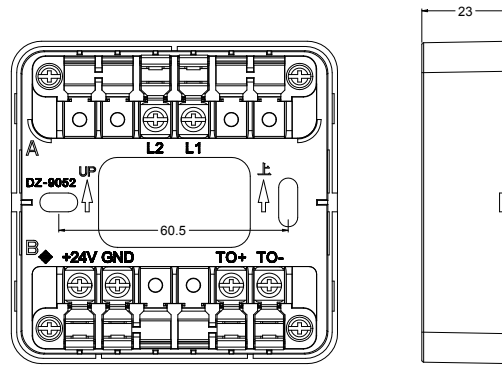
Fig.2 Base of the AW-D310 Module (unit: mm)

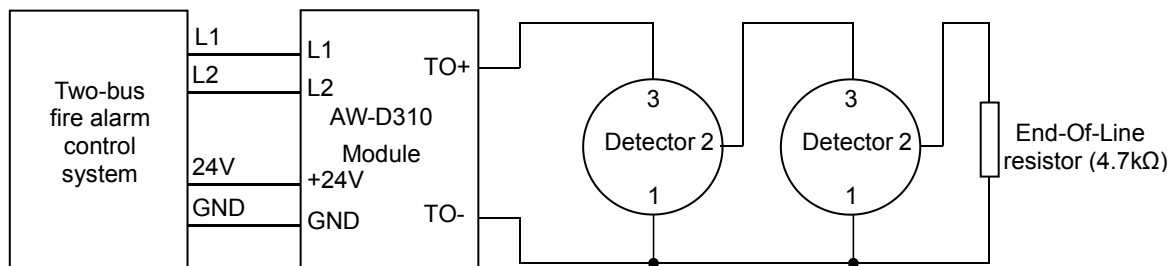2) Wiring method of the AW-D310 module
Connection with a detector (see Fig.3)

Fig.3

Note: The 24V power supply may be a DC24V provided on site; when in use, the AW-D310 module must be connected to a 4.7kΩ End-Of-Line resistor.

4. Installation and debugging

1) Make sure the type of the module matches the type given on the construction drawings.
2) Connect the 4-pin coding plug on the coder with the 4-pin coding socket (see Fig.1) on the main body of the AW-D310 module, and then set the coder with the coding function and compile the correct address code to finish the address coding.
3) Wiring correctly as Fig.3.
4) Use two M4 screws to fix the module base via the two screw holes shown in Fig.2, then insert the main body of the AW-D310 module into the module base and make sure they contact each other properly.
5) After the AW-D310 module is installed and checked, connect the power supply of the fire alarm control system. Upon successful login, the inspection indicator of the AW-D310 module will blink once about every 12 seconds, which suggests that the AW-D310 module has begun to operate.
6) Connecting the conventional devices to the AW-D310 module, and simulate an alarm through a conventional devices (such as a conventional smoke detector). After that, the AW-D310 module will send an alarm signal to the fire alarm control system and have its indicator lit, which suggests that the AW-D310 module has begun to operate.
7) After debugging, reset the AW-D310 module and conventional devices by resetting the panel.

5. Precautions

1) When connecting the AW-D310 module with a detector, do not connect the positive and negative poles inversely.
2) At most, 30 detectors can be connected in parallel after an AW-D310 module.
3) The address of the devices (such as AW-D310) in one loop should be different from each other, otherwise the panel will report an "address conflict fault".
4) Confirm the type of the conventional device connected to the AW-D310 module (feedback device or fire alarm device) and set the corresponding device type of the AW-D310 module in the fire alarm control panel. After automatic login, the AW-D310 module will treat the conventional device as fire alarm device by default.

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