

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

Before Installation

NOTE: This manual should be left with the owner/user of this equipment.

IMPORTANT: Regular testing and maintenance must be carried out in accordance with the requirements of the relevant authorities.

1. Product Overview

This device AW-D127 is a Fan Actuator Control Module for addressable fire alarm system AW-FP200/AW-FP128 and conventional fire alarm system.

2. Product Feature

- Easy to install.
- Addressable 2-wire communication technology.
- Control the fan actuator by manual / automatic operation.
- Output Power failure status can be maintained by magnetic retention relay.(Actuator motor open circuit detection)
- Mains Input power failure monitoring function.
- Addressable fire alarm panel communication monitoring.
- Position feedback terminal of fan for more than 85 degree and less than 5 degree.
- Open box detection.



3. Technical Parameters

Working voltage: Monitoring part LOOP 24V; Control part AC220V or DC24V;

Working current: Loop alarm current $\leq 40\text{mA}$; Control part $\leq 500\text{mA}$;

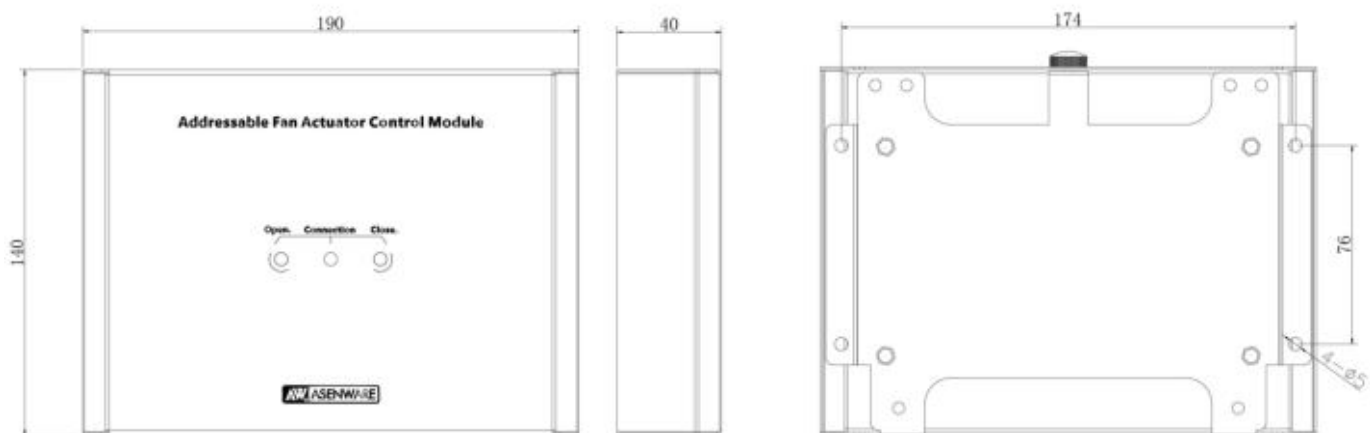
Operating temperature: $-10^{\circ}\text{C} \sim 50^{\circ}\text{C}$, relative humidity: 5%~95% (no condensation)

Application: indoor use only

Material and color: metal shell, red

Size: 190*140*40mm

Weight: about 0.65 kg



4. Panel Description

4.1 LED indicators:

A Working indicator (green): always on when the LOOP circuit is connected and the actuating power supply is correctly connected.

When there is a power failure or actuator power supply problem, The indicator will be blinking (fast flashing).

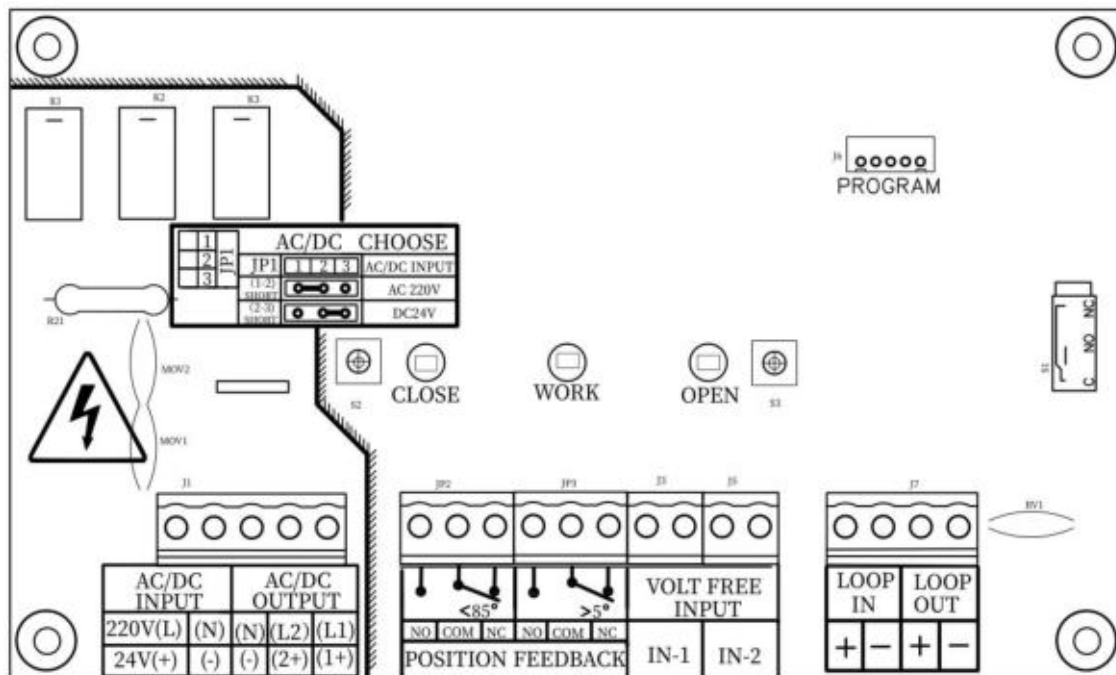
B Counterclockwise rotation/in-place light: when the actuator is rotating counterclockwise and is not reached the minimum position (≤ 5 degrees), the lamp will flash; when it reaches the minimum position (≤ 5 degrees), it will be on constantly and the rotation will stop.

C Clockwise rotation/positioning light: This lamp is flashing when clockwise rotation is performed and the maximum position (≥ 85 degrees) is not reached; when the maximum position (≥ 85 degrees) is reached, The lamp will be always on and rotation will stop.

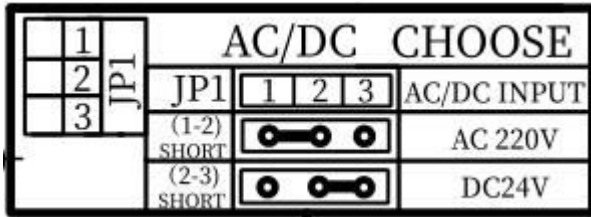
D When the position switch wiring or any of the current directions is faulty, the clockwise rotation/in-position light and counterclockwise rotation/in-position light will flash slowly.

E When the actuator motor has an open-circuit fault, or any of the current directions is faulty, the clockwise rotation/in-place light and the counterclockwise rotation/in-place light will flash slowly.

5. PCBA terminal and switch description



5.1 Power input selection jumper :

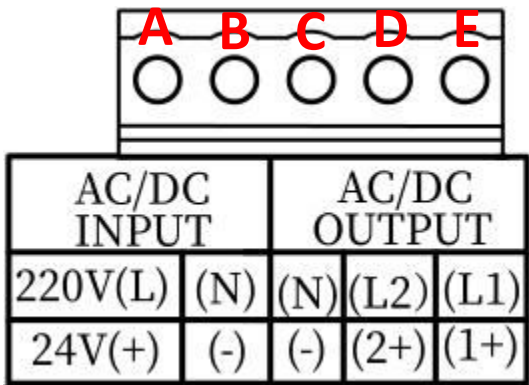


Power input selection jumper.

Jumper cap JP1(1-2) for 220VAC input.

Jumper cap JP1(2-3) for 24VDC input.

5.2 Power input of actuator motor:



Terminal A AC/DC INPUT+: 220V(L) or 24V(+)

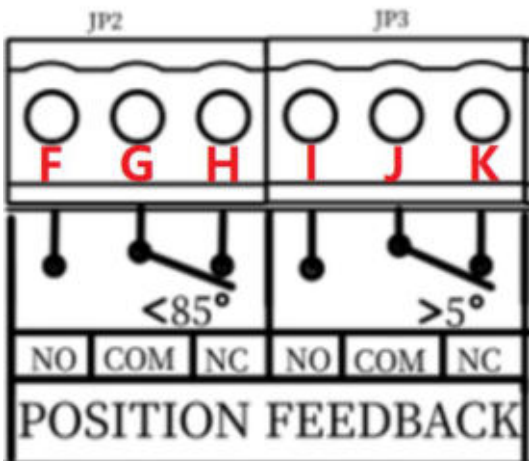
Terminal B AC/DC INPUT-: 220V(N) or 24V(-)

AC/DC OUTPUT:

Terminal C (N) connect to blue wire of actuator motor

Terminal D (L2) connect to brown wire of actuator motor

Terminal E (L1) connect to white wire of actuator motor



Actuator motor position switch (clockwise):

Terminal F connect to the gray wire of the actuator

Terminal G connect to purple wire of actuator

Terminal H connect to white wire of actuator

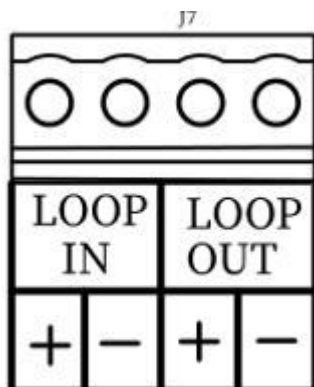
Actuator motor position switch (counterclockwise):

Terminal I connect to blue wire of actuator

Terminal J connect to yellow wire of actuator

Terminal K connect to green wire of actuator

6.8K EOL resistor must be connected, otherwise, fault alarm will be shown.

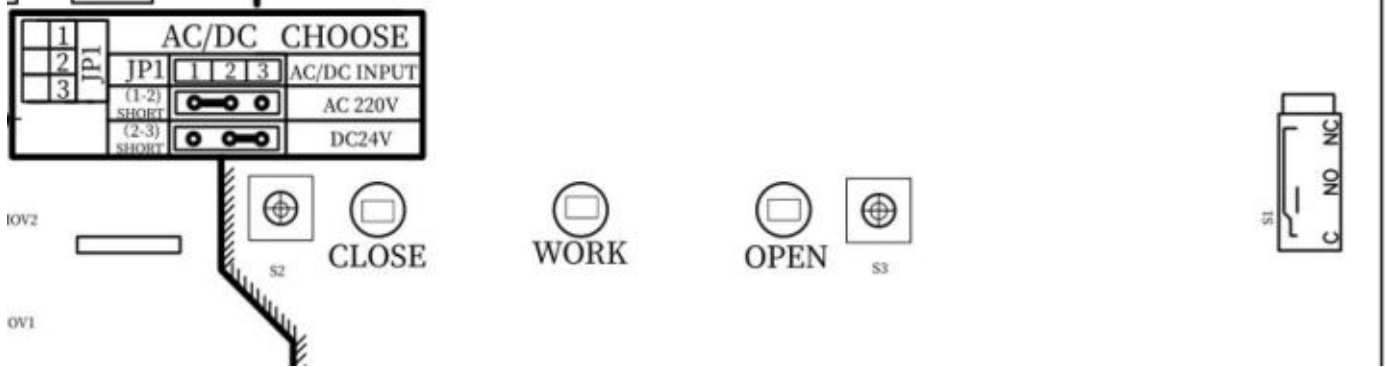


Loop power input/output:

1 LOOP IN: +/-

2 LOOP OUT: +/-

5.3 Open Box Switch



This switch is activated when the locking screw of the controller box and the panel is open. Then the motor can be operated manually.

S2 is the counterclockwise switch, S3 is the clockwise switch.

Press once to start the damper, the second time is to stop the damper.

When either direction is rotating: press the reverse switch to stop in the current direction and the second press is to start the rotation in the opposite direction.

6. Detector Programming Procedure



Connect detector to programmer by cable through programming plug.
Hold "power" button to power on programmer.

Please press "1" for selecting "1. Normal".
Press "Write" for writing address,
"Success" will be shown when it is done.
Otherwise "fail" will be shown.
Press "Read" for reading address,
"Success" will be shown when it is done.
Otherwise "fail" will be shown.

7. Fault Description

Working green light blinking: the input power of actuator is faulty, please don't start the switch operation.

When rotating clockwise or counterclockwise, the indicator slowly flashes, it is indicating that there is a problem with the corresponding switch or the end of the resistance is not connected, or the actuator motor has an open-circuit fault.