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诺 一

AMF01
Multichannel Flame Detector

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AMF01 Multichannel Flame Detector

Overview

AMF01 multi-channel flame monitor is a multi-channel flame monitor with 12-channel flame signal inputs, which can monitor the combustion status of 12--channel burners at the same time. A certain way of flameout will produce a switch alarm signal output, corresponding to the channel indicator light. Twelve inputs are divided into Group A and Group B, Group A contains 1 to 6 channels, Group B contains 7 to 8 channels, Group A corresponds to output alarm 1 and group B corresponds to output alarm 2. The channels that are not used can be set by the internal jump needle to avoid alarm.

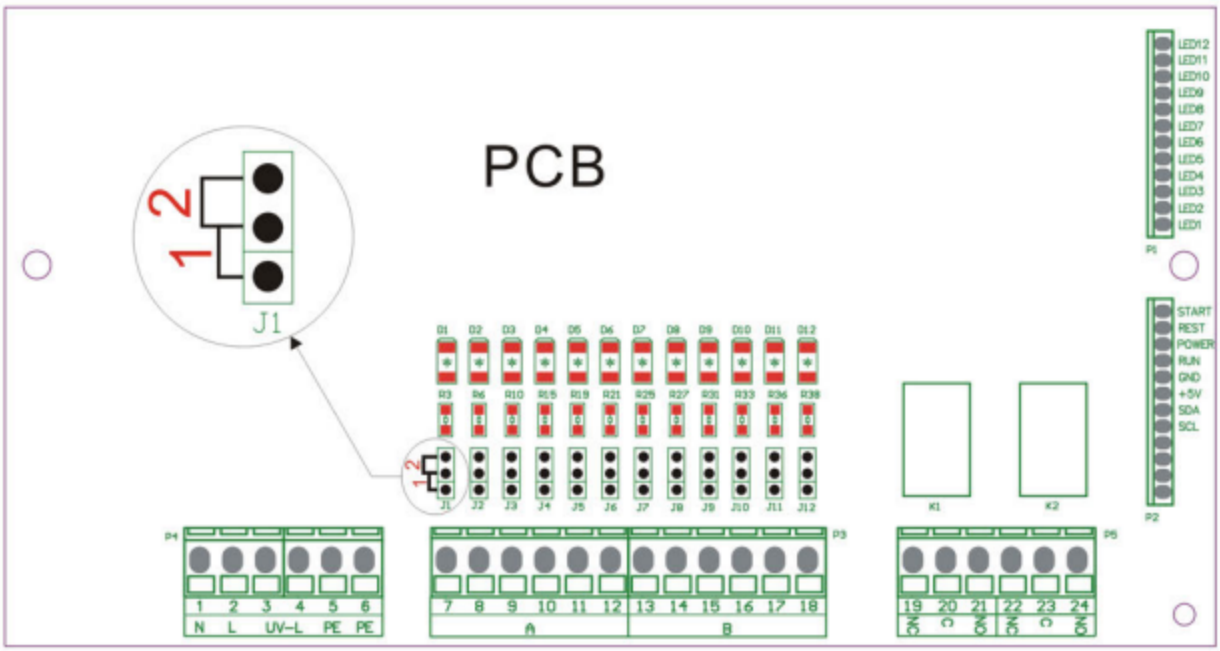
Technical Parameters

- Supply voltage: AC220V±10% 50Hz
- Maximum power consumption: 5W
- Output terminal load: 2A@250VAC .
- Flame detection sensitivity: 1.5uA
- Operating temperature: -20~+60° C
- Degree of protection: IP54
- Flame detection cable length: 75m for electrode detection, 100m for UV probe

CH1-CH12 indicator: Alarm indicator.
RUN indicator: Run indicator.
PWR indicator: Power indicator.

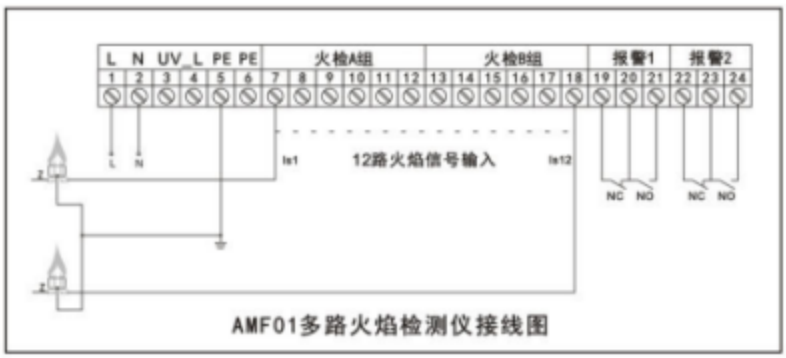
Working Principles

After power on, press the start and stop button, the flame detector will self-check all the channels once, all the lights will be lit one by one, and then go out, at this time the PWR indicator will always be on and the flame detector will start to work. If the flame signal of all the detection channels is normal, the RUN indicator is always on, and when the flame signal of a certain channel is missing (lower than 2uA), an alarm is generated, the corresponding channel indicator light is lit, the RUN indicator changes from constant light to flicker, and the alarm output relay action corresponds to the alarm output relay action (CH1-CH6 channel corresponding to alarm 1. CH7-Ch12 corresponding to alarm 2), and the alarm is locked. After the fault is cleared, it is necessary to reset or switch to re-detect the original alarm channel.



There are 12 jumper pins on the circuit board, which are used to disable/enable the corresponding detection channel short-circuit cap, which is plugged into the "1" position of the jumping pin to enable. The short-circuit cap inserted in the "2" position of the jumping pin is disabled. Jumping pins J1-J12 correspond to CH1-CH12 detection channels. The factory default short-circuit cap is inserted in the "1" position of the jumping pin, if a detection channel is not used, be sure to insert the short-circuit cap in the "2" position of the jumping pin.

Wiring diagram



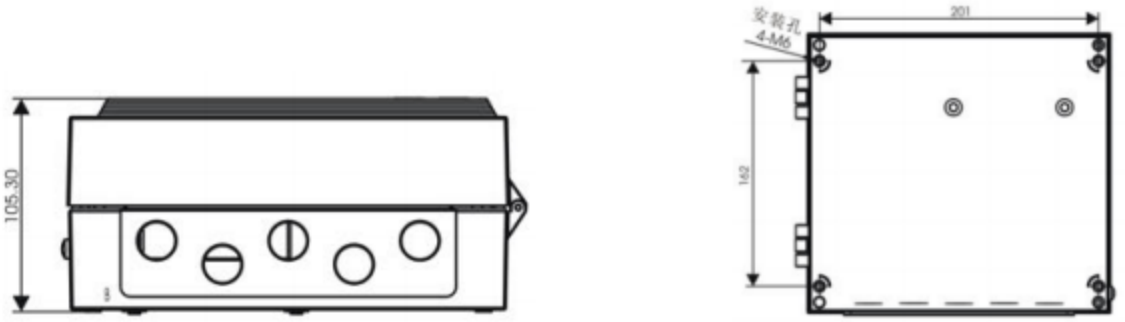
12-channel flame signal input

Wiring diagram of AMF01 multi-channel flame detector

Pin Description:

1: Wire of Fire(L)
2: Neutral line (N)
3, 4: UV Probe Head power supply
5, 6: Grounding
7~12: Group A flame signal input
12~1 8: Group B flame signal input
19, 20: Fault alarm 1 normally closed output
20, 21: Fault alarm 1 normally open output
22, 23: Fault alarm 2 normally closed output
23, 24: Fault alarm 1 normally open output

Installation dimension drawing



Installation Methods:

Fix the ACU controller directly on the installation layout with 4 M6 screws.

Precautions for Installation

- AT3 1 actuators cannot be installed in the following environments.

a. Where there are special chemicals and corrosive gases (ammonia, sulfur, chlorine, ethylene, acid gas, etc.).

b. In water, in humid (humidity not exceeding 90%) or in dewy environment.

c. Where the temperature is too high (more than 60 degrees) and vibrates frequently.

- The voltage of the power supply must not exceed the rated voltage, otherwise the motor will be burned out.
- In the selection, attention should be paid to the matching of torque and load, so as not to affect the service life of the actuator.
- The control signal line should be isolated from other strong interference wires (especially the ignition high voltage wire). The wire should be shielded and the shielding layer should be well grounded.
- Be sure to check whether the wiring is correct before powering on, so as to avoid damaging the actuator due to wiring errors.