



## AIC06 Flame Controller



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## AIC06 Flame Controller

### Overview

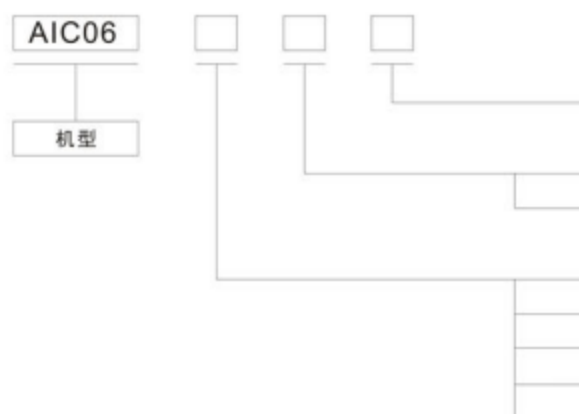
- It has many functions, such as automatic ignition, flame detection indication, flameout protection, fault alarm indication, large and small fire combustion control and so on.
- The longest ignition spark can reach 1 cm, which is the longest among similar products, and it has a strong anti-interference function and can work under strong frequency conversion interference.
- It adopts the way of plug-in base, easy to install and use, compact structure and built-in ignition transformer to realize the integration of flame detection and ignition control.
- It can be used with any 2-wire, 3-wire or 4-wire UV probe on the market.
- Please refer to the selection section for details.



### Technical Parameters

- Supply voltage: 220-240VAC 50Hz
- Maximum power consumption: 10W
- Terminal load: 5A
- High voltage package output: voltage 10KV, current 5mA
- Ignition length: 5~8mm
- Operating temperature: -20~+60° C

### Type selection table



#### Special custom identifiers

0: Power-on reset (ignition is not immediately when powered)

1: Power-on start (immediate ignition when powered on)

A: Two-electrode type (one electrode ignition, one electrode detection)

B: 3-wire, 4-wire UV probe (e.g. AVS1, AVS2, AVS8, etc.)

C: 2-wire UV probe (e.g. C7027/C7035/C7044, etc.)

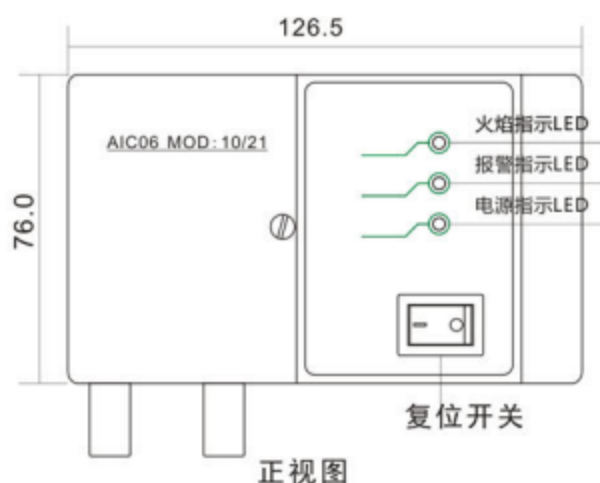
D: Single electrode type (one electrode for ignition and detection)

S: Manual type igniter

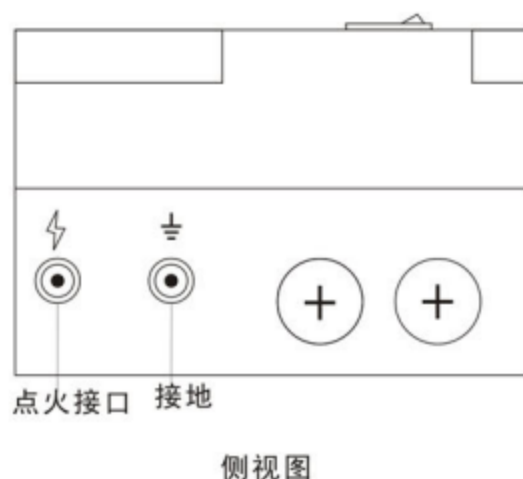
Note: power-on reset means that the controller will not ignite immediately after the power is turned on, and the panel switch must be manually switched once before starting automatic ignition.

Power-on ignition refers to the automatic ignition of the controller when the panel switch is on and the power is turned on.

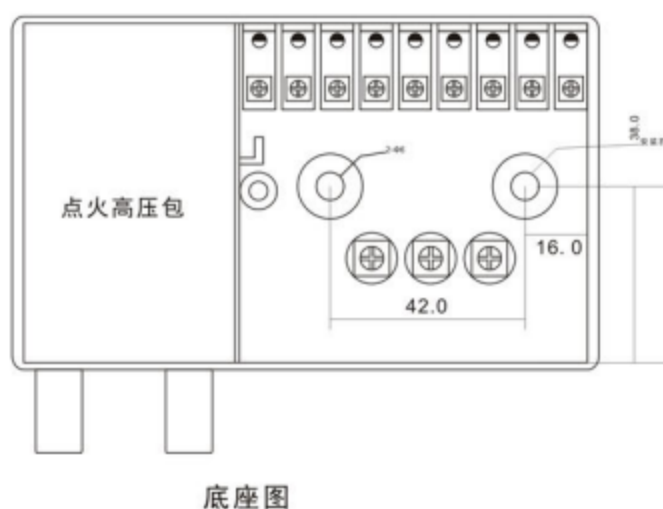
AIC06 Installation dimension drawing



Flame indicator LED  
The alarm indicates LE  
The power supply indicates LE  
Reset switch  
Front view



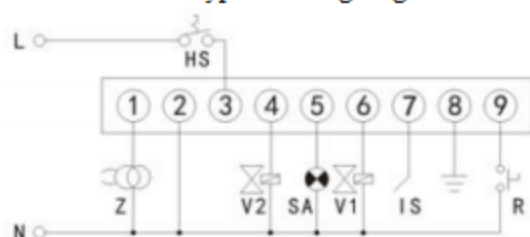
Ignition interface  
earthing  
Side view



Ignition high pressure package  
Bottom view

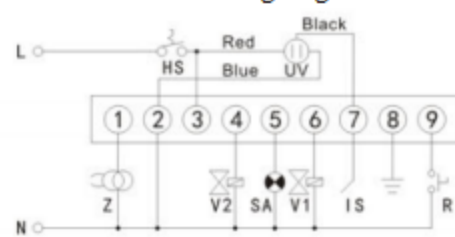
# Wiring

AIC06-Type-A wiring diagram



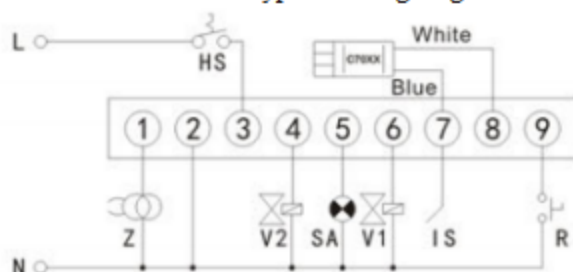
1: Ignition output (Z); 4: Ignition large fire valve output (V2); 7: Flame Detection (IS); 2: Power supply (N); 5: Alarm output (SA); 8: Grounding; 3: Power supply (L); 6: Ignition valve output (V1); 9: Remote reset (R)

AIC06-B wiring diagram



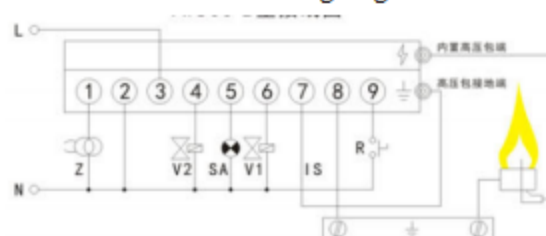
1: Ignition output (Z); 4: Ignition large fire valve output (V2); 7: UV probe black line; 2: Power supply (N); 5: Alarm output (SA); 8: Grounding; 3: Power supply (L); 6: Ignition valve output (V1); 9: Remote reset (R)

AIC06-Type-C wiring diagram



1: Ignition output (Z); 4: Ignition large fire valve output (V2); 7: C7027 blue line; 2: Power supply (N); 5: Alarm output (SA); 8: C7027 white line; 3: Power supply (L); 6: Ignition valve output (V1); 9: Remote reset (R)

AIC06-D wiring diagram



1: Ignition output (Z); 4: Ignition large fire valve output (V2); 7: Flame detection (IS); 2: Power supply (N); 5: Alarm output (SA); 8: Grounding; 3: Power supply (L); 6: Ignition valve output (V1); 9: Remote reset (R)

AIC06-Swiring diagram



Built-in high-pressure wrap ends  
High voltage package ground terminal

## Precautions for Installation

- AIC06 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. Places where the temperature is too high and vibrates frequently.
- Ignition transformer ignition high voltage cable wiring must be isolated from other wiring at a distance of at least 10CM.
- The ground wire of the ignition transformer must be connected to the metal shell of the burner.
- The F and G of the UV flame detector must be separated from other wires, take a separate conduit or use shielded wires.
- The installation position of the ultraviolet flame detector can not correct the ignition spark, so as not to fail the self-test.
- The AIC06 ignition controller does not have the purge function before ignition, so it is important to determine whether the purge function is required when selecting it.
- Please make sure that the ignition ground wire is properly grounded and that the grounding resistance is less than 10 Ω.
- Please make sure that the detection electrode is in contact with the flame and that the electrode lead is in good contact.