



AFS244

Combustion Controller



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AFS244 Combustion Controller

Overview

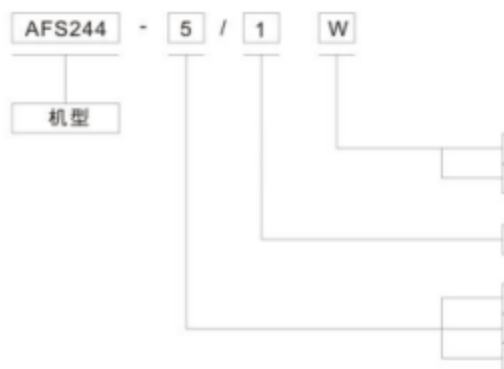
- It has automatic ignition, flame detection indication, flameout protection, fault alarm indication, large and small fire combustion control, remote reset, remote ignition control and other functions.
- It has a powerful anti-interference function and can work under strong variable frequency interference.
- It adopts the method of plug-in base, which is easy to install and use.
- The AFS244 combustion controller has a built-in ignition high-voltage package, eliminating the need for a separate ignition transformer.
- AFS244 combustion controller is widely used in industrial heat treatment systems such as steel, glass, ceramics, plastics and chemicals. It can control the ignition of gas burners of any power less than 350KW.



Technical Parameters

- | | |
|--|---|
| ● Supply voltage: AC220V±10% 50Hz | ● Operating temperature: -20~+60° C |
| ● Maximum power consumption: 10W | ● Protection class: IP40 |
| ● Terminal load: 2A@250VAC | ● Ignition cable length: less than 1m |
| ● Flame detection current sensitivity: factory default 2uA | ● Flame detection cable length: electrode detection is 75m, |
| ● Ignition time: 3S, 5S, 10S are available, factory default 5S | ● The UV probe is detected at 100m |

Type selection table



W: Supply voltage AC220V±10% 50Hz

1: Automatic ignition after turning off - times

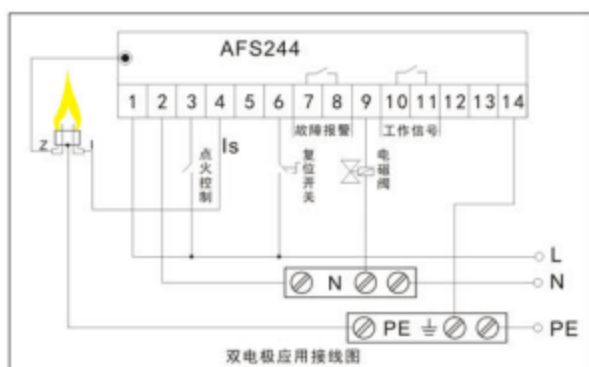
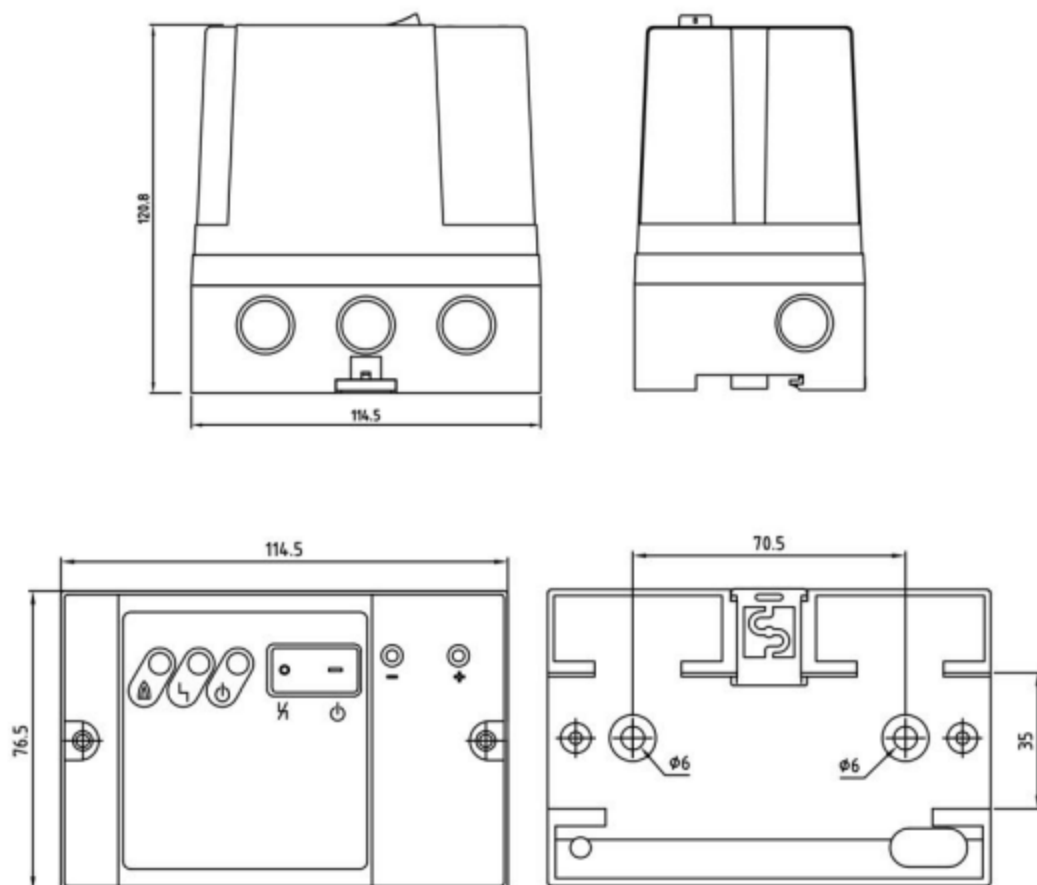
3: Ignition time is 3 seconds

5: Ignition time is 5 seconds

10: Ignition time is 10 seconds

Note: AFS244 ignition controller, housing available in black and gray. Different colors and codes are also different, please pay attention to the selection code when placing an order, please refer to the product code table for details.

Installation dimension drawing



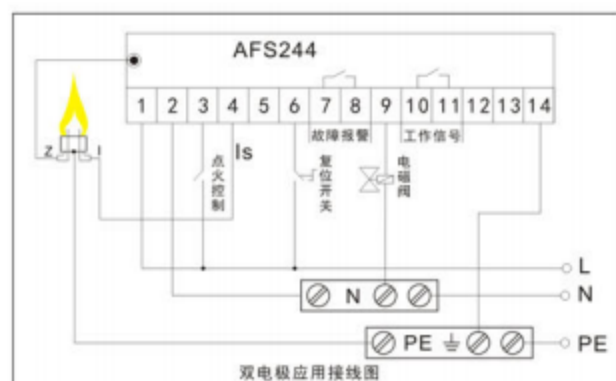
Wiring diagram for two-electrode applications



Wiring diagram for single-electrode applications

Pin Description:

1: Line of Fire (L); 4: Flame detection; 7,8: fault alarm (passive output); 12: Power output; 2: Neutral line (N); 5: External ignition transformer; 9: Solenoid valve 13: unused; 3: Work enablement; 6: Remote reset; 10,11: working signal output (passive output); 14: Grounding



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Precautions for Installation

- AFS244 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.
- The supply voltage should not exceed AC240V, otherwise the controller will be burnt out.
- 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 AFS244 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.
- Make sure that the detection electrode is in contact with the flame and that the electrode lead is in good contact.

Fault Handling

Do not ignite after starting, alarm immediately.	Electrode leakage due to damp.	Dry the porcelain tube, or replace it.
	The ignition cable is too long.	Shorten the ignition cable to 1m.
	The distance between the ignition electrode and the burner is too large.	Adjust the distance between the electrode and the burner head, the maximum does not exceed 3mm.
There's a spark, but there's no fire	Poor contact between ignition cable and electrode.	Redetermine the connection between the cable and the electrode connector.
	The solenoid valve did not open.	Check whether the solenoid valve is wired correctly or loose.
Alarm immediately after the fire	Detection electrode non-contact flame.	Adjust the air / gas ratio.
	The detection electrode is carbonized or the wiring is not reliable.	Check the electrode and wiring status.