Flame Detector

Operation Theory

When UV tube detect the ultraviolet radiation emitted from weak flame, UV rays pass through the UV glass and strike the cathode, then photoelectrons are emitted due to emission effect. Thus, the air inside UV tube will begin to change and voltage will dropped greatly to produce alarm signal.

Description

The detector has wide angular sensitivity that can reliably and quickly detects weak ultraviolet radiations emitted from flame. It will not cause any reaction from room illuminations, infrared or other light sources irrelevant to real fire.

Applications

- Premises with higher ceiling: theater, gym, storage, gallery or warehouse, etc.
- Place that fire happened easily: place stored with combustible goods, gas station, working place of factory, machine room, etc.
- Ventilation place: open market, station platform, hotel lobby, department store, etc. (place that smoke and heat can not gathering during early period of fire)
- Others: tunnel, computer room, etc.

Cautions of Installation

- Installed at obscuration-free place.
- Avoid to installed near mercury lamps, halogen lamps and sterilization lamps.
- Avoid welding sparks and radiation present within sensitive range.

Specification

Model	AH-0014		
Type	2-wire , 3-wire , 4-wire		
Alarm Contact	N/A	N/A	0.8A @30V DC
			0.4A @125V AC
Voltage Range	12 ~ 30V DC		
Alarm Current @24V DC 470Ω	35mA	35mA	30mA
Standby Current	45µA		
Permissible Current	185mA		
Sensor Type	Ultraviolet		
Sensitivity Angle	120˚		
Sensitivity Range	It can detect flame of 15mm at distance of 3m		
Ambient Temperature	-10˚C ~ +55˚C		
Material	Fire-proof plastic		
Dimensions	102mm(Dia.) x 46.5mm(H)		
Weight	About 170g		
Color	White		