Data 828
4/3/2009

Eclipse Peek-A-Flame Sensor Module

Series 7000

The Peek-A-Flame Relay Series 7000 is a sensor module that activates a relay when a flame is detected by an ultraviolet sensor or a flame rod. The Peek-A-Flame is for flame detection only; it will not detect safe start, safety lockout, load switching or any other safety procedures.

- UL recognized for the USA and Canada (120 VAC version) & FM approved (120 VAC and 220 VAC).
- Plugs into an industry standard 11-pin base.
- Test point at the front permits direct reading of the flame signal level, 0-12 VDC.
- Analog output on Pin #11 for remote monitoring by a PLC or similar device.
- "Flame On" light
- "Flame Fail" light indicates test condition and can be activated remotely by applying 12-120 VAC or VDC to Pin #10. Contacts are also activated between Pin #5 and Pin #6. A test signal is output on Pin #11.

Specifications

Applications:

For use with ultraviolet scanners
(**p.n. 49600-90, 49600-91, 49602-91, 20898**)
or flame rods

Voltage:

120 VAC, 50/60 Hz, .1 Amp (**p.n. 49700**) or
220 VAC, 50/60 Hz, .1 Amp (**p.n. 49703**)

Electrical Current Loading:

2A or less on pins 4, 5 and 6

Flame Fail Response Time:

3 seconds

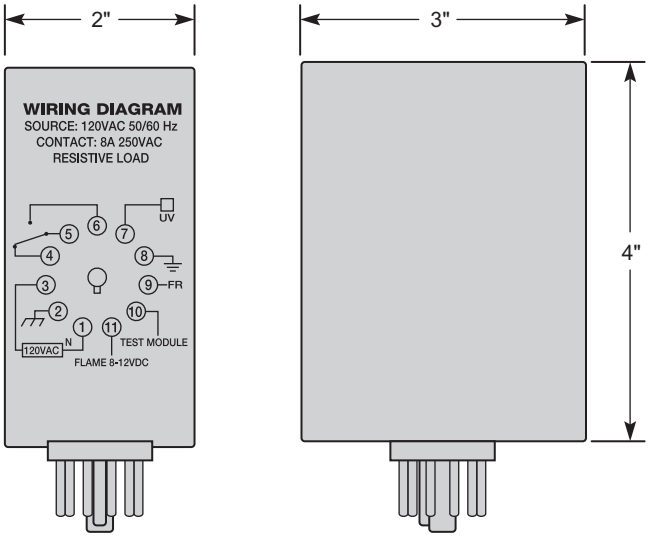
Temperature Range (Ambient):

-40° to +140°F

Mounting Base:

Standard 11-pin relay base (**p.n. 49701**)
Spring retaining kit (**p.n. 49704**)

Dimensions



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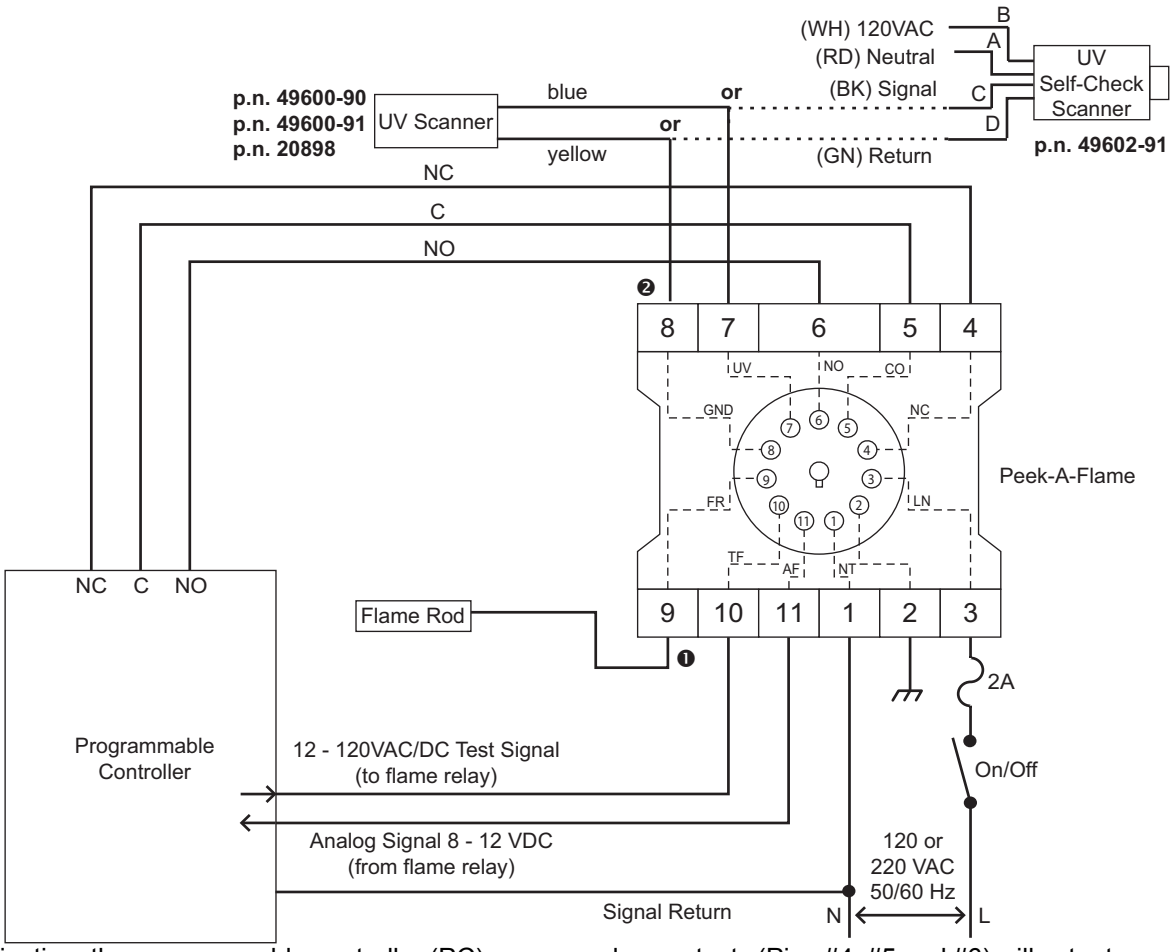
Typical Application



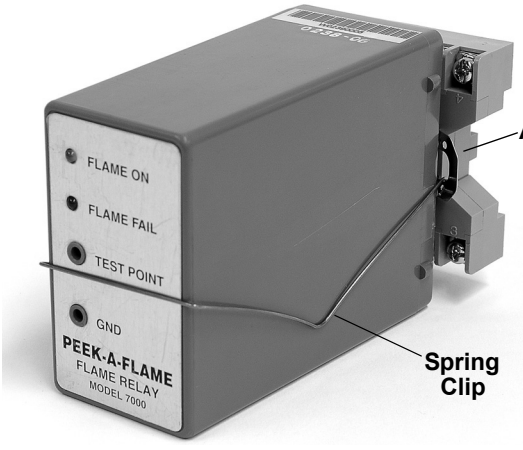
In this application, the programmable controller (PC) can test the flame relay for proper function by applying voltage to Pin #10 and monitoring the contact action on Pins #4, #5 and #6 (Pin #4 opens and Pin #6 closes with respect to pin #5). The “Flame Fail” light comes on and a signal voltage is output on pin 11 and the “Test Point”.

During normal operation, a flame is sensed by either the flame rod or the UV scanner. If a flame is present, the relay contacts (Pins #4, #5 and #6) will actuate, producing a “Flame On” output to an external device. In addition, Pin #11 provides an analog signal output of 0-12 VDC, indicating active flame signal level.

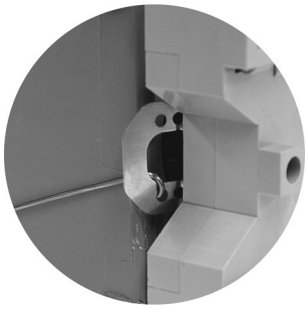
❶ If Pin #10 is not used for remote testing, it should be jumpered to Pin #1 (neutral).

❷ Terminal pins 1 and 8 are internally connected.

Mounting Base & Spring Clip



Peek-A-Flame with Standard 11-pin relay base (**p.n. 49701**) and Retaining Kit (**p.n. 49704**)



Spring Clip (**p.n. 49704**) mounting detail, bottom view

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