

Linear Systems

** We Serve, with Honours **

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UV FLAME AMPLIFIER / RELAY

(Model UV-FR-01 / Model UV-FR-21)

The UV Flame Amplifier / Relay is used in conjunction with UV Flame Sensor (Model UV-01) to detect various types of flames, namely, gas, oil, coal etc. The UV Flame Amplifier is essentially a stand-alone unit, which has two potential-free relay contact outputs, rated at 230 V Ac, 5A. The output contacts can be used for alarm, annunciation or trip purposes. The front Panel has indications for SUPPLY ON. This will turn ON when the supply is given to Terminal 1 & 2. The RELAY ON indicator indicates presence of UV radiation and Relay ON condition.

The Model UV-FR-01 has built-in time delay of about 2 seconds OFF delay. This feature avoids nuisance tripping, in the case of transient flame flicker. The Model UV-FR-21 has a site-adjustable time delay of 2 to 8 seconds and is useful for installations with high flicker.

The Amplifier is housed in a compact 70 (L) x 55 (B) x 115 (H) mm ABS plastic molded enclosure suitable for DIN standard Rail Mounting. However, it can also be mounted with the help of 2 mounting holes provided at the base.

IMPORTANT NOTE

Even though the UV Flame Amplifier is designed to work with Linear Systems make UV Sensor (Model UV-01), it has been found to work satisfactorily with UV sensors (UV tubes) of various makes, namely, Landis & Gyr, Honeywell, etc. It is important to ensure that the UV tube is rated at 230 V AC rms (325 V DC peak). It is the responsibility of the User to ensure the compatibility both in terms of ratings and satisfactory operation.

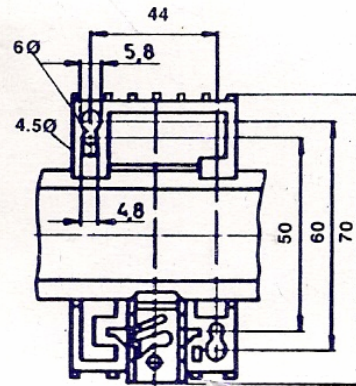
PRECAUTIONS WHILE CONNECTING THE FLAME SENSOR.

1. Supply voltage 230 V AC +/- 10 %, 50 Hz.
2. Relay contacts are rated for 5 Amps resistive at 230 V AC.
3. Please take precaution to connect UV Sensor assembly with correct Color of wire to the corresponding terminal as shown on the Label (Red + & Black -)
WRONG CONNECTION WILL CAUSE FAULTY OPERATION.
4. For better sensitivity mount the Assembly with side window facing the Flame.

BOX DIMENSIONS AND MOUNTING DETAILS

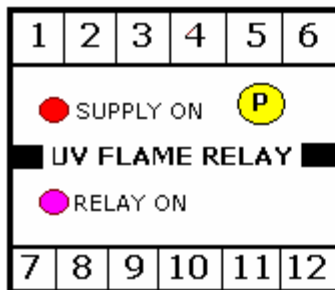


MOUNTING DIMENSIONS



75x50x110mm (Lx Bx H)

TERMINAL SCHMATIC DIAGRAM



- | | |
|----------------------|---------|
| 1. PHASE | 7.N/C |
| 2. NEUTRAL | 8. COM |
| 3. NO CONNECTION | 9. N/O |
| 4. NO CONNECTION | 10. N/C |
| 5. UV SENSOR + RED | 11. COM |
| 6. UV SENSOR - BLACK | 12. N/O |

P POTENTIOMETER FOR DELAY
ADJUST 2- 8 SECONDS.

NOTES:

The adjustable delay feature is available only for Model UV-FR-21.

Please specify postfix of Q for compatibility with QRA-2 type UV Sensor. For example, UV-FR-01-Q or UV-FR-21-Q. It essentially has reversed polarities for UV Sensor connection.