UV - Flame Detector Type FL 80/1A



1. Mounting

When mounting the flame detector the optical location angle has to be observed. The location angle is:

vertical approx. 180°
 horizontal approx. 180°

The sensitivity will decreases to the sides. Therefore adjust the flame detector directly to the project to be monitored. The flame detection is depending of the intensity of the flame and from the distance between the flame and the flame detector. Due to this fact the flame detector has to be mounted as close to the project. For monitoring of a room the optical location angle of the detector has to be observed.

In room with contaminated air (dusty or greasy air) the detector has to be mounted so that it is ventilated with fresh air to avoid depositing of dust or oil on the inspection glass. Attachment dimensions:

Refer to Dimension Drawing No. 4.0262 or 4.0262.1.

2. Starting

Connect the detector corresponding to the cable marks of the terminal box and adjust to the object to be monitored. Check the 24 VDC power supply and signal lines.

Voltage Monitoring

During the failure-free operation the relays K2 gets energized, according to the closed-circuit principle.

3. Functional Test

3.1 Voltage Monitoring/Failure

After connection of the 24 VDC corresponding to the connection diagram gets the failure relay K2 energized in the undisturbed state. The change-over contact opens the connection terminal L6.5-L6.6 and closes L6.6-L6.4.

3.2 Fire Alarm

Flame detector tested by the use of our UV-tester UVG 93 or an open flame can be used for testing (matches, gas lighter etc.)

The time till giving alarm is depending of

- a) the intensity of the UV-radiation (tester or flame)
- b) the distance between radiation source and detector
- c) the response sensibility of the detector (delay of fire alarm signal)
- d) the contamination of the optic (if necessary clean before test)

The relay K1 will be actuated in case of fire alarm. The change-over contact opens terminal L6.1-L6.2 and closes terminal L6.1-L6.3, simultaneously the red LED of the detector lights up.

3.2.1 Continuous Alarm

If the alarm of the detector is according to vote with the manufacturer set <u>on continuous alarm</u>, reset can be effected only by short disconnection of the 24 VDC power supply (e.g. by an external reset push button). As long as this reset will be actuated, there will be given a failure signal.

3.2.2 Time-limited Alarm

If the alarm of the detector is according to vote with the manufacture set <u>on time-limited alarm</u>, reset of the alarm will be automatically after run down of the adjusted time.

Datum/Date 22.09.09

Version

3

EGON HARIG GmbH
Gewerbering 4 * D-22113 Oststeinbek
Tel:/Phone: +49 (0)40 713752-0
Telefax: +49 (0)40 713752-24
E-Mail: egonharig@egonharig.de
www.egonharig.de www.flamtron.de

Bedienungsanleitung Nr./ Operating Instructions No

4.0249

Seite/Page 1 von/of 2

UV - Flame Detector Type FL 80/1A



All rights strictly reserved exept when stipulated otherwise expressly by contract. Reproduction or issue to third parties in any form whatever is not permitted without written authority from the proprietors.

4. Important Notes

Be careful at tests on the opened and connected detector because the terminals for the UV-vacuum tube and the DC/DC-transformer DC 880 voltage of approx. 600 VDC! Generally a defective unit should be sent to the manufacturer (general ling guarantee).

5. Maintenance

a) In dusty atmosphere

The quartz glass head should be clean, so that at optical check the UV-vacuum tube are visible. Otherwise clean the inspection glass by means of a soft grease-free cloth.

b) In greasy atmosphere

No oil may be deposit on the head. A thin oil film can influence the sensitivity of the detector. Therefore clean the glass more often by means of a soft and grease-free cloth, respect clean the glass by means of a grease solvent.

Condensed water on the glass causes only a little influence to the sensitivity of the detector. If the detectors are mounted that a visual check can not be carried out the functional test should be done by means of an ultra-violet tester (refer also to starting instruction).

The response sensibility of a detector is depending from the contamination of the inspection glass. Condensed water on the inspection glass has nearly no influence to the response sensibility. For safety reasons we recommend to check the detector every 14 days by means of an ultra-violet tester.

c) Electronic

The evaluation electronic is generally maintenance-free. The UV-vacuum tube should be checked at least every 2 years, and it is recommended to replace the tube every 4 years.

6. Repairs

6.1 Replacement of Components/Order of Spare Parts

In case of spare parts order the following data must be given:

- Type and serial number of the flame detector
- Type of the electronic unit or assay according to wiring diagram

For safety reasons the repairs should be limited to following components:

- Fuse F1, M125mA/250C
- Individual indication LED
- Evaluation board Type U-880-AM 887 complete
- Relay board Type U-880-b2 complete
- Quartz glass head Type HQK 28

Alle Rechte, soweit nicht vertraglich anders vereinbart, sind ausdrücklich v behalten. Vervielfältigung oder Mitteilung an Dritte, gleichgültig in welcher Form, ist ohne schriftliche Genehmigung des Eigentümers nicht gestattet.

Version

Datum/Date 22.09.09

3

EGON HARIG GmbH
Gewerbering 4 * D-22113 Oststeinbek
Tel:/Phone: +49 (0)40 713752-0
Telefax: +49 (0)40 713752-24
E-Mail: egonharig@egonharig.de
www.egonharig.de www.flamtron.de

Bedienungsanleitung Nr./ Operating Instructions No

4.0249