



ELAS Ltd.

**UV Flame detector UFD-IP65
Operating guide**

Fastiv



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1. Application.

1.1. UV flame detector is used to monitor flame of the gas burners.

1.2. The UV sensors monitor the gas burners in intermittent operation.

1.4. Environment:

- Ambient temperature: -5°C to $+60^{\circ}\text{C}$.

- Humidity: up to 90%.

1.3. Due to the constant advances of the products the insignificant changes in a scheme and construction are possible, which don't produce any effect on quality of work and technical descriptions of the detector.

2. Technical data.

2.1. Technical features of the UV flame detector are taken in the table 1.

Table 1.

№	Parameter	Units	Value
1	Power supply	V	10-30 DC
2	Power consumption, less than	W	0,8
3	Maximum switching current of the output relay AC 250V 50Hz	A	0,24
4	Weight	kg	0,4
5	UV-tube life time approx.	hour	10 000
6	Dimensions	mm	100x75x53

3. Package contents.

3.1. Package Included:

1) UV flame detector UFD-IP65

1 pcs;

2) This operating guide

1 pcs.

4. Function.

4.1. The UV vacuum tube detects the ultraviolet light of a flame. Into the detector a high voltage approx. + 300V is generated and is applied to the tube. The signal from the tube is amplified and filtered. After filtering, the signal is compared with the threshold value. When a flame is detected the free potential contacts of the output relay close between contacts 3 and 4. The connection diagram of the UFD-IP65 is shown in Fig.1.

5. Cautions.

5.1. When the power is on, a high voltage of 300 V is present in the UV flame detector!

6. Technical service and storage.

6.1. The UV flame detector does not require service.

6.2. Preventive inspection and repair of the detector are carried out in accordance with the schedule, here it is recommended to dust and pull up the screws of connecting terminals.

7. Installation.

7.1. UV flame detector dimensions are given in the Figure 2.

7.2. To carry out the connecting of the detector according to the connection diagram in the Figure 2.

7.3. Don't install the detector in the places with high temperature and vibration influence. To avoid influence of light and thermal radiation.

7.4. To mount and adjust the controller contact «ELAS LTD.».

Address: UA08500, 11B, Transportna Str., Fastiv , Kyiv reg., Ukraine

Tel/fax: +38(04565) 6-66-00;

e-mail: elas@elas.com.ua;

<http://www.elas.com.ua>

8. Troubleshooting.

8.1. Possible malfunctions and methods of their removal are summarized in the table 2.

Table 2

№	Malfunction	Cause	Method of removal
1	Detector does not detect flame	The sensor of detector is not directed on flame.	To place UFD so that a sensor was directed on flame.
2	Detector does not detect flame	Protective UV glass is dirtying	To clean glass.
3	Detector does not detect flame	A tube is defective	To send on a factory manufacturer for a tube removing
4	Detector does detect false flame	Dirtying of the tube, moisture of condensation on the tube due to the violation of the integrity of the UFD housing.	To dry out and clean the tube. To provide the UFD housing integrity.

9. Quality certificate.

9.1. UV flame detector UFD-IP65 meets technical requirements TU U 33.3-32932312-001:2005 and quality control passed.

Date of production _____

Q. C. Master _____

QC passed _____

10. Warranty condition.

10.1. The producer guarantees that the UV flame detector UFD-IP65 meets technical requirements TU U 33.3-32932312-001:2005 at the proper conditions of storage and exploitation.

10.2. The warranty period is 1.5 years from the day of commissioning. A warranty period is considered from the day of commissioning, but not later than 6 months from the moment of the product delivering to the customer.

10.3. Warranty and a post warranty service of UV flame detector is provided by the producer.

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11. Package certificate.

11.1. UV flame detector UFD-IP65 is packed by Fastiv LTD according to technical requirements of TU U 33.3-32932312-001:

Package date _____

Packed by _____
signature

A packed product
received by _____
signature

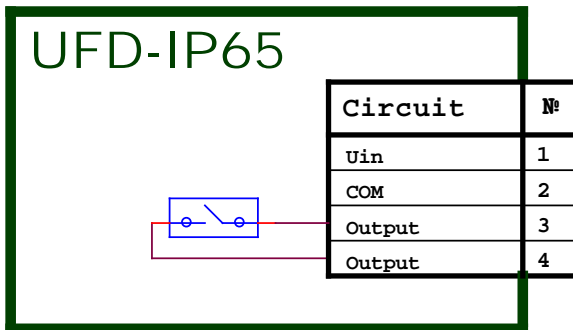


Fig. 1. UFD-IP65 connecting chart.

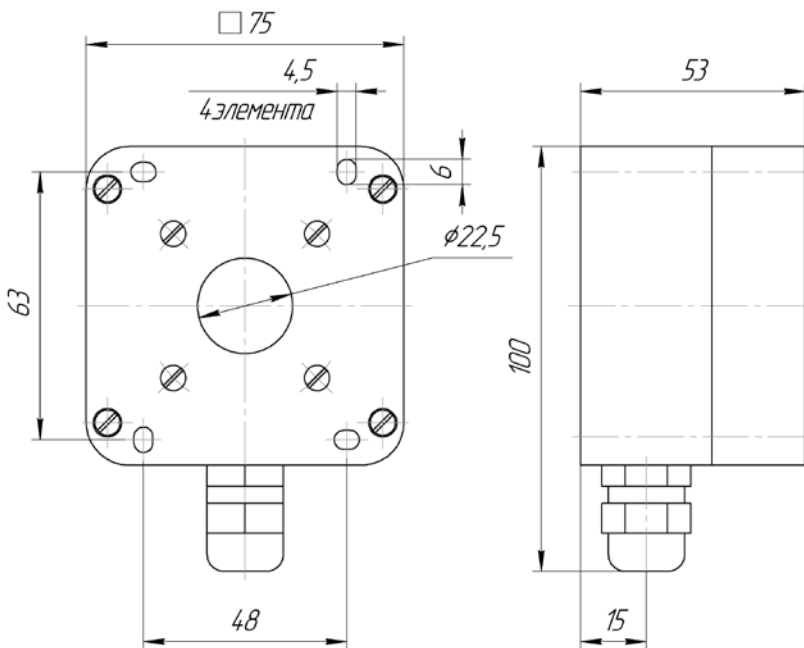


Fig. 2. UFD-IP65 dimensions.