



CIGARETTE SMOKE DETECTOR

For alarm systems

ALG-61B8



User manual
and guarantee card

INITIAL REMARKS

Before assembling, wiring and setting up of device the user should carefully read given manual. In case of any troubles with understanding the content the user should contact the producer. Unassisted assembling and start of the device can be done only with the use of proper tools. However, it is highly advised to set up a device by qualified personnel.

The producer is not responsible for damages made during incorrect set-up or maintenance or in case of any unassisted repairs or modifications.

1. DEVICE CHARACTERISTICS

The device is dedicated to monitor closed spaces to detect potential cigarette smoke and alarm during its presence. It is dedicated to use with alarm control panels that are compatible with 4-wire smoke detectors with power supply 9...33V DC. What is more, alarm control panel should be equipped with reset function (enabling to delete quickly alarm raised by cigarette smoke detector). It is equipped with high quality photo-optical sensor and sensitive system assuring quick and precise cigarette smoke detection. After detecting the cigarette smoke the signal is immediately transmitted to the alarm control panel. The device can be installed in residential buildings, schools, hospitals, offices and anywhere where smoking is forbidden. There is a possibility to create system of cigarette smoke detectors by connected them in a row to one zone, taking into account current efficiency of alarm control panel output. The device is not dedicated for fire protection systems.

2. TYPICAL WIRING DIAGRAM

Before installation of detector the technical documentation for alarm control panel should be analyzed carefully. Control panel should be compatible with 4-wire smoke detectors. Cigarette smoke detectors can be connected to alarm control panel inputs dedicated for smoke detectors. ALG-61B8 works according to the similar rule as smoke detector. When the user wants to connect the device with particular alarm system, this specific line should be set as fire zone. Wiring diagram is presented in the fig. 1.

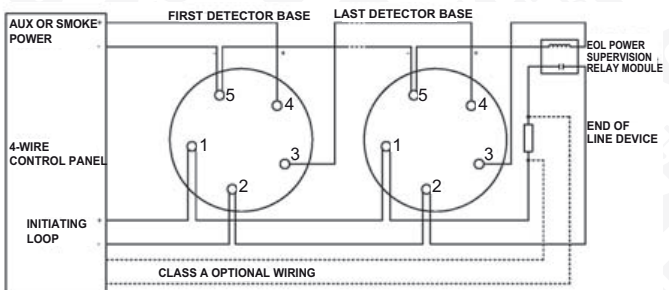


Fig. 1. Wiring diagrams for ALG-61B8 connected to the alarm control panel with dedicated inputs and reset function.

Connecting EOL power supervision relay module and end of line device are strictly dependent on the type of alarm control panel applied. Before connecting these elements you must carefully read technical documentation of alarm control panel. There is a possibility to connect ALG-61B8 to the normal alarm panel control, e.g. anti-burglary one what has no dedicated fire protection lines and reset function. In such cases specific switch should be used in a row with power supply of detectors that will enable to reset alarm by cutting off the power supply. Additionally, the alarm must be deleted from the memory of alarm control panel. Wiring diagram for such types of alarm control panels is presented in fig. 2.

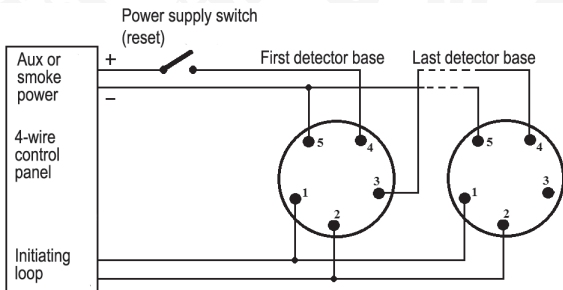


Fig. 2. Wiring diagrams for ALG-61B8 connected to the alarm control panel without dedicated inputs and reset function.

3. INSTALLATION

Detector should be installed on the ceiling in a place where the smoking is forbidden. Elements of the device are presented in the fig. 3.

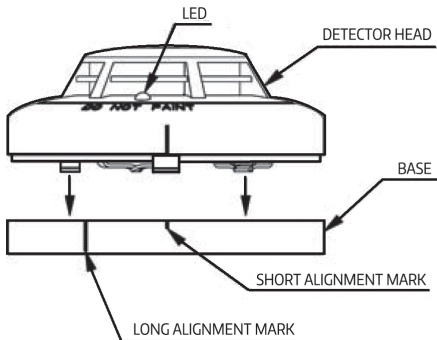


Fig. 3. Device construction

3.1. INSTALLING THE BASE

1. All wires should go through the big hole in the middle of the base.
2. The base should be attached to the ceiling with a use of two screw anchors and screws (included in the set) using two holes in the base.
3. All wires should be connected according to the wiring diagram shown in fig. 1-2.

3.2. INSTALLING THE HEAD

Before fixing the head to the base there might be a necessity to set properly the relay output to alarm control panel. By default it is set in position NO (normally open). If you want to change it to NC (normally closed) you should proceed the following steps:

1. Remove the screws from the head and remove the upper casing of the device.
2. Change the position of the jumper placed next to the relay (fig. 4).
3. Reassemble the casing onto the head and attach them with the use of screws.

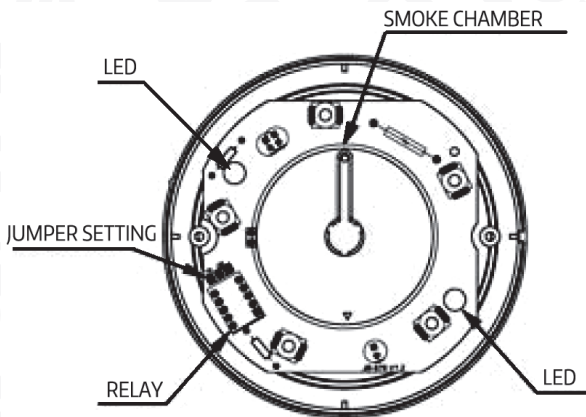


Fig. 4. Inner construction of the device

In order to attach the head to the base you must align the components as shown in Figure 3 – the mark on the head must match the smaller mark on the base. Mount the detector head on the base and twist clockwise to secure it until the mark on the head matches the smaller mark on the base.

Note

The device should not be installed in the area where the airspeed exceeds 600m/min.

4. TESTING THE DEVICE

1. All the alarm signal services, releasing device and extinguisher system should be disengaged during the test period and must be re-engaged immediately at the conclusion of testing.
2. After energizing the detector head for approximately one minute, check to see the indicator red LED flashing once every 30 seconds. If red LED fails to flash, it indicates the non-functioning of the detector or faulty wiring. Re-check the wiring or replace the detector if necessary.
3. Position the "Test Magnet" to the small arrow indicate for at least 5 seconds. The detector should be triggered to alarm as indicated by steady red LED illumination. Reset the control unit to return to normal operation.
4. Allow smoke from a cotton wick or a test smoke aerosol to enter the detector-sensing chamber for at least 10 seconds. When sufficient smoke has entered the chamber, the detector will signal an alarm, this being visible by a continuous illumination of the Red LED. Reset each detector and/or control unit before attempting to test any additional detectors in the same zone. If the alarm fails in this step, it indicates a defective unit, which requires service.

5. WARNINGS AND MAINTENANCE

- Air inlet must not be clogged with any dust or waste – in order to avoid such situation – dust must be cleaned once a month,
- The device must not be installed in places with high humidity level or in dusty space or in places where the temperature overcomes given in specification range,
- You must not paint the device – during painting the device should be disassembled and reassembled after the room is painted and dry,
- The device must not be installed next to windows, doors or fan,
- The device should be tested at least once a month,
- During cleaning the device it should be powered off, do not use any liquids, cleaning should be performed with a use of brush or Hoover.

TECHNICAL DATA

Power supply	9...33V DC
Number of wires to connect to the alarm control panel	4
Sensor sensitivity	<0.03 dB/m
Current - standby / alarm state	40µA / 35mA
Warming up time	Max. 60s
Temperature range	-10°C...+50°C
Dimensions (diameter x height)	ø100mm x 48 mm
Netto weight	140g

The copy of declaration of conformity is available on: <http://www.aura-tech.eu>

To get some information about warranty please refer to your sales assistant.

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