

GENERAL DESCRIPTION

The fire detector is designed for early warning of a fire condition upon reaching a rate of rise of the temperature or fixed temperature threshold in the protected premises. The principle of functioning of the fire detector is based on the ohmic resistance alteration in the thermistor as a result of the ambient temperature change. FD8020 is fitted on bases series 8000.

The fire detector (**fig.1**) consists of a printed circuit board and a chamber with thermistor (pos.4), fixed in a plastic body (nos.5).

Both LED indicators (pos.3) allow range of visibility 360° and provide information for the status:

- Standby mode** - the LEDs are not lit;
- Alarm condition** - the LEDs produce continuous light.

TECHNICAL DATA

Supply voltage	(10-30)V DC
Current consumption in Standby Mode	40 µA/22,5V DC
Current consumption in Alarm Condition	8mA/10VDC; 25mA/30VDC
- with base type 8000 or 8000D	18mA/10VDC; 55mA/30VDC
- with base type 8000R, 8000DR or 8000L	A2R (complies with EN 54-5:2000)
Temperature class	or BR
Protected area	circle with 10 m diameter (EN 54)
Height of mounting	up to 8 m (complies with EN 54)
Output in Alarm Condition (RI/KL terminal)	for RI 31 or RI 31S
Degree of protection	IP 43
Operational temperature range	minus 10°C - plus 55°C
Relative humidity resistance	(93±3)% at 40°C
Dimensions, base included	Ø100 mm, h 47mm
Weight, base included	0,100 kg
Type of the connecting line to the base	two-wire, a single-core or multi-core insulated wire
Cross section of the connecting wire	(0,8-1,5) mm ²

INSTALLATION

The fire detector operates with bases type **8000** (standard), **8000D** (with Schottki diode), **8000R** (with relay output), **8000DR** (with Schottki diode and resistor 510 Ω) or **8000L** (with resistor 510 Ω). They are delivered separately and are fixed on the desired place in advance by means of pins and screws. The electrical connection of the components necessary for the installation is done according to the schematic diagram on **fig.2**. It is recommended cable shoes to be used.

The fire detector is placed on the base (fig.1, pos.1). It is rotated clockwise until reaching the guiding grooves (fig.1, pos.2). It is rotated until rest (fig.3.1). The slots of the base and the body should match (fig.3.2).

Locking of the fire detector (fig.4). Before installation, the key (pos.3) is detached from the base and the rib (pos.1) of the locking click (pos.2) is cut out.

Removing of a fire detector locked to the base. Insert the key into the slot (pos.4) push in as in the same time the fire detector is rotated anticlockwise. Remove the key and continue to rotate the fire detector in the same direction until it is released from the base.

TESTING

The fire detector is tested after installation as a part of the site's fire alarm system or with maintenance activities, following this order:

1. Voltage is supplied to the fire alarm line, to which the tested fire detector is connected, from the Fire Control Panel or auxiliary power supply unit 24V DC/0,1A.
2. After one minute, is activated the fire detector using a heat tester. It should enter Alarm condition within 30s.
3. A reset command is sent from the Fire Control Panel or is interrupted briefly the supply voltage to the fire alarm line, to which the tested fire detector is connected. It should enter Standby mode.

SERVICE SCHEDULE

It is done by authorized personnel and includes the following activities:

1. Inspection for visible physical damage - monthly
2. Testing in real conditions - monthly
3. *Preventive dusting - every 6 months

*The fire detector is removed from the base. The body cover (fig.1, pos.6) is removed. The chamber and the thermistor are dusted with a small brush.

WARRANTY

The warranty period is 36 months from the date of sale.

The manufacturer guarantees the normal operation of the fire detector providing that the requirements set herein have been observed.

The manufacturer does not bear warranty liabilities for damages caused through accidental mechanical damage, misuse, adaptation or modification after production. The manufacturer bears warranty liabilities for damages in the fire detector caused through manufacturer's fault only.

