TEKO

Astra-43A
Addressable hardwired heat detector

User guide

1 FUNCTION

The detector is designed for detecting fixed temperature or rate-of-rise, forming a 'fire alarm' notification and transferring the notification to the Astra-A RPA via Signaling Line Circuit (SLC). Compatible with Control Panels: Astra–812 Pro or Astra–8945 Pro (firmware version 4_0 or version higher).

The detector provides measurement and transmission via SLC according to Astra-A RPA Extender parameter: ambient temperature (°C).

● Astra–43A is powered by Astra-A RPA Extender.

2 SPECIFICATION

Power supply voltage, V .... 7.5 – 27.6
Maximum current consumption, mA 0.5
Response time, (sec.), at the rate of temperature rise
5 °C/min 120–500
10 °C/min .... 60 - 242
20 °C/min .... 30 - 130
30 °C/min .... 20 - 100
Response temperature, °C .... 54 - 65
Overall dimensions, mm:
- diameter 106
- height 60

Operating Conditions
Temperature range, °C .... from - 30 to + 70
Relative air humidity, % .... up to 93 at +40°C
without moisture condensation

3 DELIVERY SET
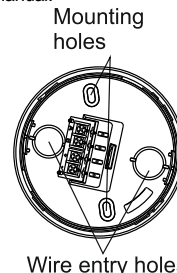
Delivery set includes: fastening parts (dowels – 2 pcs., screws – 2 pcs.), user guide – 1 pc.

4 INDICATION

Status	Red LED
Standby mode	1-time flash with a period of 8-9 sec.
Fire alarm	1 time flash with a period of 2 sec. when the response temperature is reached
Fire test	1-time flash with a period of 2 sec. within 30 sec. after receiving the "Test" command from the Laser Pointer "Astra-942" (LP)
Detector's failure	3 times flashes with a period of 25 sec. until the failure is fixed
Command receiving (LaserPointer)	1 time flash for 2-5 sec

5 ADDING TO THE SYSTEM

1) Connect the RPA to the Control Panel using RS-485 interface.

2) Add the Astra-A RPA Extender to the Control Panel according to the **user guide of the panel** Astra-812 Pro or the PKM Astra Pro built-in manual.

3) Remove the electronic unit by turning it counterclockwise relative to the base.

4) Connect the SLC power (terminals "+" and "-") and the SLC interface (terminals "A" and "B") from the Astra-A RPA to the terminals on the base.

5) Run the RPA registration mode according to the **user guide of the panel**. It takes 60 sec to register a detector.

6) Run the registration mode via two possible ways:
- setting the detector on the base (p. 8, a. **5)** (power is on and SLC connected);

Mounting holes

Wire entry holes

- using LaserPointer (if the detector is on the base), direct the Astra-942 laser beam to the detector's LED using the third laser button for at least 1 sec.

WARNNING!
Running registration for several detectors at one and the same time is forbidden.

7) Registration running check:
- In case of successful registration, you will see "HD" in the configuration module of the "PKM Astra Pro" software or you will see "HD xxx is registered" on the Astra-812 Pro LCD screen.
- In case of unsuccessful registration repeat actions from 5) to 7).

Notice: It is possible to start the registration mode on a detector previously registered in another Extender and not removed from it only using LaserPointer (Astra 942).

6 REMOVING FROM THE SYSTEM

Removing a detector from the Extender's memory can be performed using configuration module of "PKM Astra Pro" or Astra–812 Pro menu.

7 INSTALLATION PLACE

1) The distance between the ceiling and sensitive element of the detector in the place of its installation must be not less than 25 mm and not more than 150 mm. When the detector is located at a height of more than 6 m, as well as under raised floors and above suspended ceilings, the service access option must be determined.
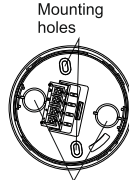**2)** Do not mask the detector (heat should pass freely through the detector's holes).

8 INSTALLATION PROCEDURE

1) Turn the electronics unit counterclockwise. Remove the electronic unit from the detector base.

2) Mark the ceiling around and through the base.

3) Insert cables through the mount holes of the detector base and connect with terminals (terminals "+" and "–"; terminals "A" and "B"). Recommended cable type: FRLS 2×2×0.5.
4) Mount the base on the ceiling.

Mounting holes

Wire entry holes

5) Install the electronic unit into the base:

- align the elecronic unit with the detector base.
- press the electronic unit of the detector to the base aligning the short marks on the cover of the electronic unit and the base.

- turn the electronic unit clockwise until it stops, aligning the line of the cover of the electronic unit with the long line on the base.

9 TEST

Run testing mode by using laser pointer Astra-942:
- press the top button of the laser pointer;
- direct laser beam to the detector's LED and irradiate the LED for 1 sec.
- check a notification "Fire Test" in 5 sec. (1x flash of 2 sec during 30 sec.). "Fire Test" log will be made in the event log of the Control Panel Astra-812 Pro or PKM Astra Pro.

10 WARRANTY

The operation warranty period is 5 years from the date of operation start-up, but no longer than 5 years 6 months from the date of manufacturing subject to the requirements of User guide.