

HI720-CN Heat detector Product manual

Overview

The heat detector HI720-CN uses a thermal sensor for fire detection.

The following table indicates the alarm conditions:

Parameter	HI720-CN
Alarm activation by:	<ul style="list-style-type: none">● Rapid temperature rise● Reaching a certain temperature
Number of parameter sets	<ul style="list-style-type: none">● 2

Features

- Compliance with EN 54-5 and EN 54-17
- Early alarm by monitoring ambient temperature
- Detector parameters that can be set according to environmental conditions
- Strong resistance to environmental interference factors such as dust, fibers, insects, humidity, extreme temperatures, electro-magnetic interference, corrosive vapors, vibration, and non-fire smoke
- Integrated line separator
- Communication with the control panel via C-NET
- Removable coding sticker for convenient engineering and commissioning
- Adoption of RoHS compliant environmentally friendly materials and production processes.

Application

The HI720-CN heat detector responds when the temperature exceeds a preset threshold, and is suitable for boiler rooms, small kitchens, and other locations where environmental temperature changes rapidly or where smoke detectors are inconvenient to use.

The HI720-CN heat detector can also detect fires with rapidly rising temperatures, which is applicable in locations where the ambient temperature is relatively stable.

The HI720-CN heat detector has two parameter settings:

- A2S (1)
- A2R (2)



For detailed parameter explanations, refer to the national standard GB4716-2005.

LED

The detector is equipped with an LED indicator. The table below shows the working modes indicated by the LED status.

Operating modes:	LED status
Normal	Off
Locate	Red light flashes every 1 second
Alarm	Red light steady on

Installation

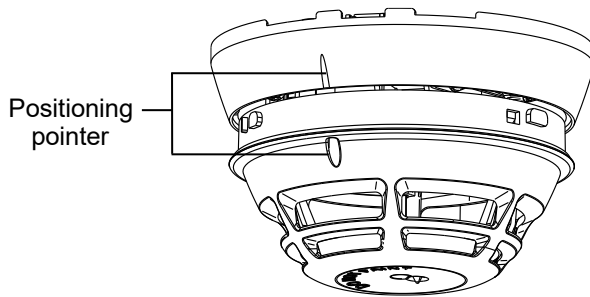


Fig. 1

Alarm indicator (AI) centered in the detector; no alignment required

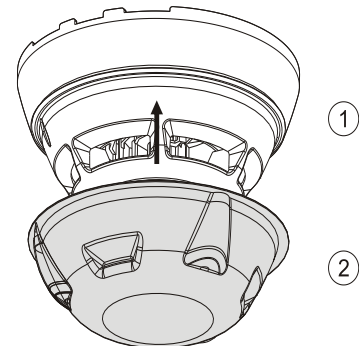


Fig. 2

1 - Detector
2 - Detector dust cap

- **Easy, time-saving and high-quality mounting (Fig. 1)**

Before the detector can be installed, the detector base must be installed. After installing the detector base, simply insert the detector into the base and turn it clockwise, until the positioning pointer of the detector aligns with the positioning pointer of the base. To remove, simply rotate counterclockwise to detach.

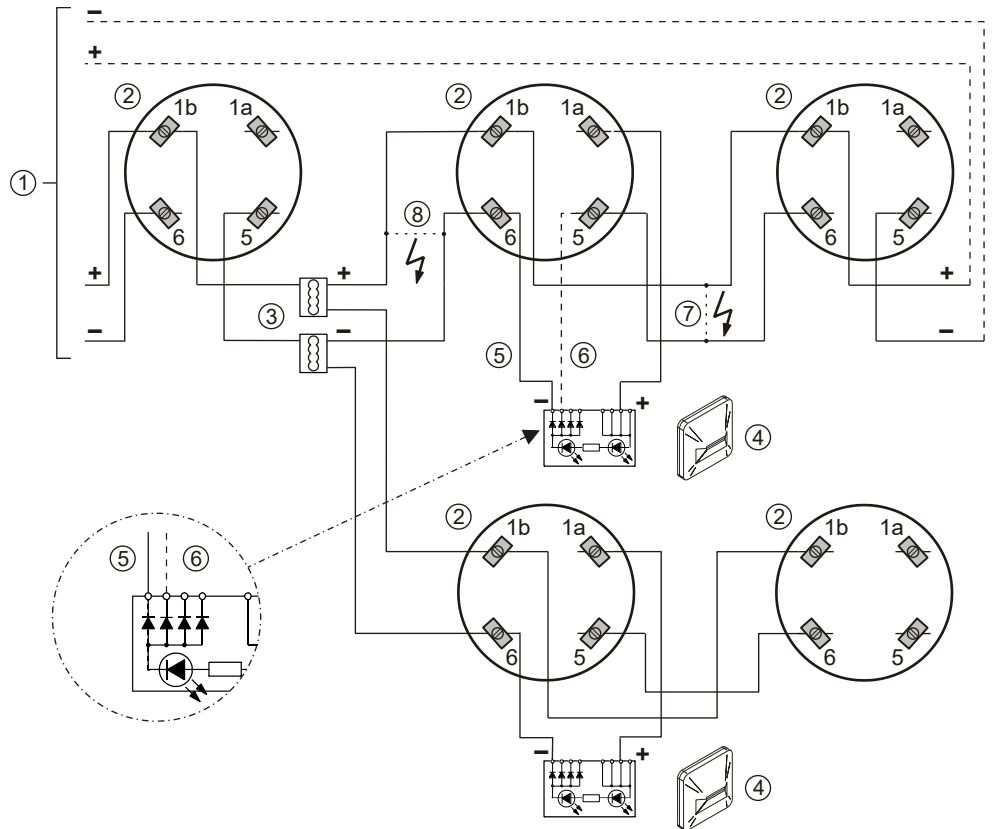
- **Detector dust cap (Fig. 2)**

A detector dust cap is provided as part of the scope of supply for each detector. During construction phase, the detector dust cap protects the detector from dust and dirt.



The dust cap must be removed when all construction is fully completed!

Electric connection



Legend

- | | |
|----------------------------------|---------------------------|
| 1 Control panel | 5 Cable –E_AI6 |
| 2 Detector base DB721-CN | 6 Cable –E_AI5 (optional) |
| 3 Connection terminal DBZ1190-XX | 7 Short-circuit (fault) |
| 4 External alarm indicator | 8 Short-circuit (fault) |

Comments

- If a shielded cable is used for connecting the external alarm indicator, its shield must be connected to the shield for the detector bus.
- The alarm indicator connected will continue to function correctly in the event of a short circuit occurring at position 7 on the connection diagram. The alarm indicator is triggered by cable –E_AI6.

If the short circuit occurs at position 8 on the connection diagram, the alarm indicator will no longer be triggered.

As an option, the alarm indicator may also be connected using cable –E_AI5.

In this case, the alarm indicator will correctly indicate an alarm even if a short circuit occurs at position 8.

Therefore, this ensures that the alarm indicator will always function correctly.



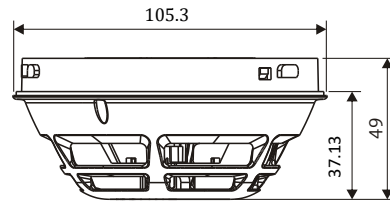
The option described is only possible in a loop line.



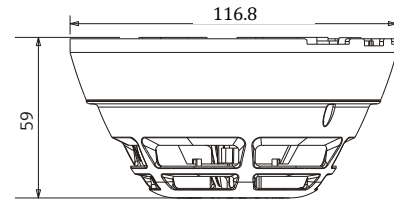
To ensure product safety performance, please do not modify the product!

Dimensions

In mm
Without base



With base



Maintenance

Regular performance checks of the detectors are required. These can be carried out using hot air fan.

Recommendations:

- All detectors are visually inspected once a year and those that are heavily contaminated and mechanically damaged must be replaced.
- It is recommended that detectors that have been in use for 12 years be replaced, regardless of the environment.
- Do not dispose of the product at will after the end of its life. Dispose of it in accordance with relevant national regulations such as the "Regulations on the Administration of Waste Electrical and Electronic Products Recycling and Disposal".

Technical data

Operating voltage	DC12V-DC33V
Quiescent current	200 μ A
Electromagnetic compatibility at:	
– 10 KHz~2.5 GHz	50 V/M
Operating temperature	-10...+50 °C
Storage temperature	-20...+70 °C
Humidity	\leq 95 % rel.
Communication protocol	C-NET
Color	Pure white, RAL9010

Ordering Information

Type	Material no.	Designation	Weight
HI720-CN	S54310-F7-A102	Point-type heat detectors (A2S+A2R)	0.083 kg
DB721-CN	S54319-F12-A101	Detector base (with loop contact)	0.050 kg