JBE-2115

Addressable Optical Smoke and Heat Detector

Key Features

- Low Profile design
- Six sensitivity profiles with different smoke/heat combinations
- Programmable soft address by means of JBE-AT1 tool
- EN 54-7 and EN 54-5 certificate

JBE-2115 is an addressable combined optical smoke and heat detector designed to operate on a loop of intelligent fire detection and alarm devices with the Jade Bird Europe loop protocol. It sends fire alarm signals to the fire panel when the pre-selected levels of heat or smoke are detected.

The detector features six (6) profiles, which combine different sensitivity levels of heat and smoke.

JBE-2115 has pollution compensation function that prevents false alarm results from dust accumulation.

Sensitivity levels

The detector performs continuously independent measurements of heat and smoke, allowing the fire panel to indicate alarm, depending on the selected alarm profile.

Each profile incorporates at least one EN 54 certified heat and/or smoke alarm levels. However, note that some profiles incorporate alarm levels which are above or below EN 54 requirements. Thresholds compliant to EN 54 are indicated in the table below.

Profile	Smoke Sensitivity	Heat Sensitivity
1	Very high	EN 54-5 A2
2	EN 54-7	EN 54-5 A2
3	EN 54-7	Very low
4	EN 54-7	0 (no heat alarm)
5	Very low	EN 54-5 A2
6	0 (no smoke alarm)	EN 54-5 A2

Expert judgement is required in order to select the most appropriate profile for each application. Compliance to EN 54 requirements shall not be assumed for those profiles which are not indicated as such.

The day/night programming in the Draco fire panel allows changing automatically the profile at different times of the day or the week.

TECHNICAL DATA

Category	EN 54-5 (A2 type) and/or EN 54-7 depending on the profile selection in the control panel.
Working voltage	19-28 VDC (JBE protocol pulse amplitude)
Connection	2-wire JBE communication bus, no polarity
Wiring	Twisted pair, max. wiring gauge 2.5 mm^2 (0.5 to 2.5 mm^2)
Quiescent current	≤0.3 mA @24 V
Activation current	≤1 mA @24 V
Working temp.	-10ºC to +60ºC
Storage temp.	-20ºC to +60ºC
Environment humidity	≤ 95% RH (40±2ºC) (no condensation nor icing)
Addressing method	Soft addressing with tool JBE-AT1, non-volatile
Address range	1-200
Protection area	20~30 m^2 (subjected to local codes)
Red LED indication	Flashes when polling Constant on when in alarms
Dimension (ØxH)	100 mm × 53 mm
Weight	0.1 kg
IP rating	IP40
Compatible base	JBE-2160
Standards	EN 54-5:2017+A1:2018 EN 54-7:2018
Declaration of Perf.	DoP-0370-CPR-3809-1

Maintenance

Alarm test should be conducted regularly, recommending every 6 months (check local regulations).

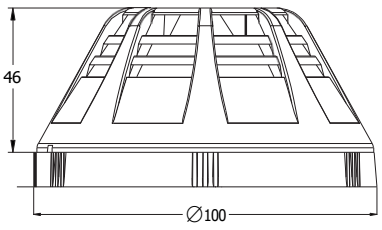
The dust cover can protect the detector from noxious dust accumulation during construction works, but the detector won't be able to detect smoke while the dust cover is on.

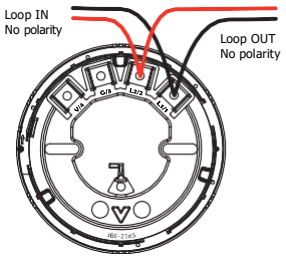
Installation

Always observe local fire and electric installation regulations.

1. Secure the base to the ceiling. The nominal spacing of drills is 60 mm
2. Connect the wiring to the base as per the diagram below
3. Program an unused loop address (1 to 200) to the detector head using the JBE-AT1 tool
4. Mount the detector onto its base and turn it clockwise to secure
5. Register the detector into the fire panel's configuration
6. Select the sensitivity profile most appropriate for your application
7. Test each detector and wiring integrity after installation and periodically according to local fire regulations

Mechanical dimensions (all dimensions in mm) and connection diagram





Terminals	Connection
1 & 2	Signal Loop L1, L2 (no polarity)
3	not used
4	not used