JADE BIRD
FIRE ALARM SYSTEMS

JBE-2106

Addressable Heat Detector

Key Features

- Low Profile design
- Remote indicator output (requires JBE-2165) base
- Heat Rate-of-Rise and Static detector (A2R, A2, A2S)
- Programmable soft address by means of JBE-AT1 tool
- EN 54-5 certificate

JBE-2106 is an addressable heat detector designed to operate on a loop of intelligent fire detection and alarm devices with the Jade Bird Europe loop protocol. This heat detector sends fire alarm signals to the fire panel when the air temperature (or its rate of rise) reaches the alarm thresholds as defined in the European standard EN 54-5.

The detector features three (3) sensitivity profiles: A2R, A2 and A2S. The Draco fire panel allows selecting which threshold to apply to the detector. The day/night programming of the fire panel allows changing the profile automatically at different times of the day or the week.

The JBE-2106 can also report to the fire panel the temperature curve which can be checked on the fire control panel to assess the impact of site-specific processes near it (i.e., steam release, opening ovens, etc.). Heat detectors are often used to detect fire in places where steam or dust can be present or where non-smoke fires might occur.

Sensitivity levels

The detector will always report alarm levels 1, 2 and 3 to the fire panel without any need of pre-configuration. Select, in the fire panel configuration, the profile(s) most appropriate for your application:

Profile 1 (Highest sensitivity)	EN 54-5 category A2R (Rate of rise)
Profile 2 (Medium sensitivity)	EN 54-5 category A2
Profile 3 (Lowest sensitivity)	EN 54-5 category A2S (Static)

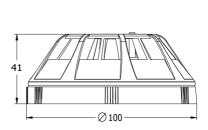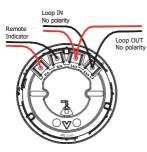| TECHNICAL DATA	
Category	EN 54-5 Point heat detectors for use in fire detection and fire alarm systems installed in and around buildings.
Working voltage	16 - 30 VDC (JBE protocol pulse amplitude)
Connection	2-wire JBE communication bus, no polarity
Wiring	Twisted pair, max. wiring gauge 2.5 mm^2 (0.5 to 2.5 mm^2)
Quiescent current	≤0.3 mA @24 V
Activation current	≤1 mA @24 V (plus up to 8 mA to remote indicator)
Working temp.	-10ºC ~ +50ºC
Storage temp.	-20ºC ~ +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 (subject to local codes)
Red LED indication	Flashing when polled Constant on when in alarms
Dimension (ØxH)	100 mm × 41 mm
Weight	0.1 kg
IP rating	IP40
Compatible bases	JBE-2160 for installation without remote indicator
	JBE-2165 for installation with remote indicator
Remote indicator	LED with or without series resistor (Rs <4 kOhm)
Standards	EN 54-5:2017+A1:2018
Declaration of Perf.	DoP-0370-CPR-3810-1

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 n(o polarity)
3	Remote indicator negative (optional)
4	Remote indicator positive (optional)