Heat detector with SelfVerify – BD-300

Interactive fire detection systems
Product datasheet

Features

- Interactive
- Plug-in detector head
- Heat detector intended for use in dry areas
- Short circuit isolator in each detector
- Conforms to EMC directive
- Comprises a built-in alarm indicator (LED)
- Automatic addressing
- Proven technology
- Configurable to class A1, A1R, A2S, B, C
- The BD-300 is not influenced by dust, humidity, exhaust gases, or electro-magnetic fields, such as radio transmitters, cellular phones, etc.
- EN 54-5/EN 54-17
- Designed to meet the requirement of the major maritime classification societies

Applications

BD-300 is a point heat detector for detection of rise in ambient temperature caused by a fire. The detector is designed for use with Autronica's interactive fire alarm systems. The SelfVerify function ensures the highest grade of reliability. All units comprising this function are automatically tested with a calibrated test once every 24 hours.

BD-300 is often used in areas where the environment is likely to produce false/unwanted alarms from smoke detectors such as:

- Galleys
- Bathrooms
- Kitchens
- Boiler rooms
- Workshops, etc.

Principle

Temperature measurement by means of a thermistor for registration and reading of temperature at the detector point. Alarm at temperature according to configured class (Ref. table 1).

SelfVerify: The detector's ability to initiate alarm at correct temperature is regularly checked.
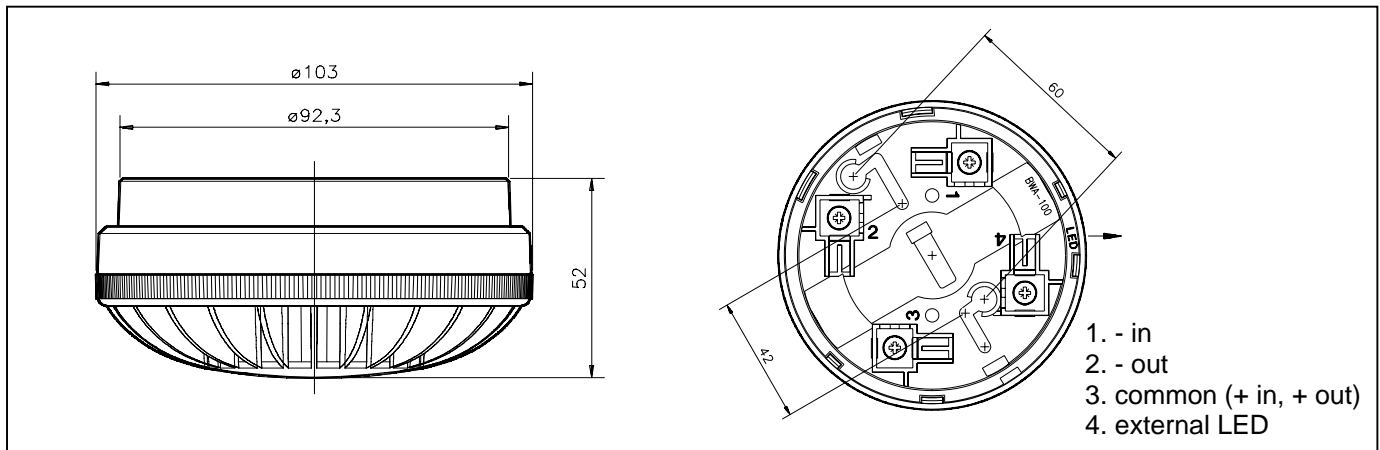

Versions

- BD-200*   Heat detector without SelfVerify.
- BD-300   Heat detector with SelfVerify.
- BD-500*   Heat detector with SelfVerify, environmentally protected.
- BD-500/Ex* Heat detector with SelfVerify, EExia-version for use in all zones.

* See separate data sheet.

Technical specifications	
Weight	140 g
Materials	PC/ABS
Colour	White
Sensitivity	Ref. table 1
Voltage	10-27 VDC
Current consumption Stand by: External alarm indicator:	< 0,3mA 6mA
CPD certificate	1134-CPD-018
Degree of protection	IP44D
Working temperature	-20 - +80°C
Storage temperature	-55 - +80°C
Max. application	Ref. table 1
Humidity (non condensing)	Max. 95%
Maintenance	None
Service	Replace if faulty
Approvals	See web site

Protecting life, environment and property…

Dimensions/Connections

1. - in
2. - out
3. common (+ in, + out)
4. external LED

Use of LED output

When LED or other equipment is connected to the LED output, a varistor - Siemens SIOVS07K25 (39V) - Autronica part. no. 116-8464-003.5039, is required between terminals 1 and 4 in base.
The LED is connected between terminals 3 and 4, terminal 3 being the positive terminal.

Table 1

Detector class	Typical application temperature °C	Maximum application temperature °C	Minimum static response temperature °C	Maximum static response temperature °C
A1	25	50	54	65
A1R*	5	50	54	65
A2S*	25	50	54	70
B	40	65	69	85
C	55	80	84	100

* R= Rate of rise.
* S= (Slow) Does not respond below the minimum static response temperature.

Note: The detector may give prewarning on a temperature below the max. application temperature.

Part number	Description
116-BWA-100	Detector base
116-BDH-300	Detector head
116-BWP-100/20	Optional conduit box for M20 glands
116-BWP-100/25	Optional conduit box for M25 glands
116-BBR-52	Optional audible indicator – SmartBuzzer