Features

- Interactive
- Heat detector intended for use in humid areas
- Short-circuit isolator in each detector
- Conforms to EMC directive
- Additional coating of PCB circuit for environmental protection
- Comprises a built-in alarm indicator (LED)
- Automatic addressing
- Proven technology
- Configurable to class A1, A1R, A2S, B, C
- Immune to electromagnetic disturbance
- Unrivalled reliability due to the SelfVerify® function
- The BD-501 is not influenced by dust, humidity, exhaust-gases, or electromagnetic fields (for example, radio transmitters, cellular phones, etc.)
- Designed to meet LPCB requirements
- EN54 pt. 5
- Designed to meet the requirements of the major maritime classification societies

Applications

BD-501 is a point heat detector for detection of rise in environment temperature caused by a fire. The detector is designed for use with Autronica's interactive fire-alarm system, AutroSafe. 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.
Additional coating of PCB and sealing of the sensing element make this detector suitable for rough areas like heavy industry, maritime and offshore applications.

BD-501 is often used in areas where the environment is likely to produce unwanted alarms, such as:

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

Principle

Temperature measurement by means of a thermistor for registration and reading of temperature at the detector point. Alarms 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-501   Standard heat detector with SelfVerify®
- BD-501/N   Heat detector with SelfVerify®, Eexn version for use in zone 2 only
- BD-501/EX*   Heat detector with SelfVerify®, EExia-version for use in all zones

* See separate datasheet

Technical Specifications

Weight	300 g
Material	Polycarbonate Macrolon
Colour	Light grey
Sensitivity	Acc. to EN-54/5
Voltage	10 - 27VDC
Current consumption Stand-by: External alarm indicator:	< 0,3mA 6mA
Environmental requirements	EN-54/5
Degree of protection	IP 56
Working temperature	-20 - +80°C
Max. application	Ref. table 1
Humidity (non-condensing)	Max. 95% RH
Maintenance	None
Service	Replace if faulty
Approvals	See separate documentation
Certificate for BD-501/N	NEMKO 03ATEX217X

Dimensions
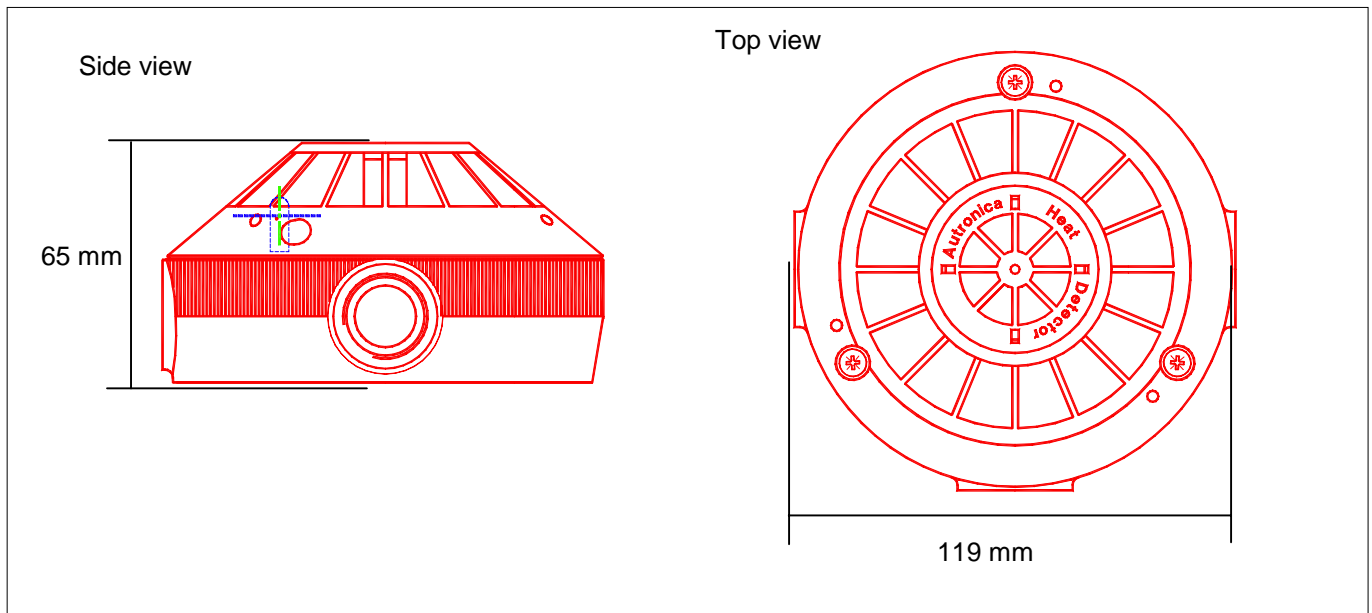
Side view

Top view

65 mm

119 mm

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.

Connections

100 mm

1. + in
2. + out
3. - in
4. - out
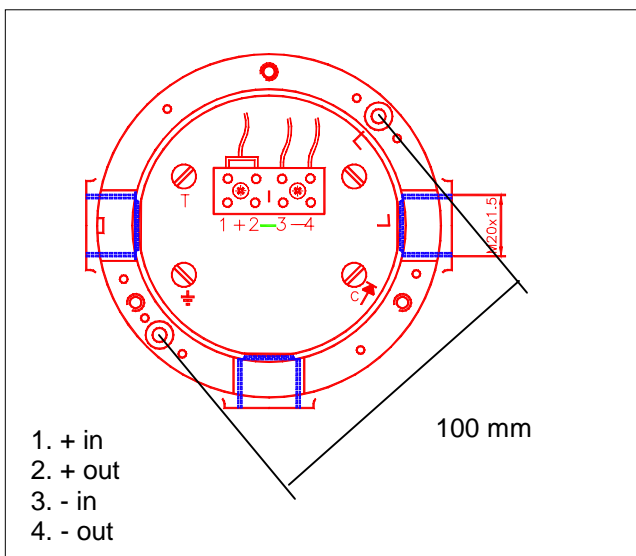
Order number	Description
BD-501	Detector, complete

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