

HEAT DETECTOR WITH SELFVERIFY - BD-501

Interactive fire detection systems Product Datasheet

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
With SelfVerify function for reduced maintenance/testing and increased reliability
Not influenced by dust, humidity, exhaust gases, or electromagnetic fields (for example, radio transmitters, cellular phones, etc.)
EN 54-5/EN 54-17
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 detection 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.

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
Ex ic version for use in zone 2 only
- BD-501/EX* Heat detector with SelfVerify
Ex ia version for use in zone 0, 1 and 2

* See separate datasheet

Technical specifications	
Weight	300 g
Material	Polycarbonate Macrolon
Colour	Light grey
Sensitivity	Ref. table 1
Voltage	10 - 27 VDC
Current consumption Stand-by: External alarm indicator:	< 0,3mA 6mA
Environmental requirements	EN 54-5
Degree of protection	IP56
Working temperature	-20 - +80°C
Cable inlet	2 X M20, 2 glands included
Max. application	Ref. table 1
Humidity (non-condensing)	Max. 95% RH
Maintenance	None
Service	Replace if faulty
CPD certificate	1134-CPD-018
Approvals	See website
Certificate for BD-501/N	NEMKO 03ATEX217X

Dimensions

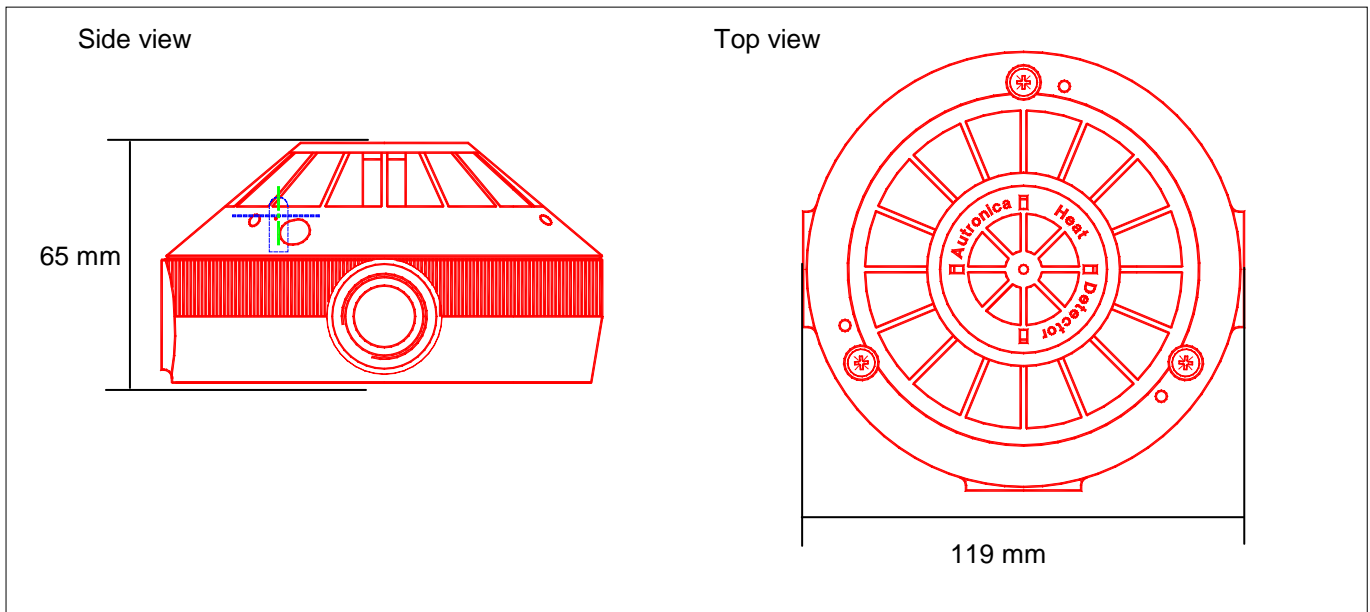


Table 1

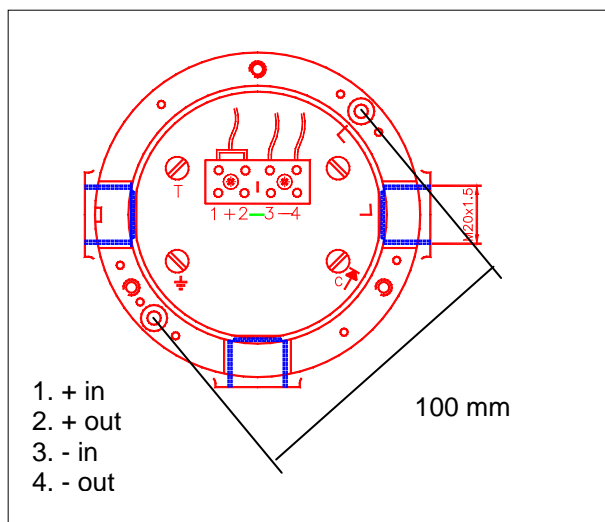
Detector class	Typical application temperature °C	Maximum application temperature °C	Minimum static response temperature °C	Maximum static response temperature °C
A1	25	50	54	65
A1R*	5	50	54	65
A2S*	25	50	54	70
B	40	65	69	85
C	55	80	84	100

* 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



1. + in
2. + out
3. - in
4. - out

Part number	Description
116-BD-501	Detector, complete with 2 glands (type 116-6571-011.2000)
Accessories	
116-6571-011.2000	PCK W/ 2 GLANDS ST M20X1,5 PG13,5