

# Heat detector D-A-F/BN300 - BD-505/EXD

Interactive fire detection systems  
Product datasheet

## Declaration of conformity and instructions

### Features

- Interactive
- Different alarm temperature models available
- Built in short circuit isolator
- Conforms to EMC directive
- No hardware addressing required
- Automatic addressing
- Proven technology
- With SelfVerify function for reduced maintenance/testing and increased reliability
- Housing of marine grade aluminium alloy
- Designed to meet the requirement of the major maritime classification societies
- CENELEC approved for use in hazardous areas
- ATEX approved

### Applications

BD-505/EXD is a point heat detector for use in hazardous area zone 1 or 2. The detector is designed for use with the 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. The detector is suitable for use in different applications including turbine rooms, flammable material stores, paint stores etc.

BD-505/EXD can be delivered for three different alarm temperature settings varying from 60 to 90°C. See reverse for ordering information.

### Principle

The construction is based on the well-proven DETECT-A-FIRE precision temperature sensor installed in an explosion proof junction box containing a BNB-300 interface unit for adaption to the interactive fire detection system.

The sensor is a rate compensated device combining the best of fixed and rate of rise detectors.

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



Technical specifications	
Weight	1900 g
Material	Aluminium alloy / Stainless steel
Colour	Grey
Conduit entry	3 x M20 x 1,5 mm
Voltage	10 - 27 VDC
Current consumption Stand by:	< 0,3mA
Degree of protection	IP66
Working temperature	- 20 - + 70°C
Storage temperature	- 55 - + 70°C
Humidity (non condensing)	Max. 95% RH
Maintenance	None
Service	Replace if faulty
EC type examination certificate	NEMKO 04ATEX1406
EX parameter	⊕ II 2 (3) G EEx d [nL IIB] IIC T6 Ta: 70°C
Directives and standards	Atex 94/9/EC EN 50014 EN 50018 89/336/EEC (EMC) Emission: EN 50081-1: 1992 Immunity: EN 50130-4: 1995 EN 61000-6-2: 1999

Part number	Description
116-BD-505/140EXD	Heat detector alarm temperature 60°C (140°F)
116-BD-505/160EXD	Heat detector alarm temperature 70°C (160°F)
116-BD-505/190EXD	Heat detector alarm temperature 90°C (190°F)

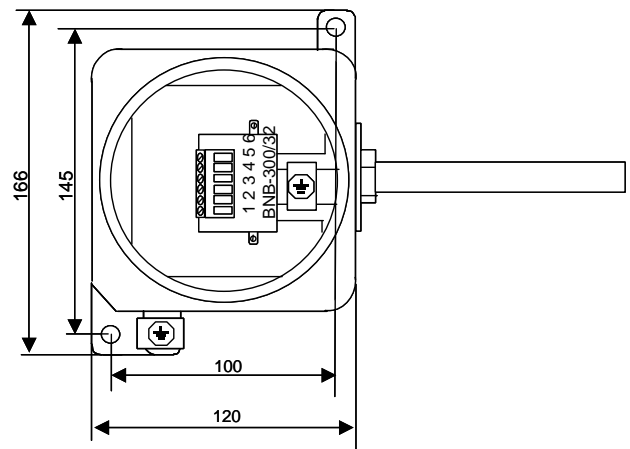
**Instructions for use in hazardous area**

- Installation must be performed by qualified personnel
- Electrical installation design must be according to IEC 60079-14, or local regulations
- Cable glands must be certified EEx d
- Only fully intact detectors must be installed
- Compliance to National safety regulations must be observed

**Maintenance**

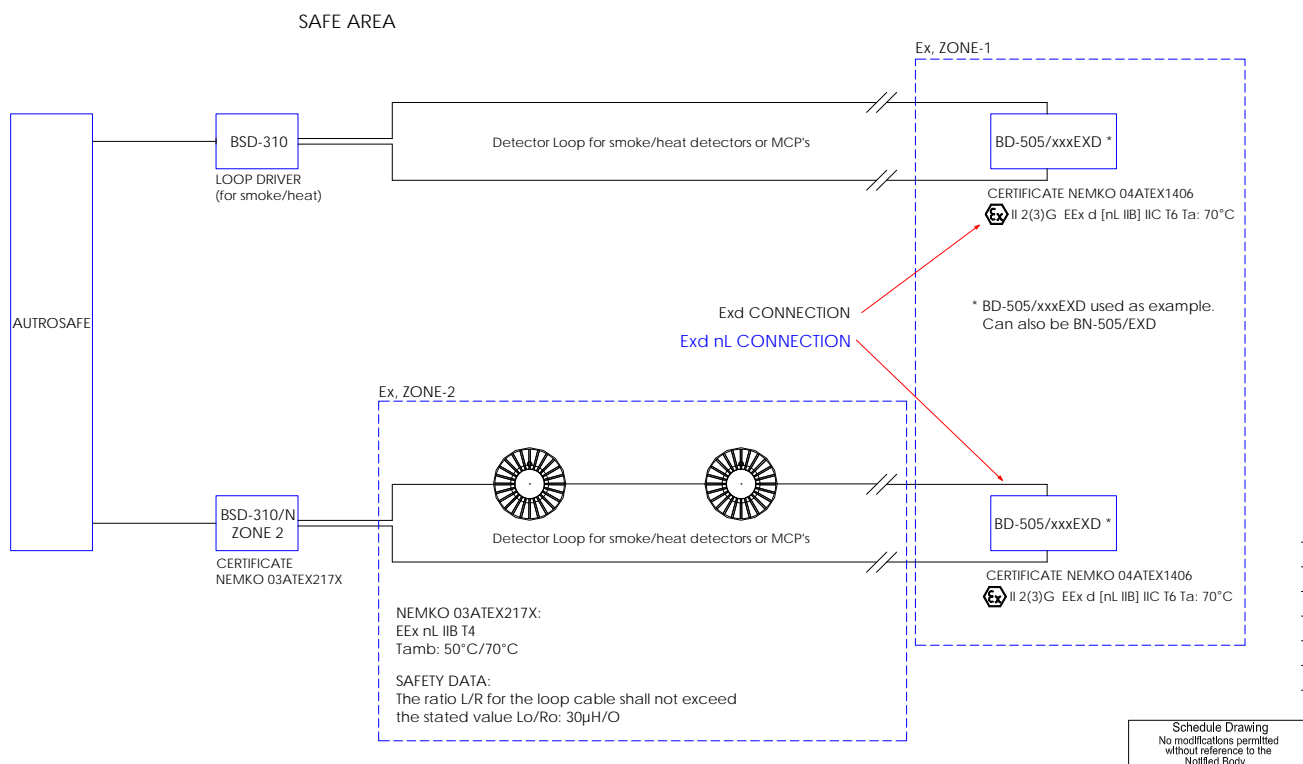
- Power must be switched off before opening the enclosure
- Replace faulty units

**Connections / Dimensions (mm)**



1. + in
2. + out
3. - in
4. - out
5. internal connection
6. internal connection

**Control Drawing Exd and Exd nL Installation**



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