

[1] EU-TYPE EXAMINATION CERTIFICATE

[2] Equipment or Protected System Intended for use
in Potentially explosive atmospheres
Directive 2014/34/EU

[3] **EU-Type Examination Certificate Number:** Nemko 04 ATEX 1406 X Issue 5

[4] **Product:** Heat Detector and Interface unit
[5] **Manufacturer:** Autronica Fire and Security AS
[6] **Address:** Bromstadvegen 59
N-7047 Trondheim
Norway

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] Nemko AS, notified body number 0470, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. PRJN-269174-2021-PA-NOR


[9] **Compliance with the Essential Health and Safety Requirements has been assured by compliance with:**

EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-11:2012

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

[11] This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate

[12] The marking of the product shall include the following:

 II 2 G Ex db IIC T6 Gb, Ta: +70°C
II 2(3) G Ex db [ic IIB Gc] IIC T6 Gb, Ta: +70°C

Oslo, 2021-08-25



Geir Hørthe
Certification Manager

[13] Schedule

[14] **EU-TYPE EXAMINATION CERTIFICATE No** Nemko 04 ATEX 1406 X Issue 5

[15] **Description of Product**

Fixed mount heat detector and interface unit are intended for fire detection. It consists of certified empty (GUB) flameproof enclosure and heat detector probe mounted in one of the enclosure threaded entries. GUB enclosure includes connection terminal and can include certified interface module which provides intrinsically safe output(s) for zone 2.

Heat detector probe includes the flameproof seal (cement) which separates the probes internal compartment volume ($V < 10 \text{ cm}^3$) from the rest of the enclosure. The probe is made by welding and it was evaluated and tested as integral part of equipment.

Equipment is provided with threaded entries intended for certified cable glands and/or plugs. The examination of the detector doesn't include the functional performance of the apparatus.

Type Designations

Model	Ex code
BD-55/XXX EXD	II 2 G Ex db IIC T6 Gb, Ta: +70°C
BD-505/XXX EXD, BN-505/EXD	II 2(3) G Ex db [ic IIB Gc] IIC T6 Gb, Ta: +70°C

Electrical Data

BN-505/EXD: Input Unit with Self verify

Input unit for connection to AutoSafe interactive fire alarm system.

Rating and principal characteristics: 10-27V DC, current consumption stand by: <0,3mA.

BD-505/XXX EXD: Heat Detector D-A-F/BN300

Point heat detector mounted in an EEx d junction box with a interface module for adoption to the AutoSafe system.

Rating and principal characteristics: 10-27V DC, current consumption stand by: <0,3mA.

XXX in type designation may be 140, 160 or 190 which indicate the heat detector alarm temperature in °F.

BD-55/XXX EXD: Conventional D-A-F Heat Detector

Point heat detector mounted in an EEx d junction box designed for use with conventional fire alarm and extinguishing systems.

Rating and principal characteristics: 10-27V DC, current consumption stand by: <0,3mA.

XXX in type designation may be 140, 160, 190, 225, 275, 325, 360 or 450 which indicate the heat detector alarm temperature in °F.

Degrees of protection (IP Code)

IP66

Ambient temperature:

-20°C to +70°C

Routine tests

The integrity of the welds on Heat detector probe enclosure have to be verified by liquid penetrant inspection method specified in Cl. 16.3 of EN 60079-1:2014 (in accordance with ASTM E1417/E1417M).

[16] Report No. PRJN-269174-2021-PA-NOR

Descriptive Documents

Number	Title	Rev	Date
27121-20	Detect-A-Fire	KB	2002-06-20
Doc-1000100	BD-55/xxx EXD type label	3	2021-08-18
116- BD-55/xxx EXD	BOM	-	2017-09-04
Doc-1001244	BD-505/xxx EXD type label	3	2021-08-18
116- BD-505/xxx EXD	BOM	-	2017-09-04
Doc-1001245	BN-505/ EXD type label	3	2021-08-18
BN-505/ EXD	BOM	-	2017-09-04
Doc-1003503	BD-55/xxx EXD control drawing, user manual	2	2021-08-18
Doc-1003506	BD-505/xxx EXD control drawing, user manual	2	2021-08-18
Doc-1003510	BN-505/ EXD control drawing, user manual	2	2021-08-18

Certificate History and Associated Nemko Reports

Issue	Date	Report	Description
0	2015-05-03	26381	Prime Certificate released
1	2008-09-15	113195	Compliance with 60079 standards
2	2010-06-30	146784	New electronic module included
3	2017-10-02	D0003032	Additional testing, update acc. To latest standard issues
4	2019-04-24	D0003900	Routine overpressure testing requirement is substituted with integrity verification of welded joints
5	2021-08-25	PRJN-269174-2021-PA-NOR	Update to the latest issue of EN 60079-0 and new address.

[17] Specific Conditions of Use

- Flameproof joints are not intended to be repaired.
- The loop driver module is intended for mounting in the AutoSafe Fire Alarm Control panel and connected to the power supply BSS-310A
- The ratio L/R for the loop cable shall not exceed the stated value: Lo/Ro:30μH/Ω

[18] Essential Health and Safety Requirements

Essential Health and Safety Requirements (EHSRs) are covered by the standards listed at item 9