



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEX PRE 17.0018X** Page 1 of 4 Certificate history:  
Status: **Current** Issue No: 2 [Issue 1 \(2019-04-24\)](#)  
[Issue 0 \(2017-10-02\)](#)  
Date of Issue: 2021-08-25  
Applicant: **Autronica Fire and Security AS**  
Bromstadvegen 59  
7047 Trondheim  
**Norway**  
Equipment: **Heat detector and Interface unit**  
Optional accessory:  
Type of Protection: **Ex d, i**  
Marking: **BD-55/XXX EXD**  
Ex db IIC T6 Gb, Ta: +70°C  
  
**BD-505/XXX EXD, BN-505/EXD**  
Ex db [ic IIB Gc] IIC T6 Gb, Ta: +70°C

Approved for issue on behalf of the IECEx  
Certification Body:

**Asle Kaastad**

Position:

**Certification manager**

Signature:  
(for printed version)

Date:

2021-08-25

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**DNV Product Assurance AS**  
**Veritasveien 3**  
**Hovik 1363**  
**Norway**





# IECEX Certificate of Conformity

Certificate No.: **IECEX PRE 17.0018X**

Page 2 of 4

Date of issue: 2021-08-25

Issue No: 2

Manufacturer: **Autronica Fire and Security AS**  
Bromstadvegen 59  
7047 Trondheim  
**Norway**

Additional  
manufacturing  
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

## STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

**IEC 60079-0:2017** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:7.0

**IEC 60079-1:2014-06** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0

**IEC 60079-11:2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

## TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[NO/PRE/ExTR17.0046/02](#)

Quality Assessment Report:

[NO/NEM/QAR10.0005/08](#)



# IECEX Certificate of Conformity

Certificate No.: **IECEX PRE 17.0018X**

Page 3 of 4

Date of issue: 2021-08-25

Issue No: 2

## EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

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 which provides intrinsically safe output(s) (EPL: Gc). List of the certified components are specified in Table 1 (attachment).

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 as 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

**BD-55/XXX EXD, BD-505/XXX EXD, BN-505/EXD**

## 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:  $< 0,3 \text{ mA}$ .

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

Point heat detector mounted in an Ex d junction box with an interface unit for adoption to the AutoSafe system. Rating and principal characteristics: 10-27V DC, current consumption stand by:  $< 0,3 \text{ mA}$ . 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 Ex d junction box designed for use with conventional fire alarm and extinguishing systems. Rating and principal characteristics: 10-27V DC, current consumption stand by:  $< 0,3 \text{ mA}$ . XXX in type designation may be 140, 160, 190, 225, 275, 325, 360, 450, 600 or 725, which indicate the heat detector alarm temperature in °F.

## Degrees of protection (IP Code)

IP66

**Ambient temperature:**  $-20^\circ\text{C}$  to  $+70^\circ\text{C}$

## 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 IEC 60079-1:2014 ( in accordance with ASTM E14A/E1417M).

## SPECIFIC CONDITIONS OF USE: YES as shown below:

-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:  $\text{Lo/Ro}: 30 \mu\text{H}/\Omega$



# IECEX Certificate of Conformity

Certificate No.: **IECEX PRE 17.0018X**

Page 4 of 4

Date of issue: 2021-08-25

Issue No: 2

**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Update to the latest edition of IEC 60079-0 and correct address.

**Annex:**

[Table 1 - Certified Components\\_ssp-4-5-iecex-i1-f1.pdf](#)

Annex to certificate: IECEx PRE 17.0018X/02

Table 1. List of Certified components

No	COMPONENT			CERTIFICATES		RATINGS
	manufacturer	name/ code	protection	number&edition	standards	voltage, current, temperature
1	CORTEM Spa.	Empty enclosure, series GUB W00	II 2 G Ex db IIC Gb	CESI 01 ATEX 034 U IECEX CES 14.0012U Issue 1	EN 60079-0:2012 EN 60079-1:2014 IEC 60079-0:2011, Edition 6.0 IEC 60079-1:2014 Edition 7	-50°C to +150°C
2	AUTRONICA Fire and Security AS	Loop driver BSD-310/N	II 3G [Ex ic Gc] IIB II 3 G Ex ic IIB T4 Gc	Nemko 03 ATEX 217 X IECEX NEM 11.0017U issue 0	EN 60079-0:2018 EN 60079-11:2012 IEC 60079-0 : 2017 Edition: 7.0 IEC 60079-11 : 2011 Edition: 6.0	3 V, 60 mA -20°C to +70°C