



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

Certificate No.: **IECEx NEM 11.0017X**

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Certificate history:

Status: **Current**

Issue No: 4

[Issue 3 \(2021-06-22\)](#)

[Issue 2 \(2016-05-20\)](#)

[Issue 1 \(2014-09-16\)](#)

[Issue 0 \(2012-03-08\)](#)

Date of Issue: 2023-11-30

Applicant: **Autronica Fire & Security AS**
Bromstadvegen 59
Trondheim 7047
Norway

Equipment: **Loop driver and detectors**

Optional accessory:

Type of Protection: **ic**

Marking: [Ex ic Gc] IIB
ExEx ic IIB T4 Gc

Approved for issue on behalf of the IECEx
Certification Body:

Asle Kaastad

Position:

Certification Manager, Ex-products

Signature:
(for printed version)

Date:
(for printed version)

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 or use of this QR Code.



Certificate issued by:

DNV Product Assurance AS
Veritasveien 1
1363 Høvik
Norway





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

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 60079-11:2011](#) 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 Reports:

[NO/NEM/ExTR11.0025/03](#)

[NO/NEM/ExTR11.0025/04](#)

Quality Assessment Reports:

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

[NO/NEM/QAR10.0005/10](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

This Certificate covers a detector system that comprises a loop driver unit and detector units for smoke, heat and manual calls. Up to 127 detector units may be connected to one detector loop. The loop driver module is intended for mounting in the AutoSafe Fire Alarm Control panel and connected to the power supply BSS-310A.

Type Designations

Ex ic IIB T4 Gc

Manual Call Points:

BF-500V2/N (-30°C ≤ Ta ≤ +70°C)

BF-501/N, BF-503/N/0100, BF-503/N/0300, BF-503/N/0400, BF-503/N/0500 and BNB-300 (-20°C ≤ Ta ≤ +70°C)

BF-502/N (-25°C ≤ Ta ≤ +70°C)

Heat Detectors:

BDH-500/N and BD-501/N (-20°C ≤ Ta ≤ +70°C)

Optical Smoke Detectors:

BHH-500/N and BHH-500/S/N (-20°C ≤ Ta ≤ +70°C)

Multisensor Smoke Detector:

BHH-520/N (-20°C ≤ Ta ≤ +70°C)

Input unit:

BN-500/N (-20°C ≤ Ta ≤ +70°C)

[Ex ic Gc] IIB

Loop driver:

BSD-310/N (-20°C ≤ Ta ≤ +70°C)

Intrinsic Safety Data

Loop driver:

The ratio L/R for the loop cable shall not exceed the stated value: Lo/Ro:30mH/W

Manual Call Points, Heat Detectors, Optical Smoke Detector, Multisensor Smoke Detector and Input unit:

Maximum input voltage Ui: 15,75V

Maximum input current Ii: 63,5mA

Maximum input power Pi: 0,44W

Maximum internal capacitance Ci: 21,6nF

Maximum internal inductance Li: 0mH

Degrees of protection (IP Code)

BF-500V2/N IP65 according to IEC 60529.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1.The loop driver module is intended for mounting in the AutoSafe Fire Alarm Control panel and connected to the power supply BSS-310A

2.The loop driver module may only be used in locations, sheltered from dust and water. The degree of protection is IP 30 D

BF-500V2N: IP22D without lid and IP24D with lid.

3.The ambient temperature differs from the normal range and is specified in this certificate.

4.The hardware circuit unit type, BNB-300, must be mounted in an enclosure that complies to IEC/EN 60079-0 and IEC/EN 60079-7 or IEC/EN 60079-11.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Update the document, new enclosure with IP65 code. Add new breaking element glass and plastic. Extend the ambient temperature to $-30^{\circ}\text{C} \leq T_a \leq +70^{\circ}\text{C}$.