

## **IECEx Certificate** of Conformity

**Asle Kaastad** 

Certification Manager, Ex-products

#### 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** Page 1 of 4

Issue No: 4 Status: Current

2023-11-30 Date of Issue:

**Autronica Fire & Security AS** Applicant:

Bromstadvegen 59 Trondheim 7047

Norway

Equipment: Loop driver and detectors

Optional accessory:

Type of Protection:

Marking: [Ex ic Gc] IIB

ExEx ic IIB T4 Gc

Approved for issue on behalf of the IECEx

Certification Body:

Position:

Signature: (for printed version)

(for printed version)

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   The Status and authenticity of this certificate may be verified by visiting <a href="https://www.iecex.com">www.iecex.com</a> or use of this QR Code.



Certificate history: Issue 3 (2021-06-22)

Issue 2 (2016-05-20) Issue 1 (2014-09-16)

Issue 0 (2012-03-08)

Certificate issued by:

**DNV Product Assurance AS** Veritasveien 1 1363 Høvik **Norway** 





## **IECEx Certificate** of Conformity

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Date of issue: 2023-11-30 Issue No: 4

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 AutroSafe Fire Alarm Control paneland connected to the power supply BSS-310A.

#### **Type Designations**

#### Ex ic IIB T4 Gc

Manual Call Points:

BF-500V2/N (-30°C  $\leq$  Ta  $\leq$  +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  $\leq$  Ta  $\leq$  +70°C)

**Heat Detectors:** 

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

Optical Smoke Detectosr:

Multisensor Smoke Detector: BHH-520/N (-20 $^{\circ}$ C  $\leq$  Ta  $\leq$  +70 $^{\circ}$ C)

Input unit:

 $BN-500/N (-20^{\circ}C \le Ta \le +70^{\circ}C)$ 

#### [Ex ic Gc] IIB

Loop driver:

BSD-310/N (-20°C  $\leq$  Ta  $\leq$  +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
Maximum input current
Maximum input power
Maximum internal capacitance
Maximum internal inductance

Ui: 15,75V
Ii: 63,5mA
Pi: 0,44W
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 AutroSafe 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 typr, 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)
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Update the document, new enclosure with IP65 code. Add new breaking element glass and plastic. Extend the ambient temperature to -30°C ≤ Ta ≤ +70°C.