



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 11.0009X**

Page 1 of 5

Certificate history:

Status: **Current**

Issue No: 6

[Issue 5 \(2022-02-01\)](#)

[Issue 4 \(2019-01-08\)](#)

[Issue 3 \(2016-05-11\)](#)

[Issue 2 \(2014-10-08\)](#)

[Issue 1 \(2011-09-14\)](#)

[Issue 0 \(2011-07-15\)](#)

Date of Issue: 2023-11-30

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

Equipment: **Call points, Heat, Smoke Detectors and Input Unit**

Optional accessory:

Type of Protection: **Intrinsic safety**

Marking: Ex ia IIC T5 Ga Tamb -30°C / -20°C to +70°C

Ex ia IIIC T200 115°C Da Tamb -20°C to +70°C

(Dust certification only for BF-502/EX and BN-500/EX)

Approved for issue on behalf of the IECEx
Certification Body:

Asle Kaastad

Position:

Certification Manager

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





IECEx Certificate of Conformity

Certificate No.: **IECEx NEM 11.0009X**

Page 2 of 5

Date of issue: 2023-11-30

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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/ExTR11.0014/00
NO/NEM/ExTR11.0014/03
NO/PRE/ExTR19.0002/02

NO/NEM/ExTR11.0014/01
NO/PRE/ExTR19.0002/00

NO/NEM/ExTR11.0014/02
NO/PRE/ExTR19.0002/01

Quality Assessment Report:

NO/NEM/QAR10.0005/10



IECEx Certificate of Conformity

Certificate No.: **IECEx NEM 11.0009X**

Page 3 of 5

Date of issue: 2023-11-30

Issue No: 6

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Point detectors for smoke, heat and manual call points. The units are designed to be used in fire alarm systems. The detectors and call points must be connected to a certified intrinsically safe output circuit. The smoke and heat detectors consists of a separate detector head, fitted to the socket BWA-100, by means of a bayonet socket. The sockets may alternative be mounted on the box BWP-100. This certificate do also cover a input unit type BN-500/EX. The input unit type is used to interface different types of signal devices of ON/OFF type onto the Autosafe. This unit does also have a intrinsically safe output.

Additional informantion in the ANNEX to this certificate.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The surface of the of isolating material exceeds the limit 4cm^2 as specified in IEC 60079-26 and the probability of electrostatic charging need to be considered for use in category 1 (Zone 0, 20, 21 and 22).
3. BF-506/EX: Contains aluminum. Beat/impact may cause sparks.
2. The equipment shall be connected to a certified intrinsically safe output circuit with output data not exceeding the above stated input values.



IECEx Certificate of Conformity

Certificate No.: **IECEx NEM 11.0009X**

Page 4 of 5

Date of issue: 2023-11-30

Issue No: 6

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Update the documents and new enclosure with IP code.

Add new breaking element glass and plastic.

Extend the ambient temperature to BF-500V2/EX: $-30^{\circ}\text{C} \leq T_a \leq +70^{\circ}\text{C}$.



IECEx Certificate of Conformity

Certificate No.: **IECEx NEM 11.0009X**

Page 5 of 5

Date of issue: 2023-11-30

Issue No: 6

Additional information:

See Annex to CoC.

Annex:

[Annex to CoC_1.pdf](#)

Annex to certificate: IECEx NEM 11.0009X/06

Description of Product:

Point detectors for smoke, heat and manual call points. The units are designed to be used in fire alarm systems. The detectors and call points must be connected to a certified intrinsically safe output circuit. The smoke and heat detectors consists of a separate detector head, fitted to the socket BWA-100, by means of a bayonet socket. The sockets may alternative be mounted on the box BWP-100. This certificate do also cover a input unit type BN-500/EX. The input unit type is used to interface different types of signal devices of ON/OFF type onto the Autrosafe. Only BF-502/EX and BN-500/EX are certified for dust.

Type Designations

Heat Detector Type: BDH-500/EX, BD-501/EX

Optical Smoke Detectors Type: BHH-500/EX and BHH-500/S/EX

Multisensor Smoke Detectors Type: BHH-520/EX

Manual Call Point: BF-500V2/EX, BF-501/EX, BF-502/EX, BF-503/EX/0100, BF-503/EX/0300, BF-503/EX/0400, BF-503/EX/0500, BF-506/EX.

Intrinsic Safety Data

Maximum input voltage U_i : 15,75V

Maximum input current I_i : 63,5mA

Maximum input power P_i : 0,44W

Maximum internal capacitance C_i : 21,6nF

Maximum internal inductance L_i : 0mH

Type Designation

Input unit : BN-500/EX

Intrinsic Safety Data

Terminals 1,2,3,4, loop connection

Maximum input voltage U_i : 15,75V

Maximum input current I_i : 63,5mA

Maximum input power P_i : 0,44W

Maximum internal capacitance C_i : 21,6nF

Maximum internal inductance L_i : 0mH

Terminals 5,6, monitoring connection

Maximum output voltage U_o : 15,75V

Maximum output current I_o : 51mA

Maximum output power P_o : 0,36W

Maximum external capacitance C_o : 20nF

Maximum external inductance L_o/R_o : 50μH/Ω

Degrees of protection (IP Code)

BF-506/EX: IP66 according to IEC 60529.

BF-500V2/EX: IP65 according to IEC 60529.

Ambient temperature:

-20°C to +70°C

BF-500V2/EX: -30°C ≤ T_a ≤ +70°C.

Routine tests

None