



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 11.0008	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 4	Issue 3 (2019-09-19)
Date of Issue:	2024-11-21		Issue 2 (2015-05-22)
Applicant:	Autronica Fire and Security AS Bromstadvegen 59 7047 Trondheim Norway		Issue 1 (2014-10-15)
Equipment:	Interface and shunt protection unit.		Issue 0 (2011-05-11)
Optional accessory:			
Type of Protection:	Intrinsic safety		
Marking:	[Ex ia Ga] IIC -20°C ≤ Ta ≤ +60°C		
	[Ex ia Da] IIIC -20°C ≤ Ta ≤ +60°C		

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





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

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

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 Report:

[NO/NEM/ExTR11.0004/04](#)

Quality Assessment Report:

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



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The BZB-500 is an interface and shunt protection unit for interconnection between a certified safety barrier and certified intrinsically safe detectors. The electronic circuit board of the unit contains a non-intrinsically safe section and a section with an intrinsically safe shunt device. The two sections are interconnected with a certified galvanic or diode safety barrier.

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Update IEC 60079-0 to the latest edition.
- Update marking plate and control drawing to include UKEX marking.
- New additional coatings to circuit boards.
- Correction of zip code.
- Remove UKEX marking from marking labels.
- Remove R29 from BOM.

Annex:

[Annex to IECEx NEM 11.0008 issue 4.pdf](#)

ANNEX to Certificate of Conformity.

Description of Equipment or Protective System

The BZB-500 is an interface and shunt protection unit for interconnection between a certified safety barrier and certified intrinsically safe detectors. The electronic circuit board of the unit contains a non-intrinsically safe section and a section with an intrinsically safe shunt device. The two sections are interconnected with a certified galvanic or diode safety barrier.

Type Designation

BZ-500/01: Shunt protection unit and safety barrier

BZ-500: Complete enclosure with terminals, safety barrier and shunt unit

Safety Data

Non Intrinsically safe part
Terminals 7, 8, 9, 10, 11, 12
Um=250V

Intrinsically safe part.
Input terminals: Barr.Ex number 1 and 4
Maximum input voltage Ui: 28V
Maximum input voltage li: 93mA
Maximum input power Pi: 0,65W

Output terminals: AL_Com/EX, number 3 and 6
Maximum output voltage Uo: 15,75V
Maximum output current Io: 63,5mA
Maximum output power Po: 0,44W
Maximum external capacitance Co: 0,48µF
Maximum external inductance Lo: 1,26mH