

[1] EU-TYPE EXAMINATION CERTIFICATE

[2] Equipment or Protected System Intended for use
in Potentially explosive atmospheres
Directive 2014/34/EU

[3] EU-Type Examination Certificate Number: **Nemko 03ATEX 230** Issue 7

[4] Product: **Interface and Shunt Protection**

[5] Manufacturer: **Autronica Fire and Security AS**

[6] Address: **Bromstadvegen 59
N-7483 Trondheim
Norway**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] Nemko AS, notified body number 0470, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no.

D0003849

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012/A11:2013, EN 60079-11: 2012

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

[11] This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate

[12] The marking of the product shall include the following:



II (1) G

[Ex ia Ga] IIC

III (1) D

[Ex ia Da] IIIC

Oslo, 2019-09-19



Geir Hørthe
Certification Manager

[13] Schedule

[14] **EU-TYPE EXAMINATION CERTIFICATE No** **Nemko 03ATEX 230** **Issue 7**

[15] **Description of Product**

The BZ-500/01 is an interface and shunt protection unit interconnected with 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 Designations

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

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

Electrical 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 $U_i=28V$

Maximum input current $I_i=93mA$

Maximum input power $P_i=653mW$

Output terminals: AL_Com/EX, number 3 and 6

Maximum output voltage $U_o=15,75V$

Maximum output current $I_o=63,5mA$

Maximum output power $P_o=0,44W$

Maximum external capacitance $C_o=0,48\mu F$

Maximum external inductance $L_o=1,26mH$

Degrees of protection (IP Code)

IP 20

Ambient temperature:

-20°C to +60°C

Routine tests

N/A

[16] **Report No. D0003849**

Descriptive Documents

| Number | Title | Rev | Date |
|--------------------|--|-----|------------|
| 116-9212-326.0001* | BZA-500 Ex Barrier circuit board | 6.4 | 2019-06-05 |
| Doc-1003753* | Control Drawing/User Manual | 1 | 2019-06-05 |
| 116-BZ-081 | TILPASNINGSENHET FOR BZ-500 INTERFACE UNIT FOR BZ-500 | E | 2014-11-13 |
| Doc-1003708* | BZA-500 Schematic Modification | 2 | 2019-07-19 |
| 7212-326.107 | BZA-500 | 0 | 1999-09-21 |
| 7212-326.007 | BZA-500 | 0 | 1999-09-21 |
| Doc-1003694* | BZA-500 Modification Drawing | 1 | 2018-06-18 |
| Doc-1003777* | BZ-500/01 Type label | 1 | 2019-06-05 |
| Doc-1001754* | BZ-500 Type label | 3 | 2019-06-05 |
| 7212-326.000 | Gerber files for BZA-500 | 0 | - |
| Doc-1001568* | Coating drawing BZA-500 | 2 | 2019-04-09 |

Certificate History and Associated Nemko Reports

| Issue | Date | Report | Description |
|-------|------------|---------------------|--|
| 0 | 2003-06-18 | 10196 | Prime Certificate |
| 1 | 2004-05-20 | 10188 | Minor changes in the design. |
| 2 | 2005-07-04 | 47631 | Minor changes in the design. |
| 3 | 2008-09-15 | 113191 | To confirm compliance with the equivalent standards: IEC 60079-0: 1998, IEC 60079-11: 1999 and IEC 60079-26: 2004. |
| 4 | 2011-05-11 | 134000 | To confirm compliance with the equivalent standards: EN 60079-0: 2009 and EN 60079-11: 2007 |
| 5 | 2014-09-05 | D0001379/ 260246 | Minor changes of the descriptive documents. |
| 6 | 2015-05-22 | D0001379 | Minor component changes. Updated to EN 60079-0 : 2012 and EN 60079-11 :2012. |
| 7 | 2019-09-19 | D0003849 | Add PLM system to the WZA-500. Add dust code and new address |

[17] Specific Conditions of Use
None

[18] Essential Health and Safety Requirements
Essential Health and Safety Requirements (EHSRs) are covered by the standards listed at item 9