

Marine & Offshore Division

Certificate number: 09606/D0 BV File number: ACI 2500/072/02

Product code: 3780H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

Autronica Fire and Security AS

TRONDHEIM - NORWAY

for the type of product

ANCILLARIES FOR FIXED FIRE DETECTION AND FIRE ALARM SYSTEMS

Barrier Unit BZ-500

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships. IEC 60079-0 (2011) /COR2 (2013), IEC 60079-11 (2011) /COR1 (2012), IEC 60079-15 (2010), IEC 60079-26 (2014).

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 16 Jun 2021

For BUREAU VERITAS,

At BV OSLO, on 16 Jun 2016, Rune MARSTEIN





This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

Certificate number: 09606/D0 BV

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

- Product model or type designation :

Barrier Unit BZ-500

- Product description:

Barrier Unit BZ-500 is a complete enclosure with terminals, P+F safety barrier and BZB-500 shunt protection unit providing galvanic insulation.

It is intended to be used with Autronica's Interactive Detectors, Call Points and I/O Units.

Up to 20 Detectors, Call Points, etc... can be connected to a BZ-500 Barrier Unit.

Ingress Protection Index : IP55

Operating Temperature : -20 to 60 °C Power supply : 24 VDC

2. DOCUMENTS AND DRAWINGS:

Pepperl+Fuchs:

- Note No. 116-0348 dated 2010-Oct-19
- Data Sheet KFDO-CS-Ex1.54, Release 2011-07-11.

For modification D0 version:

Autronica:

- Data sheet 116-P-BZ500/CGB, Rev. J, 2014-12-03.

3. TEST REPORTS:

Test report N° 99-1467 Rev. 01.

Zener Barrier KFDO-CS-Ex1.54:

- IECEx Certificate No. BAS 08.0079 Issue 1, dated 2010-01-20, [Ex ia] IIC
- IECEx Certificate No. BAS 10.0007X Issue 0, dated 2010-01-20, Ex nA II T4

For modification D0 version:

BZB500:

- ATEX Certificate No. NEMKO 03ATEX230 Issue 6, dated 2015-05-22, [Ex ia Ga] IIC Ta = 60°C
- IECEx Certificate No. NEM 11.0008 Issue 2, dated 2015-05-22, [Ex ia Ga] IIC.

4. APPLICATION / LIMITATION:

- 4.1 BUREAU VERITAS Rules and Regulations for the Classification of Steel Ships.
- 4.2 Approval valid for ships intended to be granted with the following additional class notations: AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.
- 4.3 Each application and configuration is to be submitted to the Society's examination prior to fitting on board.
- 4.4 Ex-certification is not covered by this certificate, Applications in hazardous areas are to be approved in each case according to the Rules and Conditions for Safe Use specified in a valid Ex-Certificate issued by a Notified or Recognised Certification Body.

Certificate number: 09606/D0 BV

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 The above products are to be supplied by **Autronica Fire and Security AS** in compliance with the type described in this certificate.
- 5.2 This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 **Autronica Fire and Security AS** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
- 5.4 -Autronica Fire and Security AS has declared to Bureau Veritas the following production site(s):

Autronica Fire and Security AS Haakon VII's gate 4 7483 TRONDHEIM NORWAY

6. MARKING OF PRODUCT:

- Maker's name or trade mark.
- Serial number of the units.
- Equipment type number or model identification under which it was type-tested.
- Ex marking as relevant.

7. OTHERS:

- 7.1 It is **Autronica Fire and Security AS NORWAY**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.
- 7.2 This certificate supersedes the Type Approval Certificate No. 09606/C0 BV issued on 30 Aug 2011 by the Society.

*** END OF CERTIFICATE ***