

Marine & Offshore

Certificate number: 21021/C0 BV

File number: AP3952 Product code: 3781H

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

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Autronica Fire and Security AS

TRONDHEIM - NORWAY

for the type of product

FIRE DETECTION AND FIRE ALARM CONTROL UNITS

Autroprime Interactive Fire Detection System

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships.

EN 54-2:1997 + A1:2007

EN 54-4:1997 + A1:2002 + A2:2006

IEC 60092-504 : 2016 IEC 60533 :2015

EC code: 31

This certificate is issued to attest that Bureau Veritas Marine & Offshore 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: 08 Apr 2024

For Bureau Veritas Marine & Offshore,

At BV OSLO, on 08 Apr 2019, 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 Marine & Offshore. 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 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 Marine & Offshore 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.

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THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The **Autroprime** is an addressable Fire Detection System based on a stand-alone Control Panel (BS-200M or BC-250). A maximum of 8 additional panels can be connected including Repeater Panels (BS-211), Information Panels (BV-210), Fire Brigade Panels (BU-210) and Mimic Drivers (BUR-200).

1.1 - Fire Alarm Control Panel - BS-200M & BC-250:

1.1 - Fire Alarm Control Lanci	DO 20011 & DC 2001
Main Board	
Casing:	Steel cabinet
Protection Index:	IP 32
Capacity Max:	4 x Detection loops per fire alarm control panel
	127 x Loop units per detection loop
	32 x Loop units per branch on a detection loop
	40 x Loop sounders per detection loop
Communication Ports:	1 x RS-485 bus for communication with optional panels
	1 x RS-232/422/485 bus for communication with third-party equipment (e.g. VDR)
	1 x Ethernet / MODBUS
	2 x USB
Front Panel	Keypad with LCD display
Power Supply	
Main source:	1 x 115 / 230 VAC - 50 / 60 Hz (See § 4.9)
Optional Batteries:	2 x 12V / 5.5 Ah

1.1 - Optional Panels:

Repeater Panel BS-211 is identical (with the exception of an alphanumeric keypad) to the
Operator Panel BS-210, which is an integrated part of the Fire Alarm Control Panel BS-200
From the Fire Brigade Panel BU-210 it is possible to mute the panel's internal buzzer, silence
sounders/bells etc. and reset the system. Only alarms are shown on the display.
The BUR-200 is a Mimic Driver that is capable of driving 32 LEDs with series resistors on a
mimic panel for additional indication of alarms. In addition, 8 standard monitored inputs can be
used for reading various switches.
From the Information Panel BV-210 all alarm handling and system events can be monitored.
The most significant events/conditions are shown in the display.

1.2 - Software: Autoprime 2.1.x

2. DOCUMENTS AND DRAWINGS:

AUTRONICA:

Data Sheets Nos. 116-P-BS200M/CGB Rev. I dated 2018-03-09, 116-P-BS211/CGB Rev. B dated 2017-03-17, 116-P-BU210/CGB Rev. B dated 2017-03-17, 116-P-BUR200/CGB Rev. C dated 2011-01-20, 116-P-BV210/CGB Rev. B dated 2017-03-17, 116-P-BC250/CGB dated 2014-05-23.

System Description No. 116-P-APRIME2-SYSTEM/XGB Rev. B dated 2018 -03-23.

Operator's Handbook No. 116-P-APRIME2-OPERATE/FGB Rev. A dated 2018-03-07.

Installation Handbook No. 116-P-APRIME2-INSTALL/DGB Rev. D dated 2017-04-19.

Getting Started No. 116-P-APRIME2-GETSTAR/EGB Rev. B dated 2017-04-19.

Configuration Handbook No. 116-P-APRIME2-CONFIG/EGB Rev. B dated 2017-04-19

Modification for C0 version:

AUTRONICA:

Autoprime 2.1.2 Release Notes, dated 2019-03-18.

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3. TEST REPORTS:

Nemko:

Test Report - EN 54-2 No. 86445_3 Rev. 1 dated 22.02.2008

Test Report - EN 54-4 No. 86445_4 Rev. 1 dated 22.02.2008

Environmental Test Reports No. E07357.02 Rev. 02 dated 2008.02.22, No. E07357.03 Rev. 03 dated 2011.10.12 and No. E07357.05 Rev. 05 dated 2013.06.06.

Confirmation of Release Changes, Certificate 0470-CPD-0019 issued on 2012-08-27.

Teknologisk Institutt:

Vibration Test Report No. 3010-07-0145 dated 23.08.2007.

Modification for C0 version:

Nemko:

Test Report No. E18299.00, date31-01-2019.

Test Report - EN 54-2 No. E18106.00, dated 30-12-2018.

4. APPLICATION / LIMITATION:

- 4.1 BUREAU VERITAS Rules 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 Approval valid for ships having to comply with SOLAS 74 Convention, as amended, and for units having to comply with IMO Resolution A649 (The "MODU Code").
- 4.4 The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.
- 4.5 BUREAU VERITAS Environmental Category, EC Code: 31.
- 4.6 The minimum safe distance at which the equipment may be mounted from a standard or a steering magnetic compass is not to be less than 1.5 m.
- 4.7 The equipment is not to be fitted in hazardous areas.
- 4.8 Only type approved detectors shown to be compatible with the units should be used with them.
- 4.9 Power supply sources wiring: The main (respective emergency) feeder shall run from the main (respective emergency) switchboard to the changeover switch without passing through any other distributing switchboard.
- 4.10 The complete installation design showing the location of the unit, the type and location of the detectors, alarm sounders and manual call points should be submitted to the Society's Surveyors for approval.
- 4.11 Satisfactory performance tests should be witnessed on each installation by the Society's Surveyor after installation on board.
- 4.12 An instruction manual covering operation, maintenance and testing should be placed on board each ship fitted with this equipment.
- 4.13 Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.
- 4.14 On-board Tests are to be performed in accordance with requirements for Category II Equipment.

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.
- 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 For information, Autronica Fire and Security AS has declared to Bureau Veritas the following production site(s):

Autronica Fire and Security AS Bromstadveien 59 7483 TRONDHEIM NORWAY

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6. MARKING OF PRODUCT:

- 6.1 Maker's name or trademark
 - Serial number of the unit
 - Equipment type number or model identification under which it was type-tested
 - Date of approval
 - According to EN 54-2 and EN 54-4.
- 6.2 Alternatively, the marking may be presented on a display at equipment start- up.
- 6.3 The title and version of each software element included in the installed software system shall be either marked or displayed on command on the equipment.
- 6.4 When the marking and the title and version of the software are displayed only on the display, such information shall also be included in the equipment manual.

7. OTHERS:

- 7.1 It is **Autronica Fire and Security AS**'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 N° 21021/B1 BV issued on 19 Jun 2014 by the Society.

*** END OF CERTIFICATE ***