Marine & Offshore

Certificate number: 21021/D0 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 B

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: 26 Jun 2029

For Bureau Veritas Marine & Offshore,
At BV OSLO, on 26 Jun 2024,
Rune MARSTEIN

This certificate was created electronically and is valid without signature

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:

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:

Panel	
Repeater Panel - BS-211	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
Fire Brigade Panel - BU-210	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.
Mimic Driver - BUR-200	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.
Information Panel - BV-210	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

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

3. TEST REPORTS:

Nemko:
   Confirmation of Release Changes, Certificate 0470-CPD-0019 issued on 2012-08-27.
   Test Report No. E18299.00, date31-01-2019.
   Test Report - EN 54-2 No. E18106.00, dated 30-12-2018.
   Test Report No. E20070.01, dated 21-04-2021.
   Test Report No. E20071.01, dated 21-04-2021.
   Test Report No. 392825TRF544-R01, dated 21-04-2021.

Teknologisk Institutt:
   Vibration Test Report No. 3010-07-0145 dated 23.08.2007.

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 - BUREAU VERITAS Environmental Category, **EC Code: 31 B.**

4.4 - The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.

4.5 - Approval valid for ships having to comply with SOLAS 74 Convention, as amended, and for units having to comply with IMO Resolution A.1023(26) (The "MODU Code").

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 Firmware / Software successfully tested together in compliance with the rules as referred to in cover page, according to the declaration of the manufacturer are covered by this certificate.

4.14 - Any modification of the hardware, firmware or software having an impact on the product performance or functionality has to be validated with type testing.

4.15 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev 8.

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):

<div align="center">

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/C0 BV issued on 08 Apr 2019 by the Society.

*** END OF CERTIFICATE ***