



TYPE APPROVAL CERTIFICATE

Certificate No. : CPH19730-FD006 **Initial Approval** : 18th January, 2011
Product : Fire Detection and Alarm System
Manufacturer : Autronica Fire and Security AS
Bromstadvegen 59, N-7047 Trondheim, Norway

Product Description : Type : AutroSafe 4

- Comprising of
- BS-420M : Main control panel (Marine applications)
 - BS-420G : Main control panel (Offshore applications)
 - BS-430 : Operator panel
 - BU-BV-420 : Repeater panel
 - BC-420 : Controller
 - BP-405 : Power cabinet

" See Appendix 1 "

Approval Condition : " See Appendix 1 "

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships and EN 54-2, EN 54-4

This Certificate is valid until 17th January, 2021

Reissued at Busan, Korea on 24th February, 2020



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No (ME20006000435) and certificate No.(CPH19730-FD006).



KOREAN REGISTER

*General Manager of
Marine & Ocean Equipment Team*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
 2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
 3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
 4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Appendix 1

Product Description and/or Approval Condition

Certificate No : CPH19730-FD006

Date of Issue : 24th February, 2020

A. Product Description

1. Product Specification

- 1) Power supply : DC 24V (BS-420M/G, BS-430, BU-BV-420, BC-420)
AC 115/230V 50/60Hz (BP-405)
- 2) Degree of protection : IP 32
- 3) Operating temperature : -15 ~ 70°C
- 4) Software version : 4.10.x

2. Approved drawings and documents

- 1) Datasheet No. 116-P-BS420/CGB Rev. H, 116-P-BS430/CGB Rev. G,
116-P-BC420/CGB Rev. F, 116-P-BU-BV420/CGB Rev. E,
116-P-BP405/CGB Rev. B

3. Test Reports, etc.

- 1) Test Reports
 - DNV Test Report No. 2009-3664/-3710 Rev. 1 (EN 54-2 & EN 54-4)
 - DNV Test Report No. 2009-3691 Rev. 6 (IEC 60092-504 & IEC 60533)
 - applica Test Report No. 20630 Rev. 0 (EN 54-2)
 - applica Test Report No. 20887 Rev. 8 (IEC 60092-504)
 - applica Test Report No. 21439 Rev. 0 (IEC 60092-504)
 - Test Report SW release 4.8.0 Rev. 0 (EN54-2 & EN54-4)
 - applica Test Report No. 21366 Rev. 0 for SW release 4.10.0 (EN54-2)
- 2) Release Notes, AutroSafe Software 4.8.0 dated 2016-03-30
- 3) Release Notes, AutroSafe Software 4.10.0 dated 2018-09-07

B. Approval Condition

1. This approval is granted on the basis of the test reports and approved documents.
2. Unless specially directed by the Administration, this approval is not to be construed as a substitute for a flag Administration's approval. In order to be installed on board the Korean flag vessels in Korea, Product is to be type approved by the Korean Government.
3. The manufacturer should inform this Society of all kinds of revisions of the software. If the changes are recognized to affect functionality of the approved fire detection system, Type Test to confirm the reliability of the revised software may be performed in the presence of our surveyor.
4. The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.
5. In case where this system is installed on board, the system drawings for individual vessel are to be approved by this society.
- 6) Individual Product Certification is required.

< End of Certificate >