



Confirmation of Product Type Approval

Company Name: AUTRONICA FIRE AND SECURITY AS

Address: BROMSTADVEGEN 59P.O. BOX 5620 N-5620 Norway

Product: Fire Detection and Alarm System

Model(s): AUTROSAFE 4

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	19-LD1909031-PDA	22-NOV-2019	21-NOV-2024
Manufacturing Assessment (MA)	15-TR2939928	03-OCT-2015	02-OCT-2020
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3

Intended Service

Addressable fire detection and monitoring system for use on ABS classed vessels and offshore installations in accordance with the listed ABS Rules and International standards.

Description

Autrosafe 4 addressable fire detection system comprising the following panels and associated modules:-

BC-420 Controller (12 module),

BS-420 Fire Alarm Control Panel (12 module),

BS-430 Operating Panel and Connection Unit,

BU-BV-420 Repeater Panel,

BU110 Brigade Panel,

BV 110 Information Panel,

BP-405 Power Cabinet incorporating Power Board BSF-400 and capability for 2x12V, 18Ah batteries (not included),

BSD 310/311 Loop Driver Module,

BSB 310 Output Module (4 monitored outputs),

BSJ 310 Output Module (8 open collector non-monitored outputs),

BSE 310 Input Module (4 monitored inputs),

BSE 320 Input Module (8 non-monitored inputs, galvanically isolated),

BPS-405 Power Module (5 Amps),
BPS-410 Power Module (10 Amps),
BN-180 Autrokeeper,
BN-303 Single Monitored Input Unit,
BN-304 Single Monitored Input/Output Unit,
BN-305 Single Monitored Input Unit,
BN-307 Monitored Fire Alarm Device Control Unit,
BNB-330A Conventional Loop Interface,
BNB-331 Conventional Loop Interface.

Panels and modules are compatible with Series 200, 300 and 500 fire alarm detectors, Series 300 and 500 manual call points and other loop units listed in the documentation.

Ratings

IP Rating: IP32

Temp: -15C - +70C

Power Supply: 27.2VDC (18-32VDC),

BP-405: Input 86-132VAC or 176-264VAC; Output 24VDC 5A,;

Service Restrictions

- Unit certification will be required if the installation of the system is associated with a specific class notation (ACC, ACCU, ABCU), as per 4-9-3/1 and 4-9-3/Table 2 of the ABS Marine Vessels Rules (2019).

- Each configuration and individual application is to be specifically approved.

Comments

- Each particular application and installation is to be specifically approved.

- The manufacturer has provided a declaration about the control of or lack of Asbestos in this product

Notes, Drawings and Documentation

Drawing No. 005, AutoSafe Development Process, Revision: -, Pages: -

Drawing No. 009, AutoSafe_SW_relnotes_R_4_10_0, Revision: -, Pages: -

Drawing No. 009 - AutoSafe_SW_relnotes_R_4_10_0, 009 - AutoSafe_SW_relnotes_R_4_10_0, Revision: -, Pages: 1

Drawing No. 014, AutoSafe_4, Revision: -, Pages: -

Drawing No. 015, Final_Test_results_4, Revision: -, Pages: -

Drawing No. Applica 21439, Applica 21439, Date: 12-Nov-2018, Applica Test & Certification, Revision: -, Pages: 1

Drawing No. Applica SW 4, Applica SW 4, Date: 22-Mar-2018, Applica Test & Certification, Revision: -,

Pages: 1

Drawing No. Autroprime_relnotes_R_2_1_2, Autroprime_relnotes_R_2_1_2, Revision: -, Pages: 1

Drawing No. Bulletin_2019_02_GB_Autroprime_Release2_1_2, Bulletin_2019_02_GB_Autroprime_Release2_1_2, Revision: -, Pages: 1

Drawing No. Mar09, AutroSafe4-FAT_Class Society, Date: 17-Sep-2019, Autronica, Revision: -, Pages: -

Drawing No. Nemko E18299, Nemko E18299, Date: 31-Jan-2019, NEMKO, Revision: -, Pages: 1

Drawing No. Nemko Testreport 353111 TRF EN 54-2, Nemko Testreport 353111 TRF EN 54-2, Date: 30-Dec-2018, Revision: -, Pages: 1

Drawing No. bc420_cgb, bc420_cgb, Revision: -, Pages: 1

Drawing No. bnb330a_cgb, bnb330a_cgb, Revision: -, Pages: 1

Drawing No. bs420_cgb, bs420_cgb, Revision: -, Pages: 1

Drawing No. bs430_cgb, bs430_cgb, Revision: -, Pages: 1

Drawing No. bsd310_cgb, bsd310_cgb, Revision: -, Pages: 1

Drawing No. bu110_cgb, bu110_cgb, Revision: -, Pages: 1

Drawing No. bubv420_cgb, bubv420_cgb, Revision: -, Pages: 1

Drawing No. bv110_cgb, bv110_cgb, Revision: -, Pages: 1

Drawing No. FMEA, Failure Mode and Effects Analysis, Revision: -, Pages: 1

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 21/Nov/2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

ABS Rules

- Marine Vessels Rules (2019): 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-7-3/11.3.1, 4-7-3/11.3.2, 4-7-3/11.3.3(b), 4-8-3/1.7, 4-9-3/1, 4-9-3/5, 4-9-3/9.3.4, 4-9-9/7, 4-9-9/13, 4-9-9/Table1, 5C-7-6/5.7;
- Steel Vessels for Service on Rivers and Intracoastal Waterways Rules (2019): 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-1-1/3.3, 4-1-1/21, 4-4-1/25.1.4;
- Steel Barge Rules (2019): 1-1-4/7.9, 1-1-A3, 1-1-A4
- High Speed Crafts Rules (2019): 1-1-4/11.9, 1-1-A2, 1-1-A3, 4-5-1/13, 4-6-1/11, 4-7-9/7, 4-7-9/15, 4-7-9/Table 9
- Facilities on Offshore Installations Rules (2019): 1-1-4/9.7, 1-1-A2, 1-1-A3, 3-8/7.3 (i)-(ix);
- Mobile Offshore Units Rules (2019): 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-1-1/7.9, 4-3-1/11, 6-1-1/9, 6-1-1/13, 6-1-8/9;

International Standards

IACS UR E10 Rev.6:2014

SOLAS (Consolidated Edition 2014) II-2/7

FSS Code 2018 Chapter 9
EN 54-2:1997+A1:2006
EN 54-4:1998+A1:2003+A2:2006
EN 60950-1:2006+A2:2013
EN 54-17:2005
EN 54-18:2005/AC:2007

EU-MED Standards
NA

National Standards
NA

Government Standards
NA

Other Standards
NA



A handwritten signature in blue ink, appearing to read 'Joseph W. ...'.

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 13-Dec-2019 7:43

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.