



Certificate number: 09859/F0 BV

File number: ACI 2500/073/001

Product code: 0002H

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

SOFTWARE FOR MARINE APPLICATION

Integrated Safety & Emergency Management System

AutroMaster 4 ISEMS

(For using with AutroSafe and Autroprime Interactive and BS-100 Fire Detection Systems)

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships.

Bureau Veritas Rules on Cyber Security for the Classification of marine units NR659

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: 12 Jun 2031

For Bureau Veritas Marine & Offshore,

At BV OSLO, on 12 Jun 2026,

Jonny Pettersson

This certificate was created electronically and is valid without signature



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.

The electronic version is available at: <https://www.veristarpn.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=ofq0d6e8kb>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

- Product model or type designation :

AutroMaster 4 ISEMS

- Product description:

Integrated Safety and Emergency Management System intended to be used with the AutoSafe and Autoprime Interactive and BS-100 Fire Detection Systems.

1.1 - Supported Hardware / Protocols:

Technical specifications	
Compatible Platform*	PC based on x86
Resolution of Display*	1920 x 1080 pixels
Required physical Memory*	4096 Mb minimum
Required Drives*	Minimum 100 GB
Required Ports / Interfaces*	Serial / RS-232, RS-486 Ethernet, Dual Ethernet / Network Installation
Supported Protocols	ESPA 4.4.4 ModBus RTU, ModBus TCP/IP ASAP, AutoCom, VDR, NMEA, Gessler
Compatible Fire Detection Systems*	Autosafe Interactive (Ver. 3 & 4 - see § 1.2) Autoprime(Ver. 2) BS-100
Supported Emergency Lighting Systems*	DardoPlus, Dardo2
Operating System	Ubuntu LTS 22.04 and latest
Software Version	4.4.x

***Note:** Type approved equipment is to be used.

1.2 - Incompatibilities:

AutroMaster 4 for Ubuntu is not compatible with earlier versions of AutoMasters.

AutroMaster 4 ISEMS does not work with AutoSafe v3.4.0 and earlier

2. DOCUMENTS AND DRAWINGS:

Autronica Fire and Security:

- Doc-1016826 - Operator's Handbook, AutroMaster 4, Integrated Safety and Emergency Management System (ISEMS) for Ubuntu, rev.1, dated 23-10-2024.

- Doc-1016829 - Datasheet, AutroMaster 4, Integrated Safety and Emergency Management System (ISEMS) for Ubuntu, rev.1, dated 23-10-2024.

- Doc-1016828 - System Description, AutroMaster 4, Integrated Safety and Emergency Management System (ISEMS) for Ubuntu, rev.1, dated 23-10-2024.

- Doc-1016827 - Installation and Commissioning Handbook, AutroMaster 4, Integrated Safety and Emergency Management System (ISEMS) for Ubuntu, rev.1, dated 24-10-2024.

- Doc-1029771 - AUTROMASTER 4.4.3 SP1 Release Notes, rev.1, dated 26-03-2026.

- Doc-1010696 - AUTROMASTER 4.4.2 SP2 Release Notes, rev.2, dated 09-07-2024.

- Doc-1004486 - AUTROMASTER 4.3.3 SP3 Release Notes, rev.1, dated 24-09-2020.

- Doc-1016825 - Basic Configuration Handbook - AutroMaster ISEMS for Ubuntu, rev.2, dated 22-20-2024.

- Doc-1016824 - Advanced Configuration Handbook - AutroMaster ISEMS for Ubuntu, rev.2, dated 15-05-2025.

- Doc-1004383 - AutroMaster 4 Software Development Plan, rev.1, dated 10-07-2020.

3. TEST REPORTS:

DNV test report N° 99-1484 Rev.1 dated Nov. 09.99.

FAT at Fincantieri (Oceania, Hull 6195) dated 2011-05-05 and witnessed by BV Surveyor.

4. APPLICATION / LIMITATION:

- 4.1 - BUREAU VERITAS Rules for the Classification of Steel Ships.
- 4.2 - Each application and configuration is to be submitted to the Society's examination prior to fitting on board.
- 4.3 - The system, once installed on board ship, is to be tested together with the fire alarm system in accordance with the above referred Regulations under the supervision of a Society's Surveyor.
- 4.4 - The supported hardware used for AutoMaster 4 ISEMS are to be type approved by the society.
- 4.5 - The associated Fire Detection and Alarm systems are not to be used for any other purpose except the closing of fire doors, and similar functions may be permitted at the control panel.
- 4.6 - Equipment covered by this Type Approval Certificate has been assessed in compliance with IACS UR E27 rev.1 as described in Annex.

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

Autronica Fire and Security AS
Bromstadvegen 59
7047 TRONDHEIM
NORWAY

6. MARKING OF PRODUCT:

- 6.1 - Trade name and Date of manufacture and serial number.
- 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 No. 09859/E0 BV issued by the Society.

***** END OF CERTIFICATE *****

**BUREAU
VERITAS**

Attestation number: 83676/A0 BV

File number: TCF11_304

Product code: RA-CYBER

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

REVIEW ATTESTATION

This attestation is issued to

Autronica Fire and Security AS
TRONDHEIM - NORWAY

for

CYBERSECURITY REVIEW
Fire Detection System

Requirements:

NR659 Bureau Veritas Rules on cyber security for the classification of marine units.
IACS UR E27 Rev.1 Sep 2023 Cyber resilience of on-board systems and equipment.

This document is issued to attest that BUREAU VERITAS Marine & Offshore reviewed the technical documentation submitted for the equipment identified above. Details of this review are to be found in the "Schedule of Review" in the subsequent pages of this attestation.

For Bureau Veritas Marine & Offshore,

At BV OSLO, on 30 Mar 2026,

Jonny Pettersson

***This attestation was created electronically and is valid without
signature***



This attestation will not be valid if the applicant makes any changes or modifications to the product which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. This attestation 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 judgment, 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.

SCHEDULE OF REVIEW

1. PRODUCT DESCRIPTION :

AUTRONICA Fire Detection System is described in the certificate 23170/XX BV and 09859/XX BV.

2. DOCUMENTS AND DRAWINGS :

Filename	Reference
Product Cybersecurity Change Management Standard	Version 2.0
Product Cybersecurity Operational Incident Response, Backup & Recovery Guide	Version 1.0
Autronica Secure Development Lifecycle (SDL) Process	Version 2.0
Plans for Maintenance and Verification of the Computer Based Systems (CBS)	Dated 29/01/2026
System topology - BV E27 FIRE DETECTION SRtP SYSTEMS 4 - 6 MVZ, XX AUTROMASTER	Dated 08/12/2025
F071 - Inventory list	Dated 08/12/2025
Description of Security Capabilities	Version 2.2.0
Test Procedure for Security Capabilities	Version 2.1.0
Certificate of Conformity - Industrial Cyber Security Capability	Dated 10/11/2025
IEC 62443-4-2-compliant configuration of the FL SWITCH (TSN) 2000 product families User manual	Revision 01
IEC 62443-4-2-compliant configuration of the FL MGuard product family User Manual	Revision 04

No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.

3. TEST REPORTS :

Test report 'TEST REPORT - E27 Type Approval' dated 19/03/2026 was reviewed and approved for this attestation.

The following subjects were investigated :

1. Protect against casual or coincidental access by unauthenticated entities
 - IEC 62443-3-3/SR 1.1 : Human user identification and authentication
 - IEC 62443-3-3/SR 1.1 RE2 : Multifactor authentication for human users
 - IEC 62443-3-3/SR 1.2 : Software process and device identification and authentication
 - IEC 62443-3-3/SR 1.3 : Account management
 - IEC 62443-3-3/SR 1.4 : Identifier management
 - IEC 62443-3-3/SR 1.5 : Authenticator management
 - IEC 62443-3-3/SR 1.7 : Strength of password-based authentication
 - IEC 62443-3-3/SR 1.10 : Authenticator feedback
 - IEC 62443-3-3/SR 1.11 : Unsuccessful login attempts
 - IEC 62443-3-3/SR 1.12 : System use notification
 - IEC 62443-3-3/SR 1.13 : Access via Untrusted Networks
 - IEC 62443-3-3/SR 1.13 RE1 : Explicit access request approval
2. Protect against casual or coincidental misuse
 - IEC 62443-3-3/SR 2.1 : Authorization enforcement
 - IEC 62443-3-3/SR 2.3 : Use control for portable and mobile devices
 - IEC 62443-3-3/SR 2.4 : Mobile code
 - IEC 62443-3-3/SR 2.5 : Session lock
 - IEC 62443-3-3/SR 2.6 : Remote session termination
 - IEC 62443-3-3/SR 2.8 : Auditable events
 - IEC 62443-3-3/SR 2.9 : Audit storage capacity
 - IEC 62443-3-3/SR 2.11 : Timestamps

3. Protect the integrity of the CBS against casual or coincidental manipulation
 - IEC 62443-3-3/SR 3.1 : Communication integrity
 - IEC 62443-3-3/SR 3.1 RE1 : Cryptographic integrity protection
 - IEC 62443-3-3/SR 3.2 : Malicious code protection
 - IEC 62443-3-3/SR 3.3 : Security functionality verification
 - IEC 62443-3-3/SR 3.5 : Input validation
 - IEC 62443-3-3/SR 3.6 : Deterministic output
 - IEC 62443-3-3/SR 3.8 : Session integrity
 - IEC 62443-3-3/SR 3.8 RE1 : Invalidation of session IDs after session termination
4. Prevent the unauthorized disclosure of information via eavesdropping or casual exposure
 - IEC 62443-3-3/SR 4.1 : Information confidentiality
 - IEC 62443-3-3/SR 4.1 RE1 : Protection of confidentiality at rest or in transit via untrusted networks
 - IEC 62443-3-3/SR 4.3 : Use of cryptography
5. Monitor the operation of the CBS and respond to incidents
 - IEC 62443-3-3/SR 5.1 : Network segmentation
 - IEC 62443-3-3/SR 5.1 RE1 : Physical network segmentation
 - IEC 62443-3-3/SR 5.2 : Zone boundary protection
 - IEC 62443-3-3/SR 5.2 RE1 : Deny by default, allow by exception
 - IEC 62443-3-3/SR 5.2 RE2 : Island mode
 - IEC 62443-3-3/SR 5.3 : General purpose person-to-person communication restrictions
 - IEC 62443-3-3/SR 5.4 : Application partitioning
 - IEC 62443-3-3/SR 6.1 : Audit log accessibility
6. Ensure that the control system operates reliably under normal production conditions
 - IEC 62443-3-3/SR 7.1 : Denial of service protection
 - IEC 62443-3-3/SR 7.2 : Resource management
 - IEC 62443-3-3/SR 7.3 : System backup
 - IEC 62443-3-3/SR 7.4 : System recovery and reconstitution
 - IEC 62443-3-3/SR 7.5 : Emergency power
 - IEC 62443-3-3/SR 7.6 : Network and security configuration settings
 - IEC 62443-3-3/SR 7.7 : Least functionality

4. APPLICATION / LIMITATION :

- 4.1 - This attestation is an intermediate document and does not constitute by itself a BV Type Approval Certificate. This attestation is limited to cyber resilience of product described in 1. as per UR E27 Rev. 1 dated Sept.2023.
- 4.2 - Only hardware and firmware / software successfully tested together in compliance with the rules as referred to in page one, according to the declaration of the manufacturer are covered by this attestation.
- 4.3 - The installation shall comply with the Manufacturer's recommendation described in the above-referenced documentation.
- 4.4 - It is manufacturer's responsibility to inform the Society of any modification or changes which could impact the validity of this attestation.
- 4.5 - This attestation is only valid when attached to the valid Type Approval Certificate 23170/XX BV or 09859/XX BV.
- 4.6 - This attestation has been issued based on the review of documentation provided for the Type Approval Certificate 23170/D0 BV and 09859/F0 BV.

5. PRODUCTION SURVEY REQUIREMENTS :

- 5.1 - This product is to be supplied by **Autronica Fire and Security AS** in compliance with the type described in this attestation.
- 5.2 - For information, **Autronica Fire and Security AS** has declared to Bureau Veritas the following production site(s):

Autronica Fire and Security AS
Bromstadvegen 59
7047 TRONDHEIM
NORWAY

6. MARKING OF PRODUCT :

N/A

7. OTHERS :

- 7.1 - It is **Autronica Fire and Security AS** 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.

***** END OF ATTESTATION *****