



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. A-9862
This Certificate consists of 3 pages

This is to certify that the
Fire Alarm Central Unit
with type designation
AutoSafe Control System


Manufactured by
Autronica Fire and Security AS
TRONDHEIM, Norway

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application
Location classes:

| | |
|-------------|---|
| Temperature | B |
| Humidity | B |
| Vibration | A |
| EMC | B |
| Enclosure | A |


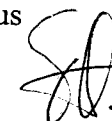
Place and date
Høvik, 2006-02-21
for DET NORSKE VERITAS AS


Knut Svein Ørding
Head of Section



Local Office
DNV Trondheim

This Certificate is valid until
2007-12-31


Guri B. Nerhus
Surveyor 

Notice: This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Cert. No.: A-9862
File No.: 473.11

Product description

AutoSafe Control System consisting of following units:

Fire alarm panels to be included in LON-communication ring:

| Code: | Function: |
|---------|--------------------------|
| BS-320M | Fire alarm control panel |
| BS-330M | Operator panel |
| BC-310M | Controller |
| BC-320M | Controller |
| BU-320M | Repeater panel |
| BV-320M | Information panel |

As stand alone system:

BS-310 Fire alarm central unit

Software version for all devices is V3.5.

Application/Limitation

System application to be in accordance with relevant parts of the Rules.

The following documentation of the actual application is to be submitted for approval in each case:

- Reference to this Type Approval Certificate
- System block diagram
- Power supply arrangement (may be part of the System block diagram)

The Type Approval covers hardware and software listed under Product description.

As long as the units are covered by the Type Approval, no Product certificate will be required according to Pt.4 Ch.9 Sec.1 A 202.

Product certificate.

Product certificate is not required. Correct configuration and set up for each delivery to be tested during commissioning after installation.

Clause for application software control.

All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Certification of Application Functions will normally be required.



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Type Approval documentation

Technical Documentation AutoSafe Release 3 dated October 2001

Test reports:

DNV 99-1291 rev.02
DNV 2000-1190 rev.02
EN54-2/EN54-4 no.99-1405 Rev.04
DNV 99-1491 Rev.02
DNV 2005-3330 Rev.01
DNV 99-1498 Rev.01
ANPI Addendum Nr. 3 : BFS/DE/1057-2004.09.07

Tests carried out

Tests according to C.N. 2.4.

Certificate retention survey

The scope of the retention/renewal survey is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the survey are:

- Ensure that type approved documentation is available.
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines.
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications.
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given.
- Ensuring traceability between manufacturer's product type marking and the type approval certificate.

Survey to be performed at renewal of this certificate.

END OF CERTIFICATE