



Certificate no.:
TAA00003SH

TYPE APPROVAL DESIGN CERTIFICATE

This is to certify:
that the Steering Gears

with type designation(s)
SG Alarm System AS02

issued to
Neuver Maritime AS
Brattvåg, Norway

is found to comply with
DNV rules for classification – Ships Pt.6 Ch.5 Sec.21 Cyber security

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.
This type approval design certificate covers the criteria for exclusion from the mandatory application of Pt.6 Ch.5 Sec.21 Cyber security, subject to conditions stated in this certificate.

Issued at **Høvik** on **2025-11-12**

This Certificate is valid until **2027-11-11**.

DNV local unit: **Mid-North Norway CMC**

for **DNV**

Approval Engineer: **Pål Børre Kristoffersen**

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Product description

The following components of the **Neuver Maritime SG Alarm System AS02** are covered by this certificate:

No.	Component Description	Type Designation	OS/Application SW Version	Connection Type
1.	Alarm panel in ECR	AS02-0120-021	RRDIO15_421_dsPIC_101.hex	CAN bus
2.	Alarm panel on the bridge	AS02-0120-021	RRDIO15_421_dsPIC_101.hex	24V PW, R5422 NMEA, CAN bus, PW
3.	Interface card in MC1	5260-RRDIO_402	RRDIO15_402_dsPIC_100.hex	CAN bus
4.	Interface card in MC2	5260-RRDIO_402	RRDIO15_402_dsPIC_100.hex	CAN bus

Application/Limitation

This Type Approval covers the design only. i.e. the Type Approval is not valid for the final product, but may be used as basis for being exempted from the list of Systems under Consideration (SuC), and not needing to obtain a product certificate.

The design as covered by this Type Approval has the following limitations:

Design Parameter	Conformance	(as in current conditions)
1) no IP-based network connection with other system	Yes	All units have no connection to the IP-network.
2) located in area(s) with restricted and controlled access	Yes	The SG alarm system AS02 is installed on the bridge and in the engine control room and alarm interface units in motor control cabinets. The panel units are enclosed, fitted in a restricted area.
3) no accessible physical interface ports	Yes	The panel units are without any software-controlled HMI or graphical layers but fixed LED indication of alarm status only.
4) not an integrated control system serving multiple vessel functions	Yes	Not integrated nor serving multiple ship functions, neither interact with any other ship services
5) not needed for propulsion and steering , and not include required safety functions	Yes	Needed for steering gear, but risk is accepted as negligible based on risk assessment.
6) not be susceptible by cyber incidents , nor propagate the effect of a cyber incident to other systems	Yes	
7) known vulnerabilities, threats, attack surface, and potential impacts deriving from a cyber incident have been considered	Yes	

Installation:

- The onboard type approved product shall be installed according to manufactures installation manual.

Cyber security:

- Components/Applications in the product description have been assessed towards the exemption criteria for DNV rules for ships Pt.6 Ch.5 Sec 21 [2.2] for Cyber Security (SP1) and IACS UR E26 [6.4], thus subjected system may be considered to represent negligible cyber risk and thus **exempted** from the list of Systems under Consideration (SuC), based on the above table for Design limitations.
- However, in the newbuilding survey, the surveyor shall verify that the system herein approved to be exempted, meets the design limitations as listed in the above table.

Type Approval documentation

DNV Doc. No.	Rev.	Title
35746638/DNV	B	Cyber Security Summary_rev-B.pdf

Tests carried out

None.

Marking of product

The type designation and name and contact address of the manufacturer shall be affixed visibly, legibly and indelibly to the onboard product. In addition, the onboard product shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

Periodical assessment

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

The scope of the periodical assessment 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 assessment 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 A renewal assessment will be performed at renewal of the certificate.

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END OF CERTIFICATE