



Potvrda br.
Certificate No.

03-001798/031443

POTVRDA O TIPNOM ODOBRENJU TYPE APPROVAL CERTIFICATE

Potvrđuje se da ovaj proizvod udovoljava Pravilima za klasifikaciju brodova, Dio 1. - Opći propisi, Odjeljak 3. - Tipno odobrenje proizvoda.
This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

TIP I OPIS PROIZVODA:
TYPE AND DESCRIPTION OF PRODUCT:

Alarm & Monitoring System NORIMOS 3500 (N3500/NS3500)

PROIZVOĐAČ:
MANUFACTURER:

Shanghai NORIS-SIBO Automation Co. Ltd.
G/F, No. 8 Building South
No. 2716 Pingliang Road, Yangpu
Shanghai, 200090
P. R. CHINA

PROIZVOD UDOVOLJAVA SLIJEDEĆIM PRAVILIMA/PROPISIMA:
THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

Hrvatski registar brodova: Pravila za klasifikaciju brodova,
Dio 12. – Električna Oprema, Dio 13. – Automatizacija
Croatian Register of Shipping: Rules for the classification of ships,
Part 12. – Electrical Equipment, Part 13. – Automation

IACS UR E10

DETALJI O PROIZVODU I UVJETIMA CERTIFIKACIJE DANI SU NA POLEĐINI.
FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

ODOBRENJE VRIJEDI DO: 2025-02-16
APPROVAL IS VALID UNTIL:

Mjesto i datum: Split, 2021-02-17
Place and date:

M.P. _____
(Seal)

Marinko Popović, dipl.ing.

NAPOMENA: Ova potvrda nije valjana ako se proizvod ili način njegove proizvodnje promijenio u odnosu na tipno ispitani proizvod. Proizvođač treba obavijestiti Hrvatski registar brodova o bilo kojoj izmjeni na proizvodu kako bi ishodilo valjanu potvrdu.
NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

PODROBNJI OPIS PROIZVODA:
DETAILED PRODUCT DESCRIPTION:

Alarmni, mjerni i upravljački sustav strojarnice pomorskih brodova sastoji se od:
Engine room alarm, measurement and control system on marine vessels consists of:

- AMS SAU 800x800
- Gateway : GATEWAY
- Binary measuring module : STM7-IN32
- I/O module : STM7-INOUT
- Integrated I/O module : STM7-AINOUT
- Current/Voltage measuring module : STM7-I/V1
- Thermal resistance measuring module : STM7-PT100
- Thermocouple measuring module : STM7-MV1
- Binary measuring module : STM7-SAFT
- Analog output module : D/A
- Extend Alarm panel (with/without Fire alarm) : N3510 / N3511
- Color LCD display (with/without Fire alarm) : N3520 / N3521
- Industrial computer : TANK-600
- UPS : V-1000
- TP-LINK : TL-SF1008+
- Display : Philips 17"
- Printer : LQ-300K+II
- Monitor Unit : N3500-MU-220-17
- Monitor Unit : N3500-MU-220-19
- Monitor Unit : N3500-MU-220-21
- Monitor Unit : N3500-MU-220-23
- Switch : N3500-HUB-SF1016D
- Keyboard : N3500-KB-1

Software ver.:

- TANK-600: REV 2.1
- GATEWAY: NS3500 GW-00

PODRUČJE PRIMJENE / POSEBNI GRANIČNI UVJETI:
APPLICATION / LIMITATIONS:

Sustav je odobren za primjenu na brodovima s dodijeljenom oznakom automatizacije – AUT1, AUT2 i AUT3.
Zahtjeva se pojedinačno odobrenje proizvoda, nadzor prilikom proizvodnje i testiranja proizvoda u nazočnosti inspektora HRB. Prethodno pojedinačnom odobrenju, dokumentacija koja se mora dostaviti HRB-u je iskazana u tablici u Pravilima za Klasifikaciju brodova, Dio 12, Poglavlje 2.10, Annex: Documents for the Register and test attendance.

Dodatno na gornji zahtjev, slijedeća dokumentacija se također mora dostaviti:

- Detaljne električne sheme
- Lista alarmnih i mjernih točaka (I/O lista)

Tipno odobrenje se odnosi na fizičke komponente (hardware) i upravljački program (software) koji su iskazani u opisu proizvoda. Ukoliko dođe do nadogradnje upravljačkog programa, HRB mora biti obaviješten.

*System is approved for use on board vessels granted with automation notations – AUT1, AUT2 and AUT3.
Product certification is required, supervision during manufacture and testing in presence of CRS surveyor. Prior to product certification, documentation that needs to be submitted to CRS is listed in Rules for Classification of ships, Part 12, Chapter 2.10, Annex: Documents for the Register and test attendance.*

In addition to above, following documentation also must be submitted:

- Detailed electrical drawings
- List of alarm and measurement points (I/O list)

Type approval covers hardware and software listed in Product description. In case of software update, CRS is to be notified.

DOKUMENTACIJA ZA TIPNO ODOBRENJE:
TYPE APPROVAL DOCUMENTATION:

- | | | |
|---------------|------------------|-------------------------------------|
| - Test report | : A15-053-ZC | - SITHIAS, dated 20.01.2016. |
| - Test report | : A16-024-WT | - SITHIAS, dated 07.12.2016. |
| - Test report | : A17-001-WT | - SITHIAS, dated 23.01.2017. |
| - Drawing No. | : N3500 YJ | - Alarm Monitoring System, Rev.02 |
| - Drawing No. | : NS3500 YJ | - Alarm & Monitoring System, Rev.01 |
| - Document | : NSB-TD-1002-EN | - N3500 FMEA, Version 1.00 |

OZNAČAVANJE PROIZVODA:
MARKING OF PRODUCT:

U skladu s IEC60945 – Označavanje i identifikacija (Naziv proizvođača i tip proizvoda, serijski broj, datum proizvodnje, sigurna udaljenost od magnetskog kompasa, napon napajanja, programska verzija....)

In accordance with IEC60945 – Marking and identification (The Manufacturer and Type Designation of the product, serial number, date of manufacture, safe distance to magnetic compass, supply voltage, software version...).

UVJETI ZA CERTIFIKACIJU:
CONDITIONS FOR CERTIFICATION:

Programske promjene treba zapisati za sve vrijeme upotrebe sustava na brodu. Zapis o programskim promjenama treba dostaviti HRB-u na odobrenje prije primjene.

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 CRS for evaluation and approval before being installed.