



Potvrda br.

03-001980/031680

Certificate No.

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:

Modular Navigation Light Controller – AHD-DPS02

AHD-DPS02 G14	Basic Module	SW – Ver. 3.49
AHD-DPS02 A07	Extension Module	SW – Ver. 15
AHD-DPS02 BS	Operation and Indicator Module	SW – Ver. 3

PROIZVOĐAČ:

MANUFACTURER:

Böning Automationstechnologie GmbH & Co. KG

Am Steenöver 4
27777 Ganderkesee
GERMANY

PROIZVOD UDOVOLJAVA SLIJEDEĆIM PRAVILIMA/PROPISIMA:

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

Hrvatski registar brodova: Pravila za klasifikaciju brodova
Croatian Register of Shipping: Rules for the classification of ships

IACS UR E10 Rev.8**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: 2027-10-12
APPROVAL IS VALID UNTIL:

Mjesto i datum: Split, 2023-10-12
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 ishodio 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.

PODROBNIJI OPIS PROIZVODA:
DETAILED PRODUCT DESCRIPTION:

Osnovne funkcije:

Basic functionalities:

*Basic Module with 14 lamp circuits
3 relay outputs and 1 binary input
Recording of operation hours for each lamp individually
Extension Module with 7 lamp circuits
Operation and Indicator module – lamp switching, indication, dimming, life time warning
Alarm for lamp failure and power supply failure
Main and emergency supply
Cold test at -25 °C passed
CAN and Modbus communication*

PODRUČJE PRIMJENE / POSEBNI GRANIČNI UVJETI:
APPLICATION / LIMITATIONS:

Bez ograničenja

No limitations

DOKUMENTACIJA ZA TIPNO ODOBRENJE:
TYPE APPROVAL DOCUMENTATION:

Tehnička dokumentacija

Technical documentation

- **Operation Manual**

Tipno ispitivanje – Elektromagnetska kompatibilnost

Type Testing – Electromagnetic Compatibility

- **EMV Services, Test report No. 07/7100-9-3**

- **SLG Prüf, Test report No. 1221-20-EE-20-PB001**

Tipno ispitivanje – Utjecaji okoliša

Type Testing – Environmental Tests

- **Paconsult, Test report No. 07-1692 Revision 1**

Ispitivanje funkcionalnosti

Performance Test

- **Test protocol ver. 2 – dated 17.08.2007.**

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:

Bitne izmjene u hardveru i softveru moraju se odobriti prije instalacije na brod.

Programske promjene treba zapisati za sve vrijeme upotrebe sustava na brodu.

Zapis o programskim promjenama treba dostaviti HRB-u na odobrenje prije primjene.

Major changes in the hardware and software are to be approved before being installed on the vessel.

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.