



Marine & Offshore

Certificate number: 20838/C0 BV

File number: AP 3929

Product code: 2811H

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

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

INELTEH d.o.o.

Rijeka - CROATIA

for the type of product

NAVIGATION LIGHT COMPONENTS

Navigation and Signal Lights Controller

Type: ITNSL-01

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships.
IMO Resolution MSC.253(83)

EC Code: 31B

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: 04 Jun 2026

For Bureau Veritas Marine & Offshore,

At BV RIJEKA, on 04 Jun 2021,

Slaven Celic



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.

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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 :

ITNSL-01

- Product description:

Navigation and Signal Lights Controller comprises the following Modules:

| | |
|---------------------|--|
| Main unit | ITNSL-01TP |
| Input module | ITNL-10-D-230, ITNL-10-S-230, ITNL-10-D-24, ITNL-10-S-24 |
| Input module | ITNL-5-D-230, ITNL-5-D-24 |
| Input module | ITNL-13-S-230, ITNL-13-S-24, ITNL-13-R |
| Power Supply Module | ITNSLP-01P |

- D: double lights, S: single lights, R: relay output

Main Characteristics:

| | |
|----------------------------------|--|
| Power Supply | : 230 Vac or 115 Vac or 24 Vdc |
| Configuration max | : 5 x input modules(in total) up to 80 lights can be connected |
| Light Power Range | : 4 - 120 W (230Vac), 4-65 W(115 Vac), 1-40 W(24 Vdc) |
| Communication | : RS485 (between modules only) : Serial Interface for Marine Navigation and Communication Systems |
| Alarm Output | : Voltage-Free Contacts (250 VAC / 1A) |
| Remote Alarm Accept Input | : NO Voltage-Free Contact |
| Lamp Circuit Failure Alarm Delay | : 2-6 Secs - Automatic change-over to spare light (if exists) |
| FW version | : ITNSL: v3.xx, ITNSLP: v3.xx, ITNL: v3.xx |

2. DOCUMENTS AND DRAWINGS:

INELTEH:

Performance Test for Navigation and Signal Lights Controller, type ITNSL-01 undated.

Supplement 1 to the Type Approval testing, identity TR1-ITNSL01, dated 15.01.2013.

Navigation and Signal Lights Controller ITNSL-01, NMEA 0183.cdr, dated 12.12.12.

Navigation and Signal Lights Controller ITNSL-01, connection rev.1.cdr, dated 12.12.12

Navigation and Signal Lights Controller ITNSLP-01, NMEA 0183 12122012, circuit.cdr, dated 12.12.12.

Navigation and Signal Lights Controller ITNSL-01, outlines rev.1.cdr, dated 12.12.12.

ITNSL-01-24, installation and user documentation, rev 0, dated Apr 25, 2016

For modification C0 version:

INELTEH:

Navigation and Signal Lights Controller ITNSL-01 Rev.0, No. 01052021 (Technical Characteristics, Operation Instructions, Outlines, Connection Diagram, Circuit Diagrams).

3. TEST REPORTS:**KONCAR (Electrical Engineering INSTITUTE):**

- Vibration Test Reports No. 21520-D-139/06 dated 21.11.2006 and No. 21520-D-081/09 dated 29.07.2009
- Climatic Test Report No. 21550-01508 dated 2008-04-09
- EMC Test Reports No. 21583EMC08060 dated 2008-03-20 and No. 21583EMC09081 dated 2009-06-19.
- EMC Test Reports No. 21580ALL006, dated Jul 2016

INELTEH witnessed by BV Surveyor:

- Test report No. CT-Cold-1606-001, dated Aug 2016
- Test report No. CT-Humidity-1606-001, dated Aug 2016
- Test report No. CT-DryHeat-1606-001, dated Aug 2016

For modification C0 version:**KONCAR (Electrical Engineering INSTITUTE):**

- Vibration Test Report No. 21584VIB21003, dated 30-03-2021.
- EMC Test Report No. 21583EMC21022, dated 30-04-2021.
- EMC Test Report No. 21583EMC21024, dated 30-04-2021.
- Test Report No. 21483SCD21022, dated 05-05-2021.
- Test Report No. 21483SCD21024, dated 05-05-2021.

INELTEH witnessed by BV Surveyor:

- Test Report No. TR 001-2021, dated 02-03-2021.
- Test Report No. TR 002-2021, dated 02-03-2021.
- Test Report No. TR 003-2021, dated 02-03-2021.

4. APPLICATION / LIMITATION:

- 4.1 - BUREAU VERITAS Rules for the Classification of Steel Ships.
- 4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.3 - BUREAU VERITAS Environmental Category, **EC Code: 31B.**
- 4.4 - The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.
- 4.5 - ITNSL-01 has Serial Interface for Marine Navigation and Communication Systems according to MSC.253(83).
- 4.6 - Only Hardware and Firmware/Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.
- 4.7 - The minimum safe distance at which the equipment may be mounted from a standard or a steering magnetic compass is not to be less than 1000mm.
- 4.8 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev 7.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The above products are to be supplied by **INELTEH d.o.o.** 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 - **INELTEH d.o.o.** 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 - **INELTEH d.o.o.** has declared to Bureau Veritas the following production site(s):

INELTEH d.o.o.
Ljubljanska cesta 7
HR-51000 Rijeka
CROATIA

6. MARKING OF PRODUCT:

- Manufacturer's name and Trademark,
- Type and model number,
- Date of manufacture and serial number,
- Equipment type or model identification under which it was type-tested.

7. OTHERS:

- 7.1 - It is **INELTEH d.o.o.**'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. 20838/B0 BV issued on 02 Dec 2016 by the Society.

*** END OF CERTIFICATE ***