Marine & Offshore

Certificate number: 41434/B1 BV
File number: AP4643
Product code: 2658H

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

ComAp a.s.

Praha 7 Holesovice - CZECH REPUBLIC

for the type of product

GENERATOR CONTROL AND PROTECTION UNITS

Modular controllers for generators, generator sets and switchgears
InteliGen, InteliSys and InteliMains

Requirements:
Bureau Veritas Rules for the Classification of Steel Ships
EC Code: 33

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: 08 Nov 2026

For Bureau Veritas Marine & Offshore,
At BV PRAGUE, on 19 Apr 2024,
Pavel Jr. Stepanek

This certificate was created electronically and is valid without signature

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.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The **InteliGen, InteliSys** and **InteliMains** are microprocessor based control and monitoring devices for single and multiple low voltage generator and generator set applications driven by four-stroke diesel engines.
The modular structure is complemented by displays, extension modules, communication modules and other devices.
Installation of the devices takes place within a cabinet or rack on DIN rail and the displays in a cut-out of a panel door.

1.1 - Devices

Model	Description
IS-NTC-BB	InteliSys NTC BaseBox, Generator/generator-set controller
IG-NT(C)-(LT)-(GC) Marine	InteliGen NT, Generator/generator-set controller with display
IG-NT(C)-BB	InteliGen NTC BaseBox, Generator/generator-set controller
InteliGen 1000 Marine	Generator-set controller for paralleling applications
InteliMains 1010 Marine	Mains supervision/Utility breaker controller
IM-NT(C) (GC) (LT)	InteliMains NT, Mains/bus breaker control - controller with display
IM-NT(C)-BB	InteliMains NT BaseBox, Mains/bus breaker control - controller
InteliVision 5.2 Marine	Colour display, 5" TFT, 800x480 pixels, soft key buttons
InteliVision5 CAN Backlit	Colour display, 5,7" TFT, 320x240 pixels, soft key buttons
InteliVision 8 Marine	Colour display, 8" TFT, 800x600 pixels, soft key buttons
InteliVision 12 Touch OEM	Color display, 12,1" LCD, 1280x800 pixels, multi-touch, RS485, CAN, Ethernet and USB; (HW vers.: 1.0; SW vers.: 1.4.x)
IGS-LSM+PMS Dongle	HW key
I-AOUT8	Extension module, 8 analogue outputs
Inteli-IO8/8	Extension module, 8 binary inputs, 8 binary outputs
Inteli-AIN8	Extension module, 8 analogue inputs
Inteli-AIN8TC	Extension module, 8 analogue inputs for thermocouple sensors
Inteli-DC4/4	Extension module, for DC low voltage and current measurements
IS-AIN8	Extension module, 8 analogue inputs
IS-AIN8TC	Extension module, 8 analogue inputs for thermocouple sensors
IS-BIN16/8	Extension module, 16 binary inputs, 8 binary outputs
IGS-PTM	Extension module, analogue/binary IOmodule, configurable
IGL-RA15	Remote annunciator
I-CB	ECU communication module (see item 4.6)
I-CR	CAN repeater communication module (see item 4.6)
I-CR-R	CAN redundancy communication module (see item 4.6)
I-LB+	Communication bridge module (see item 4.6)
IB-NT	Internet bridge communication module (see item 4.6)
I-RB16	Relay bord, 16 outputs
I-RB8	Relay bord, 8 outputs
I-RB8-231	Relay bord, 8 outputs
I-LBA	Low battery adaptor
IG-MTU 2:1	Mains transformer unit
IG-MTU/MARINE	Mains transformer unit
IG-AVRi-Marine	AVR Interface
IG-AVRi-TRANS-Marine	Power supply transformer

Software version of controllers (exept IG1000 and IM1010): 3.x.x
Software version of IG1000 and IM1010: 1.x.x

1.2 - Main characteristics

Power supply: 24V DC
Degree of protection: IP20 for the modules
IP65 for the front of displays

2. DOCUMENTS AND DRAWINGS:

- IGS-NT Installation Guide 08-2014; IGS-NT Operator Guide 01-2014;
- Datasheets: InteliGen NT BaseBox dated 19.1.2015; InteliGen NTC BaseBox dated 19.1.2015; InteliMains NT BaseBox 05-2014; InteliMains NT 05-2014; InteliMains NTC 05-2014; InteliSys NTC BaseBox dated 19.1.2015
- Descriptions: 2012-07/CPLEIV5C, 2013-04/CPLEIVI8
- Internet Bridge Reference Guide, last update on 9.2.2015

- Accessory Modules, Reference Guide dated February 2015
- Circuit diagrams filed in AP4643 and MPA1501122

For B0 version:
- InteliGen 1000 1.2.0 Global Guide; InteliGen 1000 Datasheet dated 5/28/2020
- InteliVision 12Touch & InteliVision 12Touch OEM Global Guide; | InteliVision 12Touch OEM Datasheet dated 2019-01-15
- TTM_2.1.1_GL_SOFTWARE DEVELOPMENT Rev. 3 dated 11.6.2020

For B1 version:
- Data sheets: InteliMains 1010 Marine dated 9/19/2023; InteliVision 5.2 Marine dated 8/1/2023; Inteli DC4/4 dated 2/29/2024; InteliIO8/8 HW1 dated 6/30/2023; InteliIO8/8 HW2 dated 4/12/2024

3. TEST REPORTS:

- Electrotechnical testing intitute of Praha:
402975-01/01 dated 23/09/2004; 402956-01/01 dated 06/10/2004;
603501-01/01 dated 30.11.2006; 403941-01/01 dated 15.9.2014; 603501-01/02 dated 30.11.2006;
603501-01/03 dated 16.11.2006; 603501-01/04 dated 30.11.2006; 302523-01/01 dated 26.7.2013;
400326-01/02 dated 20.2.2014; 302523-01/02 dated 24.7.2013; 400328-01/02 dated 20.2.2014;
405338-01/01 dated 2.12.2014; 301356-01/02 dated 14.5.2013; 305245-01/01 dated 19.11.2013;
203069-01/01 dated 23.8.2012; 901598-01/02 dated 15.10.2009; 100733-01/01 dated 17.3.2011;
403346-01/02 dated 11.9.2014; 304982-01/02 dated 31.10.2013; 901598-01/03 dated 26.11.2009;
502171-01/01 dated 14.7.2015; 103598-01/01 dated 15.3.2012; 004726-01/01 dated 19.4.2011;
- TÜV SÜD Auto CZ: 260314-09-TAC dated 22.Oct.2009; 260303-11-TAC dated 25May2011;
260305-11-TAC dated 25Oct.2011

For B0 version:
- ezu: 021497-01/01 dated 26.6.2020; 021208-01/02 dated 29.6.2020; 211062-01/01 dated 24.5.2021;
210677-01/01 dated 14.4.2021; 210677-01/02 dated 3.5.2021
- VZLU: P-VZLUTEST-205/20 dated 08/07/2020
- ezu: 210942-01/04 dated 27.4.2021; 210942-01/02 dated 27.4.2021; 210942-01/03 dated 27.4.2021

For B1 version:
- ezu: 212366-01/01 dated 8.11.2021; 802796-01/01 dated 15.8.2018; 803404-01/03 dated 23.11.2018; 803724-01/01 dated 3.12.2018; 231797-01/02 dated 22.8.2023; 231799-01/01 dated 4.8.2023; 221424-01/02 dated 12.7.2022
- VZLU: P-VZLUTEST-342/18 dated 27/11/2018; P-VZLUTEST-158/23 dated 10.07.2023

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: 33**
4.4 - The colour displays InteliVision 5 and 8 fulfils the EMC requirements for installation on the bridge and deck zone.
4.5 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev8.
4.6 - Internal combustion engines safety system and generator protection system required by the Rules and based on data processing techniques requires a redundant safety/protection unit.
4.7 - Remote data access via communication module is part of a project related examination.
4.8 - In accordance with IACS UR E22 and as applicable to programmable devices for computer based systems of Category II or III, for each ship application:
- Ship specific documentation is to be submitted including software documentation and categorization of the computer based system.
- Inspection and testing before installation onboard is to be performed under the surveillance of the Society.
4.9 - Any modification of program contents and data, as well as a change of software version, shall be documented and submitted to the Society's examination.
4.10 - Functional/Integration tests are to be performed at each generator set under Type Approval Certification.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The above mentioned devives are to be supplied by **ComAp a.s.** 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 - **ComAp a.s.** 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 - For information, **ComAp a.s.** has declared to Bureau Veritas the following production site:

ComAp a.s.
U Uranie 1612/14a
170 00 PRAHA 7 Holesovice
CZECH REPUBLIC

6. MARKING OF PRODUCT:

- Manufacturer's name or trademark
- Date of manufacture and/or serial number
- Equipment type number or model identification
- The title and version of each software element included in the installed software system shall be either marked or displayed on command on the equipment.
- When the title and version of the software are indicated only on a display, such information shall also be included in the equipment manual.

7.OTHERS:

7.1 - It is the responsibility of **ComAp a.s.** 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 N° 41434/B0 BV issued on 08 Nov 2021 by the Society.

***** END OF CERTIFICATE *****