



Lloyd's
Register

Type Approval Certificate Extension

This is to certify that Certificate No. 09/20034 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER

ComAp a.s.
Kundratka 2359/17
CZ - 180 00 Prague 8
Czech Republic

**PLACE OF
PRODUCTION**

Torola electronic s.r.o.
Nadrazni street 906
74401 Frenstat pod Radhostem
Czech Republic

Nvision a.s.
Klasterni street 1
25901 Votice
Czech Republic

DESCRIPTION

Generator Control and Monitoring System

TYPES

InteliGen controller - gen-set/generator control
consisting of (options in bracket)
IG-NT(C)-(GC)-(LT) Marine: control panel
IG-NT(C)-BB: base box

InteliSys: controller - gen-set/generator control
consisting of (options in bracket)
IS-NTC-BB: base box
IS-NT-BB: Marine: base box
IS NT Marine: complete unit IS-NT-BB + IS Display

Certificate No.

09/20034 (E1)

Issue Date

18 December 2014

Expiry Date

09 December 2019

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Hamburg Technical Support Office
Lloyd's Register EMEA

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71 Fenchurch Street, London EC3M 4BS*

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TYPES CONTINUED

InteliMains: controller – Mains/bus breaker control consisting of (options in bracket)
IM-NT(C)-BB: base box
IM-NT(C)-(GC)LT: control panel

Abbreviations:

BB: base box
C: add. interface USB + RS 232(RS485) and Ethernet in case of base box; selectable U/I input ranges
GC: add. graphical character support
LT: low temperature version -40°C

Accessories:

Displays:

IS-Display Marine, IS Display LT Marine: monochromatic display
IG-Display Marine (LT) (GC): monochromatic display
InteliVision 8 Marine: color display
InteliVision 5 CAN Backlit: color display

Extension Modules:

I-AOUT8: 8 analogue outputs
I-RB8: 8 analogue outputs
I-RB8 (231): 8 relay outputs
I-RB16: 16 relay outputs
Inteli IO8/8: binary/analog IO module
Inteli AIN8: 8 analogue inputs
Inteli AIN8TC: 8 analogue inputs for thermocouples
IS-AIN8: 8 analogue inputs
IS-AIN8TC: 8 analogue inputs for thermocouples
IS-BIN16/8: binary IO module
IGS-PTM: analog/binary IO module
IGL-RA15: remote annunciator

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TYPES CONTINUED

Common modules:

IG-AVRi Marine: AVR interface

IG-AVRi TRANS Marine: supply transformer for IG-AVRi

IGS-NT LSM+PMS: dongle for load sharing and power management

IG-MTU, IG-MTU Marine, IG-MTU-2-1: main transformer units

I-LBA: low battery adapter

Communication modules:

I-LB+: CAN/USB, RS 232, RS 485 bridge for multiple controllers connections

I-CR: CAN repeater module

I-CR-R: communication redundancy module

IB-NT: internet bridge NT

I-CB: communication module with ECU units

ANSI functions:

59 overvoltage, 27 undervoltage, 47 phase sequence voltage, 81H overfrequency, 81L underfrequency, 51 overcurrent (range 100-200%), 46 current unbalance, 32 overload, 51N+64 earth fault, 32R reverse power

APPLICATION

Marine, offshore and industrial applications for use in environmental categories ENV1, ENV2, ENV3 and ENV4 (power distribution zone) as defined in LR Type Approval System, Test Specification 1 – 2002

SPECIFIED STANDARD

Manufacturers Specification: ComAp Marine Application Notes, version 1.0 / October 2014

OTHER CONDITIONS

Separate synchroniser and short circuit protection devices required.
Separate safety system for the prime mover required.
Virtual periphery function not to be used for systems requiring redundancy of power generation/ propulsion.
The complete installation is subject to a separate plan appraisal according to applicable Rules and Regulations when installed on LR classed vessels.

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OTHER CONDITIONS

Various parameters may be adjusted by the utilized software tools. The parameters adjusted to be verified against the applicable LR Rules and Regulations. The valid software used is to be suitably documented in the relevant and applicable documentation. Lowest ambient temperature for fixed installation of -40° C has not been verified by documentary evidence.

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. HTS/ETS 30826-14 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 09/20034 to which this extension should be attached.

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