

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	ComAp a.s.
Address	U Uranie 14a, Prague 7, 170 00, Czech Republic
Place of Production	ComAp a.s. U Uranie 14a, Prague 7, 170 00, Czech Republic
Place of Production	TOROLA electronic, spol. s r.o. Nadrazni 906, Frenstat pod Radhostem, 744 01, Czech Republic
Place of Production	NVision Czech Republic a.s. Klasterni 1, Votice, 259 01, Czech Republic
Place of Production	Mikroelektronika spol. s r.o. Dráby 849, Vysoké Mýto - Litomyšlské Předměstí, 566 01, Czech Republic
Place of Production	Vesla s.r.o. Buštěhradská 223 Dubí, Kladno, 272 03, Czech Republic
Type	Control and Monitoring System
Description	Marine Engine Control and Monitoring System

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Trade Name	InteliDrive DCU Marine
Application	Marine, Offshore and Industrial applications for use in environmental categories ENV1, ENV2, ENV3 and ENV4 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1– 2015.
Specified Standard	Manufacturer's specification IACS E10 Rev. 8 / 2021
Ratings	Software version InteliDrive DCUMarine: 3.6.x ECU communication: 7.x.x
Additional Tests	Compass safe distance (IEC 60945: 2000): InteliVision 12Touch OEM (standard 80 cm /steering 55 cm) InteliVision 13Touch (standard 60 cm / steering 35 cm)
Other Conditions	<p>The complete installation and application software / engine parameterisation are subject to separate plan appraisal according applicable Rules and Regulations, when installed on LR classed vessels.</p> <p>If used in marine and offshore applications ID-DCU must be used together with ID-RPU.</p> <p>Application software development and software version are to be documented according applicable Rules and Regulations.</p> <p>Ambient temperature and IP ratings given in the manufacturer's data sheet have not been supported by documentary evidence.</p> <p>Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.</p>

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If the specified standards are amended during the validity of this certificate, the product is to be re- approved prior to it being supplied to vessels to which the amended standards apply.

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 Design Appraisal Document HTS/ETS 41706-21/MK/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

DESCRIPTION

Marine Engine Control and Monitoring System – IntelliDrive DCU Marine

TYPES

Type	Description	Order code	HW version	SW version
Control units				
IntelliDrive DCU Marine	Engine control unit with graphic display	ID-DCU-Marine	2.0.x	3.6.x
IntelliDrive MCU	Engine control unit with graphic display	ID-MCU-23226590	2.0.x	3.6.x
ID-RPU	Redundant/backup protection unit for DCU controller	ID-RPU	2.0	-
Extension modules				
Inteli RB8	Relay board with 8 relays	I-RB8	1.0	-
Inteli RB16	Relay board with 16 relays	I-RB16	1.0	-
I-RB 3818362	Relay board	I-RB 3818362	1.0	-
I-RB 23009950	Relay board	I-RB 23009950	1.0	-
IS-AIN8	CAN extension module – 8 analog input	IS-AIN8	5.2	2.7
IS-AIN8TC	CAN extension module – 8 analog input for thermocouples	IS-AIN8TC	5.2	2.7
IS-BIN16/8	CAN extension module – binary input or input/output	IS-BIN16/8	3.0	1.7
Inteli AIN8	CAN extension module – 8 analog input	I-AIN8	1.0	1.3
Inteli AIN8TC	CAN extension module – 8 analog input for thermocouples	I-AIN8TC	1.0	1.4
Inteli AOUT8	CAN extension module – 8 analog output	I-AOUT8	1.1	1.1
Inteli IO8/8	CAN extension module – 8/8 binary input / output	I-IO8/8	1.0	1.2
IGS-PTM	CAN extension module	IGS-PTM	2.2	11.1
IGL-RA15	Remote annunciator	EM2IGLRABAA	1.4	2.2
I-LBA	Low battery adaptor	I-LBA	1.0	-

TYPES (continued)

Type	Description	Order code	HW version	SW version
Remote displays (HMI)				
InteliVision 5 CAN Backlit	Remote display, 5.7"	InteliVision 5 CAN Backlit	1.2	2.3
InteliVision 5 CAN Backlit Volvo	Remote display, 5.7"	IV5CANBL-23226587	1.2	2.3
InteliVision 8 Marine	Remote display, 8"	InteliVision 8 Marine	1.1	2.6
InteliVision 12TOEM	Remote display, 12.1", touch, OEM	RD112OEMBZH	1.0	1.7
InteliVision 13TOUCH	Panel PC, 13.3", touch	RD1IV13TBME	1.0	-
Communication modules				
ID-COM	Communication module for DCU controller	ID-COM	2.x	-
ID-COM	Communication module for DCU controller	CM2J1708BZB	2.x	-
ID-COM	Communication module for DCU controller	ID-COM-3818362	2.x	-
InternetBridge-NT	Communication module	IB-NT	2.0	3.3
InternetBridge-NT 4G	Communication module	CM2IB4GxBFB (x = A, E, J)	2.0	3.3
I-CB	Communication module	I-CB	1.4	1.6
I-LB+	Communication bridge module	I-LB+	1.1	1.6
I-CR	CAN repeater Communication module	I-CR	1.2	1.0
I-CR-R	CAN repeater Communication module	I-CR-R	1.2	1.0

Software:

Basic:

ID-DCU-Marine-3.6.x.mhx

Applications:

DCU-Marine-AUX-3.x.aid (auxiliary)
DCU-Marine-CMB-3.x.aid (combined, harbour + emergency)
DCU-Marine-EME-3.x.aid (emergency duty)
DCU-Marine-PRP-3.x.aid (variable speed)

ECU communication: 7.x.x