# HRVATSKI REGISTAR BRODOVA

Croatian Register of Shipping



# EC TYPE EXAMINATION (MODULE B) CERTIFICATE (EC-US MRA)

03-001685/031403 No.

Marinko Popović, dipl.ing.

#### THIS IS TO CERTIFY:

That Croatian Register of Shipping did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with requirements of Marine Equipment Directive (MED) 2014/90/EU, subject to any conditions in the schedule attached hereto.

TYPE AND DESCRIPTION OF PRODUCT						
Rate-of-turn indication with type designation Sin						
NUMBER AND ITEM	<b>DESIGNATION</b> (in accordance v	ith Annex of Regulation (EU) 2018	3/773)			
MED/4.9 – Rate-of-turn in	dicator					
MANUFACTURER:			_			
NAVICO NORWA 4374 Egersund – N	AY AS, Nyåskaiveien 2, Norway					
REGULATIONS AND	STANDARDS (in accordance with	Annex of Regulation (EU) 2018/7	73)			
SOLAS 1974 as amended,	Reg. V/18; SOLAS 1974 as amended	Reg. X/3				
IMO Res. A.526(13), IMO IMO Res. MSC.191(79) ,	Res. A.694(17) , IMO Res.MSC.36(6) IMO Res.MSC.302(87).	)-(1994 HSC Code) 13, IMO Res.MSC	C.97(73)-(2000 HSC Code) 13,			
USCG Module B numb	er: 165.106/EC2489/03-001685					
NOTICE:						
	of the product and conditions for ce					
	will not be valid if the manufactu been notified to, and agreed with the		cations to the approved equipment, ficate.			
	ified regulations or standards be ar or to it/they being placed on board		ertificate, the product(s) is/are to be ations or standards apply.			
Conformity issu		ase module (D, E, or F) of Annex	and a Manufacturer's Declaration of II of the Directive is fully complied			
5. In case limitation	ons of use apply, these should be inc	icated of in the Schedule of Approv	val.			
Decision 2004/4		conclusion of an Agreement betw	dance with the European Council ween the European Community and Marine Equipment.			
Issued by Croatian Regis	ster of Shipping, notified body num	per 2489.				
This certificate is valid u	ntil: <b>2023-07-21</b>					
Place and date:	Split, 2019-07-22	Seal	Signature			

QF-PTO-29-EC-US-MRA 1/3 2018-12

# THE SCHEDULE OF APPROVAL

# 1. PRODUCT DESCRIPTION

Simrad I3007 Rate-of-turn indicator consists of the following components:

	Item name	Description	Part number	SW ver.	Location
1.	Display unit – 7"	I3007	000-14126-001	1.0.x	Protected
2.	Junction Box	MX610JB	000-11139-001	1.1.02.00	Protected
3.	Junction Box	MX612JB	000-10916-001	1.1.02.00	Protected

*Input information to the display unit may be:* 

- NMEA0183
- Analog (voltage, current, frequency)
- Digital

#### 2. APPLICATION/LIMITATION OF USE

System is to be installed in a protected environment.

ROTI indicator I3007 is tested for compliance with BAM requirements – IMO Res.MSC.302(87).

#### 3. DESIGN DRAWINGS AND SPECIFICATIONS

SIMRAD I3007 - Installation Guide, item number – 988-12391-001 MX610 Junction Box - Installation Guide, item number – 988-12457-001 MX612 Junction Box - Installation Guide, item number – 988-12458-001

#### 4. TYPE TEST RECORDS/LABORATORY RECOGNITION STATUS

Environmental testing – IEC 60945(2002) including Corrigendum 1(2008);

Serial interface testing – IEC 61162-1(2016) & IEC 61162-2 (1998);

NMEA 2000 standard – IEC61162-3(2008);

Serial interface testing – IEC 61162-450 (2011), Lightweight Ethernet;

Presentation of navigation information – IEC 62288 Ed.2 (2014-07);

Performance testing - ISO 20672 Ed. 1 (2007) incl. Corr 1 (2008);

CRS letter of approval – 2064/TSE/VB/031380 dated 2019-07-22.

# 5. MATERIALS OR COMPONENTS REQUIRED TO BE TYPE APPROVED OR TYPE TESTED

This approval remains valid for subsequent minor software amendments, as allowed by the SW 1.0.x format (x=a numeral), where written details of any such modification have been submitted to and accepted by the approvals authority.

#### 6. OTHER MATERIALS AND/OR COMPONENT

There are several optional units – junction boxes for a more complex display interconnections, as stated in product description table.

#### 7. PRODUCTION SURVEY REQUIREMENTS

The I3007 display indicator shall be supplied by 24VDC in accordance with Installation Manual.

### 8. ONBOARD INSTALLATION AND MAINTENANCE REQUIREMENTS

The installation on board shall be verified and tested according to Installation & Operation Manual.

#### 9. MARKING AND IDENTIFICATION



Subject to compliance with the conditions in this Schedule of Approval which forms part of certificate, and those of Articles 9, 10 and 15 of the Directive, the Manufacturer is allowed to affix the "Mark of Conformity" to the Product described herein.

xxxx/yy

xxxx - the number of the Notified Body undertaking surveillance module(2489 in case of CRS) yy - the last two digits of year mark affixed

This product has been assigned US Coast Guard Module B number 165.106/EC2489/03-001685. In those instances where the Notified Body conducting the conformity assessment in accordance with either Module D, E or F of the Marine Equipment Directive is not CRS, such Notified Body would use the above U.S. Coast Guard Module B number to provide the manufacturer with the U.S. Coast Guard approval number by noting it on the Certificate of Conformity, thereby authorizing the manufacturer to mark the product accordingly.

# APPENDIX – TYPE EXAMINATION DOCUMENTATION

	Document title	Identification number	Revision index
1.	I3007 Display – IEC/EN60945:2002 + Cor. 1:2008 NEMKO AS – Test Report	E19106.00	2019-07-10
2.	I3007 Display Performance NEMKO AS – Test Report	368173r00	2019-07-05
3.	I3007 Display – Acoustic noise and signal test NEMKO AS	373068-RITRFEMC	2019-06-06
4.	I3007 Display – Digital Interface IEC 61162-1:2016 (Ed. 5.0), IEC 61162-2:1998 (Ed. 1.0), ITU-T V.11:1996 BSH Test Report	454.Display/Navico I3007 & P3007/1	2019-07-10
5.	SI80 Junction Box (MX610/MX612) IEC60945 – EMC EMC Technologie Test Report	120414.1	2012-06-06
6.	SI80 Junction Box (MX610/MX612) IEC60945 – Environmental DnV Test Report	2012-3214	2012-05-29
7.	CRS Witness Test : ISO 20672 Ed. 1 (2007)	NAVICO TestLink	2019-07-12

- END OF CERTIFICATE -