



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

No.	<b>03-001851/031551</b>
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### 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

#### SIMRAD ARGUS Radar System

with type designation **P180WS/ P250/ P250WS/ P340/ P340WS**

### NUMBER AND ITEM DESIGNATION (in accordance with Annex of Regulation (EU) 2021/1158)

MED/4.64 – **Radar equipment** – CAT 1 (Ex. MED/4.34)  
 – CAT 2 (Ex. MED/4.35)  
 – CAT 3 (Ex. MED/4.36)  
 – CAT 1H (Ex. MED/4.37)  
 – CAT 2H (Ex. MED/4.37)

### MANUFACTURER:

#### NAVICO RBU ITALIA S.r.l.

**Via Romita 26, 50025 Montagnana V.P. – Montespertoli (FI), ITALY**

### REGULATIONS AND STANDARDS (in accordance with Annex of Regulation (EU) 2021/1158)

SOLAS 1974 as amended, Reg. X/3  
 IMO Res.A.278(VIII), IMO Res.A.694(17), IMO Res.MSC36(63)-(1994 HSC Code) 13, IMO Res.MSC.97(73)-(2000 HSC Code) 13, IMO Res.MSC.191(79), IMO Res.MSC.192(79), IMO Res.MSC302(87) and ITU-R M.1177-4(04/11).

<b>USCG Module B number:</b>	<b>165.115/EC2489/03-001851</b>	<b>(CAT 1)</b>	<i>(see application/limitation of use)</i>
	<b>165.116/EC2489/03-001851</b>	<b>(CAT 2)</b>	<i>(see application/limitation of use)</i>
	<b>165.117/EC2489/03-001851</b>	<b>(CAT 3)</b>	<i>(see application/limitation of use)</i>
	<b>165.216/EC2489/03-001851</b>	<b>(CAT 1H)</b>	<i>(see application/limitation of use)</i>
	<b>165.217/EC2489/03-001851</b>	<b>(CAT 2H)</b>	<i>(see application/limitation of use)</i>

### NOTICE:

- Further details of the product and conditions for certification are given overleaf.
- This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with the notified body named on this certificate.
- 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.
- The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E, or F) of Annex II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.
- In case limitations of use apply, these should be indicated of in the Schedule of Approval.
- This product has been assigned **U.S. Coast Guard Module B number** in accordance with the European Council Decision 2004/425/EC dated 21 April 2004 on the conclusion of an Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment, as amended by

Decision No.1/2018 of the Joint Committee established by the Agreement of the European Community and the United States of America of 18 February 2019.

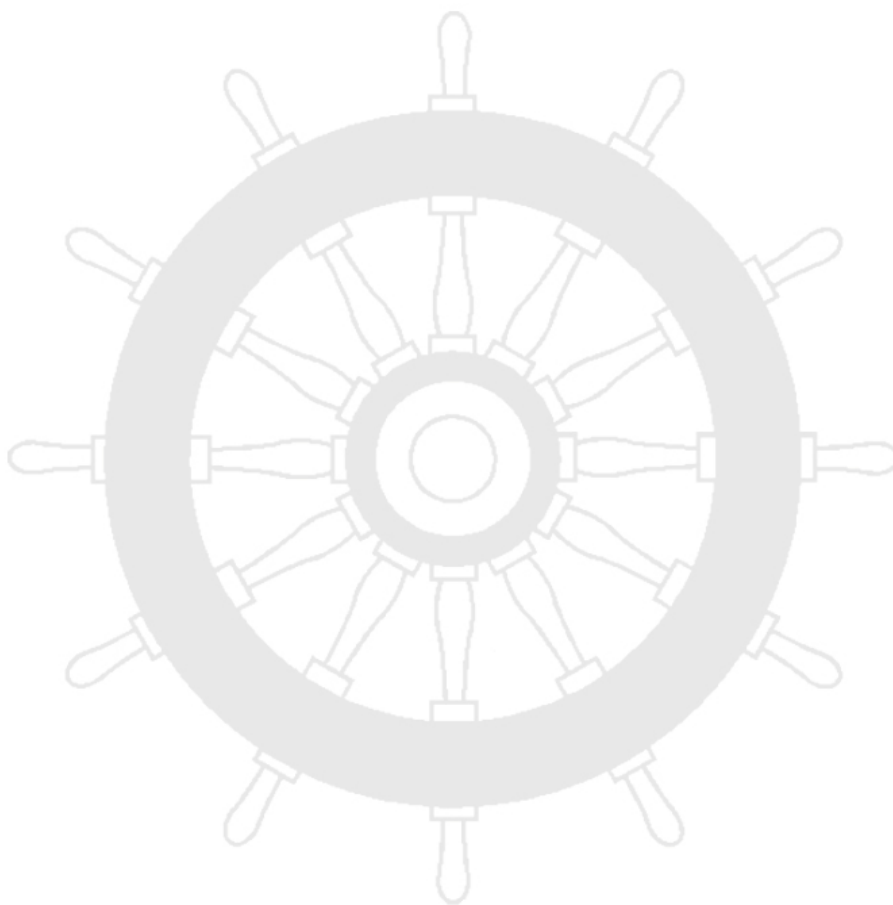
Issued by Croatian Register of Shipping, notified body number 2489.

This certificate is valid until: **2025-09-30**

Place and date: Split, 2021-09-30  
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Seal

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Signature  
.....  
Marinko Popović, dipl.ing.  
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## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION

*ARGUS RADAR SYSTEM consists of the different components:*

*This is stated in the Annex 1 to this EC type examination (Module B) certificate)*

*System may be configured in accordance with correlation table:*

*This is stated in the Annex 2 to this EC type examination (Module B) certificate)*

### 2. APPLICATION/LIMITATION OF USE

*ARGUS Radar System is found to comply with the Radar carriage requirements for different kind of vessels in all three categories CAT 3, CAT 2, CAT 1 as well as for HSC vessels:*

	<b>CAT 3</b>	<b>CAT 2</b>	<b>CAT 1</b>
<i>Minimum operational display area diameter</i>	<i>180 mm</i>	<i>250 mm</i>	<i>320 mm</i>
<i>Auto acquisition of targets</i>	<i>–</i>	<i>–</i>	<i>Yes</i>
<i>Minimum acquired radar target capacity</i>	<i>20</i>	<i>30</i>	<i>40</i>
<i>Minimum activated AIS target capacity</i>	<i>20</i>	<i>30</i>	<i>40</i>
<i>Minimum sleeping AIS target capacity</i>	<i>100</i>	<i>150</i>	<i>200</i>
<i>Minimum total AIS target and reports capacity</i>	<i>120</i>	<i>180</i>	<i>240</i>
<i>Trial manoeuvre</i>	<i>–</i>	<i>–</i>	<i>Yes</i>

*This product has been assigned U.S. Coast Guard Approval Category for the Radar Equipment with Automatic Radar Plotting Aid (ARPA), Radar Equipment with Automatic Tracking Aid (ATA) as well as Radar Equipment with Electronic Plotting Aid (EPA).*

*However, the manufacturer must obtain the Federal Communication Commission (FCC) certification on the Radar System before installation on board the U.S. vessel.*

*The system is tested for compliance to communicate with Bridge Alert Management System (BAM) and Bridge Navigational Watch Alarm System (BNWAS).*

### 3. DESIGN DRAWINGS AND SPECIFICATIONS

*250/180 WS radar display (M50xx Monitors) with SRT S-Band Down Mast Radar Sensor, dwg.no. 992-0001-00;*

*250/180 WS radar display (M50xx Monitors) with SRT S-Band Up Mast Radar Sensor, dwg.no. 992-0002-00;*

*250/180 WS radar display (M50xx Monitors) with SRT X-Band Down Mast Radar Sensor, dwg.no. 992-0007-00;*

*250/180 WS radar display (M50xx Monitors) with SRT X-Band Up Mast Radar Sensor, dwg.no. 992-0008-00;*

#### **MANUALS:**

*ARGUSRADAR-SYSTEM\_UM\_EN\_988-10185-005 – ARGUS*

*ARGUSRADAR-SYSTEM\_QRC\_988-10190-00X – ARGUS*

*ARGUSRADAR-SYSTEM\_ISM\_EN\_988-10187-005 – ARGUS*

*ArgusRadar\_S-Band\_TM\_EN\_988-10609-00X\_Interior – Argus*

*ArgusRadar\_SRT-Adapter-Box\_TM\_EN\_988-10610-00X\_Interior\_p – Argus*

*ArgusRadar\_X-Band\_TM\_EN\_988-10186-00X\_Interior – Argus*

*M5000\_UM\_EN\_988-10795-00X\_p – M50XX series displays*

*304610P001\_Manuale+Tecnico+SELUX+ST\_Rev.H – Selux*

*304645P001\_SELUX ST Quick Reference Card\_Rev.D – Selux*

*304645P001\_SELUX ST Quick Reference Card\_Rev.E – Selux*

*MAN-SRT25XD-001\_Rev\_2 – SRT*

*MAN-SRT25XD-001\_Rev\_3 – SRT*

*MAN-SRT30SD-001\_Rev.2 – SRT*

4. TYPE TEST RECORDS/LABORATORY RECOGNITION STATUS

*Performance testing – IEC 62388 Ed. 2.0 (2013-06), CRS witness test – Montagnana, July 2016.;*  
*Presentation of navigation information – IEC 62288 Ed. 2.0 (2014-07), CRS witness test – Montagnana, July 2016;*  
*Serial interface testing – IEC 61162-1(2016) & IEC 61162-2 Ed. 1.0 (1998), CRS witness test – Montagnana, August 2019.;*  
*Environmental testing – IEC 60945 Ed. 4.0 (2002-08) including Corrigendum 1(2008);*  
*CRS letter of approval – 1879/TSE/VB/031175 dated 2016-07-27;*  
*Bridge alert management testing – IEC 62923-1 Ed. 1.0 (2018) & IEC 62923-2 Ed. 1.0 (2018), Montagnana, September 2021;*  
*CRS letter of approval – 1967/TSE/NP/031551 dated 2021-09-23.*

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 numerical format.*  
*Written details of any such modification shall be submitted to and accepted by the approvals authority.*

6. OTHER MATERIALS AND/OR COMPONENT

*In case of AC application and use of SIMRAD Monitors type M50xx, external Power Supply Unit TR100M240-12E13 or TR100M240-1520E13 shall be used.*

7. PRODUCTION SURVEY REQUIREMENTS

*The manufacturer is allowed to affix the Mark of Conformity to equipment referred and to issue a Declaration of Conformity as long as either of the following is fulfilled:*  
*Module D – The quality system for production and testing shall be approved by the Notified Body.*

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

*xxx - 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 **165.115/EC2489/03-001851, 165.116/EC2489/03-001851, 165.117/EC2489/03-001851, 165.216/EC2489/03-001851 and 165.217/EC2489/03-001851.** 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.

10. OTHER

SOFTWARE:

Main	ATA	IOVP	Video Processor	Graphical Accelerator	Control Panel	TX/RX
3.3.7	3.2.7	3.2.8	1.7	1.11	16	81D

**APPENDIX – TYPE EXAMINATION DOCUMENTATION  
TEST REPORTS**

<i>Document title</i>	<i>Identification number</i>	<i>Revision index</i>
<i>Optic tests Radar Simrad M5027 – INOA</i>	<i>3F-RT16008</i>	<i>July 22, 2016</i>
<i>Optic tests Radar Display Consilium T340 (SN AL520) – INOA</i>	<i>3F-RT08025bis</i>	<i>February 5, 2009</i>
<i>Optic tests Radar Display Consilium T250 (SN AL521) – INOA</i>	<i>3F-RT08026bis</i>	<i>February 5, 2009</i>
<i>Optic tests Radar Display Consilium T340 (SN AL522) – INOA</i>	<i>3F-RT08027bis</i>	<i>February 5, 2009</i>
<i>Optic tests Radar Display Simrad 16” – INOA</i>	<i>3F-RT14007</i>	<i>Sept 26, 2014</i>
<i>Optic tests Radar Display Simrad 19” – INOA</i>	<i>3F-RT14008</i>	<i>Sept 26, 2014</i>
<i>Optic tests Radar Display Simrad 24” – INOA</i>	<i>3F-RT14009</i>	<i>Sept 26, 2014</i>
<i>Optic tests Radar Display Hatteland 24” – INOA</i>	<i>3F-RT14010</i>	<i>October 03, 2014</i>
<i>Optic tests Radar Display Hatteland 26” – INOA</i>	<i>3F-RT14012</i>	<i>October 24, 2014</i>
<i>Flickering test Hatteland 23.1” – INOA</i>	<i>3F-RT16006</i>	<i>July 20, 2016</i>
<i>Flickering test Hatteland 19” – INOA</i>	<i>3F-RT16007</i>	<i>July 20, 2016</i>
<i>Antenna_Diagram_and_Gain_SBand_Antenna – SELEX GALILEO</i>	<i>ANT12LP-S0001</i>	<i>10/04/2012</i>
<i>BSH Assessment Report – TFT Monitor for Marien radar system Argus</i>	<i>BSH/4543/001/4342800/14-2</i>	<i>Dec 2, 2014</i>
<i>BSH Assessment Report – TFT Monitor for Marien radar system Selux ST</i>	<i>BSH/4612/4341796/10</i>	<i>13<sup>th</sup> 10 2010</i>
<i>BSH Assessment Report – Approval of TFTs display per usage with Selux ST</i>	<i>BSH/4612/4341441/10-1</i>	<i>November 23<sup>rd</sup>, 2010</i>
<i>Test report ST 340 Chart Radar BSH</i>	<i>BSH-4543-001-4342570-14</i>	<i>January 28<sup>th</sup>, 2014</i>
<i>Test report SRT 12/002 – SRT 25/002</i>	<i>BSH/4543/001/4342903/15</i>	<i>February 9, 2015</i>
<i>Test report Seleux ST</i>	<i>BSH/4612/4340779/08-2</i>	<i>March 31<sup>st</sup>, 2009</i>
<i>Test report Seleux ST</i>	<i>BSH/4612/4340779/09-2</i>	<i>6<sup>th</sup> April 2009</i>
<i>Test report Selux ST 250 ST 340 ST 340 WD</i>	<i>BSH/4612/4341441/10-1</i>	<i>July 22<sup>nd</sup>, 2010</i>
<i>Test report Selux ST 340</i>	<i>BSH/4612/4341831-2/11</i>	<i>November 03, 2011</i>
<i>Test report Selux ST 250 ST 340 ST 340 WD</i>	<i>BSH/4612/4341831/12-1</i>	<i>August 24<sup>th</sup>, 2012</i>
<i>CETECOM - Test report S-BAND UP MAST</i>	<i>1-3423-11-01-10</i>	<i>2012-05-23</i>
<i>CETECOM - Test report S-BAND UP MAST</i>	<i>2-3052-01-02/02</i>	<i>25.11.2002</i>
<i>CETECOM - Test report X-BAND</i>	<i>4-2638-01-04/07</i>	<i>10.08.2007</i>
<i>BSH Comfort_Letter_ref_ARGUS NEW SOFTWARE</i>	<i>4581-001-4342610/14</i>	<i>17. April 2015</i>
<i>BSH Assesment report Hatteland 26”</i>	<i>BSH/4612/4342080/12-1</i>	<i>July 13, 2012</i>
<i>BSH Assesment report ISIC 26”</i>	<i>BSH/4612/4342080/12-2</i>	<i>July 13, 2012</i>
<i>CETECOM Report – Unwanted_emission_of_SBand_Transceiver_OOB</i>	<i>1-3423/11-01-10</i>	<i>2012-05-23</i>
<i>Politecnico di Milan – Wind-Tunnel-Test-on-a-Radar-Scanner</i>	<i>P63/11</i>	<i>September 7, 2011</i>
<i>NAVICO – Test Report on IEC 62923-1 (2018) and IEC 62923-2 (2018), CRS witnessed, 2021-09-06</i>	<i>Navico TestLink</i>	<i>08.09.2021.</i>

## ANNEX 1 TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE

No.: 03-001851/031551

## ARGUS RADAR SYSTEM COMPONENTS

No	Designation	Type Designation	Notes
1.1	X-Band Scanner (for SRT/TMTR transceiver)	a) 6 ft Array, unit type ANT6X-001 b) 9 ft Array, unit type ANT9X-001 c) 12 ft Array, unit type ANT12X-001 <sup>1</sup>	<sup>1</sup> only in combination with 2.1 or 3.1
2.1	X-Band Transceiver (up mast, SRT)	a) 12 kW, unit type SRT/12-002 b) 25 kW, unit type SRT/25-002	
2.2	X-Band Transceiver (up mast, SRT) HSC	a) 12 kW, unit type SRT/12-003 b) 25 kW, unit type SRT/25-003	
2.3a	X-Band Transceiver (down mast, TMTR)	25 kW, unit type TMTR/X-001 <sup>2 3</sup>	<sup>2</sup> Not to be mounted on the bridge <sup>3</sup> Power supply 220 VAC / 50 Hz
2.3b	X-Band Transceiver (down mast, TMTR)	25 kW, unit type TMTR/X-002 <sup>2 3 4</sup>	<sup>2</sup> Not to be mounted on the bridge <sup>3</sup> Power supply 220 VAC / 50 Hz <sup>4</sup> Can be powered by 380 V / 50 Hz 3-phase alternatively
3.1	X-Band Turning Unit, SRT	Pedestal, unit type SRT/PED-001	
3.2	X-Band Turning Unit, SRT, HSC	Pedestal, unit type SRT/PED-002	
4.1	S-Band Scanner (for SRT transceiver)	12 ft Array, unit type ANTI2LP/S-001	
5.1	S-Band Transceiver (up mast, SRT)	30 kW, unit type UPMAS/S-001	
5.2	S-Band Transceiver (up mast, SRT)HSC	30 kW, unit type UPMAS/S-002	
5.3a	S-Band Transceiver (down mast, TMTR)	30 kW, unit type TMTR/S-001 <sup>2 3 4</sup>	<sup>2</sup> Not to be mounted on the bridge <sup>3</sup> Power supply 220 VAC / 50 Hz <sup>4</sup> Can be powered by 380 V / 50 Hz 3-phase alternatively
5.3b	S-Band Transceiver (down mast, TMTR)	30 kW, unit type TMTR/S-002 <sup>2 3</sup>	<sup>2</sup> Not to be mounted on the bridge <sup>3</sup> Power supply 220 VAC / 50 Hz
6.1	S-Band Turning Unit, SRT	Pedestal, unit type PED/S-001	
6.2	S-Band Turning Unit, SRT, HSC	Pedestal, unit type PED/S-002	
7a	Display Unit 180 mm PPI	a) M5016 monitor 000-12209-001 <sup>8</sup> (Simrad) b) M5019 monitor 000-12210-001 <sup>8</sup> (Simrad) For AC applications with M50XX Monitor Power Supply TR100M240-12E13 TR100M240-1520E13	<sup>8</sup> Display installed and operated flush and bracket mounted
7b	Display Unit 250 mm PPI (19“ unit type)	JH 19T14 COD-AA1-AABA <sup>6</sup> (Hatteland)	<sup>6</sup> Display only installed and operated flush mounted
7c	Display Unit 250 mm PPI (24“ unit type)	a) M5024 monitor 000-11781-001 <sup>8</sup> (Simrad) For AC applications with M50XX Monitor Power Supply TR100M240-12E13 TR100M240-1520E13 b) HD 24T21 COD-MA1-FAGA <sup>6</sup> (Hatteland) c) HD 24T21 NVC-MA4- FAGA <sup>6</sup> (Hatteland)	<sup>8</sup> Display installed and operated flush and bracket mounted  <sup>6</sup> Display only installed and operated flush mounted
7d	Display Unit 320 mm PPI (23,1“ unit type)	JH 23T14 COD-MAI-AABA <sup>6 7</sup> (Hatteland)	<sup>6</sup> Display only installed and operated flush mounted <sup>7</sup> Operating only on DVI interface
7e	Display Unit 320 mm PPI (26“ unit type)	a) JH 26T11 COD-AA1-AOBA <sup>6</sup> (Hatteland) b) HD 26T21 COD-MA1-FAGA <sup>6</sup> (Hatteland)	<sup>6</sup> Display only installed and operated flush mounted



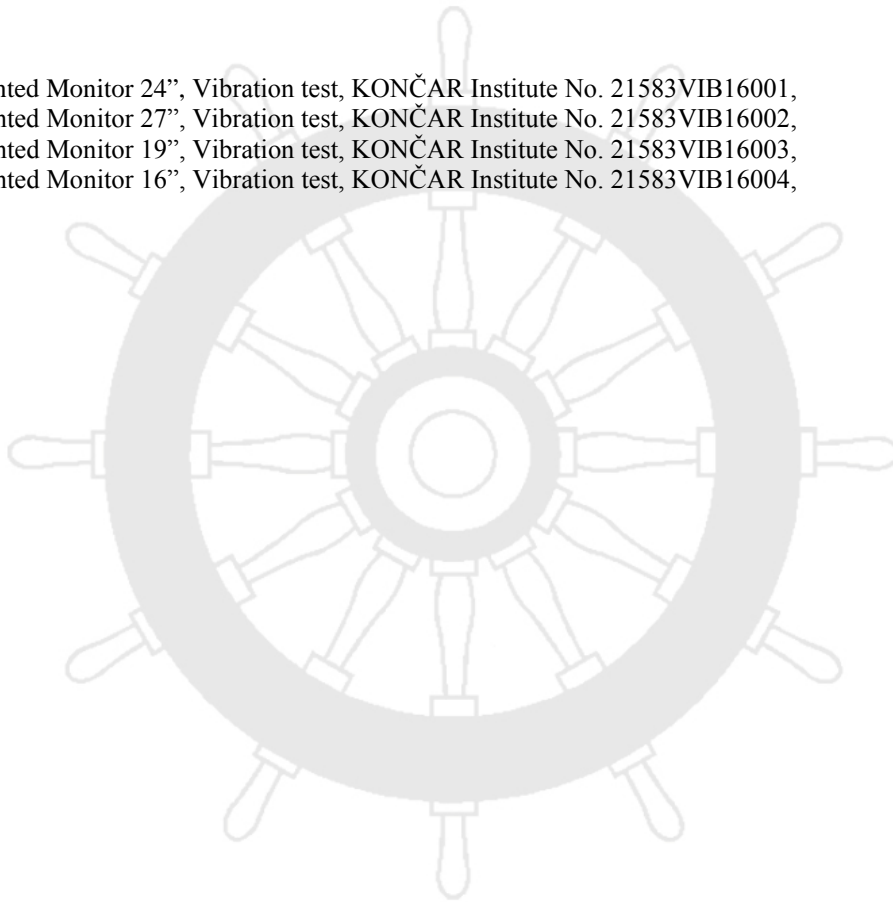
7f	Display Unit 320 mm PPI (27" unit type)	M5027 monitor 000-12726-001 <sup>8</sup> (Simrad) For AC applications with M50XX Monitor Power Supply TR100M240-12E13 TR100M240-1520E13	<sup>8</sup> Display installed and operated flush and bracket mounted
8	Control Unit	Control Panel, unit type KEYB-002 <sup>5</sup>	<sup>5</sup> Console version only
9	Processor Unit	Display Core, unit type DCORE-001	
10	Additional Navigation Equipment	SRT Adapter Box, unit type SRTAB-001	
11	M50XX Monitor Power Supply	Power Supply, TR100M240-12E13 TR100M240-1520E13	

**NOTE: All displays M50xx (Simrad) may be installed and operated as a flush & bracket mounted**

Approval documentation:

**Test reports -**

M5024 – Bracket mounted Monitor 24", Vibration test, KONČAR Institute No. 21583VIB16001,  
M5027 – Bracket mounted Monitor 27", Vibration test, KONČAR Institute No. 21583VIB16002,  
M5019 – Bracket mounted Monitor 19", Vibration test, KONČAR Institute No. 21583VIB16003,  
M5016 – Bracket mounted Monitor 16", Vibration test, KONČAR Institute No. 21583VIB16004,



ANNEX 2 TO EC TYPE EXAMINATION (MODULE B) CERTIFICATE

No.: 03-001851/031551

ARGUS RADAR SYSTEM CONFIGURATION TABLE

Type of Radar	1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	3.4	4.1	4.2	4.3	4.4	5.1	5.2	5.3	5.4
	X-Band Argus P340 (PPI 320) (Up Mast)	S-Band Argus P340 (PPI 320) (Up Mast)	X-Band Argus P340 (PPI 320) (Down Mast)	S-Band Argus P340 (PPI 320) (Down Mast)	X-Band Argus P250 (PPI 250) (Up Mast)	S-Band Argus P250 (PPI 250) (Up Mast)	X-Band Argus P250 (PPI 250) (Down Mast)	S-Band Argus P250 (PPI 250) (Down Mast)	X-Band Argus P340 (PPI 320) for HSC (Up Mast)	S-Band Argus P340 (PPI 320) for HSC (Up Mast)	X-Band Argus P340 (PPI 320) for HSC (Down Mast)	S-Band Argus P340 (PPI 320) for HSC (Down Mast)	X-Band Argus P250 (PPI 250) for HSC (Up Mast)	S-Band Argus P250 (PPI 250) for HSC (Up Mast)	X-Band Argus P250 (PPI 250) for HSC (Down Mast)	S-Band Argus P250 (PPI 250) for HSC (Down Mast)	X-Band Argus P180 (PPI 180) (Up Mast)	S-Band Argus P180 (PPI 180) (Up Mast)	X-Band Argus P180 (PPI 180) (Down Mast)	S-Band Argus P180 (PPI 180) (Down Mast)
Category of Radar	CAT 1	CAT 1	CAT 1	CAT 1	CAT 2	CAT 2	CAT 2	CAT 2	CAT 1H	CAT 1H	CAT 1H	CAT 1H	CAT 2H	CAT 2H	CAT 2H	CAT 2H	CAT 3	CAT 3	CAT 3	CAT 3
Designation																				
1.1 X-Band Scanner (for SRT/TMTR transceiver)	U <sub>1</sub>		D <sub>1</sub>		U <sub>1</sub>		D <sub>1</sub>		U <sub>2</sub>		D <sub>2</sub>		U <sub>2</sub>		D <sub>2</sub>		U <sub>1</sub>		D <sub>1</sub>	
2.1 X-Band Transceiver (up mast, SRT)	U <sub>1</sub>				U <sub>1</sub>												U <sub>1</sub>			
2.2 X-Band Transceiver (up mast, SRT) HSC									U <sub>2</sub>				U <sub>2</sub>							
2.3a X-Band Transceiver (down mast, TMTR/X-001)			D <sub>1</sub>				D <sub>1</sub>				D <sub>2</sub>				D <sub>2</sub>					D <sub>1</sub>
2.3b X-Band Transceiver (down mast, TMTR/X-002)			D <sub>4</sub>				D <sub>4</sub>				D <sub>6</sub>				D <sub>6</sub>					D <sub>4</sub>
3.1 X-Band Turning Unit, SRT			D <sub>1</sub>				D <sub>1</sub>													D <sub>1</sub>
3.2 X-Band Turning Unit, SRT, HSC											D <sub>2</sub>				D <sub>2</sub>					
4.1 S-Band Scanner (for SRT, TMTR transceiver)		U <sub>3</sub>		D <sub>3</sub>	U <sub>3</sub>		D <sub>3</sub>		U <sub>4</sub>		D <sub>5</sub>		U <sub>4</sub>		D <sub>5</sub>		U <sub>3</sub>		D <sub>3</sub>	
5.1 S-Band Transceiver (up mast, SRT)		U <sub>3</sub>			U <sub>3</sub>															
5.2 S-Band Transceiver (up mast, SRT)HSC									U <sub>4</sub>				U <sub>4</sub>							
5.3a S-Band Transceiver (down mast, TMTR/S-001)				D <sub>5</sub>			D <sub>5</sub>													D <sub>5</sub>
5.3b S-Band Transceiver (down mast, TMTR/S-002)				D <sub>3</sub>			D <sub>3</sub>				D <sub>5</sub>				D <sub>5</sub>					D <sub>3</sub>
6.1 S-Band Turning Unit, SRT				D <sub>3</sub>			D <sub>3</sub>													D <sub>3</sub>
6.2 S-Band Turning Unit, SRT, HSC											D <sub>5</sub>				D <sub>5</sub>					
7a Display Unit 180 mm PPI																	N	N	N	N
7b Display Unit 250 mm PPI (19" unit type)					N	N	N	N					N	N	N	N				
7c Display Unit 250 mm PPI (24" unit type)					N	N	N	N					N	N	N	N				
7d Display Unit 320 mm PPI (23,1" unit type)	N	N	N	N					N	N	N	N								
7e Display Unit 320 mm PPI (26" unit type)	N	N	N	N					N	N	N	N								
7f Display Unit 320 mm PPI (27" unit type)	N	N	N	N					N	N	N	N								
8 Control Unit	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
9 Processor Unit	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10 Additional Navigation Equipment	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
11 M50XX Monitor Power Supply					S	S	S	S					S	S	S	S	X	X	X	X
Note:	X = Mandatory Equipment O = Optional Equipment D <sub>n</sub> = Identification of option for down mast configuration U <sub>n</sub> = Identification of option for up mast configuration N = One out of noted possibilities in relevant section is mandatory S = Mandatory Equipment with Simrad display a).z) = Reference to the relevant section within the list of components																			

- END OF CERTIFICATE -