



## EC TYPE EXAMINATION (MODULE B) CERTIFICATE

No.	03-001450/031120
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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) 96/98/EC as last amended by directive 2013/52/EU, subject to any conditions in the schedule attached hereto.

### TYPE AND DESCRIPTION OF PRODUCT

**Electronic chart display and information system - ECDIS**  
with type designation **Simrad E5024 ECDIS System**

### ANNEX A.1 NO AND ITEM DESIGNATION

A.1/4.30 – Electronic chart display and information system (ECDIS)

### MANUFACTURER:

**NAVICO HOLDING AS, Nyåskaiveien 2,  
4374 Egersund – Norway**

### REGULATIONS AND STANDARDS (in accordance with Annex A.1, Directive)

SOLAS 1974 as amended, Reg. V/19  
IMO Res. MSC.232(82), IMO Res. MSC.191(79) and IMO Res. A.694(17)

### NOTICE:

1. Further details of the product and conditions for certification are given overleaf.
2. 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.
3. 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.
4. 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 B of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.
5. In case limitations of use apply, these should be indicated of in the Schedule of Approval.

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

This certificate is valid until: **2019-02-17**

Place and date: **Split, 2015-02-17**

Seal

Signature

**Marinko Popović, dipl.ing.**

# THE SCHEDULE OF APPROVAL

## 1. PRODUCT DESCRIPTION

*Simrad E5024 ECDIS system consists of the following components:*

1. *Simrad E5000 – ECDIS processor, part number 000-11780-00x and 151-10379-00x;*
2. *Simrad M5024 – Monitor for ECDIS application, part number 000-11781-00x and 151-10380-00x;*
3. *Logitech M570 – Wireless Trackball mouse, part number 000-12262-00x;*
4. *LTSX 50N8 – Trackball (Option), part number 000-12375-00x;*
5. *Simrad E0102 – Alarm panel, part number 000-12264-00x and 151-10381-00x;*
6. *Simrad SI80 – NMEA 0183- NMEA 2000 gateway (Option), part number 000-10425-00x.*

## 2. APPLICATION/LIMITATION OF USE

*The Simrad E5024 ECDIS is not tested for compliance with IEC 61174 Ed. 3.0 (2008) – Annex G (ECDIS in the RCDS mode of operation) and Annex H (Alarms and indicators in the RCDS mode of operation).*

*System is to be installed in a protected environment.*

## 3. DESIGN DRAWINGS AND SPECIFICATIONS

*Simrad E5024 ECDIS system overview Rev. 2.0 – NPD Documents Library;*

*Simrad E5024 ECDIS Installation Manual, part number 988-10782-00x;*

*Simrad E5024 ECDIS Operation Manual, part number 988-10788-00x;*

*Simrad E0102 Alarm panel manual, part number 988-10826-00x;*

*Simrad M50xx monitor manual, part number 988-10795-00x;*

*Simrad SI80 manual, part number 988-10475-00x.*

## 4. TYPE TEST RECORDS/LABORATORY RECOGNITION STATUS

*Performance testing – IEC 61174 Ed. 3.0 (2008), CRS witnessed – Egersund 13-15 January 2015. & Ensenada 8-9 December 2014;*

*Environmental testing – IEC 60945(2002) including Corrigendum 1(2008), CRS witnessed-Egersund 19-20 January 2015.;*

*Serial interface testing – IEC 61162-1(2010) & IEC 61162-2 (1998), CRS witnessed-Egersund 17-18 January 2015.;*

*Presentation of navigation information – IEC 62288 (2008), CRS witnessed-Egersund 15-17 January 2015.;*

*CRS letter of approval – 221/TE/VB/031120 dated 2015-02-16 (All Technical Documents & Test Reports included).*

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

*Simrad E5000 dual core processor (Part of Simrad E5024 ECDIS) might be used as a part of additional, independent information system if type approved.*

## 6. OTHER MATERIALS AND/OR COMPONENT

*Simrad E5024 ECDIS system dual installation is found to comply with the requirements for ECDIS with Back-up arrangements.*

## 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 or,*

*Module E – The quality system for inspection and testing shall be approved by the Notified Body or,*

*Module F – Compliance of the product in this EC Type Examination Certificate is to be verified by the Notified Body who shall also issue a Certificate of Conformity.*

## 8. ONBOARD INSTALLATION AND MAINTENANCE REQUIREMENTS

*The ECDIS E5024 shall be supplied by 12V or 24V DC in accordance with Installation Manual.*

*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 10.1(i) and 11 of the Directive, the Manufacturer is allowed to affix the “Mark of Conformity” to the Product described herein.*

2489/yy (yy = last two digits of year mark affixed)

## 10. OTHERS

*E5024 ECDIS system software version – 1.5.x.yyy;*

*Chart Library Presentation – SDK version – 1.5.3*

- END OF CERTIFICATE -