DN	V -	GL
----	------------	----

Certificate No: A-14149
File No: 899.30
Job Id:

262.1-016903-2

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Personal Computer

with type designation(s)

enix-2067/3067, enix-2077/3077, enix-2087/3087 and enix-4100/41x9

Issued to

Elektronix Com-Scan AS Lysaker, Norway

is found to comply with

Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

IEC 60945 Ed. 4 (2002-08) Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results

App	lication	
-----	----------	--

Location classes:

Temperature	B*
Humidity	В
Vibration	Α
EMC	В
Enclosure	Required protection according to DNV Rules
	shall be provided upon installation on board

*Tested at -15°C

DNV GL local station: Oslo Maritime and CAP Approval Engineer: Nils Jarem	for DNV GL	
	Odd Magne Nesvåg	

Form code: TA 1411a Revision: 2014-11 www.dnvgl.com Page 1 of 3 © DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Certificate No: **A-14149** File No: **899.30**

Job Id: **262.1-016903-2**

Product description Enix 2067/3067 & 2077/3077

Rating: 24V DC

Compass safe distance : Standard compass: 45 cm

Steering compass: 25 cm

Enix-2087

Rating: 24V DC

Compass safe distance : Standard compass: 240 cm

Steering compass: 150 cm

Enix-3087

Rating: 24V DC

Compass safe distance : Standard compass: 170 cm

Steering compass: 115 cm

Enix 4100/41x9

Rating: 100-240V AC 50/60Hz

Compass safe distance : Standard compass: 200 cm

Steering compass: 140 cm

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Product certificate

If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program. After the certification the clause for application software control will be put into force.

Clause for application software control

All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV for evaluation and approval. Major changes in the software are to be approved before being installed in the computer

Type Approval documentation

Data sheets: enix 3077, enix 3067, enix 2077, enix 2067, enix-41X9/4100

enix-2087, enix-3087

Manuals: User manual enix-20xx and enix-30xx version 2.0

User manual enix 41xx series version 2.0

User manual enix-2087and enix-3087 version 1.1 E12134.05 revision 05, E13045.00 revision 00

E14165.00 revision 00

DNV GL Oslo initial assessment report, dated 2014-02-07.

Tests carried out

Test reports:

Applicable tests according to Standard for Certification No. 2.4, April 2006, also covering IACS Unified Requirements E10 Rev.5.

Applicable tests for protected equipment according to IEC 60945, 4th edition (2002) and corrigendum 1.

Form code: TA 1411a Revision: 2014-11 www.dnvgl.com Page 2 of 3

Certificate No: **A-14149** File No: **899.30**

Job Id: **262.1-016903-2**

Marking of product

The products to be marked with model name, manufacturer name and serial number.

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed at least every second year and at renewal of this certificate.

FND OF CERTIFICATE

Form code: TA 1411a Revision: 2014-11 www.dnvgl.com Page 3 of 3