DNV·GL

Certificate No:
TAA00001GV

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Electrical Indicators

with type designation(s)
Flexible Display Indicator

Issued to
DEIF A/S
Skive Midtjylland, Denmark

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Location classes:

Temperature	**D**
Humidity	**B**
Vibration	**B**
EMC	**B**
Enclosure	**Required protection acc. to relevant rules shall be provided upon installation on board**

Issued at **Hamburg** on **2017-11-09**
This Certificate is valid until **2018-09-11**.
DNV GL local station: **Aalborg**

Approval Engineer: **Jan Reinecke**

for **DNV GL**

Oliver Darley
Head of Section

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.

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Job Id: **262.1-027114-1**
Certificate No: **TAA00001GV**

Product description

Flexible Display Indicator XDi with single-, dual-, multi- and nav- indicator views and extension modules AX1, DX1 and NX1/NX2.

Dimensions: XDi 96 (HxWxD) 135x175x155mm, XDi 144 (HxWxD) 135x225x200mm, XDi 192 (HxWxD) 135x315x300mm
Protection: from front IP52 (optional IP66), from rear IP20
Power supply: 24VDC (18.0..31,2VDC)
Interfaces: CAN interfaces, optional: analogue (AX1), digital (DX1) and serial (NX1/NX2) snap-on interfaces.
Software versions: XDi D & M platform 1: 1.0x.x and XDi D, M & N platform 2: 2.0x.x,
AX1 Modul: 1.0x.x,
DX1 Modul: 1.0x.x,
NX1/NX2 Modul: 1.0x.x

Application/Limitation

Software control
All changes in software are to be recorded as long as the system is in use on board. Documentation of major changes is to be forwarded to DNV GL for evaluation and approval before implemented on board.

Type Approval documentation

DNV GL No	Document Id	Rev.	Description
11		1.1	Report: Test of a Maritime navigation and radiocommunication equipment and systems IEC 61162-1/-2
9	4189350049 B	B	Manual: Designer's Handbook
8	4910217513 F	2013-03-18	Report: IPA0340-01 XDi Test data IEC60945
7	4910212100 F	2015-06-29	Report: IPA375 Summary test data IEC60945 (extension modules)
6	IPA0375-01	2015-09-15	Report: IPA375 Summary report IEC60945 XDi 96, XDi 144, XDi 192 (extension modules)
5	IPA0340-01	2013-06-27	Report: IPA340-01 Summary report IEC60945 XDi 96, XDi 144, XDi 192
5	IPA0340-01	2013-06-06	Report: EMC Immunity test DANAK-19/13130
5	IPA0340-01	2013-04-11	Report: Compass Safe Distance DANAK-19/12974
4	4189350046 D	D	XDi quick guide 4189350046 UK
3	4921250067 D	D	XDi data sheet 4921250067 UK
1	4910211100 D	2016-12-16	Report: EPC 679 XDi Test Data IEC60945

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016 and

- IEC 60945 4th edition (2002) incl. Corr.1 (2008)
- IEC 61162-1 edition 5.0 (2016)
- IEC 61162-2 edition 1.0 (1998)

Marking of product

The products to be marked with:
- manufacturer name
- model name
- serial number

- power supply ratings

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.

END OF CERTIFICATE