

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Indicator**

with type designation(s)
Wind Indicator WSDI-2

Issued to
DEIF A/S
SKIVE, Denmark

is found to comply with
DNV GL rules for classification – Ships and offshore units
IEC 60945 Ed. 4 (2002-08) Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results

Application :

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

Temperature	B
Humidity	B
Vibration	A
EMC	B
Enclosure	B/IP66-Front, IP20-Back

This Certificate is valid until **2018-05-01**.

Issued at **Høvik** on **2016-05-02**

for **DNV GL**

DNV GL local station: **Aalborg**

Approval Engineer: **Rolf Heger**

Jan Tore Grimsrud
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.

Job Id: **262.1-022378-1**
Certificate No: **TAA00000FB**

Product description

Wind Indicator

Type Designation	Location
WSDI-2	Protected

Technical Data:

Dimensions:	172.2 x 172.2 mm
Power Supply:	12/24VDC +30%, -10%
Input Signals:	RS485 – NMEA 0183
Option:	NCI-1 NMEA 0183 to CAN interface box
Display:	
Direction:	Analog pointer
Dial:	±180°
Marking:	10°
Accuracy:	Class 0.5
Speed:	4-digit 7-segmnnet display
Accuracy:	± digit
Material:	Window – Antiglare 2mm Acrylic (UV-resistant) Housing – ASA-PC blend
Degree of protection:	IP66 - Front IP22 – Back
Software:	1.0X.X

Type Approval documentation

DNV GL No.	Doc. ref.	Rev.	Description
14	DANAK-1910333	-	Report: DELTA, Compass Safe distance test
13	301001/SM	-	Report: DEIF, Performance test WSDI-2
9	IPA299	A	Report: DEIF, Environmental and EMC test report for WSDI-2
6	IPA0317	-	Report: DEIF, Environmental and EMC test report for NCI-1 Interface (Active Sence NGW-1))
10	IPA0299	B	Report: DEIF, Additional Environmental and EMC test report for WSDI-2
3	4189350032C	-	Manual: DEIF, USERS's MANUAL/INSTALLATION NOTE Wind Display Type WSDI-2
4	-	-	Manual: DEIF, Appendix 2 (NCI-1 interface) for USERS's MANUAL/INSTALLATION NOTE Wind Display Type WSDI-2

Tests carried out

- IEC 60945 Fourth Edition (2002)
- DNVGL-CG-0339 (2015)

Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.



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Periodical assessment

A retention survey is to be performed at least once every second year, and again upon renewal of this certificate.

The scope of the retention/renewal survey is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.