

**EU RO MUTUAL RECOGNITION
TYPE APPROVAL CERTIFICATE**

This Certificate is issued to

**ISIC A/S
BRABRAND, Denmark**

for

Monitors, Terminals

with type designation(s)

DuraMON 26 WS LED, Display MD26 ECDIS MK4, Display MD26 ECDIS KM05 MK4

The product is found to comply with

Type Approval Programme for EU RO MR for Monitors, Terminals

Intended service

Display for alarm and monitoring systems subject to classification.

The monitors have been verified for compliance with EU Mutual Recognition Technical Requirements for display monitors, video screens, terminals version 0.2 dated 2015-01-31. Applicable tests for protected equipment according to IEC 60945 (Fourth edition - 2002) including Corrigendum 1 have additionally been verified.

This Certificate is valid until **2019-06-19**.

Issued at **Høvik** on **2016-02-10**

for **DNV GL**

DNV GL local station: **Aalborg**

Approval Engineer: **Ståle Sneen**

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Odd Magne Nesvåg
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: **262.4-000013-3**
Certificate No: **MRA000000G**

Product description

ISIC 26" WS (16:10) Marine Monitor Build in w/LED backlight, comprising the following models:

Model name	Part No.	Description
DuraMON26WS LED	05226-XXX	26" WS (16:10) Marine Monitor Build in w/LED backlight
Display MD26 ECDIS MK4	05226-XXX	26" WS (16:10) Marine Monitor Build in w/LED backlight
Display MD26 ECDIS KM05 MK4	05226-XXX	26" WS (16:10) Marine Monitor Build in w/LED backlight – front KM05

XXX designate OEM variants of the products. The variants will include PSU option and optional OEM logo.

Options for all models:

- Power supply 100-240 VAC 50/60 Hz (marine approved for 115-230 VAC nominal voltage)
- Power supply 24 VDC (marine approved for 24 VDC nominal voltage)
- The monitor comes with either Display Port or HDMI as third input signal. DVI and VGA are standard.
- Built-in buzzer

Compass safe distance measurements:

DuraMON26WS LED / MD 26 LED – all versions and options: Standard 225 cm. Steering 135 cm.

Overview of tested hardware/firmware including name and versions are listed in ISIC's statement "Additional comment / document overview – DNV certificate on DuraMON26LED".

Manufactured by

ISIC A/S
Edwin Rahrs Vej 54
DK-8220 Brabrand

Application/Limitation

The Type Approval covers all hardware listed under Product description. The display monitors are intended for use in alarm and monitoring systems subject to classification.

Type Approval documentation

User Reference Manual: 05192-075 rev. A

Data Sheets: DuraMON 26" Wide Screen for Radar & ECDIS 2 page flyer rev. 13.12.2015.

Test Reports: SP Report 4P00022-2, dated 2014-05-06 – (DuraMON 26 WS LED),
SP Report 5P05962, dated 2015-12-11 – (DuraMON 26/DuraMON 26 Glass).

Statements: Product declaration acc.to EN60945 ed.4 8.12.1 (Corrosion), dated 2014-02-18 – (DuraMON2xWS),
Product declaration acc.to EN60945 ed.4 12.4.1 (X-radiation), dated 2014-02-18 – (DuraMON2xWS),
Additional comment / document overview – DNV certificate on DuraMON26LED dated 2014-06-11,
Additional comments / document overview – certificate update, dated 2016-01-27.

Assessment report: EU RO MR type approval PQA scheme periodical assessment checklist, DNV GL Aalborg 2015-07-07.

Marking of product

Manufacturer's name: ISIC

Type No.: Model name as listed under product description

Unique serial No.

Year of manufacture: YYYY

(Additionally to the year of manufacture, year and week of production is included in the serial No.)

Power supply ratings: Mains voltage as listed under product description + Mains current 0.6-1.3A

Job Id: **262.4-000013-3**
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Other conditions

The monitors have been verified for compliance with EU Mutual Recognition Technical Requirements for display monitors, video screens, terminals version 0.2, dated 2015-01-31. Applicable tests for protected equipment according to IEC 60945 (Fourth edition - 2002) including Corrigendum 1 have additionally been verified.

Environmental test parameters

Temperature: -15°C and 55°C

Vibration: ±1mm / 0.7g

EMC: All locations including bridge and open deck

Enclosure: IP2X standalone, IP65 when console mounted (IP ratings according to IEC 60529)

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 annually and at renewal of this certificate.

END OF CERTIFICATE