DNV·GL

Certificate No:
**MRA000000H**

# 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 19 GLASS, DuraMON 24 GLASS, DuraMON 26 GLASS**

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 **2019-09-28**.

Issued at **Høvik** on **2016-02-10**

for **DNV GL**

DNV GL local station: **Aalborg**

Approval Engineer: **Ståle Sneen**

**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.


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## Product description

ISIC 19", 24" and 26" Marine Monitor Build in w/Glass front panel, comprising the following models:

| Model name | Part No. | Description |
|---|---|---|
| DuraMON 19 GLASS | 07019-XXX | 19" (5:4) Marine Monitor Build in w/Glass front panel |
| DuraMON 24 GLASS | 07024-XXX | 24" WS (16:10) Marine Monitor Build in w/Glass front panel |
| DuraMON 26 GLASS | 07026-XXX | 26" WS (16:10) Marine Monitor Build in w/Glass front panel |

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

Options for all models:
- Power 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)
- Power supply 24 VDC and 100-240 VAC 50/60 Hz (redundant)
  (marine approved for 24 VDC and 115-230 VAC nominal voltage)
- VESA Table stand 150x280 mm
- VESA Wall mount 150x280 mm
- The monitor comes with either Display Port or HDMI as third input signal. DVI and VGA are standard.
- Built-in buzzer
- PCAP touch option

Compass safe distance measurements:
DuraMON 19 GLASS: Standard 165 cm. Steering 105 cm.
DuraMON 24 GLASS: Standard 225 cm. Steering 135 cm.
DuraMON 26 GLASS: Standard 190 cm. Steering 115 cm.

Overview of tested hardware/firmware including name and versions are listed in ISIC's statement "Additional comment / document overview – DNV certificate on DuraMON 19 / 24 / 26 GLASS".

## 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.

All monitors are available with touch screen functionality, which is beyond the scope of this approval. The touch screen hardware has been verified according to the EU MR Technical Requirements for display monitors, video screens, terminals, but any use of touch functionality in classed applications needs to be verified through functional testing.

## Type Approval documentation

## 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

## 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