



Certificate no.:
TAA00003H1

TYPE APPROVAL CERTIFICATE

This is to certify:
that the Bridge Monitor

with type designation(s)
DuraVision MDF2701W

issued to
EIZO Corporation
Hakusan, Japan

is found to comply with
MSC.191(79) Performance standards for presentation of navigation-related information on shipborne navigational displays
IMO Res. A.694(17) General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids
DNV 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.

Temperature	A
Humidity	B
Vibration	A
EMC	B
Enclosure	A, IP 22, IP 65

Issued at **Busan** on **2024-10-28**

This Certificate is valid until **2029-10-27**.

for **DNV**

DNV local unit: **Japan CMC**

Approval Engineer: **Geun Young Park**

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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

DuraVision MDF2701W is a bridge monitor for use as navigational bridge and ECDIS display.

MDF2701W-①-②-③-④ is the model/variant designation with alphanumeric code where:

① Touch Panel	T: Touch panel or N: No touch panel
② ECDIS Indicator	E: Indicating or N: No indicating
③ Bonding	B: Bonding or N: No bonding
④ Customers ID	Where ④ can be 2 digit combination of 0-9 and/or A-Z

Application/Limitation

- DuraVision MDF2701W shall be installed according to manufacturer's documentation.
- DuraVision MDF2701W may be installed as ECDIS display. Then manufacturer provided colour calibration table shall be installed, interfacing with DVI, D-SUB and Display port in accordance with the manufacturer's documentation.
- For ECDIS compliant installation display monitor control is to be interfaced with ECDIS computer and ECDIS colour table to be installed as part of ECDIS SW (see manufacturers documentation).

Type Approval documentation

DNV No.	Drawing No.	Rev.	Title
15			DOC: Salt mist test Declaration of corrosion resistance_MDF2701W
8	00N0N421CZ	C	Manual: DuraVision MDF2701W User's Manual
7	00N0N422B1	B	Manual: DuraVision MDF2701W Setup Manual
28	DOC-AP-000071		Report: Environment Tests (IEC 60945 and DNV-CG-0339 Aug. 2021 Edition)
23	DOC-AP-000061		Report: Performance tests (IEC62288, IEC61174, IEC62388)
22	DOC-AP-000073		Report: Environmental Tests (IEC 60945)
19	DOC-AP-000072		Report: EMC Tests (IEC 60945, IACS UR E10, DNV-CG-0339 Aug. 2021 Edition)
17	400-240092-1		Report: Immunity to radiated radiofrequencies (only 80 MHz to 1000 MHz) of IEC 60945
16	400-240092-2		Report: Immunity to radiated radiofrequencies (only 80 MHz to 1000 MHz) of IACS UR E10 Rev.9
14	LIC 12-23-117		Report: Conducted low frequency immunity (IEC 60945 and IACS UR E10)
13	LIC 12-23-118		Report: Compass safe distance (IEC 60945)
12	LIC 12-23-119		Report: Acoustic noise (IEC 60945)
10	CJ23-172800S		Report: IP65 (IEC 60529)
9	CJ23-172801S		Report: IP22 (IEC 60529)

Tests carried out

- Environmental testing: IEC 60945 (2002) incl. IEC 60945 Corr.1 (2008) for protected environment DNV-CG-0339 Class Guideline (2021)
- Performance testing: Relevant parts of IEC 62288 (2021, Ed.3.0)
Relevant parts of IEC 61174 (2015, Ed.4.0)
Relevant parts of IEC 62388 (2013, Ed.2.0)

Marking of product

The products to be marked with:

- Manufacturer name
- Model name
- Serial number
- Power supply ratings

Periodical assessment

The scope of the retention survey 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 examination 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 examined 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 examination given
- Ensuring traceability between manufacturer's product type marking and the type examination certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.