Certificate no.:
**TAA00003TR**

# TYPE APPROVAL CERTIFICATE

## This is to certify:

**that the Peripheral Equipment**

with type designation(s)
**Operator Panels X3 pro/marine/extreme**

issued to
## Beijer Electronics AB
**Malmö, Skåne Län, Sweden**

is found to comply with
**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.**
**Location classes:**

| | |
|---|---|
| **Temperature** | **B/D*** |
| **Humidity** | **B** |
| **Vibration** | **A/B*** |
| **EMC** | **B** |
| **Enclosure** | **C (front), A (rear)** |

***see page 2**

Issued at **Hamburg** on **2026-01-09**
This Certificate is valid until **2031-01-01**.
DNV local unit: **Denmark CMC**

for **DNV**

Approval Engineer: **Jens Dietrich**

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

| Operator Panel Model | Touch Display | Temperature* | Vibration* |
|---|---|---|---|
| X3 pro 7 | 7" | B | A |
| X3 pro 7 web | 7" | B | A |
| X3 marine 7 | 7" | B | A |
| X3 marine 7 web | 7" | B | A |
| X3 marine 7 P | 7" | B | A |
| X3 marine 7 web P | 7" | B | A |
| X3 extreme 7 P | 7" | D | B |
| X3 extreme 7 P HB | 7" | D | B |
| X3 extreme 7 web P HB | 7" | D | B |
| X3 marine 10 | 10" | B | A |
| X3 marine 10 web | 10" | B | A |
| X3 marine 10 P | 10" | B | A |
| X3 marine 10 web P | 10" | B | A |
| X3 marine 12 | 12" | B | A |
| X3 marine 12 web | 12" | B | A |
| X3 marine 12 P | 12" | B | A |
| X3 marine 12 web P | 12" | B | A |
| X3 extreme 12 P | 12" | D | B |
| X3 extreme 12 P HB | 12" | D | B |
| X3 extreme 12 web P HB | 12" | D | B |
| X3 marine 15 P | 15" | B | A |
| X3 marine 15 web P | 15" | B | A |
| X3 extreme 15 P | 15" | D | B |
| X3 extreme 15 P HB | 15" | D | B |
| X3 extreme 15 web P HB | 15" | D | B |
| X3 marine 21 P | 21" | B | A |
| X3 marine 21 web P | 21" | B | A |

**HB** variants: High Brightness

**web** variants: Web HMI with HTML5 web client

Interfaces:
2x GBit LAN,1x RS232, 1x RS485(2x)/RS422/CAN, 2x USB, 1x SD;
Interfaces pro 7 variants:
2x GBit LAN,1x RS232, 1x RS485(2x)/RS422/CAN, 1x USB, 1x SD;
Interfaces **P** variants:
2x GBit LAN,1x RS232, 1x RS485(2x)/RS422/CAN, 1x RS485/CAN, 2x DIO, 2x USB, 1x SD;

Power supply: 24VDC.

| Compass Safe Distance (IEC60945, 2002, Ch.11.2) | Standard compass | Steering Compass |
|---|---|---|
| X3 pro 7 | | |
| X3 pro 7 web | 30 cm | 15 cm |

| | | |
|---|---|---|
| X3 marine 7 | | |
| X3 marine 7 web | | |
| X3 marine 7 P | | |
| X3 marine 7 web P | 30 cm | 10 cm |
| X3 extreme 7 P | | |
| X3 extreme 7 P HB | | |
| X3 extreme 7 web P HB | 30 cm | 10 cm |
| X3 marine 10 | | |
| X3 marine 10 web | | |
| X3 marine 10 P | | |
| X3 marine 10 web P | 35 cm | 10 cm |
| X3 marine 12 | | |
| X3 marine 12 web | | |
| X3 marine 12 P | | |
| X3 marine 12 web P | 25 cm | 10 cm |
| X3 extreme 12 P | | |
| X3 extreme 12 P HB | | |
| X3 extreme 12 web P HB | 30 cm | 10 cm |
| X3 marine 15 P | | |
| X3 marine 15 web P | 40 cm | 10 cm |
| X3 extreme 15 P | | |
| X3 extreme 15 P HB | | |
| X3 extreme 15 web P HB | 30 cm | 15 cm |
| X3 marine 21 P | | |
| X3 marine 21 web P | 40 cm | 15 cm |

## Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Product certificate

If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program. After certification the clause for software control will be put into force.

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 for evaluation and approval before implemented on board. Certification of modified functionality may be required for the particular vessel.

## Tests carried out

Applicable Tests according to DNV CG-0339, 2021;
IEC60945 for protected/exposed equipment acc. to ch.8, 9, 10 and 11.2.

## Marking of product

Label showing maker, address, type designation, part number, production date YYWW, serial number, Revision**.**

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

END OF CERTIFICATE