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Certificate No: A-14156 File No: 899.60 Job Id:

262.1-018976-1

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Peripheral Equipment

with type designation(s) **T7BR**, **T7BM**

Issued to

Beijer Electronics, Inc. Salt Lake City UT, United States

is found to comply with

Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske **Veritas' Offshore Standards**

Application :	
Location classes:	

Type	Temperature	Humidity	Vibration	EMC	Enclosure
T7BR	D	В	В	В	C (panel front only)
T7BM	В	В	Α	В	C (panel front only)

	Odd Magne Nesvåg
Approval Engineer: Nils Jarem	
DNV GL local station: Long Beach	101 DNV GL
Issued at Høvik on 2015-02-16	for DNV GL
Tananad at Harrilla an 2015 02 16	
This Certificate is valid until 2019-06-30 .	

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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.

Certificate No: **A-14156** File No: **899.60**

Job Id: **262.1-018976-1**

Product description

T7BR / T7BM touchscreen operator panel. 7'', 800×480 pixel, LED lighted, TFT color display

Nominal voltage: 24V DC

Compass safe distance: Standard compass: 60 cm,

Steering compass: 35 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 Ships Pt.4 Ch.9 Control and Monitoring Systems

Application/Limitation

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Excertificate issued by a notified/recognized Certification Body.

Type Approval documentation

Datasheet: iX T7BR datasheet

Manual: T7BR Installation Manual, MAEN185, dated 2015-01

Drawings: D02-905 rev. 1

Test reports: 12267-1S rev. 0, 273359-2.2 rev. 2, 273359-4.2 rev. 2

DNV GL Long Beach initial assessment report dated 2014-06-13

Tests carried out

Applicable tests according to Standard for Certification No. 2.4, April 2006.

The 'Compass safe distance' was measured according to section 11.2 of IEC 60945 4th edition (2002).

Marking of product

Beijer Electronics Base Type: T7BR Serial no. / Part no.

Nominal voltage 24V DC, Rated current .83 A

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 at least every second year and at renewal of this certificate.

END OF CERTIFICATE

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