



COPY

TYPE APPROVAL CERTIFICATE

Certificate No. : LOX33152-AC002 **Initial Approval** : 5th October, 2015.
Product : Touch Screen Control Panel
Manufacturer : Beijer Electronics Inc.
1865 West 2100 South, Salt Lake City, Utah, 84119, USA

Product Description : Type : T7BR, T7BM

Intended for : Human Machine Interface applicaitons for use as alarm monitoring, automation etc.

" See Appendix 1 "

Approval Condition : " See Appendix 1 "

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships.

This Certificate is valid until 4th October, 2020.
Issued at Busan, Korea on 5th October, 2015.



*General Manager of
Marine & Ocean Equipment Team*

Note :1 : The approval will be automatically suspended and the Certificate become invalid from the expiry date of the Certificate in the event that the extension has not been granted or the renewal of the Certificate is not underway.
2 : The manufacturer should notify this Society of any modification or changes that may affect the validity of this Certificate.

Product Description and/or Approval Condition

Certificate No : LOX33152-AC002

Date of Issue : 5th October, 2015.

Product Descriptions :

- Touch Screen Control Panel (Type : T7BR, T7BM)

T7BR and T7BM models have identical construction except the color of T7BR enclosure is silver and the color of T7BM enclosure is black.

1. General specification :

- Power supply : 12 to 24 VDC
- Display resolution / Type : 800×480 / TFT color LCD
- Display size : 7 "
- Operating temperature : -30 ~ 70 °C
- Degree of protection : IP 66
- Development software : iX Developer ver. 2.10 or higher
- Explosion proof type : Ex nA IIC T4 Gc, -30 °C≤Ta≤+70 °C

2. This panel consists of the following interfaces

- 1× RS232, 1×RS422/485 (isolated)
- 1×10/100 Base-T, 1×10/100/1000 Base-T Ethernet
- 3×USB 2.0
- 2×CiX CAN module(Optional)
- 1×SD card
- 1×Headphone or speaker connector

3. Compass safe distance

The minimum safe distance at which this panel may be mounted from the compasses is as follows.

Type	Standard Compass (cm)	Steering Compass (cm)
T7BR, T7BM	57	35

4. Documentation :

- 1) Environmental test reports :
 - No. 273359-2.2, 273359-3.2 & 273359-4.2 issued by Nemko-CCL, Inc.
 - No. 12267-1S issued by Labtest certification Inc.
- 2) Approved drawing No. D02-723, D02-726 & D02-905
- 3) IECEx test report No. CA/LC/ExTR14.0028/00 issued by LabTest Certification Inc.
- 4) IECEx certificate No. IECEx LC 14.0028
- 5) iX T7BR data sheet

Approval Conditions :

1. This approval is granted on the basis of the test reports issued by Nemko-CCL, Inc. & Labtest certification Inc.
2. The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.
3. This Certificate covers the hardware of T7BR, T7BM only. The function of the software is to be verified by the individual product certification or on-board test.
4. If this panel is used as parts of the controller for essential auxiliaries specified in KR Rule Pt. 5, Ch. 1, 102, Individual Product Certification for the controller is required and the system drawings for individual vessel are to be approved by this society.

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