



Staff in charge : Songs Seok-sang (070-8799-8242, sssang@krs.co.kr)

To : Beijer Electronics Products AB	Work ID : KAO-T0005-16
Stora Varvsgatan 13a SE-201 24 Malmo Sweden	Your Ref. No. : -
	Date : 11 th April 2017
Attn. : Mr. Axel Gustafson (Tel.: +46 40 35 86 00)	Job ID. No. : CPH33151-AC002

Subject : (Initial) Type Approval for Touch Operator Panel(X2 HMI PANEL)

Dear Mr. Axel Gustafson

With reference to the above mentioned subject, please be informed that you are entitled to obtain the Type Approval Certificate in accordance with the rules of this Society.

Enclosed please find the certificate and an invoice to cover the cost of this job. Also, you are kindly requested to remit the total amount as per the instructions and the terms of payment on the invoice.

- Encl. 1. Type Approval Certificate --- (CPH33151-AC002)
2. Invoice ----- (HDO-05280-17)

Yours very truly,

Korean Register of Shipping

*Choi Jong-yuel / General Manager of
Marine & Ocean Equipment Team*

- C.C.1: KR Copenhagen Office** (Letter and One copy of the certificate)
C.C.2: KR Taipei Branch Office (Letter and One copy of the certificate)
C.C.3.: Beijer Electronics Corp. (Letter)
- Attn : Mr. Allan Wang(Tel.: +866 2 2218 3600)

- The End -



TYPE APPROVAL CERTIFICATE

Certificate No. : CPH33151-AC002 **Initial Approval** : 11th April, 2017
Product : Touch Screen Control Panel
Applicant : Beijer Electronics Products AB
Box 426 Stora Varvsgatan 13a SE-201 24 Malmö Sweden

Product Description : Type : X2 HMI Panel

- Power supply : 24 VDC(18 ~ 32 VDC)
- Enclosure : Front(IP65), Rear(IP20)

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

* Manufacturing place
- Beijer Electronics Corp.
- 4F, No. 501-15, Zhongzheng Rd., Xindian Dist., New Taipei City, Taiwan

" See Appendix 1 & 2 "

Approval Condition : " See Appendix 1 & 2 "

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 10th April, 2022

Issued at Busan, Korea on 11th April, 2017



KOREAN REGISTER OF SHIPPING

*General Manager of
Marine & Ocean Equipment Team*

*Note : 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.*

Appendix 1

Product Description and/or Approval Condition

Certificate No : CPH33151-AC002

Date of Issue : 11th April, 2017

A. Product Descriptions :

Type name	CPU	Display Size
X2 pro 4 - B2	IMX4 Basic	4.3"
X2 control 4 - B2	IMX4 Advanced	4.3"
X2 motion 4 - B2	IMX4 Advanced	4.3"
X2 pro 7 - B2	IMX4 Basic	7"
X2 control 7 - B2	IMX4 Advanced	7"
X2 motion 7 - B2	IMX4 Advanced	7"
X2 marine 7 - B2	IMX4 Basic	7"
X2 marine 7 - B2 SC	IMX4 Advanced	7"
X2 marine 7 - B2 HB	IMX7 Advanced	7"
X2 marine 7 - B2 HB SC	IMX7 Advanced	7"
X2 pro 10 - B2	IMX7 Basic	10.1"
X2 control 10 - B2	IMX7 Advanced	10.1"
X2 motion 10 - B2	IMX7 Advanced	10.1"
X2 pro 12 - B2	IMX7 Basic	12.1"
X2 control 12 - B2	IMX7 Advanced	12.1"
X2 motion 12 - B2	IMX7 Advanced	12.1"
X2 pro 15 - B2	IMX7 Basic	15.4"
X2 control 15 - B2	IMX7 Advanced	15.4"
X2 motion 15 - B2	IMX7 Advanced	15.4"
X2 marine 15 - B2	IMX7 Basic	15.4"
X2 marine 15 - B2 SC	IMX7 Advanced	15.4"
X2 marine 15 - B2 HB	IMX7 Basic	15.4"
X2 marine 15 - B2 HB SC	IMX7 Advanced	15.4"
X2 pro 7 - B2 Key	IMX4 Basic	7"
X2 pro 10 - B2 Key	IMX4 Basic	10.4"

All models are touch operator panels except - Key Types,

- HB : High Brightness variants
- SC : Software Option SoftControl
- Motion : with SW add-on SoftMotion CNC
- HW Options : ciX CAN Module

1. 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)
X2 marine 7 - B2 HB	45	25
X2 pro 10 - B2	75	40
X2 pro 12 - B2	40	30
X2 marine 15 - B2 HB SC	60	45
X2 control 15 - B2	70	45
X2 pro 4 - B2	35	20
X2 control 7 - B2	85	45
X2 marine 7 - B2 SC	80	35
X2 pro 7 - B2 Key	90	35
X2 pro 10 - B2 Key	95	85

For types not measured, worst case minimum compass safe distance (95cm/85cm) is to be observed.

< To be continued >

Appendix 2

Product Description and/or Approval Condition

Certificate No : CPH33151-AC002

Date of Issue : 11th April, 2017

2. Documentation :

1) EMC Test Reports :

- 151202001T-23, 151202001T-24, 151202001T-25, 151202001T-26, 151202001T-27,
151202001T-28, 151202001T-29, 151202001T-30, 151202001T-31, 151202001T-32
issued by CAL-Tech

- T160325D05-E, T160406D07-E, T160406D08-E, T160406D10-E, T160407D01-E,
T160407D02-E, T160408D01-E, T160408D08-E, T160505D01-E, T160505D02-E issued by CCSRF

2) IP Test Reports:

- IP-A105-165-E, IP-A105-166-E, IP-A105-167-E, IP-A105-168-E, IP-A105-190-E,
IP-A105-191-E, IP-A105-192-E, IP-A105-193-E, IP-A105-194-E, IP-A105-195-E
issued by CHENG SHIU University

3) Environmental Test Reports :

- 16-02-EAT-074-E01, 16-02-EAT-074-E02, 16-02-EAT-074-E03
16-05-EAT-008-E01, 16-05-EAT-008-E02 issued by ETC

4) Vibration Test Reports :

- VS-TV-050321-01, VS-TV-050321-02, VS-TV-050321-03, VS-TV-050321-04, VS-TV-050321-06,
VS-TB-050518-01, VS-TB-050518-02, VS-TB-050518-03, VS-TB-050518-04, VS-TB-050518-05
issued by Vibration Source Technology

5) Flame Test Reports:

- UT105063, UT105064, UT105065, UT105066, UT105076, UT105077, UT105078 UT105079
issued by Universal Testing Inc.

6) HV Insulation Test Reports:

- 151202001T-1, 151202001T-2, 151202001T-3, 151202001T-4, 151202001T-5, 151202001T-13,
151202001T-14, 151202001T-15, 151202001T-16, 151202001T-17 issued by CAL-Tech

7) Power Supply Variation Test Reports:

- 16-06-MAS-087-01, 16-06-MAS-087-02 issued by ETC

8) Compass Safe Distance Test Reports:

- 151202001T-7, 151202001T-8, 151202001T-9, 151202001T-10, 151202001T-11, 151202001T-18,
151202001T-19, 151202001T-20, 151202001T-21, 151202001T-22 issued by CAL-Tech

9) Approved Drawing No. :

- DDOC-00001A, DDOC-00002A, DDOC-00003B, DDOC-00004A, DDOC-00005A,
DDOC-00006A, DDOC-00007A, DDOC-00008A, DOK-Z8100-001A, DOK-Z8100-002A,
DOK-Z8100-100, DOK-Z8100-101, DOK-Z8100-102

10) Installation Manual No. MAEN202, 2016-05

B. Approval Conditions :

1. The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.
2. This Certificate covers the hardware of X2 HMI Panel only. The function of the software is to be verified by the individual product certification or on-board test.
3. 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.

< The End >