



Marine & Offshore
Division

Certificate number: 47303/A0 BV

File number: AP 4710

Product code: 4483H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Beijer Electronics Products AB

Malmö - SWEDEN

for the type of product

DISPLAY MONITORS / VIDEO SCREENS / TERMINALS

X2 Family of Operator Panels

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships
IEC 60945 (2002) +/Corr.1 (2008)

EC Code: 31B

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 04 Jan 2022

For BUREAU VERITAS,

At BV GOTHENBURG, on 04 Jan 2017,

Torbjorn Ygesjo



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 October 2014

This certificate consists of 5 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

- Product model or type designation :
X2 Family (pro, marine, control, motion)

- Product description:
 Operator Panel

1.1 - Models Identification:

Type name	CPU	Display Size
X2 pro 4 - B2	IMX6 Solo	4.3"
X2 control 4 - B2, X2 motion 4 - B2	IMX6 DualLite	4.3"
X2 pro 7 - B2	IMX6 Solo	7"
X2 control 7 - B2, X2 motion 7 - B2	IMX6 DualLite	7"
X2 marine 7 - B2	IMX6 Solo	7"
X2 marine 7 - B2 SC	IMX6 DualLite	7"
X2 marine 7 - B2 HB	IMX6 Quad	7"
X2 marine 7 - B2 HB SC	IMX6 Quad	7"
X2 pro 10 - B2	IMX6 DualLite	10"
X2 control 10 - B2, X2 motion 10 - B2	IMX6 Quad	10"
X2 pro 12 - B2	IMX6 DualLite	12"
X2 control 12 - B2, X2 motion 12 - B2	IMX6 Quad	12"
X2 pro 15 - B2	IMX6 DualLite	15"
X2 control 15 - B2, X2 motion 15 - B2	IMX6 Quad	15"
X2 marine 15 - B2	IMX6 DualLite	15"
X2 marine 15 - B2 SC	IMX6 Quad	15"
X2 marine 15 - B2 HB	IMX6 DualLite	15"
X2 marine 15 - B2 HB SC	IMX6 Quad	15"

Note: SC=SoftControl; SM= SoftMotion; HB= High Brightness;

1.2 - Enclosure:

- Enclosure: front: IP65, rear: IP20

1.3 - Power Supply:

- +24 VDC (18-32 V DC)

2. DOCUMENTS AND DRAWINGS:

Beijer Electronics:

- X2 pro 4-B2, X2 control 4-B2, X2 motion 4-B2 Outline Dimensions No. DDOC-00001 Rev. A, dated Jan 15, 2016
- X2 pro 7-B2, X2 control 7-B2, X2 motion 7-B2, X2 marine 7-B2, X2 marine 7-B2 SC Outline Dimensions No. DDOC-00002 Rev. A, dated Jan 15, 2016
- X2 marine 7-B2 HB, X2 marine HB 7-B2 SC Outline Dimensions No. DDOC-00003 Rev. B, dated Jan 22, 2016
- X2 pro 7-B2 Key Outline Dimensions No. DDOC-00004 Rev. A, dated Jan 11, 2016
- X2 pro 10-B2, X2 control 10-B2, X2 motion 10-B2 Outline Dimensions No. DDOC-00005 Rev. A, dated Jan 18, 2016
- X2 pro 10-B2 Key Outline Dimensions No. DDOC-00006 Rev. A, dated Jan 18, 2016
- X2 pro 12-B2, X2 control 12-B2, X2 motion 12-B2 Outline Dimensions No. DDOC-00007 Rev. A, dated Jan 20, 2016
- X2 pro 15-B2, X2 control 15-B2, X2 motion 15-B2, X2 marine 15-B2, X2 marine 15-B2 SC, X2 marine 15-B2 HB, X2 marine 15-B2 HB SC Outline Dimensions No. DDOC-00008 Rev. A, dated Jan 20, 2016
- Installation Manual Ref.: MAEN202, 2016-05

3. TEST REPORTS:**ETC:**

- Climatic Test Report No. 16-02-EAT-074-E01, dated Feb 15, 2016
- Climatic Test Report No. 16-02-EAT-074-E02, dated Feb 15, 2016
- Inclination Test Report No. 16-02-EAT-074-E03, dated Feb 15, 2016
- Climatic Test Report No. 16-05-EAT-008-E01, dated May 3, 2016
- Inclination Test Report No. 16-05-EAT-008-E02, dated Feb 15, 2016
- Power Supply Variation Test No. 16-06-MAS-087-01, dated Jun 28, 2016
- Power Supply Variation Test No. 16-06-MAS-087-02, dated Jun 28, 2016
- Safety Test No. 151202001T-1, dated Mar 23, 2016
- Safety Test No. 151202001T-2, dated Mar 23, 2016
- Safety Test No. 151202001T-3, dated Mar 23, 2016
- Safety Test No. 151202001T-4, dated Mar 23, 2016
- Safety Test No. 151202001T-5, dated Mar 23, 2016
- Compass Safe Distance No. 151202001T-7, dated Mar 23, 2016
- Compass Safe Distance No. 151202001T-8, dated Mar 23, 2016
- Compass Safe Distance No. 151202001T-9, dated Mar 23, 2016
- Compass Safe Distance No. 151202001T-10, dated Mar 23, 2016
- Compass Safe Distance No. 151202001T-11, dated Mar 23, 2016
- Safety Test No. 151202001T-13, dated May 27, 2016
- Safety Test No. 151202001T-14, dated May 27, 2016
- Safety Test No. 151202001T-15, dated May 27, 2016
- Safety Test No. 151202001T-16, dated May 27, 2016
- Safety Test No. 151202001T-17, dated May 27, 2016
- Compass Safe Distance No. 151202001T-18, dated Mar 23, 2016
- Compass Safe Distance No. 151202001T-19, dated Mar 23, 2016
- Compass Safe Distance No. 151202001T-20, dated Mar 23, 2016
- Compass Safe Distance No. 151202001T-21, dated Mar 23, 2016
- Compass Safe Distance No. 151202001T-22, dated Mar 23, 2016
- Electromagnetic Compatibility Test No. 151202001T-23, dated May 27, 2016
- Electromagnetic Compatibility Test No. 151202001T-24, dated May 27, 2016
- Electromagnetic Compatibility Test No. 151202001T-25, dated May 27, 2016
- Electromagnetic Compatibility Test No. 151202001T-26, dated May 27, 2016
- Electromagnetic Compatibility Test No. 151202001T-27, dated May 27, 2016
- Electromagnetic Compatibility Test No. 151202001T-28, dated May 27, 2016
- Electromagnetic Compatibility Test No. 151202001T-29, dated May 27, 2016
- Electromagnetic Compatibility Test No. 151202001T-31, dated May 27, 2016
- Electromagnetic Compatibility Test No. 151202001T-32, dated May 27, 2016
- Degree of protection Test Report No. IP-A105-165-E, dated Apr 30, 2016
- Degree of protection Test Report No. IP-A105-166-E, dated Apr 30, 2016
- Degree of protection Test Report No. IP-A105-167-E, dated Apr 30, 2016
- Degree of protection Test Report No. IP-A105-168-E, dated Apr 28, 2016
- Degree of protection Test Report No. IP-A105-190-E, dated Jun 6, 2016
- Degree of protection Test Report No. IP-A105-191-E, dated Jun 6, 2016
- Degree of protection Test Report No. IP-A105-192-E, dated Jun 6, 2016
- Degree of protection Test Report No. IP-A105-193-E, dated Jun 6, 2016
- Degree of protection Test Report No. IP-A105-194-E, dated Jun 6, 2016
- Degree of protection Test Report No. IP-A105-195-E, dated Jun 6, 2016

3. TEST REPORTS (to be continued):**ETC:**

- EMC Test Report No. T160406D07-E, dated Jul 7, 2016
- EMC Test Report No. T160408D08-E, dated Jul 12, 2016
- EMC Test Report No. T160325D05-E, dated Jul 7, 2016
- EMC Test Report No. T160407D01-E, dated Jul 7, 2016
- EMC Test Report No. T160408D01-E, dated Jul 7, 2016
- EMC Test Report No. T160407D02-E, dated Jul 12, 2016
- EMC Test Report No. T160408D08-E, dated Jul 12, 2016
- EMC Test Report No. T160505D01-E, dated Jul 7, 2016
- EMC Test Report No. T160505D02-E, dated Jul 7, 2016
- Sound Pressure Level Test Report No. TH2_16_0115E, dated May 13, 2016
- Flame Retardant Test Report No. UT105063, dated May 27, 2016
- Flame Retardant Test Report No. UT105064, dated May 27, 2016
- Flame Retardant Test Report No. UT105065, dated May 27, 2016
- Flame Retardant Test Report No. UT105076, dated Jun 17, 2016
- Flame Retardant Test Report No. UT105077, dated Jun 17, 2016
- Flame Retardant Test Report No. UT105078, dated Jun 17, 2016
- Flame Retardant Test Report No. UT105079, dated Jun 17, 2016

VST Co.,:

- Vibration Test Report X2 pro 10-B2 No. VS-TS-050409-04, dated Apr 9, 2016
- Vibration Test Report X2 pro 12-B2 No. VS-TS-050409-05, dated Apr 9, 2016
- Vibration Test Report X2 marine 15-B2 HB SC No. VS-TS-050409-06, dated Apr 9, 2016
- Vibration Test Report X2 control 15-B2 SC (option CiX-CAN) No. VS-TS-050409-07, dated Apr 9, 2016
- Vibration Test Report X2 marine 7-B2 HB No. VS-TS-050428-01, dated Apr 28, 2016
- Vibration Test Report X2 pro 4-B2 No. VS-TS-050523-01, dated May 23, 2016
- Vibration Test Report X2 pro 10-B2 key No. VS-TS-050523-02, dated May 23, 2016
- Vibration Test Report X2 pro 21-B2 No. VS-TS-050409-08 , dated Apr 9, 2016
- Vibration Test Report X2 pro 7-B2 key No. VS-TS-050531-01, dated May 31, 2016
- Vibration Test Report X2 pro 12-B2 No. VS-TS-, dated May 23, 2016
- Vibration Test Report X2 No. VS-TV-050321-02, dated Apr 4, 2016
- Vibration Test Report X2 control 15-B2 SC (option CiX-CAN) No. VS-TV-050321-01, dated May 23, 2016
- Vibration Test Report X2 marine 7-B2 SC No. VS-TS-050601-02, dated Jun 1, 2016
- Vibration Test Report X2 control 7-B2 SC (option CiX-CAN) No. VS-TS-050601-03, dated Jun 1, 2016
- Vibration Test Report X2 marine 7-B2 HB No. VS-TV-050321-03, dated Apr 8, 2016
- Vibration Test Report X2 pro 10-B2 key, No. VS-TV-050518-02, dated May 24, 2016
- Vibration Test Report X2 pro 4-B2 No. VS-TV-050518-01, dated May 23, 2016
- Vibration Test Report X2 pro 10-B2 No. VS-TV-050321-06, dated Apr 28, 2016
- Vibration Test Report X2 pro 21-B2 No. VS-TV-050321-05, dated Apr 9, 2016
- Vibration Test Report X2 marine 15-B2 HB SC No. VS-TV-050321-04, dated Apr 9, 2016
- Vibration Test Report X2 marine 7-B2 SC No. VS-TV-050518-05, dated Jun 10, 2016
- Vibration Test Report X2 pro 7-B2 key No. VS-TV-050518-04, dated Jun 9, 2016
- Vibration Test Report X2 control 7-B2 SC (option CiX-CAN) No. VS-TV-050518-03, dated Jun 5, 2016

4. APPLICATION / LIMITATION:

4.1 - BUREAU VERITAS Rules for the Classification of Steel Ships.

4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**

4.3 - BUREAU VERITAS Environmental Category, **EC Code: 31B**

4.4 - The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.

4.5 - To be flush mounted.

4.6 - Only Hardware and Firmware successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.

4.7 - The X2 Family Operator Panels are not intended for the presentation of navigation-related information.

4.8 - The minimum safe distance at which the equipment may be mounted from a standard or a steering magnetic compass is not to be less than 1 m.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The above products are to be supplied by **Beijer Electronics Products AB** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **Beijer Electronics Products AB** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - **Beijer Electronics Products AB** has declared to Bureau Veritas the following production site(s):

**Beijer Electronics
4F, No.501-15, Zhongzheng Rd.,
Xindian Dist., New Taipei City, , Taiwan 23148**

6. MARKING OF PRODUCT:

- Maker's name or trade mark.

- Serial number of the units.

- Equipment type number or model identification under which it was type-tested.

7. OTHERS:

It is **Beijer Electronics Products AB - Sweden**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

*** END OF CERTIFICATE ***