

CERTIFICATE NUMBER EFFECTIVE DATE EXPIRY DATE ABS TECHNICAL OFFICE 19-1912378-1-PDA 04-Nov-2022 21-Oct-2024 Rio de Janeiro Engineering -Machinery

## **CERTIFICATE OF**

# **Product Design Assessment**

This is to certify that a representative of this Bureau did, at the request of

# **B&R INDUSTRIAL AUTOMATION GMBH**

located at

## B & R STRASSE 1, , EGGELSBERG, Austria, 5142

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

**Product:** Monitor, Graphic Panels

Model: Power Panels T series (T30, T50, T80)

**Endorsements:** 

Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 21/Oct/2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shinning

Ivson Soares, Managing Principal Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

#### **B & R INDUSTRIAL AUTOMATION GMBH**

B & R STRASSE 1 **EGGELSBERG** 

Austria 5142

Telephone: +43 7748 6586 - 0 Fax: +43 7748 6586 - 26

Email: office@br-automation.com Web: www.br-automation.com

Tier: 2 - PDA Issued

**Product:** Monitor, Graphic Panels

Model: Power Panels T series (T30, T50, T80)

**Endorsements:** 

#### **Intended Service:**

ABS classed vessels and offshore installations in accordance with the listed ABS Rules and International Standards.

Power panels with Zoll analogue resistive touch screens.

#### **Rating:**

T30 Series:

Power Supply: 8-32 VDC Temperature: -20C to +60C

IP Rating: IP65 (front) / IP20 (back)

**Fanless** 

T50 Series:

Power Supply: 24 VDC (-15% / +20%)

Temperature: -20C to +60C

IP Rating: IP65 (front) / IP20 (back)

**Fanless** 

T80 Series:

Power Supply: 24 VDC (-15% / +30%)

Temperature: -20C to +60C

IP Rating: IP55 (front) / IP20 (back)

**Fanless** 

#### **Service Restriction:**

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

### **Notes/Drawing/Documentation:**

Drawing No. 1, T80 Panels Test Description, Revision: 1.0

Drawing No. 22, T80 7,0inch Test Report, Revision: 01, dated 15-Dec-2020 Drawing No. 3, T80 15,6inch Test Report, Revision: 01, dated 15-Dec-2020 Drawing No. 4, T80 Environmental Test Report, Revision: 02, dated 11-Mar-2021 Drawing No. 5, T80 Users Manual, Revision: 2.0

Drawing No. 6, T80 7,0inch Part List, Revision: 1.0

Drawing No. 7, T80 10,1inch Part List, Revision: 1.0

Drawing No. 8, T80 12,1inch Part List, Revision: 1.0

Drawing No. 9, T80 15,6inch Part List, Revision: 1.0

Drawing No. 10, T80 7,0inch Circuit Diagram Base, Revision: 2.2

Drawing No. 11, T80 7,0inch Circuit Diagram DRAM, Revision: 3.3

Drawing No. 12, T80 10,1inch Circuit Diagram Base, Revision: 2.2

Drawing No. 13, T80 10,1inch Circuit Diagram DRAM, Revision: 3.3

Drawing No. 14, T80 12,1inch Circuit Diagram Base, Revision: 2.2

Drawing No. 15, T80 12,1inch Circuit Diagram DRAM, Revision: 3.3

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#### Tier: 2 - PDA Issued

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Drawing No. 16, T80 15,6inch Circuit Diagram Base, Revision: 2.2
Drawing No. 17, T80 15,6inch Circuit Diagram DRAM, Revision: 3.3
Drawing No. 18, EN ISO9001:2015, Revision: 1
Drawing No. 19, EN ISO14001:2015, Revision: 1
Drawing No. 20, cLR2002532TA-02-1962075-B&R, Revision: 02
Drawing No. 21, DNV Type Approval Certificate TAA000024X, Revision: 1
Support documentation from previous review:
Drawing No. Circuit diagram T30 10,1inch, Circuit diagram T30 10,1inch, Revision: -, Pages: -
Drawing No. Circuit diagram T30 4,3inch, Circuit diagram T30 4,3inch, Revision: -, Pages: -
Drawing No. Circuit diagram T30 5,7inch, Circuit diagram T30 5,7inch, Revision: -, Pages: -
Drawing No. Circuit diagram T30 7,0inch, Circuit diagram T30 7,0inch, Revision: -, Pages: -
Drawing No. Circuit diagram T50 10,1inch, Circuit diagram T50 10,1inch, Revision: -, Pages: -
Drawing No. Circuit diagram T50 12,1inch, Circuit diagram T50 12,1inch, Revision: -, Pages: -
Drawing No. Circuit diagram T50 15,6inch, Circuit diagram T50 15,6inch, Revision: -, Pages: -
Drawing No. Circuit diagram T50 5,0inch, Circuit diagram T50 5,0inch, Revision: -, Pages: -
Drawing No. Circuit diagram T50 7,0inch, Circuit diagram T50 7,0inch, Revision: -, Pages: -
Drawing No. Documentation T30 panels, Documentation T30 panels, Revision: -, Pages: -
Drawing No. Documentation T50 panels, Documentation T50 panels, Revision: -, Pages: -
Drawing No. EMC test report T30 10,1inch, EMC test report T30 10,1inch, Date: 26-July-2019, CSA Group,
Revision: -, Pages: -
Drawing No. EMC test report T30 4,3inch, EMC test report T30 4,3inch, Revision: -, Pages: -
Drawing No. EMC test report T50 10,1inch, EMC test report T50 10,1inch, Revision: -, Pages: - Drawing No. EMC test report T50 15,6inch, EMC test report T50 15,6inch, Revision: -, Pages: - Drawing No. EMC test report T50 7,0inch, EMC test report T50 7,0inch, Revision: -, Pages: -
Drawing No. Env. test report T30 10,1inch, Env. test report T30 10,1inch, Date: 26-Sep-2019, CSA Group, Revision:
-, Pages:
Drawing No. Env. test report T30 4,3inch, Env. test report T30 4,3inch, Date: 27-Sep-2019, CSA Group, Revision: -,
Pages: ·
Drawing No. Env. test report T50 10,1inch, Env. test report T50 10,1inch, Date: 17-Dec-2019, CSA Group, Revision:
Drawing No. Env. test report T50 15,6inch, Env. test report T50 15,6inch, Date: 17-Dec-2019, CSA Group, Revision:
Drawing No. Env. test report T50 7,0inch, Env. test report T50 7,0inch, Date: 17-Dec-2019, CSA Group, Revision: -,
Pages: -
Drawing No. ISO Certificate, ISO Certificate, Revision: -, Pages: -
Drawing No. KR Certificate T30 panels, KR Certificate T30 panels, Revision: -, Pages: -
Drawing No. Overview, Overview, Revision: -, Pages: - Drawing No. Part list T30 10,1inch, Part list T30 10,1inch, Revision: -, Pages: -
Drawing No. Part list T30 4,3inch, Part list T30 4,3inch, Revision: -, Pages: -
Drawing No. Part list T30 5,7inch, Part list T30 5,7inch, Revision: -, Pages: -
Drawing No. Part list T30 7,2inch, Part list T30 7,2inch, Revision: -, Pages: -
Drawing No. Test description T30 4,3+5,7inch, Test description T30 4,3+5,7inch, Revision: -, Pages: -
Drawing No. Test description T30 7,0+10,1inch, Test description T30 7,0+10,1inch, Revision: -, Pages: -
Drawing No. Test description T50 10,1inch, Test description T50 10,1inch, Revision: -, Pages: -
Drawing No. Test description T50 12,1+15,6inch, Test description T50 12,1+15,6inch, Revision: -, Pages: -
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#### Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 21/Oct/2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Drawing No. Test description T50 5+7,0inch, Test description T50 5+7,0inch, Revision: -, Pages: -

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#### **STANDARDS**

#### **ABS Rules:**

- Marine Vessels Rules (2022): 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.7, 4-9-9/7, 4-9-9/13, 4-9-9/Table1
- Steel Vessels for Service on Rivers and Intracoastal Waterways Rules (2022): 1-1-4/7.7, 1-1-A3, 1-1-A4
- Steel Barge Rules (2022): 1-1-4/7.9, 1-1-A3, 1-1-A4
- High-Speed Crafts Rules (2022): 1-1-4/11.9, 1-1-A2, 1-1-A3, 4-6-1/11, 4-7-9/7, 4-7-9/15, 4-7-9/Table 9
- Facilities on Offshore Installations Rules (2022): 1-1-4/9.7, 1-1-A2, 1-1-A3
- Mobile Offshore Units Rules (2022): 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-1-1/7.9, 4-3-1/11, 6-1-1/9, 6-1-1/13

#### **National:**

NA

#### **International:**

NA

#### **Government:**

NA

#### **EUMED:**

NA

### **OTHERS:**

NA