



CERTIFICATE NUMBER	22-2320839-PDA
EFFECTIVE DATE	10-Jan-2023
EXPIRY DATE	09-Jan-2028
ABS TECHNICAL OFFICE	Gdynia Engineering Department

CERTIFICATE OF Product Design Assessment

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

NORIS AUTOMATION GMBH

located at

F-BARNEWITZ-STR. 10, , D-18119 ROSTOCK, Germany

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: Transducer
Model: SA502-3G
Endorsements:
Tier: 2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 09/Jan/2028 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 Shipping

Efstratios Maliatsos, Engineer/Consultant

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)

NORIS AUTOMATION GMBH

F-BARNEWITZ-STR. 10

D-18119 ROSTOCK

Germany

Telephone: -49-381-5199440

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Email: info.nar@noris-group.com

Web: www.noris-group.com

Tier: 2 - PDA Issued

Product: Transducer

Model: SA502-3G

Endorsements:

Intended Service:

Marine and Offshore Applications.

Description:

Converting of potentiometer signals into a standard current and voltage signal.

Rating:

Power Supply: 24 V DC

Operating Temperature: -25 °C up to 70 °C

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.

Comments:

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

Notes/Drawing/Documentation:

Drawing No. 090.002.03.x0x, Drawing, Revision: 1, Pages: 13

Drawing No. 090.002.03.206.B, SA502-3G - Sticker Label, Revision: -, Pages: 1

Drawing No. 204791b01, AMETEK CTS Europe GmbH - EMC Test Report D/20/4791/01 dated 29/SEP/2021, Revision: -, Pages: 17

Drawing No. 113863b06, TESEQ GmbH - EMC Test Report D/11/3863/06 dated 26/SEP/2011, Revision: 6, Pages: 59

Drawing No. TTBMP11-001_NAR, Climate Test Report dated 23/NOV/2011, Revision: 01, Pages: 53

Drawing No. 3056096_060_pb015w, TUV Rheinland - Needle Flame Test Report dated 18/JUL/2012, Revision: 01, Pages: 6

Drawing No. PB_E5664, SA502-3G TUV Rheinland - Vibration Test Report dated 30/AUG/2011, Revision: C, Pages: 20

Drawing No. DB-SA502-3G-en_V103, SA502-3G - Signal Transducer for Potentiometers, Revision: 1.03, Pages: 2

Drawing No. NAR-KD-0103-1-en_V104, SA502-3G - User Manual, Revision: 1.04, Pages: 17

Drawing No. NAR-PB-0103-1-en_V101, SA502-3G - Product Test Report, Revision: 1.01, Pages: 39

Drawing No. NAR-PB-0103-2-en_V101, SA502-3G - Product Test Report 6GHz, Revision: 1.01, Pages: 17

Drawing No. NAR-PD-0103-1-en_V100, SA502-3G Hardware Description, Revision: 1.00, Pages: 10

Drawing No. NAR-PD-0103-2-en_V103, SA502-3G - Revision Outline, Revision: 1.03, Pages: 5

Drawing No. NAR-PD-0103-10-en_V100, SA502-3G - Suppliers Overview, Revision: 1.00, Pages: 4

Drawing No. NAR-PD-0103-21-en_V103, NORIS SA502-3G - Approval Renewal Request Overview, Revision: 1.03, Pages: 1

Drawing No. Correspondence, Online PDA Application SA502-3G, Revision: -, Pages: 4

Drawing No. SL38-d_V129, SL38-d - BOM Manufacturer, Revision: 1.29, Pages: 3

Drawing No. SAR38-d-v120, Schematics, Revision: 1.20, Pages: 2

Drawing No. SMS.W.II./51611/02/C.0, NORIS Recognition for BV Mode II Scheme, Revision: -, Pages: 2

Drawing No. DE011904-1_EN, BV ISO 9001:2015 Certificate issued 25/AUG/2021, Revision: -, Pages: 1

Drawing No. FMEA_SA502-3G_v004b, SA502-3G FMEA Test Report, Revision: 4b, Pages: 7

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 09/Jan/2028 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment

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STANDARDS

ABS Rules:

2022 Rules for Conditions of Classification: 1-1-4/7.7, 1-1-A3 and A4, which covers the following:

2022 Rules for Building and Classing Marine Vessel Rules 4-8-3/1.7, 4-8-3/1.11.1, 4-8-3/1.17, 4-9-9/3, 4-9-97, 4-9-9/13.1

2022 Rules for Conditions of Classification – Offshore Units and Structures: 1-1-4/9.7, 1-1-A2 and A3, which covers the following:

2022 Rules for Building and Classing Mobile Offshore Units: 4-3-1/11, 4-3-1/15, 4-3-1/17

National:

NA

International:

IACS UR E10, Rev. 7: 2018

Government:

NA

EUMED:

NA

OTHERS:

NA