



CERTIFICATE NUMBER	21-2145453-PDA
EFFECTIVE DATE	29-Jul-2021
EXPIRY DATE	28-Jul-2026
ABS TECHNICAL OFFICE	Houston ESD - Piping

## 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:**           **Sensor/ Actuator System**  
**Model:**            **NORIMOS 4**  
**Endorsements:**  
**Tier:**              **2 - PDA Issued**

This Product Design Assessment (PDA) Certificate remains valid until 28/Jul/2026 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

Yongjin Lee, 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

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**Tier: 2 - PDA Issued**

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**Product:** Sensor/ Actuator System

**Model:** NORIMOS 4

**Endorsements:**

### Intended Service:

Sensor/ Actuator I/O System for machinery control and monitoring applications.

### Description:

System components: Norisys 4 I/Oeco, extensions 32DI/ 16DI8R/ 16DI4AI4AO/ 16AI

### Rating:

Power supply: 24 V DC (18...32V DC)

### Service Restriction:

1. Unit Certification is required for this product by the user where it is used for Category II or III services as described in Section 4-9-3/Table 1 of the 2021 Marine Vessel Rules. Otherwise, Unit Certification is not required.
2. 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:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. Tests and approvals are for hardware only.
3. Each particular application is to be specifically approved.
4. Unless specially directed by Administration, this approval is not to be constructed as a substitute for flag Administration's approval.

### Notes/Drawing/Documentation:

Drawing No. 204786b01, EMC Test Report AMETEK, Revision: -, Dated 06/23/2021

Drawing No. Declaration Of Conformity signed, dated 21 July 2020

Drawing No. NAR-PB-0139-3 Product Test Report\_6GHz, Product Test Report 6GHz, Revision: -, dated 06/24/2021

Drawing No. 045-12, NORISYS 4 IOeco ENV Test Report, Revision: 2, Dated 03/13/2015

Drawing No. FL-N4, NORISYS 4 / NORIMOS 4, Revision: 1,

Drawing No. HG-N4-16AI, NORISYS 4 16AI, Revision: 1,

Drawing No. HG-N4-16DI4AI4AO, NORISYS 4 16DI4AI4AO, Revision: 1,

Drawing No. HG-N4-16DI8R, NORISYS 4 16DI8R, Revision: 1,

Drawing No. HG-N4-32DI, NORISYS 4 32DI, Revision: 1,

Drawing No. NAR-KD-0100-1, NORISYS 4, Revision: 1,

Drawing No. NAR-PB-0139-1, NORISYS 4 IOeco, Revision: 1,

Drawing No. NAR-PB-0139-1, NORISYS 4 IOeco, Revision: 129,

Drawing No. NAR-PD-0110-1, NORISYS 4, Revision: 1,

Drawing No. NAR-PD-0139-10, NORISYS 4 IOeco, Revision: 1,

Drawing No. NAR-PD-0139-20, NORISYS 4 IOeco, Revision: 1,

Drawing No. NAR-PD-0139-20, NORISYS 4 IOeco, Revision: 101,

Drawing No. NAR-RaD-0004-1, NORISYS 4 IOeco, Revision: 1,

Drawing No. SA746, NORISYS 4 32DI, Revision: 1,

Drawing No. SA747, NORISYS 4 16AI, Revision: 1,

Drawing No. SA748, NORISYS 4 16DI8R, Revision: 1,

Drawing No. SAR155, NORISYS 4 16DI4AI4AO, Revision: 1,

Drawing No. SL-1342-N4-32DI, NORISYS 4 32DI, Revision: 1,

Drawing No. SL-1344-N4-16DI8R, NORISYS 4 16DI8R, Revision: 1,

Drawing No. SL-1345-N4-16DI4AI4AO, NORISYS 4 16DI4AI4AO, Revision: 1,

Drawing No. SL-1346-N4-32DI, NORISYS 4 32DI, Revision: 1,

Drawing No. SL-1347-N4-16AI, NORISYS 4 16AI, Revision: 1,

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Drawing No. SL-1348-N4-16DI8R, NORISYS 4 16DI8R, Revision: 1,  
Drawing No. SL-155-N4-16DI4AI4AO, NORISYS 4 16DI4AI4AO, Revision: 1,  
Drawing No. SL1343-N4-16AI, NORISYS 4 16AI, Revision: 1,

**Terms of Validity:**

This Product Design Assessment (PDA) Certificate remains valid until 28/Jul/2026 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).

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**STANDARDS**

**ABS Rules:**

Rules for Conditions of Classification, 2021: Part 1: 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:  
Rules for Building and Classing Marine Vessels (2021): 4-9-2/3.1.1 & 3.1.2, 4-9-3/5, 11.1, 7.1/Table 2, 4-9-9/7 & 13

Rules for Conditions of Classification, Part 1 - 2021 Offshore Units and Structures: 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

Rules for Building and Classing Mobile Offshore Units (2021): 4-3-4/5, 6-1-1/9, 6-1-1/13

**National:**

NA

**International:**

IACS E10 Rev. 7

**Government:**

NA

**EUMED:**

NA

**OTHERS:**

NA