



CERTIFICATE NUMBER
13-HG1098968-1-PDA

DATE
08 Apr 2016

ABS TECHNICAL OFFICE
Gdynia Engineering Department

CERTIFICATE OF DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of
SIEMENS AG, DF FA AS

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: **Programmable Controllers I/O Unit**

Model: **SIMATIC ET 200SP**

This Product Design Assessment (PDA) Certificate 13-HG1098968-1-PDA, dated 08/Apr/2016 remains valid until 24/Oct/2018 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Arkadiusz Pytkowski
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 the terms and conditions as contained in ABS Rules 1-1-A/3.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

SIEMENS AG

SIMATIC TYPE TEST

D-92224 AMBERG

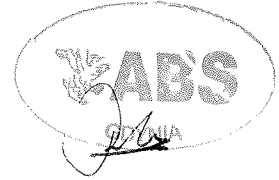
Germany

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Web: www.siemens.de

**Tier: 3 - Type Approved, unit certification not required****Product:** Programmable Controllers I/O Unit**Model:** SIMATIC ET 200SP**Intended Service:**

Automation Systems (Monitoring and Control Functions) on AMS, ACC, ACCU, ABCU Classed Vessels.

Description:

Components of ET200SP:

6ES7 131-; 6ES7 132-; 6ES7 134-; 6ES7 135-; 6ES7 137-; 6ES7 138-; 6ES7 155-; 6ES7 193-; 6ES7 510-; 6ES7 512-; 6ES7 545-.

Rating:

Power Supply: 24V DC, 120/230V AC

Service Restriction:

Unit Certification, as detailed in 4-9-8/13.3 of the ABS Rules for Building and Classing Steel Vessels 2016, is required for this product if it is incorporated in a Category II or Category III system as detailed in 4-9-3/7.1 and 4-9-3/Table 1 of the ABS Rules for Building and Classing Steel Vessels 2016. Unit Certification may be carried out during Factory Acceptance Test of the overall system by the end user.

1.) Surge Immunity: External Protective circuits are required for DC systems. See the System Manual (A5E03461486) for recommendations.

2.) Installation of the units, as per manufacturer's instructions.

3.) System may be used in bridge and deck zones together with a filter unit, type B84113C (manufactured by Epcos or equivalent) tested with: I=3A, C=2x0.47uF+2x4700pF, L=4x4.7mH.

Except: Energy Meter 6ES7 134... only for installation in general power distribution zone.

Comments:

Approval is for hardware only, the system configuration and external connection is to be specifically approved for each application. When incorporated in a system of Category I, II or III, in accordance with 4-9-3/7.1 and 4-9-3/Table 1 of the ABS Rules for Building and Classing Steel Vessels 2016, the documentation detailed in 4-9-3/Table 2 is to be submitted to ABS or to be available for review by ABS, as applicable.

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

Notes/Drawing/Documentation:

Drawing No. SIMATIC Type Test - 2015-01, Revision: 10/AUG/2015,

Drawing No. SIMATIC ET 200SP System Manual, Revision: 03/2015,

Drawing No. DEKRA 12ATEX0038 X, Certificate_et200sp_aus14_0038_engl, Revision: -,

Drawing No. IECEx DEK 13.0011X, Certificate_et200sp_aus10_0011x, Revision: -.

Terms of Validity:

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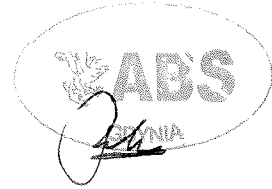
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Tier: 3 - Type Approved, unit certification not required

STANDARDS

ABS Rules:

ABS Rules for Conditions of Classification (2016): 1-1-4/7.7, 1-1-Appendix 3 & 4,

ABS Rules for Conditions of Classification (2016): Offshore Units and Structures 1-1-4/9.7, 1-1-Appendix 2 & 3,

ABS Rules for Building and Classing Steel Vessels (2016): 1-1-4/7.7, 1-1-Appendix 3 & 4, 4-1-1/3.3, 4-9-3/5, 4-9-3/7, 4-9-3/11, 4-9-8/3, 4-9-8/13, 4-9-8/15

ABS Rules for Building and Classing Steel Vessels Under 90 Meters (295 Feet) in Length (2016): 1-1-4/7.7, 1-1-Appendix 3 & 4, 4-1-1/3.3, 4-7-1/1, 4-7-2/9, 4-7-2/15.3, 4-7-2/17

ABS Rules for Building and Classing Offshore Support Vessels (2016): 1-1-4/7.7, 1-1-Appendix 3 & 4, 4-1-1/3.3, 4-9-3/5, 4-9-3/7, 4-9-3/11, 4-9-8/3, 4-9-8/13, 4-9-8/15

ABS Rules for Building and Classing Mobile Offshore Drilling Units (2016): 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-3-4/5, 6-1-1/3, 6-1-1/9,

ABS Rules for Building and Classing High-Speed Craft (2016): 1-1-4/11.9, 1-1-Appendix 2 & 3, 4-1-1/3.3, 4-7-8/3, 4-7-8/7, 4-7-8/9, 4-7-9/3, 4-7-9/15

ABS Rules for Building and Classing Steel Barges (2016): 1-1-4/7.7, 1-1-Appendix 3 & 4, 4-1-1/1.1, 4-1-3/1

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA