



CERTIFICATE NUMBER

14-HG1263150-PDA

DATE

20 October 2014

ABS TECHNICAL OFFICE

Hamburg Engineering Department

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
SIEMENS AG, INDUSTRY SECTOR - D-92224 AMBERG

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 Control/Monitoring Unit**

MODEL: **SIMATIC S7/M7-300**

This Product Design Assessment (PDA) Certificate 14-HG1263150-PDA, dated 20/Oct/2014 remains valid until 19/Oct/2019 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

Wulf-Peter Senebald
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 the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

SIEMENS AG, INDUSTRY SECTOR

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D-92224 AMBERG

Germany

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MA Certificate No. 11-HG2041761-X

Tier: 5

Product: Programmable Control/Monitoring Unit

Model: SIMATIC S7/M7-300

Intended Service:

Automation Systems (Monitoring and Control Functions) on AMS, ACC, ACCU, ABCU classed vessels.

Description:

Components for S7-300: PS 307, IM 174, IM 178, IM 360, IM 361, IM 365, CPU 312, CPU 313, CPU 314, CPU 315, CPU 316, CPU 317, CPU 318, CPU 319, CPU 614, mEC 677, MC 951, SM 374, DM 370, SM 321, SM 322, SM 323, SM 326, SM 327, SM 331, SM 332, SM 334, SM 335, SM 336, SM 338, FM 350, FM 351, FM 352, FM 353, FM 354, FM 355, FM 357, CP 340, CP 341, CP 342, CP 343, DP/PA 157. Components for M7-300: CPU 388, FM 356, EXM 378, MSM 378, IF 961, IF 962, IF 964, MC 951, MC 952, MC 953, Y-Coupler 197.

Ratings:

S7-300 / M7-300 Supply Voltage: 24V DC, Power Supply 307: 120/230V AC, 0.5..3.5A; 24V DC, 2..10A.

M7-300 Degree of Protection: IP 20.

Following components are of a certified safe type: Ex II3 (2) G EEx nA [ib] IIC T4: SM 321 (6ES7 321-7RD00-0AB0), SM 322 (6ES7 322-5SD00-0AB0; 6ES7 322-5RD00-0AB0), SM 326 (6ES7 326-1RF00-A0B0), SM 331 (6ES7 331-7SF00-0AB0; 6ES7 331-7RD00-0AB0; 6ES7 331-7TB00-0AB0), SM 332 (6ES7 332-5RD00-0AB0; 6ES7 332-5TB00-0AB0); Ex II3 (1) G EEx nA [ia] IIC T4: DP/PA (6ES7 157-0AD81-0XA0); Ex II3 G (1) GD EEx nA [ia] IIC T4: DP/PA (6ES7 157-0AD82-0XA0).

Service Restrictions:

Unit Certification is required for this product.

- 1.) Components with 24 V DC supply only to be used in conjunction with lightning protection units.
- 2.) Installation of the units, as per manufacturer's instructions.

Comments:

The Unit Certification for the switchboard, panel board and/ or console may cover this product in lieu of individual Unit Certification where they contain this product provided the tests required by 4-9-8/Table 2 are carried out when their shop testing is witnessed by the Surveyor.

Each particular application/ installation and the user operating software is to be specifically approved in conjunction with the relevant system in which the units are being used.

System Category III. Manufacturer is to keep evidence of quality plan for software, inspection of hardware components from sub-suppliers and quality control in production. Performance integration, fault simulation, final system factory acceptance tests, on-board system and integration tests to be witnessed by the Surveyor.

Notes / Drawings / Documentation:

This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

Term of Validity:

This Product Design Assessment (PDA) Certificate 14-HG1263150-PDA, dated 20/Oct/2014 remains valid until 19/Oct/2019 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.

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MA Certificate No. 11-HG2041761-X **Tier: 5**

manufacturer and intended client.

STANDARDS

ABS Rules:

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. The Rules applicable to this assessment are:

2014 Steel Vessel Rules 1-1-4/7.7, 1-1-Appendix 3, 4-8-3/13.1, 4-9-2/3.1.1,
4-9-3/5.1.1/5.1.2/5.1.3/5.1.4/5.1.5/5.1.9/11.1/11.7.1/7.1, 4-9-3/Table 2, as applicable for the inherent basic operating software, 4-9-8/7/13

National:

N.A.

International:

NA

Government Authority:

NA

EUMED:

NA

Others:

NA