CERTIFICATE NUMBER	19-HG1874537-PDA
EFFECTIVE DATE	19-July-2019
EXPIRATION DATE	18-July-2024
ABS TECHNICAL OFFICE	Hamburg Engineering Department

CERTIFICATE OF

Product Design Assessment

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

SIEMENS AG, DI FA AS

located at

D-92224, Amberg, 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 **Programmable Control/Monitoring Unit**

Model **SIMATIC S7/M7-300**

This Product Design Assessment (PDA) Certificate remains valid until expiration date 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

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SIMATIC TYPE TEST
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Tier: 5 - Unit Certification Required

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.

Rating:
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 G (2) GD Ex nA [ib Gb] [ib IIIC Db] IIIC T4 Gc: SM 326 (6ES7 326-1RF00-0AB0, 6ES7 326-1RF01-0AB0).

Service Restriction:
Unit Certification is not required for the original equipment manufacturer. However, unit certification in accordance with 4-9-3/Table 2 and 4-9-9/Table 2 is required by the user to customize this equipment where this equipment is used for Category II or III services in 4-9-3/Table 1.
Components with 24 V DC supply only to be used in conjunction with lightning protection units.
Installation of the units, as per manufacturer's instructions.

Comments:
The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
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/Drawing/Documentation:
Drawing No. A&D AS RD ST Type Test-0606, Siemens Amberg, 2006, Revision: -, Pages: -
Drawing No. I IA AS RD ST Type Test-2009-04, Siemens Amberg, 2009, Revision: -, Pages: -
Drawing No. SIMATIC Type Test-2019-01, Siemens Amberg, 2019, Revision: -, Pages: -
Drawing No. KEMA 99ATEX 2671 X Issue 5, Revision: -, Pages: -

Terms of Validity:
This Product Design Assessment (PDA) Certificate 19-HG1874537-PDA, dated 19/Jul/2019 remains valid until 18/Jul/2024 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.

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Tier: 5 - Unit Certification Required

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

STANDARDS

ABS Rules:
2019 Marine Vessel Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/13.1, 4-9-2/3.1.1, 4-9-3/5.1.1, 4-9-3/5.1.2, 4-9-3/5.1.3, 4-9-3/5.1.4, 4-9-3/5.1.5, 4-9-3/5.1.9, 4-9-3/7.1, 4-9-3/9.5, 4-9-3/11.1, 4-9-3/11.7.1, 4-9-9/7, 4-9-9/13

National:
NA

International:
NA

Government:
NA

EUMED:
NA

OTHERS:
NA