

DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. A-11868

This is to certify that the Programmable Electronic System

> with type designation(s) SIMATIC S7-200

> > Manufactured by

Siemens AG I IA AS R&D ST TT Amberg, Germany

is found to comply with Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

> Application Location classes:

Temperature	D
Humidity	В
Vibration	A
EMC	A
Enclosure	Required protection according to DNV Rules shall be provided upon installation on board

Høvik, 2010-07-06 for Det Norske Veritas AS

This Certificate is valid until 2014-06-30

Odd Magne Nesvåg **Head of Section**

DNV local office: Essen

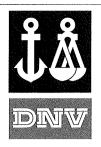
Ståle Sneen Surveyor

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.

The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

DET NORSKE VERITAS AS, Veritasveien 1, NO-1322 Høvik, Norway, Tel.: +47 67 57 99 00, Fax: +47 67 57 99 11, Org.No. NO 945 748 931 MVA www.dnv.com Form No.: TA 1411a Issue: October 2009 Page 1 of 3



Certificate No.: A-11868 File No.: 862.50

Job Id.:

262.1-000542-3

Product description

Programmable Logic Controller SIMATIC S7-200 Including:

- CPU 210/212/214/215/216/221/222/224/226
- 2. SIM 274
- 3. MC 291
- EM 221/222/223/231/232/235/241/253
- 5. TD 200
- CP 243

Place of manufacture

Siemens Energy & Automation Inc., Johnson City, USA

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Product certificate

Each delivery of the application system is to be certified according to Pt.4 Ch.9 Sec.1. The certification test is to be performed at the manufacturer of the application system according to an approved test program before the system is shipped to the yard. After the certification the clause for application software control will be put into force.

Clause for application software control

All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Type Approval documentation

Type approval documentation ring binder containing:

Specification for Type Test and Test Report of Marine	AUT7-B8.4P-9602	Issued: 09.12.1996
Electrical equipment		Acceptance: March 1997
CE Declaration of Conformity	S7 200/10.96	November 1996
Inchape Certificate of Compliance (EMC Directive)	CB121	05.09.95
CSA Certificate	LR 44226-118	07.06.96
FM Approval Report	FMRC J.I. 0B9A8.AX	
Siemens Test Certificate	2804609	15.01.96
Drawing	Aufbau S7-200 AUT 7 WKF B8.4	19.02.97
Catalog	ST70-97	

Documentation at renewal 2001:

- Katalog CA 01 04/00SE D
- Test report (w.enclosures) A&D AS E423-0101 dated 2001-05-28

Documentation at renewal 2003:

- Specification and Test report A&D AS RD 423-0301 Issued: 19.05.2003
- Technical description (preliminary) Issued: 17.02.2003

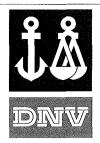
Internet: http://www.automation.siemens.com/

A-9895 retention survey report, DNV Essen 2010-06-22

Tests carried out

Applicable tests according to C.N. 2.4.

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Certificate retention survey

The scope of the retention/renewal survey is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the survey are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- · Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Retention survey is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE

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