

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Programmable Electronic System

with type designation(s)

SIMATIC ET 200 B/C/L/L-SC/M/S/X/eco/eco PN/pro and SC

Issued to

Siemens AG

DF FA AS, 92224 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	B
Vibration	A*
EMC	A
Enclosure	Required protection according to DNV Rules shall be provided upon installation on board

*Vibration class B for units ET200 eco, ET200 eco PN, ET200 pro and ET200 X (except 6GK7 142-). However 6ES7 148- for ET200 X tested to vibration class B for power module only.

This Certificate is valid until **2018-12-31**.

Issued at **Høvik** on **2015-01-14**

DNV GL local station: **Augsburg**

Approval Engineer: **Nils Jarem**

for **DNV GL**

Odd Magne Nesvåg
Head of Section

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.

Certificate No: **A-14089**
 File No: **862.50**
 Job Id: **262.1-014721-2**

Product description

Programmable Logic Controller SIMATIC ET 200B/C/L/L-SC/M/S/X/eco/pro and SC, including:

ET200 B:	ET200 C:	ET200 L and ET200L-SC	ET200 M:	ET200 S:
6ES7 131- 6ES7 132- 6ES7 133- 6ES7 134- 6ES7 135- 6ES7 193-	6ES7 141- 6ES7 142- 6ES7 143- 6ES7 144- 6ES7 145-	6ES7 131- 6ES7 132- 6ES7 133- 6ES7 193- 6ES7 138- 6ES7 127-	6ES7 153- 6ES7 195- 6ES7 157- 6ES7 654- 6ES7 158- 6ES7 197-	6ES7 151- 6ES7 151- Compact 6ES7 131- 6ES7 132- 6ES7 134- 6ES7 135- 6ES7 138- 6ES7 193-
ET200 X:	SC:	ET200 eco	ET200 pro	ET200 eco PN
6ES7 141- 6ES7 142- 6ES7 143- 6ES7 144- 6ES7 145- 6ES7 147- 6ES7 148- 6GK7 142-	6ES7 120- 6ES7 121- 6ES7 122- 6ES7 123- 6ES7 124- 6ES7 972-	6ES7 141- 6ES7 142- 6ES7 143- 6ES7 148- 6ES7 194-	6ES7 141- 6ES7 142- 6ES7 144- 6ES7 145- 6ES7 148- 6ES7 154- 6ES7 194- 6ES7 143-	6ES7 141- 6ES7 142- 6ES7 144- 6ES7 145- 6ES7 194- 6ES7 147- 6ES7 148- (only: IO-Link Master)

Place of manufacture

Siemens Elektronikwerk Amberg
 Siemens Elektronikwerk Karlsruhe

Application/Limitation

24V power supply lines are to be protected by Dehn Blitzductor order No. 918 402 (tested) or equivalent.

This type approval does not cover Wireless communication.

Type Approval documentation

TA documentation ring binder containing:

Specifications for Type Tests and Test Report of Marine Electrical Equipment	AUT7-B8.4P-9605	Issued: 11.12.1996 Acceptance: 09.04.1997
EC-Conformity Declaration	ET200 / V1 /06.2012	31. May 2012
"	ET200pro/V1/12.2011	
"	ET200S / V1 / 06.2012	31. May 2012
Drawings	ET200 M, SM322, and SM321 AUT 7 WKF B8.4	19.02.97
Catalog	ST70-97	
Operating Instructions	45E01250250-06	09/2010

Documentation at renewal 2001:

- Katalog CA 01 04/00SE D
- Test reports (w.enclosures) A&D AS E423-0104/0105/0106/0107 dated 01-05-28

Documentation at renewal 2003:

- Specification and Test report A&D AS RD 423-0301 Issued: 19.05.2003
- Technical data A5E00158716-02

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Documentation at extension/renewal 2004:

- Ring binder A&D AS RD ST Type Test, dated 04-04-16

Documentation at extension 2005:

- Test report A&D AS RD ST Type Test – 01/05, dated 2004-12-16

Documentation at extension 2006:

- Ring binder A&D AS RD ST Type Test – 0606, dated 03.07.2006

Documentation at extension 2009:

- Ring binder I IA AS RD ST Type Test – 04/09, dated 28.05.2009

Documentation at extension 2013:

- Ring binder I IA AS RD ST Type Test-2012-02, dated 18.12.2012

DNV GL Augsburg type approval assessment report for A-13123, dated 2014-12-05.

Tests carried out

Applicable tests according to DNV Standard for Certification No. 2.4, April 2006.

Periodical assessment

The scope of the periodical assessment 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 assessment 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

Periodical assessment is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE