

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Peripheral Equipment

with type designation(s)
Distributed Input / Output System ET 200iSP

Issued to

Siemens AG SIMATIC Type Test Karlsruhe
Karlsruhe, Germany

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Location classes:

Temperature B

Humidity B

Vibration A

EMC A

Enclosure Required protection according to the Rules shall be provided upon installation on board.

Issued at **Hamburg** on **2019-04-29**

This Certificate is valid until **2024-04-28**.

DNV GL local station: **Augsburg**

for **DNV GL**

Approval Engineer: **Heinz Scheffler**

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Joannis Papanuskas
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.



Product description

Distributed Input / Output System ET 200iSP:

- Rated Voltage : 24 V DC
- Power Supply Module : 6ES7 138-7Exxx
- Interface Module : 6ES7 152
- Digital Input Module : 6ES7 131
- Digital Output Module : 6ES7 132
- Analogue Input Module : 6ES7 134
- Analogue Output Module : 6ES7 135
- Watchdog Module : 6ES7 138
- Terminal Module : 6ES7 193
- RS485-IS Coupler : 6ES7 972-0Axxx
- Reserve Module : 6ES7 138-7Axxx
- Profibus Connector RS 485-IS : 6ES7 972-0Dxxx

ATEX: II 2 G (1) GD Ex ib[ia] IIC T4 and I M2 Ex ib [ia] I:

- 6ES7 131-7RF00-0AB0: KEMA 04ATEX1248 Issue Number 7, dated 12-03-2015
- 6ES7 132-7RD00-0AB0: KEMA 04ATEX1249 Issue Number 7, dated 12-03-2015
- 6ES7 132-7RD01-0AB0: KEMA 04ATEX1249 Issue Number 7, dated 12-03-2015
- 6ES7 132-7RD10-0AB0: KEMA 04ATEX1249 Issue Number 7, dated 12-03-2015
- 6ES7 132-7RD11-0AB0: KEMA 04ATEX1249 Issue Number 7, dated 12-03-2015
- 6ES7 132-7RD20-0AB0: KEMA 04ATEX1249 Issue Number 7, dated 12-03-2015
- 6ES7 132-7RD21-0AB0: KEMA 04ATEX1249 Issue Number 7, dated 12-03-2015
- 6ES7 132-7RD22-0AB0: KEMA 04ATEX1249 Issue Number 7, dated 12-03-2015
- 6ES7 132-7GD00-0AB0: KEMA 04ATEX1249 Issue Number 7, dated 12-03-2015
- 6ES7 132-7GD10-0AB0: KEMA 04ATEX1249 Issue Number 7, dated 12-03-2015
- 6ES7 132-7GD20-0AB0: KEMA 04ATEX1249 Issue Number 7, dated 12-03-2015
- 6ES7 132-7GD21-0AB0: KEMA 04ATEX1249 Issue Number 7, dated 12-03-2015
- 6ES7 132-7GD30-0AB0: KEMA 04ATEX1249 Issue Number 7, dated 12-03-2015
- 6ES7 134-7SD00-0AB0: KEMA 04ATEX1246 Issue Number 6, dated 12-03-2015
- 6ES7134-7SD00-0AB0-Z A5E33723892:KEMA 14ATEX0076 Issue Number 1, dated 08-07-2014
- 6ES7 134-7SD50-0AB0: KEMA 04ATEX1247 Issue Number 5, dated 12-03-2015
- 6ES7 134-7SD51-0AB0: KEMA 04ATEX1247 Issue Number 5, dated 12-03-2015
- 6ES7 134-7TD00-0AB0: KEMA 04ATEX1244 Issue Number 5, dated 12-03-2015
- 6ES7 134-7TD50-0AB0: KEMA 04ATEX1245 Issue Number 6, dated 12-03-2015
- 6ES7 135-7TD00-0AB0: KEMA 04ATEX1250 Issue Number 6, dated 12-03-2015

ATEX: II 2 G (1) GD Ex e [ia/ib] IIC T4 and I M2 Ex e [ia/ib] I

- 6ES7 193-7...-...: KEMA 04ATEX2242 Issue Number 8, dated 12-03-2015

ATEX: II 2 G Ex de [ib] IIC T4 and I M2 Ex de [ib] I

- 6ES7 138-7EA01-0AA0: KEMA 04ATEX2263 Issue Number 7, dated 12-03-2015

ATEX: II 2 G Ex ib IIC T4 and I M2 Ex ib I

- 6ES7 152-1AA0.-0AB0: KEMA 04ATEX1243 Issue Number 6, dated 12-03-2015
- 6ES7 138-7AA00-0AA0: KEMA 04ATEX1251 Issue Number 5, dated 12-03-2015
- 6ES7 972-0DA60-0XA0: KEMA 04ATEX1233 Issue Number 5, dated 12-03-2015
- 6ES7 138-7BB00-0AB0: KEMA 04ATEX0086 Issue Number 4, dated 12-03-2015

ATEX: II 3 (2) G Ex nA [ib] IIC T4

- 6ES7 972-0AC80-0XA0: KEMA 03ATEX1183x Issue Number 7, dated 01-04-2015

Application/Limitation

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNVGL, 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 DNVGL Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Product certificate

If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program. 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 DNVGL for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Ex-certification

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body. For use in hazardous areas of zone 1, the system is to be installed in a metallic enclosure with type of Protection EEx e (increased safety). For use in hazardous locations of zone 21, the system is to be installed in a metallic dust-proof and certified enclosure with minimum degree of protection IP 6x in accordance with directive 94/9/EC for category 2D. For use in hazardous locations of zone 2, the system is to be installed in a metallic enclosure with at least degree of protection IP 54. The enclosure must have a manufacturer's certification for zone 2 (complying with EN 60079-15). For use in hazardous locations of zone 22, the system is to be installed in a metallic dust-proof and certified enclosure with minimum degree of protection IP 5x in accordance with directive 94/9/EC for category 2D. Manufacturer's installation instructions are to be followed.

Type Approval documentation

Test report : 19-E008022-BM-D01 List of Test Reports ET 200iSP, dated 18.04.2019

Documentation: 19-E008022-BM-C01 List of Technical datasheets equipment manuals ET 200iSP, dated 18.04.2019

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.

Marking of product

The products to be marked with:

- Model name
- Manufacturer name
- Serial number

Job Id: **262.1-027910-1**
Certificate No: **TAA00001UH**

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 after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE