



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate supersedes certificate number 14/20078 issued on 21 November 2014 which is hereby cancelled.

This certificate is issued to:

PRODUCER Siemens AG
DF FA AS SIMATIC Type Test
Werner-von-Siemens-Strasse 50
92224 Amberg
Germany



DESCRIPTION Programmable Logic Controller

TYPE SIMATIC S7-1500 / ET200MP

Comprising following modules:
6ES7 155 - interface module (IM)
6ES7 505 - system power supply 24V (PS)
6ES7 505 - system power supply 24/48/60V (PS)
6ES7 507 - system power supply 120/230V (PS)
6ES7 511 - CPU 1511
6ES7 511 - CPU 1511C
6ES7 513 - CPU 1513
6ES7 512 - CPU 1512C
6ES7 515 - CPU 1515
6ES7 516 - CPU 1516
6ES7 517 - CPU 1517
6ES7 518 - CPU 1518

Certificate No. 14/20078 (E1)
Issue Date 17 December 2015
Expiry Date 20 November 2019
Sheet 1 of 3

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA



LR031.1.2013.12

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group



TYPE CONTINUATION

6ES7 523 – digital mixed module
 6ES7 534 – analogue mixed module
 6ES7 552 – technology module (TM)
 6ES7 521 – digital input module (DI)
 6ES7 522 – digital output module (DQ)
 6ES7 531 – analogue input module (AI)
 6ES7 532 – analogue output module (AQ)
 6GK7 543 – communication processor (CP) Industrial Ethernet
 6GK7 542 – communication processor (CP) PROFIBUS
 6GK7 542 – communication module (CM) PROFIBUS
 6ES7 540 – communication module (CM) PtP
 6ES7 541 – communication module (CM) PtP
 6ES7 550 – technology module (TM)
 6ES7 551 – technology module (TM)
 6EP1 332 – load power supply (PM)
 6EP1 333 – load power supply (PM)
 6ES7 954 – SIMATIC Memory Card

APPLICATION Marine applications for use in environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register Type Approval System, Test Specification Number 1 – 2013.

ADDITIONAL TESTS Low temperature (-25°C/16 hrs)

STANDARD Manufacturer's specification

RATINGS Power supply: 24/48/60V DC
120 / 230V AC

OTHER CONDITIONS Surge Immunity: External Protective circuits required for DC systems. See the current System Manual (A5E03461486) for recommendations. For use on bridge and deck zones a filter type B84113-C-B30 (manufactured by Epcos or equivalent: I=3A, C=2x0.47µF+2x4700pF, L=4x4.7mH) is to be installed into the system's power supply lines.



Certificate No. 14/20078 (E1)

Issue Date 17 December 2015

Expiry Date 20 November 2019

Sheet 2 of 3

Thorsten Wolff
 Hamburg Technical Support Office
 Lloyd's Register EMEA

Lloyd's Register

LR031.1.2013.12

Thorsten Wolff
 Hamburg Technical Support Office
 Lloyd's Register EMEA

Lloyd's Register EMEA
 71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
 Is a subsidiary of Lloyd's Register Group



OTHER CONDITIONS CONTINUED

PM 70W (6EP1332), PM 190W (6EP1333), TM Count (6ES7 550) and TM PosInput (6ES7 551) are suitable for installation in general power distribution zones only (without filter).
Installation of the units, as per manufacturer's instructions.

PLACE OF PRODUCTION



Siemens AG
Elektronikwerk
Werner-von-Siemens-Strasse 50
92224 Amberg
Germany

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HTS/ETS 32865-15 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No.	14/20078 (E1)
Issue Date	17 December 2015
Expiry Date	20 November 2019
Sheet	3 of 3

 Thorsten Wolff Hamburg Technical Support Office Lloyd's Register EMEA <small>LR031.1.2013.12</small>	 Lloyd's Register
--	---

Thorsten Wolff
Hamburg Technical Support Office
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.