



TYPE APPROVAL CERTIFICATE
No. ELE216816XG

This is to certify that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

<i>Description</i>	Programmable logic controller
<i>Type</i>	PLC SIMATIC S7-300
<i>Applicant</i>	SIEMENS AG - DF FA AS SIMATIC TYPE TEST WERNER-VON-SIEMENS-STR. 50 92224 AMBERG GERMANY
<i>Manufacturer</i>	SIEMENS AG - AMBERG
<i>Place of manufacture</i>	Werner Von Siemens Str. 50 D-92224 Amberg GERMANY
<i>Reference standards</i>	Rules for the classification of ships.- Part C - Machinery, systems and fire protection. - Ch.3, Sect. 6, Table 1.

Issued in **HAMBURG** on **November 8, 2016.** *This Certificate is valid until* **November 7, 2021**



RINA Services S.p.A.
Giuseppe Russo

This certificate consists of this page and 1 enclosure



TYPE APPROVAL CERTIFICATE

No. ELE216816XG

Enclosure - Page 1 of 2

PLC SIMATIC S7-300

Product Description:

Type	Description
Processor modules	
CPU312, CPU313, CPU314, CPU315-2DP, CPU315-2PN/DP, CPU315-2DP, CPU315F-2 PN/DP, CPU315T-2DP, CPU316-2, CPU317-2DP, CPU317-2PN/DP, CPU317F-2DP, CPU317T-2DP, CPU 317F-2 PN/DP, CPU318-2, CPU312C, CPU313C, CPU313C-2PtP, CPU313-2DP, CPU314C-2PtP, CPU314C-2DP, CPU319-3 PN/DP, CPU614, CPU677 Embedded Controller	
Test modules	
DM 370	Dummy module for reserving slot for non paramet. signal modules .. , allows address assignment
SM 374	Simulator module for testing programs, for simulation of sensors, for indicating signal status
Digital expansion modules	
SM321	Input ch. 8-16-32-64
SM322	Output ch. 8-16-32-64, 16ch. Relay
SM323	Input ch. 8-16, Output ch. 8-16
SM327	Input ch. 8, In/Output ch. 8 parametrierbar
Analogue expansion modules	
SM331	Input ch. 2-4-8
SM332	Output ch. 2-4-8
SM334	Input ch. 4, Output ch. 2
SM335	Input ch. 4, Output ch. 4; Fast Modules
SM336	Input ch. 6
Ultrasonic position encoder module	
SM338	Interface between a max of 3 absolute position encoders (SSI) and the CPU - 125 kHz/1Mhz / 8x IQ Sense
Counter modules	
FM350-1	Single channel intelligent counter module, for direct connection of incremental encoders
FM350-2	Eight channels intelligent counter module, for direct connection of incremental encoders
Positioning modules	
FM351	Two ch. pos. module for rapid traverse and creep speed drives, 8x DI, 8x DO
FM352	Extremely high-speed electronic cam controller, 32 cam tracks, 4x DI, 13x DO / 12x DI, 8x DO
FM353	Positioning module for stepper motor in machines with high clock pulse rates, 4x DI, 4x DO
FM354	Positioning module for servo motors in machines with high clock pulse rates, 4x DI, 4x DO
FM355	Closed-loop control module as continuous-action controller or step controller, 4x AI, 8x DI, 4x AO or 8x DO
FM357	Positioning and continuous path control module, for intelligent movement control of up 4 axes
Communication processors	
CP 340	For serial comm.. via point to point links: RS232C(V.24) 19.2 kbit/s 15m, 20mA(TTY) 9.6 kbit/s 1000m; RS422/ RS485(x.27) 19.2 kbit/s 1200m; protocol ASCII, 3964 and printer driver.
CP341	For serial comm.. via point to point links: RS232C(V.24) 76.8 kbit/s 15m, 20mA(TTY) 19.2 kbit/s 1000m; RS422/ RS485(x.27) 76.8 kbit/s 1200m; protocol ASCII, 3964®, RK512, custom. protocol.
CP342	AS-Interface via S7-300 front connector , up to 31 AS-Interface slaves controlled/422/485
CP343	AS-Interface via S7-300 and distributed I/O ET200M; up to 62 AS-Interface slaves controlled/Ethernet /422/485
Interface Module	
IM 174	Distributed I/O device for PROFIBUS DP
Interface modules for positioning drives	
IM 178-4	Two-channel interface for connecting positioning drives to Simatic via PROFIBUS-DP One encoder input and one analog output per channel as well as three digital I/O



1

TYPE APPROVAL CERTIFICATE

No. ELE216816XG

Enclosure - Page 2 of 2

PLC SIMATIC S7-300

Type	Description
Interface Module for connecting mounting racks in multi-tier configuration	
IM 365	For configuration with one central rack and one expansion rack with up to 8 modules
IM 360 IM 361	For configurations with one central rack and up to 3 expansion racks with up to 8 modules each.
Power supply module	
PS307	Input from Main: 120/230V AC, Output 24V DC: 2A, 5A, or 10A (model B, E, K)
Safety intergrated expansion modules	
SM326F *	8x DI (Namur); 24x DI MLB-No.: 6ES7 326-1RF00-0AB0; 6ES7 326-1RF01-0AB0 Marking: II 3 G (2) GD Ex nA [ib Gb] [ib IIIC Db] IIC T4 Gc Ex-certificate: KEMA 99ATEX2671 X Standard: EN 60079-0: 2012+A11: 2013; EN 60079-11: 2012 and EN60079-15: 2010
SM326F	10x Digital outputs acc. to IEC 61508: 2010; EN ISO 13849-1: 2015; EN 62061: 2005/A2: 2015
SM336F	6x Analogue inputs acc. to IEC 61508: 2010; EN ISO 13849-1: 2015; EN 62061: 2005/A2: 2015
Memory Cards	
MC951	Memory card
MC952	Memory card
MC953	Memory card

Documents:

- S7-300 Manual; A5E00105505-08 dated 02/2013; Installation Manual A5E00203919 dated 06/2003;

Test reports:

DEKRA Certification B.V.: - KEMA 99ATEX2671 X Issue 5 dated 12 March 2015;

TÜV SÜD Product Service GmbH: - SN87345C-A1 Rev. 2.0 dated 2016-06-06;

TÜV SÜD Rail GmbH: - SN84627C Rev. 3.0 dated 2016-06-06;

Remarks:

- EC-Code: 31

- The Manufacturer's installation recommendation described in A5E00203919 dated 06/2003 regarding surge protection is to be considered.

- S7-300 Modules SM 321 (64 DI) and SM 322 (64 DO) are to be installed in an RF shielded enclosure with minimum 30 dB shielding in the range 156 - 165 MHz to satisfy the EMC requirements for radiated emissions.

- The equipment fulfils the EMC requirements for installation in General Power Distribution Zone only.

Installation of the units, as per manufacturer instruction. ^{SN}

HAMBURG November 8, 2016