



Marine & Offshore
Division

Certificate number: 38633/A1 BV

File number: AP 4508

Product code: 4501H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to
SIEMENS AG - DF FA AS
Amberg - GERMANY

for the type of product
PROGRAMMABLE LOGIC CONTROL UNITS
ET200SP

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.
EC Code: 31 or 31B.

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 20 Oct 2019

For BUREAU VERITAS,
At BV HAMBURG, on 07 Sep 2015,
Sandro Schmidt



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The ET200SP series is a distributed I/O system for mounting on a DIN rail.

1.1 - Types:

Type	Order code	Designation
Interface modules		
	6ES7 155-..	IM155-6 PN
	6ES7 155-..	IM155-6 DP
CPU Modules		
	6ES7 510-..	CPU 1510SP-1 PN
	6ES7 512-..	CPU 1512SP-1 PN
Digital Inputs		
	6ES7 131-..	DI 4x120...230VAC
	6ES7 131-..	DI 8x24VDC
	6ES7 131-..	DI 16x24VDC
Digital Outputs		
	6ES7 132-..	DQ 4x24VDC/2A
	6ES7 132-..	DQ 4x24VAC...230VAC/2A
	6ES7 132-..	DQ 8x24VDC/0.5A
	6ES7 132-..	DQ 16x24VDC/0.5A
Relay Outputs		
	6ES7 132-..	RQ 4x24VUC...230VUC/5A
Analogue Inputs		
	6ES7 134-..	AI 4xI 2-/4-wire
	6ES7 134-..	AI 2xU/I 2-/4-wire
	6ES7 134-..	AI 4xU/I 2-wire
	6ES7 134-..	AI 4xRTD/TC 2-/3/4 A-wire
	6ES7 134-..	AI 8xRTD/TC 2-wire
	6ES7 134-..	AI Energy Meter
Analogue Outputs		
	6ES7 135-..	AQ 2xU/I
	6ES7 135-..	AQ 4xU/I
Communication modules		
	6ES7 137-..	CM AS-i Master
	6ES7 137-..	CM 4xIO-Link Master
	6ES7 545-..	CM DP Master
Technology modules		
	6ES7 138-..	TM Timer DI/DQ 10x24VDC
	6ES7 138-..	TM PosInput
	6ES7 138-..	TM Count
Bus Adapter		
	6ES7 193-..	BA 2xFC
	6ES7 193-..	BA 2xRJ45
Base Unit		
	6ES7 193-..	BU 15
	6ES7 193-..	BU 20
Server module		
	6ES7 193-..	Servermodul

1.2 - Main characteristics:

Power supply: 24V DC or 120/230V AC
Degree of protection: IP20
Firmware Version: V01.x

2. DOCUMENTS AND DRAWINGS:

- A5E03576849-AE dated 03/2015; A5E03461486-AB dated 06/2014

3. TEST REPORTS:**SIEMENS AG:**

- SIMATIC Type Test - 2015-01 dated 10.08.2015;
- Specification for Type Tests and Test Report I IA AS RD ST Type Test - 2013-02 dated 24.09.2013

4. APPLICATION/LIMITATION:

- 4.1 - Bureau Veritas Rules and Regulations for the Classification of Steel Ships.
- 4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.3 - Bureau Veritas Environmental Category, **EC Code: 31 or 31B** (see item 4.4, 4.5 and 4.6).
- 4.4 - The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone if filter of type: B84113-C or equivalent with ratings $C=2x\ 0.47\mu F + 2x\ 4700pF$, $L=4x\ 4.7mH$ is used.
- 4.5 - The module: 6ES7 134-6PA00-0BD0 AI Energy Meter fulfils the EMC requirements for installation in General Power Distribution Zones only.
- 4.6 - The Manufacturer's installation recommendation described in A5E03461486-AB dated 06/2014 regarding surge protection is to be considered.
- 4.7 - Documents relating to each application are to be submitted to the Society's examination prior fitting on board.
- 4.8 - Depending on the Application, Factory Acceptance and On-board Tests are to be performed in accordance with requirements for Category II or III Equipment.
- 4.9 - Only Hardware and Firmware successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer is covered by this certificate.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The above mentioned products are to be supplied by **SIEMENS AG- DF FA AS** in compliance with the type described in this certificate.
- 5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320.
- 5.3 - **SIEMENS AG- DF FA AS** has to make the necessary arrangements to have its works recognized by Bureau Veritas in compliance with the requirements of NR320 for HBV products:

SIEMENS AG- DF FA AS
Werner-von-Siemens-Str. 50
92224 Amberg
GERMANY

- 5.4 - Equipment is to be supplied with manual(s) for installation, use and maintenance.

6. MARKING OF PRODUCT:

- Maker's name or trade mark.
- Equipment type or model identification.
- Date of manufacture and/or serial number.

7. OTHERS:

- 7.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that **SIEMENS AG- DF FA AS - GERMANY**, will accept full responsibility for informing shipbuilders, ship owners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

- 7.2 - This certificate cancels and replaces the previous one issued by the Society on 20 Oct 2014, under ref. N° 38633/A0 BV.

*** END OF CERTIFICATE ***