

CERTIFICATE NUMBER 15-HG1423170-PDA DATE 14 Sep 2015

ABS TECHNICAL OFFICE Hamburg Engineering Department

CERTIFICATE OF DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of

SIEMENS AG OESTERREICH, SIMEA

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Power Supply Unit

Model: SITOP Modular, SITOP UPS, SITOP smart, SITOP PSU

This Product Design Assessment (PDA) Certificate 15-HG1423170-PDA, dated 14/Sep/2015 remains valid until 13/Sep/2020 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

1. Numish

Ulf Numirski Senior Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010). Electronically published by ABS Hamburg. Reference T1423170, dated 18-SEP-2015.

SIEMENS AG OESTERREICH

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Tier: 2 - PDA Issued

Product: Power Supply Unit

Model: SITOP Modular, SITOP UPS, SITOP smart, SITOP PSU

Intended Service:

Power supply modules for installation in consoles and cabinets, located in general power distribution zones.

Description:

Power supply units with wide input ranges.

Rating:

Power Supply: 120 - 500 V AC Output Voltage: 24/48 V DC Degree of Protection: IP20/65 For more details please see attachment.

Service Restriction:

Unit Certification is not required for this product. If the manufacturer or purchasers request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards an tolerances, must be clearly defined.

Units are not to be installed neither on bridge nor deck zone.

Comments:

Each particular application is to be specifically approved in conjunction with the relevant arrangements and systems. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Drawing No. 01, Assembly layout schematic 6EP4134-3AB00-xAY0 6EP4136-3AB00-xAY0, Revision: 1, Pages:

Drawing No. 02, GL 2012 item 5-6-7 6EP4136-3AB00-0AY0 represents 6EP1434-3AB00-xAY0, Revision: 1, Pages: 1

Drawing No. 03, EMC_UPS-1600-20A-Profinet_mit-GL-represents 10A_and_Battery_Modules 1 2-3 2-7-Ah, Revision: 1, Pages: 1

Drawing No. 04, EMC UPS-1600-20A-USB mit-GL-represents 10A and Battery Modules 1 2-3 2 7 Ah, Revision: 1, Pages: 1

Drawing No. 05, Vibration DC-USV 10 20 A GL Bericht AIT und Ergebnis 2013-04-09, Revision: 1, Pages: 1 Drawing No. 05, Vibration_DC-USV_10_20_A_GL_Bericht AIT und Ergebnis_2013-04-09, Revision: 1, Drawing No. 06, Assembly layout schematic_6EP4137-3AB00_xAY0, Revision: 1, Pages: 1 Drawing No. 07, GL_2012_item_5-6-7_6EP4137-3AB00-0AY0_signed, Revision: 1, Pages: 1 Drawing No. 08, EMC_40A-Profinet_represents_Battery_Module 2_5 and 12_Ah, Revision: 1, Pages: 1 Drawing No. 09, EMC_40A-USB_represents_Battery_Module_7_and_12_Ah, Revision: 1, Pages: 1 Drawing No. 10, Vibration_SITOP UPS1600_40A_Profinet_represents_USB, Revision: 1, Pages: 1 Drawing No. 11, GL_2012_item_5-6-7_6EP4133-0JB00-0AY0_signed, Revision: 1, Pages: 1 Drawing No. 12, GL_2012_item_5-6-7_6EP4135-0GB00-0AY0_signed, Revision: 1, Pages: 1 Drawing No. 13_Vibration_5_Battery_Modules_Revision: 1_Pages: 1

Drawing No. 13, Vibration_5_Battery Modules, Revision: 1, Pages: 1 Drawing No. 14, Witness-test-report-Germanischer_Lloyd_March_2015, Revision: 1, Pages: 1

Terms of Validity:

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Tier: 2 - PDA Issued

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STANDARDS

ABS Rules: 2015 Steel Vessel Rules 1-1-4/7.7, 1-1-Appendix 3 and 4, 4-8-3/1.7/1.9/1.11/1.17/5.11, 4-9-8/7/13

National: NA

International: NA

Government: NA

EUMED: NA

OTHERS: NA

Product Design Assessment (PDA) Certificate for Component Details

PDA Certificate No:	15-HG1423170-PDA
Company:	Siemens AG Oesterreich, Simea
Product/Equipment:	Power Supply Unit
Model:	SITOP Modular, SITOP UPS, SITOP smart, SITOP PSU

Rated output voltage Ua	Rated output current Ia
	5 A
	5 A
	5 A
	10 A
	10 A
	10 A
	20 A
	20 A
	20 A
	20 A
	40 A
	10 A
48 V DC	20 A
	6 A
	15 A
	40 A
24 V DC	15 A
24 V DC	15 A
24 V DC	40 A
24 V DC	6 A
24 V DC	10 A
24 V DC	20 A
24 V DC	40 A
to the external Interface Type:	······································
Profinet Interface	
Rated input voltage N/A	
24 V DC	6 A, 1.2 Ah
24 V DC	10 A, 3.2 Ah
24 V DC	15 A, 4.5 Ah
24 V DC	30 A, 7 Ah
24 V DC	30 A, 12 Ah
24 V DC	5 A, 1.2 Ah
24 V DC	5 A, 2.5 Ah
24 V DC	5 A, 3.2 Ah
24 V DC	5 A, 7 Ah
24 V DC	5 A, 12 Ah
	Rated input voltage Ue 230/ 500 V AC 24 V DC Rated input voltage Ue 120/ 230 V AC 24 V DC Rated input voltage Ue 400 – 500 V AC 24 V DC 24 V DC

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Туре	Rated output voltage Ua	Rated output current In	
SITOP smart			
	Rated input voltage Ue 120/ 240 V AC		
6EP1332-2BA10	24 V DC	2.5 A	
6EP1333-2AA01	24 V DC	5.0 A	
6EP1333-2BA01	24 V DC	5.0 A	
6EP1334-2AA01	24 V DC	10 A	
6EP1334-2BA01	24 V DC	10 A	
6EP1437-2BA20	24 V DC	40 A	
SITOP smart			
	Rated input voltage Ue 400 - 500 V AC		
6EP1436-2BA10	24 V DC	20 A	
6EP1434-2BA10	24 V DC	10 A	
SITOP PSU 8200			
	Rated input voltage Ue 120/230 V AC		
6EP3333-8SB00-0YA0	24 V DC	5 A	
6EP3334-8SB00-0YA0	24 V DC	10 A	
SITOP PSU 8200			
	Rated input voltage Ue 400 - 500 V AC		
6EP3436-8SB00-0AY0	24 V DC	20 A	

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