DNV·GL

Certificate No:
TAE00002ZK

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Power supply unit

with type designation(s)
Product Line: "SITOP advanced system" Power Supply Modules as listed below

Issued to
Siemens AG Österreich
Wien, Austria

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.

Voltage output	**See page 2**
Power	**See page 2**
Temperature class	**B**
Vibration class	**A**
Humidity class	**B**
Degree of protection	**IP20**

Issued at **Hamburg** on **2018-07-18**
This Certificate is valid until **2020-04-22**.
DNV GL local station: **Augsburg**

Approval Engineer: **Maik Gagern**

for **DNV GL**

Arne Schaarmann
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.

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Product description

Power Supply
Rated Input Voltage U_{IN} 400 – 500V AC

Type	Rated Output Voltage U_{OUT}	Rated Output Current I_{OUT}	Ambient Temp.
6EP3437-8MB00-2CY0	24V DC	4 x 10A	50°C
		optional 4 x 7.5A	60°C
6EP3437-8SB00-2AY0	24V DC	1 x 40A	50°C
6EP3436-8MB00-2CY0	24V DC	4 x 5A	60°C
6EP3436-8SB00-2AY0	24V DC	1 x 20A	60°C

Auxiliary Modules (to be used together with Power Supply Modules as listed above)
Rated input voltage U_{IN} supplied by Power Supply Modules: 40 - 50 V DC

Type of Auxiliary Modules	Rated Output Voltage U_{OUT}	Rated Output Current I_{OUT}	Ambient Temp.
6EP4436-8XB00-0CY0	24V DC	4 x 5A	60°C
6EP4437-8XB00-0CY0	24V DC	4 x 10A	60°C
6EP4436-8XB00-0DY0	24V DC	8 x 2.5A	60°C
6EP3436-8UB00-0AY0	24V DC	1 x 17A	60°C
6EP3446-8SB00-0AY0	48V DC	1 x 10A	60°C
6EP3424-8UB00-0AY0	12V DC	1 x 20A	60°C
6EP3446-8SB10-0AY0	36V DC	1 x 13A	60°C

Type of Auxiliary Modules	Rated Output Voltage U_{OUT}	Rated Output Current I_{OUT}	Ambient Temp.
Capacitor Modules			
6EP4297-8HB00-0XY0	24V DC	40A / 100ms buffer time	
6EP4297-8HB10-0XY0	24V DC	40A / 300ms buffer time	
Supercapacitor Modules			
6EP4293-8HB00-0XY0	24V DC	40A / 4s buffer time	
		5 kWs buffer energy	
6EP4295-8HB00-0XY0	24V DC	40A / 10s buffer time	
		10 kWs buffer energy	

Application/Limitation

EMC Class A
For modules intended for rated input voltage 500V AC:
Intended overvoltage shutdown at 550V AC

Type Approval documentation

Tests carried out

DNV GL Rules for Classification DNVGL-RU-0050, Edition 2016-01
DNV GL Class Guidelines DNVGL-CG-0339, Edition 2015-11

Place of Production

Siemens AG Österreich, A-1210 Vienna, Siemensstrasse 90, Austria
SIMEA SIBIU S.R.L., Str. Florian Rieger Nr. 4, 550052 Sibiu, Romania

Marking of product

Maker´s trademark
Type designation
Rated input voltage / current
Rated output voltage / current

Periodical assesment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type Approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and 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