



# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAA0000300**  
Revision No:  
**1**

## This is to certify:

That the DC Power Supply

with type designation(s)

**CP-S.1 24/3.0; CP-S.1 24/5.0; CP-S.1 24/10.0; CP-S.1 24/20.0; CP-S.1 24/40.0**

Issued to

**ABB Stotz-Kontakt GmbH**  
**Heidelberg, Baden-Württemberg, Germany**

is found to comply with

**DNV rules for classification – Ships**

## Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

### Location classes:

|             |          |
|-------------|----------|
| Temperature | <b>B</b> |
| Humidity    | <b>B</b> |
| Vibration   | <b>A</b> |
| EMC         | <b>B</b> |
| Enclosure   | <b>A</b> |

Issued at **Hamburg** on **2021-11-25**

This Certificate is valid until **2026-06-20** .

DNV local unit: **Augsburg**

for **DNV**

Approval Engineer: **Didier Girardin**

.....  
**Joannis Papanuskas**  
**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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 281

Revision: 2021-03

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## Product description

Primary switched mode power supply.

For all models:

Rated output voltage: 24 V DC

Adjustment range of the output voltage: 24-28 V DC

Mounting: DIN Rail (EN 61715)

Degree of protection: IP20

DC OK – signaling output (relay): 24 V DC, 1A

| Model related:   | CP-S.1-<br>24/3.0 | CP-S.1-<br>24/5.0 | CP-S.1-<br>24/10.0 | CP-S.1-<br>24/20.0 | CP-S.1-<br>24/40.0 |
|--|-------------------|-------------------|--------------------|--------------------|--------------------|
| Rated input voltage AC (50-60 Hz)  | 100-240 V         | 100-240 V         | 100-240 V          | 100-240 V          | 110-240 V          |
| Rated input voltage DC (see limitation)  | 100-250 V         | 100-250 V         | 100-250 V          | 100-250 V          | 110-250 V          |
| Rated output current ( $\leq 60^{\circ}\text{C}$ )                                       | 3.0 A             | 5.0 A             | 10.0 A             | 20.0 A             | 40.0 A             |
| Derating of the output current<br>( $60^{\circ}\text{C} < T_a \leq 70^{\circ}\text{C}$ ) | 2.5%/K            | 2.5 %/K           | 2.5%/K             | 2.5%/K             | -                  |
| ( $55^{\circ}\text{C} < T_a \leq 70^{\circ}\text{C}$ )                                   | -                 | -                 | -                  | -                  | 2.0%/K             |
| Reserve output current ( $\leq 40^{\circ}\text{C}$ )                                     | 4.5 A(5s)         | 7.5 A(5s)         | 15.0 A(5s)         | 30.0 A(5s)         | 60.0 A(5s)         |
| Rated output power   | 72 W              | 120 W             | 240 W              | 480 W              | 960 W              |

## Application/Limitation

DC supply is only allowed on stabilized, controlled secondary circuits.

## Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

## Type Approval documentation

Installation Manual: 1SVC320360M0000 A

See Annex

## Tests carried out

Applicable tests according to class guideline DNV-CG-0339, August 2021

For the bridge mounted components, the 'Acoustic noise and signals' and the 'Compass safe distance' were measured according to sections 11.1 and 11.2 of IEC 60945, 4<sup>th</sup> edition (2002).

## Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings
- Compass safe distance.

Alternatively, the minimum safe distance for fixed equipment may be given in the equipment manual, but portable equipment shall always be marked according 60945 IEC:2002 Ch. 4.5.3

## Place of manufacture

ZHUZHOU MEGMEET ELECTRICAL CO.,LTD

1728# TAISHAN RD, TIANYUAN DISTRICT,ZHUZHOU, HU'NAN,412007,CHINA

### Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the 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



**ANNEX**  
hidden

Job Id: **262.1-034781-2**  
Certificate No: **TAA0000300**  
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