

CERTIFICATE NUMBER EFFECTIVE DATE EXPIRY DATE ABS TECHNICAL OFFICE 23-2444329-PDA 17-Aug-2023 16-Aug-2028 Hamburg Engineering Department

CERTIFICATE OF Product Design Assessment

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

RITTAL GMBH & CO. KG

located at

AUF DEM STUETZELBERG, , D-35745 HERBORN, Germany

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:	Electrical Wire Terminal Block
Model:	SV 3450.505, SV 3451.505, SV 3455.505, SV 3456.505
Endorsements:	
Tier:	2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 16/Aug/2028 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Dimitrios Nikolakis, Engineer/Consultant

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 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 T2444329, dated 17-AUG-2023.

> RITTAL GMBH & CO. KG AUF DEM STUETZELBERG D-35745 HERBORN Germany Telephone: +49 2772 505 0 Fax: +49 2772 505 2319 Email: info@rittal.de Web: www.rittal.de Tier: 2 - PDA Issued

Product:Electrical Wire Terminal BlockModel:SV 3450.505, SV 3451.505, SV 3455.505, SV 3456.505Endorsements:SV 3450.505, SV 3451.505, SV 3455.505, SV 3456.505

Intended Service: For use as busbar pick-off L, N or PE conductors.

Description:

Screwless, push-wire conductor connection clamps.

Rating:

Rated Voltage: 1000 V AC, 1500 V DC Rated Current: up to 63 A Cross-Section: 4.0mm²/ 16mm² Ambient Temperature: -5° C to +55° C Bus bar thickness: 5mm/ 10mm Rated impulse withstand voltage : 12kV

Degree of protection: Note that the lowest values for the main bus bar system and the overall enclosure protection category prescribe the ratings for the overall switchgear assembly.

Service Restriction:

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

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. 2. Cable connectors are to be suitable for the locations of installation in accordance with the designated IP degree for the configuration of connector and cable combined ref. Marine Vessel Rules, 4-8-4/21.26.

Notes/Drawing/Documentation:

Technical Datasheets

Drawing No. SV 3450505, Revision: 13/07/2023 Drawing No. SV 3451505, Revision: 13/07/2023 Drawing No. SV 3455505, Revision: 13/07/2023 Drawing No. SV 3456505, Revision: 13/07/2023

Test Reports

TR_22383_3272000_00_EN, Test Report, Environmental, Phoenix Contact GmbH, 27/07/2017 TR_22385_3272001_00_EN, Test Report, Environmental, Phoenix Contact GmbH, 27/07/2017 TR_22386_3272010_00_EN, Test Report, Environmental, Phoenix Contact GmbH, 27/07/2017 TR_22388_3272011_00_EN, Test Report, Environmental, Phoenix Contact GmbH, 27/07/2017

Test Reports according to IEC 60947-7-1/IEC 60947-7-2

Drawing No. 22382 Rev, Test Report (1500V DC), Phoenix Contact GmbH, 07-08-2017 Drawing No. TPB_2833_3272000_00_DE, Phoenix Contact GmbH, 16-05-2017 Drawing No. TPB_2844_3272001_00_DE, Phoenix Contact GmbH, 16-05-2017 Drawing No. TPB_2845_3272010_00_DE, Phoenix Contact GmbH, 16-05-2017 Drawing No. TPB_2846_3272011_00_DE, Phoenix Contact GmbH, 16-05-2017 Electronically published by ABS Hamburg. Reference T2444329. dated 17-AUG-2023.

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Terms of Validity:

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STANDARDS

ABS Rules:

2023 Marine Vessel Rules: 1-1-4/7.7,1-1-A3, 1-1-A4, 4-8-3/1.7, 4-8-3/1.11, 4-8-3/1.17, 4-8-3/9.23, 4-8-4/21.26 2023 Mobile Offshore Units: 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-3-1/11, 4-3-1/15, 4-3-1/17.1

National:

NA

International:

IEC 60947-7-1:2009 IEC 60947-7-2:2009

Government:

NA

EUMED: NA

OTHERS:

NA