

CERTIFICATE NUMBER EFFECTIVE DATE EXPIRY DATE ABS TECHNICAL OFFICE 22-2327407-PDA 14-Dec-2022 13-Dec-2027 Genoa Engineering Department

CERTIFICATE OF

Product Design Assessment

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

ABB S.P.A.

located at

VIA VITTOR PISANI, 16, , MILANO, Italy, 20124

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:	Circuit Breaker
Model:	DS202CR
Endorsements:	
Tier:	2 - PDA Issued

This Product Design Assessment (PDA) Certificate remains valid until 13/Dec/2027 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 Giorgio Barbini Giorgio Barbini,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)

ABB S.P.A. VIA VITTOR PISANI, 16 MILANO Italy 20124 Telephone: +39 06 71634278 Fax: Email: IT-EPBP_qualitymarks@abb.com Web: www.abb.it

Tier: 2 - PDA Issued

Product:	Circuit Breaker
Model:	DS202CR
Endorsements:	

Intended Service:

Marine Shipboard and Offshore Application.

Description:

Residual Current Operated Circuit Breakers with Overcurrent Protection (RCBOs).

Rating:

Rated Current: 6 up to 40 Amps Rated Voltage: 110 / 230 V Rated Frequency: 50 Hz and 50/60 Hz Number of Poles: 2P Types: A, AC and APR Degree of Protection: IP4X(housing) IP2X(terminals) Rated impulse withstand voltage: 4 kV Rated residual operating current: 10 up to 300 mA Thermo-magnetic release characteristics: B and C Rated breaking capacity (ultimate Icn): 4.5, 6 and 10 kA Rated breaking capacity (ultimate Icu): 6 to 10 kA Rated breaking capacity (service Ics): 6 and 7.5 kA Operating Temperature Range: -25°C to +40°C

Service Restriction:

-Unit Certification is not required for this product.

-If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined. -The use of subject Residual Current Operated Circuit Breakers is restricted to distribution panels located in accommodation spaces.

-The scope of Type Approval is to comply with MSC.1/Circ.1221 dated 11 December 2006.

Comments:

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

DS202CR Data Sheet 040322-ITALCEL SGS-CEBEC IECEE CB Test Certificate No BE-7152 dated 22 June 16 in Belgium SGS-CEBEC IECEE CB Test Certificate No BE-10661 dated 30 Aug 22 in Belgium SGS-CEBEC IECEE Test Report No 62361401-(00) to (39) dated 28 Apr 16 in Belgium SGS-CEBEC IECEE Test Report No 63121002-(00) to (03) dated 26 Aug 22 in Belgium SGS-CEBEC IECEE Test Report No 62361404-(00) to (37) dated 15 Mar 18 in Belgium SGS-CEBEC IECEE CB Test Report No 62361405-(01) to (39) dated 21 June 18 in Belgium for RCBO Series DPC CEM-EMC-ACE-ULg Test Report No 130429-1145-AABJ0041 dated 29 Apr 13 in Belgium CEM-EMC-ACE-ULg Test Report No 130429-1150-AABJ0042 dated 29 Apr 13 in Belgium CEM-EMC-ACE-ULg Test Report No 130423-1630-AABJ0041D dated 29 Apr 13 in Belgium CEM-EMC-ACE-ULg Test Report No 160318-1200-AABJ0042D dated 29 Apr 13 in Belgium CEM-EMC-ACE-ULg Test Report No 160318-1200-AABJ0042D dated 29 Apr 13 in Belgium CEM-EMC-ACE-ULg Test Report No 160318-1200-AABJ0042D dated 29 Apr 13 in Belgium CEM-EMC-ACE-ULg Test Report No 160318-1200-AABJ0042D dated 29 Apr 13 in Belgium CEM Test Report No 220826-1700-AABJ0067A dated 17 Jan 22 in Belgium CENELEC Statement of test Results No STR-B10-2022 dated 30 Aug 22 in Belgium CENELEC Statement of test Results No STR-B10-2022 dated 29 Mar 18 in Belgium ABB S.P.A. VIA VITTOR PISANI, 16 MILANO Italy 20124 Telephone: +39 06 71634278 Fax: Email: IT-EPBP_qualitymarks@abb.com Web: www.abb.it

Tier: 2 - PDA Issued

Terms of Validity:

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STANDARDS

ABS Rules:

2022 Rules for Conditions of Classification, 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following: 2022 Marine Vessels Rules 4-8-3/5.3.3 2022 Yachts 4-6-4/11.1

2022 Conditions of Classification - Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following: 2022 Mobile Offshore Units, 6-1-7/13.1.1 2022 Facilities on Offshore Installations: 3-6/11.3.3

National:

NA

International: IEC 61009-1 Ed.3.2 (2013-09) IEC 61009-2-1 Ed.1.0 (1991-07)

Government:

NA

EUMED: NA

NA

OTHERS:

NA