Certificate No:
TAE00004N6

TYPE APPROVAL CERTIFICATE

This is to certify:

That the RCD - Residual Current Device

with type designation(s)
DS202CR L, DS202CR, DS202CR M, DS202CR M 110V

Issued to
ABB S.p.A.
Paola, Malta, Italy

is found to comply with
DNV 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.

Issued at **Høvik** on **2023-06-12**
This Certificate is valid until **2028-06-11**.
DNV local unit: **Italy/Malta CMC**

Approval Engineer: **Marcin Tobiasz**

for **DNV**

Frederik Tore Elter
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.

Place of Manufacture:

ABB Industrial Solutions (Klodzko) Sp. z o.o.
Pilsudskiego 5
57-300 Kłodzko
Poland

Product description

Residual Current Circuit Breakers with Overcurrent Protection (RCBO) of the DS202CR family.

Ratings		DS202CR L	DS202CR	DS202CR M	DS202CR M 110 V
Operating characteristics		AC, A	AC, A, APR	AC, A, APR	A
Rated current I_n	A	6, 10, 13, 16, 20, 25, 32, 40	6, 10, 13, 16, 20, 25, 32, 40	6, 10, 13, 16, 20, 25, 32, 40	6, 10, 13, 16, 20, 25, 32, 40
Rated sensitivity $I_{\Delta n}$	mA	30, 100, 300	10, 30, 100, 300	30, 100, 300	30
Rated residual breaking capacity $I_{\Delta m}$ acc. to EN 61009-1	kA	3	3	3	3
Rated service breaking capacity I_{CS} @ 230VAC	kA	4.5	6	7.5	7.5
Rated ultimate breaking capacity I_{CU} @ 230VAC	kA	6	10	10	10
Thermo-magnetic release characteristic		C	B, C	B, C	C
Rated voltage U_e	V	230 - 240	230 - 240	230 - 240	110
Rated frequency	Hz	50/60	50/60	50/60	50/60
Rated insulation voltage U_i	V	440	440	440	440
Rated impulse withstand voltage U_{imp}	kV	4	4	4	4
Dielectric test voltage at ind. frequency for 1 min.	kV	2.5	2.5	2.5	2.5
Degree of protection housing/ terminals		IP4X/ IP2X	IP4X/ IP2X	IP4X/ IP2X	IP4X/ IP2X

Application/Limitation

For installation inside switchboards, distribution boards and control gear enclosure.

Temperature class: D
Humidity class: B
Vibration class: B
EMC class: A

Type Approval documentation

Tests carried out

IEC 61009-1(2010) +A1(2012)+A2(2013); IEC 61009-2-1 (1991); IEC 61009-2-2 (1991)
DNV-CG-0339 2021-08

Marking of product

ABB – type designation - voltage – frequency – current – tripping current – operating characteristic

Periodical assessment

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 (where practicable)
- 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