

European Union Recognised Organisation (EU RO) Mutual Recognition Type Approval Certificate

in accordance with Article 10.1 of EU Regulation 391/2009

No. TE/1035/880567/22/MR

This is to certify to the Manufacturer named below, that the Product referred to herein has been inspected for the Manufacturer, pursuant to the relevant requirements of the European Union Recognised Organisation Mutual Recognition procedure, required by Article 10.1 of EU Regulation 391/2009, and has been found in accordance with those requirements. The most demanding and rigorous standard from all EU ROs has been taken as a reference for the development of the Technical Requirement on which present certificate is based.

Manufacturer

RADIOLEX Sp. z o.o. ul. Siennicka 23A 80-758 Gdańsk **POLAND**

Product

Electrical switchboards enclosures and boxes (standard, compact, rack)

Types: OZ, RSA, RSB, RSC, RR, SZS.

Intended service: used as part of switchgear and control gear assemblies of voltage up to 1000V a.c. at frequencies not exceeding 1000Hz or of voltage up to 1500V d.c., indoor application.

Ratings and notes/conditions/limitations: see Appendix to Certificate

other standards reference

Technical requirements or PRS Publication 102/P, Edition January 2022, Technical Requirements for "LV Enclosures and Boxes" [EU RO MR Technical Requirements for "LV Enclosures and Boxes" ver. 0.3 / Application date: 2016-10-01].

Expiration date

2027-03-29

Issued at

Gdańsk, 2022-03-30

C/020/57

When a product is presented with this EU RO MR Type Approval Certificate for given application, its acceptability with regards to the limitations stated in the certificate conditions defined in 1b, 1c and 1d of the applied Technical Requirement will be evaluated by the EU RO in charge of classing the ship or being in charge of the unit/system certification.

In accordance with Article 10 of Regulation (EC) No 391/2009 of the European Parliament and of the Council of 23 April

2009 "on common rules and standards for ship inspection and survey organizations", the following organizations, recognized by the EU on this date, have agreed on the technical and procedural conditions under which they will mutually recognize this certificate:

- · American Bureau of Shipping (ABS)
- · Bureau Veritas (BV)
- · China Classification Society (CCS)
- Croatian Register of Shipping (CRS)
- DNV
- · Indian Register of Shipping (IRS)
- · Korean Register (KR)
- · Lloyd's Register Group Ltd. (LR)
- · Nippon Kaiji Kyokai General Incorporated Foundation (ClassNK)
- Polish Register of Shipping (PRS)
- · RINA Services S.p.A. (RINA)
- · Russian Maritime Register of Shipping (RS)

The scheme for the mutual recognition of class certificates for materials, equipment and components laid down by Article 10(1) of Regulation (EC) No 391/2009 is only enforceable within the Union in respect of ships flying the flag of a Member State. As far as foreign vessels are concerned, the acceptance of relevant certificates remains at the discretion of relevant non-EU flag States in the exercise of their exclusive jurisdiction, notably under the United Nations Convention on the Law of the Sea (UNCLOS). (In accordance with COMMISSION IMPLEMENTING REGULATION (EU) No 1355/2014 amending Regulation (EC) No 391/2009 – recital (25)).

NOTES

- 1 Refer to the agreed MR Technical Requirements for additional MR TAC information that may be specifically applicable to certain products https://www.euromr.org/technical-requirements.
- 2 List of MR TACs issued by the EU ROs can be found by https://www.euromr.org/links-to-mr-certificates.
- As per clause 9 of the Terms & Conditions for Mutual Recognition of Type Approval, the manufacturer will be required to agree that it will fulfil the obligations arising out of its quality assurance scheme as approved during production. The manufacturer certifies it has kept the accredited certification body and the EU RO that issued the MR TAC duly informed of any intended design changes or updating of the production quality assurance scheme for its consideration with regard to the validity of the MR TAC. The manufacturer will apply annually for periodical assessment by the EU RO to show that the production under the MR TAC and the quality assurance scheme are being satisfactory maintained.
- 4 MR TACs are valid for a maximum of 5 years as per clause 10 of the Terms & Conditions for Mutual Recognition of Type Approval.
- 5 For more information on the factors affecting the validity of MR TACs, see clause 11, 12 and 13 of the Terms & Conditions of Mutual Recognition of Type Approval.

Polish Register of Shipping means Polski Rejestr Statków S.A., seated in Gdańsk, al. gen. Józefa Hallera 126, 80-416 Gdańsk, Poland, registered in the Register of Entrepreneurs of the National Court Register, under entry number 0000019880. Polish Register of Shipping, its affiliates and subsidiaries, their respective officers, employees or agents are, individually and collectively, referred to as Polish Register of Shipping or as PRS for short.



Appendix to the MR Type Approval Certificate No. TE/1035/880567/22/MR

Product:

Electrical switchboards enclosures and boxes (standard, compact, rack)

Types: OZ, RSA, RSB, RSC, RR, SZS.

Description / technical data:

OZ – small wall-mounted enclosure with compact dimensions and high tightness

OZ-ST C2 steel sheet RAL7035

OZ-ZN C3 steel sheet + epoxy primer RAL7035

OZ-AL C3 aluminum sheet RAL7035

OZ-OH C4 stainless steel 1.4301 (AISI 304) BRUSHED

OZ-KO C5-I (M) acid-proof steel 1.4404 (AISI 316L) BRUSHED

RSA – small wall-mounted enclosure, universal in terms of configuration and use

RSA C2 steel sheet RAL7035

RSA-P C2 steel sheet / transparent door RAL7035

RSA-ZN C3 steel sheet + epoxy primer RAL7035

RSA-AL C3 aluminum sheet RAL7035

RSA-OH C4 stainless steel 1.4301 (AISI 304) BRUSHED

RSA-KO C5-I (M) acid-proof steel 1.4404 (AISI 316L) BRUSHED

RSB – large freestanding enclosure, universal in terms of configuration and use

RSB C2 steel sheet RAL7035

RSB-P C2 steel sheet / transparent door RAL7035

RSB-ZN C3 steel sheet + epoxy primer RAL7035

RSB-AL C3 aluminum sheet RAL7035

RSB-OH C4 stainless steel 1.4301 (AISI 304) BRUSHED

RSB-KO C5-I (M) acid-proof steel 1.4404 (AISI 316L) BRUSHED

RSC- small wall-mounted or floor-standing enclosure characterized by factory-installed 19-inch rack

RSC C2 steel sheet RAL7035

RR – large standing enclosure, characterized by the ability to connect several enclosures of the same type in series

RR C2 steel sheet RAL7035

RR-P C2 steel sheet / transparent door RAL7035

RR-ZN C3 galvanized steel sheet RAL7035

RR-AL C3 aluminum sheet RAL7035

RR-OH C4 stainless steel 1.4301 (AISI 304) BRUSHED

RR-KO C5-I (M) acid-proof steel1.4404 (AISI 316L) BRUSHED

SZS – reinforced wall-mounted or freestanding enclosure, characterized by high corrosion and ingress protection properties

SZS-ZN C3 steel sheet + epoxy primer RAL7035

SZS-MG C4 magnelis sheet RAL7035

SZS-OH C4 stainless steel 1.4301 (AISI 304) BRUSHED

SZS-KO C5-I (M) acid-proof steel 1.4404 (AISI 316L) BRUSHED

Ratings:

Ingress protection according to IP code: 55/66 Impact resistance according to IK code: 08/10

Operating temperature range: from -25°C to +80°C

Grounding: threaded grounding studs in the cover and enclosure body

Other information: There are perforated angle bars inside the enclosure for mounting TS-35 rail or mounting plate



Restrictions / limitations:

1. Enclosures and boxes intended for indoor applications only (inside Ship's hull).

2. Door stops are to be applied (ordered with enclosure) in case of any enclosure with door.

3. In case of assembly of switchgear and control gear inside and/or on the door designer is responsible for approval of switchboard's documentation and perform FAT in RO presence, if required.

Test Report(s):

Bosmal	2021-11-30
Hamilton	2021-07-19
Hamilton	2020-11-13
Hamilton	2022-02-28
Hamilton	2021-11-19
Radiolex	2022-03-23
	Hamilton Hamilton Hamilton Hamilton Hamilton Hamilton Hamilton Hamilton

Manufacturer's documentation:

As specified in PRS Design Evaluation document: TM/PU/880567/86/22 dated 2022-02-24 TM/PU/880567/217/22 dated 2022-03-24