

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB0000B88
Revision no.:
0

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

that the **A' & 'B' Class divisions fire integrity: - 'B' class division**

with type designation(s)
KCM-22 and KCR-11

issued to

Kariner Oy
FORSSA, Finland

is found to comply with the Implementing Regulation (EU) 2025/1533 for
Item no. **MED/3.11b (Row 1 of 1)**

according to the following requirements:

SOLAS 74 Reg. II-2/3.4, SOLAS 74 Reg. II-2/9, IMO MSC.1/Circ.1581, IMO MSC/Circ.1120

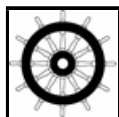
Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2025-09-24**

Expiry date: **2030-09-23**

DNV local unit:
Finland CMC

Approval Engineer:
Karolina Kusmider



for **DNV AS**

Notified Body
no.: **0575**

Christine Mydlak-Röder
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment signed 17 October 2005, and amended by Decision No 1/2023 dated August 21st, 2023.



The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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 USD 300 000.

Product description

Product description

"B-15 Class Ceiling with AC Cabin Units (KCM-22 and KCR-11)"

composed of 0.6 mm thick steel sheets insulated on top with 50 mm thick Rockwool SeaRox SL970 slab wool (manufactured by Rockwool A/S) with density 110 kg/m³. The ceiling was carried by insulated steel U-profiles (35x30x5 mm or 40x40x5 mm) mounted perpendicularly to the ceiling and insulated with additional layer of 50 mm thick and 200 mm wide stone wool slab Rockwool SeaRox SL970. Carriers were fixed from the deck to the U-profiles.

The panels can be fitted with AC cabin units:

1) KCM-22 with diffuser type KDC-31

Dimensions: 400 mm x 600 mm x 170 mm (w x l x h)

KCM-22 weight: 10.4 kg

KDC-31 weight: 1.2 kg

2) KCR-11 with diffuser type KDS-30

Dimensions: 400 mm x 600 mm x 150 mm (w x l x h)

KCM-22 weight: 10.0 kg

KDC-31 weight: 1.2 kg

AC cabin unit is made of 0.75 mm thick galvanized steel sheets by riveting and insulated around with 15 mm thick "Paroc Marine Slabs 150" fixed to ceiling with sealant. AC cabin unit is attached to panels with 4.2x13 mm screws. The panels were stiffened with one beam along each longitudinal side of the AC cabin unit (perpendicularly to the ceiling panels).

Total panel thickness: 50 mm

For more details see drawings listed under Type Examination documentation below.

Application/Limitation

Approved for use as a horizontal fire retarding division of class B-15. In combination with a structural steel deck located 400 mm above, the whole construction is to be regarded as class A-30 deck.

Max. panel size: 300 x 2995 mm (W x L)

Max. distance between hangers/U-profiles, longitudinal direction: 900 mm

Max. distance between hangers, transvers direction: 1200 mm

Max. distance between AC cabin unit and U-profile: 142.5 mm

Max. distance between U-profile and bulkhead: 1045 mm

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

Each product is to be supplied with its manual for installation and maintenance.

Type Examination documentation

Tests carried out

Tested according to IMO 2010 FTP Code part 3.



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Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating, the Mark of Conformity and USCG Approval Number if applicable (see first page).