DNV·GL

Certificate No:
MEDB00006FZ

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the "B" Class divisions, fire integrity

with type designation(s)
Class B-15 Bulkhead (Navy - Panel)

Issued to
KAEFER Schiffsausbau GmbH
Bremen, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397,**
item No. MED/3.11b. SOLAS 74 as amended, Regulation II-2/3.4 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1581

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

This Certificate is valid until **2025-02-17**.
Issued at **Hamburg** on **2020-02-18**

DNV GL local station:
Magdeburg

Approval Engineer:
Roland Priebe

Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
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 European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004, and amended by Decision No 1/2018 dated February 18th, 2019.

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 GL SE 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.

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Product description

The **Class B-15 Bulkhead (Navy - Panel)** is a 52.3 mm thick wall construction with metal panels on each side and insulation inbetween.

Construction:
The panels are flat on the outside and are made of 0.5mm thick galvanized steel sheets reinforced with 0.8 mm thick curved aluminum followed by 1 mm perforated steel sheets (540 mm x 200 mm). All three metals are glued together with a two-component adhesive.

Between the panels there is 50 mm thick mineral wool insulation.

The panel edges are provided with a special profile which allows connecting them to each other with a free thermal bridge connection without any screwing or welding.

Insulation material:
ISOVER SAINT-G08AIN -ULTIMATE Marine felt U MFN 24. (density: 23kg/m³, organic content 5.6%)

Adhesives:
Henkel AG & Co. KgaA, two components: A = Loctite UK 8200, B = Loctite UK 5400, mixing ratio 4 : 1
or alternative
Kömmerling Chemische Fabrik GmbH, two components: A = Körapur 672, B = Köracur TH 650, mixing ratio 5 : 1.

For further details refer to the documentation listed below under "Type Examination documentation".

Application/Limitation

Approved for use as a vertical fire retarding division of class B-15.

Maximum panel size: 2320 mm long x 600 mm wide

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 use.

Type Examination documentation

Test report No. 20141218 dated 2014-10-17 and 1. Modification to No. 20141218 dated 2015-01-07 issued by MPA Dresden, Germany.

This certificate is based on the previous MED-B 13881-15 HH dated 2015-03-03.

Tests carried out

Tested according to IMO Res. MSC.307(88) - 2010 FTP Code, Annex 1, Part 3.

Marking of product

The product or packing is to be marked with:

- name and address of manufacturer,
- type designation,
- fire technical rating,
- the MED Mark of Conformity (see page 1) and
- USCG approval number, if applicable.