DNV·GL

Certificate No:
MEDB00002UX

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 C class Divisions

with type designation(s)
KAE-VIP (Vacuum-Insulation-Panel) system - Composite C-Class Division

Issued to
KAEFER Schiffsausbau GmbH
Bremen, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306,**
item No. MED/3.64. SOLAS 74 as amended, Regulation II-2/3.10 & 2/9 and IMO 2010 FTP Code

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

This Certificate is valid until **2022-06-22**.

Issued at **Hamburg** on **2017-06-23**

DNV GL local station:
Bremerhaven

Approval Engineer:
John Alan Walton

Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudszus
Head of Notified Body

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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Product description

The **KAE-VIP (Vacuum-Insulation-Panel) system - Composite C-Class Division** is composed of panels with a non-combustibe silica based core material enclosed with a glass fibre woven fabric and sealed with an approved low flame spread composite foil. The sealed core and a strip of mineral wool insulation (Ultimate U MFN 13-36 or Armaflex AF) bonded around the edges are covered with a flanged steel sheet covering bonded to each face with an adhesive (Loctite UK 8160) of approved type.

The sealed core has a thickness range from 20 up to 40 mm.
The steel sheet covering has a thickness range from 0.8 up to 4 mm.

The panels may consist of two or more sealed cores.

Application/Limitation

Approved as C class division.

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.

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code Part 5”

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

Type Examination documentation

Tests carried out

Tests according to IMO Res. MSC.61(67) – (FTP Code), Annex 1, Part 1 and Part 5 and in compliance with Annex 2, Ch. 1 & 2.2 and with IMO Res. MSC.307(88) – (2010 FTP Code), Ch. 8.

Marking of product

The product or packing is to be marked with the name and address of manufacturer, its type designation and the Mark of Conformity.