

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-0 Navy-Panel Deck

Issued to
KAEFER Schiffsausbau GmbH
Bremen, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773**,
item No. MED/3.11b. SOLAS 74 as amended, Regulation II-2.3.4 & II-2/9 and IMO 2010 FTP Code

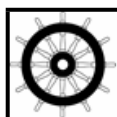
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-01-31**.

Issued at **Hamburg** on **2019-02-01**

DNV GL local station:
Bremerhaven

Approval Engineer:
Pavel Golyshev



Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudsus
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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

"Class B-0 Navy-Panel Deck"

The deck ceiling system consists of individual, prefabricated metal panels which are held together in a cassette-like form by means of multiple flanged profiling at the panels' longitudinal edges (without use of screws).

An individual panel is composed (from the side exposed to fire) of 0.5 mm thick steel sheet, 0.8 mm thick corrugated aluminium sheet fixed to the steel sheet on the other side with an adhesive of approved type, and with two layers (each layer 23 mm thick) of ISOVER Ultimate SeaProtect 34 V2 insulating mats (nominal density: 34 kg/m³, provided by Saint-Gobain Isover G+H AG) fixed above the corrugated aluminium sheet by means of the approved adhesive.

The panels may be transversely connected with each other by means of the DTS type steel profiles screwed to the panels. The profiles are further screwed to the vertically arranged short angle profiles made of steel (maximum transverse distance between two such profiles is 1200 mm) which are then fixed to the structural steel deck above.

Profiles of the same DTS type are also fixed at the perimeter of the assembled construction.

Total panel thickness: 50 mm.

For further details, please see test report with included drawings listed under Type Examination documentation below.

Application/Limitation

Approved for use as a horizontal fire retarding division of class B-0.

The minimum distance between the ceiling panel and the structural steel deck is 350 mm.

Maximum panel size: 600 mm x 3000 mm (width x height).

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

Test report No. 20180415 dated 7th of September 2018 issued by MPA Dresden (Fire Test Laboratory) Germany.

Tests carried out

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

Marking of product

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