

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)

90 - class B-15 ceiling with built-in components

Issued to

Jansen Systembau GmbH & Co. KG
Papenburg/Aschendorf, Germany

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2017/306,**

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 **2022-04-04.**

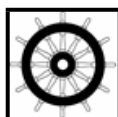
Issued at **Hamburg** on **2017-04-05**

DNV GL local station:

Leer

Approval Engineer:

Hiltraud Möhlmann



Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudzus
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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-15 ceiling, consisting of 39 mm rock wool, type Rockwool Conrock 15 (density 150 kg/m³) covered with 1.4 mm galv. steel sheet on unexposed side and 0.6 mm galv. steel sheet on exposed side, panels connected to each other with tongue and groove connection; acc. to attachments 1 to 6 of test report, with following optional fittings:

- down light, fastened with drilling screws on exposed side, cable penetration by a hole (diameter: 10 mm), cable hole sealed with SIKAFix Firesil Marine N, cable fastened with aluminium foil on unexposed side acc. to drawing no: 900 30 005, attachment 6 of test report GH10/7489.
- loudspeaker, cross section of cut out in ceiling is 143 mm, covered with an insulating box of stone wool type PAROC Marine Slab (density: 220 Kg/m³) with external dimension of 275 x 275 x 50 mm, acc to drwg. no.: BE 900 30 004, attachment 5 of test report GH 10/7489.
- Inspection hatch, clear opening 535 mm x 535 mm, acc. to attachments 6,7 and 8 of test report 20621892.
- Suspension for ceiling panels, U-Profile, acc. to attachment 4 of test report 20621892.
- Flat channel with blind frame, screwed, clear opening 200 mm x 370 mm, acc. to attachment 5 of test report 20621892.
- Air duct – unit 2, consist of 0.5 mm thick galvanised steel plate, insulated inside the box with Isover Ultimate U MPV 90, external dimension were 612 x 405 x 123 mm; the air outlet on the exposed side was tested without cover and therefore open directly into the internal insulation/steel sheet of the air duct; in addition a 589 x 240 x 0.7 mm galv. steel sheet was glued to the mineral wool inside the box above the air outlet; the air duct was also mounted with additional insulation, 3 mm Insulfrax Paper, covering the entire unexposed side of the duct; the insulation was fixed with aluminium tape, acc. to drwg. no.: 11 420401 5028 0025 – 9902 Rev. A and photos 12, 13, 14, 15, 16, 17, 27, 18, 23 and 24 (see test reports and assessment of certificate 20698-11HH).
- Air duct – unit 3, consist of 0.5 mm thick galvanised steel plate, insulated inside the box with Isover Ultimate U MPV 90, external dimension were 612 x 405 x 123 mm; the air outlet on the exposed side was tested without cover and therefore open directly into the internal insulation/steel sheet of the air duct; an additional layer of 10 mm thick Isover Ultimate U MPV 90 was glued to the lower surface of the insulation inside the box; 15 mm thick Paroc Marine Slab 220, with white glass cloth facing away from the duct, was fixed on the outside to the vertical edges of the duct with aluminium tape around the corner; the steel sheet on the unexposed side of the ceiling was reinforced with two 45 mm wide steel strips each fixed to the panel with two roves screws; acc. to drwg. No.: 11420401 5028 0025 – 9903 Rev. B and photos 12, 13, 14, 15, 16, 18, 27, 28, 29, 30 and 31, (see reports and assessment of certificate 20698-11HH).
- RSB box –unit 4; the exterior dimensions of the air box were 255 x 290 x 450 mm (height x width x length); manufactured of one layer 0.5 mm galv. steel sheet with 10 mm Isover Ultimate U MPV90 glued to the inside of the steel sheet with the black glass cloth facing away from the steel sheet; a steel frame work of folded steel sheet was mounted inside the connecting panel along the edges, 40 mm wide and 25 mm high, as basis for the screws fixing the diffuser part to the panel; the connecting panel was insulated with 25 mm thick Isover U MFA24 at the bottom, and with 15 mm thick Paroc Marine Slab 220 with glass cloth on top; the diffuser on the exposed side of the connection panel was insulated with 15 mm thick Paroc Marine Slab 220 with glass cloth on top;. acc. to drwg. no.: 11 420401

Job Id: **344.1-006730-1**
Certificate No: **MEDB00002DG**

5028 0025 – 9904 Rev. B and photos 33 to 41, (see test reports and assessment of certificate 20698-11HH).

Application/Limitation

Approved for use as a horizontal fire retarding division of class B-15. Approved for use as a horizontal fire retarding division of a class A-30 steel deck in combination with a class B-15 ceiling, when ceiling is positioned a min. distance of 390 mm below deck.

Max panel size: 3000 x 600 x 40 mm (length x width x thickness).

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, use and maintenance.

Type Examination documentation

Test report nos. GH 09/6821.2 dated 2010-01-26, 10/7489 dated 2010-11-15 issued by TÜV NORD Bauqualität GmbH & Co. KG, Hamburg, Germany and 20621892 dated 2011-02-10 issued by DMT GmbH & Co. KG.

Tests carried out

Tested according to IMO FTPC Part 3 and in compliance with IMO 2010 FTP Code Ch.8.

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 and USCG approval number if applicable (see first page).