

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007MJ

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

This is to certify:

That the A & B Class divisions fire integrity: B class divisions.

with type designation(s)

Class B-15 Bulkhead with Cavity wall box Type: HWD B15 (one gang box/one gang junction box)

Issued to

Kaiser GmbH & Co. KG
Schalksmühle, Nordrhein-Westfalen, Germany

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

Regulation (EU) 2021/1158,

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

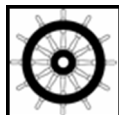
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2026-09-30**.

Issued at **Hamburg** on **2021-10-01**

DNV local station:
Essen

Approval Engineer:
Timo Linn



Notified Body
No.: **0098**

for **DNV SE**

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Christine Mydlak-Roeder
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) 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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 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 300,000 USD.



Product description

"Class B-15 Bulkhead with Cavity wall box Type: HWD B15 (one gang box/one gang junction box)" is a B-15 bulkhead (MEDB000049Y) of type K-600/25 B15 manufactured by Norac AS, Arendal, Norway fitted with (one gang box/one gang junction box)

Bulkhead made of 760 mm wide K-600/25 panels consisting of 24-49 mm Rockwool T150 insulation (150 kg/m³) covered with 0.6 mm steel sheets on the front side and 0.4 mm unperforated or perforated steel sheets on the back side. The steel sheets are glued to the insulation with Henkel Teroson UR 7226. The panels are connected by tongue and groove connections and fixed with blind rivets, cc 400 mm, by the back-side joints. Total panel thickness is 25-50 mm.

Alternative insulation materials may be used (replacing Rockwool T150 with same thickness):

- Rockwool B250 with nominal density 250 kg/m³.
- Conrock 15 with nominal density 150 kg/m³.

When Rockwool B250 is used, an additional 0.6 mm thick galvanized steel plate may be glued inside to the 0.6 mm thick steel sheet in the above description.

In the B-15 wall, 5 pieces of cavity wall inlet boxes as a single box and a total of 15 pieces of cavity wall inlet boxes as a combination of three were inserted.

The Class B-15 Bulkhead is fitted with following optional fittings (see also mentioned test report below for further details):

"9463-15" (single box)

A hole (ø 74 mm) was drilled in the wall panel, into which a hollow wall inlet box type "9463-15" was inserted from the side facing the fire room. The box was fixed into the wall by means of the lugs provided on the box. A cable of the type "Alu-11000201/RFA-FRHF 1x2x0.75 M6620037 orange" (outer diameter: 9.0 mm) and a cable of the type "359344 A /MPRX 3G 1.5 RM with protective conductor" (outer diameter: 8.2 mm) were then fed through the box on the side facing away from the fire compartment, the cables were each fastened to the wall panel with metal perforated tape. On the side facing away from the fire room, the length of the cables was (500 ± 50) mm. On the side facing the fire room, a standard light switch was mounted in the box.

"9463-15" (3-piece combination)

Three holes (ø 74 mm) were drilled in the wall panel, into which three hollow wall inlet boxes of type "9463-15" were inserted from the side facing the fire room. The boxes were fixed in the wall by means of the lugs provided on the boxes. A cable of the type "359344 A/MPRX 3G 1.5 RM with protective conductor" (outer diameter: 8.2 mm), a cable of the type "Alu-11000201/UC 80055274 P LS MF yellow /f/17005529" (outer diameter: 6.4 mm), a cable of the type "3980738/MPRXCX 5G 1.5 RM with protective conductor" (outer diameter: 10.9 mm), a cable of type "<FxrPS2> 230V SF0J(c) 2Px 0.75 SQMM JEC 60332-3A JEC 60331 JS-Cable 2011 (43) J44 0646 M" (outer diameter: 14.4 mm), a cable of type "129691/Koaxkabel RG 214 FRNC MJL-C-17G " (outer diameter: 11.25 mm) and a cable of type "Alu-11000201/RFA-FRHF 2x2x0.75 K 10 329 023 orange" (outer diameter: 14 mm). On the side facing away from the fire compartment, the cables were fastened to the wall panel with perforated metal tape. On the side facing away from the fire room, the length of the cables was (500 ± 50) mm. On the side facing the fire room, a 3-way combination consisting of two standard light switches and a socket was mounted in the boxes.

"9464-15" (single box)

A hole (ø 74 mm) was drilled in the wall panel, into which a hollow wall inlet box type "9464-15" was inserted from the side facing the fire room. The box was fixed in the wall by means of the lugs provided on the box. A cable of the type "Alu-11000201/RFA-FRHF 1x2x0.75 M6620037 orange" (outer diameter: 9.0 mm) and a cable of the type "359344 A /MPRX 3G 1.5 RM with protective conductor" (outer diameter: 8.2 mm) were then fed through the box. On the side facing away from the fire compartment, the cables were each fastened to the wall panel with metal perforated tape. On the side facing away from the fire room, the length of the cables was (500 ± 50) mm. On the side facing the fire room, a standard light switch was mounted in the box.

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"9463-14" (single box)

A hole (ø 74 mm) was drilled in the wall panel, into which a hollow wall inlet box type "9463-14" was inserted from the side facing the fire room. The box was fixed in the wall by means of the lugs provided on the box (with zero-tension lugs). A cable of the type "Alu-11000201/RFA-FRHF 1x2x0.75 M6620037 orange" (outer diameter: 9.0 mm) and a cable of the type "359344 A /MPRX 3G 1.5 RM with protective conductor" (outer diameter: 8.2 mm) were then fed through the box. On the side facing away from the fire compartment, the cables were fastened to the wall panel with metal perforated tape. On the side facing away from the fire room, the length of the cables was (500 ± 50) mm. On the side facing the fire room, a standard light switch was mounted in the box.

"9463-14" (3-piece combination)

Three holes (ø 74 mm) were drilled in the wall panel, into which three hollow wall inlet boxes of type "9463-14" (see also Annex 1.6) were inserted from the side facing the fire room. The boxes were fixed in the wall by means of the lugs provided on the boxes (with zero-tension lugs). A cable of the type "359344 A /MPRX 3G 1.5 RM with protective conductor" (outer diameter: 8.2 mm), a cable of the type "Alu-11000201/UC 80055274 P LS MF yellow /f/17005529" (outer diameter: 6.4 mm), a cable of the type "3980738/MPRXCX 5G 1.5 RM with protective conductor" (outer diameter: 10.9 mm), a cable of type "<FxRPS2> 230V SF0J(c) 2Px 0.75 SQMM JEC 60332-3A JEC 60331 JS-Cable 2011 (43) J44 0646 M" (outer diameter: 14.4 mm), a cable of type "129691/Koaxkabel RG 214 FRNC MJL-C-17G mit GL Zertifizierung" (outer diameter: 11.25 mm) and a cable of type "Alu-11000201/RFA-FRHF 2x2x0.75 K 10 329 023 orange" (outer diameter: 14 mm). On the side facing away from the fire compartment, the cables were fastened to the wall panel with metal perforated tape. On the side facing away from the fire room, the length of the cables was (500 ± 50) mm. On the side facing the fire room, a 3-way combination consisting of two standard light switches and a socket was mounted in the boxes.

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Insulation material

"SeaRox SL 440" with a nominal density: 150 Kg/m³ manufactured by Rockwool International A/S.

Adhesive / Sealant

"Loctite UR 7226" manufactured by Henkel AG & Co. KG.

For further details, see drawings mentioned under Type Examination documentation below.

Application/Limitation

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

Max. panel size (height x width): 2480 mm x 600 mm.

Any surface materials used have to be approved for smoke and toxicity and low flame-spread characteristics (IMO 2010 FTP Code parts 2 and 5) when required according to 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

Test report HWD B15 document no. DMT-DO_53-153 dated 14th of July 2021 from DMT GmbH & Co. KG, Lathen, Germany.

Tests carried out

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

USCG Approval Category (Module B) number

This product has been assigned a U.S. Coast Guard Module B number 164.108/EC0098 to note type approval to Module B only as it pertains to obtaining US Coast Guard approval 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.

Marking of product

The product or packing is to be marked with:

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