

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No: **MEDB00004CN** Revision No:

1

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 Fire Doors

with type designation(s) **Door B-15 K50**

Issued to

R & M International GmbH Hamburg, Germany

is found to comply with the requirements in the following Regulations/Standards: Regulation **(EU) 2019/1397,**

item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511, IMO MSC.1/Circ.1319

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

This Certificate is valid until 2023-10-03.

Issued at Hamburg on 2020-07-03

DNV GL local station: **Hamburg CMC**

Approval Engineer: Roland Priebe

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for **DNV GL SE**

Notified Body No.: **0098** Gerhard Aulbert 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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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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.

Job Id: **344.1-008458-2** Certificate No: **MEDB00004CN**

Revision No: 1

Product description

The **Door B-15 K50** is a single leaf hinged fire door composed of door leaf and frame and various fittings.

The door leaf is manufactured from 0.7 mm thick steel plates and is insulated inside with rock wool. The four-sided door frame is made by 1.5 mm thick steel plates and filled with rock wool insulation. At the top of door frame, a 73 mm thick top panel of external size of 180 mm in height (200 mm including additional overlap of 20 mm on the side exposed to fire) is installed as one part of it. The top panel is insulated inside with rock wool.

For insulation of door leaf, frame and frame top panel, "ABM-SR 200" type marine moisture-proof rock wool slab (provided by Shanghai ABM Rockwool Co., Ltd, China, nominal density: 150 kg/m³) is used and fixed to the steel plates with an adhesive of approved type.

Alternatively the insulation "TIZO-FLOT Lamella 150" (density 150 kg/m³) from Joit Stock Company "TIZOL" may be used – see assessment No. 20190456 from MPA Dresden.

The door leaf is connected to the frame by three steel hinges at one of its vertical edge and is fitted with a fireproof lock at the other edge. The door frame is bolted to the bulkhead and may also be tack- and fully welded to the bulkhead. During the test, the door leaf was installed to open away from the heating conditions.

The door may be optionally fitted with:

- In-built ventilation duct with upper and lower vent grill openings facing different door leaf sides (during the test, the upper mounted vent grill opening was facing the fire side). For construction, mounting and other details see drawings K701684-3.1 and K701684-3.1-01;
- Escape panel with the exterior dimensions of 530 mm x 530 mm arranged as integrated part of the door leaf in the lower part of door leaf;
- Spy eye (Ø14 mm) acc. to drawing K701684-1.1;
- Cable pipe of Ø18 mm x 479 mm installed at the mid position in door leaf, made by 1.0 mm thick steel plate and fixed to the door leaf by an adhesive of approved type.

Total thickness of door leaf: 50 mm (not including the edge cover).

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

Application/Limitation

Approved for use as an integrated part of fire retarding division of class B-15.

Max. size of door leaf: 681 mm x 1996 mm (width x height).

Max. clear opening door size: 650 mm x 1990 mm (width x height).

Max. clear opening of escape panel: 500 mm x 500 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. FT14026 dated 17th of February 2014, from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Assessment report No. 20190456 dated 24th September 2019 from MPA Dresden, Dresden, Germany.

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Tests carried out

Tested according to IMO Resolution 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, MED Mark of Conformity and USCG approval number if applicable (see first page).

USCG Approval Category (Module B) number

This product has been assigned a U.S. Coast Guard Module B number 164.136/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.

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