EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB00004C4
Revision no.:
3

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 **Fire doors**

with type designation(s)
A-15 single door

issued to
R & M International GmbH
Hamburg, **Germany**

is found to comply with the Implementing Regulation **(EU) 2024/1975** for
Item no. **MED/3.16** (Row **1 of 1**)
according to the following requirements:
IMO MSC.1/Circ.1511, SOLAS 74 Reg. II-2/9.

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

Date of issue: **2025-05-12**

Expiry date: **2028-08-29**

DNV local unit:
Hamburg – CMC North/East

Approval Engineer:
Meike Grabau

Notified Body
no.: **0098**

for **DNV SE**

Digitally Signed By:
Permoda, Jowita
on behalf of

Christine Mydlak-Röder
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, and amended by Decision No 1/2023 dated May 26th, 2023.
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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"A-15 single door"
is a single leaf hinged fire door composed of door leaf and frame and various fittings.

Total door leaf thickness (excluding edge cover): 39 mm.

For further details, see documents listed under Type Examination documentation below.

Please see Appendix: Product Description

Application/Limitation

Approved for installation in steel bulkheads of class A-15. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Maximum door leaf size (variant 1): 1232 mm x 2210 mm (W x H)
Maximum door leaf size (variant 2): 1242 mm x 2217 mm (W x H)
Maximum clear door opening: 1200 mm x 2200 mm (W x H)
Maximum clear window opening: 400 mm x 400 mm (W x H)
Maximum clear hose port opening: 150 mm x 150 mm (W x H)

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the MED Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

A fire door of marginally larger dimensions than a fire-tested fire door may be individually assessed and accepted by Flag Administration (or Recognized Organization acting on its behalf) for a specific project with the same classification, provided documented compliance with IMO MSC.1/Circ.1319.

The door has been successfully tested for an extended test period of 68 minutes (fire integrity) and 18 minutes (insulation).

Each door is to be supplied with its manual for installation, use and maintenance.

Type Examination documentation

Document No.	Rev.	Title
PGA11232A (edition 1)		Test Report (variant 1) dated 8 August 2018 from DBI Hvidovre, Denmark
PGA11232A	1	Supplement to test report PGA11232A (variant 1) dated 8 August 2018 from DBI Hvidovre, Denmark
AJFS2408009532FR		Test Report dated 6 December 2024 from SGS-CSTC Standards Technical Services, Anji County, China

Tests carried out

Tested according to IMO 2010 FTP Code, 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).

APPENDIX

Product Description

Certificate no.:
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Variant 1:
The door leaf is composed of 36 mm type Tizol-Flot 150 rock wool, manufactured by Tizol (density: 150 kg/m³), sandwiched between two 1.5 mm thick steel plates. The insulation is glued to the steel plates with an adhesive of approved type. Along all edges of the door leaf a cover made by 15 mm x 43 mm x 15 mm x 0.7 mm steel U-profiles are fixed by steel pop rivets. The steel profile is folded inwards along the 15 mm edges. The door leaf is connected to the frame by three steel hinges at one side and fitted with a type C1 lock at the other side, 1050 mm from the bottom of the door leaf. A magnetic sensor type DC124 mounted at the top of the door leaf.

The three-sided door frame is composed of Z-shaped profile of a 4 mm thick steel plate with the dimensions 60 x 53 x 24 mm and either welded or bolted (M10) to the steel bulkhead spaced maximum 300 mm apart.

Alternative frame profile: U-profile with an extra flange of specification 65 mm x 65 mm x 53 mm x 24 mm and a thickness of 4 mm. This type of frame shall be fully welded to the steel bulkhead and insulation of the bulkhead shall fill out the hollow frame.

The door may be optionally fitted with a fireproof rectangular glass window with a total thickness of 23 mm, composed of a 50 mm x 3 mm window steel frame and a fireproof glass type Pyrostop 60-101 (manufactured by Pilkinton Germany). A 4 mm strip Insulfrax paper (manufactured by Unifrax) is glued along the inside of the glazing beads (towards the glass pane) as well as along the edges of the glass.

The door may be optionally fitted with a self-closing (fitted with chain spring "18") hose port.

The door leaf is mounted with a 1.9 mm x 40 mm intumescent strip of type Promaseal PL (provided by Promat GmbH, Germany) adhered along the bottom edge of the door leaf. The intumescent strip of the same type and specification is also adhered along the bottom edge of the hose port, as well as on the door leaf above the hose port and along the hinged side. In addition, the same intumescent strip is fixed to the door frame (both Z- and U-profiles): along the top and the vertical sides inside the door frame profile is adhered along the flange.

Variant 2:
The door leaf is composed of 37.5 mm type ABM-SR rock wool, manufactured by Shanghai ABM Rock Wool (density: 150 kg/m³), sandwiched between two 0.7 mm thick galvanized steel plates. The insulation is glued to the steel plates with an adhesive of approved type. A 1.5 mm thick steel U-shaped profile is used as a framework. A type RM2002 fireproof sealing strip, manufactured by Shanghai Gallford Fire Sealing Material, is installed around the door leaf. The door leaf is connected to the frame by three steel hinges at one side and fitted with a type C1 lock at the other side, 1080 mm from the bottom of the door leaf. A magnetic sensor type DC124 mounted at the top of the door leaf.

The three-sided door frame is composed of Z-shaped profile of a 4 mm thick galvanized steel plate with the dimensions 60 x 53 x 25 mm and either welded or bolted (M10) to the steel bulkhead spaced maximum 300 mm apart.

The door may be optionally fitted with a fireproof rectangular glass window with a total thickness of 23 mm, composed of a galvanized window frame (manufactured by Alvedoor Kunshan), fireproof glass type Pyrostop 60-101 (manufactured by Pilkinton Germany) and sealing material type RM2002 (manufactured by Shanghai Gallford Fire Sealing Material). The fireproof sealing strips are installed at the joints between the window leaf and window frame.

The door may be optionally fitted with a hose port. The hose port is connected to the door leaf through Spring Aditech 18. Fireproof sealing strips are installed at the joints of the hose port and door leaf for sealing. The structure of the hose port is consistent with that of the door leaf.

OTHER

USCG approval limitations
The approval is limited to fire doors without windows and doors with total window area of 645 cm², or less, in each door leaf. For larger windows, USCG shall be contacted.

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.