EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB0000BZ6
Revision no.:
0

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-60E single

issued to
Rheinhold & Mahla GmbH
Schellerdamm 22-24 21079 Hamburg Germany,

is found to comply with the Implementing Regulation **(EU) 2025/1533** for
Item no. **MED/3.16** (Row **1 of 1**)
according to the following requirements:
SOLAS 74 Reg. II-2/9, IMO MSC.1/Circ.1511

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

Date of issue: **2026-03-17**

Expiry date: **2026-09-20**

DNV local unit:
Hamburg – CMC North/East

Approval Engineer:
Meike Grabau

Notified Body
no.: **0098**

for **DNV SE**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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 USD 300 000.

Product description

"A-60E single"
is a single leaf hinged fire door optionally equipped with window and hose port.

The door leaf is composed of 0.7 mm steel plate + 18.5 mm stone wool + 12 mm thick fire board + 18.5 mm stone wool + 0.7 mm steel plate. The layers are glued together with an adhesive of approved type. The steel sheets of the door leaf are folded forming an overlap over a reinforcing 25 mm x 48.5 mm x 25 mm U-profile along all edges of the door leaf. These edges are finished with a 0.7 mm thick U-profile with dimension 15 mm x 53 mm x 15 mm.

The insulating stone wool is Tizol-Flot Lamella 200 (nominal density 200 kg/m³, produced by Joint Stock Company “Tizol”) and the fire protection board is Cemval Protect Marine (nominal density 975 kg/m³, produced by Cem Trade).

An intumescent strip (1.9 mm x 20 mm) is mounted along the bottom and top edge of the door leaf and the hose port and along the vertical edges of the door frame.

The door frame is a three-sided steel Z-profile (60 mm x 64 mm x 29 mm x 4 mm). It is mounted to the bulkhead with M10 mm bolts with nuts and washer. Alternative a Rina-frame profile with an extra flange (65 mm x 65 mm x 64 mm x 34 mm x 4 mm) must be fully welded to the steel bulkhead (see PHD10036A).

The rectangular window of maximum size 440 mm x 440 mm or a circular window of maximum size Ø 440 mm is positioned in the upper half of the door leaf. The glass pane consists of 27 mm thick Pilkington Pyrostop 60-201 (from Pilkington Germany). The window frame is on both sides formed from a 62.5 mm x 3 mm steel profile and fixed to the door leaf with counter sunk screws. 4 mm thick insulfrax paper is glued inside the window frame towards the glass pane. Alternative: a glass of “Type A-60” from Yuehua Industrial And Technical Glass Factory, China may be used (see PHD10036A).

The hose port is located at the lower part of the door leaf on the lock side. The piano hinge of the hose port is mounted to the door leaf with pop-rivets. The hose port is closing automatically by means of a concealed spring fetter (chain spring).
Alternative 1 (as tested in PHD10033A) is equipped with a finger hole with a pipe and cover extending 14 mm into the hose port.
Alternative 2 (as tested in PHD10033A) is not equipped with any finger hole.

The door leaf is furnished with three steel hinges, a magnetic sensor at the top edge lock side and with a latch/bolt lock.

Total door leaf thickness (excluding window fixing frame): 50 mm.

For further details see documents under Type Examination documentation below.

Application/Limitation

Approved for installation in steel bulkheads of class A-60. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Maximum door leaf size: 1242 mm x 2216 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), alternative: Ø 400 mm
Maximum clear hose port opening: 155 x 153 mm (W x H)

Doors with windows shall not be fitted in the boundaries of machinery spaces of category A.

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

USCG approval: 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.

Type Examination documentation

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 Mark of Conformity and USCG Approval Number if applicable (see first page).