DNV·GL

Certificate No:
**MEDB00006SF**

# 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 Fire Doors**

with type designation(s)
**Class A-60 double leaf hinged fire door type "LMD-HD-NR"**

Issued to
**Podszuck GmbH**
**Kiel, Germany**

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2020/1170,**
**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 **2025-09-21**.
Issued at **Hamburg** on **2020-09-22**

DNV GL local station:
**Hamburg CMC**

Approval Engineer:
**Pavel Golyshev**

Notified Body
No.: **0098**

for **DNV GL SE**

**Gerhard Aulbert**
**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 1/2018 dated February 18th, 2019.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.



© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

## Product description

Class A-60 double leaf hinged fire door type "LMD-HD-NR"
Double leaf hinged fire door composed of active and non-active door leaves and frame and various fittings.

Each door leaf is made by 1.0 mm thick steel sheets and reinforced inside along the top edge with 45 mm x 10 mm flat steel as well as along and the bottom and the vertical edges with 45 mm x 6 mm flat steel. An inlay of 45 mm x 6 mm Promatect H is placed inside along the edges between the flat steel and the steel sheet of the door leaves, and an inlay of 15 mm x 6 mm Promatect H is mounted inside along the edges towards the exposed side.
At the centre of the hinged side of both door leaves a Ø14 mm safety bolt is screwed into the door leaf. The backside of matching hole drilled in the door frame is covered by Ø35 mm steel protection cap.
Along all four edges, both door leaves are mounted with 2 mm thick steel U-profile of specification 27 mm x 58 mm x 27 mm.
Each door leaf is insulated with two layers of 25 mm thick calcium silicate boards Silca 200 manufactured by Calsitherm GmbH (nominal density 210 kg/m³) fixed with each other as well as with the steel sheets with approved adhesive.

Each door leaf is connected to the door frame (made by 3 mm thick steel Z-profiles of specification 63 mm x 50 mm x 30 mm) by three steel hinges. The door was tested with the door frame fixed to the steel bulkhead with M8 x 16 mm bolts with nut at c/c 250 mm and may be installed with door frame both bolted, tack- and fully welded to the bulkhead.

The non-active door leaf is provided with two lock systems, an Espagnolette lock mounted at the top, with the handle positioned at the exposed door leaf side (the cavity between the lock channel and the steel sheet of the door leaf is insulated with two layers of 35 mm x 600 mm x 6 mm Promatect H strips away from the exposed side). An automatic flush bolt activated by closing of the active door leaf is mounted at the bottom of the door leaf.

A Z-profile is mounted (by means of screws at c/c 300 mm) along the leading edge of the door leaf forming an overlap of 35 mm along the exposed side.

The active door leaf is fitted with a latch/bolt lock, and the lock casing is insulated on both sides with Promatect H strips: two layers of 250 mm x 120 mm x 6 mm towards the exposed side and two layers of 190 mm x 90 mm x 6 mm towards the unexposed side.

A steel cover profile is mounted (by means of screws at c/c 200 mm and spot welding on the inside at c/c 200 mm) along the leading edge of the door leaf forming an overlap of 38 mm along the unexposed side.

The door construction may provide the following optional fittings and alternatives:

- the active door leaf may be optionally fitted with self-closing hose port with approx. 150 mm square clear opening (with the door closed), fitted with spring hinge and installed at the bottom of the lock side (further construction details acc. to drawing no. P 19-1002.02 A of the test report);
- alternative sill/frame types acc. to drawings P19-1002.03.DWG Rev.A and P19-1002.04.DWG Rev.A;
- door may be fitted with a clamping frame for marine doors acc. to drawing P98-1101.1.

Total thickness of each door leaf: 53 mm.

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

## Application/Limitation

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

Maximum size of each door leaf (as tested): 1170 mm x 2354 mm (width x height).
Maximum clear opening size (as tested): 2200 mm x 2300 mm (width x height).

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 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.

Note that this is a fire safety certificate which only covers fire technical properties (i.e. not to cover any evaluations related to watertightness, weathertightness etc.).

## Type Examination documentation

Test report no: PG11497A dated 27th of August 2019 issued by Danish Institute of Fire and Security Technology, Denmark.

Drawings P19-1002.03.DWG Rev.A and P19-1002.04.DWG Rev.A both dated 4th of November 2019 and P98-1101.1 dated 31st of January 2020 from manufacturer.

## Tests carried out

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

The door has been successfully tested with extended test period for at least 68 minutes for insulation and 68 minutes for fire integrity in compliance with IMO MSC.1/Circ.1319.

## 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.