DNV·GL

Certificate No:
**MEDB00006SE**

# 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-ROH"**

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 **2025-10-14**.
Issued at **Hamburg** on **2020-10-15**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



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## Product description

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

Each door leaf is made by 1.5 mm thick steel sheets and reinforced inside along the top- and bottom edges as well as along the hinged edges with 50 mm x 5 mm flat steel. An inlay of 50 mm x 6 mm Promatect H is placed inside along the edges between the flat steel and the steel sheet of the door leaves. The top of the door leaves is reinforced for a door closer with 90 mm x 4 mm flat steel, fixed on the unexposed side
Along the hinged side of each door leaf, three Ø14 mm safety bolts are screwed into the door leaf. The backside of each matching hole drilled in the door frame is covered by Ø35 mm steel protection cap.
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.

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 Promatect H strips: two layers of 35 mm x 600 mm x 6 mm towards the exposed side and one layer of 40 mm x 600 mm x 8 mm 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.

The active door leaf is fitted with a three point lock with latch. The locks are connected by 30 mm x 5 mm steel rod, and the lock casings are insulated on both sides with Promatect H strips: two layers of 250 mm x 120 mm x 6 mm towards the exposed side and one layer of 190 mm x 90 mm x 8 mm away from the exposed side.

Each door leaf is connected to the door frame (made by 3 mm thick steel Z-profiles of specification 50 mm x 54 mm x 30 mm) by three steel hinges.

The door was tested with the door frame welded with 60 mm intermittent welding to the steel bulkhead at c/c approx. 300 mm. The door may be installed with door frame bolted to the bulkhead with M8 x 16 mm bolts with nut per maximum 337 mm as shown on the drawing P19-1001.03 included in supplement to test report.

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 Rev.A of the test report);
- alternative fixing with bolts acc. to drawing P19-1001.03 included in supplement to test report;
- alternative sill/frame types acc. to drawings P19-1001.03 Rev.B and P19-1001.04 Rev.B;
- door may be fitted with a clamping frame for marine doors acc. to drawing P98-1101.1.

Total thickness of each door leaf: 54 mm.

The door leaf steel sheets are bent in such form to build an overlap of approx. 23 mm at the perimeter of each door leaf. For these and other details, see test report and supplement to 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): 1313 mm x 2864 mm (width x height).
Maximum clear opening size (as tested): 2495 mm x 2800 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: PG11419A dated 24th of May 2019 and supplement to test report PG11419A dated 24th of September 2019 both issued by Danish Institute of Fire and Security Technology, Denmark.
Drawing P19-1001.03 dated 19th of September 2019 included in supplement to test report PG11419A.

Drawings P19-1001.03 Rev.B, P19-1001.04 Rev.B both dated 1st of October 2020 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 and amended by Decision No.1/2018 dated February 18th, 2019.