DNV·GL

Certificate No:
MEDB00002WA

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)
LMD-H1-HBW Class A-60 Single Leaf Hinged Door

Issued to
Podszuck GmbH
KIEL, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306,**
item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511

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

This Certificate is valid until **2022-09-06**.

Issued at **Hamburg** on **2017-09-07**

DNV GL local station:
Hamburg

Approval Engineer:
Pavel Golyshev

Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudszus
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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"LMD-H1-HBW Class A-60 Single Leaf Hinged Door"
Single leaf hinged door composed of door leaf and frame and various fittings.

The door leaf is 1074 mm wide and 2200 mm high in external size and is manufactured from 2.5 mm thick steel sheet, reinforced inside along the edges with flat steel and insulated with two layers of 25 mm thick calcium silicate board type Silca SB 250 (nominal density 250 kg/m³), manufactured by Calsitherm GmbH, Germany. An inlay of 50 mm x 6 mm Promatect H board (nominal density 870 kg/m³, manufactured by Promat GmbH, Germany) is mounted along all edges between the flat steel and the 2.5 mm steel. The door leaf is reinforced inside with horizontal U-profiles, insulated inside with 25 mm thick silicate board type Silca SB 250.

The door leaf is connected to the four-sided frame (made by 50 mm x 66 mm x 22 mm x 16 mm x 4 mm steel Z-profile) by 4 steel hinges. A Ø14 mm safety bolt with protection cap from the back side is installed at the hinged edge of the door leaf. The door leaf is provided with a three-point lock, a latch lock at the top and the bottom and a latch/bolt lock at the centre. The lock casings are insulated with 2x 8 mm (total 16 mm thick from the side exposed to fire) and 10 mm (from the side unexposed to fire) Promatect H board. A protection cap is welded to the back side of the door frame covering the holes for all three locks. Sealing list (silicone-elastomer), type MEDInagen ST-SC-80 is mounted inside the void at the back of the door frame.

The door frame is fixed to the steel bulkhead by bolts.

The door may be optionally fitted with 27 mm thick CONTRAFLAM N2 type glass window, provided by Vetrotech SG and installed in the upper half of door leaf acc. to drawing P17-602.2 The window pane has multilayer setup, with two 6 mm thick external and two 3 mm thick internal layers of tempered glass and with three 3 mm thick gel coating layers in-between.

Total thickness of door leaf: 56 mm.

For further details, see test report and 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 (aluminium, FRP, etc.) are subject to case-by-case approval.

Clear opening size (as tested): 1000 mm x 2150 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.

Maximum clear view opening size of window: 250 mm x 250 mm (width x height).

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 product is to be supplied with its manual for installation and maintenance.

Type Examination documentation

Test report no. PGA11001A dated 27th of April 2017, issued by Danish Institute of Fire and Security Technology, Hvidovre, Denmark.
Drawings P17-1002-A and P17602.2-A.

Tests carried out

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

The door has been successfully tested for extended test period of 68 minutes.

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 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. Doors with a window area exceeding 645 cm² are not part of this certificate and need direct USCG approval.