DNV·GL

Certificate No:
MEDB00004HG

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-30 single leaf hinged fire door type "LMD-HSL 1-30"

Issued to
Podszuck GmbH
Kiel, Schleswig-Holstein, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
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 **2023-12-10**.

Issued at **Hamburg** on **2018-12-11**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"Class A-30 single leaf hinged fire door type "LMD-HSL 1-30"
Single leaf hinged fire door composed of door leaf and frame and various fittings.

The door leaf is manufactured from 0.88 mm thick steel sheets, reinforced inside along the top edge, the bottom edge and the vertical edges with 40 mm x 3 mm flat steel. In addition, 3 mm thick reinforcing profiles made by flat steel and of specification 205 mm x 40 mm are mounted along the positions of the three hinges, and of specification 400 mm x 40 mm is mounted along the edge inside the lock side of the door leaf on a level with the lock casing. The steel sheets of the door leaf are folded along the edges of the door leaf. The edges of the door leaf are covered with 2 mm thick U-profiles of specification 22 mm x 48 mm x 22 mm, welded together along all the corners as well as diagonally from the corners. Along the hinged side the edge profiles are additionally fixed to the door leaf edges by means of the screws for the hinges. Along the lock side the edge profile is additionally fixed to the door leaf edge with two pop-rivets.

The insulation inside the door leaf consists of two layers of 20 mm thick calcium silicate board type Silca 200 (nominal density 210 kg/m³, manufactured by Calsitherm GmbH, Germany) glued together as well as to the steel sheets with an adhesive of approved type at each layer. The door leaf is provided with a latch/bolt lock at the centre. The lock casing is insulated on both sides with 85 mm x 180 mm x 3 mm Promatect H board (nominal density 870 kg/m³, manufactured by Promat GmbH, Germany). A protection cap is welded to the back side of the door frame covering the holes for the latch/bolt lock.

The door leaf is connected to the door frame (made by 3 mm thick steel Z-profiles of specification 50 mm x 54 mm x 23 mm) by three steel hinges. The door was tested with the door frame fixed to the steel bulkhead with M8 x 20 mm bolts (with nut per approx. 250 mm along the entire door frame) and may be installed with door frame both bolted, tack- and fully welded to the bulkhead.

The door construction may provide the following optional fittings and alternatives:
- alternative sill/frame types acc. to drawings 16-1005-Z.DWG and 16-1005-GT.DWG;
- door may be fitted with a clamping frame for marine doors acc. to drawing P98-1101;

Total thickness of door leaf: 48 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-30. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Maximum size of door leaf (as tested): 1213 mm x 2232 mm (width x height).
Maximum clear opening size (as tested): 1180 mm x 2200 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.

Type Examination documentation

Test report no. PGA10970A dated 10th of February 2017, issued by Danish Institute of Fire and Security

Technology, Hvidovre, Denmark.

Drawings 16-1005-Z.DWG, 16-1005-GT.DWG and P98-1101 all dated 18th of April 2018 from manufacturer.

Tests carried out

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

The door has been successfully tested with extended test period for at least 36 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).