DNV·GL

Certificate No:
MEDB0000600

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 sliding fire door type "LMD-SL-D"

Issued to
Podszuck GmbH
Kiel, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397,**
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 **2024-11-20**.
Issued at **Hamburg** on **2019-11-21**

DNV GL local station:
Hamburg

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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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

Product description

Class A-60 double leaf sliding fire door type "LMD-SL-D".
The marine LMD-SL-D, Class A-60 sliding fire door is a double leaf door, installation and structure is illustrated in the test report nos. PGA10295 and PGA10379 drw. nos. P13-0810.01 and P13-0309.02.

The door leaves are manufactured from 1.5 mm thick steel sheets and reinforced inside along the top edge with 50 mm x 10 mm flat steel as well as along the trailing edges. Each door leaf is basically of the same size of 1430 mm x 2867 mm (width x height) incl. overlap at the top. An inlay of a 50 mm x 6 mm Promatect H calcium silicate board is mounted along all four edges between the flat steel and the steel sheet. Guiding steel U-rails of specification 22 mm x 49 mm x 22 mm x 3 mm are tack welded to the bottom of the door leaves and roller bearings (one for each door leaf) are mounted on the deck. These act as the bottom guides for the door leaves. The insulation inside the door leaves consists of two layers of 25 mm thick Silca 200 calcium silicate boards glued together as well as to the steel sheets with an adhesive of approved type. Both door leaves are mounted on a roller guide fitted to the bulkhead above the door.

The join of the two door leaves is a female/male arrangement. The door leaf (female) leading edge has a U-form construction consisting of an arrangement of steel flat profiles/U-profiles and glued strips of Promatect-H board. A manual locking mechanism is fitted in the door leaf (male). This comprises of a door handle acting on a hooked latch and on a further latch and vertical locking pin arranged at the bottom of the door leaf.

The 3 mm thick Z-profile steel door frame, provided on three sides (top and two sides) was bolted to the bulkhead.

Insulation:
Calcium silicate boards Silca 200, nominal density 210 kg/m³ manufactured by Calsitherm GmbH.
Calcium silicate board Promatect H, nominal density 870 kg/m³ manufactured by Promat GmbH.
An adhesive of approved type K84 provided by Promat GmbH was used in conjunction with the insulation materials

The door may be fitted with a self-closing hose port with approx. 150 mm square clear opening located in the bottom corner (below the door handle) of the door leaf (male).

Total thickness of each door leaf: 54 mm.

For further details, see test reports with included drawings listed under Type Examination documentation on the next page.

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.

Maximum clear opening size: 2527 mm x 2700 mm (width x height). An LMD-SL-D door having this maximum clear opening size has an overall size of 2857 mm x 2847 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 nos. PGA10379 and PGA10295 both dated 12th of December 2013 and issued by the Danish Institute of Fire and Security Technology (DBI), Hvidovre, Denmark.

This certificate is based on the previous MED Module B Certificate No. 11 249 - 14 HH.

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.