DNV·GL

Certificate No:
MEDB0000601

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 single leaf sliding fire door type "LMD-SL-R-G"

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 **2024-11-21**.
Issued at **Hamburg** on **2019-11-22**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Product description

Class A-60 single leaf sliding fire door type "LMD-SL-R-G".

Door leaf

The door LMD-SL-R-G is a Class A-60 single leaf sliding door is constructed from 1.5 mm - 2.0 mm thick steel sheets folded at the edges around the Silca 200 insulation core. The door leaf is reinforced inside along the top edge with 50 mm x 10 mm flat steel as well as along the vertical edges and the bottom edge with 50 mm x 5 mm flat steel.
An inlay of 50 mm x 6 mm Promatect H calcium silicate boards is placed along all four edges between the flat steel and the steel sheets of the door leaf. The door leaf is insulated with two layers of 25 mm thick Silca 200. The Silca 200 panels are glued together as well as to the steel sheets.
A labyrinth L-profile of 3.3 mm thick steel is welded to the top and the trailing edge of the door leaf. Along the bottom of the door leaf, a 2.5 mm thick steel U-profile is welded to the bottom edge of the door leaf. Along the leading edge (lock side) of the door leaf a U-profile is welded along the edge along both sides of the door. The door leaf is provided with a manual lock and a stainless steel handle. For further details see drawing no. P-14-1606.01.

Door Frame

The door frame at the counter part of the door leaf (lock side) consists of a 3 mm thick omega shaped steel profile. This part of the frame is welded to a second part (also made of 3 mm steel profiles), forming a hollow frame at this side of the door. The hollow frame is insulated inside with Paroc Marine Slab160.
The door frame may be bolted or welded to the steel bulkhead. For the door sill arrangements and further details see drawing no. P-14-1606.02.

Rolling device

Along the top, the door leaf was mounted with two roller devices fitting into a rail track connected to the door frame. The device was mounted to the door leaf with two bolts connections center door leaf with 1270 mm apart.

Insulation materials:

Silca 200, from Calsitherm GmbH, Germany. Density: 210 kg/m³.
Promatect H, from Promat GmbH, Germany. Density: 870 kg/m³.
Paroc Marine Slab 160, Paroc Group Oy, Finland. Density: 160 kg/m³.

The door construction may provide the following optional fittings:

- The door leaf may be fitted with a fire safety window type Contra Flame Marine A-60 located at the centre of the door leaf (centre of door clear opening). The external dimensions of the glass pane are 430 mm x 630 mm x 27 mm. The 1.5 mm thick steel profile frame is bolted to the door leaf. A combination of Insulfrax paper insulation strips and intumescent sealing strip (Kerafix Flexpress 100) is fitted around the window between the glass pane edges and frame. For further details see drawing no. P14-602.2.
- The door may be fitted with a self-closing hose port with approx. 150 mm square clear opening. For further details see drawing no. P-14-1606.011.

Total thickness of door leaf: 54 mm.

For further details, see test reports and assessments (all 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 size of door leaf (incl. overlap):	1905 mm x 2625 mm (width x height).
Maximum clear opening size:	1700 mm x 2500 mm (width x height).
Maximum clear view opening size of window:	400 mm x 600 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 nos. PGA10492 and PGA10520 both dated 29th of August 2014, Assessment report nos. PHA10561b and PH10561a both dated 9th of September 2014 all 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. 11 435 - 14 HH.

Tests carried out

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

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.

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.