

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007G0

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV 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 B-15 Fire Door type: StNzT21

Issued to

Stengel GmbH
Ellwangen Jagst, Baden-Württemberg, 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

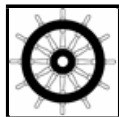
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2026-06-15**.

Issued at **Hamburg** on **2021-06-16**

DNV local station:
Augsburg

Approval Engineer:
Timo Linn



Notified Body
No.: **0098**

for **DNV SE**

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Christine Mydlak-Roeder
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) 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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.



Product description

Class B-15 single leaf 3 hinged fire door type: StNzT21 composed of door leaf and frame and various fittings.

The door leaf

The door leaf (1042 mm x 2110 mm; W x H) consisted of two multiple-edged steel sheets made of 0.6 mm thick stainless steel. A 34 mm thick layer of the insulation material "Knauf CNF Board M15" with the adhesive "Körapur 672" at an application rate of 500 g / m² are glued between the edges. The two steel sheets of the door leaf are connected to each other with U-profiles made of 1 mm thick steel. These U-profiles are connected to the two door sheets with rivets. An overhead door closer and a lock with handle set are installed on or in the door leaf. The door was tested with opening direction away from the fire room.

Overhead door closer

An overhead door closer of the type "GEZE TS 2000 BC", exposed to the fire, was installed in the head area of the door leaf. A stainless steel plate (250 mm x 91 mm; W x H) with a thickness of 1.5 mm was attached to the door leaf to secure the overhead door closer.

Door lock

To lock the door, a door lock of the type "Assa Abloy Series 5316" was built into the door leaf (handle height: 1085 mm).

Tapes

The door leaf is connected to the frame by three stainless steel bands of the type "DIN R, 113 mm x 55 mm x 15 mm", each screwed to the frame and the door leaf with 8 steel screws "M6".

The side of the frame consists of a folded steel profiles (68 mm x 50 mm x 25 mm x 25 mm x 43 mm; thickness: 1.0 mm) which are screwed together. In the floor area, a door coaming made of 1.5 mm thick stainless steel is placed on the floor assembly. The door lintel is formed by a door lintel tube (50 mm x 30 mm) made of 1.5 mm thick steel, to which two edged door lintel profiles made of 0.7 mm thick stainless steel sheet are screwed.

The frame is attached to the side of the B-15 wall construction using a hook locking system on the side facing away from the fire room. These hook-profiles (29 mm x 30 mm x 13 mm) is made of 1.5 mm thick steel.

Finally, L-profiles (25 mm x 20 mm) made of folded, 1 mm thick steel are attached to the clamping profiles of the side frame elements from the side facing away from the fire room.

Total thickness of door leaf: 36mm (with peripheral U-profiles = 38 mm).

For further details, see test report, assessment and drawings listed under Type Examination documentation below.

Application/Limitation

The door is approved for use as an integrated part of fire retarding division of class B-15.

Maximum size of door leaf: 1042 mm x 2110 mm (width x height).

Maximum clear opening size: 1000 mm x 2100 mm (width x height).

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. DMT-DO-53-151 dated 31st of March 2021 by DMT GmbH & Co.KG, Dortmund, Germany.

Drawing: 200024_96V00[V00] page 1, 2 and 3 dated 25th of January by Stengel GmbH.

Tests carried out

Tested according to IMO Res. 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 Category (Module B) number



Job Id: **344.1-011548-1**
Certificate No: **MEDB00007G0**

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.