DNV·GL

Certificate No:
MEDB00005JR

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Fire Doors

with type designation(s)
B-15 single hinged door

Issued to
Oy Saajos International Ltd.
Lohja, Finland

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 **2024-10-15**.

Issued at **Høvik** on **2019-10-16**

DNV GL local station:
Finland CMC

Approval Engineer:
Tessa Biever

Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
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 United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

NORWEGIAN ACCREDITATION PROD 019

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Product description

B-15 single hinged door,
a single leaf hinged door composed of an insulating core of 39 mm type "Paroc Fire Slab 150 LO" mineral wool density of 150 kg/m^3 (manufactured by Paroc) faced on each side with 0.8 mm steel sheets. The door leaf is equipped with 3 pcs. of hinges and door lock.

Total thickness of door leaf: 40 mm

The door frame is composed of 1.5 mm thick steel and filled with 40 or 40+20 mm thick mineral wool type "Paroc Fire Slab 80" with density of 80 kg/m^3 (manufactured by Paroc). The frame is fitted with a threshold 100x20 mm made of a 1.5 mm thick steel. Self-drilling screws 5x30 mm are fastened between frame and bulkhead according to the drawing no. SA-28280A. Additionally, 1 mm thick steel cover list profiles are fitted to door frame and bulkhead (on both unexposed and exposed side) by pairs of 4.2x20 mm self drilling screws (c/c distance 280 - 330 mm), covering gap between door frame and bulkhead.

Top part of frame with size of 1220x255x100 mm is made of 1.5 mm steel sheets insulated in between by two layers of a 47 mm thick each "Paroc Fire Slab 150 LO" mineral wool density of 150 kg/m^3 (manufactured by Paroc).

The door may be fitted with:

- Ø420 mm, 16 mm thick fire glass, model "Contraflam 30" from Saint-Gobain, centered position in the upper region of the door, insulated with ceramic sealing Keraband 3x9 mm,
- 515 mm x 515 mm (W x H) kick-out panel with 420 mm x 210 mm (W x H) ventilation louver, insulated with 39 mm mineral wool of density 150 kg/m^3 from Paroc and positioned in the lower region of the door leaf,
- Lock: Essence Assa Abloy, Electric striker plate effeff,
- Door viewer AMIG mod 5-7 16/30 mm.

For further details, see the drawings mentioned under Type Examination documentation below.

Application/Limitation

Approved for use as an integrated part of fire retarding division of class B-15.

Max. size of door leaf:	1134 mm x 2121 mm (W x H)
Max. size of clear opening:	1100 mm x 2100 mm (W x H)
Max. clear window opening:	Ø400 mm

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. 788-19TMAU-IMO dated 2019-05-16 from TÜV Eesti OÜ, Maardu, Estonia.

Drawing No. SA-28023A dated 2019-04-23 from the manufacturer.
Drawing No. SA-27728 dated 2017-09-27 from the manufacturer.
Drawing No. SA-28202 dated 2019-04-10 from the manufacturer.
Drawing No. SA-28280A dated 2019-08-19 from the manufacturer.

Document "Description of Fastening of Frame and Cover Lists in B-15 Fire Test 12.3.2019" dated 2019-08-27 from the manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

The door has been successfully tested with extended test period of 37 minutes.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG Approval Number if applicable (see the first page).

USCG approval limitations

The approval is limited to fire doors without windows and doors with total window area of 645 cm^2, or less, in each door leaf. Doors with a window area exceeding 645 cm^2 are not part of this certificate and need direct USCG approval.