DNV·GL

Certificate No:
MEDB00003G4

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)
Single-leaf hinged fire door A-60 with window

Issued to
Oy Saajos International Ltd.
LOHJA, Finland

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306,**
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 **2023-01-11**.

Issued at **Høvik** on **2018-03-01**

DNV GL local station:
Turku

Approval Engineer:
Aleksandr Jegorov

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"Single-leaf hinged fire door A-60"
consists of a door leaf composed of an insulating core of 60.5 mm thick "Paroc PV150LO" with density 150 kg/m^3, faced on both sides with 0.8-1.0 mm steel sheets. The insulation is glued to the steel sheets by means of adhesive. Gypsum boards are used as insulation of the lock case and the latch, inside the door blades. The door leaf is fitted with 3 hinges. The door leaf is fitted with the steel reinforcements in the upper part, thickness 2.0 mm on exposed side and 1.5 mm on unexposed side. The door is approved without the sill being part of the frame.

Total thickness of door leaf: 62 mm.

The frame is composed of 3.0 mm thick steel and either welded or bolted (M12x25 and M8x25) to the bulkhead spaced maximum 300 mm apart. Door frame could be manufactured in several alternatives as per drawing No. SA-27517A – "A60 marine fire door frame alternatives" which is part of Statement No. ST 003-17. Frame is fitted with intumescent gasket "Marvon" in size 1.8 x 30 mm fitted from second hinge, around the top and down to the lock between door blade and frame.

The door leaf may incorporate:

- Window located in the upper center part, consisting of glasing unit type "Contraflam 60-23N, A60 Fireglass" (420 x 420 mm (W x H) and 32 mm thick), fire proof seal type "Keraband", glass list made of 1.0 mm steel, fixing screws diam 4.2 x 13;
- Hose port in size of 220 x 152 mm (W x H) located in lower coner and made from same composition as door leaf by means of one spring hinge;
- Lock type "Ving Card" and recessed handle;
- Casing tube/assembly parts for AISA in lower part (88mm from the bottom);
- Door closer Dorint 380, Geze Boxer, DormaITS 96 or of similar construction.

For further details see drawings/test report listed under Type Examination documentation below.

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.

Max. clear opening:	1360 mm x 2400 mm (W x H)
Max. size of each door leaf:	1393 mm x 2412 mm (W x H)
Max. clear opening window:	420 mm x 420 mm (W x H)

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, use and maintenance.

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.

Type Examination documentation

Test report No. 689-17TMAU-IMO dated 7 November 2017 from TÜV Eesti OÜ, Maardu, Estonia.

Statement No. ST 003-17 dated 7 November 2017 from TÜV Eesti OÜ, Maardu, Estonia

Drawing No. SA-27728 – "Door with integrated door closure" dated 27 September 2017 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

The door has been successfully fire tested for extended test period of 70 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 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. For larger windows, USCG shall be contacted.