

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB00003G4**  
Revision No:  
**2**

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 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) 2022/1157,  
**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**

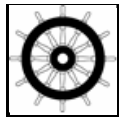
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2028-01-06**.

Issued at **Høvik** on **2023-01-07**

DNV local unit:  
**Finland NB**

Approval Engineer:  
**Izabela Misztal**



Notified Body  
No.: **0575**

for **DNV AS**

**Sverre Olav Bergli**  
**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, and amended by Decision No 1/2019 dated February 22nd, 2019.



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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

"Single-leaf hinged fire door A-60"

consists of a door leaf composed of an insulating core of 60.5 mm thick "Paroc PV150LO" of 150 kg/m<sup>3</sup> density, faced on both sides with 0.8 - 1 mm thick steel sheets. The insulation is glued to the steel sheets by means of an adhesive. Gypsum boards are used as an insulation of the lock case and the latch, inside the door blades. The door leaf is attached to the door frame with 3 hinges. In the upper part the door leaf is fitted with the steel reinforcements of 2 mm thickness on the exposed side and of 1.5 mm thickness on the 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 mm thick steel and is either welded or bolted (M12x25 and M8x25) to the bulkhead, spaced maximum 300 mm apart. The door frame can be manufactured in several alternatives as per the drawing no. SA-27517A – "A60 marine fire door frame alternatives" which is part of the Statement no. ST 003-17.

Intumescent Marvon in 1.8 x 30 mm size, is fitted from the second hinge to the top edge, around the top and down to the lock between the door blade and frame.

The door leaf may incorporate:

- Window located in the upper center part, consisting of a glazing unit type "Contraflam 60-23N, A60 Fireglass" (420 x 420 mm (W x H) and 32 mm thick), a fire proof seal type "Keraband", a glass list made of 1 mm steel, fixing screws of 4.2 x 13 diameter;
- Hose port in 220 x 152 mm size (W x H) located in the lower corner and made of the same composition as the door leaf, by means of one spring hinge;
- Lock "Ving Card" type and a recessed handle;
- Casing tube/assembly parts for AISA in the lower part (88 mm from the bottom);
- Door closer Dorint 380, Geze Boxer, DormaITS 96 or of the 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 of door: 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 of 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.

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.

Each door is to be supplied with its manual for installation, use and maintenance.

## 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.



Job Id: **344.1-007649-26**  
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### **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 cm<sup>2</sup>, or less, in each door leaf. For larger windows, USCG shall be contacted.