

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB00000E5**  
Revision No:  
**1**

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)  
**A-60 Single Leaf Hinged Door**

Issued to  
**Oy Saajos International Ltd.**  
**Lohja, Finland**

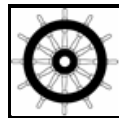
is found to comply with the requirements in the following Regulations/Standards:  
Regulation **(EU) 2018/773**,  
**item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511**

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

This Certificate is valid until **2024-04-22**.

Issued at **Høvik** on **2019-05-20**

DNV GL local station:  
**Finland CMC**



for **DNV GL AS**

Approval Engineer:  
**Nanna Martine Jacobsen**

Notified Body  
No.: **0575**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



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## Product description

"A-60 Single Leaf Hinged Door"

Single leaf hinged door with door blade made of insulation of type Paroc Slab 150 LO mineral wool with thickness 60 mm and nominal density 155 kg/m<sup>3</sup> (from Paroc Oy), faced with steel sheets on both sides. The steel sheets are glued to the mineral wool with adhesive. The door leaf is to be attached to the door frame by 3 steel hinges.

The door frame is made of a 3 mm thick steel Z-profile and may be bolted (M8, M10 or M12 bolts, 300 mm c/c), or welded to the bulkhead.

The door may be fitted with:

- Hose port on the lower corner of the door leaf.
- Window (Contraflam 60-23)
- Two hinges for small blades, i.e. maximum size 1092 x 1610 mm or 750 x 1900 mm (W x H)

In addition the following modifications may be arranged:

- The door frame may be of 3 mm thick U-profile, bolted (M10 stud welded bolts, 300 mm c/c) or welded to the bulkhead.
- Alternative type hinges of equivalent material and equally strength may be used.

Total door leaf thickness is 62 mm.

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

## Application/Limitation

Approved for use as an integrated part of fire retarding divisions of class A-60.

This door is approved without the sill being part of the frame with an air gap of maximum 5 mm.

Maximum clear opening of door: 1130 x 2140 mm (W x H)

Maximum size of door leaf: 1160 mm x 2155 mm (W x H)

Maximum 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.

Each product is to be supplied with its manual for installation and maintenance.

## Type Examination documentation

Test Reports:


- Test Report No. RTE938/04 dated 7 June 2004 from VTT, Espoo, Finland
- Test Report No. RTE1317/04 (small doors/hatches) dated 23 April 2004 from VTT, Espoo, Finland
- Test Report No. VTT-S-10387-07 (door with U-frame, ref. Statement VTT-S-10689-07) dated 29 November 2007 from VTT, Espoo, Finland

Assessment Reports:

- Assessment report No. VTT-S-10689-07 (U-frame) dated 11 December 2007 from VTT, Espoo, Finland

Drawings:

- Drawing No. SA-20062 dated 20 August 2001 from Saajos
- Drawing No. SA-21755 B dated 11 June 2004 from Saajos
- Drawing No. SA-22627 dated 22 December 2004 from Saajos
- Drawing No. SA-22625 dated 21 December 2004 from Saajos



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- Drawing No. SA-24196 (U-frame fastening) dated 29 November 2007 from Saajos
- Drawing No. SA-22286 C-EN (Mounting instruction, Z and U frame) dated 29 January 2008 from Saajos

### **Tests carried out**

Tested according to IMO FTPC Part 3 and in compliance with IMO 2010 FTP Code Ch. 8.

### **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.