DNV·GL

Certificate No:
MEDB00002ZK

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 the Kingdom of Norway.

This is to certify:

That the Fire Doors

with type designation(s)
Double-leaf hinged marine fire door A-60

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 **2022-07-27**.

Issued at **Høvik** on **2017-07-28**

DNV GL local station:
Turku

Approval Engineer:
Fryderyk Hoga

Notified Body
No.: **0575**

for **DNV GL AS**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"Double-leaf hinged marine fire door A-60"
consist of double door leaf (equal sized) composed of insulating core of 80 mm (compressed to approx. 60 mm) "Paroc Marine Fire Mat 80", with density 80 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 blades are fitted with 3 hinges. The door are fitted with the steel reinforcements in the upper part, in 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 blade: 62 mm.

The frame is composed of 3.0 mm thick steel and bolted to the bulkhead spaced maximum 300 mm apart. There is generated an installation gap of max. 20 mm in the upper edge of the frame and the gap is filled with fire resistant compound Tetrakem Fire secure mastic adhesive 1027.

Self-expanding gasket "Marvon" in size 1.8x30 mm is fitted from second hinge to top edge, around the top and down to the lock on both door blades.

The door leaf may incorporate:

- Window "Contraflam 60-23N, A60 Fireglass" in the upper half of the door, size 460 x 460 mm and thickness: 32 mm,
- Hose port in size 220 x 152 mm (W x H) made from same composition as door leaf, installed on the lower part of the active door by means of one hinge,
- Lock case: WSS 1-136A/65, in active door leaf,
- Latch: BKS with recessed handle, in inactive door leaf.

For further details see approved drawings listed below.

Application/Limitation

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

Max. clear opening:	2740 mm x 2400 mm (W x H)
Max. size of each door leaf:	1394 mm x 2421 mm (W x H)
Max. clear opening window:	420 mm x 420 mm (W x H)

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, use and maintenance.

Type Examination documentation

Test report No. 644-17T2MAU-IMO dated 3 May 2017 from TÜV Eesti OÜ, Maardu, Estonia.

Drawings Nos.
SA-27396 B rev.A dated 02 March 2017
SA-27540 dated 02 March 2017
SA-27581 dated 21 March 2017
all above from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

The door has been successfully 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.