

# 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 'A' and 'B' class fire proof windows and side scuttles**

with type designation(s)  
**A-60 Window 1268 x 2268 (type VA9014003)**

Issued to  
**C.C. Jensen Window A/S**  
**Svendborg, Syddanmark, Denmark**

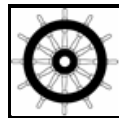
is found to comply with the requirements in the following Regulations/Standards:  
Regulation **(EU) 2020/1170,**  
**item No. MED/3.25. SOLAS 74 as amended, Regulation II-2/9, IMO MSC/Circ.1120 and IMO 2010 FTP Code, IGC Code 3**

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

This Certificate is valid until **2025-11-01.**

Issued at **Høvik** on **2020-11-02**

DNV GL local station:  
**Denmark CMC**



for **DNV GL AS**

Approval Engineer:  
**Tessa Bieber**

Notified Body  
No.: **0575**

**Roald Vårheim**  
**Head of Notified Body**



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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

"A-60 Window 1268 x 2268 (type VA9014003)"

The window unit is composed as follows – seen from the exposed side:

- 8 mm thick toughened glass from Saint-Gobain Securit
- 10 mm air space with 10 mm steel distance profile
- 3 layers of 4 mm thick glass with 4.3 mm Alkali-silicate between the glasses
- 5 mm thick toughened glass – type Controflam 60 from Vetrotech Saint-Gobain – with 4.3 mm Alkali-silicate between this glass and the nearest 4 mm thick glass

Total window unit thickness is 48 mm and labelled as CONTRAFLAM 60-3 CLIMALIT.

The main frame of the window is composed of a stainless-steel L-profile 63 mm x 75 mm x 6 mm fully welded into the steel bulkhead. M8 x 90 mm studs were tick welded to the 63 mm wide flange at c/c 150 mm. The inside frame (on the unexposed side) consisted of an aluminium L profile 60 mm x 60 mm x 6 mm. The frame was manufactured with Ø9 mm holes at c/c 150 mm corresponding with the studs tick welded to the main frame

The insulation between the main frame and the inside frame consisted of 25 mm wide and 55 mm high Promarine 640 (manufactured by Promat GmbH with density 640 kg/m<sup>3</sup>), and the glass pane was supported along the bottom with two 80 x 50 x 10 mm Promarine 640 supporting blocks. The void between the Promarine 640 and the edges of the glass pane was filled out with ceramic wool type Insulfrax S (manufactured by Unifrax Ltd. with density 128 kg/m<sup>3</sup>).

Additional 30 mm thick Rockwool SeaRox SL 640 (manufactured by Rockwool Int. A/S with density 130 kg/m<sup>3</sup>) was mounted along the edge of the window. The width of the additional insulation was 600 mm along the vertical edges and the height was 300 mm along the top and the bottom edge.

A silicone rubber gasket 22 x 3 mm was mounted along all four edges of the glass pane between the glass and the main frame. A Technosil fire retardant gasket 22 x 3 mm was mounted along all four edges of the glass pane between the glass and the inside frame.

For further details, see the drawing listed under Type Examination documentation below.

## Application/Limitation

Approved for use as an integrated part of fire resisting bulkheads of class A-60.

Restricted application: Fire against 8 mm toughened glass from Saint-Gobain Securit

Maximum size of fire technical glazing unit: 1318 mm x 2318 mm (width x height).  
Maximum exposed window size: 1268 mm x 2268 mm (width x height).

Hose Stream Test was carried out with satisfactory results according to IMO 2010 FTP Code part 3 Appendix A.I.5.

The window has only been evaluated with respect to fire technical properties (e.g. strength requirements have not been considered). Arrangement and location of any window is subject to approval from relevant authorities in each case.

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

Job Id: **344.1-000427-18**  
Certificate No: **MEDB000070K**

## **Type Examination documentation**

Test report No. PGA10872A dated 19 September 2016 from DBI, Hvidovre, Denmark.

Drawing Nos.:

- VA9014003S Rev. 04 dated 05-07-2016 (Overview bulkhead with window)
- VA9014003 Rev. 08 dated 04-07-2016 (Window 1268 x 2268, horizontal section A-A)
- VA9014003 Rev. 08 dated 04-07-2016 (Window 1268 x 2268, vertical section D-D)
- VA9014003-1 Rev. 02 dated 14-06-2016 (Main frame, welded)
- VA9014003-2 Rev. 01 dated 07-06-2016 (Inside frame, welded)
- VA9014003g dated 17-12-2015 (Window pane)
- VA9014003S-01 Rev. 3 dated 05-07-2016 (Clear opening in steel bulkhead)
- VA901400-15 dated 15-06-2016 (Stainless steel stud, M8 x 90)

## **Tests carried out**

Tested according to IMO 2010 FTP Code part 3.

## **Marking of product**

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