

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MERB0001N7G
Revision no.:
0

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

that the **A and "B" class fireproof windows and side scuttles**

with type designation(s)
A-60 window (type VA9014003)

issued to

C.C. Jensen Window A/S
Svendborg, Denmark

is found to comply with the Regulation (UK) **MSN 1874 Amendment 10** for
Item no. **UK/3.25 (Row 1 of 1)**
according to the following requirements:

SOLAS 74 Reg. II-2/9, IMO Res. MSC.5(48)-(IGC Code) 3, IMO MSC/Circ.1120, SOLAS 74 Reg. II-2/9.

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

Date of issue: **2025-11-18**

Expiry date: **2030-11-17**

DNV local unit:
Denmark CMC

Approval Engineer:
Izabela Misztal



Approved Body No.: **0097**



for **DNV UK Ltd.**

Digitally Signed By:

Christine Mydlak-Röder

Christine Mydlak-Röder
MER Service Responsible



**Maritime &
Coastguard
Agency**

UK Approved Body Authorised
by the MCA

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.

During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved 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-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. In case limitations of use apply, these should be indicated in the Annex.

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 USD 300 000.

Product description

“A-60 window (type VA9014003)”

is a window unit 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 is 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/m³), 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/m³).

Additional 30 mm thick Rockwool SeaRox SL 640 (manufactured by Rockwool Int. A/S with density 130 kg/m³) 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

The window is approved for installation in steel bulkheads of class A-60. Other applications are subject to case-by-case approval.

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

Maximum size of fire technical glazing unit: 1318 mm x 2318 mm (W x H).

Maximum exposed window size: 1268 mm x 2268 mm (W x H).

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 and use.

Type Examination documentation

| Document No. | Rev. | Title |
|--------------|------|--|
| VA901400-15 | 01 | Drawing dated 15 June 2016 (Stainless steel stud, M8 x 90) from manufacturer |
| VA9014003 | 08 | Drawing dated 4 July 2016 (Window 1268 x 2268, horizontal section A-A) from manufacturer |

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| VA9014003 | 08 | Drawing dated 4 July 2016 (Window 1268 x 2268, vertical section D-D) from manufacturer |
| VA9014003-1 | 02 | Drawing dated 14 June 2016 (Main frame, welded) from manufacturer |
| VA9014003-2 | 01 | Drawing dated 7 June 2016 (Inside frame, welded) from manufacturer |
| VA9014003g | | Drawing dated 17 December 2015 (Window pane) from manufacturer |
| VA9014003S | 04 | Drawing dated 5 July 2016 (Overview bulkhead with window) from manufacturer |
| VA9014003S-01 | 03 | Drawing dated 5 July 2016 (Clear opening in steel bulkhead) from manufacturer |
| PGA10872A | | Test report dated 19 September 2016 from DBI, Hvidovre, Denmark |

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 Mark of Conformity (see first page).