

DET NORSKE VERITAS

EC TYPE-EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2002/75/EC, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This certificate is issued by Det Norske Veritas under the authority of the Government of the Kingdom of Norway.

CERTIFICATE NO. MED-B-3658

This Certificate consists of 3 pages

This is to certify that the product
Windows and side scuttles

with the type designation(s)
A-60 WINDOW 1200 x 2200

Manufactured by
C.C. Jensen A/S
Svendborg, Denmark

is found to comply with the requirements in the following Regulations/Standards:
Annex A.1, item No. A.1/3.25 and Annex B, Module B in the Directive SOLAS 74 as amended, Regulation II-2/9.4.1.3, MSC/Circ.847 and IMO FTP Code.

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

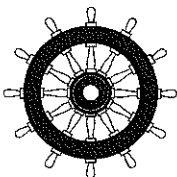
Place and date
Høvik, 2006-05-15

for DET NORSKE VERITAS AS

Tore Morten Wetterhus

Manager, MTPNO370

Department Systems & Components



Notified Body No. 0575

This Certificate is valid until
2011-05-15



Dag Nilsen

Surveyor

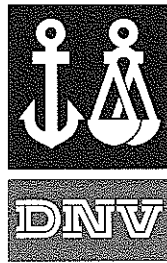
DNV local office:
DNV Fredericia



Notice: The certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended.

The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Cert. No.: MED-B-3658
Case No.: 344.1-000427-1
File No.: A.1/3.25

Product description

“A-60 WINDOW 1200 x 2200”

composed of steel frame incorporating a glass unit consisting of one of the following:

1. pressure glass, minimum 10 mm, an air cavity of 15 mm and a fire technical glass sheet unit made from “Contraflam N2” (4+5+3+5+6), or
2. pressure glass sheet, min. 10 mm, an air cavity of 6 mm and a fire technical glass sheet unit made from MarinFlam (4 mm glass + 22 mm gel + 6 mm glass).

Total glass unit thickness 48 mm.

Complete side of window frame to be insulated on unexposed side to the same fire rating as that of the bulkhead, to which the window is mounted.

Applications/Limitations

The window is approved for use as an integrated part of fire retarding bulkheads of class A-60. Maximum size of fire technical glazing unit: 1200 x 2200 mm (width x height).

Fire against external (pressure glass) side.

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.

Hose Stream test was carried out with satisfactory results according to IMO Res. A.754(18) Appendix A.I.5.

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

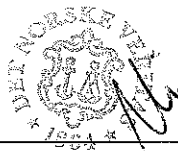
Tests carried out

Test report: WARRES No. 112609 dated 19 June 2000 from Warrington Fire Research Centre, Warrington, UK and test report File No. PG 11030 Serial No. 8585 dated 11 June 2002 from Danish Institute of Fire Technology, Copenhagen, Denmark.

Tested according to IMO FTPC Part 3 (IMO Res. A.754(18)).

Marking of product


The product is to be marked with name of manufacturer, type designation, fire technical rating and the Mark of Conformity (see page 3).





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Mark of conformity

The manufacturer is allowed to affix the Mark of Conformity  according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

- Module D: The quality system for production and testing shall be approved by the Notified Body.
- Module E: The quality system for inspection and testing shall be approved by the Notified Body.
- Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

END OF CERTIFICATE

