DNV·GL

Certificate No:
MEDB00004KZ

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Windows and side scuttles

with type designation(s)
WDF-C31 Fire glass A-60 rectangular window

Issued to
Wuxi Dongzhou Marine Equipment Co., Ltd
Wuxi, 100, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
item No. MED/3.25. SOLAS 74 as amended, Regulation II-2/9, IMO MSC/Circ.1120 and IMO 2010 FTP Code

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

This Certificate is valid until **2024-01-16**.

Issued at **Hamburg** on **2019-01-17**

DNV GL local station:
Jiangyin

Approval Engineer:
Roland Priebe

Notified Body
No.: **0098**

for **DNV GL SE**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Product description

"WDF-C31 Fire glass A-60 rectangular window"
is a Class A-60 fire rectangular window. It's pane of external size 2320 mm x 1820 mm consists of a multi-layer structure of a total thickness of 62,28 mm. The composition starts on the exposed side with a 19 mm thick tempered glas + 2,28 mm thick sandwiched glue + 5 mm thick tempered glass + 9 mm air gap + 5 mm thick tempered glass + 6 mm dry-type fireproof solution + 5 mm thick tempered glass + 6 mm dry-type fireproof solution + 5 mm thick tempered glass, which was provided by Qinghuangdao Yaohua Industrial and Technical Glass Co., Ltd.

The window pane is fitted between the main frame (10 mm thick steel) and press plate (6 mm thick steel). The mid frame is fitted in between the press plate and the main frame. Sealing strip, from Jiangyin Haida Rubber and Plastic Products Co., Ltd. is used between the glass and the main frame. Between the glas and the press plate there is a fireproof rubber strip from Shanghai Jiar Fu Decoration Material Co., Ltd. The press plate is fixed to the mid frame with M6 1Cr18Ni9Ti bolts at every 75 mm. The mid frame is fixed to the main frame with M8 1Cr18Ni9Ti bolts at every 75 mm. A inorganic fireproof board, of type YD from Suzhou Youlian Marine Fitting Co., Ltd (density 1000 kg/m³), is filled in the gap between the window glass and the frame and between the mid frame and the main frame. The main frame is welded to the bulkhead.

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.

Maximum size of clear view glazing: 1700 mm x 2200 mm (HxW).

Fire against uninsulated steel bulkhead side for use on tankers (fire from outside).

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 authority in each case.

The insulation materials used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

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

Type Examination documentation

Test Report No. FT18231 dated 23rd of October 2018 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Drawing No. 261WDF1806-00 dated 28th of June 2018 from the manufacturer.

Tests carried out

Tested according to IMO Resolution MSC.307(88) – 2010 FTP Code Annex 1, Part 3.

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 (see first page).