DNV·GL

Certificate No:
MEDB00001A0

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 Windows and side scuttles

with type designation(s)
P-1084x1654x75-NOW-2020-A60-Rw Type Class A-60 Fire Window

Issued to
QINHUANGDAO XINGYANG MARINE FITTING CO., LTD.
Qinhuangdao, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2015/559,**
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, IMO MSC/Circ.847, 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 **2021-10-09**.

Issued at **Høvik** on **2016-10-10**

DNV GL local station:
Tianjin

Approval Engineer:
Fryderyk Hoga

Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
Head of Notified Body

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Product description

"P-1084x1654x75-NOW-2020-A60-Rw Type Class A-60 Fire Window"
is a rectangular window assembly. The 88.5 mm thick glass unit consisting of following layers (from unexposed to exposed side):

- 6 mm toughened glass
- 1.5 mm film layer
- 5 mm toughened glass
- 12 mm air space
- 6 mm toughened glass
- 18 mm air space
- 6 mm toughened glass
- 24 refractory gel
- 10 mm toughened glass

Glass unit is mounted in a 8 mm steel glass frame and plate with bolts (size M6x25, max. spacing 120 mm). Between glass frame and window unit, ceramic wool made by Shandong Luyang with density 160 kg/m^3 is fitted. The glass frame is mounted to the main frame with screws (size M10x30, maximum spacing 360 mm). The main frame, made of 75x75x10 mm steel L-profile, is welded to the bulkhead. Seal strips of specification 50x8 mm and 30x8 mm are fitted between window unit/main frame and glass frame.

For further details, see test report and drawings 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.

Max. clear light size: 1084 x 1654 mm (W x H)
Max. glass size: 1124 x 1694 mm (W x H)

Restricted application: Fire against external side only (10 mm toughened glass)

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 maintenance.

Type Examination documentation

Test report No. FT15369 dated 10 November 2015 from "FEFTC" Far East Fire Testing Centre, China.

Drawing No. XY0514, XY0514-1, XY0514-2, XY0514-3 and XY0514-4, all found in File No. QS7.0-TA1501.01 dated 8 June 2015 from QINHUANGDAO XINGYANG MARINE FITTING CO., LTD.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating and the MED Mark of Conformity.