

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 Fire Doors

with type designation(s)

Class B-15 Fire Door, Type "CGFM-3" with components

Issued to

Jiangsu Hailu Technology Incorporated Corporation
JIANGYIN, JIANGSU, China

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2018/773**,

item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511

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

This Certificate is valid until **2024-04-04**.

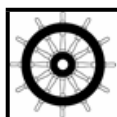
Issued at **Hamburg** on **2019-04-05**

DNV GL local station:

Jiangyin

Approval Engineer:

Pavel Golyshev



Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

"Class B-15 Fire Door, Type "CGFM-3" with components"

A single leaf hinged fire door composed of door leaf and frame, various fittings and optional installations. Construction and installation are illustrated in figures 1 to 7 of the test report.

The door frame is a "three side door frame" of external size 1050 mm wide x 2460 mm height and 50 mm deep. The two sides of the door frame are made by 1.2 mm thick steel sheet and the top was made by 0.8 mm thick steel sheet. The cavity of the door frame is insulated with rock wool material. The top panel 1050 mm wide x 335 mm height x 50 mm thick is installed at the top of door frame and is an integral part of the door frame. A continuous groove of 20 mm x 10 mm, in which a fireproof seal strip is bedded, is arranged around the inside of the three-sided door frame.

The door leaf is made by 0.6 mm thick steel sheet and insulated with rock wool and is fixed to the door frame with three stainless steel hinges mounted on the side of the door which was not exposed to the fire hazard. The door thus opens away from the fire hazard.

The door frame is fixed to the bulkhead by steel clips.

The door may be optionally fitted with:

- rectangular glass window of 460 mm x 460 mm in external size, made by toughened glass and with total window pane thickness of 28 mm, installed at a distance of approx. 360 mm below the top of door leaf, further details acc. to figure 5 (drawing no. 262HL-38T-01) of the test report;
- escape hatch with ventilation grill with an external size of 440 mm x 540 mm (width x height) fitted at a distance of approx. 150 mm above the bottom of the door leaf, further details acc. to figure 6 (drawing no. 262HL-38T-00) of the test report;
- self-closing (fitted with spring hinge) fire hose port with approx. 150 mm square clear opening (with the door closed) installed in the lower corner of the door leaf on the same side as the lock, further details acc. to figure 7 (drawing no. 262HL-38E-02-02) of the test report.

Insulation and sealing materials:

Ceramic wool Type AZ120 of 120 kg/m³ nominal density produced by Jiangyin Anzhou Construction Material Co., Ltd.

Fireproof seal strip of specification 18 mm x 8 mm provided by Jiangyin Lide Fittings Co., Ltd.

Total door leaf thickness: 40 mm.

For further details, see test report with included drawings listed under Type Examination documentation below.

Application/Limitation

Approved for use as an integrated part of fire retarding division of class B-15.

Maximum size of door leaf:	983 mm x 2092 mm (width x height)
Maximum clear opening door size:	950 mm x 2100 mm (width x height)

With reference to SOLAS Reg.II-2/ 9.4.1.2.1 and 4.2.1, B-class doors approved without the sill being part of the frame, shall be installed such that the gap under the door does not exceed 25 mm.

Maximum size of exposed fire technical glazing unit:	400 mm x 400 mm (width x height)
Maximum clear opening size of escape panel:	410 mm x 517 mm (width x height)

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

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

Job Id: **344.1-009247-1**
Certificate No: **MEDB000058Y**

Type Examination documentation

Test report no. FT12303 dated 19th of December 2012, issued by Far East Fire Testing Centre (FEFTC), Shanghai, China.

Tests carried out

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

This certificate is based on the previous MED Module B Certificate No. 60 568 - 13 HH.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire-technical rating, MED Mark of Conformity and USCG approval number if applicable (see first page).

USCG approval limitations

The approval is limited to fire doors without windows and doors with total window area of 645 cm², or less, in each door leaf. Doors with a window area exceeding 645 cm² are not part of this certificate and need direct USCG approval.