DNV·GL

Certificate No:
MEDB00004BB

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)
CFM-11 class B-15 double-leaf fire door

Issued to
Jiangyin Dongrui Decoration Materials Co., Ltd
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 **2024-06-12**.

Issued at **Hamburg** on **2019-06-13**

DNV GL local station:
Jiangyin

Approval Engineer:
Roland Priebe

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Product description

"CFM-11 class B-15 double-leaf fire door"
is a class B-15 double-leaf stainless steel fire door with louvered excape and glazed opening in each door.

Construction:
The 40 mm thick door leaf is composed of 0.8 mm thick stainless steel plate + rock wool + 0.8 mm thick stainless steel plate. Adhesive was used in between the stainless steel plate and rock wool for bonding. One layer of 1.0 mm thick stainless steel material is wrapped at the perimeter of the door.

Each door leaf was installed at one side with three stainless steel hinges. On the other side a fireproof C-1 door lock provided by Nantong Hujiang Marine Technology Co., Ltd. was fitted 1100 mm above the bottom of each door leaf.

The door frame is four sided. Its top and bottom edge is made by 0.8 mm thick stainless steel plate and its two side edges are made of 1.2 mm thick stainless steel plate. The insulation material filled in door frame is rock wool. A fireproof seal strip is fixed at three sides of the door frame and in a center groove at each door leaf.

The glazed opening of 400 mm x 400 mm is installed at the top half of the door leaf. It is fitted with a press frame of 1.0 mm stainless steel. The fireproof glass is composed of 3 mm tempered glass + 29 mm fireproof solution + 3 mm tempered glass.

The louvered escape is 417 mm wide x 517 mm high in clear opening size and installed at the bottom half of each door leaf. The escape door is 40 mm thick, made of 1 mm thick stainless steel plates and provided with ventilation slots on both sides. A regulating ventilation plate is at the inside and made of 0.8 mm stainless steel.

Materials:
The insulation material used is KMD-Y type rock wool produced by Tianchang Kangmeida New Insulation Material Co., Ltd. It has a nominal density of 120 kg/m³ and ≤3% nominal organic content.

The adhesive used is a PAPU-30 type polyurethane adhesive produced by Jingjiang Green Functional Material Co., Ltd.

The fireproof glass is provided by Yixing Yu's Specific Glas Co., Ltd.

For further details see test report stated under "Type Examination documentation" below.

Application/Limitation

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

Max. size of each door leaf (W x H x T): 1080 mm x 2206 mm x 40 mm
Max. clear opening (W x H): 2000 mm x 2200 mm
Max. clear opening of window (W x H): 400 mm x 400 mm

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, use and maintenance.

Type Examination documentation

Test Report No. FT18177 dated 2018-10-09 from Far East Fire Testing Centre, Shanghai, China.

"INSTALLATION MANUAL OF FIREPROOF DOOR" from the manufacturer.

List of Drawings from the manufacturer:

No.	Title
18DR-MB15-T0	Sample Assembly Plan
18DR-MB15-T1	Sample Construction Plan
18DR-MB15-00	Overal Fixtion
18DR-MB15-01	Frame
18DR-MB15-02	Left Leaf
18DR-MB15-03	Right Leaf
18DR-MB15-T1-1	Composite Rock Wool Panel
18DR-MB15-T2	Sample Frame Plan
DR-TKFS-T1	Escape Louver

Tests carried out

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

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG approval number, if applicable (see page 1).

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.