EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB000093F

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV 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)
HS-FM2 Type Class A-60 Double-Leaf Fire Door (with observation window)

issued to
Jiangyin Haisheng Marine Outfitting & Decoraton Co., Ltd.
Jiangyin, **China**

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2024/1975,**
item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511, IMO MSC.1/Circ.1319

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

This Certificate is valid until **2029-10-08**.

Issued at **Hamburg** on **2024-10-09**

DNV local unit:
Jiangyin NB & CMC

Approval Engineer:
Joanna Kowalczuk

Notified Body
No.: **0098**

for **DNV SE**

Mydlak-Röder, Christine
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, and amended by Decision No 1/2023 dated May 26th, 2023.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees (“DNV”) arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Product description

"HS-FM2 Type Class A-60 Double-Leaf Fire Door (with observation window)"
Is a hinged, double leaf steel door. Each door leaf is constructed of:

- 0.7 mm thick stainless steel plate,
- 5 mm thick inorganic board, YB type of density 1000 kg/m³ (manufactured by Suzhou Youlian Ship Equipment),
- 38mm thick rock wool KMD-Y type of density 120 kg/m³ (manufactured by Tianchang KMD New Insulation Materials),
- 5 mm thick inorganic board, YB type of density 1000 kg/m³ (manufactured by Suzhou Youlian Ship Equipment),
- 0.7 mm thick stainless steel plate.
- 1.5 mm thick two transverse and two horizontal stiffeners.

The four-sided frame is made by 1.5 mm stainless steel plate, fire sealing strip of specification 20 mm x 15 mm and waterproof rubber strip of specification 12 mm x 6 mm both produced by Jiangyin Lide Decoration Material are installed inside and around door frame. Frame is bolted to the bulkhead by M6x30 mm bolt spaced maximum 250 mm apart or may be welded.

Every door leaf is fixed to the frame with four stainless steel flag hinges.
Right leaf may be equipment with a lock type CTD-A type (manufactured by Nantong Hujiang Marine Technology).

The door may be fitted with 44 mm thick fireproof window (400 mm x 600 mm (W x H)), composed of 12 mm tempered glass layer, 20 mm fire retardant solution and 12 mm tempered glass provided by Yixing Yushi Special Glass.

Total door leaves thickness: 50 mm

For further details, see the drawings listed under Type Examination documentation below.

Application/Limitation

The door is approved for installation in steel bulkheads of class A-60. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Max. size of door leaf:	1186.5 mm x 2772 mm (W x H)
Max. clear door opening:	2300 mm x 2700 mm (W x H)
Max. clear opening of window:	400 mm x 600 mm (W x H)

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

Type Examination documentation

Test Report No. FT22275, dated 7 December 2022 from Far East Fire Testing Centre, Shanghai, China.
Drawings no. HS-FM2 dated 6 September 2022 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code 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 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. For larger windows, USCG shall be contacted.