TYPE EXAMINATION CERTIFICATE – EC MODULE B

Certificate no.:
MEDB0000925

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)
CFM-4ZA A-60 Class 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) 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 **2030-05-19**.

Issued at **Hamburg** on **2025-05-20**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 USD 300 000.

Product description

"CFM-4ZA A-60 Class Door"
is a double-leaf hinged door composed of left and right leaves and frame.
Each door leaf consists of:

- 0.8 mm thick galvanized steel plates,
- 5 mm thick inorganic fire board (YB type with 1000 kg/m^3 density, produced by Suzhou Youlian Ship Equipment),
- 36mm thick marine rock wool insulation (KDM-Y type with 120 kg/m^3 density, produced by Tianchang Kangmeida New Insulation Materials),
- 5 mm thick fire board (YB type with 1000 kg/m^3 density, produced by Suzhou Youlian Ship Equipment),
- 0.8 mm galvanized thick steel plate,
- 1 mm thick stainless steel decorative profile around the door leaf as edge trim.
- 25 mm air gap at the bottom between door blades and the floor.

Each door leaf is internally reinforced with three vertical stiffeners made by 1.5 mm thick steel plate and 2 mm thick steel door leaf skeleton is located on the ends around each door leaf.

Total door leaf thickness: 48 mm

Adhesive (YB8001 type, produced by Shanghai Ningrui Adhesives Science &Technology Development) is used in the interior of door leaf for the fixation of insulation. Fireproof seal strip (20 mm x 16 mm) is on the overlap between the left and right leaves.

Frame is made of 3 mm thick galvanized steel plate and is welded or bolted to the steel bulkhead by bolts M6x25 mm spaced maximum 250 mm apart.

The door leaf is connected to the three-sided frame by 3 steel hinges at one of its vertical edges.

The door leaf can be equipped with:

- C1 type fire lock (manufactured by Nantong Hujiang Marine Technology),
- Service rounded (Radius 200 mm) window composed of 1.5 mm thick frame and glass (two layers of 8 mm thick tempered glass with 20 mm thick fireproof liquid between, produced by Yixing Yushi Special Glass),
- Hose port.
- Escape exit, the structure of the panel is consistent with door leaf, locking rod is installed at the top and is fixed to the door leaf with two locking pins at the bottom.

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

Application/Limitation

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.

Maximum door leaf size:	1216 mm x 2207 mm	(W x H)
Maximum clear door opening:	2340 mm x 2200 mm	(W x H)
Maximum clear view opening size of window:	400 mm x 400 mm	(W x H)
Maximum hose port:	160 mm x 160 mm	(W x H)
Maximum escape exit:	642 mm x 842 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.

A fire door of marginally larger dimensions than a fire-tested fire door may be individually assessed and accepted by Flag Administration (or Recognized Organization acting on its behalf) for a specific project with the same classification, provided documented compliance with IMO MSC.1/Circ.1319.

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

Type Examination documentation

Test report No. AJFS2405005866FR dated 13 August 2024 from SGS, Anji, China.

Drawings No. CFM-4ZA (7 sheets) dated 2 April 2024 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

The door has been successfully tested for extended test period of 68 minutes.

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 cm, or less, in each door leaf. For larger windows, USCG shall be contacted.