EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB0000904

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)
CGFM-3DY

issued to
Jiangsu Hailu Technology Incorporated Corporation
JIANGYIN, JIANGSU, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2023/1667,**
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 **2029-06-11**.

Issued at **Hamburg** on **2024-06-12**

DNV local unit:
Jiangyin NB & CMC

Approval Engineer:
Meike Grabau

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"CGFM-3DY"
is a class B-15 single-leaf sliding door.

The door consists of rock wool insulation glued to 0.6 mm steel plate on both sides. The KMD-Y type marine rock wool insulation is produced by Tianchang KMD New Insulation Materials Co., Ltd. (120 kg/m³ nominal density). The glue is a low flame-spread PAPU-30 type adhesive produced by Jingjiang Green Functional Material Co., Ltd.

Total door leaf thickness: 40 mm.

At one side of the door leaf, a C-3 type stainless steel mechanical door lock (from Nantong Hujiang Marine Technology Co., Ltd.) is installed 1050 mm above the bottom of the door leaf and at its upper part, two pulleys are installed. The door leaf is fitted with a window constructed from 32 mm fireproof glass YS-A60, consisting of 5 mm reinforced glass + 22 mm fireproof liquid + 5 mm reinforced glass, produced by Yixing Yushi Special Glass Co., Ltd. and a 13 mm x 2 mm fire seal strip provided by Jiangyin Lide Decorations Co., Ltd.

The door frame is a four-sided door frame made by 1.2 mm thick stainless steel plate filled with KMD-Y type rock wool of 120 kg/m³ inside and fixed on three sidesto the B class bulkhead by screws (M4 x 16). The 2.5 mm thick upper rail strengthened is fitted on the bulkhead plate at the upper part of the door frame by screws (M4 x 16). The upper rail with case outside is fitted by M5 x 25 mm bolts. A continuous groove of 6 mm x 20 mm was provided at inner side of three sides of the door frame for installation of a fire seal strip.

For further details refer to the test report listed under "Type Examination documentation" below.

Application/Limitation

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

Maximum door leaf size: 1290 mm x 2260 mm (W x H)
Maximum clear door opening: 1200 mm x 2200 mm (W x H)
Maximum clear window opening: 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 MED 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.

Note that this is a fire safety certificate which only covers fire technical properties (i.e. not to cover strength evaluations related to water-tightness, weathertightness, etc.).

Type Examination documentation

Test report nos. FT19363 and FT19364 dated 6 January 2020 from Far East Fire Testing Centre, Shanghai, China.

Tests carried out

Tested according to IMO 2010 FTP Code Annex 1, 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.