EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB0000B0U
Revision no.:
0

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)
FS-SMA60-1 Type A-60 Class Double-Leaf Fire Door

issued to
JIANGSU FENGSHUN NEW MATERIAL TECHNOLOGY CO.,LTD
Changzhou, **China**

is found to comply with the Implementing Regulation **(EU) 2024/1975** for
Item no. **MED/3.16** (Row **1 of 1**)
according to the following requirements:
IMO MSC.1/Circ.1511, SOLAS 74 Reg. II-2/9.

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

Date of issue: **2025-04-22**

Expiry date: **2030-04-21**

DNV local unit:
Nanjing NB & CMC

Approval Engineer:
Meike Grabau

Notified Body
no.: **0098**

for **DNV SE**

Christine Mydlak-Röder
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"FS-SMA60-1 Type A-60 Class Double-Leaf Fire Door"
is a class A-60 double-leaf stainless steel fire door with windows and fire hole.

The door leaf consists of a rock wool core, covered by 5 mm thick inorganic fireproof plates and 0.6 mm thick stainless steel plates on both sides. The KMD-Y type rock wool with nominal density of 120 kg/m³, produced by Tianchang KMD New Insulation Materials and the ASK type fireproof plate with nominal density of 1000 ±10% kg/m³, produced by Zhangjiagang ASK Building Materials Industry is affixed to each other and to the steel sheets with an adhesive of approved type.

Total door leaf thickness: 40 mm.

Each door leaf is installed at one side with three stainless steel hinges. On the other side an expansion type fireproof sealing strip type FPJ-A-1 (20 mm x 15 mm), provided by Jiangyin Lide Decorations and a C1 type fire lock provided by Shanghai Dongsheng Lock Factory is fitted at a height of 1100 mm from the bottom edge.
The upper part of each door leaf is fitted with a 33 mm thick window. The window is composed (from exposed side) of 5 mm tempered glass, 22 mm fireproof layer and 6 mm tempered glass, provided by Yixing Yushi Special Glass and a 1.5 mm stainless steel frame, fixed to the door leaf by M4 x 12 stainless steel screws. A 40 mm thick fire hole is installed by a spring hinge in the lower corner of the right door leaf. It consists of a KMD-Y type rock wool core, covered by 0.6 mm thick stainless steel plates on both sides.

The door frame is a four-sided door frame made by 1.2 mm thick stainless steel plate, filled with rock wool (same as above). The frame is fixed to the opening of the A-class bulkhead by screws (M6 x 30 mm). Fireproof strips type FPJ-A-1 (20 mm x 15 mm), provided by Jiangyin Lide Decorations, are provided around the door frame.

For further details, please see documents 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, each: 1116 mm x 2236.8 mm (W x H)
Maximum clear door opening: 2200 mm x 2200 mm (W x H)
Maximum clear window opening, each: 400 mm x 400 mm (W x H)
Maximum clear fire hole opening: 150 mm x 150 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.

Type Examination documentation

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).