EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00008K4

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

That the Fire Doors

with type designation(s)
A-60 Steel Door, Type 262WHL047-00

Issued to
Wuxi MNET Equipment Tech Co., Ltd.
Wuxi, 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 **2028-10-29**.

Issued at **Høvik** on **2023-10-30**

DNV local unit:
Jiangyin NB & CMC

Approval Engineer:
Joanna Kowalczuk

Notified Body
No.: **0575**

for **DNV AS**

Sverre Olav Bergli
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 United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2023 dated August 21st, 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 AS 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"A-60 Steel Door, Type 262WHL047-00"
is a single leaf hinged door with door leaf constructed of an insulating core of 38 mm thick ceramic wool "TG-II" of density 170 kg/m³ (manufacturer by Yixing Marine Insulation Material Factory), faced from exposed side with 1.5 mm thick steel plate + 8 mm thick inorganic fireproof board "YB" of density 1200-1350 kg/m³ (manufacturer by Suzhou Youlian Ship Fitting Co., Ltd.) and 8 mm thick steel plate from unexposed side, stiffened with three L-type 70 mm x 40 mm x 8 mm stiffeners.
In lock device area, door leaf composes of air gap, covered on both sides with 8 mm thick, inorganic fireproof board "YB" and 1.5 mm thick steel plate.

The door leaf is fixed to the frame with three hinges and equipment with a handle, lock type C-2 (manufactured by Shanghai Li Yong Lock Co., Ltd.) and 10-point clip locking system provided by the manufacturer.

In addition, it may be fitted with window constructed from 19 mm thick toughened glass, 22 mm thick fire solution and 19 mm thick toughened glass (manufactured by Qinhuangdao City Haigang District Yuehua industrial and Technical Glass Factory). The window frame is fixed to the door leaf by 32 M6 x 45 screws and is made of 8 mm x 20 mm steel sheet. The steel window seat of specification 20 mm x 14 mm is welded to the face plate of door leaf from unexposed side.

The door and window are fitted with flame retardant rubber gaskets and fireproof seal strips.

The door frame is assembled from L100 mm x 63 mm x 10 mm thick angle steel and is bolted to the bulkhead by 42 M12 steel bolts spaced maximum 260 mm, or can be welded.

Total thickness of door leaf: 87.5 mm.

For further details see test report and 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:	1271 mm x 2371 mm (w x h)
Max. clear opening of door leaf:	1200 mm x 2300 mm (w x h)
Max. clear opening of window:	450 mm x 600 mm (w x h)

The insulation materials 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.

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

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

Type Examination documentation

Test Report No. FT12324, dated 13 December 2012 from Far East Fire Testing Centre, Shanghai, China.

Drawing No. 262WHL047-01, dated 1 December 2012from manufacturer,
Drawing No. 262WHL047-02, dated 1 December 2012from manufacturer,
Drawing No. 262WHL047-01, dated 1 December 2012from manufacturer,
Drawing No. 262WHL047-02, dated 1 December 2012from manufacturer,
Drawing No. 262WHL047-03, dated 1 December 2012from 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.