EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007S7

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 Single-Leaf Fire Door, Type 262WHL653C-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) 2021/1158,**
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 **2027-04-19**.

Issued at **Høvik** on **2022-04-20**

DNV local station:
Jiangyin NB & CMC

Approval Engineer:
Thorvald Furuseth

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 1/2019 dated February 22nd, 2019.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 Single-Leaf Fire Door, Type 262WHL653C-00"
A door construction consisting of single leafed steel door in a steel frame. The door leaf is composed of 1.5 mm thick stainless steel plate + 8 mm thick inorganic fireproof board YB (manufactured by Suzhou Youlian Ship Equipment Co., Ltd. type with nominal density of 1000 kg/m^3) + 58.5 mm thick ceramic wool TG-II type (manufactured by Yuanyang Fire Resistance Factory with nominal density of 170 kg/m^3) + 8 mm thick inorganic fireproof board (the same as above) + 4.0 mm thick stainless steel plate (on hinged side). Insulation material is fixed by means of adhesive. A flame retardant neoprene rubber sealing, type XP-74E, is fitted in the groove of the door leaf and a fireproof expansion graphite strips, 20 x 2.5 mm, type FP-03, is fitted around the door leaf.

The door may be fitted with a window (A60 Fire Proof Window, manufactured by Yixing Yushi Special Glass Co., Ltd.) with total thickness of 60 mm (8 mm toughened glass + 40 mm fireproof solution + 12 mm toughened glass) in the upper part of the door leaf (fire against the 8mm toughened glass).

The door is fitted with 3 hinges and a fireproof lock system. The door frame is formed by 1.5 mm and 4 mm thick stainless steel plates with ceramic wool insulation filled in the cavity and with fireproof expansion graphite strips, 20 x 2.5 mm, type FP-03, installed in the groove of the door frame.
The door frame is to be bolted or welded to the bulkhead.

Total thickness of door leaf: 80 mm

For further details, see the test report and drawings mentioned 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:	1278 x 2278 mm (W x H)
Max. clear opening of door leaf:	1200 x 2200 mm (W x H)
Max. clear opening of window:	400 x 600 mm (W x H)

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.

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

Type Examination documentation

Test report No. FT13239 dated 3rd September 2013 from Far East Fire Testing Centre, Shanghai, China.

Drawing No. 262WHL653C-00 (2 pages) from Wuxi Delin Marine and Ocean Technology (Group)Co.,Ltd., Wuxi, China.
Drawing No. 262WHL653C-01-0 (1 page) from Wuxi Delin Marine and Ocean Technology (Group)Co.,Ltd., Wuxi, China.
Drawing No. 262WHL653C-02-0 (1 page) from Wuxi Delin Marine and Ocean Technology (Group)Co.,Ltd., Wuxi, China.
Drawing No. 262WHL653C-03-00 (1 page) from Wuxi Delin Marine and Ocean Technology (Group)Co.,Ltd., Wuxi, China.
Drawing No. 262WHL653C-04-00 (1 page) from Wuxi Delin Marine and Ocean Technology (Group)Co.,Ltd., Wuxi, China.

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.