

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000082S

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)
QMA60-II

Issued to

CSSC - Jiangxi Chao Yang Machinery Co., Ltd.
Jiujiang, Jiangxi, 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 **2027-06-07**.

Issued at **Høvik** on **2022-06-08**

DNV local station:
Wuhan NB & CMC

Approval Engineer:
Marcin Tobiasz



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"QMA60-II"

is a single leafed hinged door. The door leaf is composed of an insulation core with 0.5 mm steel plates on both sides. The insulation core is made of 48 mm rock wool of type YG-2 (120 kg/m³) from Changzhou Thermal Insulation Material Factory with 5 mm thick magnesium oxide boards (1200 kg/m³) from Suzhou Eron Industrials fitted on both sides of insulation. The insulation materials were fixed with an adhesive. The door leaf is laterally reinforced with six 1.5 mm thick channel stiffeners (two along top and bottom edge, two along window and two in lower part of the door leaf). Sealing strip (14x10 mm) manufactured by Jiangyin Leaders Accessories is fixed at the perimeter of door leaf. The door leaf is fitted with four hinges and a fireproof lock of C-7GA type manufactured by Shanghai Kangbo Hardware Products.

Total door leaf thickness is 60 mm.

The door leaf may be fitted with a 35 mm thick A-60 glass window of from Yixing Yushi Special Glass composed from exposed side of: 9 mm thick tempered glass, 20 mm thick fire retardant solution, 6 mm thick tempered glass.

The four-sided frame is made of 1.5 mm steel plates with rock wool insulation filled in the cavity. The door frame is fitted with a fireproof expansion strip (26x22 mm) manufactured by Jiangyin Leaders Accessories. The door frame is bolted (M6x25 mm, c-c max. 250 mm) or welded to the bulkhead.

For further details see the drawing listed under Type Approval 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.

Max. size of door leaf:	1150 mm x 2269 mm (w x h).
Max. clear opening of door leaf:	1080 mm x 2200 mm (w x h)
Max. clear opening of window:	400 mm x 400 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 product is to be supplied with its manual for installation, use and maintenance.

Type Examination documentation

Test Report No. FT21001 dated 21 January 2021 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Drawing No. 262CYC177-00SY dated 14 April 2020 from CSSC - Jiangxi Chao Yang Machinery Plant.

Drawing No. 262CYC177-00 dated 14 April 2020 from CSSC - Jiangxi Chao Yang Machinery Plant.

Drawing No. 262CYC177-1-0 dated 14 April 2020 from CSSC - Jiangxi Chao Yang Machinery Plant.

Drawing No. 262CYC177-2-0 dated 14 April 2020 from CSSC - Jiangxi Chao Yang Machinery Plant.

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.