

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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 GL AS under the authority of the Government of Norway.

This is to certify:

That the Fire Doors

with type designation(s)
A60SM-0.3

Issued to

QINHUANGDAO XINGYANG MARINE FITTING CO., LTD.
Qinhuangdao, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397**,
item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511

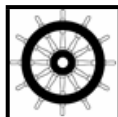
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-12-15**.

Issued at **Høvik** on **2019-12-16**

DNV GL local station:
Tianjin

Approval Engineer:
Thorvald Furuseth



Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
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.



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

"A60SM-0.3"

A single leafed hinged door consisting of 3 mm steel plate, 17 mm ceramic wool insulation of type LYHX-816T (density 160 kg/m³) from Shandong Luyang Share Co., Ltd, 8 mm steel plate, stiffeners cavity is filled with ceramic wool (LYHX-816T), 10 mm calcium silicate board of type LGB-0 from Suzhou City Weiyu Marine Material Decoration Co., Ltd, and 1 mm steel plate. The 8 mm steel plate is bent around the edge. The door leaf is reinforced with seven (100 mm x 10 mm) horizontal stiffeners and eight steel plates of section size 100 mm x 10 mm together with one full-length steel plate of section size 100 mm x 12 mm as vertical stiffeners. In addition the door is stiffened around the edge of the door leaf with 8 mm angled steel stiffener (100 mm deep) placed 44 mm from the edge of the door leaf. The door leaf is fitted with rubber seal (45 x 20 mm) from Jiangyin Junshan Marine Fittings Co., Ltd.

Total door leaf thickness is 139 mm.

The door is fitted with three hinges and a linkage locking device. The locking device consists of a steel hand wheel, steel connections and 22 clips.

The door frame is made of 10 mm angled steel, and is welded to the bulkhead.

For further details, see the 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.

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.).

Maximum door leaf size: 1270 mm x 2170 mm (W x H).

Maximum clear door opening: 1200 mm x 2100 mm (W x H).

The insulation materials and adhesives 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 and regulations.

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

Type Examination documentation

Test Report No. FT14020 dated 26 January 2014 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Drawing No. XY0177 from the 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).