DNV·GL

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000000A
Revision No:
1

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)
CLASS A-60 FIRE DOOR: MA60TT

Issued to
CSSC - Jiangxi Chao Yang Machinery Co., Ltd.
PENGZE, JIANGXI, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
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 **2020-04-06**.

Issued at **Høvik** on **2018-11-05**

DNV GL local station:
Wuhan CMC

Approval Engineer:
Helge Bjørnarå

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

NORWEGIAN ACCREDITATION PROD 019

Job Id: **344.1-002413-7**
Certificate No: **MEDB000000A**
Revision No: **1**

Product description

CLASS A-60 FIRE DOOR: MA60TT,
A door construction consisting of a single leaved steel door in a steel frame. The door leaf is composed of 0.6 mm galvanised steel plates on each side of an insulating core. The insulating core is composed of 25 mm thick LYB-150 rock wool of density 150 kg/m^3 (manufactured by Beijing New Building Materials Public Limited Company) with inorganic magnesium oxide boards of density 1200 kg/m^3 (manufactured by Yulong Decorative Material Co., Ltd.) on both sides (one side with 5 mm thickness and the other side with 10 mm thickness). Glue type HY92 is used for fixation of insulation. The door leaf is edge covered with a layer of 1 mm thick stainless steel, and is fitted with a stainless steel (fireproof) lockset and attached to the frame with 4 hinges.

The door leaf may incorporate a 35 mm thick window (manufactured by Qinhuandao Xingyang Special Glass Co., Ltd) in the upper half of the door. The window frame consists of 1.5 mm steel profiles. Also a lockable fireproof ventilation grilled escape hatch may be fitted at the bottom half of the door leaf, and reinforced around the opening with 1.2 mm steel profiles.

The door frame profile is constructed with 1.5 mm thick steel sheet with rock wool filled in the hollow. The door frame is arranged around with a continuous groove of 22 x 22 mm at the inner side for the ø25 ceramic fibre string or 22 mm x 26 mm fireproof expansion strip to fit in, and to be bolted or welded to the bulkhead.

Total thickness of door leaf is 45 mm (including the edge cover).

For further details see 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. door clear opening:	1000 mm x 2100 mm (w x h)
Max. size of door leaf:	1036 mm x 2135 mm (w x h)
Max. clear opening of window:	400 mm x 400 mm (w x h)
Max clear opening of an escape hatch:	418 mm x 520 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 product is to be supplied with its manual for installation, use and maintenance.

Type Examination documentation

Test report No. FT09266 dated 17 November 2009 from Far East Fire Testing Centre, Shanghai, China.

Test report No. FT14306 dated 20 October 2014 from Far East Fire Testing Centre, Shanghai, China (fireproof expansion strip).

Drawing No. 262CY119-00 dated 25 July 2009 from maker.

Tests carried out

Tested according to IMO FTPC Part 3 and in compliance with IMO 2010 FTP Code Ch. 8.

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.