DNV·GL

Certificate No:
MEDB00005FR

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)
WTHS A-60 Fire Door

Issued to
BY Controls Inc.
Gimhae-si, Gyungsangnam-do, Republic of Korea

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 **2024-07-16**.

Issued at **Høvik** on **2019-07-17**

DNV GL local station:
Gimhae Station

Approval Engineer:
Synnøve Bolstad Eri

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Product description

"WTHS A-60 Fire Door"
Single leaf hinged door which comes in symmetrical left and right opening types. The door leaf is composed of 8 mm steel plate, insulated with 50 mm + 25 mm + 25 mm ceramic insulation (Firemaster Marine Plus) from Thermal Ceramic UK Ltd with nominal density 128 kg/m^3. The door leaf is reinforced internally with a framework of vertical and horizontal stiffeners and the insulation is fitted around and in between the stiffeners. The aluminium foiled ceramic insulationis pinned and clipped to the door leaf steel plate on the stiffened side.

The door is fitted with two hinges. The locking device consists of a steel hand wheel, steel connections and 14 point clip locking system.

Total door leaf thickness is 116 mm.

The door frame is made by welding of 60 mm + 10 mm thick steel plates, and is welded to the bulkhead.

For further details, see drawings listed under Type Examination 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.

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: 950 mm x 1960 mm (W x H).
Maximum clear door opening: 900 mm x 1910 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. KOMERI-0402-14T0275 dated 24 April 2014 from KOMERI, Busan, Korea.

Drawing No. PLTP176 Rev. A, dated 28 April 2014 from the manufacturer.
Drawing No. PLTP311 Rev. I, dated 28 April 2014 from the manufacturer.
Drawing No. PLTP317 Rev. D, dated 28 April 2014 from the manufacturer.
Drawing No. PLTP319 Rev. E, dated 28 April 2014 from the manufacturer.
Drawing No. PLTP245 Rev. D, dated 28 April 2014 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).