

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)
U-FR-10 (Fire Door A-15)

Issued to
Ucalso Industrial Vigo S.L.
Vigo, Pontevedra, Spain

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

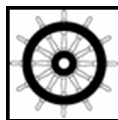
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2023-11-11**.

Issued at **Høvik** on **2018-11-12**

DNV GL local station:
Vigo

Approval Engineer:
Grzegorz Wolski



Notified Body
No.: **0575**

for **DNV GL AS**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Job Id: **344.1-008655-1**
Certificate No: **MEDB00004KR**

Product description

"U-FR-10 (Fire Door A-15)"

Is a double leaf door with single handle opening. The door is composed of frame, two door blades, locking arrangement and sealing materials.

Each door leaf is constructed of 6 mm thick steel panel on un-exposed side insulated with 30 mm thick SeaRox SL 450 insulation with density of 45 kg/m³ by Rockwool Technical Insulation. The door leaf is reinforced by two equally spaced horizontal FB 30x8 and closed by 3 mm thick steel back profile with height of 130 mm supported by vertical C-profile.

Each door leaf is supported by two hinges at longer edge and 3 closing toggles at opposite edge.

Total thickness of door leaf is 139 mm.

The 4 sided frame is made of 8 mm thick steel and welded to the bulkhead. Intumescent strips are fitted along the perimeter of frame and along the connection profiles of door leaves. Additionally, two 15 x 4 mm intumescent strips shall be fitted in the centre-opening closing edge.

For further details, please see Type Examination documentation below.

Application/Limitation

The door is approved for installation in steel bulkheads of class A-15. Installation of the door in bulkheads made of other materials (aluminium, FRP, etc.) are subject to case-by-case approval.

Restricted application: fire from thinner steel plate side only

Max. clear opening: 1400 mm x 2100 mm (w x h)

Max. size of door blade: 740 mm x 2100 mm (w x h)

Max. clear light size: Ø 250 mm

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.

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.).

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

Type Examination documentation

Test report No. 059801-004-a dated 13 July 2018 from Tecnalia Research & Innovation, Azpeitia, Spain.

Drawing no. 16/763/03 dated 06 June 2018 from Ucalisa Industrial Vigo S.L.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.



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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.