

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 the Kingdom of Norway.

This is to certify:

That the Fire Doors

with type designation(s)
COSMO B-15TVH

Issued to

COSMO Co., Ltd.
Busan 11, Republic of Korea

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306**,
item No. MED/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511

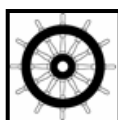
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2019-09-15**.

Issued at **Høvik** on **2017-06-12**

DNV GL local station:
Gimhae Station

Approval Engineer:
Tomasz Werchowicz



Notified Body
No.: **0575**

for **DNV GL AS**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"COSMO B-15TVH"

Three hinged steel doors composed of 37 mm thick mineral wool type "Mineral wool#140" with nominal density of 140 kg/m³ from KCC Corporation, covered with 0.6 mm thick steel plates from both sides and in the top part of the door leaf 150 x 2 mm (H x T) doubling plate from both sides.

The door frame is made of 1.5 mm thick steel plates, fitted with a neoprene "door bumper" and is connected to the bulkhead by self-tapping screws.

The doors may also be fitted with:

- Observation Windows, 400 x 600 mm (W x H) and nominal thickness 16 mm
- Escape and ventilation grids in lower part of the doors, 452 x 552 mm (W x H)
- Fire Hoseport in lower left corner of the leaf, 150 x 150 (W x H)

Total thickness of door leaf is 38 mm.

For further details see drawings mentioned under Type Examination documentation below.

Application/Limitation

Approved for use as an integrated part of fire retarding division of class B-15.

Max. clear door opening: 1000 x 2100 mm (W x H)
Max. size of door leaf: 1133 x 2114 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

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, 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.