DNV·GL

Certificate No:
MEDB00006BZ

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)
COSMO B-15TVHD

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

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, IMO MSC.1/Circ.1319

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

This Certificate is valid until **2025-01-08**.
Issued at **Høvik** on **2020-01-09**

DNV GL local station:
Gimhae Station

Approval Engineer:
Tessa Biever

Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified Body

NORWEGIAN ACCREDITATION PROD 019

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Product description

"COSMO B-15TVHD"
is a double leaf hinged door with one active and one non-active door leaf. Each door leaf consists of a 37 mm thick core of mineral wool, nominal density of 140 kg/m^3 and type "Mineral wool" (manufactured by KCC CORPORATION), bonded to 0.6 mm thick steel sheets on both sides (bonded with adhesive). The upper part of the door leaves, 130 mm space, are internally reinforced with 2 mm thick steel plate. The door leaves are each connected to the frame with 3 hinges.

The door frame is made from 1.5 mm thick steel sheets, and may be fitted with 36 x M5 x 25L bolts or welded to the bulkhead.

The door may be fitted with:

- Window in the upper part of the doors, type designation "Contraflam lite marine B-15" (manufactured by Saint-Gobain). Thickness: 16 mm.
- Hose port in the lower corner of the door (opposite to hinge side), 150 mm x 150 mm (w x h).
- Kick out panel in lower part of the doors, maximum size 420 mm x 520 mm (w x h), with or without internal ventilating ducting grilles.

Total door leaf thickness is 38 mm.

For further details see Type Examination documentation below.

Application/Limitation

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

Max. clear opening window:	400 mm x 600 mm (w x h)
Max. clear opening door:	2000 mm x 2100 mm (w x h)
Max. size of door leaf:	1017 mm x 2105 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.

The door has been successfully tested with extended test period in compliance with IMO MSC.1/Circ. 1319.

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

Type Examination documentation

Test report no. KOMERI-0402-13T1847 dated 2014-06-20 from Korea Marine Equipment Research Institute (KOMERI), Busan, Korea.

Drawing no. CD-FB15TVHDD-0 (11 pages) dated 2013-09-23 from Cosmo Co., Ltd.

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 and MED Mark of Conformity (see page 1).