

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00008AX

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 AS under the authority of the Government of Norway.

This is to certify:

That the A & B Class divisions fire integrity: B class divisions.

with type designation(s)

B-15 Bulkhead Type: TNF 2SF with electrical switch and hatch

Issued to

INEXA Interiors (Nantong) Co., Ltd.
Nantong City,, Jiangsu Province,, China

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2022/1157,**

item No. MED/3.11b. SOLAS 74 as amended, Regulation II-2/3.4 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1581

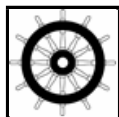
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-05-14.**

Issued at **Høvik** on **2023-05-15**

DNV local unit:
Nantong

Approval Engineer:
Timo Linn



Notified Body
No.: **0575**

for **DNV AS**

Sverre Olav Bergli
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, and amended by Decision No 1/2019 dated February 22nd, 2019.



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

"B-15 Bulkhead Type: TNF 2SF with electrical switch and hatch" is composed of a galvanized steel plate + rock wool + galvanized steel plate, and the structural details are as follows:

The Bulkhead is consisted of three rock wool panels with height of 2500 mm and width of 950/1100 mm and a thickness of 25 mm. The width of the outermost two panels is 950 mm, and the middle width is 1100 mm. The surface (frontside) of the partition panel is made of 0.5 mm galvanized steel plate which is also the exposed to the fire and the side with the fittings, the steel plate unexposed to the fire (backplate) has a thickness of 0.4 mm. The panels are fixed to each other by means of H profile joint.

In addition the Bulkhead may be fitted with:

Switch and socket: Manufactured by JUNG, the type of switch is 502U and specification was 250V, 10AX; the type of socket is LS 1521 KI SWM and the specification is 250 V, 16 A; the size of opening for installation of switch and socket on the rock wool panel was 195 mm x 51 mm. The switch and socket were fixed on the bulkhead by screws. A cover made of 1 layer of 3.5 mm thick ceramic wool with aluminum foil cloth on the surface of one side was put on the unexposed surface of the switch and socket to full cover the switch and socket. The external size of the cover is 210 mm long by 100 mm wide by 3.5 mm thick. A cover is fixed on the unexposed face of the plate through an aluminum foil tape around.

Volume control unit: Manufactured by Vingtor Stentofon, Type: VCOR, specification is 24 VDC override, 15 W; the size of opening for installation of volume control 1 unit on the rock wool panel is 52 mm x 52 mm. A cover made of 1 layer of 3.5 mm thick ceramic wool with aluminum foil cloth on the surface of one side was put on the unexposed surface to cover the unit. The external size of the cover was 100 mm long by 100 mm wide and 3.5 mm thick. A cover is fixed on the unexposed face of the plate through aluminum foil tape around.

Duty alarm panel accommodation: Manufactured by SAM Electronics, Type: DAP 2200, size of opening for installation of duty alarm panel accommodation on the rock wool panel is 278 mm x 136 mm. A cover made of 1 layer of 3.5 mm thick ceramic wool with aluminum foil cloth is fixed on the unexposed surface. The external size of the cover was 300 mm long by 150 mm wide by 3.5 mm thick. The cover was fixed on the unexposed face of plate through aluminum foil tape around. The cover of 220 kg/m³ ceramic wool and aluminum foil cloth was produced by Morgan Thermal Ceramics (Shanghai) Co., Ltd.

Panel hatch: Manufactured by INEXA, Type: 683, consisting of galvanized steel plate 0.5 mm + rock wool (BSS TYPE rock wool produced by Weihai Bosheng Advanced Materials CO., LTD. of a nominal density 120 Kg/m³) + galvanized steel plate 0.5 mm. The internal opening of the Panel is (800 mm x 800 mm) with a max. thickness of 20mm. External size of the panel is 840 mm x 840 mm. Hatch is fixed with a steel frame (L-profile of 1.5 mm). See also Figure 1 (6) of test report mentioned below for details.

For further details, please see drawing listed under Type Examination documentation below

Application/Limitation

Approved for use as a vertical fire retarding division of class B-15.

Max. panel width: 1100 mm
Max. panel height: 2500 mm
Total panel thickness: 25 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.

Insulation Material:

BSS TYPE rock wool produced by Weihai Bosheng Advanced Materials CO., LTD. of a nominal density 120 Kg/m³.

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

Type Examination documentation

Test report No. AJFS2211009366FF-01 dated on 23th of April 2023 from SGS-CSTC Standards Technical Services Co., Ltd. ANJi Branch, Beijing, China
Drawing No. TNF-2SF-1 dated on 20th of October 2022, Page 1-4 from INEXA.

Tests carried out

Tested according to IMO FTP Code Part 3

Marking of product



Job Id: **344.1-012553-1**
Certificate No: **MEDB00008AX**

The product or packing is to be marked with name and address of manufacturer, type designation, MED Mark of Conformity (see page 1) and USCG approval number, if applicable.