

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 "B" Class divisions, fire integrity

with type designation(s)
TNF 2S Type F, Q, M and A Bulkhead Panels

Issued to
INEXA Interiors (Nantong) Co., Ltd.
Nantong City JIANGSU, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306,**
item No. MED/3.11b. SOLAS 74 as amended, Regulation II-2.3.4 & II-2/9 and IMO 2010 FTP Code
Manufacturers authorised representative
Inexa Holding AB
Vrena, Sweden

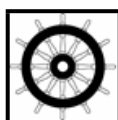
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-10-30.**

Issued at **Høvik** on **2017-10-31**

DNV GL local station:
Nantong

Approval Engineer:
Nathaniel Frithiof



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"TNF 2S Type F, Q, M and A"

Type F:

composed of bulkhead panels (600 mm width) of total thickness 25 mm. Panels consist of mineral wool, Rockwool Lamel (160 kg/m³), covered with a combination of 0.56 mm perforated steel plate (28% galv.) on one of the side, and 0.56 mm steel plate on the other side.

Type F may be fitted with the following electrical equipment:

- Electrical plug and switches which are covered on the backside with 3 layers of 3 mm Fiberfrax Duraboard LD insulation covered with 1.25 mm steel plate fixed to the bulkhead with screws.
- Cable transit, max three cable in one transit and max cut out $\varnothing$ 30mm. The opening and cables are sealed with SikaFireseal- Marine N ending approx. 25 mm out on the cables.

For details see drawing L2S.swi25.

Type Q:

composed of bulkhead panels (600 mm width) of total thickness 50 mm. Panels consist of mineral wool, ABM-SR (150 kg/m³) produced by Shanghai ABM Rock Wool Co., Ltd., covered with 0.56 mm steel plates on both sides. The insulation is glued to the steel with an adhesive. Two cable trays (80 mm x 20 mm) are fitted lengthwise in each panel.

Type M:

composed of bulkhead panels (600 mm width) of total thickness 50 mm. Panels consist of two layers of 21.8 mm mineral wool, Rockwool Lamel (160 kg/m³) with app. 3 mm air gap between, covered with 0.7 mm steel plate on both sides. Towards the air gap the mineral wool is covered with glass tissue (60 g/m²). The insulation along longitudinal edges of the panels consist of one layer of app. 43 mm wide Rockwool Marine Slab 200 (200 kg/m³). The insulation is glued to the panels with Icema adhesive.

Type A:

composed of bulkhead panels (600 mm width) of total thickness 50 mm. Panels consist of mineral wool, ABM-SR (150 kg/m³) produced by Shanghai ABM Rock Wool Co., Ltd., covered with 0.56 mm steel plate on both sides. The insulation is glued to the steel with an adhesive.

All panels are joined by steel profiles of type TNF320.

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

Application/Limitation

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

Type M and A are successfully tested with regard to integrity and insulation for 30 minutes.

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

Test reports:

- Type F: File No. PG 11596 Serial No. 10470 dated 21 March 2006.
File No. PG 11634 Serial No. 10716 dated 1 September 2006.
Both reports from Danish Institute of Fire Technology, Denmark.
- Type M: File No. PG11663 Serial No. 11048, dated 14 March 2007 from Danish Institute of Fire Technology, Denmark.
- Type Q: No. FT13017 dated 28 January 2013 from Far East Fire Testing Centre (FEFTC), Shanghai,



Job Id: **344.1-001491-31**
Certificate No: **MEDB000039Z**

China.
File No. PG 11587 Serial No. 10547 dated 2 April 2006.
Type A: No. FT13016 dated 19 February 2013 from Far East Fire Testing Centre (FEFTC), Shanghai,
China.
File No. PG 11587 Serial No. 10547 dated 2 April 2006.

Tests carried out

Tested according to IMO FTPC Part 3 and in compliance with IMO 2010 FTP Code Ch. 8.

Marking of product

The product or packing 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).