DNV·GL

Certificate No:
MEDB000066G

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)
Class B-15 Entrance panels

Issued to
Dampa ApS
Tommerup, Syddanmark, Denmark

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397,**
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 **2025-06-01**.
Issued at **Høvik** on **2020-06-02**

DNV GL local station:
Denmark CMC

Approval Engineer:
Tessa Biever

Notified Body
No.: **0575**

for **DNV GL AS**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

NORWEGIAN ACCREDITATION PROD 019

Product description

"Class B-15 Entrance panels",
Ceiling composed of two types of panels (entrance panels and DCC 308 panels) suspended below the structural steel deck. The entrance panels were mounted towards each longitudinal edge of the mounting frame. The gap in between the two entrance panels were filled using DCC 308 panels.

The entrance panels, which comes in two versions (type A and B), consist of 22 mm thick mineral wool core of type Rockwool FB6040 (manufactured by Rockwool with density of 60 kg/m^3) covered with 0.6 mm or 0.7 mm thick steel sheets on the underside. Panel type A has no groove at the longitudinal joint, panel type B has a groove at the longitudinal joint. The panels are connected to each other by fitting screws Ø4.2 x 10 mm with max. c-c 150 mm. Entrance panel thickness is 24 mm.

The DCC 308 panelsconsist of 25 mm thick mineral wool core of type Marine Batts 32 (manufactured by Rockwool with density of 32 kg/m^3) covered with 0.6 mm thick steel sheets on the underside. All DCC 308 panels were fixed to the intermediate supports using one self-tapping screw in both sides. DCC 308 panel thickness is 26 mm.

On top of the ceiling a 50 mm thick layer of SeaRox SL740 (manufactured by Rockwool with density of 45 kg/m^3) was installed.

The ceiling is suspended below the structural steel deck by a steel hanger system. The suspension profiles consists of M8 threaded rods (Ø8 mm) which are welded to the steel deck with a cc distance of max. 600 mm. Square steel plates with a side length of 44 mm were welded to M6 threaded rods (Ø6 mm) with a pitch of 1.25 mm and were fixed to the M8 rods using Rod Clip.

The intermediate supports consisted of two parts:
- Steel L profile designated 'Edge Trim' with dimensions 55 x 25 x 1.0 mm.
- Steel U profile designated 'Modular carrier' with dimensions 10 x 76 x 1.0 mm.

The Modular Carrier was perforated and had small hooks with c-c distance of 100 mm used to fix the ceiling panels.

The L-profiles were supported by the suspension profiles at c-c 600 mm. The Entrance Panels were fixed to the L-profiles using self-tapping screws Ø4.2 x 10 mm at max. c-c 300 mm.

The U-profiles were fixed to the top of the L-profiles using self-tapping screws at max. c-c 300 mm staggered with regards to the screws from the entrance panels.

The entrance panels (type A and B) may incorporate downlight units manufactured by Orluna fully insulated with 50 mm thick layer of SeaRox SL740 (manufactured by Rockwool with density of 45 kg/m^3). Max. diameter of the downlights are 80 mm.

For further details, see drawings listed under Type Examination documentation.

Application/Limitation

Approved for use as a Class B-15 Ceiling. When the ceiling panels are suspended minimum 300 mm below a structural steel deck, the whole construction is to be regarded as a fire resisting division of class A-30.

Max. entrance panel width: 600 mm (0.6 mm steel sheet)
800 mm (0.7 mm steel sheet)

The use of the entrance panels in combination with other MED approved ceilings (instead of the DCC308 panels) are subject for a case by case approval by the relevant Flag Administration.

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 and use.

Type Examination documentation

Test report No. PGA11474 dated 2019-09-03 from DBI, Hvidovre, Denmark.

Assessment report No. 11257A dated 2020-01-28 from DBI, Hvidovre, Denmark.

Dwg. No. DBI-1 dated 2019-07-04 from manufacture.
Dwg. No. DBI-2 dated 2019-07-02 from manufacture.
Dwg. No. DBI-3 dated 2019-07-16 from manufacture.
Dwg. No. DBI-4 dated 2019-07-02 from manufacture.

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, MED Mark of Conformity and USCG approval number if applicable (see first page).