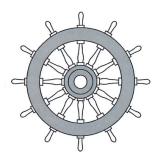


EC TYPE-EXAMINATION CERTIFICATE

according to Marine Equipment Directive (Module B)



NOTIFIED BODY 0809

This is to certify that Eurofins Expert Services Ltd did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 2014/90/EU and Commission implementing regulation (EU) 2018/773 subject to any conditions in the schedule attached hereto.

A-60 steel deck, PAROC Marine Fire Slab 100 or PAROC Marine Wired Mat 100 or PAROC Marine Mat 100, 40/25 mm insulation

meet the requirements imposed in IMO 2010 FTP Code, Annex 1 Part 3 (IMO Resolution MSC.307(88) Annex 1 Part 3) on

Class A-60 deck

and the provisions of Marine Equipment Directive 2014/90/EU, that apply to

fire integrity of A-60 Class division.

These products have been assigned a U.S. Coast Guard Module B number (164.107 / EC0809) to note type approval to Module B only as it pertains to obtaining U.S. Coast Guard approval as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment" signed February 27th, 2004 and amended by Decision No.1/2018 signed February 18th 2019.

Manufacturer of the product is

Paroc Group Oy

The Certificate is valid until August 19, 2024 unless suspended, expired or withdrawn, provided the conditions in this certificate are complied with and the equipment remains satisfactory in service.

Espoo August 20, 2019

This document is electronically approved

Tiina Ala-Outinen Business Manager

Heli Välimäki Senior Expert

EUROFINS EXPERT SERVICES OY

Kivimiehentie 4 FI-02150 ESPOO Y-tunnus 2297513-2 www.sertifikaattihaku.fi



Expert Services

Manufacturer

Paroc Group Oy Energiakuja 3 P.O.Box 240 FI-00181 Helsinki

Finland.

Regulation Item

MED /3.11a, "A" Class divisions, fire integrity.

Products

Class A-60 steel deck insulated with PAROC Marine Fire Slab 100 or PAROC Marine Wired Mat 100 or PAROC Marine Mat 100, 40/25 mm.

Product description

"A" Class steel deck insulated between the stiffeners with 40 mm thick PAROC Marine Fire Slab 100 or PAROC Marine Wired Mat 100 or PAROC Marine Mat 100 and upon the stiffeners with 25 mm thick layer, having nominal density of 100 kg/m³. Alternatively deck can be insulated with 40 mm thick continuous

Marine Mat.

The insulation is fastened by using \emptyset 3 mm thick steel pins and \emptyset 30 mm steel washers or with bent pins without washers. Maximum distance to the nearest pin is horizontally 300 mm and vertically 500/250 mm. Insulation on stiffeners shall be pinned on both sides. Insulation joints shall be compressed between each other and towards stiffeners and if wired mat is used, it shall be tied together at joints.

Approved application

A-60 class steel deck.

Technical document

Drawing 18034 (20.12.2018), DBI - 001 (5.3.2019), DBI - 002 (24.6.2019), DBI

-003 (13.8.2019).

Test reports

Test report No. PGA11343A (21.12.2018), DBI, Denmark. Assessment PHA11184B_2 (13.8.2019), DBI, Denmark.

Test methods and standards

IMO 2010 FTP Code Annex 1 Part 3 (IMO Resolution MSC.307(88) Annex 1

Part 3).

Notes

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and

agreed with the notified body named on this certificate.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reapproved prior to it being placed on board vessels to which the amended regulations or standards apply.

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-control phase module (D, E or F) of Annex B of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

END OF CERTIFICATE