



Marine & Offshore

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This certificate is not valid when presented without the full attached schedule composed of 7 sections
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Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2022/1157 of 4 July 2022

This certificate is issued to:

Halton Marine Oy

Lahti - FINLAND

for the type of product

**PENETRATIONS THROUGH "B" CLASS DIVISIONS: PIPE, DUCT, TRUNK, etc,
PENETRATIONS**

Single or double air flow ventilating units, types "HMR", "HMF", "HFR", "HMM" & "HME"

Requirements:

SOLAS 74 convention as amended, Regulations II-2/9
IMO Res. MSC.307(88) (2010 FTP Code)

This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

This certificate will expire on: 04 Apr 2028


For Bureau Veritas Marine & Offshore Notified Body 2690,

At BV TURKU (ABO), on 04 Apr 2023,

Miika KOKKO

This certificate was created electronically and is valid without signature



This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark ) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

1.1 - Double airflow ventilating unit: HMR

- W500 mm x L600 mm x H240 mm
- Maximum inlet air duct Ø125 mm + Ø100 mm / Maximum outlet air duct Ø250 mm
- Made of 0.75 mm thick galvanized steel sheets by riveting
- Insulated with mineral wool "**PAROC Marine Fire Slab 100**" (Nominal density: 100 kg/m³, 25 mm in thickness) manufactured by Paroc Group Oy.
- Weight 18 kg

1.2 - Single airflow ventilating unit: HMF

- Maximum W500 mm x L600 mm x H280 mm
- Maximum inlet air duct Ø200 mm / Maximum outlet air duct Ø250 mm
- Made of:
 - 0.75 mm thick galvanized steel sheets by riveting
 - Insulated with mineral wool "**PAROC Marine Fire Slab 100**" (Nominal density: 100 kg/m³, 25 mm in thickness) manufactured by Paroc Group Oy.
 - Weight 18 kg

OR

- 0.5 mm thick galvanized steel sheets by riveting
- Insulated with mineral wool "**U SP SLAB**" (Nominal density: 66 kg/m³, 20 mm in thickness) manufactured by Saint-Gobain Isover.
- Weight 11.5 kg

1.3 - Single airflow cabin unit: HMM & HME

- Maximum W500 mm x L600 mm x H280 mm
- Maximum inlet air duct Ø200 mm / Maximum outlet air duct Ø250 mm
- Made of:
 - 0.75 mm thick galvanized steel sheets by riveting
 - Insulated with mineral wool "**PAROC Marine Fire Slab 100**" (Nominal density: 100 kg/m³, 25 mm in thickness) manufactured by Paroc Group Oy.
 - Weight 18 kg

OR

- 0.5 mm thick galvanized steel sheets by riveting
- Insulated with mineral wool "**U SP SLAB**" (Nominal density: 66 kg/m³, 20 mm in thickness) manufactured by Saint-Gobain Isover.
- Weight 11.5 kg

1.4 - Single airflow ventilating unit: HFR

- W500 mm x L800 mm x H200 mm
- Maximum inlet air duct Ø125 mm / Maximum outlet air duct Ø250 mm + 3 x Ø80 mm
- Made of:
 - 0.75 mm thick galvanized steel sheets by riveting (1 mm in front wall)
 - Insulated with mineral wool "**PAROC Marine Fire Slab 100**" (Nominal density: 100 kg/m³, 25 mm in thickness) manufactured by Paroc Group Oy.
 - Weight 23.5 kg

May be incorporated in **B-0/B-15 continuous (or not) class ceiling**, depending on the type, when mounted as per the Manufacturer's specifications.

The units may be used with or without JCC diffuser (square: max. 450x450 mm and weight 2.8 kg or circular: max. Ø250 mm and weight 2.3 kg) or DLQ diffuser (667x967 mm and weight 10 kg) or VHB-200 diffuser (449x449 mm and weight 4 kg).

2. DOCUMENTS AND DRAWINGS:

As per the Manufacturer's drawings:

- HMR: N° LH-9400 rev.D dated 25/10/2017
- HMF: N° LH-9100 rev.D dated 23/01/2019, N° JG173487 Ver.A dated 03/10/2018 and N° LH-9900 rev.B dated 14/02/2023
- HMM: N° LH-9201 rev.C dated 23/01/2019 and N° LH-9900 rev.B dated 14/02/2023
- HME: N° LH-9200 rev.C dated 23/01/2019 and N° LH-9900 rev.B dated 14/02/2023
- HFR: N° JpM1800750 rev.A dated 09/10/2018

3. TEST REPORTS:**3.1 - HMR/HMF**

- N° VTT-S-06116-17 dated 30/11/2017, as per IMO 2010 FTP Code Annex 1 Part 3, from VTT, Finland.
- N° S-05484-18 dated 12/11/2018, as per IMO 2010 FTP Code Annex 1 Part 3, from EUROFINS, Finland.
- Technical assessment (larger inlet air ducts) N° EUFI29-19000691-T1 dated 07/03/2019, from EUROFINS, Finland.

3.2 - HFR

- N° S-05484-18 dated 12/11/2018, as per IMO 2010 FTP Code Annex 1 Part 3, from EUROFINS, Finland.

4. APPLICATION / LIMITATION:

The fitting aboard to be the same as used for the test.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - This certificate alone does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D Production Quality Assurance or module E Product Quality Assurance or module F Product Verification of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.

5.2 - For information concerning the production phase modules, **Halton Marine Oy** has declared the following manufacturing sites:

Halton Marine Oy
Pulttikatu 2,
FIN 15700 Lahti
FINLAND

Halton Ventilation (Shanghai) Co., Ltd.
Block 7, No. 55 Feidu Road,
Lingang New City, Pudong, Shanghai
CHINA

5.3 - The following components shall comply with the requirements of MED 2014/90/EU, as amended, and be wheelmarked:

- the "**B-0/B-15 continuous (or not) class ceiling**"
- the insulation materials "**PAROC Marine Fire Slab 100**" and "**U SP SLAB**".

6. MARKING OF PRODUCT:

Reference is made to MED 2014/90/EU chapter 2.

In particular Article 10.3 specifies that the wheelmark shall be followed by the identification number of the Notified Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).

7. OTHERS:

7.1 - It is **Halton Marine Oy's** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes EC Type Examination Certificate N° 10809/D2 MED issued on 28/01/2020 by the Society.

*** END OF CERTIFICATE ***