



Marine &amp; 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) 2021/1158 of 22 June 2021

This certificate is issued to:

**Halton Marine Oy**

Lahti - FINLAND

for the type of product

**FIRE DAMPERS**

A-Class Fire Dampers, type "FDA"

### 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: 14 Oct 2026**

**For Bureau Veritas Marine & Offshore Notified Body 2690,**

At BV TURKU (ABO), on 14 Oct 2021,

Miika KOKKO



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:

#### **A-Class Fire Dampers, type "FDA"**

Rectangular steel fire dampers, sizes up to 1200 x 1600 mm. The distance between the fire damper center and the deck/bulkhead plating should be at least 225 mm. For bulkhead can be used modular type damper with up to four dampers with maximum size of 1200 x 1250 mm with the total size of installation up to 2500 x 2600 mm.

Damper frame thickness 3 mm for size up to 1200 x 1600 mm.

Thickness of the fire damper coaming: 3 mm for fire damper size up to 1200 x 1600 mm (except for modular type)

The joint between the coaming and the frame of the damper is a flanged joint with bolts and nuts. The connection is to be sealed with sealant "SealFire W200" or "Fire Secure Mastic Adhesive 1027". The dampers are to be fitted with "Promaseal PL 1,8" or "FF102" (Firefly 102) intumescent seal as blades sealing material.

Coaming and fire damper casing are to be insulated with 60 mm of "**Paroc Marine Fire Slab 100**" (nominal density 100 kg/m<sup>3</sup>, manufactured by Paroc Oy, Finland) or with 38 mm of "**Fyre Wrap LT Blanket**" (nominal density 128 kg/m<sup>3</sup>, manufactured by Unifrax, China), as shown in referred manufacturer's drawings.

The additional insulation to be installed on damper and coaming with same quality and thickness as the other insulation of damper and casing.

The actuators need not to be insulated.

#### **Types of FDA fire damper:**

- electrical (FDA-EL)
- rotating pneumatic (FDA-PNR)

#### **Operation of FDA fire damper:**

- Automatic (with fusible link):
  - Electrical motor, type BELIMO BF-230-2HL, Elodrive CSQP-15A1E, Schischek InMax-15-SF, Schischek ExMax-15-SF or PETZ QT.Ex-MFD03
  - Pneumatic, type Rotork GTWSM, Rotork GTWNM, Festo DAPS, Air Torque AT104, Air Torque AT301, Air Torque AT351 or Air Torque AT101
- Manual (with fusible link): spring loaded.
- Manual (without fusible link): operated with a handle

The construction of the fire damper itself is the same in these dampers, only the operation is different.

### 2. DOCUMENTS AND DRAWINGS:

As per the Manufacturer's drawings:

- N° LH-51500 Rev B dated 15/08/2016 (A-15 to A-60 class) - LH-51501 Rev C dated 15/08/2016 (A-15 to A-60 class)
- N° LH-51502 Rev B dated 15/08/2016 (A-0 class) - N° LH-51503 Rev C dated 27/01/2020 (A-60 class)

### 3. TEST REPORTS:

3.1 - Bulkhead - Size 1200x1600 mm/Actuator Rotork GTWSM: test report N° 575-16TD-IMO dated 08/04/2016, as per IMO 2010 FTP Code Annex 1 Part 3, from TÜV OÜ, Estonia.

3.2 - Bulkhead - Size 1200x1600 mm/Actuator Air Torque AT301, Size 300x300 mm/Actuator Elodrive CSQP-15A1E, Size 200x200 mm/Actuator BELIMO BF-230-2HL: test report N° 561-15TD-IMO dated 19/02/2016, as per IMO 2010 FTP Code Annex 1 Part 3, from TÜV OÜ, Estonia.

3.3 - Bulkhead - Size 1200x1600 mm/Actuator Rotork GTWSM, Size 300x300 mm/Actuator Schischek InMax-15-SF, Size 200x200 mm/Actuator Air Torque AT104: test report N° 552-15TD-IMO dated 03/02/2016, as per IMO 2010 FTP Code Annex 1 Part 3, from TÜV OÜ, Estonia.

3.4 - Bulkhead - Size 1200x1600 mm/Actuator AirTorque AT301: test report N° 573-16TD-IMO dated 06/04/2016, as per IMO 2010 FTP Code Annex 1 Part 3, from TÜV OÜ, Estonia.

3.5 - Bulkhead - Size 2500x2600 mm (modular)/ Actuator Air Torque AT351: test report N° 614-16TD-IMO dated 30/08/2016, as per IMO 2010 FTP Code Annex 1 Part 3, from TÜV OÜ, Estonia.

3.6 - Deck - Size 1200x1600 mm/Actuator Air Torque AT351, Size 300x300 mm/Actuator Elodrive CSQP-15A1E, Size 200x200 mm/Actuators BELIMO BF-230-2HL and Rotork GTWSM: test report N° VTT-S-04567-15 dated 11/02/2016, as per IMO 2010 FTP Code Annex 1 Part 3, from VTT, Finland.

3.7 - Deck - Size 1200x1600 mm/Actuator Rotork GTWNM: test report N° VTT-S-00639-16 dated 10/03/2016, as per IMO 2010 FTP Code Annex 1 Part 3, from VTT, Finland.

3.8 - Deck - Size 1200x1600 mm/Actuator Rotork GTWSM, Size 300x300 mm/Actuator Air Torque AT104, Size 200x200 mm/Actuator Schischek InMax-15-SF: test report N° VTT-S-00798-16 dated 09/05/2016, as per IMO 2010 FTP Code Annex 1 Part 3, from VTT, Finland.

3.9 - Deck - Size 1200x1600 mm/Actuator Rotork GTWSM, Size 300x300 mm/Actuator Festo DAPS, Size 200x200 mm/Actuators Festo DAPS and Air Torque AT101: test report N° VTT-S-04439-15 dated 14/01/2016, as per IMO 2010 FTP Code Annex 1 Part 3, from VTT, Finland.

3.10 - Statement N° VTT-S-00593-16 dated 05/02/2016, from VTT Expert Services, Finland (new manual override).

3.11 - Bulkhead - Size 1200x1200 mm/ Actuator PETZ QT.Ex-MFD03: test report N° RS-18/B-205-E dated 15/06/2018, as per IMO 2010 FTP Code Annex 1 Part 3 by C.T.O. S.A., Poland (new actuator, new sealant and new insulation wool).

3.12 - Test report N° RS-20/B-016/E dated 25/02/2020, as per IMO 2010 FTP Code Annex 1 Part 3, from C.T.O. S.A., Poland.

#### **4. APPLICATION / LIMITATION:**

4.1 - The tests have been carried out with fire insulating material "**Paroc Marine Wired Mat 100**" (density 100 kg/m<sup>3</sup>) or "**Fyre Wrap LT Blanket**" (density 128 kg/m<sup>3</sup>); any alternative insulation material, previously proven and approved, giving at least an equivalent insulation performance, can be used.

4.2 - Approved for use in:

- A-15, A-30, A-60 class steel deck/bulkhead with fire insulation as described in §1.
- A-0 class steel deck/bulkhead without fire insulation.

4.3 - The arrangement of the fire damper (coaming / fire insulation ...) is subject to approval in each case.

4.4 - The damper is to be:

- provided with an indicator which shows whether the damper is open or closed. This indicator is to be fitted on the damper out of the insulation coating, if any.
- capable of being closed manually from both sides of the division.

4.5 - Actuators of same mode (pneumatic, manual or electric) and manufacturer as tested ones but with different size may also be used, provided that they have sufficient torque, a similar installation arrangement and equivalent fire technical and functional properties.

4.6 - 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 E "Product Quality Assurance" or 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 site:

**Halton Marine Oy**  
**Pulttikatu 2**  
**15700 Lahti**  
**FINLAND**

**Halton Ventilation (Shanghai) Co Ltd**  
**Block 10, 600 Xinyuan Road**  
**Lingang New City, Pudong**  
**201306 Shanghai**  
**CHINA**

#### **6. MARKING OF PRODUCT:**

6.1 - 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).

6.2 - In pursuance of the EU/US MRA+, and in accordance with the Council Decision 2004/425/EC of 21 April 2004 amended by Decision 1/2018 of 18 February 2019, the product(s) marked as per MED 2014/90/EU may be marked with the USCG conformity marking as authorized by the Notified Body undertaking surveillance module.

**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 the Type Approval Certificate N° 46122/A1 MED issued on 24/01/2019 by the Society.

**\*\*\* END OF CERTIFICATE \*\*\***