

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB00007XD**

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 AS under the authority of the Government of Norway.

## This is to certify:

**That the Fire dampers**

with type designation(s)  
**EUSD and EUSDx (fire dampers for bulkhead)**

Issued to

**EUROPAIR S.R.L**  
**Cormano MI, MI, Italy**

is found to comply with the requirements in the following Regulations/Standards:  
Regulation (EU) 2021/1158,  
item No. MED/3.22. SOLAS 74 as amended, Regulation II-2/9 and IMO 2010 FTP Code

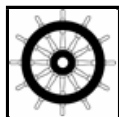
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-04-26**.

Issued at **Høvik** on **2022-04-27**

DNV local station:  
**Italy/Malta CMC**

Approval Engineer:  
**Lars Erik Hallbeck Parelus**



Notified Body  
No.: **0575**

for **DNV AS**

**Sverre Olav Bergli**  
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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

**LEGAL DISCLAIMER:** Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



## Product description

"EUSD and EUSDx (fire dampers for bulkhead)", are automatically operated multi bladed rectangular fire dampers. The damper casing is made of 2 mm thick upper and bottom frame of one profile with blade stop and two C-shaped lateral frames. These elements which conform the frame is fixed together by means of rivets ( $\varnothing$  6.5 x 12 mm) and spot welding of an L-shaped connecting corner profile. The 1.5 mm thick damper blades are shaped to a double skin hollow profile and are fastened to the shaft by means of two rivets ( $\varnothing$  6.5 x 30 mm) per end of each blade and one welded point at 60 mm at the end of each blade.

The coaming is made of 5 mm thick galvanized steel and is fixed to the bulkhead by means of welding and to the damper by means of bolts and nuts (M8 x 25 mm). The outer surface of the coaming is insulated with one layer of 60 mm thick semi-rigid slab of stone wool of type SeaRox SL 620 with density 100 kg/m<sup>3</sup> (manufactured by Rockwool International A/S). The contact surface between each damper and coaming is insulated with 30 x 3 mm mineral fibre sealant of type PAPERSEAL ECO with density 190 kg/m<sup>3</sup> (manufactured by BIFIRE S.r.l.).

EUSD is made of galvanized steel (material Z200).  
EUSDx is made of stainless steel (material AISI 316L).

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

## Application/Limitation

Approved for use in ducts penetrating A-class steel bulkheads. Other applications are subject to case-by-case approval.

Table 1. Approved fire dampers

| Type designation | Material                             | Fire rating |
|------------------|--------------------------------------|-------------|
| EUSD             | Galvanized steel (material Z200)     | A-60        |
| EUSDx            | Stainless steel (material AISI 316L) | A-30        |

Max. fire damper size: 1000 x 1150 mm (W x H)  
Max. blade size: 994 x 148mm (W x H)  
Max. number of blades: 8

Actuators to be used:

- BF230-C232 (manufactured by Belimo)\*
- InMax 15-BF (manufactured by Schischek GmbH)\*

\* Actuators of same brand as mentioned above but with different size may also be used, provided that they have sufficient torque, similar installation arrangement and equivalent fire technical and functional properties.

The arrangement of the fire damper and necessary insulation of damper frame and ducting in the vicinity of the partition is subject to approval in each case.

The insulation used is to be regarded as minimum insulations for all fire rating and is not to be removed if the fire damper is to be used in division with lower fire ratings.

The damper shall be capable of being closed from both sides of the bulkhead.

Each product is to be supplied with its manual for installation, use and maintenance.

## Type Examination documentation

Test Report No. 21/25268-1563 dated 30 November 2021 from APPLUS, Barcelona, Spain.

Drawing No. 075\_21 (4 sheets) dated 20 May 2021 from manufacturer.

Drawing No. 076\_21 (4 sheets) dated 20 May 2021 from manufacturer.

## Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

## Marking of product

The product or packing 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).