EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB00009C7

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)
Deck MFD type fire damper

issued to
Wozair Limited
Gillingham, Kent, United Kingdom

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2024/1975,**
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 **2029-11-25**.

Issued at **Høvik** on **2024-11-26**

DNV local unit:
UK & Ireland CMC & VMC

Approval Engineer:
Marta Kropiwnicka

Notified Body
No.: **0575**

for **DNV AS**

Mydlak-Röder, Christine
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 1/2023 dated August 21st, 2023.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"Deck MFD type fire damper"
composed of single or multi-bladed rectangular fire damper with manual/automatic/pneumatic actuation. Damper blades made from 1.2 mm or 1.5 mm mild steel/stainless steel and damper casing made from min. 2.0 mm thick mild steel/stainless steel. The damper casing is 200 mm or 300 mm deep.

Coamings are covered with one or two layers of insulation.

Kerafix 2000 ceramic fibre tape is applied between the fire damper and spigot mating flange, both sides of bolt holes.

For further details, see Type Examination documentation below.

Application/Limitation

Approved for installation in A-class steel deck. Other applications are subject to case-by-case approval.

For fire dampers to be mounted in A-0 decks, no insulation of the coaming/duct is required, subject to case-by case approval.

The arrangement of the fire damper and necessary insulation of damper frame and ducting in the vicinity of the partition are 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.

Size of MFD dampers:

Fire Damper type	Damper size W x H [mm]	Coaming length on exposed side [mm]	Coaming length on unexposed side [mm]	Coaming thickness [mm]	Length of the second insulation layer on the exposed side [mm]	Length of the second insulation layer on the unexposed side [mm]	Maximum blade length [mm]	Maximum blade width [mm]	Max. number of blades
MFD*1)	150 x 150	250	1000	5	250	0	142	144	1
MFD	1220 x 1220	200	2500	5	200	200	1212	251	5
MFD	1220 x 1525 1)	250	2500	5	250	200	1212	196	8
		450	1500		0	0		262	6
MFD	2500 x 1220 2)	125	2500	5	125	250	1180	182	7
MFD*2)	1500 x 1500 3)	150	2000	5	150	250	682	235	3

1) Max. size of single damper
2) 2-section mullion arrangement
3) 4-section mullion and transom arrangement
*1) Fire dampers covered with insulation SeaRox SL 620 type (density 100 kg/m^3, produced by Rockwool)
*2) Fire dampers covered with insulation FireMaster Marine Plus blanket (density 80 kg/m^3, produced by Morgan Thermal Ceramics)

Pneumatic or electric actuators that may be used:
- Belimo type BF, BFL and BFN. (*)
- Johnson Controls M series. (*)
- Petz QT.Ex spring return and fire trigger Petz FT.Ex. (*)
- Petz QT.Nc actuator with Petz FT.Nc thermal sensor. (*)
- Powertork PT series and corresponding Alpha products. (*)
- Schischek type ExMax, InMax and RedMax. (*)
- Wozair spring manual latch assembly. (*)

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

The fire dampers shall be capable of being closed from both sides of the deck.

* Steel thickness of damper casing to be equal to or greater than thickness of duct/sleeve required by the rules if the damper casing is part of the duct/sleeve.

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

Type Examination documentation

Test report No. 20/21989-610 dated 22 September 2020 from Applus Lab., Spain.

Test report No. 01.26109.01.001 dated 15 October 2020 from Southwest Research Institute, Texas, USA.
Test report No. 18/16521-312 dated 20 September 2018 from Applus Lab., Spain.
Test report No. 400624 dated 20 November 2018 from Exova Warringtonfire, Warrington, UK.
Test report No. 537451 dated 1 May 2024 from Warringtonfire, Warrington, UK.
Test report No. FT24101 dated 8 April 2024 from Far East Fire Testing Centre, Shanghai, China.

Drawing No. 870.2356 dated 4 May 2018 from manufacturer.
Drawing No. 870.2488_11 dated 30 September 2024 from manufacturer.
Drawing No. 870.2488_12 dated 30 September 2024 from manufacturer.
Drawing No. 870.2488_13 dated 30 September 2024 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, MED Mark of Conformity and USCG approval number if applicable (see first page).