DNV·GL

Certificate No:
MEDB00005D4

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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 GL AS under the authority of the Government of Norway.

This is to certify:

That the Fire dampers

with type designation(s)
LFD

Issued to
Wozair Limited
Gillingham, Kent, United Kingdom

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397,**
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 **2024-11-04**.
Issued at **Høvik** on **2019-11-05**

DNV GL local station:
Southampton

Approval Engineer:
Helge Bjørnarå

Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

NORWEGIAN ACCREDITATION PROD 019

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Product description

"LFD",
composed of single or multi-bladed rectangular fire damper with manual/automatic/pneumatic actuation. Damper blades made from 1.5 mm mild steel /stainless steel and damper casing made from min. 1.5 mm mild steel/stainless steel (*see application/ limitation below). The damper casing can be 150 mm or 200 mm deep.

Application/Limitation

Approved for use in ventilation ducts penetrating A-class bulkheads/decks. The damper satisfies for 60 min. the requirements to stability and integrity according to Chapter II-2, regulation 3 of the SOLAS Convention.

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. Insulation to be used for all fire ratings, using steel pins, wire mesh and washers.

Size of LFD damper:

	A-class (H x W)	
Size	Deck [mm]	Bulkhead [mm]
Min.	100 x 100	100 x 100
Max.	1000 x 1000	1000 x 1000

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. (*)
- Powertork PT series and corresponding Alpha products. (*)
- Schischek type EX and RedMax. (*)

(*) Actuators of same make 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 bulkhead/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 and use.

Type Examination documentation

Test report No. 143264 dated 21 December 2004 from Warrington, Warrington, UK.
Test report No. 143265 dated 22 December 2004 from Warrington, Warrington, UK.
Test report No. 176173, issue 2, dated 6 January 2009 from Bodycote warringtonfire, Warrington, UK.
Test report No. 176174, issue 2, dated 7 January 2009 from Bodycote warringtonfire, Warrington, UK.
Test report No. 383115 dated 15 September 2017 from Exova Warringtonfire, Warrington, UK.

Tests carried out

Tested (in 2004-2009) according to IMO FTP Code Part 3 and in compliance with IMO 2010 FTP Code Ch.8. Tested (in 2017-) according to IMO 2010 FTP Code part 3.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG Approval Number if applicable (see first page).