

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Fire dampers

with type designation(s)
CFH(F)(Q) and CFH(F)(Q)D

Issued to

Jiangsu Yiyuan Ventilation Manufacture Co., Ltd.
Taixing, 100, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773**,
item No. MED/3.22. SOLAS 74 as amended, Regulation II-2/9 and IMO 2010 FTP Code

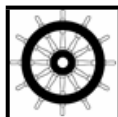
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2023-12-06**.

Issued at **Hamburg** on **2018-12-07**

DNV GL local station:
Jiangyin

Approval Engineer:
Roland Priebe



Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudzus
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 European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

CFH(F)(Q) and CFH(F)(Q)D are automatic fire dampers and are designed for use in ventilation systems penetrating class A-60 bulkheads.

The CFF type is a rectangular electric operated fire damper with one insulated valve plate (20 mm thick, max. dimension tested 300 x 600 mm). The used electric actuator was a DDJG16-00 type from Jiangsu Yiyuan Ventilation Manufacture Co., Ltd.

The CFH type is a rectangular manual operated fire damper with one insulated valve plate (20 mm thick, max. dimension tested 80 x 120 mm).

The CFH DN type is a round manual operated fire damper with one insulated valve plate (20 mm thick, max. diameter tested 100 mm).

The CFQ DN type is a round pneumatic operated fire damper with one insulated valve plate (20 mm thick, max. diameter tested 400 mm). The used pneumatic actuator was a 45SR type from Wuxi St.Hans Controls Co., Ltd.

The CFFD DN type is a round electric operated fire damper with three insulated valve plates (22,8 mm thick, max. diameter tested 400 mm). The used electric actuator was a BFL24 type from BELIMO.

The insulation material used on damper body, external surface of coaming/spigot and in the interior of the damper blades is TG type ceramic wool (measured thickness = 20 mm, density = 162,6 kg/m³, organic content = 1,4 %) produced by Zhejiang Province Deqing County Pusen Fireproof Material Co., Ltd.

Actuator: Besides the a.m. actuators each damper is also fitted with automatic closing function set to 70° ± 3° C.

For further details please see under Type Examination documentation.

Application/Limitation

The fire dampers are approved for installation in steel bulkheads (vertically). Other applications are subject to case-by-case approval.

The fire damper shall be capable of being closed from both sides of the bulkhead and shall be fitted with open/close indicator.

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.

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 functional properties.

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

Type Examination documentation

Test report no. FT18069 dated 26 April 2018, from Far East Fire Testing Centre, Shanghai, China.

Marine Fire Damper – Technical Specifications
Marine Fire Damper – Test Outline

Drawing Nos.:

- CFH(F)(Q) DN-00 (3 pages),

Job Id: **344.1-007855-1**
Certificate No: **MEDB00003T1**

- CFH(F)(Q) a*b-00 (3 pages) and
- CFH(F)(Q)(D) DN-00 (16 pages).

Tests carried out

Tested according to IMO 2010 FTP Code, Annex 1, 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).