DNV·GL

Certificate No:
MEDB00005E0

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)
Circular bulkhead fire damper Type: CFHIICD 2000-Q

Issued to
Taizhou Hujiang Special Equipment Co., Ltd.
Taizhou, 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 **2020-08-19**.

Issued at **Hamburg** on **2019-06-13**

DNV GL local station:
Jiangyin

Approval Engineer:
Timo Linn

Notified Body
No.: **0098**

for **DNV GL SE**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Product description

Multi blade (multi-layer) circular steel fire damper, Type: CFHIICD 2000-Q/Z/S, max. clear opening size: ø2000 mm. The fire damper can be activated automatically by fusible metal rod (70°C +/-3°C), manual, pneumatically or by electrical operated system. The blades consist of 48 mm DJS type super light polycrystalline thread covered by 1 mm steel plates. Fire damper wall thickness is 8mm.

The insulation material of 2 x 20 mm ceramic wool, density 170 kg/m³) used on coaming and fire damper 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 fire damper is flanged to the coaming using M20 bolting. Coaming is made of 5mm thick steel and seal welded to the steel bulkhead/deck. Length between coaming flange and steel bulkhead is min. 225 mm on exposed side, and min. 500 mm on unexposed side. Casing and blades have been insulated.

Insulation:
Casing: ceramic wool, nominal density 170 kg/m³, manufactured by Deqing County Pusen Fireproof Material Co., Ltd Zhejiang Province.
Damper blades: DJS type super light polycrystalline thread, density of 120Kg/m³, manufactured by Deqing County Pusen Fireproof Material Co., Ltd Zhejiang Province.

For further details, see Type Examination documentation below.

Application/Limitation

Approved for use in ducts penetrating class A-60 steel bulkhead.
The damper shall be capable of being closed from both sides of the bulkhead or deck

Maximum size of damper: 2000 mm in diameter
Maximum number of blades: 9

Actuation is done manually or automatically by thermal triggering device (bulb) combined with an pneumatic spring return actuator (see below) or electrical actuator.

Actuator to be used:
- αA-125SR pneumatic actuator manufactured by Wuxi St.Hans Pneumatic Actuators Valves Maker Co., Ltd. (*)
- BLF230 electrical actuator manufactured by BELIMO Automation AG (*)
- SKZB manual actuator manufactured by Taizhou Hujiang Special Equipment Co., Ltd. (*)

(*) 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.

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.

The fire damper is to be fitted with open/close indication and shall be easily accessible.

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

Type Examination documentation

Test Report No. FT14377 dated 2014-12-22 issued by Far East Fire Testing Centre, Shanghai, China.

Certificate has been renewed based on the MED B Certificate 14734-15 HH

Tests carried out

Tested according to IMO 2010 FTP Code Annex1, Part 3.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire-technical rating, MED Mark of Conformity and USCG approval if applicable.