

TYPE APPROVAL CERTIFICATE
No. **LAB453405CS/2**



This is to certify that the product identified below is in compliance with the regulations herewith specified.

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|-----------------------------|---|
| <i>Description</i> | Fire dampers |
| <i>Type</i> | MULTI BLADE FIRE DAMPER TYPE FDB |
| <i>Applicant</i> | HALTON OY PULTTIKATU 2 15700 LAHTI FINLAND |
| <i>Manufacturer</i> | HALTON OY |
| <i>Place of manufacture</i> | PULTTIKATU 2 15700 LAHTI FINLAND |
| <i>Reference standards</i> | Chap. II-2 of SOLAS 74 Convention, as amended; Chapter 4, Part C of RINA Rules |

Issued in Genoa on November 25, 2005. This Certificate is valid until November 9, 2010



RINA

Massimo Dinale

This certificate consists of this page and 1 enclosure

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MULTI BLADE FIRE DAMPER TYPE FDB

Product description

Steel square dampers having dimensions ranging from 100 x 100 mm to 1000 x 1000 mm. The damper blades and the casings are made of steel plates having thickness of 3 to 5 mm; the casings may be welded or bolted to the deck or bulkhead plating. The damper may operate automatically with fusible link with electrical motor, pneumatic linear or rotary actuator having spring giving at least 2 Nm torque or manually with or without fusible link.

Field of application

Fire resistant A-60 class dampers for passage through decks (dimensions ranging from 100 x 100 mm to 1000 x 1000 mm) and bulkheads (dimensions 100 x 100 mm). Dampers having dimensions greather than 100 x 100 mm up to 1000 x 1000 mm are A-30 class when used on bulkheads.

Reference documents

Halton Oy drawings enclosed to VTT Building Technology of Finland Test Report No. PAL11/93 dated 30 June 1993 and No. RTE11128/96 dated 16 December 1996.

Tests carried out

Tests as per VTT Building Technology of Finland Test Report No. PAL11/93 dated 30 June 1993 and No. RTE11128/96 dated 16 December 1996 issued according to IMO Res. A. 754(18).

Remarks

Each item of the mass production to be fitted on vessels classed by RINA is to be previously inspected at the manufacturer workshop by a RINA Surveyor and is to be marked or labelled with the trade name and the data of the Company to whom this Certificate is addressed. The validity of this Certificate ceases in the case of amendments to the rules on the basis of which the Certificate was issued.

Genoa November 25, 2005

