



DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. F-18845

This Certificate consists of 3 pages

This is to certify that the
Fire Damper

with type designation(s)
A-60 Marine

Manufactured by
Ruskin Air Management Ltd.
Whitstable, United Kingdom

is found to comply with
Det Norske Veritas' Rules for Classification of Ships
Det Norske Veritas' Offshore Standards
Det Norske Veritas' Interpretation of SOLAS 1974 Convention as Amended

Application

Approved for use in ducts penetrating class A bulkheads and decks. Min. size of damper:
100 x 100 mm or Ø100. Max size of damper: 1000 x 1000 mm or Ø1000.

Place and date

Høvik, 2008-11-18

for DET NORSKE VERITAS AS

Petter Langnes
Head of Section



Local Office
DNV London

This Certificate is valid until

2012-12-31

Helge Bjørnara
Surveyor

Notice: This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Cert. No.: F-18845
File No.: 472.22
Case No.: 262.1-005923

Product description

“A-60 Marine”

is a single or multi bladed fire damper consisting of a 0.9 mm galvanized steel inner casing, a 1.2 mm galvanized fully welded steel outer casing* and 0.5 mm stainless steel double skin hollow profile shaped blade(s). The damper is 150 mm or 210 mm deep. Dampers are operated by electric or pneumatic actuators that are spring operated with automatic fail safe thermal actuator.

Fire dampers are manufactured by Ruskin Air Management Ltd., Whitstable, Kent, UK.

Applications/Limitations

Approved for use in ventilation ducts penetrating A-class bulkheads/decks.

For all A-class divisions, including A-0, the damper sleeve is to be A-60 insulation on the damper side. For A-15, A-30 and A-60 divisions the ducts are to be additionally insulated by the extension of the insulation at the same level of the division for at least 450 mm.

*Steel thickness of outer casing to be made from 3 to 5 mm steel for widths or diameters from 300 mm to 760 mm and over for dampers intended to be part of sleeves/ducts with thickness specified in the rules. Outside the sleeve the outer casing may have minimum thickness of 1.2 mm (2.0 and 3.0 mm casings are also acceptable).

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. Multiple dampers may be used. Max size is 1580 x 750 mm.

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

Type Approval documentation

Certification in accordance with Certification Note No. 1.2, Type Approval, December 1996.

Initial survey report from DNV London dated 7 August 2008.

Test report Nos. TE201588 dated 2 January 2001, TE202091 dated 28 February 2001 and 208147A dated 17 May 2002 from BRE, Hertfordshire, UK and test report Nos. 2005CS013898 dated 13 October 2005 and 2006CS013874 dated 12 October 2006 from Rina, Genova, Italy.

Tested according to IMO FTPC Part 3 (IMO Res. A.754(18)).



12



Cert. No.: F-18845
File No.: 472.22
Case No.: 262.1-005923

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire-technical rating.

Certificate retention survey

Det Norske Veritas' surveyor is to be given permission to perform Certification Retention Surveys at any time during the validity period of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in item 4.3, Certification Note No. 1.2.

END OF CERTIFICATE

