



CERTIFICATE NUMBER

DATE

11-LD766034B-PDA

07 July 2011

ABS TECHNICAL OFFICE

London Engineering Department

# CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of **APOLLO FIRE DETECTORS LIMITED - HAMPSHIRE**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

PRODUCT: **Fire Detector**

MODEL: **Apollo Orbis Conventional Range of Flame/Smoke/Heat Detectors and Accessories**

This Product Design Assessment (PDA) Certificate 11-LD766034B-PDA, dated 07/Jul/2011 remains valid until 06/Jul/2016 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Wing F. Cheung  
Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

**APOLLO FIRE DETECTORS LIMITED**

36 BROOKSIDE ROAD  
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HAMPSHIRE  
ENGLAND PO9 1JR  
United Kingdom  
Telephone: 44-2392-492-412  
Fax: 44-2392-492-754  
Web: www.apollo-fire.co.uk

MA Certificate No. 09-SO1732027-X

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**Product:** Fire Detector

**Model:** Apollo Orbis Conventional Range of Flame/Smoke/Heat Detectors and Accessories

**Intended Service:**

Conventional fire detection systems for marine and offshore applications in machinery and accommodation spaces

**Description:**

The Orbis range detectors are microprocessor based conventional fire detection units comprising:

ORB-HT-41001-MAR Class A1R Heat Detector with SensAlert/FasTest  
ORB-HT-41002-MAR Class A2S Heat Detector with SensAlert/FasTest  
ORB-HT-41003-MAR Class BR Heat Detector with SensAlert/FasTest  
ORB-HT-41004-MAR Class BS Heat Detector with SensAlert/FasTest  
ORB-HT-41005-MAR Class CR Heat Detector with SensAlert/FasTest  
ORB-HT-41006-MAR Class CS Heat Detector with SensAlert/FasTest  
ORB-HT-41013-MAR Class A1R Heat Detector with Flashing LED/SensAlert/FasTest  
ORB-HT-41014-MAR Class A2S Heat Detector with Flashing LED/SensAlert/FasTest  
ORB-HT-41015-MAR Class BR Heat Detector with Flashing LED/SensAlert/FasTest  
ORB-HT-41016-MAR Class BS Heat Detector with Flashing LED/SensAlert/FasTest  
ORB-HT-41017-MAR Class CR Heat Detector with Flashing LED/SensAlert/FasTest  
ORB-HT-41018-MAR Class CS Heat Detector with Flashing LED/SensAlert/FasTest  
ORB-MB-00001-MAR Timesaver Base ✓  
ORB-OH-43001-MAR Multisensor Smoke Detector with SensAlert/FasTest/DirtAlert  
ORB-OH-43003-MAR Multisensor Smoke Detector with Flashing LED/SensAlert/FasTest/DirtAlert  
ORB-OP-42001-MAR Optical Smoke Detector with SensAlert/FasTest/DirtAlert ✓  
ORB-OP-42003-MAR Optical Smoke Detector with Flashing LED/SensAlert/FasTest/DirtAlert  
ORB-RB-40004-MAR Relay Base  
55000-026-MAR UV Flame Detector

**Ratings:**

Smoke/Heat Detectors  
Nominal voltage: 8.5 to 33V DC (non-polarised);  
Operating temperature: -40°C to 70°C;  
Ingress protection: IP44  
Flame Detector 55000-026MAR  
Nominal voltage 12 to 33V DC;  
Operating temperature -40°C to 55°C;  
Sensitivity selectable Class 1 (default) or Class 3;  
Operating range 25m for 0.1m<sup>2</sup> n-heptane fire;  
Field of View 90 degree cone



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**Service Restrictions:**

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined. Not suitable for hazardous area applications.

**Comments:**

Tests and approval are for hardware only. Each configuration and external connection is to be specifically approved.

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**Notes / Drawings / Documentation:**

This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

**Term of Validity:**

This Product Design Assessment (PDA) Certificate 11-LD766034B-PDA, dated 07/Jul/2011 remains valid until 06/Jul/2016 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

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**STANDARDS**

**ABS Rules:**

2011 Steel Vessel Rules 1-1-4/7.7, 4-7-3/11.5, 4-9-7/13

**National:**

BS EN 54 Parts 5:2001, 7:2001, 10:2002 as applicable

**International:**

IMO FSS Code Chapter 9

**Government Authority:**

NA

**EUMED:**

European Union Marine Equipment Directive 96/98/EC as Amended by 2008/67/EC. Item A.1/3.51 Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, machinery spaces and unattended machinery spaces.

**Others:**

NA



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