



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

25-0287000-PDA
09-May-2025
08-May-2030
London Engineering Department

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

APOLLO FIRE DETECTORS LIMITED

located at

**36 BROOKSIDE ROAD, HAVANT, , HAMPSHIRE, United Kingdom,
PO9 1JR**

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
Endorsements:
Tier: 3 - Type Approved, unit certification not required

This Product Design Assessment (PDA) Certificate remains valid until 08/May/2030 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

SBarua

Siddharth Barua,Engineer/Consultant

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 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

HAVANT

HAMPSHIRE ENGLAND

United Kingdom PO9 1JR

Telephone: 44-2392-442875

Fax: N/A

Email: Billy.blakeman@apollo-fire.com

Web: www.apollo-fire.co.uk

Tier: 3 - Type Approved, unit certification not required

Product: Fire Detector

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

Endorsements:

Intended Service:

For use on ABS Classed Vessels and Offshore Facilities in accordance with the listed ABS Rules, International and National Standards.

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

Rating:

Smoke/Heat Detectors

Nominal voltage: 8.5 to 33V DC (non-polarised);

Operating temperature: -40C to 70C;

Ingress protection: IP44

Flame Detector 55000-026MAR

Nominal voltage 12 to 33V DC;

Operating temperature -40C to 55C

Sensitivity selectable Class 1 (default) or Class 3

Operating range 25m for 0.1m² n-heptane fire

Field of View 90 degree cone

Service Restriction:

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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ATEX certified equipment is not to be installed in hazardous areas on U.S. Flagged Vessels, unless it can be proven to have been tested to the IEC 60079 series standards by an independent laboratory accepted by the U.S. Coast Guard. USCG MI Notice 01-12 (February 7, 2012).

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Drawing Submitted During this Review

Drawing No. ABS - Conformity of Compliance, Pages: 1

Previously Submitted Drawing

Drawing No. 18R110 ER , Test Report, Revision: 1, Date: 25-Mar-2018, Hursley EMC, Pages: 72

Drawing No. TL18051A, Test Report, Date: 17-Jul-2018, Mariner Systems, Revision: 1, Pages: 105

Drawing No. 38531-902_8, IS optical orbis chamber, Revision: 1, Pages: 1

Drawing No. 38531-969_4, Orbis optical chamber, Revision: 1, Pages: 1

Drawing No. P101167-1001 Test Report, EN 54-7 test report, Revision: -,

Drawing No. PP2250/2006/Issue 1, Orbis Intrinsically Safe Product Guide,

Drawing No. PP2147/2010/Issue 4, Orbis Product Guide

Terms of Validity:

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STANDARDS

ABS Rules:

Marine Vessels Rules (2025): 1-1-4/7.7, 1-1-A3, 1-1-A4 which covers the following:
4-7-3/11.3.3a)ii; 4-7-3/11.3.3a)iii; 4-7-3/11.3.3a)v

Offshore Rules (2025) 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:
4-1-1/7.9, 4-3-1/11,6-1-8/9

National:

EN 54-7:2018

International:

IMO FSS Code as amended (2024) , Chapter 9 rules 2.3.1.1; 2.3.1.2; 2.3.1.3

Government:

NA

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EUMED:

Approved in accordance with the Fire protection equipment requirements for fixed fire detection and fire alarm systems components – item MED/3.51 of the European Union Marine Equipment Directive 2014/90/EU

OTHERS:

NA