



Confirmation of Product Type Approval

Company Name: APOLLO FIRE DETECTORS LIMITED

Address: 36 BROOKSIDE ROADHAVANT PO9 1JR United Kingdom

Product: Fire Detector

Model(s): Apollo Orbis Conventional Range of Intrinsically Safe Smoke/Heat Detectors and Accessories

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	20-1966612-PDA	09-APR-2020	08-APR-2025
Manufacturing Assessment (MA)	20-4185318	10-MAR-2020	09-MAR-2025
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3

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 IS range detectors are microprocessor based conventional fire detection units with standard IS (time-saving) electronic-free bases comprising optical smoke detectors, multisensor smoke detectors and heat detectors. The following part numbers and classifications are included in the range:

ORB-BA-50008-APO Adaptor Base

ORB-HT-51145-APO Class A1R Heat Detector with SensAlert/FasTest

ORB-HT-51146-APO Class A1R Heat Detector with Flashing LED/SensAlert/FasTest

ORB-HT-51147-APO Class A2S Heat Detector with SensAlert/FasTest

ORB-HT-51148-APO Class A2S Heat Detector with Flashing LED/SensAlert/FasTest

ORB-HT-51149-APO Class BR Heat Detector with SensAlert/FasTest

ORB-HT-51150-APO Class BR Heat Detector with Flashing LED/SensAlert/FasTest

ORB-HT-51151-APO Class BS Heat Detector with SensAlert/FasTest

ORB-HT-51152-APO Class BS Heat Detector with Flashing LED/SensAlert/FasTest

ORB-HT-51153-APO Class CR Heat Detector with SensAlert/FasTest

ORB-HT-51154-APO Class CR Heat Detector with Flashing LED/SensAlert/FasTest

ORB-HT-51155-APO Class CS Heat Detector with SensAlert/FasTest
ORB-HT-51156-APO Class CS Heat Detector with Flashing LED/SensAlert/FasTest
ORB-HT-51157-APO Class A1S Heat Detector with SensAlert/FasTest
ORB-HT-51158-APO Class A1S Heat Detector with Flashing LED/SensAlert/FasTest
ORB-MB-50018-APO Timesaver Base
ORB-OH-53027-APO Multisensor Smoke Detector with SensAlert/FasTest/DirtAlert
ORB-OP-52027-APO Optical Smoke Detector with SensAlert/FasTest/DirtAlert
ORB-OP-52028-APO Optical Smoke Detector with Flashing LED/SensAlert/FasTest/DirtAlert
ORB-OH-53028-APO Multisensor Smoke Detector with Flashing LED/SensAlert/FasTest/DirtAlert

Ratings

Nominal voltage: 14 to 24V DC (non-polarised);

Ingress protection: IP44;

IS Certification: 06ATEX0007X;

Operating temperature: - 40C to 70C;

Classification: II 1G Ex ia IIC T5 or T4;

Certification: BASEEFA 06 ATEX 0007X and IECEx BAS 06.0002X

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.

Comments

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

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).

Notes, Drawings and Documentation

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

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

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

Drawing No. TL18051B, Test Report, Revision: 1, Date: 23-Jul-2018, Mariner Systems, Pages: 100

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 08/Apr/2025 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.

ABS Rules

- Marine Vessel Rules (2020): 1-1-4/7.7, 1-1-A3&A4, 4-7-3/11.3.3a)ii; 4-7-3/11.3.3a)iii; 4-7-3/11.3.3a)v;
- Facilities on Offshore Installations (2020): 1-1-4/9.7, 1-1-A2&A3;
- Mobile Offshore Units (2020): 1-1-4/9.7, 1-1-A2&A3, 4-1-1/7.9, 4-3-1/11, 6-1-1/9, 6-1-1/13;
- Steel Vessels for Service on Rivers and Intracoastal Waterways (2020): 1-1-4/7.7, 1-1-A3&A4;
- High Speed Crafts (2020): 1-1-4/11.9, 1-1-A2&A3, 4-6-1/11, 4-7-9/7, 4-7-9/15;
- Steel Barge Rules (2020): 1-1-4/7.9, 1-1-A3&A4;

International Standards

IMO FSS Code 2015 Edition, Chapter 9 rules 2.3.1.1; 2.3.1.2; 2.3.1.3

EU-MED Standards

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

National Standards

EN 54-7: 2018

Government Standards

NA

Other Standards

NA



Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 01-Jun-2020 4:09

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

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 prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.