



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	Apollo Fire Detectors Ltd
Address	36 Brookside Road, Havant, PO9 1JR, United Kingdom
Type	Fire Detection Alarm Systems
Description	Heat
Trade Name	ORBIS
Application	Marine, offshore and industrial use in Environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register Test Specification No. 1: 2015
Specified Standard	EN54-5: 2017
Ratings	ORBIS Range comprising of: ORB-MB-00001-MAR: Orbis TimeSaver base ORB-RB-40004-MAR: Orbis TimeSaver relay base ORB-HT-41001-MAR: Class A1R with SensAlert and FasTest ORB-HT-41002-MAR: Class A2S with SensAlert and FasTest ORB-HT-41013-MAR: Class A1R with SensAlert, FasTest and Flashing LED ORB-HT-41014-MAR: Class A2S with SensAlert, FasTest and Flashing LED ORBIS (Intrinsically Safe) Range comprising of: ORB-HT-51145-APO: Class A1R with SensAlert and FasTest

Matt Higgins

Senior Electrical Specialist to Lloyd's Register
EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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ORB-HT-51146-APO:	Class A1R with SensAlert, FasTest and Flashing LED
ORB-HT-51157-APO:	Class A1S with SensAlert and FasTest
ORB-HT-51158-APO:	Class A1S with SensAlert, FasTest and Flashing LED
ORB-HT-51147-APO:	Class A2S with SensAlert and FasTest
ORB-HT-51148-APO:	Class A2S with SensAlert, FasTest and Flashing LED
ORB-MB-50018-APO:	Orbis IS TimeSaver Base
ORB-BA-50008-APO:	Orbis IS Base Adaptor (in conjunction with 45681- 207 base)

Additional Tests

Hazardous Areas Components (ATEX):
EEX II 1G Ex ia IIC T4(- 40° C </- Ta </- + 60° C) / T5(- 40° C </- Ta </- +40° C)

Other Conditions

- 1.Type Approval of products according to Test Specification No. 1 is essentially for hardware. Examination of software aspects is restricted to functional operation as demonstrated in the Performance Test.
- 2.The requirements of the Lloyd's Register (LR) Rules apply when the equipment is installed on LR Classed vessels and offshore installations.
- 3.Maximum operating voltage is 28V in accordance with specification.
- 4.Screened cable is to be used for all installations.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 04/00090(E4)

The Design Appraisal Document LR2375372TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT

Issue by: UKITSO SOUTHAMPTON

Issued to: APOLLO FIRE DETECTORS LTD

For: ORBIS IS (INTRINSICALLY SAFE) RANGE (CLASS A1R, A1S & A2S)

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 04 (September 2020) and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

ISO9001:2015 Certificate No 10 Iss 19 6 Jul 2021

DATA SHEETS

200-HT-00001 Issue 2, Orbis (PIC) Heat Detector PCB, SMD Assembly	Apr 09
400-HT-00001 Issue 2, Orbis (PIC) Heat Detector, Un-configured Assembly	Aug 10
400-HT-00002 Issue 2, Orbis (Texas Chip), Heat Detector, Un-configured Assembly	Aug 10
100-HT-00011 Issue 4, Orbis Intrinsically Safe Heat Detector Circuit Diagram	Jul 10
200-HT-00009 Issue 5 A, Orbis Intrinsically Safe, Heat Detector PCB, SMD Assembly	Dec 2014
400-HT-00011 Issue 2, Orbis Intrinsically Safe, Heat Detector, Un-configured Assembly	Aug 10
300-MA-00011 Issue 5, Orbis Intrinsically Safe, Timesaver Base Assembly	Jun 20017
100-RB-0007 Issue 2, Orbis Relay Base Circuit Diagram	Jun 13
200-RB-00005 Issue 4, Orbis Relay Base, PCB Assembly	Jun 13
300-MA-00005 Issue 5A, Orbis Fully Loaded Deep Base Assembly	Nov 07
400-RB-00007 Issue 3A, Orbis Base Assembly	Nov 07

TEST REPORTS

Certificate Of Constancy Of Performance Certificate No.: 2531-CPR-CSP11149	30 Jun 2022
Certificate Of Constancy Of Performance Certificate No 2531-CPR-CSP11153	8 Jul 2022
Certificate Of Constancy Of Performance Certificate No 2531-CPR-CSP11154	30 Jun 2022
Certificate Of Constancy Of Performance Certificate No 2531-CPR-CSP11155	30 Jun 2022
P105642-1.2 - Test schedule for EMC Update of Various Products Phase 2	18 Jul 2018
P105641/1.2 Test schedule for EMC Update of Various Products (Phase One)	13 Mar 2018
Lloyd's Register Inspection and Surveillance of Production Facilities SOU 1400418	25 April 2014
TE-P105641-1001 Iss1 EMC Test Report	31 Oct 2018
TE-P105642-1001 Iss 1 Variety of Detectors and Bases EMC Test Report	21 Mar 2019
Apollo Fire Detectors LTD Declaration of Performance No. 0832-CPD-0470	16 Nov 2015
Apollo Fire Detectors LTD Declaration of Performance No. 0832-CPD-0475	16 Nov 2015



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Certificate No: LR2375372TA
Issue Date: 22-February-2022
Expiry Date: 1 November 2024
Reference: UKITSO/TA/ETS/MJH/WP47948200

Matthew Higgins MIET
Senior Specialist
Electrotechnical Systems
UK&I Technical Support Office, Marine & Offshore
Lloyd's Register EMEA
Email: engineering@lr.org

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.

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