



## 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.

<b>Manufacturer</b>	<b>Apollo Fire Detectors Ltd</b>
<b>Address</b>	36 Brookside Road, Havant, PO9 1JR, United Kingdom
<b>Type</b>	Fire Detection Alarm Systems
<b>Description</b>	Heat Detector
<b>Trade Name</b>	ORBIS
<b>Application</b>	Marine, offshore, and industrial use in Environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register Test Specification No. 1: 2020.
<b>Specified Standard</b>	EN54-5: 2017
<b>ADDITIONAL TESTS</b>	Hazardous Areas Components (ATEX): EEX II 1G Ex ia IIC T4(- 40° C ≤ Ta ≤ + 60° C) / T5(- 40° C ≤ Ta ≤ + 40° C)
<b>Other Conditions</b>	<ol style="list-style-type: none"><li>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.</li><li>2. The requirements of the Lloyd's Register (LR) Rules apply when the equipment is installed on LR Classed vessels and offshore installations.</li><li>3. Maximum operating voltage is 28V in accordance with specification.</li></ol>

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**Matt Higgins**

Electrical & Control - Senior Specialist to  
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A member of the Lloyd's Register group

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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:** 04/00092(E4), LR2331152TA, LR2331152TA-01

The Design Appraisal Document LR2331152TA-02 and its supplementary Type Approval Terms and Conditions form part of this Certificate.



## LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT

Issue by: UKITSO SOUTHAMPTON  
Issued to: Apollo Fire Detectors Ltd  
For: HEAT DETECTOR

Types: ORBIS IS (INTRINSICALLY SAFE) RANGE (Category CR & CS)

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

ISO 9001: 2015 Certificate No 010 Iss 19 5 Jul 2021  
Schedule of accreditation BRE Global Ltd Iss 128 17 Feb 2022

### DATASHEETS

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 5A, 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 2017  
100-RB-00007 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, Relay Base Assembly Nov 07

### TEST REPORTS

Test schedule for EMC Update of Various Products (Phase One) No P105641/1.2 23 Jan 2018  
Test schedule for EMC Update of Various Products (Phase Two) No P105642/1.2 18 Jul 2018  
BRE Global Test Report No TE-P105641-1001 Iss1 31 Oct 2018  
BRE Global Test Report No TE-P105642-1001 Iss1 21 Mar 2019  
Certificate of Constancy of Performance Cert No 2531-CPR-CSP11149 30 Jun 2022  
Certificate of Constancy of Performance Cert No 2531-CPR-CSP11151 30 Jun 2022  
Certificate of Constancy of Performance Cert No 2531-CPR-CSP11152 30 Jun 2022  
Certificate of Constancy of Performance Cert No 2531-CPR-CSP11153 8 Jul 2022  
Certificate of Constancy of Performance Cert No 2531-CPR-CSP11154 30 Jun 2022  
Certificate of Constancy of Performance Cert No 2531-CPR-CSP11155 30 Jun 2022



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Certificate No: LR2331152TA-02  
Issue Date: 13-July-2023  
Expiry Date: 24-January-2028  
Reference: UKITSO/TA/ETS/MJH/WP50997357

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Certificate of Constancy of Performance Cert No 2531-CPR-CSP11157	13 Jul 2022
Certificate of Constancy of Performance Cert No 2531-CPR-CSP11158	13 Jul 2022
<b>Lloyd's Register Inspection and Surveillance of Production Facilities SOU 1400418</b>	25 April 2014
Apollo Fire Detectors LTD Declaration of Performance No. E0042	11 Jul 2022
Apollo Fire Detectors LTD Declaration of Performance No. E0043	5 Jul 2022

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**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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**ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR2331152TA**

**Appendix**

**TYPE**

ORBIS Range comprising of:

- ORB-MB-00001-MAR: Orbis TimeSaver base
- ORB-RB-40004-MAR: Orbis TimeSaver relay base
- ORB-HT-41005-MAR: Category CR with SensAlert and FasTest
- ORB-HT-41006-MAR: Category CS with SensAlert and FasTest
- ORB-HT-41017-MAR: Category CR with SensAlert, FasTest and Flashing LED
- ORB-HT-41018-MAR: Category CS with SensAlert, FasTest and Flashing LED

ORBIS IS (Intrinsically Safe) Range comprising of:

- ORB-HT-51153-APO: Category CR with SensAlert and FasTest
- ORB-HT-51154-APO: Category CR with SensAlert, FasTest and Flashing LED
- ORB-HT-51155-APO: Category CS with SensAlert and FasTest
- ORB-HT-51156-APO: Category CS 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)