



## 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: 2015
<b>Specified Standard</b>	EN54-5: 2017
<b>Ratings</b>	ORBIS Range comprising of: ORB-MB-00001-MAR: Orbis TimeSaver base ORB-RB-40004-MAR: Orbis TimeSaver relay base ORB-HT-41003-MAR: Class BR with SensAlert and FasTest ORB-HT-41004-MAR: Class BS with SensAlert and FasTest ORB-HT-41015-MAR: Class BR with SensAlert, FasTest and Flashing LED ORB-HT-41016-MAR: Class BS with SensAlert, FasTest and Flashing LED ORBIS (Intrinsically Safe) Range comprising of: ORB-HT-51149-APO: Class BR with SensAlert and FasTest

**Matt Higgins**

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A member of the Lloyd's Register group

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## Type Approval Certificate

LED	ORB-HT-51150-APO:	Class BR with SensAlert, FasTest and Flashing
	ORB-HT-51151-APO:	Class BS with SensAlert and FasTest
LED	ORB-HT-51152-APO:	Class BS with SensAlert, FasTest and Flashing
	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:** 04/00091(E4)

The Design Appraisal Document LR2375396TA 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 BR & BS)

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 Iss 19 Certificate No 010, Expires 6 Jul 2019

### **DATA SHEETS**

200-HT-00001 Issue 2, Orbis (PIC), Heat Detector PCB, SMD Assembly	Apr 2009
400-HT-00001 Issue 2, Orbis (PIC), Heat Detector, Un-configured Assembly	Aug 2010
400-HT-00002 Issue 2, Orbis (Texas Chip), Heat Detector, Un-configured Assembly	Aug 2010
100-HT-00011 Issue 4, Orbis Intrinsically Safe, Heat Detector Circuit Diagram	Jul 2010
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 2010
300-MA-00011 Issue 5, Orbis Intrinsically Safe, Timesaver Base Assembly	Jun 2017
100-RB-00007 Issue 2, Orbis Relay Base Circuit Diagram	Jun 2013
200-RB-00005 Issue 4, Orbis Relay Base, PCB Assembly	Jun2013
300-MA-00005 Issue 5A, Orbis Fully Loaded, Deep Base Assembly	Nov 2007
400-RB-00007 Issue 3A, Orbis, Relay Base Assembly	Nov 2007

### **TEST REPORTS**

Certificate Of Constancy Of Performance Certificate No.: 2531-CPR-CSP10936	10 Jun 2022
Certificate Of Constancy Of Performance Certificate No.: 2531-CPR-CSP11151	30 Jun 2022
Certificate Of Constancy Of Performance Certificate No.: 2531-CPR-CSP11152	30 Jun 2022
P105642-1.2 - Test Schedule for EMC of Various Products Phase 2	18 Jul 2018
TE-P105642-1001 Iss 1 Variety of Detectors and Bases EMC Test Report	21 Mar 2019
Lloyd's Register Inspection and Surveillance of Production Facilities SOU 1400418	25 Apr 2014
Apollo Fire Detectors LTD Declaration of Performance No. 0832-CPD-0471	16 Nov 2015
Apollo Fire Detectors LTD Declaration of Performance No 0832-CPD-0472	16 Nov 2015



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Certificate No: LR2375396TA  
Issue Date: 22-February-2023  
Expiry Date: 01-November-2024  
Reference: UKITSO/TA/ETS/MJH/WP47946741

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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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