



Lloyd's
Register

Type Approval Certificate Extension

This is to certify that Certificate No. 04/00088(E3) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Apollo Fire Detectors Ltd
PLACE OF PRODUCTION	36 Brookside Road Havant Hampshire PO9 1JR United Kingdom (UK)
DESCRIPTION	Optical Smoke Detector
TYPE	<p><u>ORBIS Range comprising of:</u></p> <p>ORB-MB-00001-MAR: Orbis TimeSaver base ORB-RB-40004-MAR: Orbis TimeSaver relay base ORB-OP-42001-MAR: with SensAlert, FasTest and DirtAlert ORB-OP-42003-MAR: with SensAlert, FasTest, DirtAlert and Flashing LED</p> <p><u>ORBIS IS (Intrinsically Safe) Range comprising of:</u></p> <p>ORB-OP-52027-APO: with SensAlert, FasTest and DirtAlert ORB-OP-52028-APO: with Flashing LED, SensAlert, FasTest and DirtAlert</p> <p>ORB-MB-50018-APO: Orbis IS TimeSaver Base ORB-BA-50008-APO: Orbis IS Base Adaptor (in conjunction with 45681-207 base)</p>

Certificate No.	04/00088(E4)
Issue Date	8 October 2015
Expiry Date	1 November 2019
Sheet	1 of 2



A.M. Anderson
Marine Technology & Engineering Services, Southampton
Lloyd's Register EMEA

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APPLICATION	Marine, offshore and industrial use in Environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register Test Specification No. 1: 2002
STANDARD	EN 54-7: 2000 + A1: 2002 + A2: 2006
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	<ol style="list-style-type: none"> 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."

All other details remain as the previous Certificate No. 04/00088(E3) to which this extension should be attached.

Certificate No.	04/00088(E4)
Issue Date	8 October 2015
Expiry Date	1 November 2019
Sheet	2 of 2

MTES Southampton Office

AM Anderson

Lloyd's Register EMEA

LR031.1.2013.12

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Issue number 1

DESIGN APPRAISAL DOCUMENT

Date 8 October 2015	Quote this reference on all future communications MTES/ETS/AO/AMA/WP23063689/W04205272
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LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.

Issued to: APOLLO FIRE DETECTORS LTD.

For: OPTICAL SMOKE DETECTOR

**Types: ORBIS IS (INTRINSICALLY SAFE) RANGE
 TYPE APPROVAL CERTIFICATE No. 04/00088 (E4)**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Request for Marine Services, Form 2502
 Application for Type Approval, Form 2571
 Application Checklist, Form 2502TA
 ISO 9001: 2008 Certificate. No: 010, issue 16 (Expires 18 Feb 2018)

21 Aug 2015
 18 Aug 2015
 -
 19 Feb 2015

DATASHEETS

Document Register 010s/01 Ref No: 3098, issue 2
 Document Register 010s/02 Ref No. 5273, issue 3
 38531-969 - Revision 4 - Orbis Optical Chamber

13 Aug 2015
 13 Aug 2015
 07 Aug 2015

TEST REPORTS

Lloyd's Register Inspection and Surveillance of Production Facilities SOU 1400418
 BRE Covering Letter for Test Report TE101167-1001
 BRE Test Report TE101167-1001, issue 1

25 Apr 2014
 14 Aug 2015
 14 Aug 2015

Also all the documentation listed on Design Appraisal Document associated with Type Approval Certificate No's 04/00088, 04/00088(E1), 04/00088(E2) and 04/00088(E3).

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.

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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 LR Type Approval System Procedure.

Anthony Osborne
Southampton Office



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Lloyd's Register EMEA

LR031.1.2013.12

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**Part 3
Fire and Gas Detection Alarm and Control Systems (Part 3)**

Producer/Licence No.	Item Description	Technical Details	Category/Additional Tests	Remarks	Cert. No.
Apollo Fire Detectors Ltd, 36 Brookside Road, Havant, Hampshire, PO9 1JR, United Kingdom (UK).	Optical Smoke Detector ORBIS Range Type ORB-OP-42001-MAR With SensAlert, FasTest and DirtAlert ORB-OP-42003-MAR With SensAlert, FasTest, DirtAlert and Flashing LED ORB-MB-00001-MAR Orbis TimeSaver base ORB-RB-40004-MAR Orbis TimeSaver relay base <u>ORBIS IS (Intrinsically Safe) Range</u> <u>Comprising modules:</u> ORB-OP-52027-APO With SensAlert, FasTest and DirtAlert ORB-OP-52028-APO With Flashing LED, SensAlert, FasTest and DirtAlert ORB-MB-50018-APO Orbis IS TimeSaver Base ORB-BA-50008-APO Orbis IS Base Adaptor (in conjunction with 45681-207 base)	Refer to manufacturer's literature	ENV1 ENV2 ENV3 (2002) In accordance with the Test Specification.	Expires: 1 November 2019 Complies with: EN 54-7: 2000 + A1: 2002 + A2: 2006 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.	04/00088(E4)

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