



Lloyd's  
Register

## Type Approval Certificate Extension

This is to certify that Certificate No. 04/00089(E3) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

<b>PRODUCER</b>	Apollo Fire Detectors Ltd
<b>PLACE OF PRODUCTION</b>	36 Brookside Road Havant Hampshire PO9 1JR United Kingdom (UK)
<b>DESCRIPTION</b>	Multi Sensor (thermally enhanced optical) Detector
<b>TYPE</b>	<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-OH-43001-MAR: with SensAlert, FasTest and DirtAlert          ORB-OH-43003-MAR: with SensAlert, FasTest and DirtAlert and Flashing LED</p> <p><u>ORBIS IS (Intrinsically Safe) Range comprising of:</u></p> <p>ORB-OH-53027-APO: with SensAlert, FasTest and DirtAlert          ORB-OH-53028-APO: with SensAlert, FasTest, DirtAlert 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)</p>

<b>Certificate No.</b>	04/00089(E4)
<b>Issue Date</b>	8 October 2015
<b>Expiry Date</b>	1 November 2019
<b>Sheet</b>	1 of 2



A.M. Anderson  
Marine Technology & Engineering Services, Southampton  
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<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: 2002
<b>STANDARD</b>	EN 54-7: 2000 + A1:2002 + A2: 2006 CEA 4021: 1999
<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><li>4. Screened cable is to be used for all installations.</li></ol>

*"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. 04/00089(E3) to which this extension should be attached.

<b>Certificate No.</b>	04/00089(E4)
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**Lloyd's Register EMEA**

**MARINE TECHNOLOGY & ENGINEERING  
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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/W4205272
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**LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.**

**Issued to: APOLLO FIRE DETECTORS LTD.**

**For: MULTI SENSOR (THERMALLY ENHANCED OPTICAL) DETECTOR**

**Types: ORBIS IS (INTRINSICALLY SAFE) RANGE  
TYPE APPROVAL CERTIFICATE No. 04/00089 (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 010t/02 Ref No: 5281, issue 2  
38531-902 – Revision 8 – Orbis Optical Chamber

13 Aug 2015  
28 Sep 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 04/00089, 04/00089(E1), 04/00089(E2) and 04/00089(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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## Lloyd's Register EMEA

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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  
Senior Specialist  
Electrotechnical Systems



Alasdair Anderson  
Principal Specialist  
Electrotechnical Systems

**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.
<p>Apollo Fire Detectors Ltd, 36 Brookside Road, Havant, Hampshire, PO9 1JR, United Kingdom (UK).</p>	<p>Multi sensor (thermally enhanced optical) Detector ORBIS Range</p> <p>Type ORB-OH-43001-MAR With SensAlert, FasTest and DirtAlert</p> <p>ORB-OH-43003-MAR With SensAlert, FasTest and DirtAlert and Flashing LED</p> <p>ORB-MB-00001-MAR Orbis TimeSaver base</p> <p>ORB-RB-40004-MAR Orbis TimeSaver relay base</p> <p>ORBIS IS (Intrinsically Safe) Range <u>Comprising modules:</u></p> <p>ORB-OH-53027-APO With SensAlert, FasTest and DirtAlert</p> <p>ORB-OH-53028-APO With SensAlert, FasTest, DirtAlert and Flashing LED</p> <p>ORB-MB-50018-APO Orbis IS TimeSaver Base</p> <p>ORB-BA-50008-APO Orbis IS Base Adaptor (in conjunction with 45681 - 207 base)</p>	<p>Refer to manufacturer's literature</p>	<p>ENV1 ENV2 ENV3 (2002) In accordance with the Test Specification.</p>	<p>Expires: 1 November 2019</p> <p>Complies with: EN 54-7: 2000 + A1:2002 + A2: 2006 and CEA 4021: 1999</p> <p>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.</p> <p>2. The requirements of the Lloyd's Register (LR) Rules apply when the equipment is installed on LR Classed vessels and offshore installations.</p>	<p>04/00089(E4)</p>

*AM Anderson*