




Type Approval Certificate Extension

This is to certify that Certificate No. 04/00088(E1) 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	<u>ORBIS Range comprising of:</u> 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 <u>ORBIS IS (Intrinsically Safe) Range comprising of:</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)

Certificate No.	04/00088(E2)
Issue Date	09 December 2009
Expiry Date	01 November 2014
Sheet	1 of 2



A.B. Gunn
London Design Support Services
Lloyd's Register EMEA

Lloyd's Register EMEA
71 Fenchurch Street, London EC3M 4BS

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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
SPECIFIED 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."

The attached Design Appraisal Document No. 04/00088(E2) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 04/00088(E1) to which this extension should be attached.

Certificate No.	04/00088(E2)
Issue Date	09 December 2009
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Sheet	2 of 2



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Issue number 1

DESIGN APPRAISAL DOCUMENT

Date 09 December 2009	Quote this reference on all future communications LDSS/ TA/ETS/W02141686/TB/O-102805
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LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.

Issued to: APOLLO FIRE DETECTORS LTD.

for: OPTICAL SMOKE DETECTOR

Type: ORBIS IS (INTRINSICALLY SAFE) RANGE

TYPE APPROVAL CERTIFICATE No. 04/00088(E2)

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.

ADDITIONAL APPROVAL DOCUMENTATION

Request Form	06.08.2009
Amended test for Apollo Fire Detectors Limited Orbis and Orbis IS range of detectors and bases	27.10.2006
Apollo Fire Detectors Extension Quotation DAPP/PAS/TA/0000001/MHR/O-71744	08.06.2006

TEST REPORTS

Lloyd's Register Inspection and Surveillance of Production Facilities SOU 0901304	19.11.2009
LPCB ISO 9001:2000 Certificate Number 010 Issue 11	20.02.2006

Also all the documentation listed on Design Appraisal Documents associated with Type Approval Certificate No. 04/00088(E1).

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.

A.B. Gunn
London Design Support Services
Lloyd's Register EMEA

**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>Optical Smoke Detector ORBIS Range</p> <p>Type ORB-OP-42001-MAR With SensAlert, FasTest and DirtAlert</p> <p>ORB-OP-42003-MAR With SensAlert, FasTest, 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><u>ORBIS IS (Intrinsically Safe) Range</u> <u>Comprising modules:</u></p> <p>ORB-OP-52027-APO With SensAlert, FasTest and DirtAlert</p> <p>ORB-OP-52028-APO With Flashing LED, SensAlert, FasTest and DirtAlert</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: 01 November 2014</p> <p>Complies with: EN 54-7: 2000 + A1: 2002 + A2: 2006</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>04/00088(E2)</p>

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10.12.2009.