



## Type Approval Certificate Extension

This is to certify that Certificate No. 04/00089(E1) 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</p> <p>ORB-RB-40004-MAR: Orbis TimeSaver relay base</p> <p>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><u>ORBIS IS (Intrinsically Safe) Range comprising of:</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>

<b>Certificate No.</b>	04/00089(E2)
<b>Issue Date</b>	09 December 2009
<b>Expiry Date</b>	01 November 2014
<b>Sheet</b>	1 of 2

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

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

<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."*

*The attached Design Appraisal Document No. No.04/00089(E2) and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

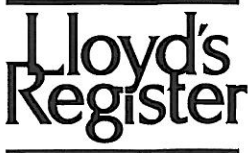
All other details remain as the previous Certificate No. 04/00089(E1) to which this extension should be attached.

<b>Certificate No.</b>	04/00089(E2)
<b>Issue Date</b>	09 December 2009
<b>Expiry Date</b>	01 November 2014
<b>Sheet</b>	2 of 2



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

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



## Lloyd's Register EMEA (London Office)

LONDON DESIGN SUPPORT SERVICES

71 Fenchurch Street, London, EC3M 4BS

Telephone 020 7709 9166 Fax 020 7488 4796

Email tad@lr.org

Page 1 of 1
Document number 04/00089(E2)
Issue number 1

### DESIGN APPRAISAL DOCUMENT

Date 09 December 2009	Quote this reference on all future communications LDSS/TA/ETS/W02147115/TB/O-102805
--------------------------	--

## LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.

Issued to: APOLLO FIRE DETECTORS LTD.

for: MULTI SENSOR (THERMALLY ENHANCED OPTICAL) DETECTOR

Type: ORBIS IS (INTRINSICALLY SAFE) RANGE

TYPE APPROVAL CERTIFICATE No. 04/00089(E2)

The undemoted 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. 04/00089(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.
Apollo Fire Detectors Ltd., 36 Brookside Road, Havant, Hampshire, PO9 1JR, United Kingdom (UK).	Multi sensor (thermally enhanced optical) Detector ORBIS Range  Type ORB-OH-43001-MAR With SensAlert, FasTest and DirtAlert  ORB-OH-43003-MAR With SensAlert, FasTest and 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-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)	Refer to manufacturer's literature	ENV1 ENV2 ENV3 (2002) In accordance with the Test Specification.	Expires: 01 November 2014  Complies with: EN 54-7: 2000 + A1:2002 + A2: 2006 and CEA 4021: 1999  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.	04/00089(E2)

Al  
10.12.2009