



Type Approval Certificate Extension

This is to certify that Certificate No. 04/00092(E2) 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	Heat 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-HT-41005-MAR: Class CR with SensAlert and FasTest ORB-HT-41006-MAR: Class CS with SensAlert and FasTest ORB-HT-41017-MAR: Class CR with SensAlert, FasTest and Flashing LED ORB-HT-41018-MAR: Class CS with SensAlert, FasTest and Flashing LED</p> <p><u>ORBIS IS (Intrinsically Safe) Range comprising of:</u></p> <p>ORB-HT-51153-APO: Class CR with SensAlert and FasTest ORB-HT-51154-APO: Class CR with SensAlert, FasTest and Flashing LED ORB-HT-51155-APO: Class CS with SensAlert and FasTest ORB-HT-51156-APO: Class CS with SensAlert, FasTest and Flashing LED</p>

Certificate No.	04/00092(E3)
Issue Date	19 May 2014
Expiry Date	01 November 2019
Sheet	1 of 2

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

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71 Fenchurch Street, London EC3M 4BS

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ORB-MB-50018-APO: Orbis IS TimeSaver Base
ORB-BA-50008-APO: Orbis IS Base Adaptor (in conjunction with 45681-207 base)

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 54-5: 2000 + A1: 2002
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. 04/00092(E2) to which this extension should be attached.

Certificate No. 04/00092(E3)
Issue Date 19 May 2014
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Sheet 2 of 2



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Page 1 of 2
Document number 04/00092(E3)
Issue number 1

DESIGN APPRAISAL DOCUMENT

Date 19 May 2014	Quote this reference on all future communications MTES/ETS/TB/AMA/WP17394286/W03676565
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LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.

Issued to: APOLLO FIRE DETECTORS LTD.

for: HEAT DETECTOR

**Types: ORBIS IS (INTRINSICALLY SAFE) RANGE (CLASS CR & CS)
 TYPE APPROVAL CERTIFICATE No. 04/00092(E3)**

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 form with product amendment information
 ISO 9001: 2008 Certificate, Expires 18 Feb 2015

04 Mar 2014
 19 Feb 2012

DATASHEETS

Updated drawings of the following:

200-HT-00001 Issue 2, Orbis (PIC), Heat Detector PCB, SMD Assembly	Apr 09
400-HT-00001 Issue 2, Orbis (PIC), Heat Detector, Un-configured Assembly	Aug 10
400-HT-00002 Issue 2, Orbis (Texas Chip), Heat Detector Un-configured Assembly	Aug 10
100-HT-00011 Issue 4, Orbis Intrinsically Safe Heat Detector Circuit Diagram	Jul 10
200-HT-00009 Issue 5, Orbis Intrinsically Safe, Heat Detector PCB, SMD Assembly	Jul 10
400-HT-00011 Issue 2, Orbis Intrinsically Safe, Heat Detector, Un-configured Assembly	Aug 10
300-MA-00011 Issue 4, Orbis, Intrinsically Safe, Timesaver Base Assembly	Aug 11
100-RB-00007 Issue 2, Orbis Relay Base, Circuit Diagram	Jun 13
200-RB-00005 Issue 4, Orbis Relay Base, PCB Assembly	Jun 13
300-MA-00005 Issue 5A, Orbis, Fully Loaded, Deep Base Assembly	Nov 07
400-RB-00007 Issue 3A, Orbis, Relay Base Assembly	Nov 07

TEST REPORTS

Lloyd's Register Inspection and Surveillance of Production Facilities SOU 1400418
 Apollo Fire Detectors LTD Declaration of Performance No. CD0003/HEAT/V2

25 April 2014
 01 July 2013

Also all the documentation listed on Design Appraisal Document associated with Type Approval Certificate No's 04/00092, 04/00092(E1) and 04/00092(E2).

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.

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Page	2 of 2
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Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.

Alasdair Anderson
Principal Specialist
Electrotechnical Systems
Marine Technology & Engineering Services

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

<p>Apollo Fire Detectors Ltd, 36 Brookside Road, Havant, Hampshire, PO9 1JR, United Kingdom (UK).</p>	<p>Heat Detector ORBIS Range</p> <p>Type</p> <ul style="list-style-type: none"> • ORB-HT-41005-MAR • Class CR with SensAlert, FasTest • ORB-HT-41006-MAR • Class CS with SensAlert and FasTest • ORB-HT-41017-MAR • Class CR with SensAlert, FasTest and Flashing LED • ORB-HT-41018-MAR • Class CS with SensAlert, FasTest and Flashing LED • ORB-MB-00001-MAR • Orbis TimeSaver base • ORB-RB-40004-MAR • Orbis TimeSaver relay base • ORBIS IS (Intrinsically Safe) Range • Comprising new modules: • ORB-HT-51153-APO • Class CR with SensAlert and FasTest • ORB-HT-51154-APO • Class CR with SensAlert, FasTest and Flashing LED • ORB-HT-51155-APO • Class CS with SensAlert and FasTest • ORB-HT-51156-APO • Class CS with SensAlert, FasTest 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>Refer to manufacturer's literature</p>	<p>ENV1 ENV2 ENV3 (2002) In accordance with the Test Specification.</p>	<p>Expires: 01 November 2019</p> <p>Complies with: EN 54-5: 2000 + A.1: 2002</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>04/00092(E3)</p>
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Am Anderson