

Type Approval Certificate Extension

This is to certify that Certificate No. 04/ 00092(E3) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER Apollo Fire Detectors Ltd

PLACE OF 36 Brookside Road

PRODUCTION Havant

Hampshire PO91JR

United Kingdom (UK)

DESCRIPTION Heat Detector

TYPE ORBIS Range comprising of:

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

ORBISIS (Intrinsically Safe) Range comprising of:

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-A PO: Class CS with SensAlert and FasTest ORB-HT-51156-A PO: Class CS with SensAlert, FasTest and

Flashing LED

Certificate No. 04/ 00092(E4)

Issue Date 2 November 2019

Expiry Date 1 November 2024

Sheet 1 of 3 M JHiggins

Marine Technology & Engineering Services, Southampton Lloyd's Register EMEA

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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 \leq Ta \leq + 60° C) / T5(- 40° C \leq Ta \leq +

40° C)

OTHER CONDITIONS

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.

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"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.04/00092(E4) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 04/ 00092, 04/ 00092(E1), 04/ 00092(E2), 04/ 00092(E3), to which this extension should be attached.

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Lloyd's Register EMEA (Southampton)

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DESIGN APPRAISAL DOCUMENT

Date 22 August 2019	Quote this reference on all future communications UKITSO/TA/ETS/MJH/WP36802584	
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LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2017.

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, 2017 and this Design Appraisal Document forms part of the Certificate.

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ISO 9001: 2015 Certificate No 010 Iss 18, Expires 5 July 2021	1 Jul 2018
Schedule of accreditation BRE Global Ltd Iss 112	3 Jul 2019

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 5A, Orbis Intrinsically Safe, Heat Detector PCB, SMD Assembly	Dec 2014
400-HT-00011 Issue 2, Orbis Intrinsically Safe, Heat Detector, Un-configured Assembly	Aug 10
300-MA-00011 Issue 5, Orbis, Intrinsically Safe, Timesaver Base Assembly	Jun 2017
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	25 April 2014
Apollo Fire Detectors LTD Declaration of Performance No. 0832-CPD-0473	16 Nov 2015
Apollo Fire Detectors LTD Declaration of Performance No. 0832-CPD-0474	16 Nov 2015

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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.

Matthew Higgins **UKITSO Southampton Office**

Lloyd's Register EMEA

M J Higgins Electrical Specialist Southampton Technical Support Office Marine & Offshore Lloyd's Register