

Type Approval Certificate Extension

This is to certify that Certificate No. 04/00088(E4) 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 PO9 1JR

United Kingdom (UK)

DESCRIPTION

Optical Smoke Detector

TYPE

ORBIS Range comprising of:

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

ORBIS IS (Intrinsically Safe) Range comprising of:

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)

APPLICATION

Marine, offshore and industrial use in Environmental categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register Test Specification No. 1: 2002

Certificate No.

04/00088(E5)

Issue Date

2 November 2019

Expiry Date

1 November 2024

Hugina . Registe

Sheet

1 of 2

Marine Technology & Engineering Services, Southampton

Lloyd's Register EMEA

Lloyd's Register EMEA

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

Lloyd's Register EMEA
Is a subsidiary of Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



STANDARD

EN 54-7: 2000 + A1: 2002 + A2: 2006

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.
- 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(E5) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 04/00088(E4), 04/00088(E3), 04/00088(E2), 04/00088(E1) and 04/00088 to which this extension should be attached.

Certificate No.

04/00088(E5)

Issue Date

2 November 2019

Expiry Date

1 November 2024

Sheet

2 of 2

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

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

> Lloyd's Register EMEA Is a subsidiary of Lloyd's Register Group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that

npton Office Lloyd's Register EMEA



Lloyd's Register EMEA (Southampton)

Marine & Offshore UK&I

Lloyd's Lloyd's Register Global Technology Centre, Sou Register Boldrewood Innovation Campus, Burgess Road, Southampton, SO16 7QF Lloyd's Register Global Technology Centre, Southampton

Telephone +44 330 414 1000

Email tass@lr.org

Page 1 of 1 Document number 04/00088(E5) Issue number

DESIGN APPRAISAL DOCUMENT

Date 28 August 2019	Quote this reference on all future communications SOUTSO/ETS/TA/MJH/WP36723915

LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2017.

Issued to: APOLLO FIRE DETECTORS LTD. For: OPTICAL SMOKE DETECTOR TYPE APPROVAL CERTIFICATE No. 04/00088(E5)

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.

APPROVAL DOCUMENTATION	
ISO 9001: 2015 Cert No 010 Issue 18 Schedule of Accreditation BRE Global Ltd Issue 112 DATASHEETS	6 Jul 2018 3 Jul 2019
Document Register 010s/01 Ref No: 3098, issue 5 Document Register 010s/02 Ref No. 5273, issue 4 38531-969 – Revision 4 – Orbis Optical Chamber <u>TEST REPORTS</u>	30 Jan 2019 11 Jan 2017 07 Aug 2015
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
Sumlementary Tour A	

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

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.



Matt Higgins **Electrical Specialist Engineering Systems** UK&I Technical Support Office, Marine & Offshore Lloyd's Register EMEA

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.