Certificate No: LR2331116TA-03
Issue Date: 24/07/2023
Expiry Date: 24/01/2028

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**Apollo Fire Detectors Ltd**
Address	36 Brookside Road, Havant, PO9 1JR, United Kingdom
Type	Smoke Detection and Alarm System
Description	Analogue addressable optical smoke detector
Trade Name	Discovery Range: 58000-600 MAR
Application	Marine and offshore use in environmental categories ENV1, ENV2, ENV3 and ENV5 as defined in LR Type Approval System Test Specification No.1:2020
Specified Standard	EN54-7:2018

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.

Previous Version: 03/00062(E4), LR2331116TA, LR2331116TA-01,LR2331116TA-02

The Design Appraisal Document LR2331116TA-03 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Matt Higgins

Electrical & Control - Senior Specialist to
Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Certificate No: LR2331116TA-03
Issue Date: 24-July-2023
Expiry Date: 24-Jan-2028
Reference: UKITSO/TA/ETS/MJH/WP50997357

LLOYD'S REGISTER TYPE APPROVAL – DESIGN APPRAISAL DOCUMENT

Issue by: UKITSO SOUTHAMPTON
Issued to: APOLLO FIRE DETECTORS LTD
For: Analogue Addressable Optical Smoke Detector
Type: Discovery Range 58000-600 MAR

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 04 (September 2020) and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

LR EN54 Update Product overview	Not dated
LPCB ISO 9001:2015 Certificate 010 Issue 19	6 Jul 2021
58000-600 2531-CPR-CSP10942 Certificate of Constancy of Performance	1 Jul 2020
PP5000 Discovery Marine Optical Smoke Detector Datasheet Issue 1	2017
Discovery (PP2029/2017/Issue 12)	2016
Discovery Engineering Product Guide (PP2052/2015/Issue 7a)	2015
Open, Closed and Digital Protocols (PP2099/2017/Issue 6)	2017

DRAWINGS

34000-063 Iss 4 Discovery Optical Detector Microprocessor Programming	Oct 2015
34000-063SW Iss 4 Embedded Software Record Sheet	Oct 2015
34100-002SW Rev 3 Embedded Software Record Sheet	Oct 2015
35158-800 Rev 1C XP95 Keypad Drawing	Aug 2016
38531-779 Rev 5A Optical Housing Series 60/Xp95	09 Jun 2017
38531-861 Rev 2D Optical PCB Cover Discovery	21 Jun 2019
38531-875 Rev 2B RFI Shield (Carbon Loaded)	11 Feb 2015
43781-800 Iss 15 Optical Smoke Detector PCB Assembly	Apr 2020
58000-600 Rev 2 Optical Detector GA	Feb 2008
No. 58000-600CD Iss 14 Discovery Optical Smoke Detector Schematic Diagram	Apr 2020

TEST REPORTS

TE-P105641-1001 Iss 1 BRE Global Test Report	31 Oct 2018
P105641-1.2 Test schedule for EMC Update of Various Products (Phase One)	13 Mar 2018
BRE TE236936 Technical Evaluation of 58000-600 Series Optical Detectors to EN54-7:2000[1]	26 Nov 2007
Apollo Test Schedule	24 May 2002
Apollo (No. 1658.0)	12.01.2003
LPC (No. TE 90371)	16.04.1999

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

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.