

Page 1 of 4

Certificate No: 15-00066-02 Issue Date: 02/06/2020 Expiry Date: 01/06/2025

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, Hampshire

Place of Production Apollo Fire Detectors Ltd

36 Brookside Road, Havant, PO9 1JR, Hampshire

Type Fire And Gas Detection Alarm And Control Systems

Description Discovery Marine Isolator Base

Trade Name 45681-286 MAR

Application Marine applications in category ENV1, ENV2, ENV3 and ENV4 as defined in

Lloyd's Register Type Approval Test Specification No. 1, 2015 where the test

specification is satisfactory for the intended operation.

Specified Standard EN 54-7: 2005

Ratings Input Voltage: 17-28V DC

Current consumption: At 18V DC: 23µA At 28V DC: 43µA

At 18V DC and adjacent sector isolated: 4mA

Matt Higgins

Electrical Specialist to Lloyd's Register EMEA A member of the Lloyd's Register Group

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

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 '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.



Page 2 of 4

Certificate No: 15-00066-02 Issue Date: 02/06/2020 Expiry Date: 01/06/2025

Type Approval Certificate

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 Design Appraisal Document No. 15-00066-02 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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

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 '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.















 Page
 3 of 4

 Certificate No:
 15-00066-02

 Issue Date:
 02/06/2020

 Expiry Date:
 01/06/2025

Reference: UKITSO/ENG/MH/WP39151156

LLOYD'S REGISTER TYPE APPROVAL

Issue by: UK & I TSO
Issued to: APOLLO FIRE DETECTORS LTD.
For: DISCOVERY MARINE ISOLATOR BASE
TYPE: 45681-286 MAR

This certificate is a renewal of certificate no. 15/00066.

LR Inspection and Surveillance of Production Facilities

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 03 (July 2017) and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

LR Job Control Record: SOU1401050	20.04.2015
<u>CERTIFICATION</u> LPCB Certificate of Management System Registration: Certificate No. 010, issue 18	06.07.2018
ABS Certificate of Design Assessment – Certificate No. 16-LD1536864-2-PDA	29.07.2016
TEST REPORTS	
45681-286 MAR-Report with Addendum	03.06.2015
BRE Testing – Test Report No. TE226333/2	31.08.2006
BRE Testing – Test Report No. TE231156	11.01.2007
TUV SUD Test Document No. 75930213, Report 01, Issue 1	12.06.2015
Intertek Test Report No. 101842724LHD-001, issue 1	19.11.2014
Intertek Test Report No. 100975009, issue 1	11.06.2013
DATA SHEETS	
Isolating Base PCB Assembly - Drawing No. 43781-271, issue 5	Dec 2018

Addressable Isolating Base Circuit Diagram - Drawing No. 45681-284CD, issue 2A

Isolating Base General Assembly - Drawing No. 45681-284, issue 2

Marine Isolating Base Assembly Build Standard Sheet, issue 3

Affrym -

Matt Higgins MIET 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 '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.

IS IS

R

<u>IX</u> IR

18.11.2014

Jan 2016

Dec 2013

<u>IR</u>

R

R

R

<u>に</u>

R



Page 4 of 4

Certificate No: 15-00066-02 Issue Date: 02/06/2020 Expiry Date: 01/06/2025

Reference: UKITSO/ENG/MH/WP39151156

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.

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 '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.

IS IS

R

L L

R

R

LX LR

R

IS