



TYPE APPROVAL CERTIFICATE

Certificate No. : LDN23417-FD001 **Initial Approval :** 18th November, 2008
Product : Fire Detectors
Manufacturer : Apollo Fire Detectors Ltd.
36 Brookside Road, Havant, Hampshire, P09 1JR. U.K

Product Description : Discovery analogue addressable fire detectors

- Type :
- 58000-400MAR Discovery Heat Detector
- 58000-500MAR Discovery Ionisation Smoke Detector
- 58000-600MAR Discovery Optical Smoke Detector
- 58000-700MAR Discovery Multisensor Detector
- 45681-210MAR Mounting Base
- 55000-700MAR Isolator
- 45681-211MAR Mounting Base for Isolator

" See Appendix 1 "

Approval Condition : " See Appendix 1 "

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships and EN54-5, EN54-7

This Certificate is valid until 17th November, 2023

Issued at Busan, Korea on 19th February, 2020



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No (ME20006231263) and certificate No.(LDN23417-FD001).



KOREAN REGISTER

*General Manager of
Marine & Ocean Equipment Team*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
 2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
 3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
 4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Appendix 1

Product Description and/or Approval Condition

Certificate No : LDN23417-FD001

Date of Issue : 19th February, 2020

A. Product Description :

- 1) 58000-400MAR Discovery Heat Detector (Temperature monitor)
- 2) 58000-500MAR Discovery Ionisation Smoke Detector
- 3) 58000-600MAR Discovery Optical Smoke Detector
- 4) 58000-700MAR Discovery Multisensor Detector (Temperature & Photoelectric smoke)
- 5) 45681-210MAR Mounting Base
- 6) 55000-700MAR Isolator
- 7) 45681-211MAR Mounting Base for Isolator

Detector Type	Operating Voltage	Operating Current Quiescent / Alarm
58000-400MAR	17~28 VDC	0.5 mA / 3.4 mA
58000-500MAR	17~28 VDC	0.5 mA / 3.5 mA
58000-600MAR	17~28 VDC	0.4 mA / 3.4 mA
58000-700MAR	17~28 VDC	0.5 mA / 3.5 mA

B. Approval Condition :

- 1) This approval is granted on the basis of test reports & documents
 - Discovery engineering product guide & General assembly drawings
 - TE90371, TE90372, TE90373, TE90374
 - TE236307, TE260875, TE 236936, TE301792,
 - 1657, 1658, 1659, 1660
 - SW-99238, 1188.04, 1189.02, 1190.02, 1191.03
 - TE P111208-1001
- 2) The product or packing is to be marked with manufacturer name and type designation on a suitable position.
- 3) Unless specially directed by the Administration, this approval is not to be construed as a substitute for a flag Administration's approval. In order to be installed on board the Korean flag vessels in Korea, this product is to be type approved by the Korean Government.
- 4) Individual Product Certification is not required.

< End of page >