Type Approval Certificate



[Flame Detector]

Initial Approval 8th March, 2021

Manufacturer Apollo Fire Detectors Ltd.

36 Brookside Road, Havant, Hampshire, P09 1JR. U.K

Product Description Flame Detector (Type: 55000-029MAR)

" 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.

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships and EN 54-10

This Certificate is valid until 7th March, 2026 Issued at Busan, Korea on 8th March, 2021



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(ME21006373723) and certificate No.(LDN23417-FD005).



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.

Certificate No: LDN23417-FD005 Appendix 1

Product Description and/or Approval Condition

Date of Issue: 8th March, 2021

A. Product Description

1. Product Specification

1) Product Description (Type: 55000-029MAR)

The Marine Intelligent Base Mounted Triple Infra-red(IR3) Flame Detector, part no 55000-029 MAR, is designed for use where open flaming fires may be expected.

2) Technical Data

- Supply Voltage 17 ~ 28 VDC

- Digital Communication : XP95

-20°C to +70°C - Operating Temperature : - Spectral Response : 0.75 to 2.7 μm

- Sensitivity - Operating Range - Quiescent Current Class 1 or 3, EN54-10 0.1m² n-heptane at 25m

: 2.5 mA : 4.2 mA - Alarm Current

2. Approved Drawings and Documents

- 1) Approved Drawing
 - Technical Data PP5020/2017 Issue 1
 - Intelligent Base Mounted IR3 Flame Detector (Marine) DWG. NO. 55000-029MAR Rev. 2
 - XP95 UV/IR HCS12X, Flame Detector Circuit Diagram Rev.C
- 2) Reviewed Document
 - Installation & Maintenance Guide PP2349/2010 Issue 3

3. Test Reports, etc.

- 1) Test Reports

 - EN54-10 Tests, Plug In XP95 Flame Detector Issue 1
 Report No. 75931682 Report 01 Issue 1
 Report No. 104519415LHD-001a Issue 1
 Report No. 104519415LHD-001b Issue 1
 Lloyds Register Type Approval Test Specification Number 1 July 2013 dated 2015-08-24

B. Approval Condition

1. Application & Limitation

- 1) This approval is granted on the basis of the approved drawings and the test reports.
- 2) Unless specially directed by the Administration, this approval is not to be construed as a substitute for a flag Administration's approval. This certificate may not be used for Korea flagged vessels.
- 3) The manufacturer should inform this Society of all kinds of revisions of the equipment. If the changes are recognized to affect functionality of the approved equipment, type test to confirm the reliability of the revised equipment may be performed in the presence of our surveyor.
- 4) Degree of protection shall be complied with Rule Pt. 6 Ch. 1 Sec. 2 201. 2. (5).

2. Individual Product Cert. and Drawing Approval Requirement

1) Individual product certification is not required.

AC-2A (2021.01)

Appendix 1 Certificate No : LDN23417-FD005

Product Description and/or Approval Condition

Date of Issue: 8th March, 2021

3. Marking

1) The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.

4. Others

1) Test condition

Test	Condition	Remark
EMC	All locations including the bridge and deck zone	Up to 6GHz
Temperature	−25 ~ +70°C	
Vibration	Acceleration ±0.7g	

< End of Certificate >

AC-2A (2021.01) 3/3