



Marine & Offshore

Certificate number: 12244/E0 BV

File number: AP 3470

Product code: 3784H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

APOLLO FIRE DETECTORS LIMITED

Havant - UNITED KINGDOM

for the type of product

HEAT FIRE DETECTORS

Discovery Series

Heat Detector 58000-400 MAR.

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships.
EN 54-5: 2017 + A1: 2018.

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 09 Nov 2028

For Bureau Veritas Marine & Offshore,

At BV LONDON, on 09 Nov 2023,

Spencer Yule

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=sbajmlfic0>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Discovery 58000-400 Heat Detector.

Main Characteristics of Heat Detector Part No: 58000-400 MAR

Type	: Analogue Addressable with Conventional alarm facility during CIE processor fault.
Principle	: Point Detector using a Thermistor.
Additional Function	: Apollo Discovery Transmitting Protocol compatible with XP95 Systems
Sensitivity	: Adjustable (5 Modes corresponding to Classes A1R, A2, A2S, CR and CS).
Protection Index	: IP 53 Indoor.
Working Temperature	: Min: -20°C, Max: According to Class of Detector
Power Supply	: 24 VDC (17 to 28 VDC)
Software Number / Issue	: 34000-064SW/ 2

Note: The Detector is to be used in conjunction with the 45681-210 Mounting base.

2. DOCUMENTS AND DRAWINGS:

Apollo:

- Discovery Engineering Product Guide, No. PP2052/2015/Issue 7a.
- Build Standard Sheet, Product No. 58000-400 Issue 17, dated Nov. 2022.
- Drawings No. 58000-400 GA issue 4, 58000-400 CD Issue 7 and 43781-600 issue 9.
- Microprocessor No. 34000-064 Issue 2.
- Embedded Software Record No. 34000-064SW, Issue 2.
- Embedded Software No. 34100-001SW, Issue 1
- Embedded Software No. 34100-002SW, Issue 3

DBI:

- Certificate of constancy of performance No. 2531-CPR-CSP10936, dated 10-06-2022.

3. TEST REPORTS:

Apollo:

- Test report N° 1657.0 dated 12/03/03.

LPC:

- Test report N° TE 90372 dated 16 April 1999.

BRE:

- BRE Test Report No. TE 236307 Rev.1, dated 16-11-2007.
- Test Report No. TE-P105642-1001 Rev.1, dated 02 Sep. 2022

eurofins:

- EMC Test report No. 1278 CR, dated 30-05-2019.
- EMC Test report No. 1041 IR, dated 12-04-2019.

4. APPLICATION / LIMITATION:

- 4.1 - BUREAU VERITAS Rules and Regulations for the Classification of Steel Ships.
- 4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.3 - Approval also valid for ships having to comply with SOLAS 74 Convention, as amended, and for units having to comply with IMO Resolution A1023 (The "MODU Code").
- 4.4 - The Associated fire alarm central unit used with the above equipment (cf. clause 1) shall be Type Approved.
- 4.5 - The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.
- 4.6 - The detectors are not to be used in hazardous areas.
- 4.7 - The complete installation design showing the location of the detectors should be submitted to the Society's Surveyors for approval.
- 4.8 - Satisfactory performance tests should be witnessed on each installation by the Society's Surveyor after installation on board.
- 4.9 - An instruction manual covering operation, maintenance and testing should be placed on board each ship fitted with this Unit.
- 4.10 - Only Hardware and Firmware / Software successfully tested together in compliance with the rules and regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.
- 4.11 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev 8.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The **Discovery 58000-400** Heat Detectors are to be supplied by **APOLLO FIRE DETECTORS LIMITED** in accordance with the type(s) described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **APOLLO FIRE DETECTORS LIMITED** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - For information, **APOLLO FIRE DETECTORS LIMITED** has declared to Bureau Veritas the following production site(s):

APOLLO FIRE DETECTORS LIMITED
36 Brookside Road
Havant
Hampshire
UNITED KINGDOM

6. MARKING OF PRODUCT:

- Maker's name or trade mark.
- Serial number of the units.
- Equipment type number or model identification under which it was type-tested.
- According to EN 54-5

7. OTHERS:

7.1 - It is **APOLLO FIRE DETECTORS LIMITED**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate n° 12244/D1 BV issued on 30 May 2023 by the Society.

*** END OF CERTIFICATE ***