



Marine & Offshore

Certificate number: 14062/D0 BV

File number: AP 3633

Product code: 3782H

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

SMOKE FIRE DETECTORS

Orbis / Orbis IS - Conventional Optical Detector

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.
EN 54-7(2000) + A1(2002) + A2(2006)

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: 07 Oct 2024

For Bureau Veritas Marine & Offshore,

At BV LONDON, on 07 Oct 2019,

Spencer Yule



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 SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Orbis / Orbis IS - Conventional Smoke Detector - Fire Detector

Orbis Product/Part N°	Description
ORB-OP-42001-MAR	Orbis optical smoke detector with SensAlert, FasTest and DirtAlert
ORB-OP-42003-MAR	Orbis optical smoke detector with SensAlert, FasTest, DirtAlert and Flashing LED
ORB-OP-52027-APO	Orbis Intrinsically Safe optical smoke detector with SensAlert, FasTest and DirtAlert
ORB-OP-52028-APO	Orbis Intrinsically Safe optical smoke detector with, SensAlert, FasTest, DirtAlert and Flashing LED

2. DOCUMENTS AND DRAWINGS :

Apollo:

- Product guide ref: PP2250 IS PG.
- Drawing IS OPTICAL ORBIS CHAMBER No.:38531-902 Rev.8, dated 28/07/2015
- Drawing ORBIS SMOKE LID No.:38531-903 Rev.6, dated 26/08/2014
- Drawing ORBIS OPTICAL CHAMBER No.:38531-969 Rev.4, dated 07/08/2015

For modification D0 version:

- Installation guideNo. 39214-104/Issue 12, dated 06 Sep. 2017.
- Drawings specification N°s: 48000-013/Issue 10, 400-OP-00005/Issue 6, 400-OP-00006/ Issue 5.

3. TEST REPORTS :

- BRE/LPC test reports N°s:

- 210362 dated 05 Jan. 2004
- 210362-SW dated 09 Jun. 2003
- 10362BSW dated 18 Nov. 2003
- TE 230077-1 dated 15 Aug. 2006
- Apollo test report N°: -1840.0 dated 10 Sep. 2004.

BRE:

- Performance test according to EN 54-7 No.:P101167-1001 Issue: 1, dated 14 August 2015.

For modification D0 version:

- Baseefa certificate N° 06ATEX0007X- Issue 4, dated 23 Feb. 2015

4. APPLICATION / LIMITATION :

- 4.1 - Approval also valid for ships to be granted with the notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.2 - Approval also valid for ships having to comply with SOLAS 74 Convention, as amended, and for units having to comply with IMO Resolution A649 (The "MODU Code").
- 4.3 - The fitting aboard to be the same as used for the test.
- 4.4 - The equipment is not to be fitted in open deck or submerged area.
- 4.5 - Satisfactory performance tests should be witnessed on each installation by the Society's Surveyor after installation on board.
- 4.6 - An instruction manual covering operation, maintenance and testing should be placed on board each ship fitted with this Unit.
- 4.7 - The complete installation design showing the location of the detectors should be submitted to the Society's Surveyors for approval.
- 4.8 - Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.
- 4.9 - All Intrinsically Safe (IS) Products must incorporate a certified safety barrier or interface to limit the voltage and power to the circuit.
- 4.10 - Intrinsically safety type Optical smoke detectors EEx ia IIC T4 may be used in areas considered as dangerous due to the presence of flammable or explosive gases or vapours corresponding to the group IIC and to the temperature class T4 defined in IEC Classification, in accordance with BASEEFA certificates at Clause 3 above.
- 4.11 - The Associated fire alarm central unit used with the above equipment (cf. clause 1) shall be Type approved.

5. PRODUCTION SURVEY REQUIREMENTS :

- 5.1 - The above products are to be supplied by **APOLLO FIRE DETECTORS LIMITED** in compliance with the type described in this certificate.
- 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.
- Ex. Informations, as relevant.

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 No. 14062/C1 BV issued on 02 Nov 2015 by the Society.

*** END OF CERTIFICATE ***