



Marine & Offshore

Certificate number: 54286/B0 BV

File number: AP4805

Product code: 2801H

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

www.veristar.com

TYPE APPROVAL CERTIFICATE

This certificate is issued to

SEABRIGHT
PIRAEUS - GREECE

for the type of product

LIGHTING FITTINGS

APOLLO 300, APOLLO 200, APOLLO 150, APOLLO 100 and APOLLO 50

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.
Bureau Veritas Rules for the Classification of Offshore Units.
Bureau Veritas Rules for the Classification of Naval Ships

EC Code: 41SB

IEC 60092-306 (2022)

IEC 60598-1 (2020)

IEC 60598-2-5 (2015)

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: 16 Feb 2029

For Bureau Veritas Marine & Offshore,

At BV PIRAEUS, on 16 Feb 2024,

Spyros KONTOULIS

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=vtkuxrsj2d>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

The **APOLLO 300**, **APOLLO 200**, **APOLLO 150**, **APOLLO 100** and **APOLLO 50** are Light Emitting Diode (LED) lights for Marine and Offshore applications.

1.1 - Specification:

| Types | Cylindrical Reflector Angle | Rated Voltage | Rated Frequency | Rated Power | Degree Of Protection | Remarks (Maximum allowed number of luminaries to be connected to one circuit breaker at 230V) |
|---|-----------------------------|---------------|-----------------|-------------|----------------------|--|
| APOLLO 300-SB APOLLO 300-NB APOLLO 300-WB | 21° 35° 64° | 100~240V | 50~60Hz | 320W | IP 67 | B10 - Nil B16 - 1 Pc C10 - 1 Pc C16 - 2 Pcs |
| APOLLO 200-SB APOLLO 200-NB APOLLO 200-WB | 21° 35° 64° | 100~240V | 50~60Hz | 215W | IP 67 | B10 - 1 Pc B16 - 2 Pcs C10 - 2 Pcs C16 - 4 Pcs |
| APOLLO 150-SB APOLLO 150-NB APOLLO 150-WB | 21° 35° 64° | 100~240V | 50~60Hz | 160W | IP 67 | B10 - 1 Pc B16 - 2 Pcs C10 - 2 Pcs C16 - 4 Pcs |
| APOLLO 100-SB APOLLO 100-NB APOLLO 100-WB | 21° 35° 64° | 100~240V | 50~60Hz | 110W | IP 67 | B10 - 2 Pcs B16 - 3 Pcs C10 - 4 Pcs C16 - 6 Pcs |
| APOLLO 50-SB APOLLO 50-NB APOLLO 50-WB | 21° 35° 64° | 100~240V | 50~60Hz | 55W | IP 67 | B10 - 4 Pcs B16 - 7 Pcs C10 - 7 Pcs C16 - 11 Pcs |

2. DOCUMENTS AND DRAWINGS:

- APOLLO Drawings dated 17.09.2017.
- APOLLO Lighting Fixtures Instruction Manual rev.1
- Gap Analysis, No. R0001 dated 17/01/2024

3. TEST REPORTS:

H.E.EQ.A.C : - Report No: 504362-E dated 31/05/2018.

- Test Reports No. 1733.002.3.01 dated 15/1/2024
- Test Report No. 10102 dated 06.02.2024

4. APPLICATION/LIMITATION:

- 4.1 - Bureau Veritas Rules for the Classification of Steel Ships, Offshore Units and Naval Ships.
- 4.2 - Bureau Veritas Environmental Category, **EC Code: 41SB**
- 4.3 - The lighting fittings fulfils the EMC requirements for installation in Bridge and Deck Zone.
- 4.4 - 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 **APOLLO 300**, **APOLLO 200**, **APOLLO 150**, **APOLLO 100** and **APOLLO 50** are to be supplied by **SEABRIGHT** 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 - **SEABRIGHT** 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, **SEABRIGHT** has declared to Bureau Veritas the following production site:

**SEABRIGHT,
51, VASILIKON & IMITTOU STR,
18540, PIRAEUS,
GREECE.**

6. MARKING OF PRODUCT:

- Maker's name or trademark
- Equipment type or model identification
- Date of manufacture and/or serial number
- Supply voltage
- Degree of protection
- Type, rated power of lamp

7. OTHERS:

7.1 - It is **SEABRIGHT**'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. 54286/A0 BV issued on 24 Oct 2018 by the Society.

*** END OF CERTIFICATE ***