



Marine & Offshore

Certificate number: 54286/A0 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

IEC 60092-306 (2009)

IEC 60598-1 (2014)

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: 24 Oct 2023**

**For Bureau Veritas Marine & Offshore,**

At BV PIRAEUS, on 24 Oct 2018,

Spyros KONTOULIS



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.veristarnb.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=d7r91huegj>

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 as communicated to BV dated 09/07/2018.

### 3. TEST REPORTS:

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

### 4. APPLICATION/LIMITATION:

- 4.1 - Bureau Veritas Rules and Regulations 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.

### 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(s):

**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:**

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.

**\*\*\* END OF CERTIFICATE \*\*\***