



Marine &amp; Offshore

Certificate number: 47682/A1 BV

File number: AP 4716

Product code: 2617H

*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*

**MARINELEC TECHNOLOGIES**

Quimper - FRANCE

*for the type of product*

**SIGNALING AND CONTROL DEVICES**

CL16CPL

**Requirements:**

Bureau Veritas Rules for the Classification of Steel Ships.  
IMO Res. A830 (19), IMO Res. A686 (17).

EC Code: 31

*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: 18 May 2022**

**For Bureau Veritas Marine & Offshore,**  
At BV SAINT-NAZAIRE, on 06 Jun 2017,  
Francois Lopinot



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:

- Product model or type designation :  
**CL16CPL**
- Product description:  
Signaling Light Column System

### 1.1 - Technical Specifications:

CPLM_02	Master Board Power line Light columns system	<ul style="list-style-type: none"> <li>- Capacity: 1 master, 1 to 14 slaves</li> <li>- CPL_IN: 230VAC, 50/60Hz, 12A max.</li> <li>- CPL_OUT: 230VAC, 50/60Hz, 12A max.</li> <li>- Ethernet: Modbus TCP, 10/100Mbps</li> <li>- IP rating : IP00 (to be mounted in cabinet)</li> </ul>
CL16CPL	Light Column, 4 to 8 pictograms	<ul style="list-style-type: none"> <li>- Capacity: 1 master, 1 to 14 slaves</li> <li>- PLC_IN: 230VAC, 50/60Hz, 12,5A max.</li> <li>- PLC_OUT1: 230VAC, 50/60Hz, 12.5A max.</li> <li>- PLC_OUT2: 230VAC, 50/60Hz, 12.5A max.</li> <li>- IP65 (Junction box)</li> <li>- Outputs               <ul style="list-style-type: none"> <li>• Pictograms: 8 channels 0/24VDC, 100mA max.</li> <li>• AUX. OUT 0: 2 tones siren + flashing light output. 230VAC, 1,5A max.* (5 terminals provided)</li> <li>• AUX. OUT 1: 2 tones siren + flashing light output.. 230VAC, 1,5A max.* (5 terminals provided)</li> </ul> </li> </ul>
CPLS_02_JB	Light column junction box	Same characteristics as CL16CPL without pictogram

### 2. DOCUMENTS AND DRAWINGS:

#### **MARINELEC**

- CL16CPL ENVIRONMENTAL\_TEST\_PROGRAM REV0, dated Jul 2016.
- CL16CPL ENVIRONMENTAL\_TEST\_SPECIFICATION REV0, dated Jul 4, 2016
- Data sheet CL16CPL FP GB REV1, dated Jan 2017
- CL16CPL CAB\_test\_bench REV0 Test\_layout, dated Jun 29, 2016
- CL16CPL\_FUNCTIONAL\_TEST\_PROCEDURE\_REV0, dated Jul 11, 2016
- CL16CPL\_MECHANICAL DIAGRAM\_REV0 Drawings, dated May 23, 2016
- CL16CPL\_PROGRAMMING\_GUIDE\_EN\_REV1, dated Nov 21, 2016
- CL09CPL\_PROGRAMMING\_GUIDE\_REV21, dated Jan 22, 2017

### 3. TEST REPORTS:

#### **KENTA :**

- EMC & Environmental Test Reports No. 204 065 Ed 1.0 dated Nov 2016.

#### **MARINELEC :**

- Functional Test Reports No. CL16CPL\_FUNCTIONAL\_TEST\_PROCEDURE\_REV1.1, dated Jan 9, 2017 - Satisfactory witnessed by Bureau Veritas on Jan 9, 2017.

### 4. APPLICATION / LIMITATION:

- 4.1 - BUREAU VERITAS Rules 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 - BUREAU VERITAS Environmental Category, **EC Code: 31**
- 4.4 - The equipment fulfils the EMC requirements for installation in General Power Distribution Zones.
- 4.6 - The equipment is not to be fitted in hazardous areas.
- 4.7 - 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.

**5. PRODUCTION SURVEY REQUIREMENTS:**

5.1 - The above products are to be supplied by **MARINELEC TECHNOLOGIES** 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 - **MARINELEC TECHNOLOGIES** 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 - **MARINELEC TECHNOLOGIES** has declared to Bureau Veritas the following production site(s):

**MARINELEC TECHNOLOGIES**  
**13 Rue Alfred Le Bars**  
**29000 QUIMPER - FRANCE**

**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

**7. OTHERS:**

7.1 - It is **MARINELEC TECHNOLOGIES'** 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. 47682/A0 BV issued on 18 May 2017 by the Society.

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