



Marine & Offshore

Certificate number: 31091/C0 BV

File number: ACE5/853/1

Product code: 2862I

*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*

**POLYLUX, S.L.**

Cerdanyola (Barcelona) - SPAIN

*for the type of product*

**VOLTAGE (POTENTIAL) TRANSFORMERS**

TTS serie.

Three Phase Transformers.

### Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.

*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: 01 Mar 2027**

**For Bureau Veritas Marine & Offshore,**

At BV BILBAO, on 01 Mar 2022,

Juan jose GUTIERREZ GARCIA



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.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION:

Three phase isolating transformers for Marine applications.

#### 1.1 - Specifications:

Input/Output:	Up to 1100V	
Frequency:	50-60 Hz	
Protection degree:	IP23	IP65
Isolation:	Class F - 155°C up to 25kVA Class H - 180°C from 31.5kVA	Class F - 155°C up to 20kVA Class H - 180°C from 25kVA
Winding:	Class HC - 200°C	
Ambient temperature:	Up to 55°C	

#### 1.2 - Approval range:

Reference	Rating (kVA)
TTS0.4	0.4
TTS0.63	0.63
TTS0.8	0.8
TTS1	1
TTS1.25	1.25
TTS1.6	1.6
TTS2	2
TTS2.5	2.5
TTS3.15	3.15
TTS4	4
TTS5	5
TTS6.3	6.3
TTS8	8
TTS10	10
TTS12.5	12.5
TTS16	16
TTS20	20
TTS25	25
TTS31.5	31.5
TTS40	40
TTS50	50
TTS63	63
TTS80	80
TTS100	100
TTS125	125
TTS160	160
TTS180	180

### 2. DOCUMENTS AND DRAWINGS:

#### Polylux, S.L.:

- Specification from the manufacturer's website, dated 17/01/2013.
- Document IT.110113, dated 11/01/2013, reviewed by BV's Surveyor.

### 3. TEST REPORTS:

#### Polylux, S.L.:

- Test Report N°E/4797, dated 15/06/2012, witnessed by BV's Surveyor.
- Test Report N°E/4798, dated 15/06/2012, witnessed by BV's Surveyor.
- Test Report N°E/4822, dated 24/07/2012, witnessed by BV's Surveyor.
- Test Report N°E-011402, dated 21.01.2014, witnessed by BV's Surveyor.
- IP test report N° 12/31700694, dated 09.Mar.2012.

### 4. APPLICATION / LIMITATION:



BUREAU VERITAS Rules and Regulations for the Classification of Steel Ships.

**5. PRODUCTION SURVEY REQUIREMENTS:**

- 5.1 - The above products are to be supplied by **POLYLUX, S.L.**, in compliance with the type and the requirements described in this certificate.
- 5.2 - This type of product is within the category IBV of Bureau Veritas Rule Note NR320.
- 5.3 - BV product certificate is required.
- 5.4 - For information, **POLYLUX, S.L.** has declared to Bureau Veritas the following production site:

**POLYLUX, S.L.**  
**Avda. de Roma, 18-26.**  
**08290 Cerdanyola (Barcelona)**  
**SPAIN**

**6. MARKING OF PRODUCT:**

- 6.1 - Trade name.
- 6.2 - Date of manufacture and serial number.
- 6.3 - Equipment type or model identification under which it was type-tested
- 6.4 -  or  conformity marking, as relevant (I product only).

**7. OTHERS:**

- 7.1 - It is **POLYLUX, S.L.** 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° 31091/B0 BV issued on 12 Sep 2016 by the Society.

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