

Marine & Offshore

Certificate number: 49203/A0 MED File number: NAV6/1053/2 Item number: MED/4.21

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Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

# EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2017/306 of 06 Feb. 2017

This certificate is issued to:

PRAXIS AUTOMATION TECHNOLOGY B.V.

LEIDERDORP - NETHERLANDS

for the type of product

### **PROPELLER REVOLUTION INDICATOR**

Mega-Guard Propeller Revolution Indicator

#### **Requirements:**

SOLAS 74 Convention as amended, Regulations V/18, V/19 and X/3 IMO Res. MSC.36(63) -(1994 HSC Code)- as amended, 13 IMO Res. MSC.97(73) -(2000 HSC Code)- as amended, 13 IMO Res.A.694(17) IMO Res.MSC.191(79), MSC.302(87),A.1021(26) ISO 22554:2015, IEC 60945 (2002) + /Corr. 1 (2008), IEC 61162-1 ed4.0 (2010-11), IEC 62288 Ed. 2.0 (2014-07).

This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

#### This certificate will expire on: 28 Dec 2022

For Bureau Veritas Marine & Offshore Notified Body 2690, At BV ROTTERDAM, on 28 Dec 2017, Joost Castelijn

BUREAU VERIT PARIS 1828 47IONAL

This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark 🕥) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

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. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. 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, 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 :**

Mega-Guard Propeller Revolution Indicator

#### 2. DOCUMENTS AND DRAWINGS :

- 2.1 5.7" TFT Operator Panel SCHEMATIC DIAGRAM dated 06/10/2016
- 2.2 5.7" TFT Operator Panel CONNECTION DIAGRAM dated 12/03/2014
- 2.3 CONTROL PROCESSOR with TFT SCHEMATIC DIAGRAM dated 16/06/2016
- 2.4 CP with 4 Ethernet Port SCHEMATIC DIAGRAM dated 19/10/2016
- 2.5 24 Mixed I/O Board SCHEMATIC DIAGRAM dated 17/02/2015
- 2.6 24 Mixed I/O Board MOUNTING AND DIMENSIONS dated 29/11/2012
- 2.7 8.4" TFT Operator Panel MOUNTING AND DIMENSIONS dated 21/04/2016
- 2.8 CONTROL PROCESSOR MODULE MOUNTING AND DIMENSIONS dated 08/12/2015
- 2.9 THRUSTER CONTROL SYSTEM OPERATOR GUIDE dated 15/01/2016
- 2.10 Single and Multiple Indicator RISK ASSESSMENT dated 23/02/2017.

#### 3. TEST REPORTS :

- 3.1 Type Approval 2011 TEST REPORT dated 21/06/2011
- 3.2 Type Approval 2013 TEST REPORT dated 19/08/2013
- 3.3 Type Approval 2015 Set 1 TEST REPORT dated 22/02/2016
- 3.4 Type Approval 2015 Set 2 TEST REPORT dated 28/04/2016
- 3.5 MED Approval test document 2016 Rev1\_3 dated 06/12/2016.

#### 4. APPLICATION / LIMITATION :

4.1 -As per requirements of Regulations stated on front page of this certificate.

4.2 - The following component(s) shall comply with the requirements of MED2014/90/EU, as amended, and be wheelmarked:

- Mega-Guard Propeller Revolution Indicator

#### **5. PRODUCTION SURVEY REQUIREMENTS :**

5.1 - This certificate alone does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D "Production Quality Assurance" or E "Product Quality Assurance" or F "Product Verification" of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.

5.2 - For information concerning the production phase modules, **PRAXIS AUTOMATION TECHNOLOGY B.V.** has declared the following manufacturing site(s):

#### ZIJLDIJK 24A 2352 AB LEIDERDORP NETHERLANDS

#### 6. MARKING OF PRODUCT :

Reference is made to MED 2014/90/EU chapter 2.

In particular Article 10.3 specifies that the wheelmark shall be followed by the identification number of the Notified Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).

#### 7. OTHERS :

It is **PRAXIS AUTOMATION TECHNOLOGY B.V.NETHERLANDS'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 \*\*\*