



Marine & Offshore

Certificate number: 10747/E0 BV

File number: AP 3356

Product code: 4431H

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

AUTO-MASKIN A/S

Skjetten - NORWAY

for the type of product

INTERNAL COMBUSTION ENGINE CONTROL UNITS

DCU 305

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: 02 Feb 2027

For Bureau Veritas Marine & Offshore,

At BV OSLO, on 02 Feb 2022,

Rune MARSTEIN

Rune Marstein



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:

Electronic Control Unit for control and monitoring of diesel engines comprising:

Items	Description	Firmware
DCU 305 A/P R2 and CU 2500	Control Unit	rev. 4.xx
DCU 305 R3	Control Unit	rev. 6.xx
DCU 305 R3 LT	Control Unit	rev. 6.xx
RSP 305	Remote Slave Panel	rev. 5.xx
RK 66	Wire terminal card	-
AK-6	Analog expansion board	-
MK-6	Relay expansion board	-
MK-14	Relay expansion board	-
Rudolf	Configuration tool	-

2. DOCUMENTS AND DRAWINGS:

- Drawings DCU 305 R2/R3 rev. 3, RK-66, MK-14. Auto-Maskin A/S ref.: 1468, 1470, 1476, 1475.
- User's manual DCU 305 R2, June 2004.
- User's manual Rudolf, August 2011.
- Firmware Revisions DCU 305 R2/CU2500 N°5001 dated 23-11-2007.
- Firmware Revisions DCU 305 R3 N°5002 dated 23-11-2007.
- Software Quality Assurance Plan, Doc No. 2/1201-AMS015, dated 2021-09-29.
- Firmware Revisions RSP 305, Doc No. 5003, dated 23.01.2006.
- User manual DCU 305 R3 and R3 LT, dated July 2014.
- Installation Guide for MK-6 and MK-14 and AK-6, dated June 2017.
- Datasheet DCU 305 R3 LT Engine control Unit, October 08, 2015.

3. TEST REPORTS:

- 3.1 - DNV environmental test report 99-1420 rev.1.
- 3.2 - DNV Test report N° 2005-3292 rev.01 dated 27/Jun./2005.
- 3.3 - DNV Test report N° 2002-3290 rev.01 dated 16/Oct./2002.
- 3.4 - DNV Test report N° 2001-3056 rev.01 dated 16/Feb./2001.
- 3.5 - Nemko Test report N° E21169.02 rev.02 dated 2021-09-08.

4. APPLICATION / LIMITATION:

- 4.1 - According to 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 - On board installation & Maintenance requirements: To be mounted in cabinet or desk.
- 4.4 - Only Hardware and Firmware / Software successfully tested together in compliance with the regulations as referred to in cover page, according to the declaration of the manufacturer are covered by this certificate.
- 4.5 - Any modification of the hardware, firmware or software having an impact on the product performance or functionality has to be validated with type testing.
- 4.6 - In accordance with IACS UR E22 and as applicable to programmable devices for computer based systems of Category II or III, for each ship application:
 - Ship specific documentation is to be submitted including software documentation and categorization of the computer based system.
 - Inspection and testing before installation onboard is to be performed under the surveillance of the Society.
- 4.7 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev7.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The above products are to be supplied by **AUTO-MASKIN A/S** 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 - **AUTO-MASKIN A/S** 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 - **AUTO-MASKIN A/S** has declared to Bureau Veritas the following production site(s):

AUTO-MASKIN A/S
Hvamsvingen 22
2013 Skjetten
NORWAY

6. MARKING OF PRODUCT:

- 6.1 - Maker's name or trademark.
- Catalogue Number and Serial Number.
 - Equipment type number or model identification under which it was type-tested.
- 6.2 - Alternatively, the marking may be presented on a display at equipment start-up.
- 6.3 - The title and version of each software element included in the installed software system shall be either marked or displayed on command on the equipment.
- 6.4 - When the marking and the title and version of the software are displayed only on the display, such information shall also be included in the equipment manual.

7. OTHERS:

- 7.1 - It is **AUTO-MASKIN A/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. 10747/D0 BV issued on 24/03/2017 by the Society.

*** END OF CERTIFICATE ***