

# TYPE APPROVAL CERTIFICATE

**This is to certify:**  
**that the Electric Motor**

with type designation(s)  
**POD series**

issued to  
**Rim Drive Technology B.V.**  
**Andelst, Netherlands**

is found to comply with  
**DNV rules for classification – Ships, offshore units, and high speed and light craft**

## Application:

**Products approved by this certificate are accepted for installation on all vessels classed by DNV.**

Degree of protection	<b>IP68</b>
Insulation class	<b>F</b>
Temp. class (°C)	<b>A</b>
Voltage (V)	<b>24 - 570V AC</b>
Power (kW)	<b>0.5 - 50 kW</b>
Frequency (Hz)	<b>variable</b>
Speed (RPM)	<b>variable</b>

Issued at **Høvik** on **2026-05-05**

This Certificate is valid until **2031-05-04**.

DNV local unit: **Netherlands VMC**

Approval Engineer: **Georgy Abramenko**



for **DNV**

*Andrew Downall*  
This document has been digitally signed and will  
therefore not have handwritten signature

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

## Product description

3-phase synchronous motor with permanent-magnet excitation controlled by frequency converter.

Duty type:	S1
Environmental parameters according to DNV CG-0339:	
IP Rating	Class D/ IP68
Temperature	Class A

### Characteristics of motors

Product name	Power [kW]	Nominal voltage [V]	Nominal current [A]
POD 0.5	0.5	48	13
POD 3.0 – 24V	3	24	125
POD 3.0	3	48	70
POD 5.0 – 24V	5	24	210
POD 5.0	5	48	106
POD 8.0	8	48	170
POD 11.0	11	48	230
POD 15.0	15	48	300
POD 22.0	22	96	230
POD 25.0	25	96	260
POD 30.0	30	110	273
POD 50.0	60	570	150

## Application/Limitation

1. Propeller blades are not assessed within this type approval certification.
2. When integrated in propulsion line, relevant documentation must be submitted for approval within product certification, as guided in DNV Rules for Ships Pt.4 Ch.8 Sec.1 Table 8 (certification of shafts), additional Class notations requirements.

## Type Approval documentation

Title	Approval date
POD-Marine (datasheet)	27.05.2024
DNV Certification Test procedure	11.06.2025
DNV Test report signed D	12.11.2025
Motor Design Overview	25.02.2026

## Tests carried out

According to DNV Rule for Ships Pt.4 Ch.8 Sec.5, DNV Class Guidance CG-0339.

## Marking of product

Type designation - technical data including rated voltage - RPM, rated power - ambient temperature - rated current - rated frequency - insulation class - IP class

## Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

## Manufactured by:

**RIM Drive Technology**  
 Wanraaij 4, 6673DN, Andelst

END OF CERTIFICATE