TYPE APPROVAL CERTIFICATE

Certificate No:
TAE000041E
Revision No:
2

This is to certify:

That the Electric Motor

with type designation(s)
HMC3 80 to HMC3 355

Issued to
Svend Hoyer A/S
Hadsten, Midtjylland, Denmark

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	**IP 55, IP 56, IP 65, IP 66**
Insulation class	**130 (B), 155 (F), 180 (H) on request**
Temp. class (°C)	**45° C, 50 °C with power reduction**
Voltage (V)	**220 V up to 690 V**
Power (kW)	**0,75 kW up to 378 kW**
Frequency (Hz)	**50 Hz, 60 Hz**
Speed (RPM)	**750 1/min up to 3600 1/min**

Issued at **Høvik** on **2025-12-04**

This Certificate is valid until **2030-08-03**.
DNV local station: **Denmark CMC**

Approval Engineer: **Georgy Abramenko**

for **DNV**
Oddvar Deinboll
This document has been digitally signed and will therefore not have handwritten signature

Oddvar Deinboll
Head of Section

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.

Place of manufacturing
DNV ID 10694675
DNV ID 10330395

Product description

Sizes:	S, S1, S2, M, M1, M2, M3, MB, L, L1, L2, L3
Rated voltage:	220 V up to 690 V
Rated power:	S1 0,75 kW up to 378 kW
Duty Type:	S1 to S9
Synchronous speed:	750 1/min up to 3600 1/min
Rated frequency:	50 Hz, 60 Hz
Ambient temperature:	45° C, 50 °C with power reduction
Thermal class:	130 (B), 155 (F), 180 (H) on request
Degree of protection:	IP 55, IP 56, IP 65, IP 66
No. Of poles:	2, 4, 6, 8
Spec. Model:	For marine / offshore environments. On request optional with built-in units e.g. brakes, external fans, encoders

Application/ Limitation
DNV product certification is required for motors performing essential/ important function and having rated power exceeding 300kW according to DNV Rules for Ships Pt.4 Ch.8 Sec.1

Type Approval documentation
Data sheets 03/06-15 for HMC3 Motors
Drawings: 90022_20140814, 90073_20140902, 90613_20150504
Test reports: SH590103-001,-002,-0003,-004,-0005,-006 of 2015.06.17-18-19
Catalogue: Hoyer IE3 motors 2015, IE3 marine data

Tests carried out
IEC 60034-1:2010-02, IEC 92-301-3rd ed. 1980
DNV Rules for Ships Pt.4 Ch.8 Sec.5

Marking of product
Manufacture, decnical data and type desigantion etc.

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.

END OF CERTIFICATE