



Type Approval Certificate

[Electric Motor]

Initial Approval 30 November 2021

Manufacturer Svend Hoyer Power Transmissions(Ningbo) Co., Ltd.
 No. 19, Jingwu Middle Road, Beilun District, Ningbo City, Zhejiang Province, 315821, P.R.China

Product Description Explosion-proof three-phase induction motor

- Type : HMCX80 ~ HMCX400

" See Appendix 1 "



Approval Condition " See Appendix 1 "

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows.

Pt. 6, Ch. 1, Sec. 3 of the Rules for Classification, Steel Ships

This Certificate is valid until 29 November 2026

Reissued at Shanghai, China on 10 March 2023



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No(ME23009596566) and certificate No.(NIB28088-EL003).



KOREAN REGISTER

*General Manager of
China Plan Approval Center
CHINA KR Co., Ltd.*

- Note :**
1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
 2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
 3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
 4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Product Description and/or Approval Condition

Date of Issue : 10 March 2023

A. Product Description

1. Product Specification

1) Product Description (Type : HMCX80 ~ HMCX400)

Explosion-proof three phase induction motor for marine use with cast iron frame

- Frame sizes	: 80 ~ 400
- Rated power	: 0.75 ~ 550 kW
- Rated voltage	
Rated power ≤ 3 kW	: 200 V ~ 690 V
Rated power > 3 kW and frame size 112 ~ 280	: 112 V ~ 690 V
Rated power > 3 kW and frame size 315 ~ 355	: 230 V ~ 1140 V
Rated power > 100 kW and frame size 400	: 380 V ~ 1000 V
- Frequency	: 50/60 Hz
- Number of poles	: 2, 4, 6, 8, 10, 12, 14, 16
- Number of phase	: 3 Phase
- Duty type	: S1
- Insulation class	: F or B
- Ex-proof grade	: Ex db, db eb IIB/IIC T4/T5 Gb
- Degree of protection	: IP55, IP56, IP65, IP66
- Amb. Temp.	: DOL operation -40 ~ 50 °C VFD operation -40 ~ 60 °C

2. Approved Drawings and Documents

1) Drawings and Specifications

- Approved drawing package dated 9th Oct, 2021
- Approved drawing package dated 16th Aug, 2022

3. Test Reports, etc.

- 1) Test report no. X2021-298C & 162997 witnessed by this Society's surveyor.
- 2) Explosion-proof certificates
 - IECEX CNEX 19.0007X Issue 3 dated 13th Nov, 2020
 - IECEX CNEX 19.0019X Issue 3 dated 13th Nov, 2020
 - CNEX 19 ATEX 0028 X Issue 3 dated 30th Nov, 2020
 - CNEX 21 ATEX 0005 X Issue 2 dated 23rd Dec, 2021
 - IECEX CNEX 21.0006X Issue 3 dated 1st Jul, 2022

B. Approval Condition

1. Application & Limitation

- 1) This approval is granted on the basis of the test reports and the approved documents.
- 2) Degree of protection shall be complied with Rule Pt.6 Ch.1 Sec.2 201.2. (5).
- 3) The manufacturer should inform this Society of all kinds of revisions of the equipment. If the changes are recognized to affect functionality of the approved equipment, type test to confirm the reliability of the revised equipment may be performed in the presence of our surveyor.

2. Individual Product Cert. and Drawing Approval Requirement

- 1) As long as the motors are covered by Type Approval, drawing approval for individual vessel will not be required.
- 2) Individual Product Certification is required.

3. Marking

- 1) The product or packing is to be marked with the manufacturer's name and type designation on a suitable position.

4. Others

N/A

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