China Classification Society

CERTIFICATE OF TYPE APPROVAL

This is to certify that the following products produced by the manufacturer stated in the certificate can meet the requirements of the approval standards listed below.

Product Approved

MARINE ALTERNATING CURRENT ASYNCHRONOUS ELECTROMOTOR

Manufacturers

ABB Sp. z o.o. LV Motors Factory

ul. Placydowska 27, 95-070 Aleksandrow Lodzki, Poland

Approval Standards

1. China Classification Society "Highly Reputable ship Class" (2015) 
   Chapter 3, Part Four of China Classification Society Rules for Classification of Sea-going Steel Ships 2015 and its Amendments

Certificate Validity

This Certificate is valid until 2021年5月27日 / May 27, 2021
产品明细/ Product Description

船舶三相交流异步电动机/MARINE ALTERNATING CURRENT ASYNCHRONOUS ELECTROMOTOR

产品型号/Type

额定电压/Rated Voltage

额定电流/Rated Current

额定频率/Rated Frequency

额定转速/Rated Revolution

额定功率/Rated Power

绝缘等级/Insulation Class

外壳防护等级/Degree of Protection of Enclosure

产品型号/Type

额定电压/Rated Voltage

额定电流/Rated Current

额定频率/Rated Frequency

额定转速/Rated Revolution

额定功率/Rated Power

绝缘等级/Insulation Class

工作定额/Rating

外壳防护等级/Degree of Protection of Enclosure

批准的图纸和设计计算书/ Approved Drawings and Design Calculations

图纸批准号/ Drawings Approval No.

产品认可试验报告/ Approval Test Report

试验报告编号/Test Report No.

试验报告日期/Test Report Date

试验单位/Laboratory

试验报告编号/Test Report No.

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试验单位/Laboratory
产品适用范围/Application of the Product
船只与海上设施/Ships and Offshore Installations

认可条件/Maintenance Requirements of Approval
1. 产品及其重要零部件的设计、所用材料或制造方法有所改变，且影响到产品的主要特性、特征或产品的性能指标有所更改，且超过认可的范围，船用厂商须申请有关实验证明并进行试验，其结果应证明符合认可条件。
   After type approval, if there are changes to the design, materials used, or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or its measurement indexes of the product are changed and exceed the scope of approval, the drawings and documents of the product should be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.
2. 产品的质量管理体系应保持有效运行，并且与认可时一致。如果质量管理体系发生改变，应经原体认证机构审核并报本社批准。
   The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the Society’s approval shall be obtained.
3. 认可证书有效期内，如果出现可能导致本社取消认可的情况，工厂应及时采取有效的纠正措施。
   Within the validity of the approval certificate, if there occurs that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.
4. 在认可证书有效期内，本社检验人员可在必要时通知的情况下对工厂的产品制造过程进行审核，以验证产品的生产是否符合本社批准的产品图及文件，工厂应予以配合。
   Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.
5. 如果由于获得模式认可或模式证书，且无需颁发产品证书/等效证明文件的情况，本社检验员应接受本社每年一次的定期审核。审核的条件为认可证书期满前相应的每周年，检查工作可在周年后的前三个月内进行。
   If belong to the situation of has type approval mode B certificate, and marine product certificate/equivalent document is not necessary, those who have obtained the certificate should be subject to periodical audit every year. The periodical audit should be carried out within 3 months before and after the anniversary date which corresponds to the date of expiry of the relevant.

认可后的产品检验方式/Method of Product Inspection after Approval

对于原材料和零部件的检验要求/Inspection Requirements for Materials and Components

产品如下原材料和零部件应由本社认可的制造厂生产/The following materials and components of the product should be manufactured by the factory approved by the Society:

产品如下原材料和零部件应经本社检验/The following materials and components of the product should be inspected by the Society:

产品如下原材料和零部件的制造厂清单，经本社批准方可变更/The list of manufacturer for the following materials and components of the product should not be changed without the Society’s approval:

责任声明/Statement of Responsibility

本社的认可不影响、替代与本社授权或检验无关的各方对上述工厂的认可和发证，并且不对与本社授权或检验无关的各方负责，不承担任何法律和经济责任。

The approval of the Society does not affect and replace any approval and certification of the manufacturer by any parties that have no relation with this Society’s authorization or survey and therefore takes no responsibility for these parties. The Society does not undertake any legal and
economic liabilities arising from accepting this Society's certificate without prior permission from this Society.

其他/Others

本证书由原证书（No. HB15T00044 and HB16T00025）换新井替代原证书。
This certificate is renewed from and supersedes the previous Type Approval Certificate No. HB15T00044 and HB16T00025.

1. AA type Sizes: 160 MLA/MLD/MLC; 180 MLA/MLD/MLC; 200 MLA/MLD/MLC; 225 SMA/SMB/SMC/SMD; 250 SMA/SMB/SMC/SMD; 280 SMA/SMB.

Aluminium frame:

Number of phases: 3; Number of Poles: 2 to 8; Single speed and multi speeds

本社已审核了产品厂无石棉声明。但本社的审核不免责产品厂按照合同关系向订货方保证产品无石棉的责任。
The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society.
However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.