



Certificate no.:
TAE00004U0

TYPE APPROVAL CERTIFICATE

This is to certify:
that the Electric Motor

with type designation(s)
P52L7009

issued to
ABB Motors and Mechanical Inc.
Flowery Branch, GA, USA

is found to comply with
DNV rules for classification – Ships
DNV offshore standards

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Degree of protection	56
Insulation class	H
Temp. class (°C)	55
Voltage (V)	560/637
Power (kW)	858
Frequency (Hz)	80/91/180
Speed (RPM)	800/910/1800

Issued at **Houston** on **2024-05-21**

This Certificate is valid until **2029-05-20**.

for **DNV**

DNV local unit: **Certification & Inspection Services**

Approval Engineer: **Qi Ricky Li**

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 300,000 USD.



Form code: TA 251

Revision: 2023-09

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Product description

AC Induction Motor, Continuous Duty (S1)
Frame size 5233, Totally enclosed water cooled (TEWC), Temperature ambient 55°C,
1150 HP (858 kW)

Type/ Model Number	Frame size	Rated Voltage (V)	Rated Frequency (Hz)	Rated Power HP/kW	Rated current (A)	Rated speed RPM	Insulation Class	Ingress Protection
P52L7009	5233	560	80	1150/858	1061	800	H	IP56
		560	180	1150/858	1061	1800		
		637	91	1150/858	938	910		
		637	190	1150/858	938	1800		

Name and place of manufacturer

ABB Motors and Mechanical Inc.
4349 Avery Drive
Flowery Branch, GA 30542, USA

Application/Limitation

Ex-e motor driven by a power converter is not accepted to be installed in zone 1, unless the motor is driven by a converter that was Ex-certified together with the motor. All limitation and allowed motor-converter combinations/configurations specified in the Ex-certificate shall be followed.

Each motor shall be provided with DNV product certificate.

This statement shall be referred to in DNV Product Certificates:

The information related to Ex-Certification from recognized test institution is given as for information only. Ex installations to be approved in each case according to the Rules and Ex-Certification/ special condition for safe use listed in valid Ex-Certificate issued by a notified/ recognized certification body.

The motor cannot be used for any main or auxiliary propulsion purposes.

Type Approval documentation

Tests carried out

Temperature rise, Insulation Resistance, Winding Resistance, Vibration, No Load, Overload.

Marking of product

Manufacturer's name – type designation/serial number – Voltage – Power – Frequency – Current – IP class – power factor – RPM – insulation class – ambient temperature.

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



Job ID: **262.1-037843-1**
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