



Certificate no.:
TAE000054B

TYPE APPROVAL CERTIFICATE

This is to certify:
that the Electric Motor

with type designation(s)
M6800 Induction Motor

issued to
National Oilwell Varco, L.P. - Rig Technologies Division - FM 529
Houston, TX, USA

is found to comply with
DNV offshore standards

Application:

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

Degree of protection	IP56
Insulation class	H
Temp. class (°C)	180
Voltage (V)	575
Power (kW)	1000
Frequency (Hz)	40.3-90.7
Speed (RPM)	800-1800

Issued at **Houston** on **2025-08-22**

This Certificate is valid until **2030-08-21**.

for **DNV**

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

Approval Engineer: **Pasquale Macri**

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

Type M6800, 3 phase Vertical Squirrel Cage Induction Outline and Mounting 18741648-GAD, M6800 Datasheet 19139790-DAS and M6800 Nameplate 188472444-001

Rated Voltage (V):		575	575	575
Rated Frequency (Hz):		40.3	75.7	90.7
Revolution (RPM):		800	1500	1800
Amps (A):		1248	1231	1035
Rated power (HP/kW):		1341/1000	1341/1000	1117/833
Number of poles:		6		
Duty type:		S1		
Enclosure class:		IP56/ TEWC Flame Proof		
Ambient air temperature:		-20°C to +55°C		
Cooling:	Coolant:	50/50 Water/Ethylene Glycol		
	Inlet coolant temperature:	0 - 38°C		
	Minimum flow:	20 US GPM (76l/min or 4.54 m^3/h)		
	Inlet pressure:	100-150 PSI (0.689 - 1.034 MPa)		
	Pressure drop:	< 50 PSI (345 kPa)		
	Method:	TEWC (IC71W)		
Ex rating (SIRA - IECEx SIR 07.0041X SIRA 07ATEX1160X)		Ex db eb IIB T3 Gb IP56 (T_{amb} = -20°C to 55°C) II 2 G Ex db eb IIB T3 Gb IP 56 (T_{amb} = -20°C to 55°C)		
Insulation class:		H		
Temperature rise class:		H		

TEWC - Totally Enclosed Water Cooled

Application/Limitation

All limitations and allowed motor-converter combinations/configurations specified in the Ex-certificate shall be followed.

IECEx Certificate conditions of certification shall be followed up.

Service temperature ranges -20°C to +55°C.

Each motor should be provided with a DNV product certificate.

The following statement shall be added to 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 conditions for safe use which are listed in valid Ex Certificate issued by a notified/ recognized certification body."

The motor is intended for drilling top drive and similar industrial applications only and cannot be used for any main or auxiliary propulsion purposes.

Type Approval documentation

Tests carried out

The following tests have been carried out:

- Cold Resistance
- Insulation Resistance (1000V)
- Temperature Rise at Full Load
- 160% Torque Test
- 150% Current Test
- 120% Speed Test
- Vibration measurement
- No Load Current and KW
- Locked Rotor (Single Phase) Current and KW
- Hi-Potential Test (2150V)
- IP rating

Marking of product

For traceability of the product to this Type Approval Certificate the products are as a minimum to be marked as follows:

1. a) Serial number, b) Manufacturer's name, c) Model and d) Type Designation
2. a) Power (HP/kW), b) Voltage, c) Current, d) Frequency, e) Speed, f) Power factor
3. Duty type (if other than S1/Continuous)
4. a) Winding insulation class and b) Winding connection
5. Degree of protection
6. a) Maximum permissible cooling medium temperature, b) Ambient temperature
7. Performance standard
8. Total mass

Separate Nameplate with at least:

1. a) Manufacturer's name, b) Model and c) Type Designation
2. Ex-marking (Ex protection method)
3. Reference to a) Ex certification agency and b) Ex certificate number

Periodical assessment

The scope of the periodical/renewal assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems/components/materials.

The main elements of the assessment are:

- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines.
- Ensuring that design/systems/components/materials used comply with type approved documents and/or referenced system/component/material specifications.
- Review of possible changes in design of systems/components/materials, software version and performance, and make sure that such changes do not affect the type approval given.
- Comparison of renewal routine tests results (RT) with Type Tests results (TT).
- Ensuring traceability between manufacturer's product type marking and the type approval certificate.
- Ensuring that type approved documentation is available.

Assessment to be performed at every second year

Manufactured by:

National Oilwell Varco, L.P. - Rig Technologies Division
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Houston, TX 77041-3017, USA