

PRODUCT NOTE

API compliant 2-pole modular induction motors for VSD use

High reliability for pump and compressor applications



Offering compliance with American Petroleum Institute standard API 541, ABB's variable speed drive (VSD) controlled 2-pole modular induction motors meet high demands for reliability and quality.

High reliability

ABB's VSD controlled 2-pole modular induction motors, type AMI, help plant operators to minimize downtime. The motors offer a continuous speed range up to 4,000 rpm for pump and compressor applications.

Motors rated up to 4,000 HP (3,000 kW) have self-lubricated sleeve bearings. This ensures low maintenance and easy installation at remote locations, as self-lubricated sleeve bearings reduce the need for piping. In addition, there is no need to connect the motor to the driven equipment's oil supply or to a separate oil supply unit. Motors rated above 4,000 HP have forced lubricated sleeve bearings.

ABB's VSD controlled 2-pole modular induction motors are specifically designed to meet the needs of the oil and gas industry, and water industries. Compliance with API 541 ensures reliability, quality and straightforward installation.

An optional advanced condition monitoring system, ABB MACHsense-R, detects potential problems at a very early stage, before they become serious. By enabling targeted and timely maintenance, this system helps to further reduce downtime, and therefore increases productivity and lowers your overall cost of ownership.

High reliability is ensured by proven ABB technology and extensive testing of each motor. We have more than 125 years of experience in manufacturing electric motors. Our technical expertise and deep application knowledge ensure a tailor-made motor-drive package, optimized in terms of thermal behavior, reliability, efficiency, and speed and power ranges.

Easy to buy, integrate and use

ABB is a one-stop shop for complete motor-drive packages, which means more efficient project management, reduced installation and commissioning times, and less risk in project execution. DocStage, our online system for sharing and managing documentation, provides easy access to documents and 3D drawings. This ensures easier integration of the motors into your process.

The motors' low noise level (82 dB) makes for improved safety for personnel working nearby. Additionally, low noise enables installation in residential areas for water industry applications.

ABB's global service network provides a complete portfolio of services covering the entire product life cycle, as well as spare parts availability. The network includes over 60 service centers and more than 150 authorized service providers.

Main specifications	
Output power	500 to 8,700 HP (400 to 6,500 kW)
Frame size	400 to 630
Motor type	AMI
Number of poles	2
Voltages	≤11 kV
Speed range	Up to 4,000 rpm
Ambient	-40 to +55 °C
Protection form	IP24, IP55
Cooling method	TEAAC (air-to-air) / IP55, TEWAC (air-to-water) / IP55, WPII (open) / IP24
Protection class	Ex e, Ex nA, Ex px, Ex pz, Ex td, Class 1 Div 2, Class 1 Zone 2
Enclosure material	Welded steel
Bearings	Self-lubricated sleeve bearings (frame sizes 400 to 500), forced lubricated sleeve bearings (frame sizes 560 to 630)
Mounting	IMB3 (IM1001)
Standards	IEC, NEMA, API 541
Supply	VSD

Your reliable partner

ABB motors are based on reliable designs, proven in thousands of installations, and provide high productivity in demanding conditions.

With ABB you always have a partner to discuss different motor solutions to optimize your process. Our services do not stop at sales. We make it easy for you to reach us at every stage of your motor's life cycle.

We offer predefined maintenance programs for all lifetime phases of all ABB motors, and preventive diagnosis and updates can help to further boost your competitiveness when needed.

For more information please visit:

www.abb.com/motors&generators

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