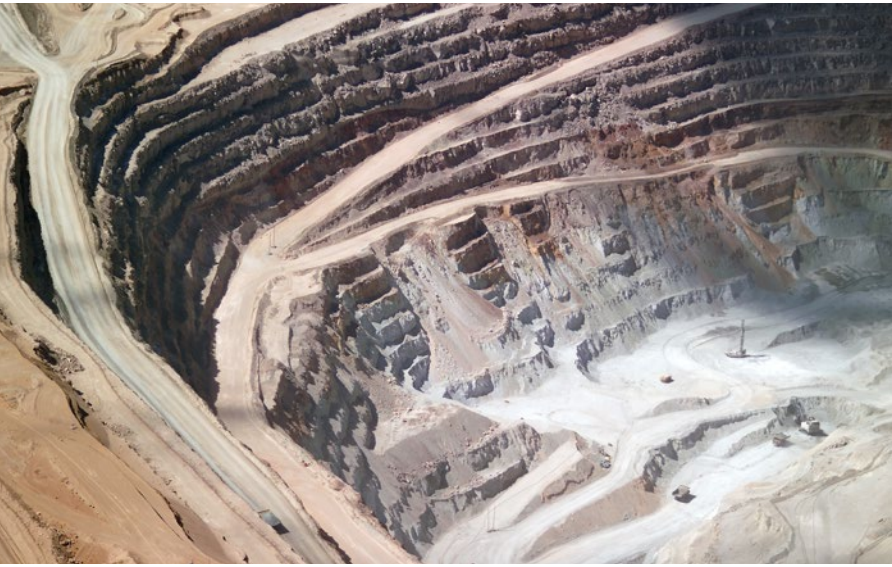


High voltage motors for the mining industry

More for mining



ABB's excellent mining application specific know-how and technical expertise, gained from thousands of mining installations, make us an ideal partner for mining companies who want to improve reliability and efficiency of their processes.

Energy efficiency and lower cost of ownership

ABB's high voltage motors help mining companies to meet their goals: to operate safely and efficiently while keeping costs down.

ABB's motors are very efficient, reducing the operating costs of energy-intensive processes. The reliability of ABB motors, ensured by proven design and careful maintenance planning, reduces the downtime of critical equipment.

Reliability in demanding conditions

ABB motors are based on reliable designs, proven in thousands of installations, and provide high productivity in demanding conditions. We only use high-quality materials and components, and thoroughly test every motor before it leaves the factory.

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.

ABB's extensive global network ensures local service delivery whenever and wherever you need it. The worldwide network includes over

60 service centers and more than 150 authorized service providers.

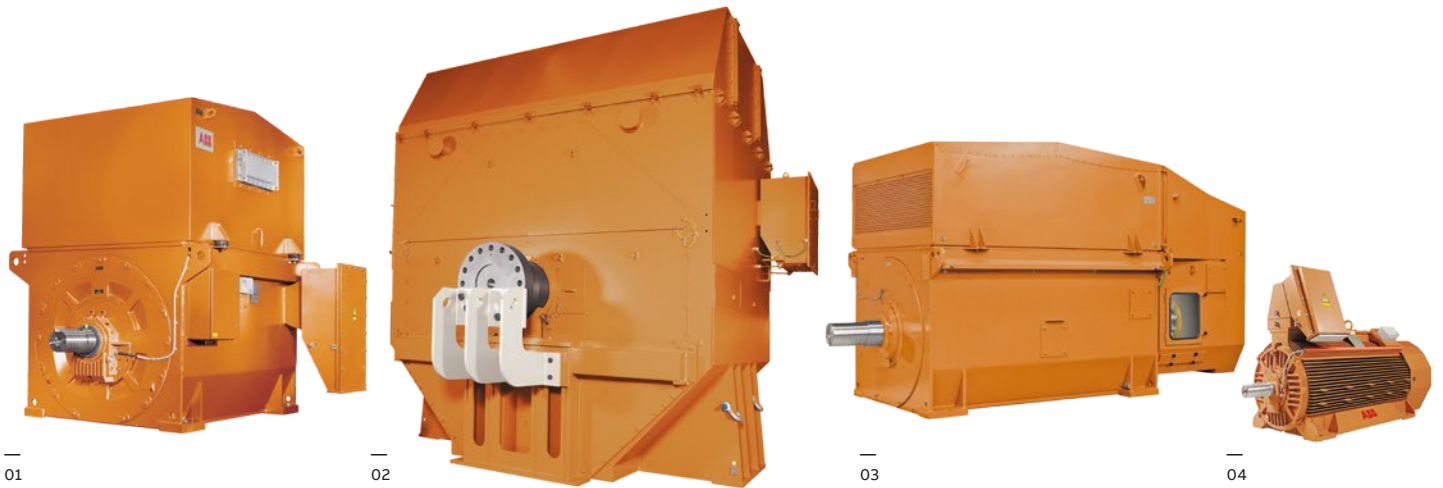
We offer predefined maintenance programs for all lifetime phases of all ABB motors, and preventive diagnosis and updates can help to further boost your competitiveness when needed.

Wide range of motors for the mining industry

ABB offers a wide range of reliable, high efficiency induction and synchronous motors that comply with leading international standards. Designed according to individual customer requirements for use in the mining and cement industries, the motors can be connected direct-on-line or fed via variable speed drives and they are certified by global certification authorities.

ABB has industry specific solutions for the main mining applications:

- Drills and working machinery
- Vehicles
- Hoists
- Conveyors
- Mills and crushers
- Pumps
- Fans and compressors
- Separation and beneficiation equipment



- 01 Modular motor
- 02 Synchronous motor
- 03 Slip-ring motor
- 04 Rib cooled motor

Induction motors

Induction motors are the workhorses of the industry due to their versatility, reliability and simplicity. Squirrel cage induction motors are available up to powers of 23 MW and usually represent the first choice in this power range.

Rib cooled motors

Power: 100 to 2,250 kW

Frame sizes: 315 to 560

Direct-on-line or fed via variable speed drive

High efficiency levels

Modular motors

Power: 160 to 23,000 kW

Frame sizes: 400 to 1120

Direct-on-line or fed via variable speed drive

Complete range of enclosures and cooling arrangements

Slip-ring motors

Power: 160 to 18,000 kW

Frame sizes: 400 to 800

Wound rotor design

Complete range of enclosures and cooling arrangements

Synchronous motors

Synchronous motors are typically preferred when higher power and torque are required. In addition to their high power capabilities, synchronous motors offer the benefits of high efficiency, high performance and an adjustable power factor. Permanent magnet motors are synchronous motors that do not need separate excitation.

These motors are generally used for very slow speed applications.

Synchronous motors

Power: 0.5 to 75 MW

Frame sizes: 710 to 2500

Direct-on-line or fed via variable speed drive

Complete range of enclosures and cooling arrangements

Superior reliability with robust design

- Feature set chosen specifically for demanding mining applications
- Motor enclosure built entirely of cast iron and steel, including cooling fan and fan cover
- Motor frame and terminal boxes tested to fulfill ingress protection requirements
- High altitude and special ambient temperature requirements
- Flexible positioning of main and auxiliary terminal boxes
- Low vibration levels in all operating conditions
- Motor finished in high visibility orange (Munsell 2,5 YR 6/12 or RAL2011, any color available on request)
- Dimensioning always includes safe margins: magnetic flux is far from saturation, current density is well below maximum allowed by requirements
- Excellent application specific know-how and technical expertise to fulfill the most demanding starting conditions

For more information please visit:
www.abb.com/motors&generators

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