

PRODUCT NOTE

Low voltage motors for the mining and cement industry

Built to cope with the harshest conditions of all



Mining and cement production places very stringent demands on motors. The specialized motors must be built to withstand the harshest conditions imaginable. Further demands are placed on motors used in explosive environments, so-called Ex d motors.

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ABB Low voltage mining motors are designed to meet the hardest conditions in mining and cement industry.

Motor types

ABB supplies the following types of air-cooled low voltage induction motors for mining and cement applications.

Cast iron motors	
Output power	from 0.18 to 1000 kW
Frame sizes	from 71 to 450
Motors for explosive at	
Motors for explosive at Output power	

Harsh conditions, stringent demands

Mining motors must cope with everything from falling rocks to particle ingression in order to maintain availability and performance.

Meanwhile, demands for reliability in mining and cement are among the most stringent there are. In these highly competitive commodities markets, the cost of any motor failure – and consequent production stoppage – can literally count in the millions of U.S. dollars.

Why you can rely on ABB's motors

ABB mining motors deliver the highest reliability in the harshest environments. Here are some of the crucial factors that make these motors first choice for their reliability.

Robust design

The robust fan cover protects the fan against falling rocks. This prevents the risk of reduced cooling performance and costly repair downtime.

IP 66 protected

Efficient ingress protection is essential whenever dust and water are present. ABB motors are IP66 protected, preventing intrusion of particles as well as moisture from high-pressure water cleaning.

Sealed bearings

Specially designed seals prevent dust, water and other contaminants from entering the bearing housing, thus protecting the bearing grease and reducing the risk of premature bearing failure.

Efficient cooling

Unlike conventional motors, dust settling on the motor is no problem with ABB mining motors. Thanks to their superb tightness, they are easy to wash which ensures long-term cooling efficiency.

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Low voltage cast iron motor for mining application. 02

Low voltage flameproof motor for underground mining application..

Special features for mining motors

ABB's mining motors are built on proven, reliable platforms, with critical components being regularly upgraded to meet the challenges of the mining sector.

Reliability in operation

ABB mining motors are based on reliable designs, proven in thousands of mining installations, delivering highest productivity even in the most demanding conditions.

Support and service

ABB's mining motors are covered by the global ABB sales, support and service network – the most extensive motor vendor network in the world. With presence in more than 100 countries, our support is never far away – regardless of the location of your production.

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