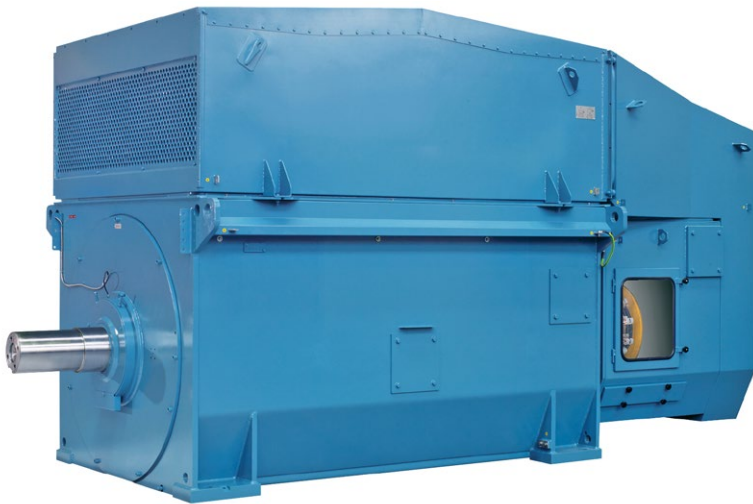


# Slip-ring modular motors from ABB

## Availability for heavy load inertia applications



Slip-ring motors are an ideal solution for applications which require high starting torque and low starting current. They are especially suitable for heavy load inertia applications like mill drives or situations where network conditions are weak.

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01 ABB's slip-ring modular motor, type AML.

### General purpose and engineered motors

ABB's slip-ring motors are available as N-series general purpose motors (type NMK) and A-series engineered motors (type AMK and AML).

N-series general purpose motors combine cost-efficient standardized designs and short lead times with safety, productivity, energy efficiency and reliability. They are targeted at applications where a highly customized motor is not needed.

A-series engineered motors are highly customized, fine-tuned to the customer's precise needs, and offer a high degree of engineering flexibility.

### High availability

ABB's slip-ring motors minimize mechanical stress at starting, increasing the lifetime of your driven equipment. They provide maximized availability and high torque over the entire speed range.

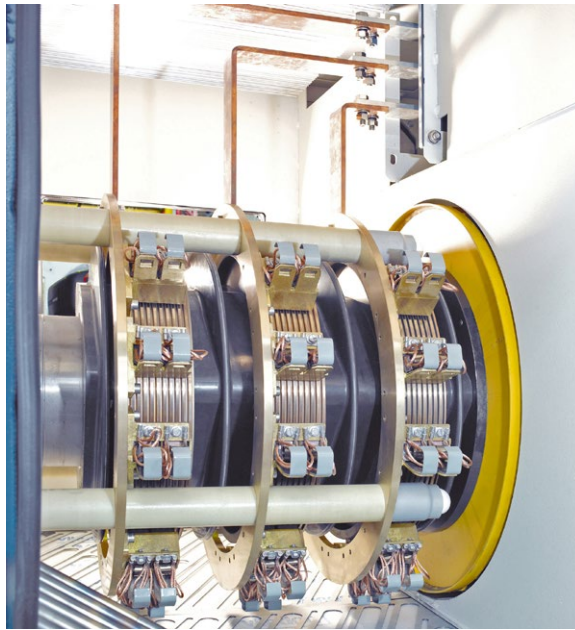
Slip-ring motors are widely used in mills, fans, crushers and conveyors in the mining, cement and metal industries. In addition, these motors offer a reliable solution for pumps in the water industry and safe area pumps, compressors and mixers in the petrochemical industry.

### Reliability and high efficiency

Reliability and high efficiency of ABB slip-ring motors reduce the downtime and operating costs of your processes, minimizing cost of ownership. The high efficiency is ensured by proven motor design, use of high quality materials, and advanced ventilation technology. The fully braced and vacuum impregnated windings increase reliability in your heavy-duty operations.

High power density of our slip-ring motors means the power required is achieved in a smaller frame size. The motors' compact size and light weight reduces required installation space and equipment to lift the motor on site, leading to lower installation costs.

Technical specifications	Motor types AMK and AML	Motor type NMK
Output power:	up to 12,000 kW	up to 2,800 kW
Frame sizes:	400 to 800	400 to 500
Voltage:	380 V to 13.8 kV	4 to 11 kV
Cooling:	IC01, IC611, IC616, IC81W	IC611, IC616
Protection:	IP55, IP23	IP55
Mounting:	Horizontal (vertical mounting available on request)	Horizontal
Bearings:	Antifriction or sleeve (optionally roller bearings)	Antifriction
Insulation class:	F	F
Supply:	direct-on-line, variable speed drive	direct-on-line



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### 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.

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.