

PRODUCT NOTE

High voltage modular induction motors

High efficiency, reliability and availability



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ABB high voltage modular induction motors are tailored for an exact match with their application. They boost reliability, productivity and energy efficiency across a wide range of industries.

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01 ABB's high voltage modular induction motor, type AMI

ABB high voltage modular induction motors are fine-tuned to the customer's precise needs and offer a high degree of flexibility.

They are engineered to provide reliability and availability in the toughest and most demanding conditions, and they can be used in all industry segments and applications.

Key benefits



High efficiency

- High efficiency motors help save energy and cut costs



Designed for most demanding applications

- Meets demanding application needs



Efficient cooling

- Modular cooling options to meet all customer requirements



High productivity

- Reliable proven design and productivity from countless installations

High efficiency saves energy and cuts costs

As the world seeks ways to achieve its net zero ambitions, energy efficiency and circularity have critical roles to play.

High efficiency modular induction motors enable industries to lower their environmental impact and reduce the total cost of ownership. They can provide energy savings totaling up to 1.1 GWh over a 20-year lifetime.

Using less energy to produce the same output means lower CO2 emissions and shorter payback times. The payback time can be as low as six months (based on an energy price of EUR 0.40/kWh).

At ABB we take our responsibilities seriously, with a strong focus on sustainability. Carbon neutrality is prioritized in our manufacturing operations.

02 High voltage modular induction motors are tailor-made to meet the needs of each customer and each application.



Technical specifications	
Output power:	Up to 23 MW
Frame sizes:	400 to 1000
Number of poles:	2 to 24
Voltages:	Up to 13.8 kV
Frequency:	50 or 60 Hz, or VSD
Ambient:	-50 °C to +60 °C
Cooling:	Air-to-air, air-to-water, weather-protected open ventilated system
Protection:	IP23, IPW24, IP55, IP56
Enclosure material:	Welded steel
Bearings:	Antifriction or sleeve
Mounting:	Horizontal or vertical
Standards:	IEC, NEMA
Supply:	Variable speed drive (VSD), direct-on-line (DOL)

Designed for most demanding applications

ABB modular induction motors are tailor-made for their specific application. They are built on the most successful modular platform for electric motors. They not only meet demanding application requirements but also have the flexibility to allow adaptation for highly specialized configurations.

The motors are typically used to drive blowers, fans, compressors, pumps, conveyors, hoists, mixers and thrusters. They are found in industries like power generation, air separation, oil and gas, chemicals, metals, marine, mining, and pulp and paper.

ABB modular induction motors comply with all relevant international standards. Versions are available for both direct-on-line (DOL) and variable speed drive (VSD) operation.

Efficient cooling for peak performance

Efficient cooling is vital for peak motor performance in all ambient operating conditions. The optimal cooling option is chosen from three basic modules:

- air-to-air heat exchanger
- air-to-water heat exchanger
- weather-protected open ventilated system

The selected cooling module is mounted on top of the frame, ensuring that customer requirements regarding the cooling method and environmental protection can be met in every case.

High productivity

ABB motors are based on reliable designs, proven in thousands of installations, and provide high productivity in demanding conditions. We use our extensive experience and segment knowledge to determine what type of motor will perform best in each application.

The modular induction motors’ proven core technology, materials, manufacturing methods and low vibration ensure great reliability. Each motor is thoroughly tested before it leaves the factory.

Your reliable partner

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.

The extensive ABB global network ensures local service delivery whenever and wherever you need it. Our 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 further boost your competitiveness when needed.

Learn more from the ABB High voltage modular induction motors page.



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

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