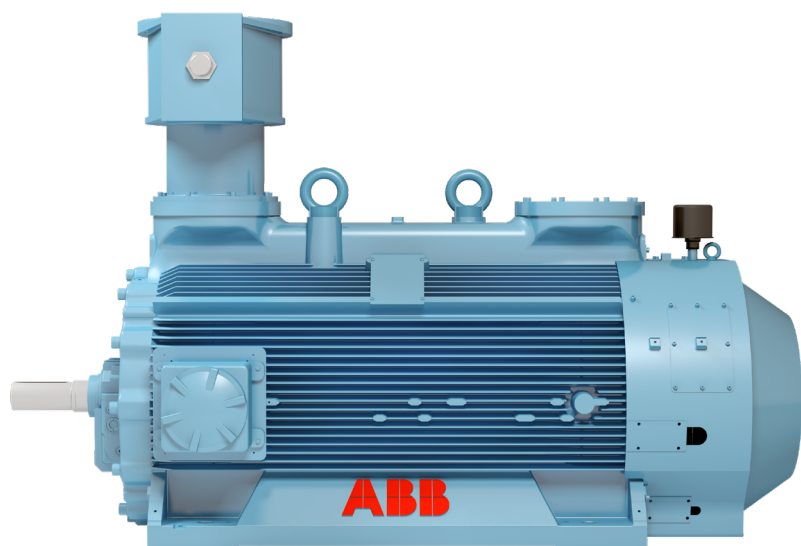


PRODUCT NOTE

High voltage flameproof motors

Performance, reliability and safety



01

01 Rib cooled flameproof motor, type AMD R

Safe choice

ABB high voltage flameproof motors are designed to withstand the pressure caused by an internal explosion without incurring any damage. They prevent the propagation of flames outside of the enclosure, and they are certified for gas groups IIB and IIC.

ABB flameproof motors are a safe choice for applications in potentially explosive atmospheres. They meet all relevant international standards, such as EN and ATEX Directive, as well as the most important specification requirements for the oil and gas industry. ABB's extensive experience as a motor manufacturer – which spans more than 140 years – ensures the motors will operate reliably in harsh environments with hazards like extreme temperatures, corrosive dust and humidity.

High productivity and reliability

The high voltage flameproof motors are available in two versions rib cooled motors up to frame size 500, and tube cooled motors for higher power ratings.

ABB's high voltage flameproof motors are designed for reliable operation in the toughest conditions. They provide compliance with international standards and oil & gas industry requirements, and deliver great performance, reliability and safety for applications in hazardous areas.

ABB rib cooled flameproof motors offer the benefits of very high power density and efficiency, increased reliability and easier maintenance. These advantages ensure a lower cost of ownership. In fact, the motors have set a new benchmark, offering more watts per kilogram than has ever been achieved before with rib cooled motors.

High power density means that for a given output you can often use a motor one frame size smaller than with similar products. This helps to save space and enables more compact installations.

The tube cooled motors are cooled using cooling tubes, which allows for a compact size while optimizing motor performance. They offer the benefits of high reliability, easy maintenance and lower operational costs while maximizing application productivity and efficiency.

Versions are available for both direct-on-line (DOL) and variable speed drive (VSD) operation. Certified ABB motor-drive packages, with optimized thermal behavior, reliability, efficiency and power range, offer even higher productivity and energy efficiency.

02 Tube cooled
flameproof motor,
type AMD T



02

Main specifications

Rib cooled motors, type AMD R	
Output power	100 to 1,600 kW
Frame size	355 to 500
Number of poles	2 to 18
Voltages	Up to 11 kV
Frequency	50/60 Hz, VSD
Cooling	IC411, IC416
Ambient temperature	-20° to 40°C (as option down to -55°C and up to 60°C)
Protection	IP55 (as option up to IP66)
Enclosure material	Cast iron
Bearings	Antifriction or sleeve
Mounting	Horizontal or vertical
Ex protection types:	Ex db, Ex db eb, Ex tb, Ex db I Mb
Gas/Dust group	I, IIB, IIC
Temperature class	T3, T4, T5
Standards	IEC, EN, NEMA electrical
Tube cooled motors, type AMD T	
Output power	700 to 7,500 kW
Frame size	500 to 900
Number of poles	2 to 12
Voltages	Up to 11 kV
Frequency	50/60 Hz, VSD
Cooling	IC511, IC516
Ambient temperature	-20° to 40°C (as option down to -50°C and up to 60°C)
Protection	IP55
Enclosure material	Welded steel
Bearings	Antifriction or sleeve
Mounting	Horizontal or vertical
Gas/Dust group	IIB, IIC*, IIB+H2**
Temperature Class	T3, T4
Ex protection types	Ex db, Ex db eb
Standards	IEC, EN, NEMA electrical

* IIC frame available for AMD T 500 only

** IIB + H2 available for AMD T 710 only

Key benefits



Safe choice

- Design meets all relevant standards and specification requirements in hazardous environments



High power density

- Compact size with more watts per kilogram



High reliability

- Increased uptime and productivity



Easy to maintain

- ABB's predefined maintenance programs ensure operational safety and reliability

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

Preventive maintenance helps keep production running and optimize costs. ABB's certified engineers for hazardous area motors ensure that all the relevant international regulations and requirements for relevant standards are met.

For more information please visit:

abb.com/motors&generators

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