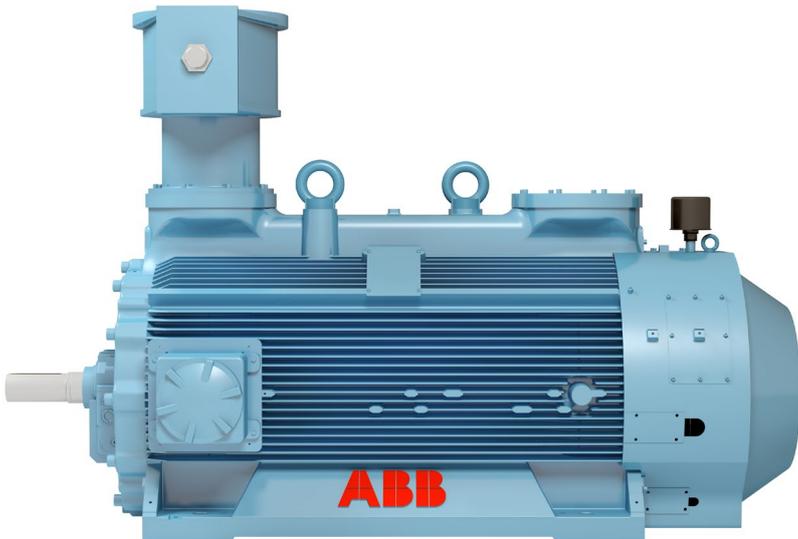


PRODUCT NOTE

Flameproof motors from ABB

Performance, reliability and safety



High voltage flameproof motors from ABB offer great performance, reliability and safety for applications in potentially explosive atmospheres.

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01

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01 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 flame propagation 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, including IEC, EN, NEMA, ATEX Directive, and the most important specification requirements for the oil and gas industry. We have applied our experience as a motor manufacturer – which spans more than 130 years – to ensure the motors will operate reliably in harsh environments, withstanding hazards such as extreme temperatures, corrosive dust or humidity.

High productivity and reliability

The high voltage flameproof motors are available in two versions: rib cooled motors and tube cooled motors.

Frame sizes 450 and 500 of the rib cooled flameproof motors are based on our latest generation of rib cooled motors. Benefits include very high power density and efficiency, increased reliability and easier maintenance, which ensure a lower cost of ownership. In fact, these 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 on the market. This helps to save space and enables more compact installations.

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

Main specifications

Rib cooled motors, type AMD R

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|---------------------|---|
| Output power | 100 to 1,600 kW |
| Frame size | 355 to 500 |
| Number of poles | 2 to 18 |
| Voltage | 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, IIIC |
| 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 18 |
| Voltage | 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 |
| Ex protection types | Ex db, Ex db eb |
| Gas/Dust group | IIB |
| Temperature Class | T3, T4 |
| Standards | IEC, EN, NEMA electrical |

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.