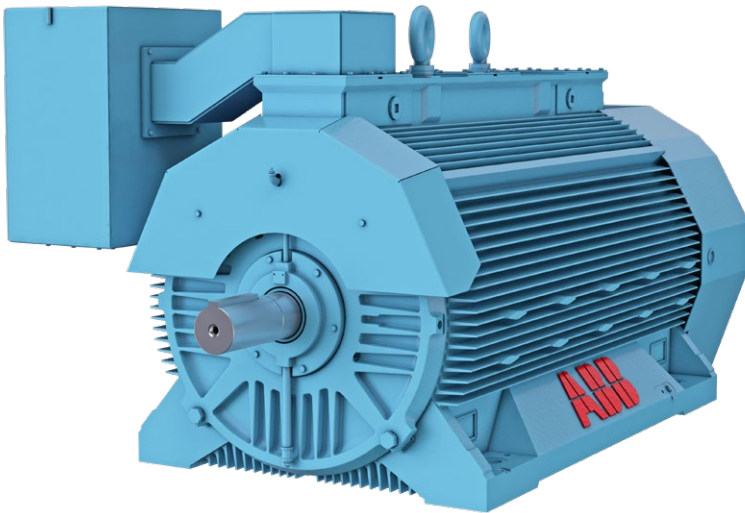


Above NEMA AXR Rib cooled motors from ABB

Extended power ratings



ABB's latest extension of the reliable multipurpose rib cooled motors for the Above NEMA market offers high power ratings in customizable motors.

The extended platform of the AXR 7100 now offers up to 1750 HP in a customizable design.

Above NEMA AXR motors are available for both direct-on-line (DOL) and variable speed drive (VSD) operation.

Engineered Rib cooled motors

ABB's custom designed rib cooled motors are available as A-series engineered motors – AXR 7100 frame size now extends power up to 1750HP in a totally enclosed fan cooled (TEFC) motor.

A-series engineered motors are highly customized, fine-tuned to the customer's precise needs, and offer a high degree of performance and feature rich enhancements. The Above NEMA AXR series can be specified with different bearing configurations to meet specific needs. The AXR series of motors can fill the customer's application needs where the configured to order NXR motors may not completely fit the requirement's of the application.

High power density for compact installations

The Above NEMA AXR motors set a benchmark for the industry, offering more HP per pound than has ever been achieved before with rib cooled motors. High power density means that for a given output you can often use a smaller frame size or lighter motor than with conventional products. This helps to save space and enables more compact installations.

Our engineering team achieved high power density by improving the coil design for increased power and optimizing internal and external airflows for maximum cooling effect.

Internal air circulation has been increased throughout the motor, while the external cooling surface area was also maximized. Auxiliary accessory wiring can be routed inside the motor as well as out side the motor, depending on the customers preference and requirements. Even the end shields have been designed for optimized cooling.

Main specifications		
	AXR 5000 -5800	AXR 7100
Output power:	250 to 1000 Hp	up to 1750 Hp
Frame size:	5008 thru 5810	7110
Number of poles:	2 to 8	4 to 8
Voltages:	Up to 6.6 kV	Up to 6.6 kV
Frequency:	50/60 Hz, VSD	50/60 Hz, VSD
Cooling:	IC411, IC416, IC417, IC418	IC411
Protection:	IP54 (optionally IP56)	IP54 (optionally IP56)
Enclosure material:	Cast iron	Cast iron
Bearings:	Anti-friction or sleeve	Anti-friction
Motor types:	NXR and AXR	AXR
Mounting:	Horizontal	Horizontal
Ex protection types:	Hazardous area location Class 1 Division 2 area capable	Hazardous area location Class 1 Division 2 area capable
Standards:	NEMA feature set and mounting dimensions	NEMA feature set and mounting dimensions

Easy configurability

Mounting accessories is very straightforward, thanks to ready-made fixing points along the sides of the motor. The end shields are pre-engineered for accessories such as instrumentation.

The design also enables flexibility in the positioning of the terminal boxes. The main terminal box can be mounted on either side, at the DE or ODE^{*)}.

The auxiliary terminal box can be mounted on either side and can be positioned along the motor. As a result, modifications can be done easily and quickly. This means you can reduce the number of spare units needed if your plant is running several motors with the terminal boxes on different sides.

Built-in serviceability cuts service downtime

Built-in serviceability makes maintenance straight-forward, and therefore reduces downtime. You can easily remove the fan cover for fast access, and check the coil end and bearings with an endoscope without removing the end shields (Sleeve bearings).

To maintain maximum performance over the entire life cycle, pre-designed fixing points enable easy mounting of condition monitoring systems. These systems collect and analyze operating data from the motors, providing early warnings of problems before failures can occur.

^{*)} With modified fan cover

Optimized for variable speed drive use

By controlling the motor with a variable speed drive, you can optimize the motor's performance, minimize energy consumption and control your process more accurately. ABB's motor-drive packages are easy to install and operate.

Key features and benefits

- High efficiency for reduced cost of running
- High power density for more watts per kilogram than ever before with rib cooled designs
- Optional ingress protection level available up to IP56
- Compact size for smaller overall installations
- Rigid, weight-optimized frame is engineered to minimize vibration
- Fixing points make accessory fitting straight forward
- Flexible repositioning of main terminal box on site by ABB service personnel
- Interchangeable terminal boxes reduce need for spare motors
- Built-in serviceability features reduce downtime and cost of not running
- Designed for easy deployment of ABB condition monitoring systems
- Versions optimized for VSD operation can deliver even higher efficiency
- Optimized ABB motor and VSD packages are easy to install and operate
- 3D models available on request
- Based on more than 125 years of experience manufacturing electric motors

For more information please visit:

new.abb.com/motors-generators

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