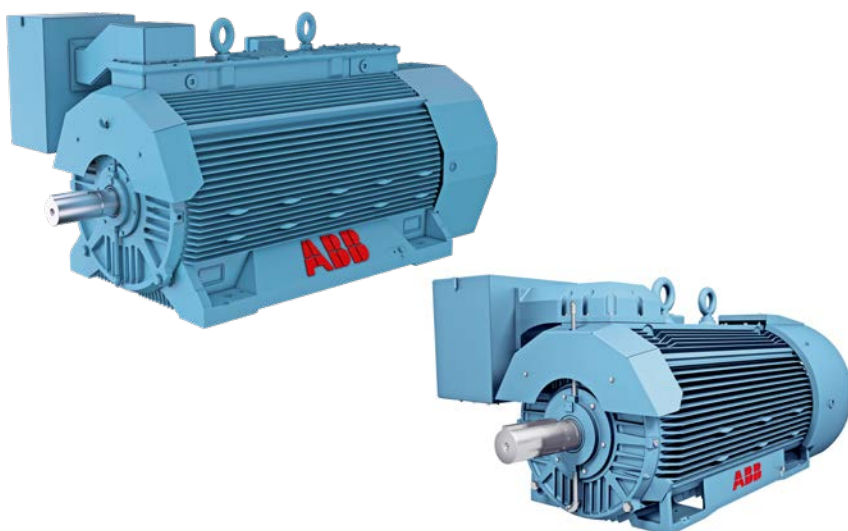


PRODUCT NOTE

Above NEMA NXR rib cooled motors

More know-how per HP



ABB's latest generation of industrial purpose rib cooled motors (NXR) for the above NEMA market offer high power density, customizable motors with built-in serviceability, allowing for a compact footprint and improved efficiencies.

Engineered motors

ABB's configurable design of the rib cooled motors are available as N-series config to order motors - NXR 5000 - NXR 5800 and NXR 7100.

N-series motors are engineered to meet demanding applications, while also being easy to configure, purchase, install and maintain.

The NXR series can be configured with different bearing configurations, various temperature monitoring devices and other equipment to meet the customer's specific needs.

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

High power density for compact installations

The NXR sets a benchmark for the industry, offering more HP per pound than has 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 conventional products. This helps to save space and enables more compact installations.

ABB's engineering team achieved high power density by leveraging the proven performance of the NXR frame rib cooled platform which has an internal cooling loop and maximized cooling fin coverage.

Internal air circulation has been increased throughout the motor, while the external cooling is maximized through surface area optimization. Auxiliary wiring can be routed inside the motor as well as outside the motor, depending on the customer's preference and requirements. The end shields have also been designed for optimized cooling.

Main specifications:	
Output power:	250 to 1750 HP
Frame size:	5008 - 7110
Number of poles:	2 to 8
Voltages:	460V, 2300/4000V
Frequency:	50 Hz Reratable, 60 Hz, VSD
Cooling:	IC411
Protection:	IP54 (optionally IP55)
Enclosed material:	Cast iron
Bearings:	Anti-friction
Motor types:	NXR
Mounting:	Horizontal
Ex protection types:	Hazardous area location Class I Div 2 area capable
Standards:	NEMA feature set and mounting dimensions

Easy configurability

The NXR product family is designed for modifications to be quick and easy. 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.

- Ready-made fixing points on side of motor make mounting accessories straightforward
- End shields are pre-engineered for accessories such as instrumentation
- Main terminal boxes can be mounted on either DE or ODE side
- Auxiliary terminal box can be mounted on either side and positioned along the motor

Built-in serviceability cuts service downtime

Built-in serviceability makes maintenance straightforward, and therefore reduces downtime.

- Cable routing ensures that the cables are clearly routed and always secured in the same position.
- 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.

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 lower total cost of ownership
- High power density for more watts per kilogram
- 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
- Designed for easy deployment of ABB condition monitoring systems
- Based on more than 125 years of experience manufacturing electric motors