

Fact Sheet

# RXT Series RELIANCE legacy motors



ABB's RXT series of Reliance legacy motors are tailored to your specifications through modified-to-order (MTO) and engineered-to-order (ETO) in both NEMA Totally Enclosed and Open frame options. Designed to meet the rigorous demands of the North American market, these motors are configured to meet or exceed NEMA Premium<sup>®</sup> energy efficiency standards, ensuring exceptional performance and efficiency.

### **Designed for North America**

The RXT series is designed and engineered in North America for the North American NEMA market.

Reliance legacy motors leverage decades of engineering expertise in large motor design, drawing from the decades of knowledge and experience creating these iconic motors. All of that results in robust efficient designs.

### Modified or Engineered for you

We are dedicated to delivering the exact motor you need, precisely when you need it. The RXT series comes with standard features that can be customized to your specifications through our modified-to-order (MTO) options.

For a truly tailored solution, you can design a motor from the ground up, perfectly created to your specific setting and environment with our engineered-to-order (ETO) options.

### Made by ABB

ABB has been manufacturing industrial electric motors for more than 125 years and this experience is built into every ABB high voltage induction motor. Every RXT motor is designed with cost-efficient, standardized designs to be safe, energy efficient and reliable.

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#### Dedicated North American salesforce

ABB's dedicated Large AC salesforce is located throughout North America to work with you on your large motor needs.



Working with your local sales teams and North America based ABB application engineers, ABB's MTO and ETO capability enables you to design the motor for your application needs.

### **Application engineering**

Local engineering teams with deep application knowledge ensure proper design and motor selection.



## ABB Services

Local certified ABB service technicians and authorized service repair facilities are there for the lifecyle of your motor, to reduce unplanned downtime and extend equipment life.



## Installation

Flexible foundations and simple lead connections make installation easy

# Designed by Reliance. Manufactured by ABB. Made for you.

The RXT series is available as either a totally enclosed or open motor with the options to fit your needs.

## MTO motors

- In stock and ready to ship
- Designed to deliver industry-leading • performance
- Options such as a customized electrical design •
- Can deliver an MTO motor with shorter leadtimes
- Meets or exceeds NEMA Premium<sup>®</sup> energy efficiency standards

## **ETO motors**

- Dependable, durable and efficient motor tailored to your specifications
- Customizable options such as Sleeve Bearings
- Modular induction
- Mechanically and electrically NEMA compliant ٠
- Maximum output of 1750 HP
- Options of anti-friction and sleeve in 2 to 8 poles



# **Results-driven designs and manufacturing**

The RXT series delivers long life and low overall operating costs, reduces downtime and increases output, leading to better financial returns. It also fits a wide range of industries and applications.

### Industries

- Power Generation
- Chemical, Oil & Gas
- Mining and Minerals
- Metals
- Pulp and Paper

## Applications

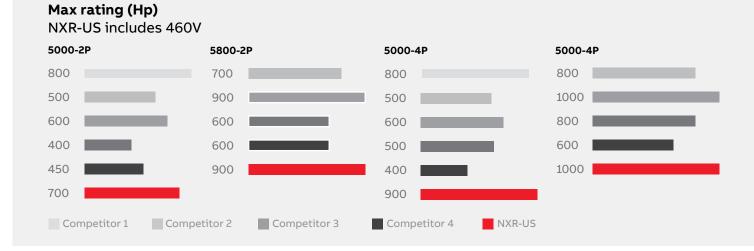
- Compressors (centrifugal, reciprocating, etc.)
- Centrifugal Pumps
- Fans
- Mills
- Conveyers
- Extruders



**Pole Number** 

Figure 1. AMI5800 60Hz motors output as function of pole number





# High power density for compact installations

The RXT series sets a benchmark for the industry, offering more horsepower per pound than has ever been achieved before with TEFC and Open frame 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.

# **RXT series options**

Buying low and medium voltage motors has never been easier. ABB's RXT series motors combine cost-efficient designs, productivity, energy efficiency and reliability,

# RXT TEFC MTO motors with up to 1000 Hp are stocked in the US with the following features:

- Stock completed motors 460V and 2300/4000V
- 2-6 pole
- 7 100 ohm platinum winding RTDs (2 per phase + spare)
- Provisions for Bearing RTDs
- Corrosion-resistant paint protection on interior metal surfaces
- Cast iron frame and end brackets
- 0.005" foot flatness
- Insulated ODE Bearing
- Stainless steel hardware ANSI 300 Series
- Class F insulation
- Service Factor of 1.15 DOL
- 3.5 PU surge capability
- Rated for use on a VSD, 10:1 VT / 2:1 CT (1000:1 CT safe area with TEBC modification)
- CSA approval Class 1 Div II (Class 2 with mods)
- IP54 Standard IP55 with Mod
- Coil head space heaters
- Stock brackets, caps, lead channels and NEMA MTBs
- NEMA 4X auxiliary box for accessories
- Performance data, drawings and other information is readily available

# Available modifications are completed in our Athens, GA USA factory:

- ABB Ability Smart Sensor for motors
- Standard rerates
- Bearing changes Ball to Roller
- Bearing RTDs
- Blower cooling (TEBC)
- Shaft Grounding for non-CSA motors
- Provisions or accessories for vibration monitoring
- Modifiable MTB positions F2, F3, oversized boxes, accessories
- Shaft seals- labyrinth, Inpro™
- D-flange/C-face
- Arctic Duty (-40°C)
- Thermostats
- Export crating

# ETO motors are tailored from the ground up and include the MTO offerings plus:

- Sleeve Bearings
- Electrical modifications
- Voltages from 380 to 6600V
- 50 or 60 hz
- Dedicated VFD applications
- Custom Shaft Extensions

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