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NEMA MOTORS

General Purpose motors

Proven, reliable, available

BALDOR • RELIANCE



Baldor-Reliance® General Purpose motors are energy efficient, durable, and readily available, minimizing overall operating costs and downtime. The robust design offers industry leading reliability, flexibility, and safety to meet the exact demands of a wide range of applications.

Proven, reliable, available

Minimize your operating costs

As the world market leader, ABB offers the broadest range of NEMA motors available. We have long advocated the need for efficiency in motors, and highly efficient and reliable products have been at the core of our motor portfolio for decades.

Baldor-Reliance General Purpose motors are energy efficient, durable, and readily available, minimizing overall operating costs and downtime. The robust design offers industry leading reliability, flexibility, and safety to meet the exact demands of a wide range of applications.

From lowering energy consumption and keeping your energy costs at a minimum to building rugged and robust motors that maximize productivity, we are committed to continuous innovation: applying new technologies to improve reliability and energy efficiency, lowering overall operating costs and downtime for the processing industries.

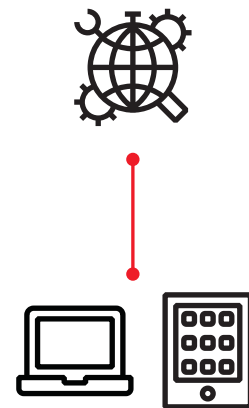
Whether that means designing a product for your specific application, accessing technical data or how you place your order, we make it easy to do business with us.

When and where you need a motor

Built in US manufacturing facilities and available from our industry leading global distribution network, Baldor-Reliance® motors are available when and where you need them. Visit baldor.abb.com to find a local distributor or service center. For a full list of ratings, visit baldor.abb.com/catalog

Technical information at your fingertips

Industry's best information making you more efficient and productive. Whether you are researching technical information on a specific product, designing a custom motor, or placing an order, our VIP ecommerce site has it all. Visit www.baldorvip.com



No matter the environment, General Purpose motors are workhorses

Robust design is strong inside and out

— 01 High grade materials make up a strong insulation system with Class F insulation and Class B temperature rise for operation in higher ambient temperature, overload conditions, and voltage tolerances.

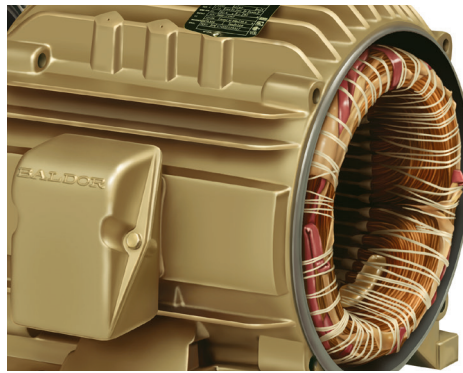
— 02 Quickly and easily read motor nameplate specifications with a durable, high contrast nameplate.

— 03 Cast Iron / Steel band options allows you to choose the best option for the application and environment.

— 04 Stator end turns are fully laced to minimize conductor movement. Stators are dipped in modified, high solids content, UL recognized impregnating resin to eliminate corona and promote insulation longevity.

The extensive line of Baldor-Reliance single phase and three phase General Purpose motors are available in a wide variety of enclosure construction from industrial steel band open designs where water and dust exposure are moderate; to totally enclosed cast iron designs where exposure to water, dust, and corrosives exists.

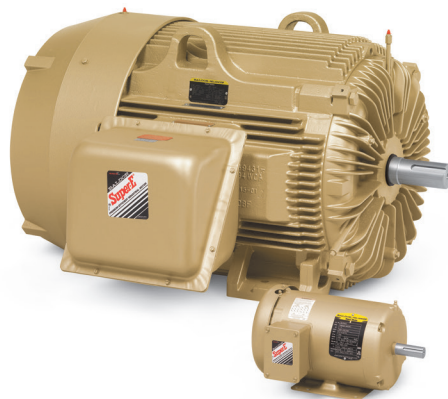
While designed for standard and straightforward uses, general purpose motors can be modified to meet most specifications.



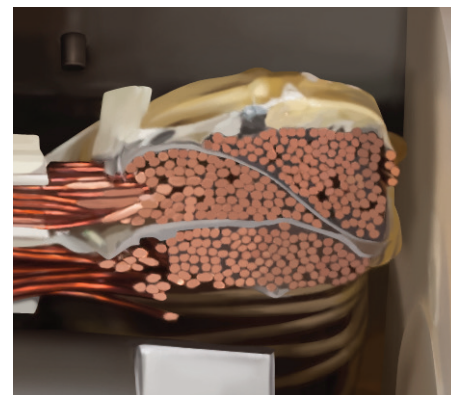
01



02



03



04

For a full list of ratings, visit www.baldor.com/catalog

Minimize your capital costs

Standardize on-site inventory

In stock, ready to ship

Baldor-Reliance General Purpose motors are the ideal choice when off-the-shelf availability is of highest importance. General Purpose motors are versatile to perform reliably in a variety of operations where highly custom and hazardous location certifications are not needed.

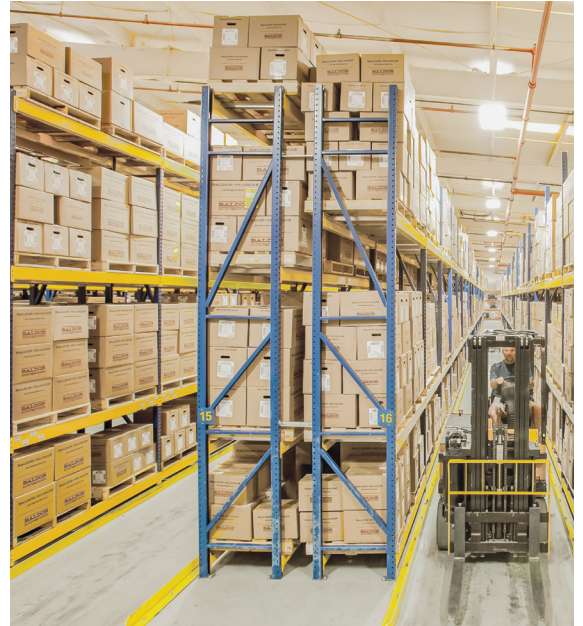
With a wide breadth of ratings and mounting configurations, you can reduce and standardize your on-site inventory to minimize capital costs.

When off the shelf doesn't cut it

Our time-saving local technical experts get to know your unique needs and requirements, so we can truly provide a motor that fits and meets your requirements. Work with our experienced engineering and manufacturing teams to ensure you get the right motor for your application. Visit www.baldor.com/VIP.

Motor Mod-Express®

Adaptable to your requirements, our industry leading regional Motor Mod Express program allows you to order a stock motor with a wide variety of additional features without going through a review and design process. Utilizing on-site inventory, we can quickly modify the motor and ship on short lead times.



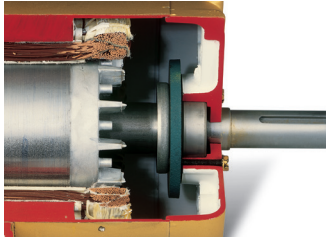
Ready for any challenge

— 01 Internally mounted AEGIS® bearing protection ring bolts onto the bearing retainer ring

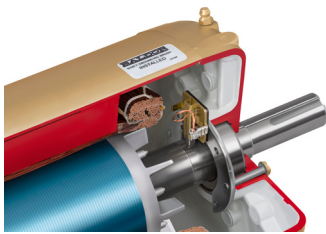
— 02 Designed and tested by our own engineering team, our carbon shaft grounding brush is spring loaded to maintain contact with the rotating shaft.

— 03 Brakes are available through 450 HP models

— 04 A variety of pump mounting configurations are available



— 01



— 02



— 03



— 04

General Purpose three phase motors are designed for both direct on line (DOL) and variable-speed operation. Designed to work over a wide variable torque speed range, these motors have an insulation system that meets the requirements of NEMA MG1 Part 31.4.4.2 for VFD use and are considered Inverter Ready.

Bearing protection from induced currents

To protect your critical asset from shaft induced currents that can be harmful to the motor, we offer an off-the-shelf solution. Shaft grounding motors feature bearing current mitigation devices mounted internally, shielding them from dust and other contaminants. Choose from options available from stock, through our Motor Mod Express program, or through custom configuration.

Fast, accurate, and secure braking

Operations and processes that face frequent cycling, starting, and stopping require a motor that can aid with decelerating the load and by holding the load in the event of an interrupted power supply. We offer an extensive line of brakemotors for these demanding applications.

Pumping efficiency and reliability

Baldor-Reliance pump motors provide exceptional value by increasing reliability and reducing maintenance costs. With an industry leading portfolio of premium efficient pump motors, we can meet your industrial and commercial applications. We help you save money by using winding designs that are industry leading in efficiency and can be counted on to stand up over time to the challenges of inverter use.

For a full list of ratings, visit www.baldor.com/catalog

Shift to predictive maintenance

Full transparency on motor health conditions



Convert your traditional motors into smart, wirelessly connected devices. The ABB Ability™ Smart Sensor measures key attributes to give you meaningful information on the condition and performance of the motor. This enables you to identify inefficiencies and reduce the risk of unplanned shutdowns. This allows you to plan maintenance based on actual need rather than a generic schedule.

Easy-to-fit





At the heart of the solution is a compact sensor unit that is easily attached to motors without the need for wiring. For already installed motors, retrofit kits are available that enable motors to be field upgraded with sensors. Mounting and configuring the sensors takes only a few minutes.

Health checks

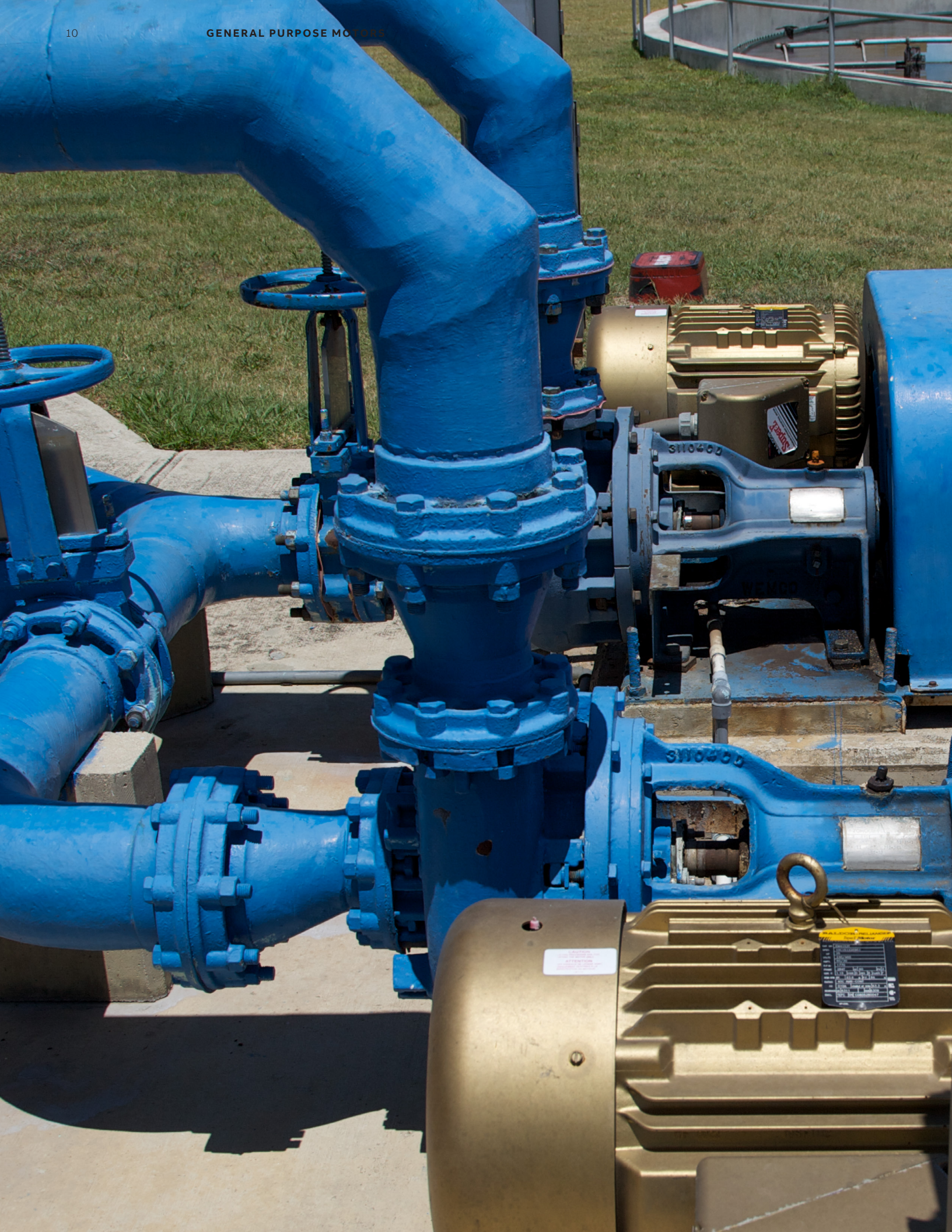
Based on ABB's extensive know-how, advanced algorithms are used to analyze the data and produce meaningful information. The server sends this information directly to a smartphone or gateway and to a dedicated ABB Ability™ Smart Sensor portal. Data is also tracked over time for trend analysis.

Find your solution

General Purpose motor offering

				
	Three phase Totally enclosed	Single phase Totally enclosed	Three phase Open	Single phase Open
NEMA frame	42 - 500	42 - 250T	48 - 449T	48 - 210T
Hp	1/8 - 400	1/12 - 15	1/4 - 450	1/6 - 10
Voltage 60 Hz	115/208 - 230 volts (Single phase) 115/230 volts (Single phase)	200 volts 230/460 volts 460 volts 575 volts	115/208 - 230 volts (Single phase) 115/230 volts (Single phase)	200 volts 230/460 volts 460 volts 575 volts
Speed		3600 RPM 1800 RPM 1200 RPM 900 RPM		3600 RPM 1800 RPM 1200 RPM 900 RPM
IP code		IP44*		IP22
Mounting style		Foot mounted C-face C-face footless JM, JP, West Coast pump		Foot mounted C-face C-face footless JM, JP, West Coast pump
Frame material		Heavy gauge steel frame Cast Iron		Heavy gauge steel frame Cast Iron

*IP54 when Drain Fitting Kit #HA5027A03 is installed



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MOTOR DATA LABEL	
MODEL	
HP	
VOLTS	
AMPS	
PHASES	
FLYING LEADS	
INSULATION CLASS	
TEMP. RISE	
TEMP. CLASS	
WINDING CONNECTION	
WINDING DATA	
WINDING MATERIAL	
WINDING TYPE	
WINDING SIZE	
WINDING LENGTH	
WINDING WEIGHT	
WINDING RESISTANCE	
WINDING INDUCTANCE	
WINDING CAPACITANCE	
WINDING QUALITY	
WINDING TEST RESULTS	



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new.abb.com/motors-generators

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