A Proven Approach to Reducing Electricity Costs

Baldor
A MEMBER OF THE ABB GROUP

The Answer for an Energy Driven Economy
The history of energy efficiency in industrial motors is really the story of Baldor Electric Company. For almost 100 years, Baldor has led the industry in developing products that deliver greater performance and reliability while using less electricity. From the company’s founding in the 1920s through today, Baldor has introduced one efficiency enhancing advancement after another. In fact, many of the advancements initiated by Baldor have later been adopted as industry standards.

The issue of energy efficiency for electric motors and drives is becoming increasingly relevant as electricity costs continue to rise. Companies are now competing in an environment of rising energy costs and the uncertainty of available electricity. These dynamics require the kind of forward-thinking industrial motor, drive, and generator supplier that anticipates customer needs and delivers products that save money and improve productivity. That company is Baldor.

Why is Energy Efficiency Important?

Electric motor-driven systems used in industrial processes consume some 679 billion kWh or 63 percent of all electricity used in U.S. industry, according to a Department of Energy report published in 1998. The report goes on to reveal that industrial motor electricity consumption could be reduced by up to 18 percent if companies were to apply “proven efficiency technologies and practices.” Specifically, the DOE recommends motor efficiency upgrades and application improvements. The purpose of this brochure is to show you the energy saving opportunities from using premium efficient motors and drives. The opportunities are real.

In 1992, the Energy Policy Act (EPAct) established minimum efficiency standards for industrial electric motors built after October 1997. Yet, only about 10 percent of all motors in use today comply with the minimum efficiency levels the Act mandates. When you factor in the savings potential of using adjustable speed drives in many applications, it’s easy to see that the environment, along with your profitability, stand to benefit significantly.

Leadership in Energy Savings for More Than Eighty Years.

1924
In the company’s first product catalog, Baldor establishes its charter to “build a better motor” which requires “a minimum of energy.”

1976
First to put full-load motor efficiency ratings on all motor nameplates.

1976
First motor company to receive Federal Energy Administration Merit Award.

1983
Baldor Super-E® premium efficient motors introduced.
The efficiency of any machine, including an electric motor, is determined by the amount of useful power it produces compared to the amount of electricity required to operate it. The graphic above illustrates how a Baldor Super-E® effectively turns $1,000 in electrical power into $930 worth of mechanical power. Since motor efficiencies are commonly expressed as a percentage, you can see that this Super-E efficiency rating equals 93 percent. Measuring specific efficiency ratings involves precise lab testing. To do this, Baldor uses IEEE Standard 112, Test Method B and CSA 390A. These are the most complete and accurate method to test motor efficiency, encompassing all energy losses that might occur.

Payback is the time (in months) it takes for the cumulative energy savings to equal the additional cost of a new Super-E motor. Payback will vary depending on the motor’s use.

What Is Higher Efficiency Worth?

Savings from using a 40 Hp Baldor Super-E – 94.5 percent efficiency compared with an average industrial motor – 88 percent efficiency.

Payback And The Baldor Super-E

How Is Motor Efficiency Measured?

The efficiency of any machine, including an electric motor, is determined by the amount of useful power it produces compared to the amount of electricity required to operate it. The graphic above illustrates how a Baldor Super-E® effectively turns $1,000 in electrical power into $930 worth of mechanical power. Since motor efficiencies are commonly expressed as a percentage, you can see that this Super-E efficiency rating equals 93 percent. Measuring specific efficiency ratings involves precise lab testing. To do this, Baldor uses IEEE Standard 112, Test Method B and CSA 390A. These are the most complete and accurate method to test motor efficiency, encompassing all energy losses that might occur.

Electric motor “soft” starters added to product line.

Baldor introduces the Series 11 inverter (adjustable speed drive).

Canadian electric utility, BC Hydro, approves Baldor as the first motor company to label motors “Power Smart.”

Baldor makes it easy to calculate energy savings with the SAVE software tool.
The Baldor-Reliance Super-E®

In the mid-1970s, a southeastern tire manufacturing plant asked Baldor if it were possible to increase the operating efficiencies of motors in their plants. Baldor engineers determined that considerable energy savings could be gained from a better motor design. By adding more copper to the windings, upgrading the laminations to a higher premium-grade steel, designing precision air gaps between the rotor and stator, and reducing fan losses in the motor, Baldor was able to supply the plant with the premium efficient motors it needed.

This was the birth of the Baldor Super-E®. Today’s upgraded and expanded Super-E product line offers some of the highest levels of efficiency in more than 600 stock motors rated from ½ to 15,000 horsepower. Super-E, severe duty, close-coupled pump, IEEE 841, washdown, and explosion-proof models are also available with a three-year warranty or better. (Our IEEE 841 motors have a five-year warranty.) Called a “key breakthrough” by the Consortium of Energy Efficiency, the Baldor Super-E was recognized by the CEE in 1998 as the first premium efficiency motor line to meet their stringent efficiency criteria citing, “For the first time, one manufacturer will carry all qualifying products.” In 2001, the CEE efficiency levels were adopted as the NEMA Premium® efficient levels and expanded to 500 horsepower. The chart on the left...
page illustrates how Baldor Super-E efficiencies exceed both EPAct standards and the average efficiency of motors in use today.

**Premium Efficiency Pays for Itself**

To understand what a motor really costs, compare initial purchase price with the cost of the electricity it uses over its working lifetime. Often, too much attention is paid to purchase price. For most motors, this initial cost represents less than two percent of its lifetime cost. Electricity accounts for about 97 percent. Baldor Electric Company's motors and drives save customers money every minute they operate. Whether it's lower energy costs or greater reliability, these savings go straight to the bottom line. Baldor is the industry leader in overall efficiency ratings. Better than 96 percent of the energy used by some of Baldor’s Super-E motors is converted to mechanical work. The Baldor-Reliance Super-E runs cooler and longer with greater reliability than any other industrial motor. When you consider that a typical 50 horsepower motor costs over $36,000 to operate continuously in a year, it's easy to see how just a few percentage points of higher efficiency can quickly reduce electricity costs. Even seemingly modest percentage point differences in efficiency ratings can yield substantial electricity cost savings when the motor is operating continuously every day.
When the city of Lavaca, AR, determined it needed to perform some maintenance work on its water tower, city water officials faced a real dilemma. Without a full water tank, the gravitational pressure would be lost, and the system would not be able to provide a constant water supply to its customers. It also meant the possibility of having to dump and waste clean water, something the city could not afford.

"With the system I had in place, I was going to have to drain the tank and potentially lose $118,400 worth of water over the course of the project," says Bobby Leonard, Lavaca water superintendent. "No community can afford to waste that kind of money, so we began to look for a better way to control the pump pressure and prevent the loss of water."

Baldor’s VS1SP260-1B 60 HP adjustable speed drive was selected for a history of consistent performance and because it is simple to program and easy to operate.
"Installing the drives allowed us to complete the water tank upgrade without losing one drop of water."

Bobby Leonard, water superintendent, City of Lavaca

Once you set the parameters on the first drive, you can simply plug that information into additional units, speeding up the installation process.

Evans Enterprises also replaced an existing electromechanical valve with a pressure transducer, allowing the drives to control the motor speed, and in turn the water pressure. "Their old system was either fully open running at full speed, or it was off," says Williams. "By using the drives to respond to pressure, we discovered we could trim the full load amps down from 136A to 54A, a real cut in their energy usage."

"Installing the drives allowed us to complete the water tank upgrade without losing one drop of water," says Leonard. "I was focused on saving my water bill, not even thinking about how much we would save in energy. Prior to the drives installation, our average monthly power bill was $1,039. Today our power bill has dropped to an average of $650. Saving the water more than paid for the drives, so what we are saving now on our electricity bill is a huge bonus for us."

Another unexpected bonus is that the drives prevent single phasing of the motors during power brownouts. "During a winter ice storm, the drives tripped on phase loss twice to help protect our motors from being single phased," explains Leonard. "We didn't have any phase loss protection before, so again, these drives saved us from having costly motor repairs or replacements. This project has been a big success, and all of the savings we are realizing couldn't have come at a better time."
The Baldor-Reliance Super-E®: Premium Efficiency Inside And Out

Fan and fan cover designed for maximum cooling and quieter operation.

Over-sized cast iron conduit boxes, exceeding NEC standards, make connections easier. Neoprene rubber gaskets ensure a tight, waterproof seal.

Simple F1 to F2 conversion on cast iron frame motors.

Multiple foot mounting holes for easier change-out.

High temperature (Class F) insulation systems.

Insulation system withstands voltage spikes from inverters per NEMA MG1, Part 31.4.4.2

What makes a Baldor Super-E® better?

Premium-grade copper wire, more iron, annealed laminations with premium-grade steel and insulated oxide coating, superior bearings, large end rings, low-loss fans, and the expertise that enables each Super-E to run cooler and longer with better reliability than any other industrial motor.
Baldor was the first motor manufacturer to use Exxon Polyrex®EM grease. Polyrex®EM protects motor bearings better, providing improved lubrication life, greater shear stability, and superior resistance to washout, rust, and corrosion.

High-pressure die cast aluminum rotor through 449T frames coated to prevent corrosion.

Patented Lube-Lok® retainer grease seal on both ends, 250T frame and up.

Locked bearing construction reduces endplay.

Neoprene rubber shaft slinger on pulley of motor prevents contaminants from entering.

Dynamically balanced to half of the NEMA allowable vibration limits.

Baldor was the first motor manufacturer to use Exxon Polyrex®EM grease. Polyrex®EM protects motor bearings better, providing improved lubrication life, greater shear stability, and superior resistance to washout, rust, and corrosion.

Low Temperature Rise Increases Motor Life

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Max permissible for class F insulation

Baldor Super-E

A motor that runs cooler, lasts longer.
Baldor-Reliance Super-E® Motors and Baldor Drives

Super-E Totally Enclosed Fan Cooled (TEFC)
- Three Phase
- 1 Hp thru 500 Hp stock, to 2250 Hp custom
- Enclosures: TEFC
- Foot and Face Mount
- Inverter-Ready
- Low and medium voltage including 200V, 575V and 2300/4000V

Super-E C-Face and D-Flange
- C-Face motors available from stock in most all configurations and product families
- D-Flange motors are available as custom items or through Mod Express
- NEMA or IEC style

Super-E Single Phase
- Single Phase
- 1/4 Hp thru 5 Hp stock, to 15 Hp custom
- Enclosures: TEFC and ODP
- Foot or face mount

Super-E Severe Duty
- Designed for corrosive environments
- Three Phase
- 1 Hp thru 800 Hp stock, to 2250 Hp custom
- Enclosures: TEFC and TENV
- Foot and face mount
- Inverter-Ready
- Low and medium voltage including 575V and 2300/4000V

Super-E Severe Duty IEEE 841
- Three Phase
- 1 Hp thru 250 Hp stock, to 500 Hp custom
- Enclosures: TEFC and TENV
- Exceeds the IEEE 841-2009 standards for severe duty
- InproSeal® on fan and drive end shafts

Super-E Pump Motors
- Three Phase
- 1 Hp thru 50 Hp stock, to 250 Hp custom
- Enclosures: TEFC and ODP
- JM, JP and West Coast Shafts
- Inverter-Ready

Super-E Open Drip Proof
- Three Phase
- 1 Hp thru 300 Hp stock, to 15000 Hp custom
- Enclosures: ODTF, OPEN, OPSB, WPI and WPII
- Inverter-Ready
- Low and medium voltage including 200V and 575V

Super-E Explosion Proof
- Three Phase
- 1 Hp thru 60 Hp stock, to 800 Hp custom
- Enclosures: TEFC and TENV
- Class 1 Group C & D, Class II Group F & G
- U.L. approved cast conduit box standard
- Low voltage

WPI – WPII
- Low and Medium Voltage through 1500 Hp stock to 15,000 Hp custom
- Sleeve bearings available
- Super-E NEMA Premium® efficiency available
- Standard aluminum and copper bar rotor designs

Super-E TEF C Vertical Base
- Three Phase
- 1/4 Hp thru 75 Hp stocked
- Enclosures: OPEN and TEFC
- Normal, medium, and high thrust designs
- Standard and super efficiencies
Super-E Brake Motors
- Three Phase
- 1 Hp thru 30 Hp stock
- Enclosures: TEFC and TENV
- Inverter-Ready brake connection
- NEMA standard BA dimension
- Easily convertible to C-Face

Super-E Washdown Duty
- Single and Three Phase
- 1/2 Hp thru 20 Hp stock
- Enclosures: TEFC and TENV
- Base mount, C-Face with or without base or JM pump shaft
- Available with BISSC approval
- IEC Ratings available

Super-E All-Stainless Washdown Duty
- Three Phase
- 1/2 Hp thru 20 Hp stock
- Enclosures: TEFC and TENV
- C-Face with or without base
- Labyrinth seals
- IEC Ratings available

Super-E IEC Metric Frame
- Three phase 230/400 50 Hz
- IE3 Premium efficiency - IEC 60034-30
- 5.5 - 132 kW stock - larger custom
- Enclosure: TEFC IP54
- Cast iron construction
- F2 conduit box - terminal strip
- All metric hardware
- CE compliant

Adjustable Speed Drives
- Inverter, Encoderless Vector, Vector Drive and AC Servo available
- 230 volt, 3/4 through 60 hp
- 460 volt, 3/4 through 1000 hp
- 575, volt 3/4 through 150 hp
- Graphical operator display
- PID Process control loop
- Ethernet connection option

Motion Controls
- Single & Multi-axis controls
- Digital and Analog I/O
- Available in PCI format or stand alone unit with USB and serial interfaces
- Program via Baldor’s MintMT® (Multi-Tasking), embedded ‘C’ or ActiveX® Technologies
- Device Net, ProﬁbusDP, CANopen, Ethernet

Cooling Tower Motor and Control
-Eliminates the need for a gearbox, jack shaft, pillow block bearings and couplings
- Eliminates cooling water contamination by eliminating gearbox oil and leakage
- Reduces power consumption (typically 8% average or over 20% if ASD not in use)
- Low noise design (typically 5 dBA reduction)
- Water-tight motor design operates in the air stream
- Oversized to maintain longer bearing life exceeding L-10 100,000 hours
- Sensorless Permanent Magnet motor control operates without an encoder or resolver
- Trickle heating eliminates need for motor space heaters
- No tuning is required due to the Matched Performance of the motor and control
- Allows for a soft start (controlled ramp)
- Trickle current for braking prevents fan windmilling when not in operation
- Utilizes MODBUS-RTU, MODBUS/TCP, EtherNet/IP, LonWorks, Metasys-N2, BACnet, DeviceNet or PROFINET protocols
- Interfaces with existing building automation systems
**Power Transmission Components**

**TORQUE-ARM™ II Shaft MountReducers**
- Ratings: 3,000-325,000 lb-in (339-36725 N-m)
- Size: TA0107L - TA12608H
- Mounting Configurations: Shaft Mounted, Screw Conveyor Adapter mounted
- Twin tapered bushing system, Short shaft twin tapered bushing system
- Torque arm tie rods
- Screw conveyor adapters, Screw conveyor drive shafts
- HNBR oil seals with additional contaminant excluder seals
- Motor mounts
- Belt guards
- Harsh duty options available

**Quantis Gearmotors andReducers**
- Gear type: ILH Inline Helical, RHB Right Angle Helical Bevel, MSM Motorized Shaft Mount
- Ratings: 1/4 hp - 75 hp (0.18 to 55 kW)
- Ratios: 1.5:1 - 300:1+ (capable of higher ratios through tandem configuration)
- Size: 8 Case sizes per housing configuration
- Mounting: Clamp Collar, 3-piece coupled, Integral Gearmotor, Separate Input. Solid, Straight Hollow, Tapered Hollow output
- ILH / MSM Efficiency of 98% per stage, RHB Efficiency of 95% per stage
- XT Harsh Duty output seal

**PARA-FLEX®, GRID-LIGN®, GEAR, RIGID and FLUID Couplings**
- 10 different types of Elastomeric & Metallic couplings
- Torque ratings up to 1,000,000 + lb-ins (113 kN-m)
- Bore sizes up to 12+ inches
- Shaft mounting available with clearance fit, interference fit, bushings (QD, TAPER-LOCK® and GRIP-TIGHT)
- Application specific couplings: spacer, flywheel, floating shaft, mill motor
- Rigid coupling for rigid mounting Dodge Magne gear to conveyor shafts
- Single/multiple delay-fill and control fill fluid couplings available

**CST (Controlled Start Transmission)**
- 300 to 3000 hp, 300,000 to 3,500,000 lb-in torque
- Offset parallel and right angle configurations
- Standard 15:1 through 38:1 gear ratio
- 7 case sizes
- Unsurpassed acceleration/deceleration control and load sharing capability
- Highly efficient planetary output gearing
- Allows starting drive motor under no load and utilization of up to breakdown torque of motor without oversizing system
- Hydroviscous clutch on output absorbs transient shocks
- Dual lip HNBR seals
Mechanical Drive Components

- Bushing styles in multiple belt profiles 3V, 5V, 8V, A, B, C, D, E
- Wide range of Bushing sizes
- Fixed Bore and Bushed Light Duty, Variable Pitch, Adjustable Pitch, Heavy Duty Adjustable Pitch and Step FHP Sheaves
- Synchronous Pulleys have multiple tooth profiles available including Trapezoidal, Curvilinear, Modified Curvilinear and Reinforced Parabolic
- Wide range of Classical and Narrow V-Belts, Cogged, Banded, Double V, FHP and Synchronous Belts
- Designed for harsh environments
- Made-to-Order Sheaves and Bushing capabilities

Baldor Standby and Peak Shaving Generators

Standby Generators

- Diesel Liquid Cooled, Gaseous Liquid Cooled or Industrial Diesel Liquid Cooled configurations
- 20 kW to 2,000 kW
- Superior quality weather protective sound attenuating enclosures
- Extremely reliable alternators comply with NEMA, IEEE and ANSI standards
- Components comply to UL, CSA and NFPA 110 standards

Towable Generators

- Powered by industrial grade John Deere and Isuzu diesel engines
- 20 kW to 200 kW...custom built to 2,000 kW
- Available with or without heavy-duty trailers
- Heavy 12-gauge steel enclosure construction with sound attenuation for ultra-quiet operation
- Proven brushless alternator for long life and low maintenance
- Automatic safety shutdowns
Baldor Drive Energy Savings

In many instances, the greatest potential for energy savings lies in the overall design of the application. The U.S. Department of Energy has indicated that application and process improvements yield the highest energy savings.

In some applications, savings can be as much as 60 percent. For example, heat and air systems can be made more efficient by pairing a Baldor premium efficient motor with an adjustable speed drive (ASD). The savings result from the ASD automatically adjusting the motor speed to maintain an appropriate temperature and airflow.

What is the energy savings potential from using Baldor ASDs in other applications? According to the Wisconsin Center for Demand-Side and Research, many applications for pumps and compressors could deliver savings up to 25 percent; fans, blowers, and centrifugal refrigeration systems add up to 35 percent, and boiler fans and feedwater pumps as high as 50 percent in energy savings.

Baldor’s broad line of drive products for fan and pump applications, soft starts, and line regenerative AC drives provide our customers with a variety of energy saving solutions.

The Fastest Way to Calculate Payback from Electricity Savings

How long before the electricity savings from a premium efficiency motor equal or exceed your cash outlay to purchase it? The answer depends on how the motor is rated, how it is used, and the cost of electricity per kWh. Although a premium efficiency
motor costs more than a standard motor, users soon recover that cost and more. Baldor Energy Savings Tool (B.E.$.T.), an energy savings program, included free with this brochure, makes the calculation easy. Cost savings and payback time frames from the addition of an adjustable speed drive can be calculated as well. In a single motor mode, the motor analysis section of BE$T 3.0 compares the annual operating costs of your motors with a Baldor Super-E premium efficient motor and a Baldor Standard-E® based on its ratings and operating cycles, giving you a financial summary of the annual savings and payback in months for each. The ASD analysis compares the use of an Adjustable Speed Drive to various mechanical means of flow control in pump or fan systems, calculating annual cost of operation, savings potential, and payback. In multi-motor mode, BE$T is powerful enough to perform a complete plant analysis and provide a complete project summary. The BE$T program can also factor in rebates and make the payback calculation using motor rewind cost as an offset.

Simple facility surveys can lead to identification of the age and efficiency of the motor population and can lead to a motor management strategy designed to increase plant uptime and productivity (often worth 5–8 times possible energy savings). Based on their usage and efficiency, motors can be tagged to be replaced immediately with Baldor Super-E premium motors, replace on failure with Super-E or simply rewind the motor.

Ask for Baldor Electric’s Method to Reduce Energy Costs to learn how we have been able to save over $1 million dollars annually in energy costs in our own manufacturing facilities. You can find our full line of premium efficiency products on our website at www.baldor.com.
Why Baldor?

More Value for the User...

It is Baldor’s goal to offer more Value to our customers. How can we best do this in an electric motor? Let’s look at Baldor’s value formula.

\[ V_p = \frac{Q_p \times S_p}{C \times T} \]

We believe that Baldor builds the best industrial motors, but it is the customer’s opinion of our quality that matters here. The customer’s view of Baldor’s service is also important and includes the ability to furnish accurate information, literature, websites, and manuals, etc. Cost not only includes purchase price, but also cost of operation, service, shipping, parts, etc. Time deals with how long it takes to receive a motor, an answer, or a matter resolved.

How do we offer this additional Value? We build motors that last longer and perform better than industry specs call for. For over 85 years, Baldor has been dedicated to providing customers with the most Value and reliability in energy-efficient industrial electric motors and drives. But to be considered as the #1 preferred motor brand, Baldor goes beyond designing and manufacturing the best motors. Other reasons are...

Baldor offers the industry’s broadest line of stock motors and drives.

You can save valuable time with just one call to Baldor for all your motor and drive needs. We stock more than 6,500 different motors, drives, gearboxes, and generators plus, a broad line of servos, linear motors and drives, and MINT® motion control products.

Baldor products are available at more locations than any other brand.

Our 36 district offices across North America offer immediate availability of Baldor products to thousands of distributors in the U.S., Canada, and Mexico.

Industry’s shortest lead times/ flexible manufacturing.

Baldor has the industry’s shortest lead times on custom motors – as short as two weeks. Our unique Lean FLEX FLOW manufacturing process lets us produce any order in any quantity, quickly, and efficiently.

Matched Performance®

This Baldor exclusive provides lab-tested performance data on Baldor products to help customers quickly and easily match the right motor and control to get precisely the drive they need.
Continuous innovation to improve reliability.

Baldor leads the motor industry in applying new technologies and materials to improve motor reliability. In 1996, Baldor was first to introduce ISR® (Inverter Spike Resistant®) magnet wire, which is up to 100 times more resistant to voltage spikes. In 2000, Baldor was first to use Exxon’s new POLYREX®EM Grease, which protects motor bearings better, providing improved lubrication life, greater shear stability, and superior resistance to washout, rust, and corrosion.

Common keypad language.

To make things easy for our customers, we developed our common-language keypad for all our controls. So you don’t have to learn different languages to operate Baldor inverters, vectors, DC, or servo controls.

Industry’s best information.

Only Baldor offers customers a choice of sources for product information with a wide variety of catalogs and product brochures, and the Baldor Web site (www.baldor.com). Or, talk to a Baldor customer service person at one of our sales offices.

If you need fast answers to tough questions, log on to www.BaldorProSPEC.com and ask a Baldor engineer. We guarantee we will have an answer for you within one business day. Easy access to accurate information is critical and no one does it better than Baldor.

Establish a Partnership with Your Electric Utility to Reduce Energy Costs

There are many U. S. electric utilities currently offering rebates to customers who buy premium efficient motors. For certain ratings, rebates can be as high as 15 percent of the purchase price for new and retrofit applications. In addition, a number of utility companies have incentive programs focused on decreasing energy use at the application level. Adjustable speed drives and soft starts qualify for these incentives.

At the time of writing this brochure, the U.S. DOE offers a "save energy now" program to conduct plant surveys to determine ways to reduce energy consumption for certain industries.

Industry should treat their electrical suppliers as a partner and work with them to understand their utility usage and investigate ways to reduce the charges. Peak demand charges from starting large motors can be reduced by adding adjustable speed drives and soft starters or simply starting large motors at different times.

Today’s businesses rely on electricity for all facets of daily operation. Costly and unreliable electric suppliers can be managed through a program consisting of a reduction of electricity consumption by adding more efficient Baldor•Reliance Super-E® premium efficient motors and Baldor adjustable speed drives.

Backup electrical power can be supplied by the addition of Baldor generators. Additionally, lower utility rates may be possible by use of a Baldor generator to do peak shaving or allow adoption of a consistent utility rate.
Literature Available…

Super-E® Premium Efficient Motors
Baldor literature number BR457.

Severe Duty Motors
Baldor literature number BR420.

Washdown Duty Products
Baldor literature number BR455.

Duty Master® Above NEMA Frame AC Induction Motors
Baldor literature number BR435.
Invest in Gold

Electric motors consume 63 percent of all electricity used in U.S. industry. Designed and built to meet or exceed NEMA Premium® efficiency standards, Baldor® Reliance® Super-E® motors run cooler, last longer and cost less every minute they operate.

Fractional to 15,000 Hp, Baldor® Reliance Super-E motors reduce your electricity costs with a return on your investment that’s as good as gold.

baldor.com