



## AC Motors



### **Premium Efficiency**

Super-E Motors are designed to conserve energy over extended time periods. These premium efficiency designs are available in both Totally Enclosed Fan Cooled and Open Drip Proof construction. All three phase motors are Inverter Ready per NEMA Standard MG1, Part 31.4.4.2. This means the motors in 230 and 460 volts meet NEMA's corona inception voltage requirements, under this Standard, and can withstand peak voltages of up to 1600 volts. Motors having premium efficiency are also available in single phase designs.



### **Automotive**

Automotive approved motors are available in both Standard High Efficiency, our Standard-E, and Premium Efficiency, our Super-E, designs. The Standard High Efficiency motors meet efficiency times power factor requirements of GM7EQ. The Premium Efficiency motors meet the efficiency times power factor of GM7EHQ. Available from stock in ratings from 1 HP to 100 HP. These cast iron motors meet automotive requirements for sound power levels.



### **Brake Motors**

Baldor's line of brake motors are available in totally enclosed fan cooled, open drip proof, or explosion proof designs, in either single or three phase. Stock ratings are available from .25 horsepower through 30 horsepower. These motors use a mechanical spring set brake with a manual release. Brake motors may be used on machine tools, conveyors, door operators, speed reducers, hoists, or any application requiring quick stops and positive holds.



### **Commercial Motors**

Baldor's new Definite Purpose Commercial Motor line offers many new ratings designed for applications with low to medium starting torque requirements. The Baldor Commercial Duty Motor line brings Baldor's reputation for high quality designs to commercial applications with a cost-effective offering. This definite purpose product line is designed for certain applications requiring NEMA 48 and 56 motors rated between 1/4 and 1 HP, in both single and three phase ratings. Typical applications include: Jet Pump, Heating and Cooling, Ventilation, Air Conditioning, Blowers, Direct Drive Fans, Condenser Fans, and Pedestal Fans.



### **Explosion Proof**

Baldor's Explosion-proof motors are ideal for a wide variety of applications where hazardous fumes or dust may be present. The motors are available in three phase and single phase with ratings, in stock, from 1/4 HP through 300 HP. Designs available include standard foot mounted, C face with base and C face less base, 60 Hz and 50 Hz, Jet Pump motors, and Inverter Drive motors.



### **F-2 Mounting**

Motors built for applications requiring F-2 mounting are available from stock in 1/2 HP through 60 HP. These motors are manufactured in both TEFC and Open Drip Proof construction in NEMA frames from 56 to and including 364T. Many of the ratings are Class "F" insulated with 1.15 Service Factor that operate within Class "B" temperature limits. The motors are stocked in both Standard High Efficiency and Premium Efficiency designs.



### **Farm Duty**

These motors are designed for many of the varied applications found on the farm. Designs include motors suitable for aeration fans, auger drives, grain stirring, metering pumps, instant reversing, irrigation tower drives, and crop driers. General purpose motors are also available in both single and three phase, TEFC and ODP construction. For those loads that are hard to start and require extra torque, Baldor is the only motor manufacturer that stocks Repulsion-Start Induction Run motors, in sizes from 2 HP to 10 HP.



### **General Purpose**

Baldor's extensive line of General Purpose motors are available in Open Drip-proof and TEFC construction in both single and three phase. Horsepower sizes available from stock range from 1/12 HP through 1500 HP. Designed for "general purpose" use means that these motors can be used in applications which include compressors, pumps, fans, conveyors, material handling, machine tools and many others. Also available are stock motors that are direct replacements for the motors built in Pre-1952 NEMA frames.



### **Severe Duty**

Severe Duty motors are available from 1 HP to 500 HP. These products are especially designed for those applications requiring protection of the motors from severe environmental operating conditions. A few typical applications which might require these types of motors include petro-chemical plants, mines, foundries, pulp and paper plants, waste management facilities, rock crushers, and chemical plants.



### **HVAC**

Baldor's line of Heating, Ventilation, and Air Conditioning Motors are designed with dynamically balanced rotors for reduced vibration and quiet operation. The motors range in size from 1/4 HP to 75 HP and include heavy duty industrial designs as well as designs for commercial applications. These applications include ventilators, direct drive and belted fans, exhaust fans, unit heaters, air conditioning units, and commercial refrigeration condensers. Also included are motors designed especially for use with variable torque electronic controls that are used to conserve electricity.



### **Inverter Duty**

Inverter Drive Motors are wound with 200 degree C. moisture resistant ISR (Inverter Spike Resistant) magnet wire which dramatically extends the life of the motors compared to motors wound with non-ISR wire. The motors available from stock range in size from 1/3 HP to 500 HP. These motors are designed for applications where up to a 1000:1 constant torque speed range is required. Applications include conveyors, pumps, fans, metal processing, compressors, test stands, and material handling equipment.



### **Metric**

Baldor's line of Metric Dimension Motors are designed in IEC Frames from D63 through D200L. The motors are available from stock in 50 Hz or 60 Hz. This means that replacement 60 Hz motors are readily available from Baldor to replace metric motors that have failed on imported machinery. Motor construction meets IP54 and includes motors with B3 base mounting, B5 Flange mounting, or B14 Face mounting. Stock motors range in size from .18 kW to 30 kW. Typical applications for this product include pumps, fans, conveyors, machine tools, gear reducers and any other jobs that requires IEC Frames.



### **Pressure Washer**

These single phase motors are available in both totally enclosed fan cooled and open drip proof construction. Industrial quality with 200 degree C., moisture resistant wire, the motors have UL and CSA recognized component approvals. NEMA frame sizes include 56 through 184 in rigid base only or NEMA C face with base.



### **Pump**

Our pump line of motors includes single or three phase jet pump motors, square flange motors, close-coupled pump motors, and P-Base vertical solid shaft pump motors. The motors are stocked in totally enclosed fan cooled, open drip proof, and many explosion proof ratings. Applications for these run the gamut from swimming pool pumps to medium and high thrust in-line pumps used in water treatment plants. Horse powers range in size from 1/3 through 75 HP.



### **Servo**

Baldor's servo line includes both brushless and brush type motors. Designs are available having either ferrite or rare earth magnets. Numerous ratings are stocked and are available with Baldor controls for Matched Performance. These motors are ideal for industrial applications where high torque to inertia ratio and repeatability are needed. These applications include material handling, X-Y positioning, machine tools, factory automation, and packaging equipment.



### **Two-Speed**

Two Speed Motors are available in both totally enclosed fan cooled and open drip proof designs. Constant torque or variable torque motors having one winding or two winding are stocked in NEMA frames 56 through 284T. Applications for these motors include fans, blowers, pumps, machine tools, hoists and conveyors.



### **Unit Handling**

Baldor's line of Unit handling motors are designed for wide variety of applications in baggage handling, conveyors, packaging equipment, machine tools, hoists, elevators and door openers. These motors are available from stock in ratings of ½ HP thru 10HP (56 thru 215T frames) with or without Dodge D-Series brakes. Features include an oversized top mounted conduit box on 56 & 140T frames that provide easy access for making connections. Footed frames include slotted feet to for easy mounting.



### **Vector**

Vector Drive Motors are stocked in either totally enclosed blower cooled with an attached constant velocity fan or totally enclosed non-ventilated construction. All motors are supplied with a 1024 line count encoder. Horse powers are available from 1 through 500 HP in NEMA frame sizes from 56C through 5009L. The motors are ideal in industrial applications where full torque is needed from base speed down to zero speed. Applications include test stands, material handling, packaging equipment, printing presses, and others requiring exact speeds and positioning.



### **Washdown**

Baldor's Washdown Duty Motors are available from stock in single and three phase AC and in DC designs. Horsepowers range from 1/2 to 20. Designs include motors having an electrostatically applied epoxy finish, paint free with major components in 300 series stainless steel, and all stainless steel. Applications include food processing, packaging, pharmaceuticals, or applications where motors are regularly exposed to high pressure wash down.

# DC Motors



## **General Purpose**

These NEMA frame DC motors include permanent magnet designs through 5 HP and wound field designs through 500 HP designed for adjustable speed operation from SCR controls. Applications include conveyors, extruders, winders, printing presses and metering pumps. Most designs are constructed so a tachometer may be added for closed loop applications. Permanent magnet and wound field designs for 90 or 180 VDC have a 20:1 constant torque speed range.



## **Washdown**

Permanent magnet DC motors are available with a choice for standard painted or paint-free finishes. PMDC motors may be used for adjustable speed applications such as conveyors or packing equipment. They may be paired with our BCWD140 Washdown DC SCR control.



## **Explosion Proof**

Permanent Magnet DC Motors are available for 1/4 - 2 HP and wound field motors of 1/2 - 3 HP for Class I, Group D and Class II, Group F & G locations with listing by both UL and CSA. Applications include conveyors and mixers in hazardous locations.



## **Metric Frames**

Permanent Magnet DC Motors are available with a choice of IEC B5 flanges in .2 to 5 HP or B14 C-faces in .2 to 2 HP. All are designed for 180 volt input power with a 20:1 constant torque speed range. These metric frames are designed for replacement on equipment requiring an IEC interface with the gearbox.



## **Power Motors**

Baldor Power Motors are designed for fixed-speed operation from a generator or battery power supply. These are 20% compound-wound motors. Applications include cranes, hoists, conveyors and augers where only DC power is available.



## **Integral Tachometer**

Baldor has designed a Permanent Magnet DC Motor with an integral 50 VDC per 1000 RPM precision tachometer. Its compact design fits into many locations where a conventional motor won't fit. Plus it is less costly than buying the motor, tach kit and tachometer. Applications include precision metering pumps and tensioning.



## **Lifting Magnet Generators**

Baldor Lifting Magnet Generators provide power for lifting electro-magnets used in scrap and bulk metal handling facilities. Horizontal motors may be belted from the diesel engine or the motors with C-faces may be coupled to the PTO drive of the crane.