



# LEESON...Your Complete Source For Quality DC Motors And More



Modern LEESON manufacturing plants are located in Grafton, Saukville, Neillsville, and Black River Falls, Wisconsin; Lincoln, Lebanon, and West Plains, Missouri; and Hanover, Ontario. Pictured above is the Grafton headquarters facility.

Today's LEESON offers one of the broadest and most accessible ranges of AC and DC commercial and industrial electric motors, gearmotors, and drives.

Nearly 4,000 stock products are available as off-the-shelf problem-solutions. With a network of 33 strategically located warehouses, next-day or better delivery can be made to most locations in North America.

Where a custom motor is the answer, no one can match LEESON's flexibility in custom motor design, manufacturing and delivery. LEESON manufacturing operations are certified to ISO 9000 international quality standards, your assurance of consistent-quality product.

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## SCR Rated and Low Voltage Permanent Magnet DC Motors



### SCR Rated Motors — 90 & 180 VDC

LEESON SCR rated, permanent magnet DC motors are available in sizes ranging from 1/50 through 3 HP. These motors are designed to withstand the additional heating produced by the pulsating direct current power output of unfiltered or filtered SCR adjustable speed controls. They may also be used with PWM-type DC drives.

### Low Voltage Motors — 12, 24, 36 or higher VDC

LEESON low voltage DC motors are available from 1/50 through 8 HP. These motors are high torque, continuous or periodic-duty products suitable for a wide variety of applications ranging from pumps to propulsion. The motors operate on battery power or generated "pure" DC



*NEMA and IEC frame DC motors from LEESON feature oversized brushes, accessible without disassembly of the motor. Integral constant pressure springs and bi-directional brush holders help ensure long service before maintenance — up to four times that of other DC motors. Four brushes are used in larger horsepower low voltage motors.*

## NEMA & IEC Frame Permanent Magnet DC Motor Features—

- Designed and manufactured to NEMA MG1 and IEC 34-1 (European) mechanical and electrical standards.
- Available in NEMA and IEC, footed, face and flange mountings as well as a wide variety of special and custom mountings and enclosures.
- NEMA frame motors have inch fasteners. IEC motors utilize metric fasteners.
- Recognized by Underwriters Laboratory component approval program, file number E57948, guide number PRGY2, and by Canadian Standards Association, file number LR33543.
- Full-fact metal rating plate lists a permanent record of motor data. SCR (thyristor) motors have dual horsepower ratings listing 1.05 and 1.40 form factor output capability and full load DC amperage for each horsepower rating.
- Steel frames with rugged high-pressure cast 380 alloy aluminum machined endshields, with steel bearing seat inserts (NEMA SS56/IEC 71 and larger) for precision alignment and bearing life, accurate brush tracking and maximum motor life.
- Permanent magnet motors operate cooler and more efficiently than do wound field motors. Designed for ambient temperature range of -20°C to 40°C.
- Precision dynamically balanced armatures for quiet, smooth operation.
- Class F & H insulation materials used throughout with fusion welded, molded commutators for dimensional stability.
- Reversible by interchanging armature connections and capable of dynamic braking for faster stopping.
- Sealed or shielded, permanently lubricated, selected electric motor grade ball bearings are used for quiet operation and long life.
- Tachometer mounting provisions are available, with adaptor packages for a variety of tachometers.

*LEESON's facility in Saukville, Wisconsin, is dedicated to the design and manufacture of NEMA and IEC frame DC motors.*

