

THOUSANDS OF STOCK POWER TRANSMISSION SOLUTIONS



LEESON's off-the-shelf product offering is one of the widest in the industry and includes nearly 4,000 stock motors, gearmotors, gear reducers and drives. All are built for industrial use and have numerous features making them easy to install in replacement applications.

MOTORS OF ALL TYPES

Stock motors include both AC and DC designs, from sub-fractional horsepower through hundreds of horsepower for general-use and specific-purpose applications. All popular enclosures and configurations are available, along with some not-so-easy-to-find items. Standard at no extra cost on all stock NEMA three phase motors (1 HP and larger) is LEESON's Inverter-Rated Insulation System (IRIS™), which provides an extra margin of protection from inverter-induced voltage spikes.

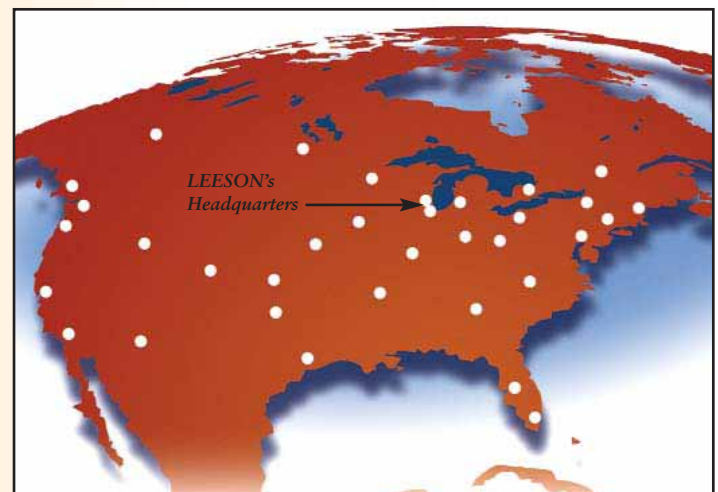
GEARING PRODUCTS

The LEESON product array includes both fractional and integral horsepower gear reducers. The new LeCENTRIC™ in-line reducer offers bolt-in interchangeability with leading brands. And the popular IRONMAN™ worm gear line, in both solid and hollow output shaft designs, has proven itself as a versatile workhorse.

ADJUSTABLE SPEED DRIVES

SPEEDMASTER® drives team-up perfectly with many types of LEESON motors. For AC applications through 60 HP, there's the Micro Series inverter with easy-to-use "plain English" programming. For applications through 25 HP, choose the SM Plus Sub-Micro Inverter, with its minuscule footprint, "big drive" features and wide range of accessories. For a more straightforward applications where all that is needed is a "shaft turner", choose the new SM Series drive, with the same small footprint as the SM Plus, it's an excellent value.

*LEESON is a subsidiary of
REGAL-BELOIT CORPORATION,
a worldwide manufacturer of mechanical
and electrical motion control products.
LEESON sales offices and warehouses
are located throughout North America.*



Inverter-Duty Motors For Every Need!



General Purpose, Inverter-Rated EPACT Motors 1 to 200 HP Pages 8-14

All LEESON stock NEMA three-phase motors, 1 HP and larger, feature the IRIS™ insulation system, which provides superior protection against voltage spikes induced by variable frequency drives. Many ratings have been designated as EPACT motors, meaning that they have efficiencies that meet or exceed EPACT standards. Suitable for use with an inverter at speed ranges of 6:1 for variable torque and 3:1 for constant torque. With blower kit, and proper inverter setup, suitable for use up to 20:1 variable torque and 4:1 constant torque.



WATTS AVER® Premium Efficiency Motors 1/3 to 125 HP Pages 15-18

Premium efficiency motors with the IRIS™ insulation system for extra spike protection. These motors are designed for superior performance in PWM and vector-drive service. Efficiencies meet or exceed most utility rebate programs and have been independently verified to IEEE 112B standards. Meets requirements for NEMA MG-1, part 30. Suitable for use with an inverter up to 10:1 variable torque and 10:1 constant torque. With blower kit, and proper inverter setup, suitable for use up to 20:1 variable torque and 10:1 constant torque. Also suitable for vector-duty (full rated torque at zero speed) with blower and encoder kits.



SPEEDMASTER® Extreme-Duty Inverter Motors 1 to 350 HP Page 19

Specially designed for inverter applications, these motors have 2000:1 constant torque speed range with blower cooling and vector-input IRIS™ voltage spike protection. Cast iron frame, endplates and fan cover. Provisions for encoder mounting. Meets requirements for NEMA MG-1, part 30 and 31. For inverter-duty use up to 2000:1 variable torque and constant torque. Vector duty with the addition of an encoder kit.

Inverter-Duty Motor Speed Ranges*

Construction Type	NEMA Frame	Safe Hertz Range			Safe Hertz Range With Forced Ventilation Mod
		CT▲	VT▲	CHP**	
General Purpose Inverter-Rated EPACT Motors					
Steel Frame	56-210T	20-60 Hz	10-60 Hz	to 90 Hz	Full torque at low speed with vector control
Cast Iron Frame, TEFC	180-440T	20-60 Hz	10-60 Hz	to 90 Hz	Full torque at low speed with vector control
Cast Iron Frame, ODP	180-440T	20-60 Hz	10-60 Hz	to 90 Hz	Full torque at low speed with vector control
WATTS AVER® Premium Efficiency Motors					
Steel Frame	56-180T	20-60 Hz	6-60 Hz	to 90 Hz	
	180-280T	6-60 Hz	6-60 Hz	to 90 Hz	0-90 with full torque at zero speed with vector control
Cast Iron Frame, TEFC	320-440T	15-60 Hz	10-60 Hz	to 90 Hz	0-90 with full torque at zero speed with vector control
Cast Iron Frame, ODP	180-280T	6-60 Hz	6-60 Hz	to 90 Hz	
	320-440T	15-60 Hz	10-60 Hz	to 90 Hz	
SPEEDMASTER® Extreme-Duty Inverter Motors					
TENV	143TC-256TC	0-120 Hz	0-120 Hz		
TEBC	284T-449T	0-90 Hz	0-90 Hz		

* General information is given because each application is unique with its own unique set of application characteristics. Successful motor/drive applications require proper setup and installation (in accordance with all applicable electrical codes and regulations) by personnel familiar with the installation, setup, and operation of adjustable speed drives. Proper adjustment of the adjustable speed drive, in accordance with the Installation and Operation manual that comes with it, must be performed to ensure that the motor/drive setup is complete and appropriate for the application. Failure to perform proper setup can lead to substandard performance and/or failure of system components.

** For constant Horsepower operation, the maximum speed for 2 pole (3600 RPM) motors is 75Hz, not 90Hz. Contact LEESON for application analysis if 90Hz is required.

