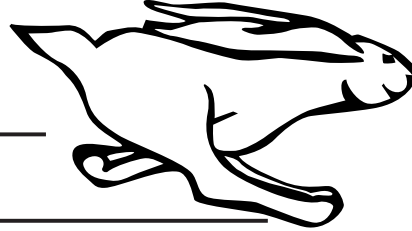




# Custom **PDQ**



## PDQ MODULAR PRODUCTION PROGRAM

### CUSTOM MULTI-SPEED, LOW SPEED AND MODIFIED MOTORS, ONE OR SEVERAL AT A TIME, ON A QUICK TURNAROUND BASIS.

LEESON's "Modular Production" utilizes specially designed and standard components to make almost any imaginable NEMA frame multi-speed or low-speed motor available when you need it.

**Quick Turnaround**-LEESON's Custom **PDQ** can provide quick answers to inquiries and fast turnaround for orders of highly customized motors.

**Comprehensive Catalog** - Features the Industry's most extensive two-speed and low speed motor selection as well as a listing of commonly requested modifications. **Call for your copy of LEESON Catalog 1057 - Multi-Speed, Low-Speed and Modified Motors.**

**Full Fact Acknowledgement** - With Custom **PDQ** all custom motors are promptly and fully acknowledged upon receipt of order. The acknowledgement includes the complete motor specification pricing and shipping date.

Motors of 254T frame and larger are of cast iron construction with all the rugged features of LEESON's stock single-speed motors described on pages 14 & 15 of this catalog. All two-speed designs are class F insulated and have a 1.15 S.F.



**Whether for the everyday or not-so-everyday needs, Custom PDQ gives you the ability to say "Yes" to requests for customized motors.**

#### Multi-speed

Two, three and four-speed motors

#### Low Speed

900, 720, 600, 450 and 300 rpm

#### Modified as per Catalog 1057 - Some examples are:

- Anti-condensation heaters
- Brakemotors, custom
- Cooling tower specifications
- Downsized frames
- Epoxy and fungus proofing
- 50 Hz
- Premium-efficiency, North American manufacture
- Insulation, special
- Marine duty (below deck)
- Part winding (low and high voltages)
- Shafts, modified
- Thermostats
- Thermistors
- Washdown service
- IEEE841 conversion of WATTS AVER® motors
- Voltages (non-standard)

...and many more

**For quotations, availability, and application assistance phone toll-free to our Canadian manufacturing facility.**

# TWO-SPEED MOTORS

## THREE PHASE • VARIABLE AND CONSTANT TORQUE



Multi-Speed

### TWO-SPEED • VARIABLE AND CONSTANT TORQUE

Two-speed, single winding design motors. Typical applications and characteristic speed torque curves are noted below.

These totally enclosed fan cooled designs are priced competitive to other manufacturers' drip-proof two-speed, single winding motors.



#### VARIABLE TORQUE • 460 V

##### 1725/850 RPM • ONE WINDING • RIGID BASE • TEFC

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	F.L. Amps **	"C" Dim. (Inches)
1/2.5	1725/850	143T	120945	\$748	B	36	460	1.6-0.7	12.75
1.5/3.7	1725/850	145T	120941†	779	B	36	460	2.4-1.0	12.75
2/5	1725/850	145T	120940	908	B	36	460	3.2-1.3	12.75
3/7.5	1725/850	184T	131474	973	B	77	460	4.0-1.8	14.46
5/1.2	1740/860	184T	131475	1241	B	107	460	6.5-2.5	15.96
7.5/1.9	1740/860	215T	140447	1749	B	155	460	9.7-3.3	17.71
10/2.5	1740/860	215T	140448	2061	B	168	460	12.7-4.2	18.71

These TEFC motors have a 1.0 Service Factor.

#### VARIABLE TORQUE • 208-230 V

##### 1725/850 RPM • ONE WINDING • RIGID BASE • TEFC

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	F.L. Amps **	"C" Dim. (Inches)
1/2.5	1725/850	143T	120944	\$748	B	36	208-230	3.2-1.4	12.75
1.5/3.7	1725/850	145T	120947†	780	B	36	208-230	4.8-2.0	12.75
2/5	1725/850	145T	120946	908	B	35	208-230	6.3-2.6	12.75
3/7.5	1725/850	184T	131468	973	B	78	208-230	8.0-3.6	14.46
5/1.2	1740/860	184T	131469	1241	B	94	208-230	13.0-5.0	15.96
7.5/1.9	1740/860	215T	140443	1766	B	154	208-230	19.4-6.6	17.71
10/2.5	1740/860	215T	140444	2061	B	166	208-230	25.4-8.4	18.71

These TEFC motors have a 1.0 Service Factor.

#### CONSTANT TORQUE • 460 V

##### 1725/850 RPM • ONE WINDING • RIGID BASE • TEFC

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	F.L. Amps **	"C" Dim. (Inches)
1/5	1725/850	143T	120943†	\$1066	B	36	460	1.4-1.6	13.25
2/1	1740/860	184T	131471	1365	B	68	460	2.9-2.9	13.96
3/1.5	1725/850	184T	131470	1548	B	80	460	3.8-3.5	14.96
5/2.5	1725/850	215T	140445	2024	B	145	460	6.7-7.0	17.71

These TEFC motors have a 1.0 Service Factor.

#### CONSTANT TORQUE • 208-230 V

##### 1725/850 RPM • ONE WINDING • RIGID BASE • TEFC

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	F.L. Amps **	"C" Dim. (Inches)
1/5	1725/850	143T	120942	\$1066	B	37	208-230	3.2-4.2	12.75
2/1	1740/860	184T	131473	1365	B	69	208-230	5.8-5.7	13.96
3/1.5	1725/850	184T	131472	1548	B	80	208-230	7.6-6.9	14.96
5/2.5	1725/850	215T	140446	2024	B	137	208-230	13.4-14.0	17.71

These TEFC motors have a 1.0 Service Factor.

\*\* F.L. Amps listed are for high and low speeds, respectively.  
† Class F insulated.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

### MULTI-SPEED MOTORS • APPLICATION DATA

**Variable torque** motors have horsepower ratings that vary as the the square of the speed, while torque varies directly with the speed. These motors are typically used on applications such as fans, blowers and centrifugal pumps.

**Constant torque** motors are capable of developing the same torque for all speeds. Their horsepower ratings vary directly with the speed. Constant torque motors are used on mixers, compressors, conveyors, printing presses, extractors, feeders and laundry machinery.

**Constant horsepower** motors develop the same horsepower at all operating speeds, and the torque varies inversely with the speed. These motors are often used on machine tools, such as drills, lathes, punch presses and milling machines. **Please contact LEESON with details for constant HP applications.**

