



*Since 1964*

# DRIVE UNITS CATALOG



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**ELECTRIC, INC.**

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## Motors and Controls



### AC Motors

**HP:** 0.25-2000

**RPM:** 3600, 1800, 1200, 900, 720 and 600 (also 2 & 4 speed)

**Power Supply:** 3 phase, 60Hz, standard 208-230/460 or 575 VAC; also above 200 HP- 2300 or 4000 VAC; wide variety of special voltages and frequencies available

**Frames:** 182-587U (cool running U-frames), 56-449T (stock T-frames) and over NEMA frames above 400 HP

**Enclosures:** ODP, TENV, WP-I, WP-II, TEWAC, TEFV and Sterli-Seal® (Washdown Duty)

**Nema Designs:** A, B, C, D and Wound Rotor; special designs for specific applications

**Mountings:** Footed, C-face, D-flange, P-base and special mounting faces or flanges for specific applications

**Brakemotors:** 0.25-30 HP (T-frames) and 0.25-60 HP (U-frames)

**Outstanding Features:** CONSTRUCTION - rugged cast iron or rolled steel (0.25-2hp) available; BEARINGS - oversized ball bearings; SERVICE FACTOR - standard 1.15; INSULATION - Class B or F insulation available; NAMEPLATE - stainless steel standard

### Sterli-Seal® Stainless Motors

**HP:** 0.33-10

**RPM:** 3600 and 1800

**Power Supply:** 3 phase, 60 Hz, standard 208-230/460 and 575 VAC

**Enclosure:** TENV and TEFC (Washdown Duty)

**Nema Design:** B

**Mountings:** Footed, C-face footed, C-face footless and Close Coupled Pump Style "JM"

**Outstanding Features:** CONSTRUCTION - All stainless steel frame, brackets, fan cover, conduit box and shaft; BEARINGS - oversized ball bearings; SERVICE FACTOR - standard 1.15; INSULATION - Class F; all fits with RTV sealant and four-quadrant stainless steel drain plugs in C-face bracket



### Adjustable Frequency AC Motors

**HP:** 1 - 150

**RPM:** 3600, 1800 and 1200

**Power Supply:** 3 phase, 60 Hz, standard 208-230/460 or 575 VAC; wide variety of special voltages and frequencies available

**Enclosures:** TEFC, TEBC (totally enclosed blower cooled) and Sterli-Seal® (Washdown Duty)

**Mountings:** Footed, C-face and special mounting faces available for specific applications

**Outstanding Features:** Special spike resistant magnet wire; Class "H" insulation with Class "B" temperature rise; full phase to phase insulation; winding temperature thermostats standard; optional encoder for closed loop applications

### Speed-Tron® 2000AC Controls

**Power Supply:** 3 phase input, 3 phase output; .25 - 5 HP 230 VAC; .25 - 20 HP 460 VAC

**Enclosures:** NEMA 1, NEMA 12, and NEMA 4X/12 Sterli-Seal® (Washdown Duty)

**Outstanding Features:** 50 or 60 Hz input line frequency; 3 - 240 Hz operating frequency range; selectable local or remote operation; 0 - 10 VDC or 4 - 20 ma signal follower capability; simple approach to programming functions by use of a keypad and digital display



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## Motors, Controls and Gearmotors & Reducers



### Speed-Tron® DC Controls

**Power Supply:** 115 or 230 VAC, 1 phase jumper selectable; 0.25-1 HP 115 VAC 90 VDC armature; 0.25-2 HP 230 VAC 180 VDC armature

**Enclosures:** Chassis, NEMA 1 and NEMA 4/12 Sterli-Seal® (Washdown Duty)

**Options:** Run/log with operator controls; reversing with operator controls; instrument interface 0-10 VDC or 4-20 ma; torque with operator controls; torque with instrument interface

### DC Motors (Permanent Magnet)

**HP:** 0.25-2

**RPM:** 1725 base speed

**Power Supply:** 90 or 180 VDC

**Enclosures:** TEFC and Sterli-Seal® (Washdown Duty)

**Mountings:** C-face footed and C-face footless

**Options:** 7 VDC / 1000 RPM tachometer



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### Classic Helical Gearmotors & Reducers

**HP:** 0.25-100

**Reductions:** Single, Double, Triple and Quadruple

**RPM:** 780-3.3

**Power Supply:** 3 phase, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

**Enclosures:** ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown Duty)

**Nema Designs:** B, C, D and special designs for specific application

**Input:** Solid shaft, C-face (coupling) and integral

**Mountings:** REDUCER - base, C-face and flange; MOTOR - base, C-face, shelf and motor-over mount

**Outstanding Features:** Oversized, rugged cast iron construction; positive oil seals allow mounting in any position without modification; all gears located between bearings-no overhung loads; rugged gears diameter and wide face; bearing housing integrally cast to assure proper alignment; low shaft places torsional stress close to feet

### 2000HG Helical Gearmotors & Reducers

**HP:** 0.25-75

**Reductions:** Double and Triple

**RPM:** 887-7

**Power Supply:** 3 phase, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

**Enclosures:** ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown Duty)

**Nema Designs:** B, C, D and special designs for specific applications

**Input:** Solid shaft and C-face (quill style with nylon bushing)

**Mountings:** Base and flange; interchangeable with major European suppliers

**Outstanding Features:** REDUCER - compact single piece cast iron housing; positive oil seals allow mounting in any position without modification; all gears located between bearings - no overhung loads; hardened and ground pinions and gears; bearings housings integrally cast to assure proper alignment; unique C-face bushing system prevents fretting and corrosion of motor shaft



## Gearmotors & Reducers, Shaft Mounts and Conveyors



### 2000SM Shaft Mount Gearmotors & Reducers

**HP:** 0.25-100

**Reductions:** Double and Triple

**RPM:** 337-5

**Power Supply:** 3 phase, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

**Enclosures:** ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown Duty)

**Nema Designs:** B, C, D and special designs for specific applications

**Input:** Solid shaft and C-face (quill style with nylon bushing)

**Mountings:** Base, flange, solid shaft and hollowshaft; interchangeable with major European suppliers

**Outstanding Features:** REDUCER - single piece cast iron housing; positive oil seals allow mounting in any position without modification; all gears located between bearings-no overhung loads; hardened and ground pinions and gears; bearing housings integrally cast in case to assure proper alignment; unique C-face bushing system prevents fretting and corrosion of motor shaft

### AGMA Shaft Mounts and Screw Conveyors

**HP:** 0.25-60

**Ratios:** 5:1, 15:1 and 25:1

**Output Shaft Bores:** 15/16-3 7/16

**Options:** Motor mounts, backstops and taconite seals

**Outstanding Features:** ribbed cast iron housing; single tapered bushing design is self-locking and will not back off shaft; fretting and corrosion of bushing to shaft is prevented; hardened and ground pinions and gears; standard double lip seals on ground and polished shafts protect against leaking



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### 2000C Cycloidal Gearmotors & Reducers

**HP:** 0.25-200

**Stages:** Single and Double

**RPM:** 300-0.23

**Power Supply:** 3 phase, 60Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

**Enclosures:** ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown Duty)

**Nema Designs:** B, C, D and special designs for specific applications

**Input:** Solid shaft, C-face (coupling) and C-face (quill)

**Mountings:** Base and flange; interchangeable with major cycloidal suppliers

**Outstanding Features:** Rolling contact for high torque; compact design (high ratios in small cases); high shock load capability; thermal ratings exceed mechanical ratings; high efficiency at high ratios

### Right Angle Gearmotors & Reducers

**HP:** 0.25-30

**Reduction:** Single and double worm or combination helical/worm

**RPM:** 345-0.48

**Power Supply:** 3 phase, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

**Enclosures:** ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown Duty)

**Nema Designs:** B, C, D and special designs for specific applications

**Input:** solid shaft, C-face (coupling) and C-face (quill)

**Mountings:** Base, ring, bracket, flange and hollowshaft

**Center Distance:** 1"-10"

**Outstanding Features:** Precision ground worms of high quality alloy steel; accurate hobbed cast bronze gears; tapered roller bearings on output shaft permit maximum overhung load capacity; large oil reservoir for splash lubrication affords cool operation and oil seal design provides trouble free operation





## Motors & Drives and Gearmotors & Reducers



### 2000HW Helical Worn Gearmotors & Reducers

**HP:** 0.25-20

**Reductions:** Double and Triple

**RPM:** 219-2

**Power Supply:** 3 PHASE, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

**Enclosures:** ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown duty)

**Nema Designs:** B, C, D and special designs for specific applications

**Input:** Solid shaft and C-face (quill style with nylon bushing)

**Mountings:** Base, flange, solid shaft and hollowshaft; interchangeable with major European suppliers

**Outstanding Features:** REDUCER - all cast iron housing; positive oil seals allow mounting in any position without modification. All gears located between bearings-no overhung loads; hardened and ground pinions, gears and worn shafts; high quality bronze worm gearing; bearing housings integrally cast in case to assure proper alignment; unique C-face bushing system prevents fretting and corrosion of motor shaft

### 2000HB Helical Bevel Gearmotors & Reducers

**HP:** 5-150

**Reduction:** Triple

**RPM:** 225-11

**Power Supply:** 3 phase, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

**Enclosures:** ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown duty)

**Nema Designs:** B, C, D and special designs for specific applications

**Input:** solid shaft and C-face (quill style with nylon bushing)

**Mounting:** Base, flange, solid shaft and hollowshaft; interchangeable with major European suppliers

**Outstanding Features:** REDUCER - all cast iron housing including integral feet; positive oil seals allow mounting in any position without modification. All gears located between bearings-no overhung loads; hardened and ground pinions, gears and worn shafts; high quality bronze worm gearing; bearing housings integrally cast in case to assure proper alignment; unique c-face bushing system prevents fretting and corrosion of motor shaft



### Speed-Trol® Mechanical Variable Speed Drives

**HP:** 0.50-50

**Speed Variation:** Up to 10:1

**Power Supply:** 3 phase, 60 Hz, standard 230/460 or 575 VAC; wide variety of special voltages and frequencies available

**Enclosures:** ODP, TEFC, Explosion Proof and Sterli-Seal® (Washdown Duty)

**Nema Designs:** B, C, D and special designs for specific applications

**Standard Variations:** Available with T or U-frame motors; variety of assembly positions; with or without reducers (helical and right angle); can be supplied with modular, C-face input and output to accept any type of motor or reducer

**Outstanding Features:** Lube-Free® (no grease) design of pulleys and shafts; positive speed control over stepless range; heavy duty belt with large thermal capacity to ensure long, cool-running operation; full length cover plates on both sides of transmission provide easy access to internal parts; various means available for changing speed (manual, electric or pneumatic); tachometer speed read-out; modular design provides the ultimate in flexibility and ease of service; automatic belt tensioning ensures the smooth transmission of power and prevents excess belt wear; can provide extra high starting torque

### Application Specific Motors & Drives

- Designed to meet customer's mechanical and/or electrical requirements

Example:

- High and low temperature applications
- Multi-speeds and voltages
- Special shafts and flanges
- Quick lead-times from design to production
- Large and small quantities
- Modified stock specials and complete custom design and manufacture



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# Product Line Card

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Harco partners with leading manufacturers in the industry to bring you an innovative range of sanitary and hygienic processing equipment and supplies. With experience in design, manufacturing and support, our partners are selected for their quality, reliability, and advanced products.

