



# Phelan Electromec™

## LEESON STOCK SUB-FHP GEARMOTORS

### MECHANICAL FEATURES:

- All units feature rugged aluminum construction for maximum gear and bearing support
- In-line units have machine hardened steel gearing (most to AGMA Class 9 standards)
- Right-angle units feature hardened steel gear with bronze worm wheel
- Oversize output bearings for greater overhung load and longer life
- Single lip, spring loaded oil seals keep lubricant in and dirt out
- Precision ground needle bearing journals provide maximum finish and fit
- High carbon alloy output shaft
- Gears and bearings splash-lubricated with permanent heavy duty gear oil

### ELECTRICAL FEATURES:

- Totally Enclosed, Permanent Magnet performance matched SCR (90Volt) motors provide 60:1 speed range, constant torque and continuous duty when used with full-wave, full-filtered control with 1.3 to 1.4 form factor
- Totally Enclosed, Permanent Magnet, Performance matched Low Voltage motors (12 Volt) designed for continuous duty on battery power or low voltage motor controller with form factor up to 1.05.
- Single phase gearmotors are rated for continuous duty, general purpose applications
- Permanent split capacitor designs are rated for 115/230VAC, 50/60HZ input and have starting torques equal to the running torques

	AC GEARMOTORS	INTERCHANGE INFO	DC GEARMOTORS
	<b>Parallel Shaft PZ Series</b>  Single Phase 115V 12-100 In-Lbs Output Torque	<b>BODINE/BISON/DAYTON DIRECT INTERCHANGE</b>	DC SCR 90 & 180V 10-100 In-Lbs Output Torque Low Voltage 12V 36-100 In-Lbs Output Torque
	<b>P240 &amp; P300 Series</b>  Single Phase 115/230V 43-391 In-Lbs Output Torque	<b>BISON/DAYTON DIRECT INTERCHANGE</b>	DC SCR 90 & 180V 27-353 In-Lbs Output Torque Low Voltage 12V 113-353 In-Lbs Output Torque
	<b>OS300 Series</b>		DC SCR 90V and Low Voltage 12V 130-268 In-Lbs Output Torque
	<b>PE350 Series</b>  Single Phase 115/230V 25-341 In-Lbs Output Torque Three Phase 230/460V 55-320 In-Lbs Output Torque	<b>BODINE DIRECT INTERCHANGE</b>	DC SCR 90 & 180V 25-371 In-Lbs Output Torque Low Voltage 12V 155-341 In-Lbs Output Torque
	<b>P1100 Series</b>  Single Phase 115/230V 70-1105 In-Lbs Output Torque Three Phase 230/460V 70-1105 In-Lbs Output Torque	<b>BISON/DAYTON DIRECT INTERCHANGE</b>	DC SCR 90V 105-1112 In-Lbs Output Torque Low Voltage 12V 320-1087 In-Lbs Output Torque
	<b>Right-Angle Worm Type 10 &amp; 13 Series</b>  Single Phase 115/230V 14-113 In-Lbs Output Torque	<b>BISON/DAYTON DIRECT INTERCHANGE</b>	DC SCR 90 & 180V 5-135 In-Lbs Output Torque Low Voltage 12V 25-135 In-Lbs Output Torque
	<b>Bravo Right- Angle Worm Type 12 Series</b>		DC SCR 90V & Low Voltage 12V 46-134 In-Lbs Output Torque

The above is intended to provide basic information about **LEESON Sub FHP** gearmotors. For detailed data product descriptions, rating information, pricing and availability, please contact **Phelan-ElectroMec** or visit [www.phelanmotors.com](http://www.phelanmotors.com)



**LEESON STOCK SUB-FHP IP55 WASHGUARD GEARMOTORS**

**MECHANICAL FEATURES:**

- 303 Stainless Steel external shafts
- White epoxy painted motors
- Interior components protected against corrosion
- Right-angle units feature hardened steel gear with bronze worm wheel
- Oversize output bearings for greater overhung load and longer life
- O-Rings and gaskets used for sealing - one way stainless steel vapour vent is provided
- Cast conduit box, Nitrile gaskets, box cover made from 303 Stainless Steel
- Output shafts have needle bearings for high load capacities
- Gears and bearings splash-lubricated with permanent heavy duty gear oil
- UL listed and CSA certified

**ELECTRICAL FEATURES:**

- Single and Three Phase Washdown gearmotors rated for extended life in continuous Washdown duty applications
- Permanent Split designed single phase motors include capacitor in conduit box
- DC Permanent Magnet gearmotors rated for continuous duty and designed for use with full wave un-filtered SCR controls or battery supplied low voltage for adjustable speed applications requiring constant torque throughout the speed range
- The motor's stall torque exceeds recommended full load torques for the gear-boxes. A current limiting device should be used to prevent damage to the gear sets.

**INTERCHANGE INFO**

**VOLTAGE AVAILABLE**



**P300 Series**

DC SCR 90 & 180V  
10-100 In-Lbs  
Output Torque  
Low Voltage 12V  
36-100 In-Lbs  
Output Torque



**PE350 Series**

DC SCR 90 & 180V  
27-353 In-Lbs  
Output Torque  
Low Voltage 12V  
113-353 In-Lbs  
Output Torque



**Right-Angle 13 Series**

DC SCR 90V and  
Low Voltage 12V  
130-268 In-Lbs  
Output Torque



**P240 Series**

**BISON/DAYTON  
DIRECT INTERCHANGE**

DC SCR 90 & 180V  
25-371 In-Lbs  
Output Torque  
Low Voltage 12V  
155-341 In-Lbs  
Output Torque



**Right-Angle Worm Type  
10 & 13 Series**

**BISON/DAYTON  
DIRECT INTERCHANGE**

DC SCR 90V  
105-1112 In-Lbs  
Output Torque  
Low Voltage 12V  
320-1087 In-Lbs  
Output Torque

**Stock Sub-FHP three Phase Inverter Rated Gearmotors**



**Includes gearmotor  
Series PZ, P240,  
PE350 and 13  
Series Right-Angle**

Three Phase 230V  
12-391 In-Lbs  
Output Torque

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