



SUB-FHP AC GEARMOTORS

INVERTER RATED

Design Specifications:

Three phase motors totally enclosed for continuous duty, general purpose applications.



Standard on all these ratings is the exclusive Inverter

Rated Insulation System (IRIS). This provides superior protection against voltage spikes induced by variable frequency drives.

Many superior mechanical features for both the motor and gearbox. Double shielded ball bearings in the motor. Needle bearings in the parallel shaft gearboxes and ball bearings in the Right angle (worm) gearboxes. Steel conduit box provided as Standard. Complete gearmotor furnished with high gloss hardened black enamel paint.

Application Notes:

These motors are designed with high temp insulation (Class F) to avoid over heating when operated with a PWM inverter down to a 10:1 speed range from the printed gearmotor output RPM.

Refer to pages 176 to 178 detailing non-horizontal mounting.

The torque values listed are the recommended full load torque values for reasonable gear life.

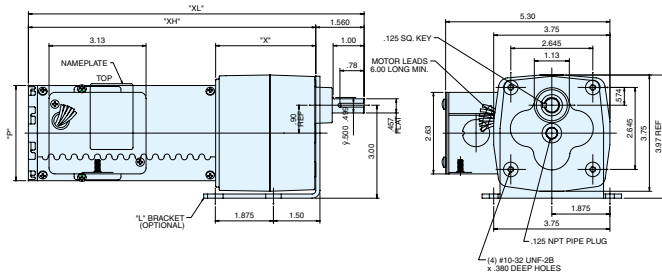
Overhung load capacities shown are at the center of the output shaft. See page 179 for optional "L" bracket kits for PZ and PE350 units. Please contact LEESON for output speeds not listed.

PZ SERIES AC GEARMOTORS

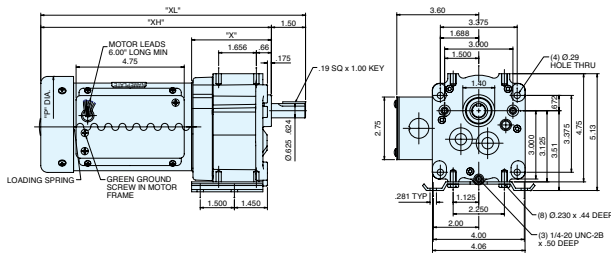
THREE PHASE • 230V • TENV

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Gearmotor Type & Frame	Ratio to 1	F.L. Amps 230V AC	Over-hung Load (Lb.)	DIMENSIONS			
								P	X	XL	XH
19	100	1/15	M1125282.00	PZ4-31	90	0.4	155	3.07	3.23	10.83	9.27
57	56	1/15	M1125283.00	PZ3-31	30	0.4	171	3.07	2.43	10.03	8.47
142	24	1/15	M1125284.00	PZ2-31	12	0.4	180	3.07	2.13	9.73	8.17
283	12	1/15	M1125285.00	PZ2-31	6	0.4	180	3.07	2.13	9.73	8.17

PZ SERIES - AZ



P240 SERIES - AC

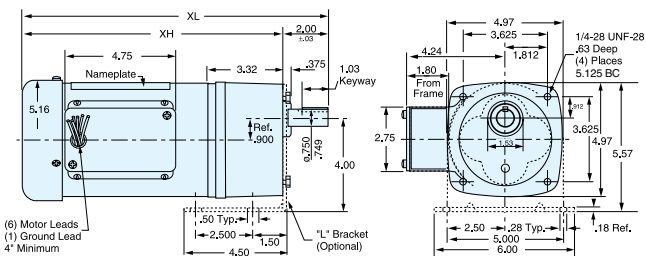


P240 SERIES AC GEARMOTORS

THREE PHASE • 230V • TEFC

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Gearmotor Type & Frame	Ratio to 1	F.L. Amps 230V AC	Over-hung Load (Lb.)	DIMENSIONS			
								P	X	XL	XH
16	391	1/6	M1145122.00	P243-38	103	0.72	399	4.43	3.50	11.63	10.13
30	295	1/6	M1145123.00	P243-38	58	0.72	330	4.43	3.50	11.63	10.13
60	157	1/6	M1145124.00	P242-38	29	0.72	268	4.43	3.50	11.63	10.13
90	103	1/6	M1145125.00	P242-38	19	0.72	330	4.43	3.50	11.63	10.13
156	60	1/6	M1145126.00	P242-38	10.6	0.72	330	4.43	3.50	11.63	10.13

PE350 THREE PHASE

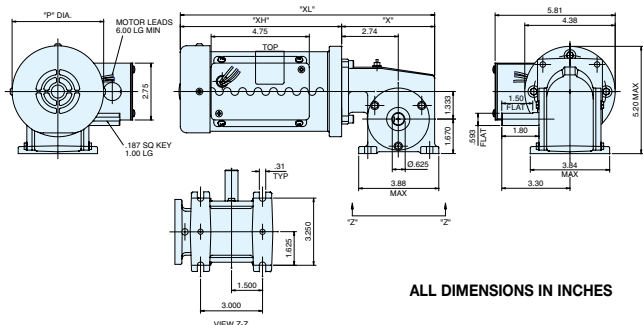


PE350 SERIES AC GEARMOTORS

THREE PHASE • 230/460V • TEFC

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Gearmotor Type & Frame	Ratio to 1	F.L. Amps 230V AC	Over-hung Load (Lb.)	DIMENSIONS			
								P	X	XL	XH
9	341	1/6	096065.00	PE353-42	180	1.0	491	5.16	3.32	12.57	10.57
29	300	1/4	096066.00	PE353-42	58	1.2	327	5.16	3.32	13.07	11.07
58	244	1/4	096067.00	PE353-42	30	1.2	300	5.16	3.32	13.07	11.07
85	165	1/4	096068.00	PE352-42	20	1.2	300	5.16	3.32	13.07	11.07
173	92	1/4	096069.00	PE352-42	10	1.2	300	5.16	3.32	13.07	11.07
325	50	1/4	096070.00	PE352-42	5	1.2	300	5.16	3.32	13.07	11.07

13 SERIES - AC



ALL DIMENSIONS IN INCHES

RIGHT ANGLE SERIES AC GEARMOTORS

THREE PHASE • 230V • TEFC

Output RPM	F.L. Torque (Lb.In.)	Input HP	Catalog Number	Gearmotor Type & Frame	Ratio to 1	F.L. Amps 230V AC	Over-hung Load (Lb.)	DIMENSIONS			
								P	X	XL	XH
29	238	3/8	M1145127.00	13F60-38	60	1.3	235	4.43	4.50	12.31	7.81
43	228	3/8	M1145128.00	13F40-38	40	1.3	235	4.43	4.50	12.31	7.81
86	138	3/8	M1145129.00	13F20-38	20	1.3	235	4.43	4.50	12.31	7.81
172	105	3/8	M1145130.00	13F10-38	10	1.3	235	4.43	4.50	12.31	7.81
345	54	3/8	M1145131.00	13F05-38	5	1.3	235	4.43	4.50	12.31	7.81

Design Specifications:

Three phase motors totally enclosed for continuous duty, general purpose applications.

Standard on all these ratings is the exclusive Inverter Rated Insulation System (IRIS). This provides superior protection against voltage spikes induced by variable frequency drives.

Many superior mechanical features double shielded ball bearings, welded-on base, steel conduit box provided as standard, furnished with high gloss hardened black enamel paint.

Application Notes:

These motors are designed with high temp insulation (Class F) to avoid overheating when operated with a PWM inverter down to a 10:1 speed range from the motor's base speed.

230 VOLT • THREE PHASE
1.0 SERVICE FACTOR • TOTALLY ENCLOSED

HP	RPM 60 Hz	Frame	Catalog Number	Voltage	F.L. Amps 230V
1/45	1725	38	M1140171.00*	230	.4
1/6	1725	38	M1140173.00*	230	.72
1/4	1725	38	M1140172.00	230	1.1

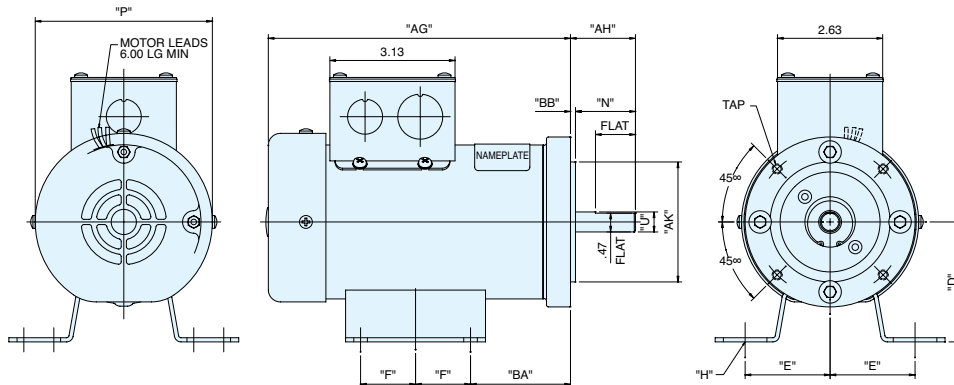
* TENV enclosure

38 FRAME NEMA C-FACE WITH BASE DIMENSIONS

Catalog Number	AG	P	U	AH	BB	AJ	TAP	R	AK	BB	D	BA	E	F	H
M1140171.00	5.14	3.85	.5000	1.63	1.00	3.75	1/4-20	4.25	3.00	.13	3.0	2.50	2.125	1.375	11/32 Slot
M1140173.00	6.14	3.85	.5000	1.63	1.00	3.75	1/4-20	4.25	3.00	.13	3.0	2.50	2.125	1.375	11/32 Slot
M1140172.00	7.56	4.43	.5000	1.63	1.00	3.75	1/4-20	4.25	3.00	.13	3.0	2.50	2.125	1.375	11/32 Slot

GEARMOTORS

AC 38 48C



ALL DIMENSIONS IN INCHES

Both motors only and gearmotors will have inverter rated printed on the nameplate.
UL and CSA recognition for both motors only and gearmotors



LEESON'S Inverter Rated Insulation System (IRIS™) provides superior protection against voltage spikes induced by variable frequency drives. This *total insulation system* protects better than spike-resistant magnet wire alone. Sleeved connections (from the leads all the way

into the turns), and deep-penetrating, non-hygroscopic, high temperature varnish are just a few features contributing to extra protection. All this plus second generation spike-resistant magnet wire. The IRIS™ *total insulation system* is standard at no extra cost.