



Saving Energy for the Next Generation

**E.I.S.A. Facts:**

E.I.S.A. is an acronym for Energy Independence & Securities Act

This law was signed on Dec. 19, 2007 and goes into effect on Dec. 19, 2010. All motor manufactures may not build motors that have a lower nameplate efficiency than the rules allow. Motors can be sold and shipped after Dec. 19, 2010, having the lower efficiency that were built before the deadline.

**General Overview of Levels**

General purpose motors today that meet EPACT, will need to change to NEMA Premium. General purpose motors that were exempt from EPACT, due to voltage, mounting, etc..., will need to change to meet EPACT Motors that are exempt, include motors having special shafts, non-standard Hz, Inverter only motors and TENV motors.

**For more information on EISA, please visit our website at: [leeson.com/energy-efficient/EISAFacts.html](http://leeson.com/energy-efficient/EISAFacts.html)**

# TABLE OF CONTENTS

## AC & DC MOTORS

### AC MOTORS

	<b>Single Phase</b>	<b>Three Phase</b>
Agricultural Motors	Pages 72 - 82	73 - 76, 82
Aluminum Frame Motors		38 - 46
Automotive Duty Motors - U-Frame		182 - 188
BISSC Certified Motors	92	88, 92, 95
Boat Hoist Duty	108	
Brake Motors, General Purpose	116	116 - 117
Brake Motors, WASHGUARD		117
Brake Kits		118
Compressor Duty Motors	106	106
Coupler Brakes	119	119
Crusher Duty Motors		189
Elevator Duty Motors		190 - 195
Explosion Proof Motors	120	121 - 123
Explosion Proof Jet Pump Motors	120	121
Extreme Duck Stainless Steel Motors		95
F2 Mount Motors	102	102
Fan & Blower Motors	73, 109 - 113	109, 110
Fire Pump Motors		212 - 215
Food Processing Motors	85, 90, 92	85 - 99
GE Commercial Motors by Regal Beloit	112	
General Purpose Motors, Rigid Base	62, 63, 66 - 71	20 - 23, 30 - 49
General Purpose Motors, C-Face	64, 65, 67, 70	24 - 27, 33 - 49
General Purpose Motors, Resilient Base	103	104
IEC Metric Motors		148 - 151
IEC Metric Motors, Washdown Duty		93
IEEE 841 Motors		58
Instant Reversing Motors	108	
Inverter Motors, SPEEDMASTER®, CTAC®		29, 50 - 57
Jet Pump Motors	124, 127	125
Jet Pump Motors, Washdown		87
JM Pump Motors, General Purpose	129	129, 130
JM Pump Motors, Washdown, Stainless		87, 92
JP Pump Motors, General Purpose	128	128, 130
Medium Voltage Motors		197
Motor Accessories / Kits	216 - 223	216 - 223
Motor Modifications, MOD-SQUAD	224 - 235	224 - 235
Multi-Speed Motors, PDQ Motors		115
Pedestal Fan Motors	111	
Paint-Free Motors	90, 92	88 - 95
Poultry Motors	76, 80	
Premium Efficiency Motors, General Purpose		
WATTSARE®, ULTIMATE E®	28	20 - 23, 30 - 49
Premium Efficiency Motors, C-Face		
WATTSARE®, ULTIMATE E®		24, 33, 36, 42, 49
Resilient Base Motors, General Purpose	103	104
Severe Duty Premium Efficient Motors		58 - 61
Slide Bases	219	219
Square Flange Pump Motors, FHP	127	
Stainless Steel Premium Efficient Motors		90 - 95
Steel Frame Motors - High HP		30 - 45, 50 - 57
Swimming Pool Motors	126	
TENV Motors	102	102
Two-Speed Motors	109	109, 115
Vector Duty Motors, SPEEDMASTER®, CTAC®		29, 54 - 57
Washdown Duty Motors, Duck Family,		
WASH-THRU™, MULTIGUARD®	85, 90, 92	83 - 101
Woodworking Motors	107	
200-208/400-416 Volt Motors		133 - 137
50 HZ Motors	131	132
575 Volt Motors		133, 138 - 146
2300/4000 Volt Motors		197

**DC MOTORS**

SCR Rated, NEMA Motors . . . . . Page 153  
SCR Rated, NEMA Explosion-Proof . . . . . 154  
SCR Rated, NEMA WASHGUARD . . . . . 154  
SCR Rated, Metric (IEC) Motors . . . . . 156  
SCR Rated, Sub-FHP Motors . . . . . 155  
SCR Rated, All-Stainless Steel NEMA and IEC . . . . . 161  
Low Voltage Motors . . . . . 158

**SUB-FHP GEARMOTORS**

**AC GEARMOTORS**

Parallel Shaft, PZ . . . . . Page 174  
Parallel Shaft, P240 . . . . . 175  
Parallel Shaft, PE350 . . . . . 176  
Parallel Shaft, P1100 . . . . . 177  
Right-Angle. . . . . 178  
Inverter-Rated. . . . . 180  
Right-Angle, WASHGUARD . . . . . 178  
Parallel Shaft, P240 WASHGUARD. . . . . 175

**DC GEARMOTORS**

Parallel Shaft, PZ - SCR & Low Voltage . . . . . Page 164  
Parallel Shaft, P300 - SCR & Low Voltage . . . . . 165  
Parallel Shaft, P300 - WASHGUARD . . . . . 171  
Parallel Shaft, PE350, SCR & Low Voltage. . . . . 167  
Parallel Shaft, PE350 - WASHGUARD . . . . . 172  
Parallel Shaft, P1100 . . . . . 168  
Offset Shaft, OS300 - SCR & Low Voltage. . . . . 166  
Right-Angle - SCR & Low Voltage . . . . . 169  
Right-Angle, WASHGUARD . . . . . 173  
Right-Angle, Series 12. . . . . 170

**AC & DC ADJUSTABLE SPEED DRIVES**

**AC INVERTERS**

Micro Series NEMA 1. . . . . Page 198  
Micro Series NEMA 4/12 & 4X . . . . . 199  
SM Series . . . . . 203  
SM Plus Series . . . . . 202  
Vector Series . . . . . 204  
Accessories . . . . . 200, 207, 208  
FHP Series . . . . . 209

**DC DRIVES**

SCR RATED . . . . . Page 210  
LOW VOLTAGE . . . . . 211  
DUAL MODE . . . . . 209

**GENERAL INFORMATION**

**MOTORS**

Technical Information. . . . . Page 11 - 17, 269 - 275  
Dimensions. . . . . 276  
Cross References  
Baldor-to-LEESON. . . . . 237  
Grainger/Dayton-to-LEESON . . . . . 249  
Magnetek/AO Smith-to-LEESON . . . . . 245  
Marathon-to-LEESON . . . . . 242  
Catalog Number Index . . . . . 256

**TERMS AND CONDITIONS** . . . . . Page 285

**WARNINGS AND CAUTIONS** . . . . . Page 287



**AC MOTORS**  
PAGES 18 - 151



**DC MOTORS**  
PAGES 152 - 161



**GEARMOTORS**  
PAGES 162 - 197



**AC & DC ADJUSTABLE SPEED DRIVES**  
PAGES 198 - 211



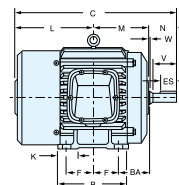
**MOTOR ACCESSORIES and KITS**  
PAGES 216 - 223



**MOTOR MODIFICATIONS**  
PAGES 224 - 235



**GEARING OVERVIEW**  
(SEE CATALOG 8050 FOR GEARING PRODUCT INFO)  
PAGES 290 - 297



**GENERAL INFORMATION**  
PAGES 11 - 17 & 236 - 288