# Elco Motor Performance Guide

| Motor Specifications | EP-300 | EP-600 | EP-1000 | EP-2000 | EP-3500 |
|---|---|---|---|---|---|
| Length | 21" | 24" | 24" | 30" | 31" |
| Width | 12” | 12" | 12" | 13" | 16" |
| Height | 14” | 16" | 16" | 18" | 20" |
| Weight | 138 bs | 225 bs | 225 bs | 375 bs | 425 bs |
| Motor service life (estimated) | 50,000 hrs | 50,000 hrs | 50,000 hrs | 50,000 hrs | 50,000 hrs |
| Warranty | 3 years parts and 2 years labor on all Elco Electric Motors. | | | | |
| **Electrical System** | | | | | |
| Volts | 36 vdc | 72 vdc | 72 vdc | 108 vdc | 108 vdc |
| Amp/hrs | 220 amp/hrs | 220 amp/hrs | 220 amp/hrs | 220 amp/hrs | 220 amp/hrs |
| Number of batteries | 3 | 6 | 6 | 9 | 9 |
| Battery weight (total) | 396 bs | 792 bs | 792 bs | 1,188 lbs | 1,188 lbs |
| Charger(s) | 1x36 volt | 2x36 volt | 2x36 volt | 3x36 volt | 3x36 volt |
| Plug-in-play components | 3 | 3 | 3 | 3 | 3 |
| enGauge IV display panel | yes | yes | yes | yes | yes |
| Water resistant/submersible | yes | yes | yes | yes | yes |
| Battery service life (estimated) (lead acid) | 8 yrs | 8 yrs | 8 yrs | 8 yrs | 8 yrs |
| Generator (electrical recharge) | yes | yes | yes | yes | yes |
| Generator (continuous running) | yes | yes | yes | yes | yes |
| **Performance*** | | | | | |
| Boat size (recommended) | 10’ to 20’ | 15' to 25' | 20' to 34' | 30' to 45' | 38' to 55' |
| Cruising range/duration @ 4 knots | 7-10 hrs | 8-12 hrs | 8-12 hrs | 4-6 hrs | 3- 4 hrs |
| Cruising range/duration @ 5 knots | 5-7 hrs | 6-8 hrs | 6-8 hrs | 3-4 hrs | 2-3 hrs |
| Cruising range/duration @ full speed | 3-6 hrs | 3-6 hrs | 3-6 hrs | 1-3 hrs | 1-2 hrs |
| Recharging time (shore power) | 1- 8 hrs | 1-10 hrs | 1-10 hrs | 1-12 hrs | 1-2 hrs |
| Recharging time (solar) | yes | yes | yes | yes | yes |
| Recharging time (wind) | yes | yes | yes | yes | yes |
| RPM (designed/max) | 2,000 rpm | 2,000 rpm | 2,000 rpm | 2,000 rpm | 2,000 rpm |
| Power boost | 2,500 rpm | 2,500 rpm | 2,500 rpm | 2,500 rpm | 2,500 rpm |
| Horse power diesel equivilancy | 6 hp | 12 hp | 20 hp | 40 hp | 70 hp |
| KW Equivilancy | 3 kw | 6 kw | 10 kw | 20 kw | 35 kw |
| MPG Equivilancy (estimated) | 80 mpg | 65 mpg | 50 mpg | 30 mpg | 20 mpg |

*Performance is based on battery power only - Run time can be continuous with Genset