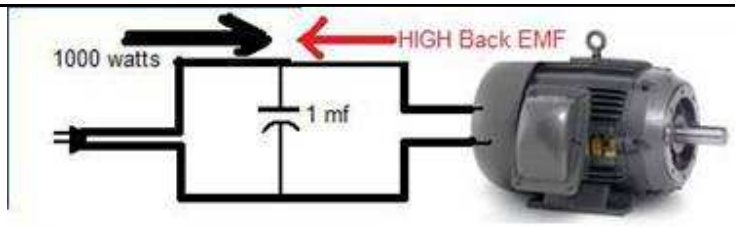
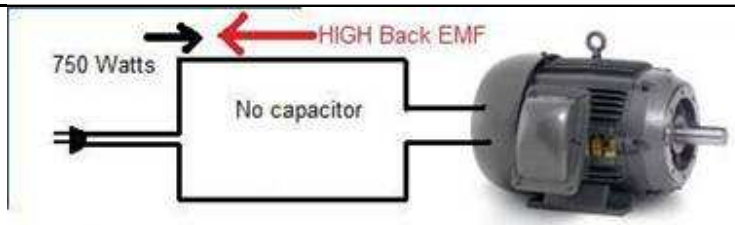
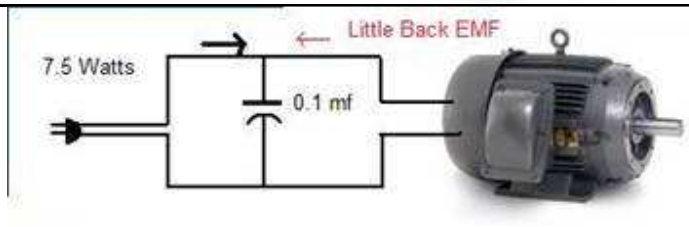
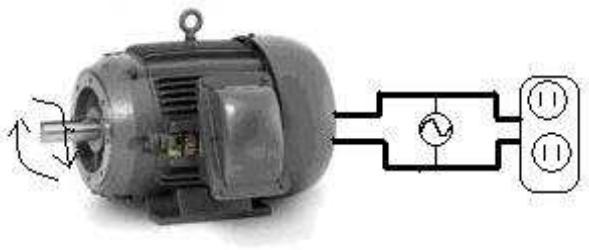
Operating Principles—Rotoverter

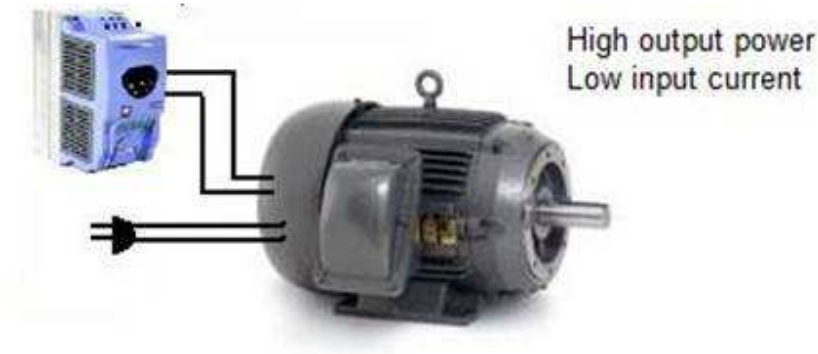
1. An electric motor wastes large amounts of energy by producing “Back EMF” that opposes the flow of electricity.
    a. This back EMF can be cancelled out by using certain technologies t “tune” the motor.
    b. It is thus simple to reduce power consumption by 90%.

	• **Starting up**: High current use. • A 750 watt motor may use 1000 watts of power. • A big starting capacitor is needed to help the motor
	• **Running:** Lower Current Use • No capacitor is generally used. • Current used is at the rating of the motor.
	• **Tuned:** Lowest Current Use • Small capacitor used • **Only 10% of rated power required!**

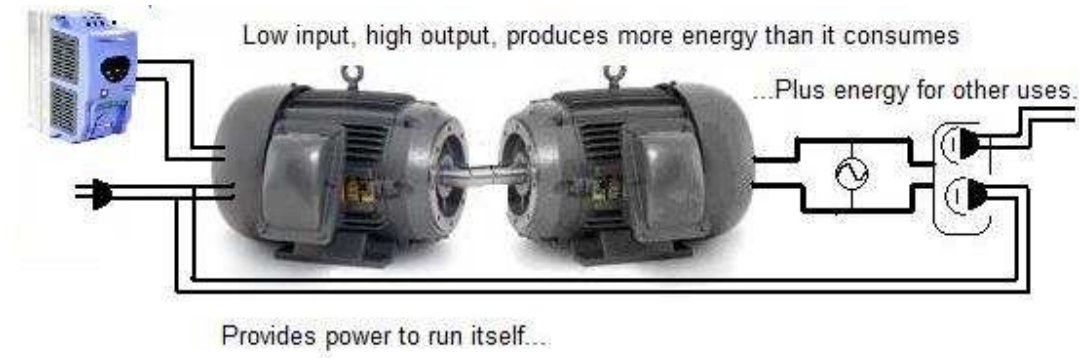
2. If the shaft of an electric motor is spun by another source (“prime mover”), the motor acts as a generator and produces electricity.



3. An electric motor can be controlled by certain electronic circuits in a way that produces many times the rated power of the motor. This can be done without a significant increase in the power use of the motor.



4. By coupling two electric motors, one acting as a motor (the prime mover), and the other acting as a generator, the power produced by the generator can be looped back to drive the prime mover motor. In this way, a low-power consumption motor can drive a generator and produce more power than is consumed.



5. Generators can also be modified to produce much more power than a typical generator. This allows much more efficient energy production from such sources as hydroelectric plants, mini-hydro, wind power, tidal power, etc.

Global Genius Energy has several more projects ready for production, which could be added to these projects at any time. Some examples are:

1. a stand-alone generator set which operates without fuel or energy input, producing up to 75 KW of energy on the footprint of a 5 KW standard genset. This uses a closed-loop tesla turbine that operates with Freon gas, powered with ambient energy.
2. Anti-gravity systems for propulsion and static use.
3. Protective force-field technologies.
4. Wireless, loss-less transmission of electrical energy, for power, as well as ultra-wide bandwidth for communications and information systems (internet) use.
5. Technologies which allow the growth of super-sized plants, vegetables and fruits, with high nutritional content, in almost any environment.