

The 360° Magnetic Monopole Field Effect[™] Technology

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Background

Limitations of Current Electric Motor/Generator Technologies

Electric motor/generator manufacturers have been racing to develop and market more efficient and compact motors/generators in an effort to reduce energy costs and comply with various regulatory mandates. Most importantly, electric motors are the largest electricity consuming devices in both homes and businesses globally at 29%. A huge number of motor/generator systems are now in use ranging from the smallest of medical device motors to the largest of power plant electricity generators and covering both AC and DC.



However, little progress has been made in making major leaps in improving the performance and efficiency tradeoff achieved when using these. This problem persists even in newer motor technologies that advertise 90%+ efficiencies since only 20% of the electromagnetic flux generating volume of the stator and rotor are actually producing utilizable electromagnetic force to create motion. In other words, that 90%+ efficiency is only of 20% of the copper/lamination volume versus 100% of it!

Huge wastes are still occurring in the form of heat. Reliability and durability has also always been another area where great electric motor/generator improvements were desired. Brushes wear, bearings fail, and windings vibrate and heat up then short and take the whole stator or rotor down.



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The Quantakinetic Technologies[™] Solution

- Harnesses all the magnetic flux for best in class efficiency of 99% and elimination of external magnetic field detection;
- Lowers thermal waste to the point there is only 10% temperature increase over ambient so there is almost no heat signature to be detected externally while reducing stress on internal materials;
- Reduces size and weight by 60%+ along with the associated material costs;
- Uses no permanent magnets, if desired, and hence avoids ambient temperature limitations plus potential rare earth costs;
- Employs unique coils winding architecture, which can fail without disturbing the general active magnetic field and taking the whole unit down for robust reliability;
- Reduces Back EMF by up to 100% for immense power input utilization;
- Rides on QKTTM unique proprietary parallel backup Passive Magnetic Bearings (PMB) inherit in its architecture for improved durability and the physical bearings protection;
- No mechanical vibrations due to windage and/or mixed harmonics interferences from the winding ends otherwise present in old electric motors;
- No electrostatic and/or Eddy Currents discharging catastrophic failure reason possible due to its proprietary inner architecture.





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