



eDrive Systems

Axial Flux Electric Motor AF-230

In 2011 GKN Driveline entered into a joint venture with EVO Electric, a UK based pioneer in advanced electric drive solutions. This new venture enables GKN Driveline to manufacture and sell electric motors and integrated drive systems based on EVO's axial flux motor technology for use in hybrid and all-electric vehicles.



Design

The AF-230 electric motor is a three-phase permanent magnet motor that uses proprietary axial flux technology to deliver very high torque and power density in a compact and lightweight unit. This makes it particularly suitable for use in electric and hybrid electric vehicles, where low weight and compact packaging are important in delivering optimum efficiency in performance and design.

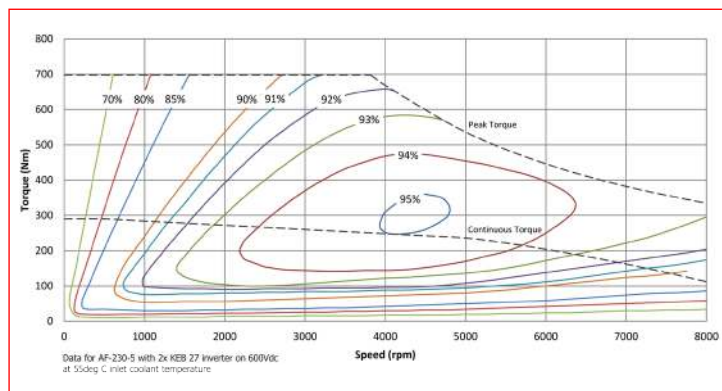
Key Benefits

- > Very high torque and power density
- > Low cogging torque
- > Compact design with flat front and back faces for mounting
- > Integrated resolver for rotor position feedback
- > Liquid cooling for enhanced performance

Specifications

Type	PM Synchronous - Axial Flux
Maximum Speed	8000 rpm
Nominal Torque	290 Nm
Peak Torque (for up to 60s)	500 Nm
Nominal Output Power	128 kW
Peak Output Power (for up to 60s)	200 kW
Peak Output Power (for up to 20s)	280 kW
Peak Efficiency	95.1%
Dimensions	211.8 (230.7) mm (L) x 300 mm (D) at 57.5 kg

Performance and Efficiency (Motor Operation)



For further information please contact:

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