DATASHEET

Turntide Axial Flux Motor 125 MODEL: AF125

Features

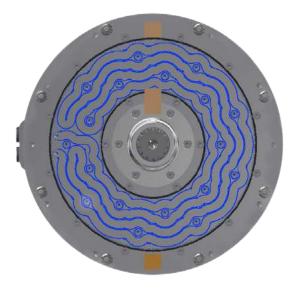
- + Short motor length resulting from axial flux design
- + Very high power density of 4.5 kW/kg*
- + Peak Efficiency >95%
- + Low cogging and low ripple torque gives smooth, quiet operation in direct drive applications
- + Compact design with flat front and back faces for mounting
- + IP67 rated shaft seals (optional)
- + Low inertia composite rotor with excellent dynamic stability
- + Suitable for inverter supply voltages up to $800V_{nc}$
- + Liquid cooling using water / glycol for enhanced performance
- + Integrated PT100 winding temperature sensors
- + Sin/Cos resolver for out of the box compatibility with most commercially available inverters
- + Standard with 8mm keyshaft 25mm

Specifications at $600V_{nc}^{\dagger\dagger}$

Model	AF125
Maximum Speed (rpm)	12000
Continuous Torque (Nm)	100
Peak Torque** (Nm)	220
Nominal Output Power (kW)	59
Peak Output Power** (kW)	100
Recommended Coolant Flow Rate (LPM)	8
Weight (kg)	22







Stator Coolant Path

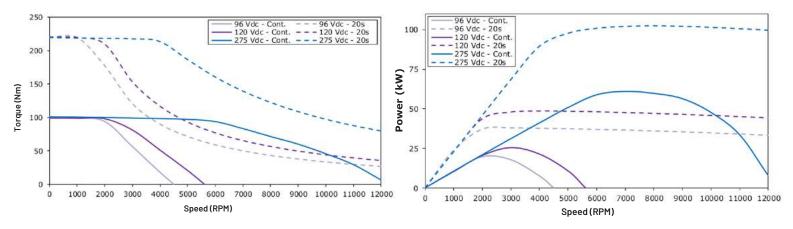
- * Weight as delivered dry
- ** For up to 20s test conditions

⁺⁺ All values in table are quoted for 45°C ambient with coolant at 55°C inlet temperature and 8 LPM flow rate. Higher coolant temperature possible, please contact <u>electrificationsales@turntide.com</u>



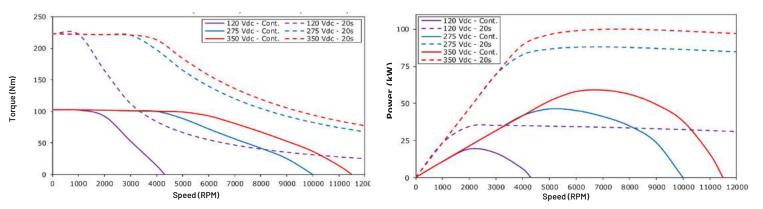
For further information please contact our team of experts at <u>electrificationsales@turntide.com</u>



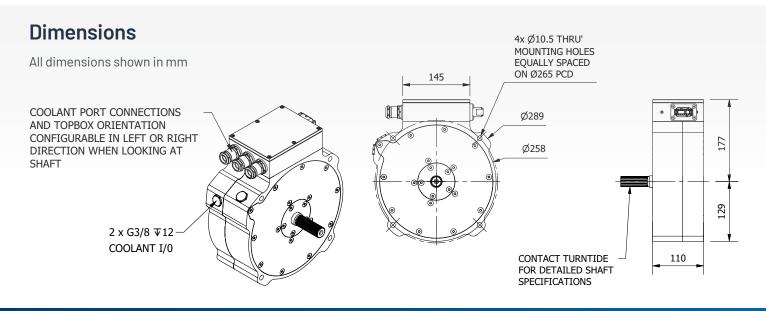


3 Turn - Continuous (190 Arms) and 20s Peak (420 Arms)

4 Turn - Continuous (145 Arms) and 20s Peak (320 Arms)



All values in graphs are quoted for 45°C ambient with coolant at 55°C inlet temperature and 8 LPM flow rate. Efficiency will vary based on Voltages and Turn count



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Turntide Technologies | 1295 Forgewood Avenue, Sunnyvale, CA 94089 turntide.com | electrificationsales@turntide.com