

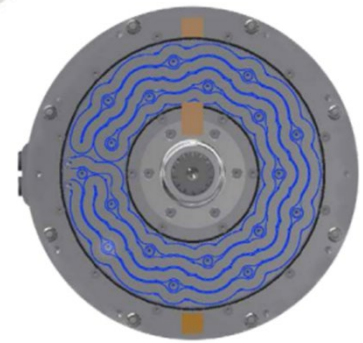
DATASHEET



Turntide Axial Flux Motor 125 (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 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_{DC}
- 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



Stator Coolant Path

Specifications (600V_{DC}^{††})

Characteristics

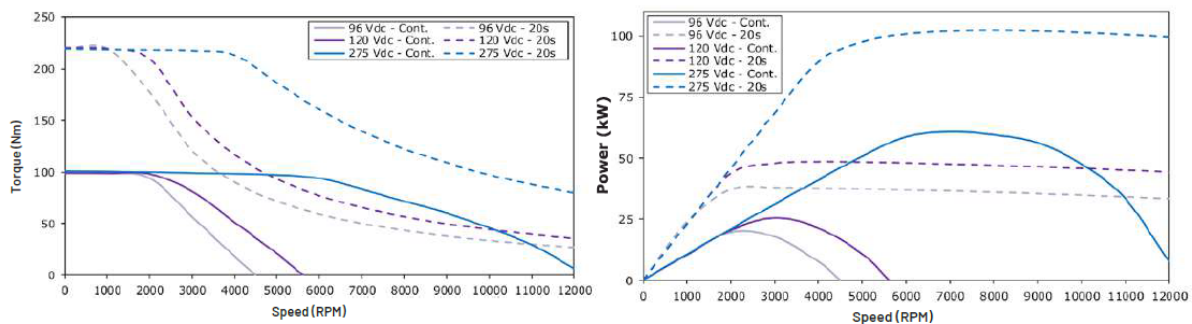
Maximum Speed (rpm)	12000	Continuous Torque (Nm)	100
Peak Torque** (Nm)	220	Nominal Output Power (kW)	59
Recommended Coolant Flow Rate (LPM)	8	Peak Output Power** (kW)	100

** 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, contact Turntide for higher temperature ratings.

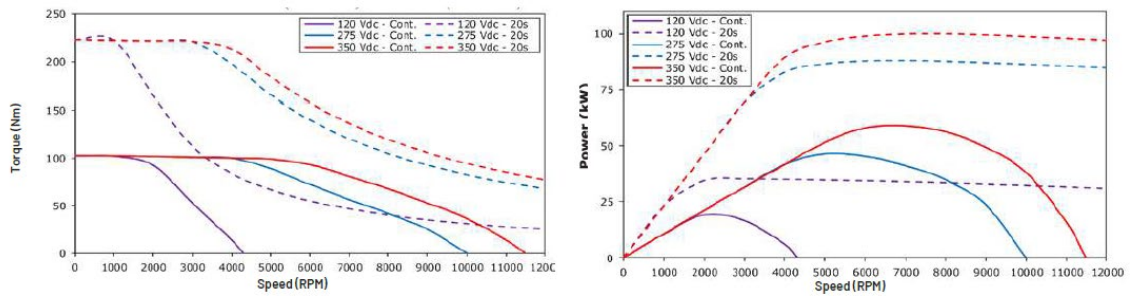
Power & Torque Curves

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



Details are correct at time of publishing

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

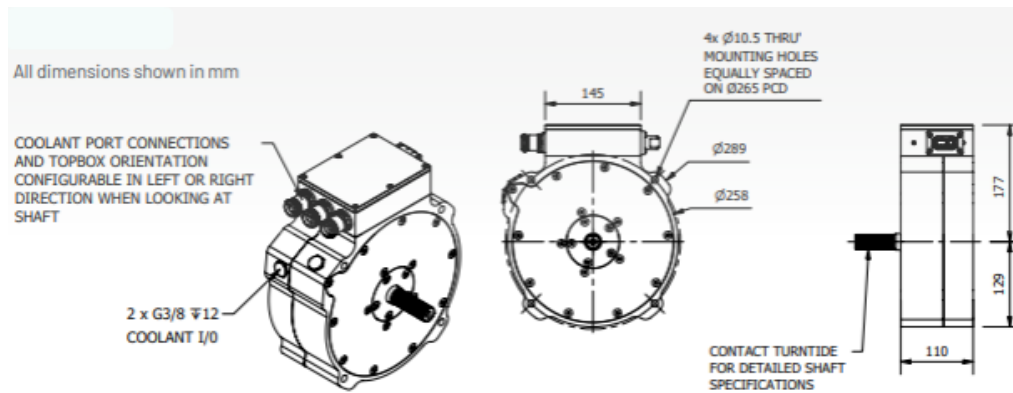


All values in graphs are quoted for 45° C ambient with coolant at 55° C inlet temperature and 8 LPM flow rate. Efficiency will vary based on Voltages and Turn count

Weight & Dimensions

Weight (kg)*	22	Height (mm)	306
Depth (mm)	110	Diameter (mm)	258

*Weight as delivered dry



For further information please contact our team of experts at electrificationsales@turntide.com

TURNTIDE TECHNOLOGIES

Our breakthrough technologies accelerate electrification and sustainable operations for energy-intensive industries

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