

DATASHEET

Turntide Axial Flux Motor 140 (AF140)



Features

- Short motor length resulting from axial flux design
- Very high power density of 4.6 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_{DC}
- Liquid cooling using water / glycol for enhanced performance
- Integrated PT100 winding temperature sensors
- Sin/Cos resolver compatible with most commercially available inverters

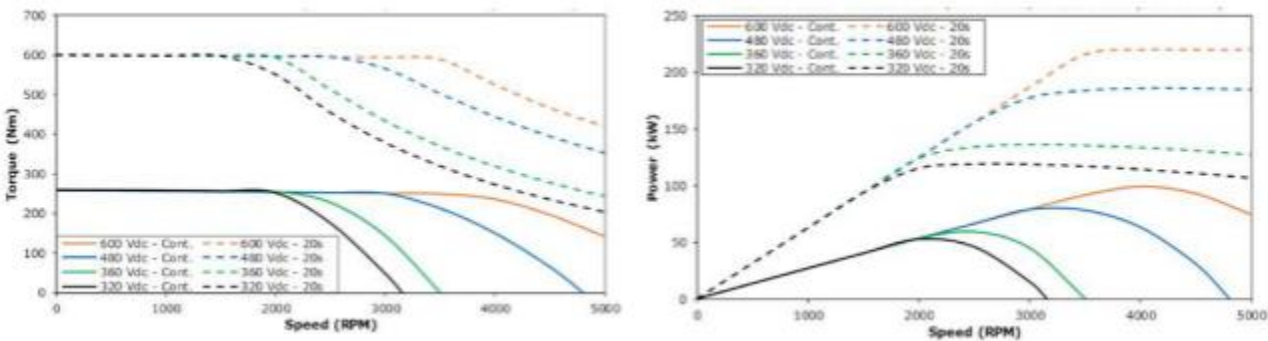


Specifications (600V_{DC} ††)

Characteristics			
Maximum Speed (rpm)	5000	Nominal Output Power (kW)	94
Continuous Torque (Nm)	260	Peak Output Power** (kW)	220
Peak Torque** (Nm)	600	Recommended Coolant Flow Rate (LPM)	8

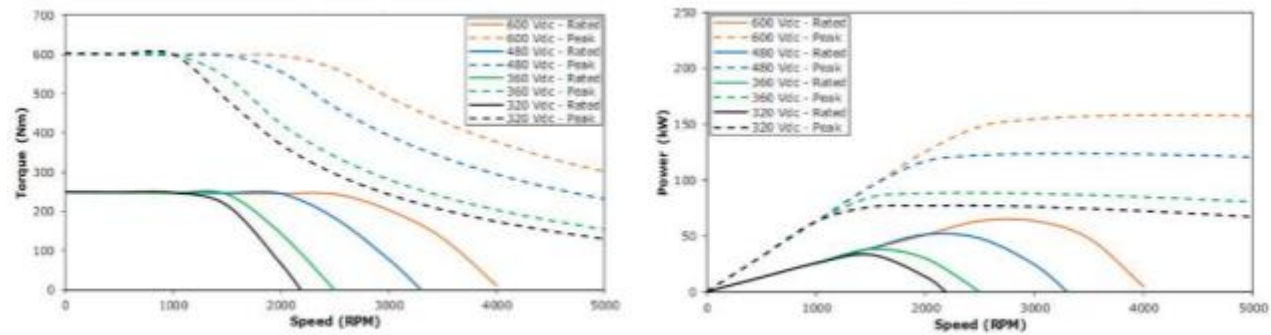
†† All values in table are quoted for 45°C ambient with coolant at 55°C inlet temperature and 8 LPM flow rate. Contact Turntide for higher coolant temperatures.

4 Turn – Continuous (145 Arms) and 20s Peak (350 Arms)



Details are correct at time of publishing

6 Turn - Continuous (95 Arms) and 20s Peak (240 Arms)



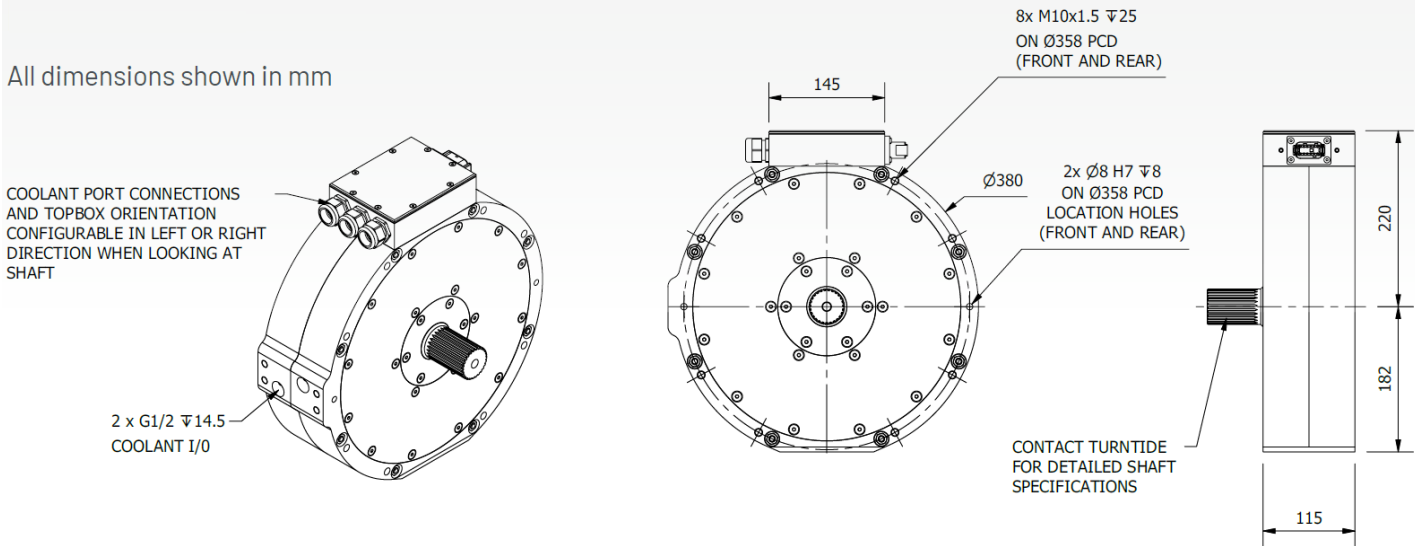
All values in graphs are quoted for 45°C ambient with coolant at 55°C inlet temperature and 8 LPM flow rate. Efficiency will vary based on Voltages and Turn count

Weight and Dimensions

Weight (kg)	43	Height (mm)	402
Depth (mm)	115	Diameter (mm)	380

*Weight as delivered dry

All dimensions shown in mm



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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