

Turntide Axial Flux Motor 140

MODEL: AF140

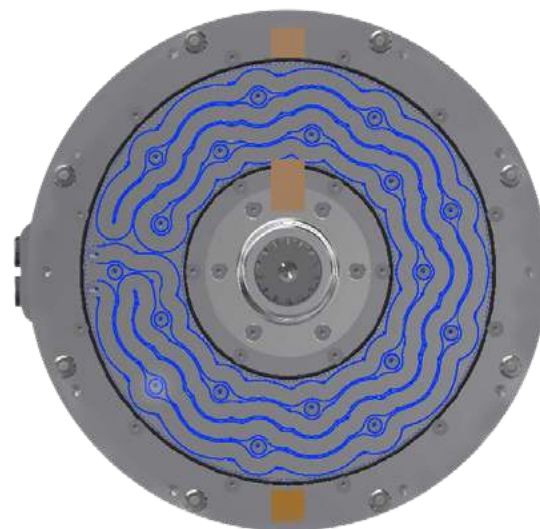


Features

- + Short motor length resulting from axial flux design
- + Very high power density of 5.2 kW/kg*
- + Peak Efficiency >95%
- + Low cogging and low ripple torque gives a 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 rotor dynamic stability
- + Suitable for inverter supply voltages up to 800 V_{DC}
- + Liquid cooling using water / glycol for enhanced performance
- + Integrated PT100 winding temperature sensors
- + Sin/Cos resolver compatible with most commercially available inverters
- + Standard with 28 spline shaft 1.375"

Specifications at 600V_{DC} ††

Model	AF140
Maximum Speed (rpm)	5000
Continuous Torque (Nm)	260
Peak Torque** (Nm)	600
Nominal Output Power (kW)	94
Peak Output Power** (kW)	220
Recommended Coolant Flow Rate (LPM)	8
Weight (kg)	43



Stator Coolant Path

* Weight as delivered dry

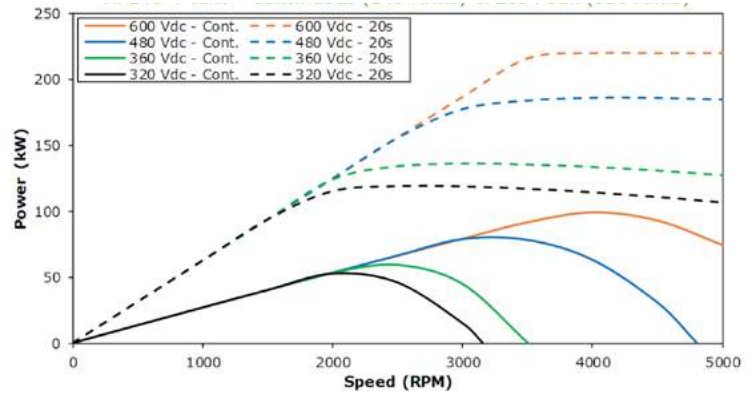
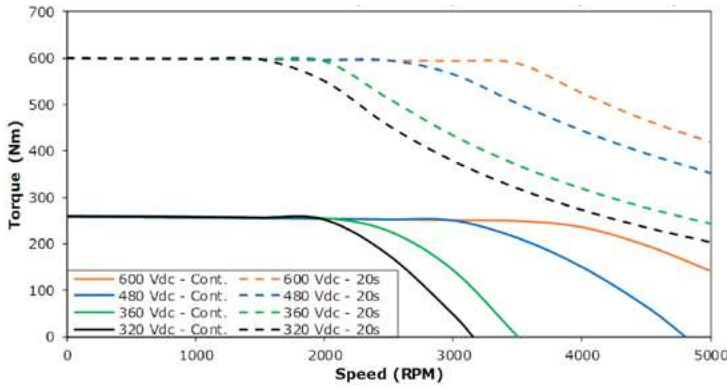
** For up to 20s test conditions

††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 electrificationsales@turntide.com

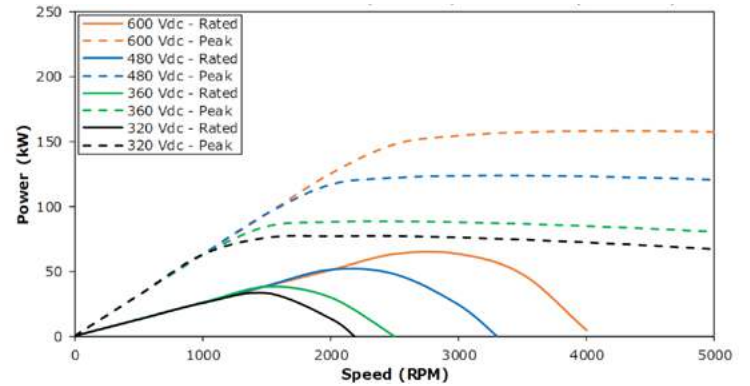
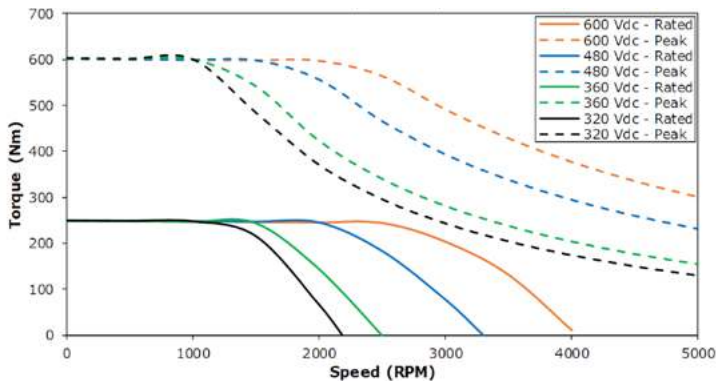


For further information please contact our team of experts at electrificationsales@turntide.com

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



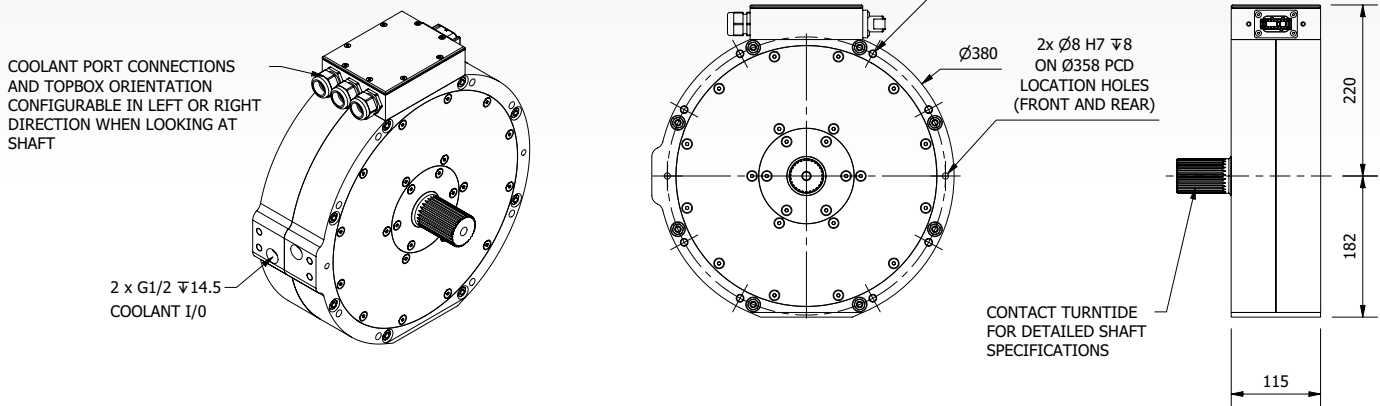
6 Turn - Continuous (95 Arms) and 20s Peak (240 Arms)



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

Dimensions

All dimensions shown in mm



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