

EVO Axial Flux Electric Motor AF140 Model

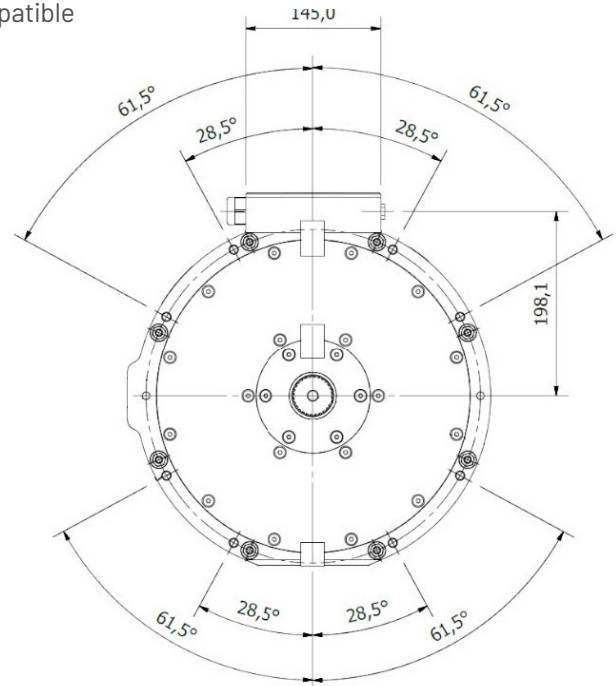


Features

- + Very high torque and power density, 5.2 kW/ Kg* off the shelf and >10 kW/kg achievable in custom applications.†
- + >95% efficiency.
- + Low cogging and low ripple torque gives a smooth, quiet operation in direct drive applications.
- + Low inertia composite rotor with excellent rotor dynamic stability.
- + Suitable for inverter supply voltages up to 800 VDC.
- + Compact design with flat front & back faces for mounting.
- + Liquid cooling for enhanced performance, using water/glycol for simplified system integration.
- + Integrated PT100 temperature sensors and sin/ cos resolver compatible with most commercially available inverters.
- + Through shaft and customised versions available.‡

Specifications at 600V_{DC} ††

PM Synchronous Axial Flux Motors	AF 140
Maximum Speed (rpm)	5000
Nominal Torque (Nm)	260
Peak Torque - for up to 60s (Nm)	400
Peak Torque - for up to 20s (Nm)	600
Nominal Output Power (kW)	94
Peak Output Power - for up to 60s (kW)	150
Peak Output Power - for up to 20s (kW)	220
Coolant Flow Rate (litre/min)	8
Length (mm)	110
Diameter (mm)	380
Weight (kg)	42.5

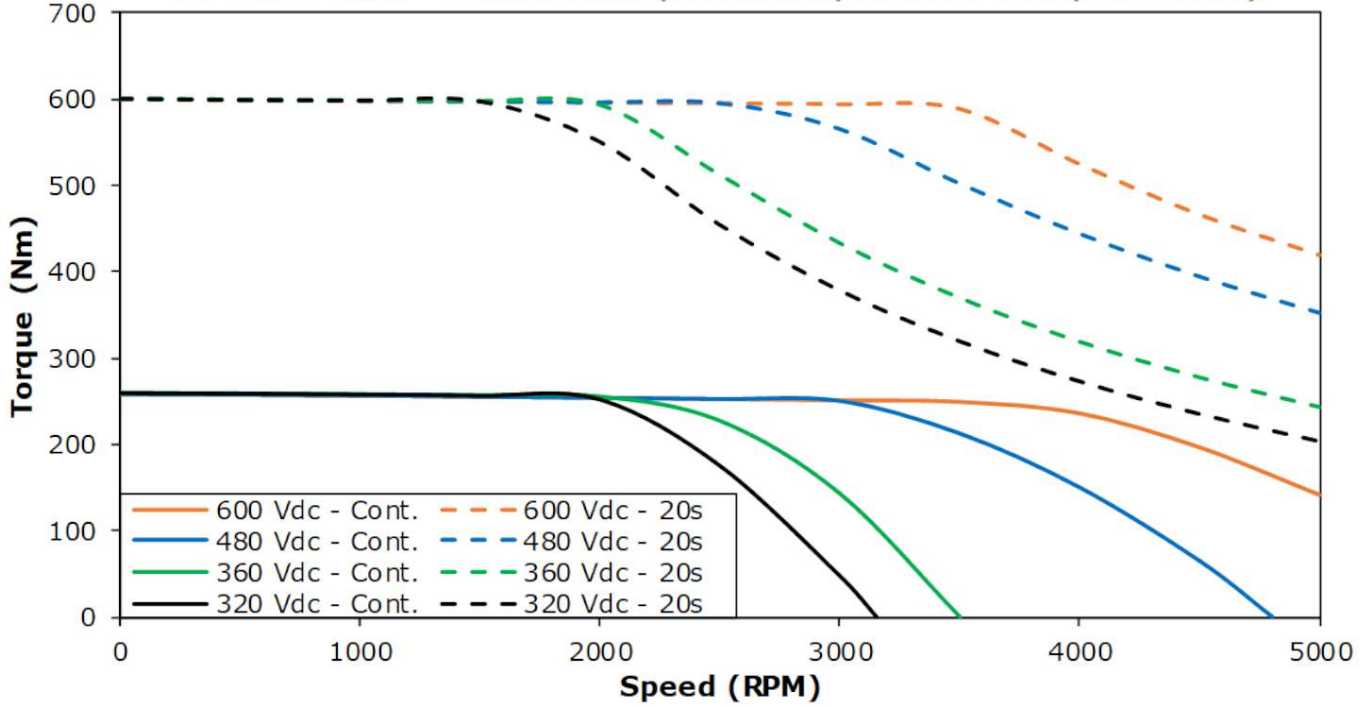


*Weight as delivered (fully dressed, dry)

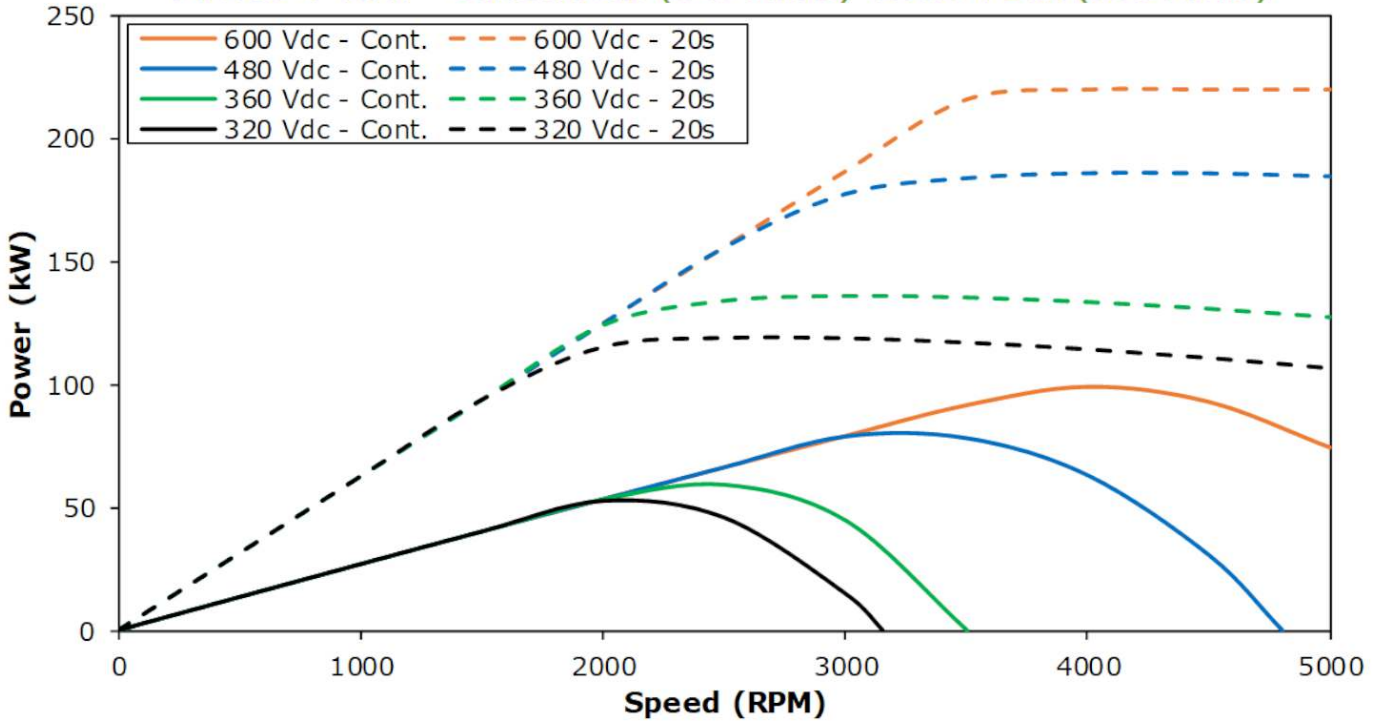
†Please contact sales@turntide.com for details on our bespoke design service.

††All values in table are quoted for 45°C ambient with coolant at 55°C inlet temperature and 8l/min flow rate.

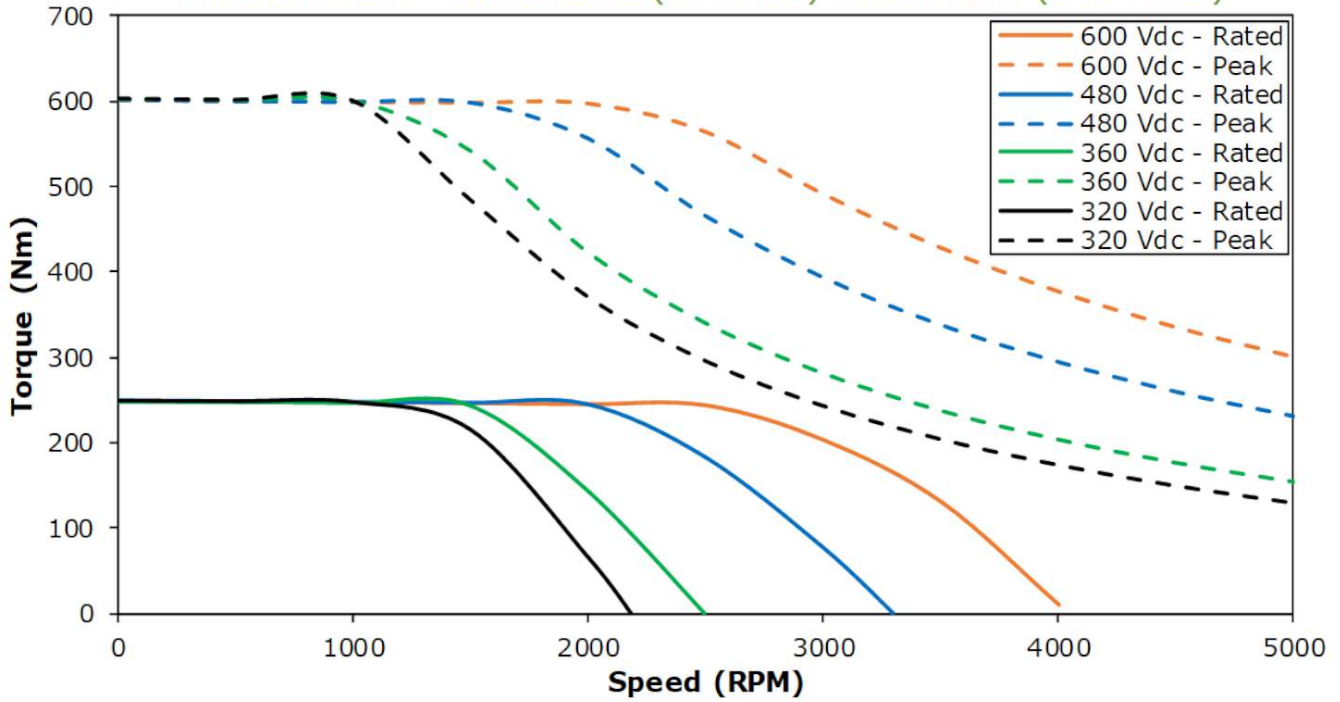
AF140 4 Turn - Continuous (145 Arms) & 20s Peak (350 Arms)



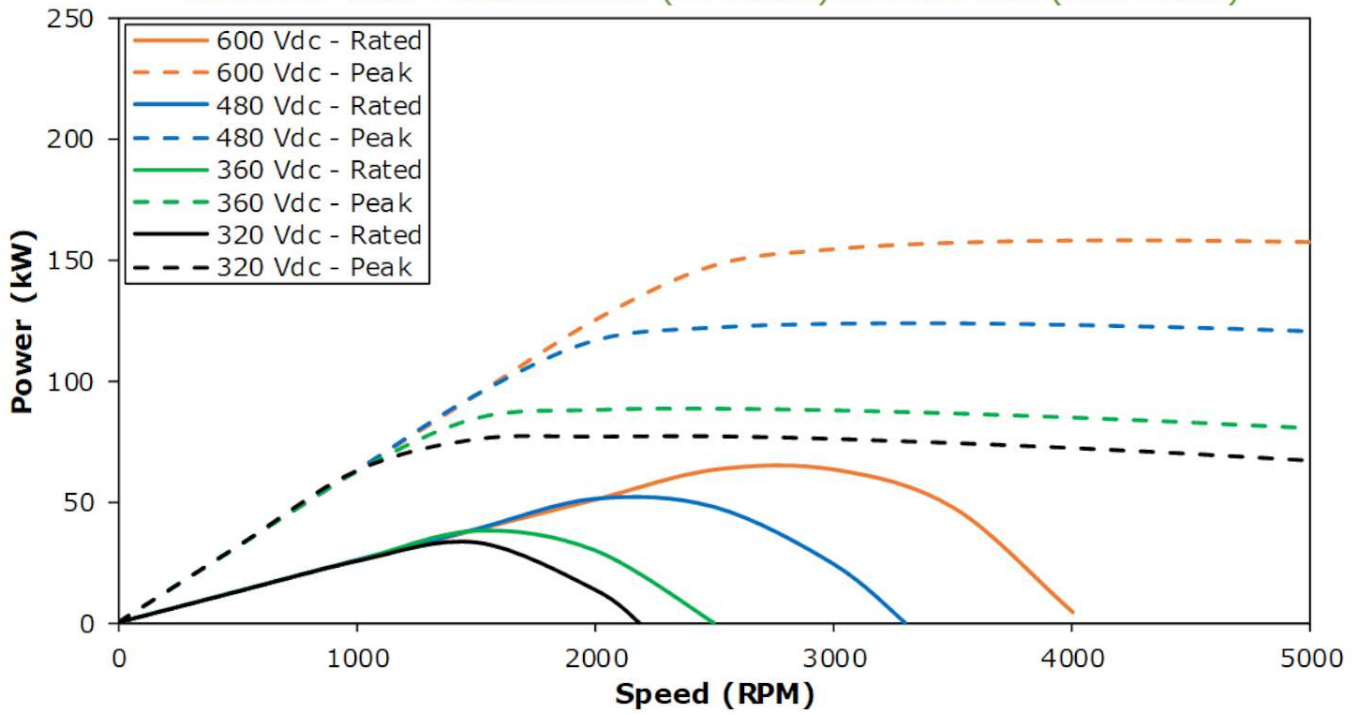
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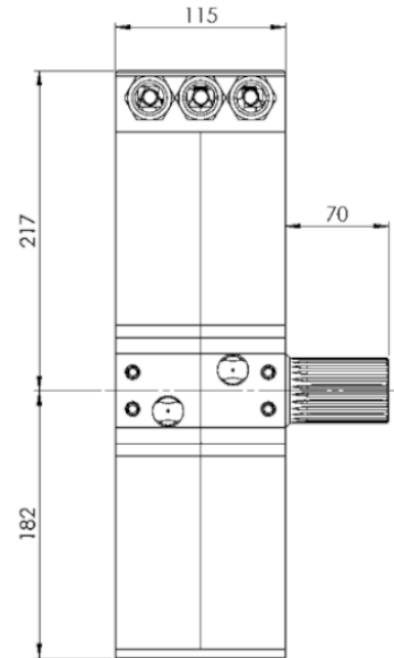
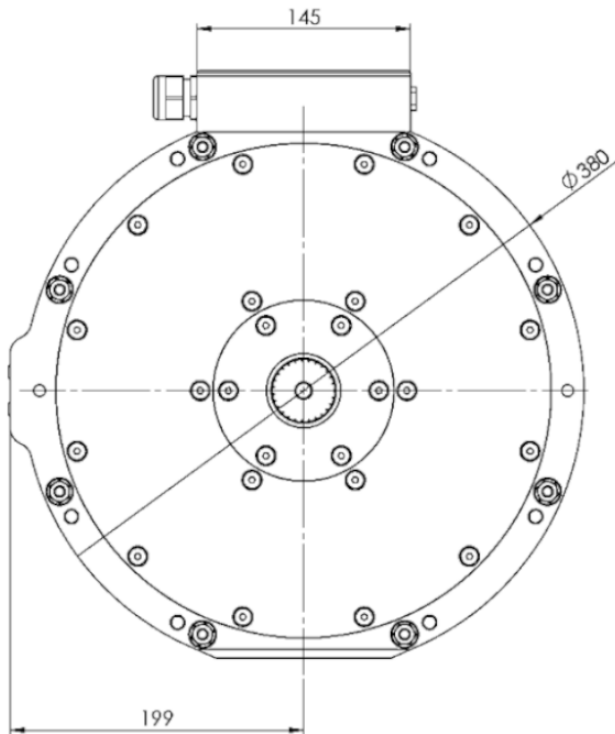
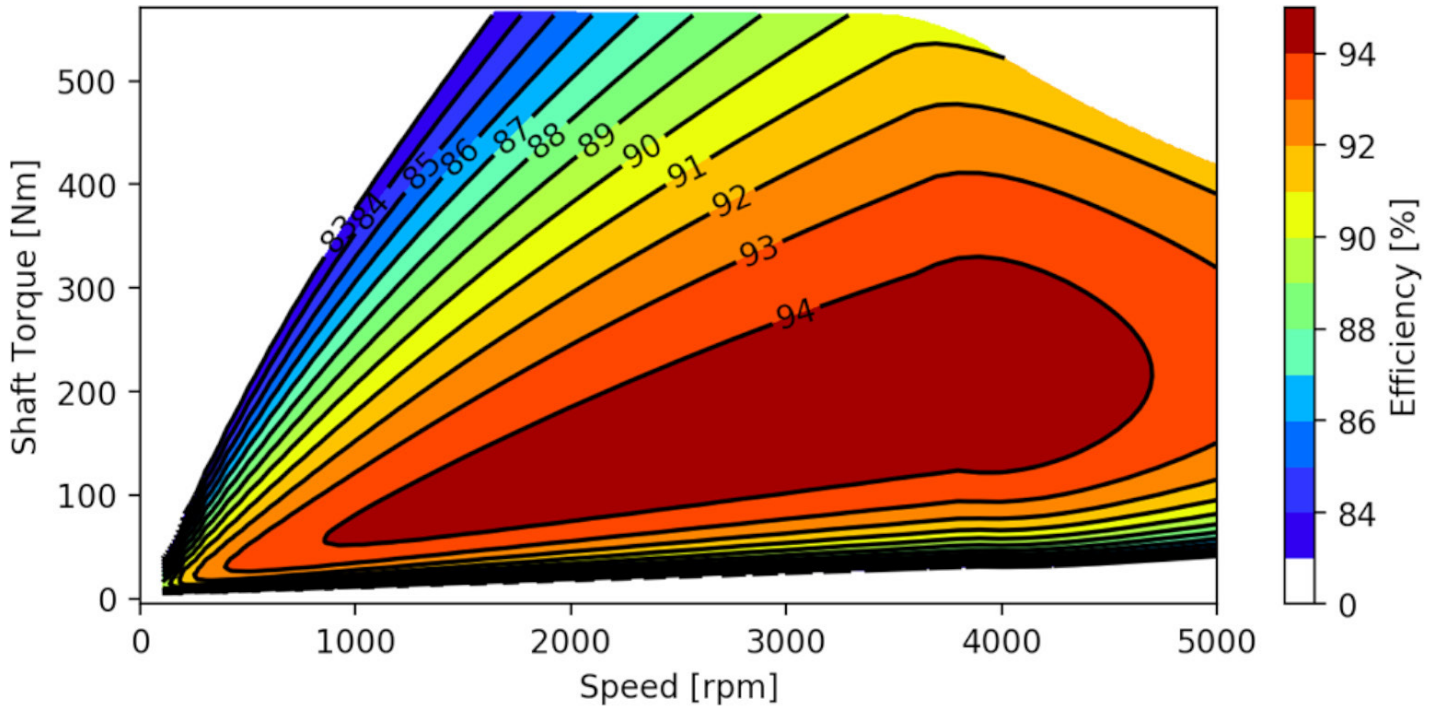
AF140 6 Turn - Continuous (95 Arms) & 20s Peak (240 Arms)



AF140 6 Turn - Continuous (95 Arms) & 20s Peak (240 Arms)



Efficiency map AF140-4T, 600 Vdc



All graphs show performance when operating in 45°C Amb, coolant at 55°C inlet temperature and 8l/min flow rate.

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