

DATASHEET



Turntide Axial Flux Motor 240 (AF240)

Features

- Short motor length resulting from axial flux design
- Very high power density of 5.4 kW/kg*
- Peak Efficiency >95%
- Low inertia composite rotor with excellent dynamic stability
- 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)
- 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
- Suitable for inverter supply voltages up to 800V_{DC}
- Single and dual inverter variants available



Stator Coolant Path

Specifications (600V_{DC} ††)

Characteristics

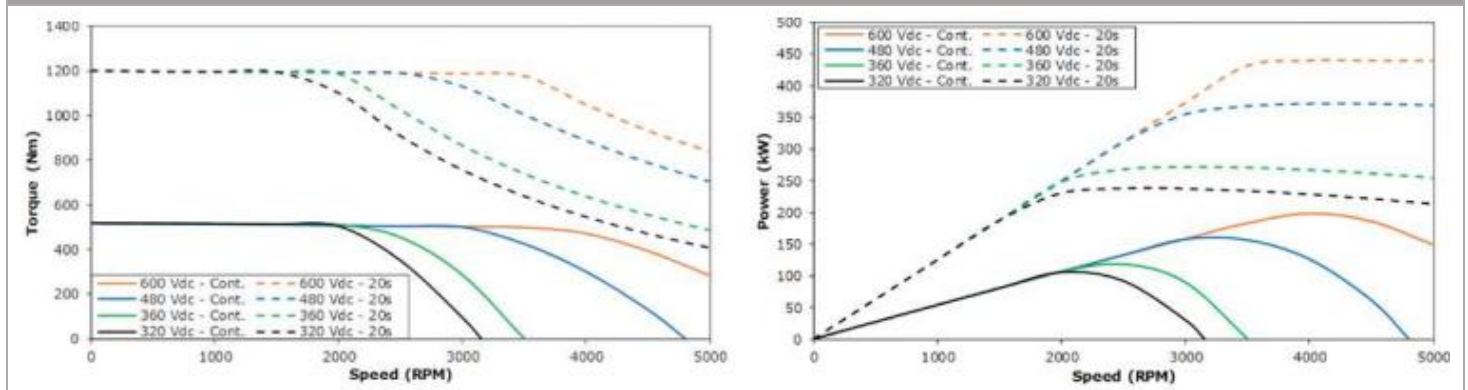
Maximum Speed (rpm)	5000	Continuous Torque (Nm)	520
Peak Torque** (Nm)	1200	Nominal Output Power (kW)	188
Recommended Coolant Flow Rate (LPM)	16	Peak Output Power** (kW)	440

** For up to 20s test conditions

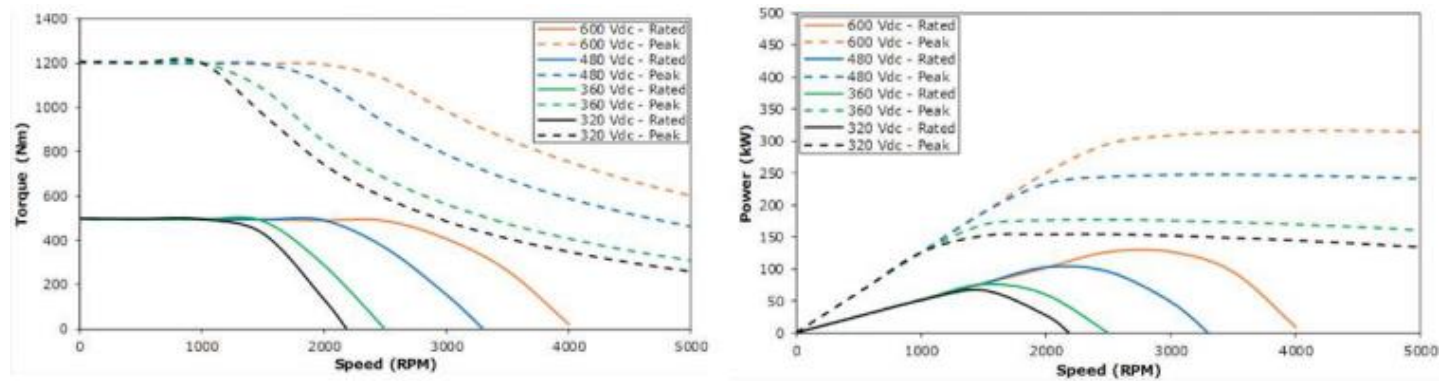
†† All values in table are quoted for 45°C ambient with coolant at 55°C inlet temperature and 16 LPM flow rate, contact Turntide for higher temperature ratings.

Power & Torque Curves

4 Turn - Continuous (290 Arms) and 20s Peak (700 Arms)



6 Turn - Continuous (190 Arms) and 20s Peak (480 Arms)

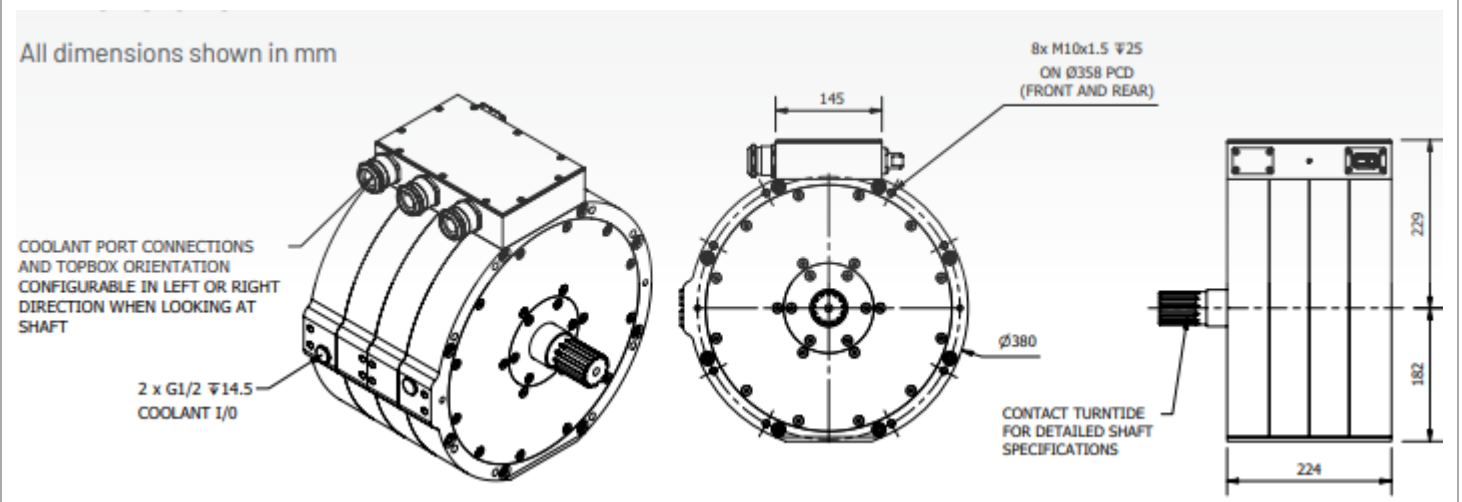


All values in graphs are quoted for 45° C ambient with coolant at 55° C inlet temperature and 16 LPM flow rate. Efficiency will vary based on Voltages and Turn count

Weight & Dimensions

Weight (kg)*	82	Height (mm)	411
Depth (mm)	224	Diameter (mm)	380

*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

Turntide Technologies | 1295 Forgewood Avenue, Sunnyvale, CA 94089

turntide.com | electrificationsales@turntide.com

