

DATASHEET



Turntide Axial Flux Motor 230 (AF230)

Features

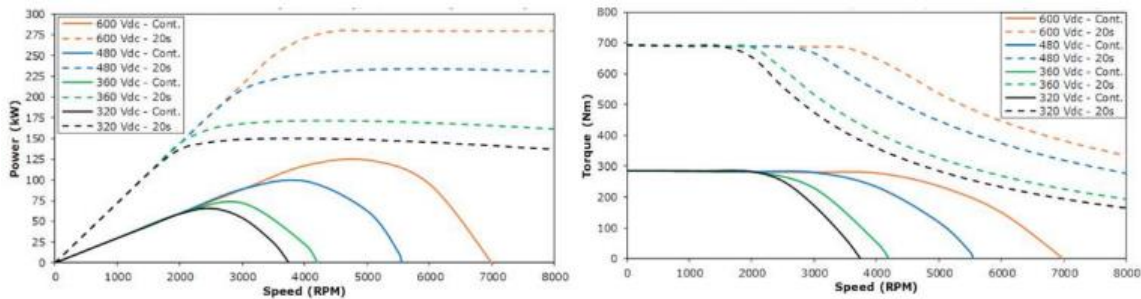
- Short motor length resulting from axial flux design
- Very high power density of 4.9 kW/kg*
- Available configured with either one or two inverters
- Peak Efficiency >95%
- Low cogging and low ripple torque gives smooth, quiet operation in direct drive applications
- Compact design with flat front 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 for out of the box compatibility with most commercially available inverters
- Single and dual inverter variants available



Specifications (600V_{DC} ††)

Characteristics			
Maximum Speed (rpm)	8000	Nominal Output Power (kW)	128
Continuous Torque (Nm)	290	Peak Output Power** (kW)	280
Peak Torque** (Nm)	700	Recommended Coolant Flow Rate (LPM)	16
** 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 to discuss alternative coolant temperatures.			
4 Turn - Continuous (270 Arms) and 20s Peak (660 Arms)			
<div><div><p>Power (kW)</p><p>Speed (RPM)</p></div><div><p>Torque (Nm)</p><p>Speed (RPM)</p></div></div>			

6 Turn - Continuous (180 Arms) and 20s Peak (440 Arms)



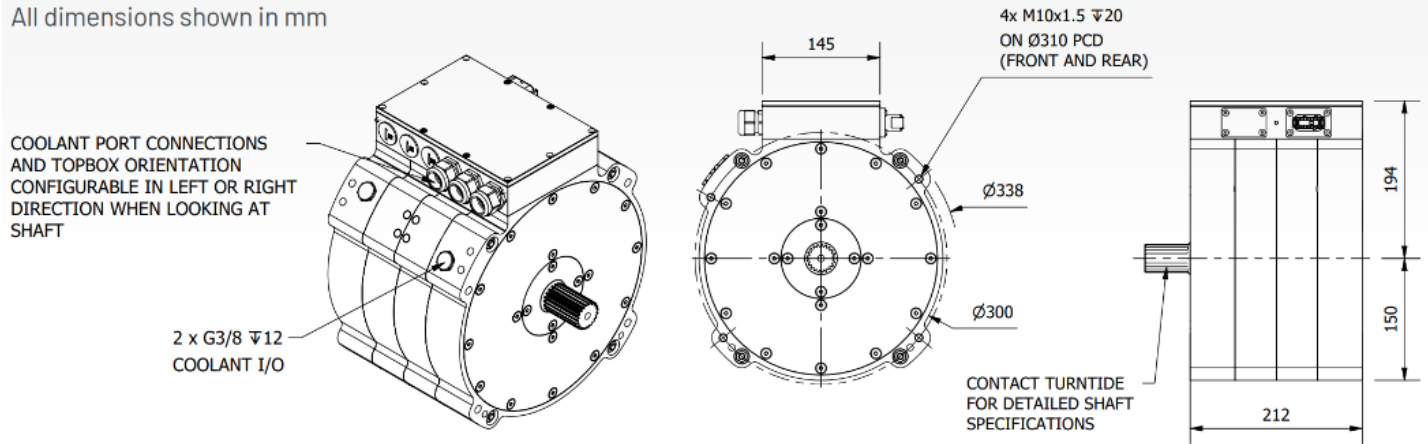
All values in graphs are quoted for 45°C ambient with coolant at 55°C inlet temperature and 16 LPM flow rate.
Efficiency will vary based on Voltages and Turn count

Weight and Dimensions

Weight (kg)*	58	Height (mm)	344
Depth (mm)	212	Diameter (mm)	300

*Weight as delivered dry

All dimensions shown in mm



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

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