TTN-MAN-006 V1.0 - 16/04/2024

DATASHEET

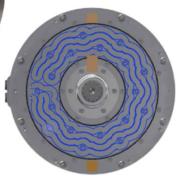
Turntide Axial Flux Motor 130 (AF130)



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
- 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





Stator Coolant Path

Specifications (600 V_{DC}^{tt})

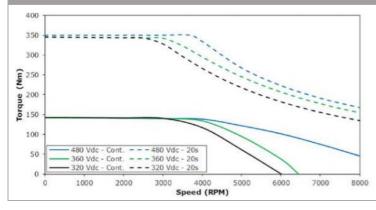
Characteristics				
Maximum Speed (rpm)	8000	Continuous Torque (Nm)	145	
Peak Torque** (Nm)	350	Nominal Output Power (kW)	64	
Recommended Coolant Flow Rate (LPM)	8	Peak Output Power** (kW)	140	

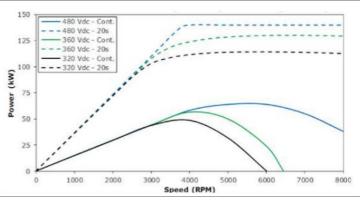
^{**} For up to 20s test conditions

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

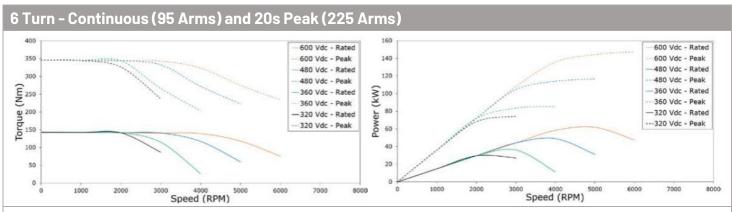
Power & Torque Curves

4 Turn - Continuous (135 Arms) and 20s Peak (330 Arms)





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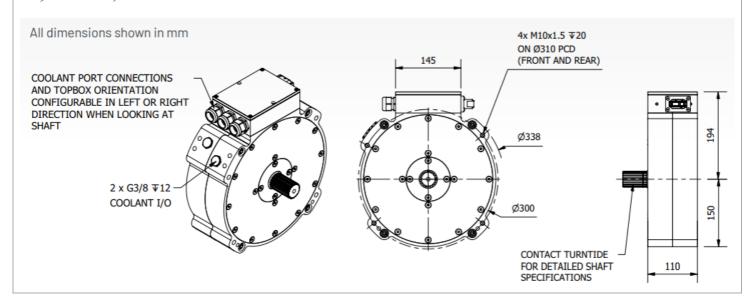


All values in graphs are quoted for 45° C ambient with coolant at 55° C inlet temperature and 8 LPM flow rate. Efficiency will vary based on Voltages and Turn count

Weight & Dimensions

Weight (kg)*	30	Height (mm)	344
Depth (mm)	110	Diameter (mm)	300

*Weight as delivered dry



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

TURNTIDE TECHNOLOGIES

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Turntide Technologies | 1295 Forgewood Avenue, Sunnyvale, CA 94089

turntide.com | electrificationsales@turntide.com

