

DATASHEET

Turntide Axial Flux Motor 440 (AF440)

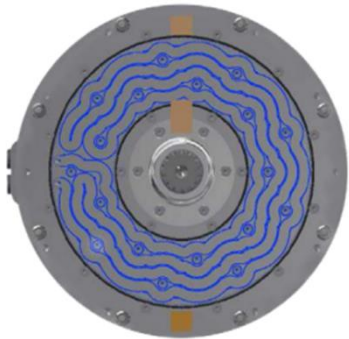


Features

- Primary Powertrain Traction Motor or Generator
- Peak Efficiency >95%
- Excellent power and torque density
- 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 4 x composite rotors with excellent rotor dynamic stability
- Suitable for inverter supply voltages up to 800V_{DC}
- Designed to be driven by two inverters
- Liquid cooling for improved heat transfer and enhanced performance, using water / glycol for system integration
- Integrated PT100 winding temperature sensors
- Sin/Cos resolver compatible with most commercially available inverters



Turntide AF440 (with shaft seal)



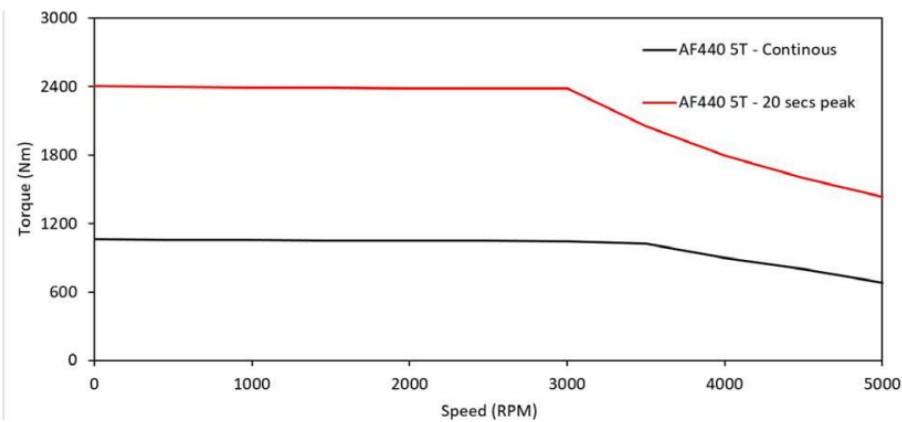
Stator Coolant Path

Specifications (600V_{DC}^{††})

Characteristics			
Maximum Speed (rpm)	5000	Continuous Torque (Nm)	1040
Peak Torque** (Nm)	2400	Nominal Output Power (kW)	376
Recommended Coolant Flow Rate (LPM)	32	Peak Output Power** (kW)	880
** For up to 20s test conditions			
†† All values in table are quoted for 45°C ambient with coolant at 55°C inlet temperature and 32 LPM flow rate, contact Turntide for higher temperature ratings.			

Power & Torque Curves

5 Turn - 750 VDC



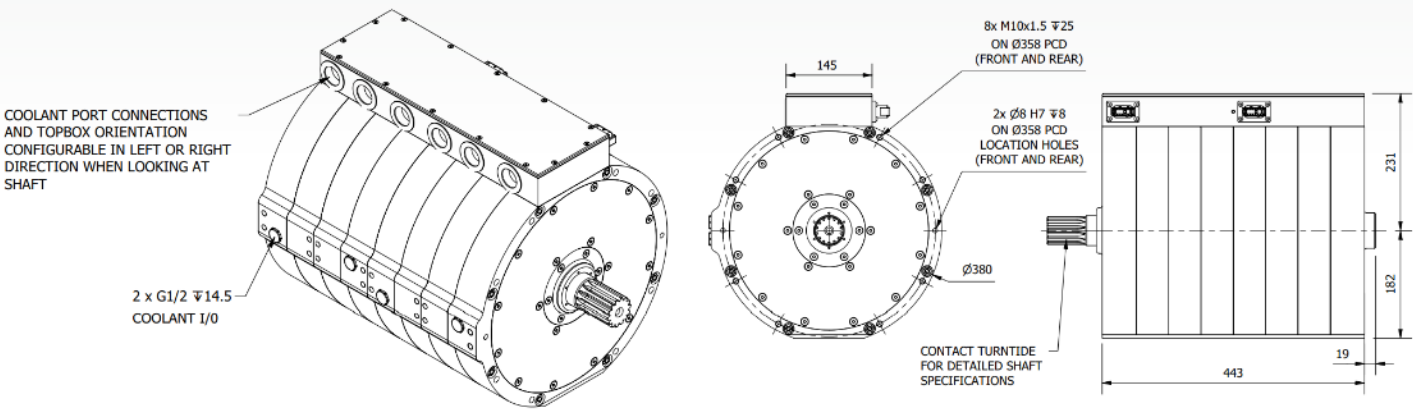
All values in graphs are quoted for 45° C ambient with coolant at 55° C inlet temperature and 32 LPM flow rate. Efficiency will vary based on Voltages and Turn count

Weight & Dimensions

Weight (kg)*	160	Height (mm)	413
Depth (mm)	443	Diameter (mm)	380

*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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