

# Turntide Axial Flux Motor 440

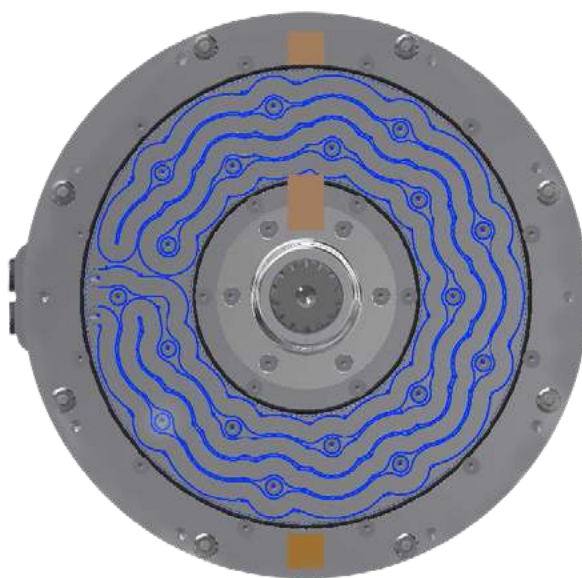
MODEL: AF440

## 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 <math><800V\_{DC}</math>
- + 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 at 600V<sub>DC</sub> ††

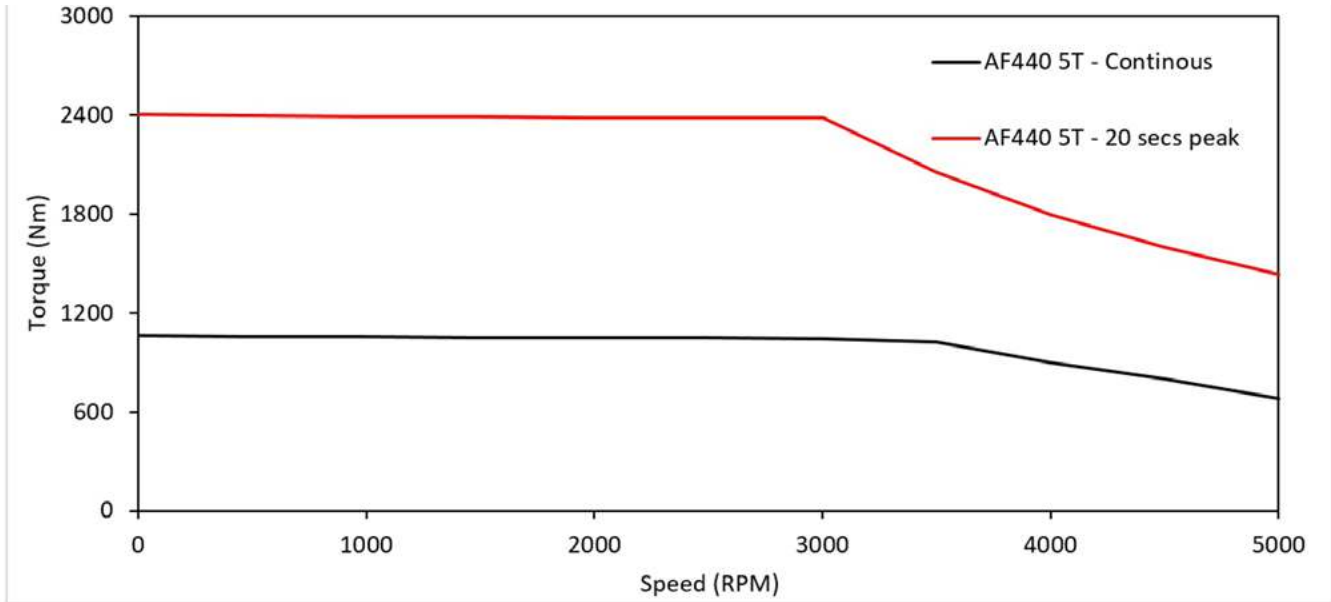
<b>Model</b>	AF440
<b>Maximum Speed (rpm)</b>	5000
<b>Continuous Torque (Nm)</b>	1040
<b>Peak Torque** (Nm)</b>	2400
<b>Nominal Output Power (kW)</b>	376
<b>Peak Output Power** (kW)</b>	880
<b>Recommended Coolant Flow Rate (LPM)</b>	32
<b>Weight (kg)</b>	160

\*\* 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. Higher coolant temperature possible, please contact [electrificationsales@turntide.com](mailto:electrificationsales@turntide.com)

 For further information please contact our team of experts at [electrificationsales@turntide.com](mailto:electrificationsales@turntide.com)

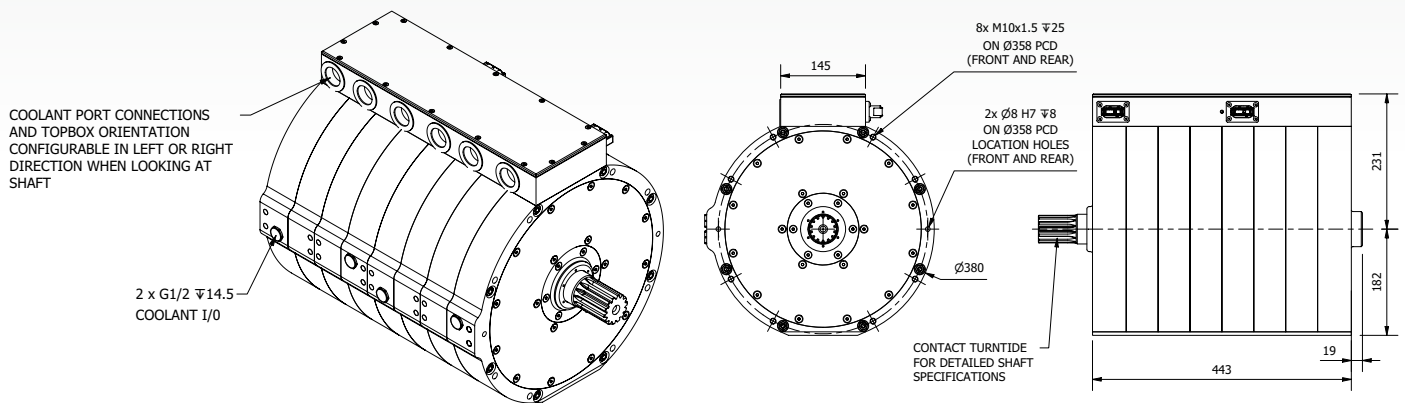
## 5 Turn - 750 VDC



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

## Dimensions

All dimensions shown in mm



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