

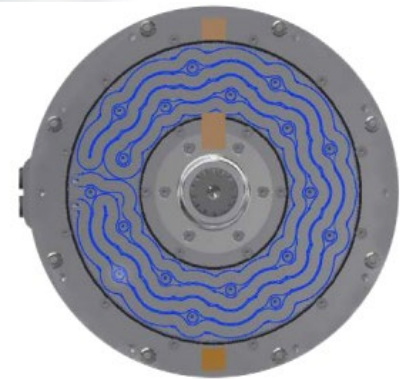
## DATASHEET



## 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<sub>DC</sub>
- 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



Stator Coolant Path

Specifications (600V<sub>DC</sub> ††)

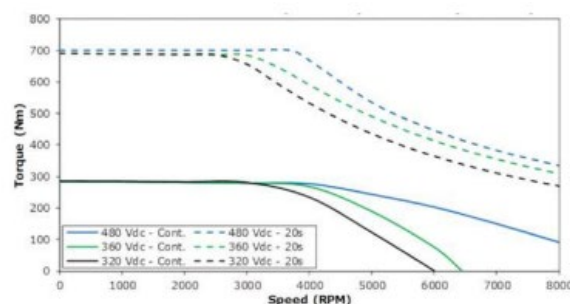
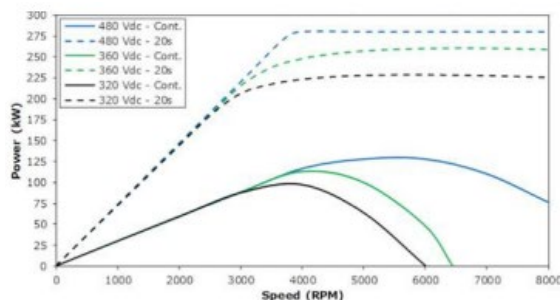
## Characteristics

<b>Maximum Speed (rpm)</b>	8000	<b>Nominal Output Power (kW)</b>	128
<b>Continuous Torque (Nm)</b>	290	<b>Peak Output Power** (kW)</b>	280
<b>Peak Torque** (Nm)</b>	700	<b>Recommended Coolant Flow Rate (LPM)</b>	16

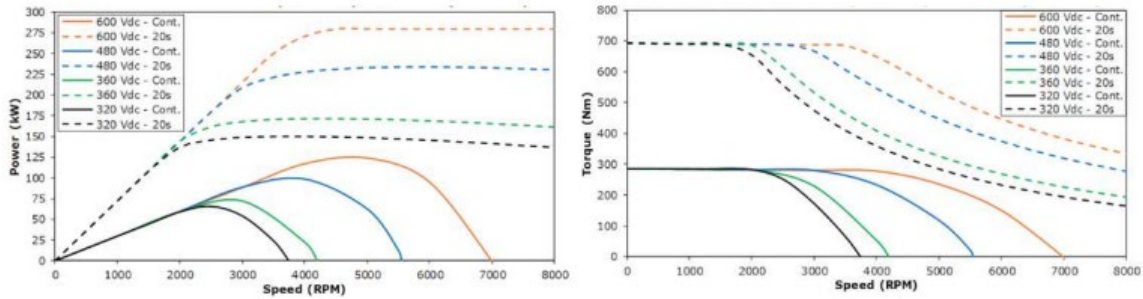
\*\* For up to 20s test conditions

†† 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)



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



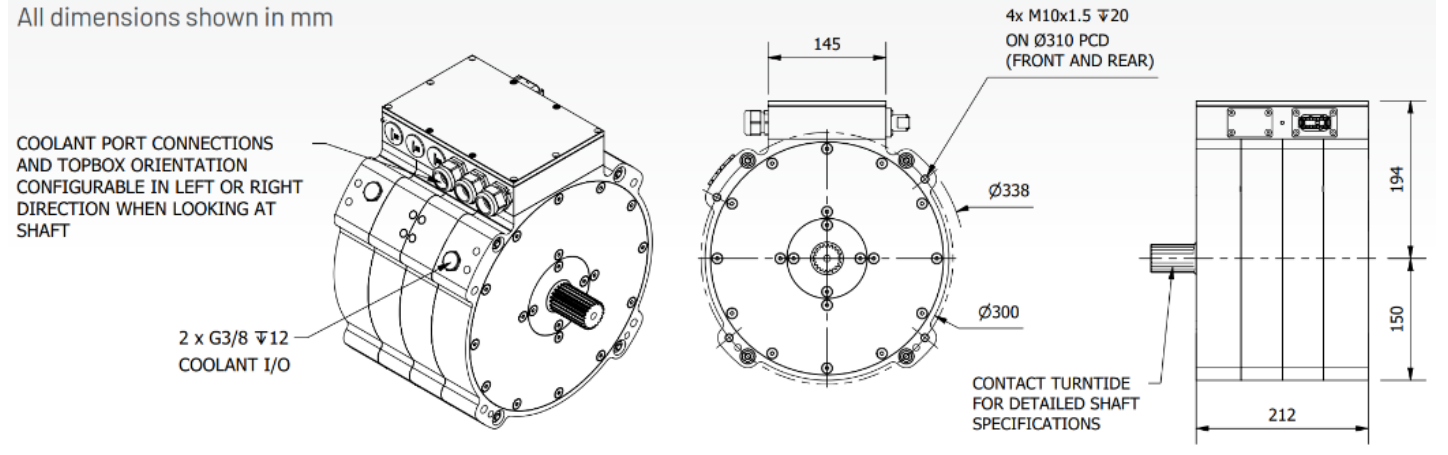
All values in graphs are quoted for 45°C ambient with coolant at 55°C inlet temperature and 16 LPM flow rate. Efficiency will vary based on Voltages and Turn count

### Weight and Dimensions

<b>Weight (kg)*</b>	58	<b>Height (mm)</b>	344
<b>Depth (mm)</b>	212	<b>Diameter (mm)</b>	300

\*Weight as delivered dry

All dimensions shown in mm



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

