

DATASHEET

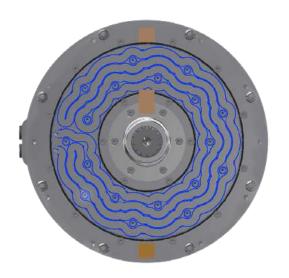
# Turntide Axial Flux Motor Range

Turntide offers a range of permanent magnet axial flux motors based on proprietary technology. These innovative motors are perfectly suited to EV or hybrid applications that need high torque and a limited package space.



## **Features**

- + Very high torque and power density
- + Low cogging and low ripple torque
- + Compact design with flat front and back faces for easy mounting
- + Suitable for inverter supply voltages up to 800V<sub>pc</sub>
- + Peak Efficiency >95%
- + Low inertia composite rotor with excellent rotor dynamic stability
- + Water glycol liquid cooling for improved heat transfer and enhanced performance
- + Standard variants utilize spline shafts
- + Integrated PT100 temperature sensors in windings
- + Sin/Cos resolver compatible with most commercially available inverters



**Stator Coolant Path** 

## Specifications at 600V<sub>DC</sub>

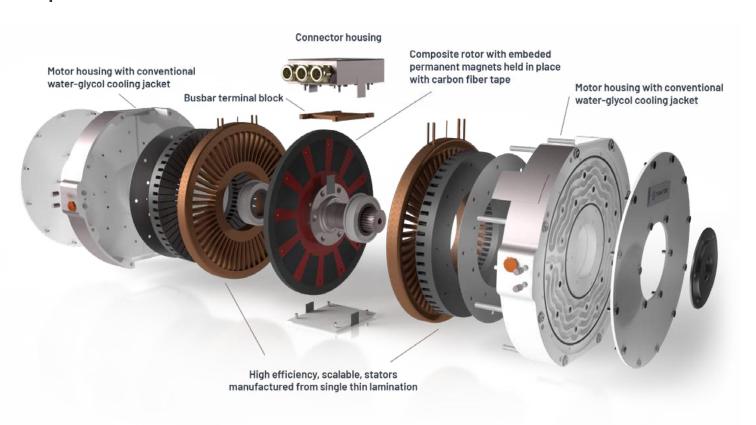
| Model                       | AF125   | AF130   | AF140   | AF230   | AF240   | AF340   | AF440   |
|-----------------------------|---------|---------|---------|---------|---------|---------|---------|
| Maximum Speed (rpm)         | 12,000  | 8,000   | 5,000   | 8,000   | 5,000   | 5,000   | 5,000   |
| Continuous Torque (Nm)      | 100     | 145     | 260     | 290     | 520     | 780     | 1,040   |
| Peak Torque (20s) (Nm)      | 220     | 350     | 600     | 700     | 1,200   | 1,800   | 2,400   |
| Nominal Output Power (kW)   | 59      | 64      | 94      | 128     | 188     | 282     | 376     |
| Peak Output Power (20s)(kW) | 100     | 140     | 220     | 280     | 440     | 660     | 880     |
| Dimensions* LxD (mm)        | 110x258 | 110x300 | 115x380 | 212x300 | 212x380 | 333x380 | 443x380 |
| Weight** (kg)               | 22      | 30      | 43      | 58      | 82      | 122     | 160     |

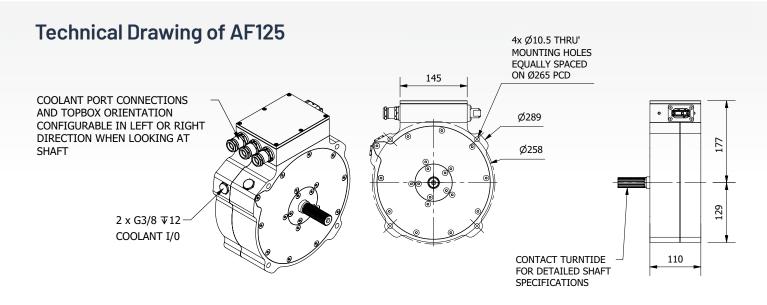
<sup>\*</sup>Reference diameter excludes top connector housing. Please contact electrificationsales@turntide.com for additional information.

<sup>\*\*</sup> Weight as delivered dry



## **Expanded Motor**







For further information please contact our team of experts at <a href="mailto:electrificationsales@turntide.com">electrificationsales@turntide.com</a>

Details are correct at time of publishing

#### **TURNTIDE TECHNOLOGIES**

Our breakthrough technologies accelerate electrification and sustainable operations for energy-intensive industries

