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 800VDC
- 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

Applications

Suitable for high voltage electric traction and ancillaries applications.



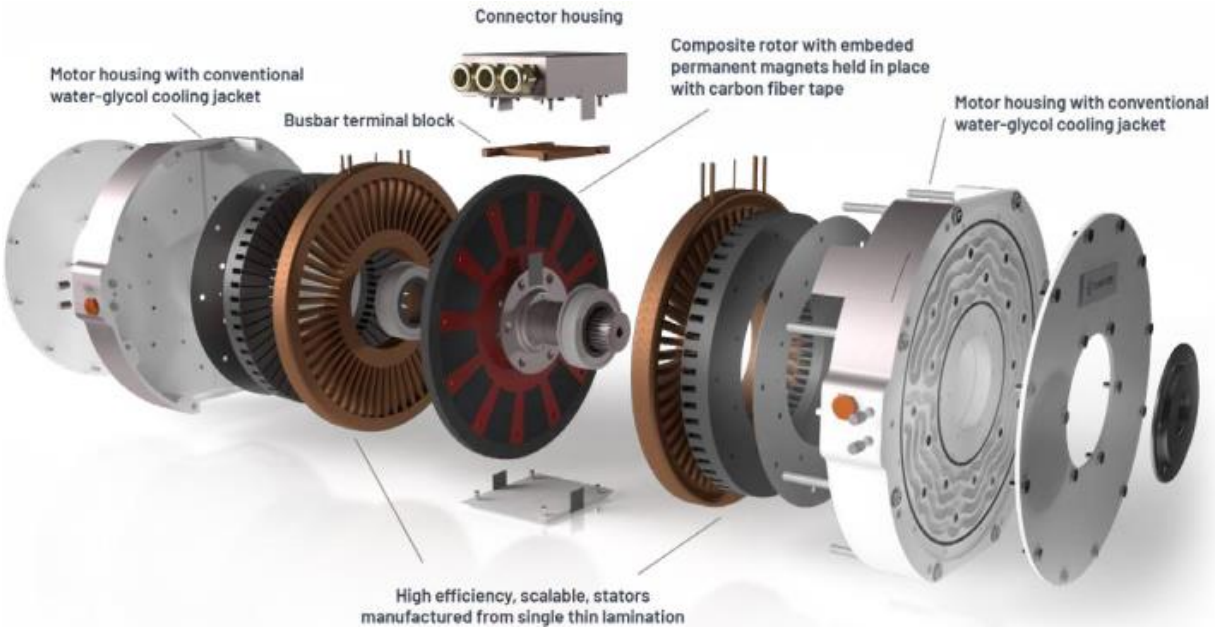
Specifications (600V_{DC}†)

Key Features								
Model	**AF125**	**AF130**	**AF140**	**AF143**	**AF230**	**AF240**	**AF340**	**AF440**
Maximum Speed (rpm)	8,000	8,000	5,000	3,700	8,000	5,000	5,000	5,000
Continuous Torque (Nm)	100	145	260	375	290	520	780	1,040
Peak Torque (20s) (Nm)	220	350	600	650	700	1,200	1,800	2,400
Nominal Output Power (kW)	59	64	94	110	128	188	282	376
Peak Output Power (20s) (kW)	100	140	220	230	280	440	660	880
Dimensions LxD (mm)**	110x258	110x300	115x380	110x420	212x300	212x380	333x380	443x380
Weight (kg)**	22	30	43	48	58	82	122	160

***Reference diameter excludes top connector housing. Weight as delivered dry*

† 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.

Expanded Motor



For more information on this product or Turntide's range of inverters, motors, batteries, pumps and fans, please visit our website or contact our team of experts at electrificationsales@turntide.com.