

EVO Axial Flux High Performance Electric Motor Range



Turntide offers permanent magnet motors based on proprietary axial flux motor technology that can be used in conjunction with custom built or standard inverters. Bespoke and integrated solutions for OEM applications can be developed on demand for traction, generator and accessory drive.

Features

- + Very high torque and power density.
- + Low cogging torque.
- + Compact design with flat front & back faces for mounting.
- + Power density of >10kW/Kg achievable.
- + Voltage: Up to 800VDC.
- + Peak Efficiency: >95% (includes power inverter)
- + Low inertia composite rotor with excellent rotor dynamic stability.
- + Water/glycol cooled for simplified installation & enhanced performance.
- + Through shaft and customised versions available.
- + Integrated PT100 temperature sensors and sin/cos resolver compatible with most commercially available inverters.

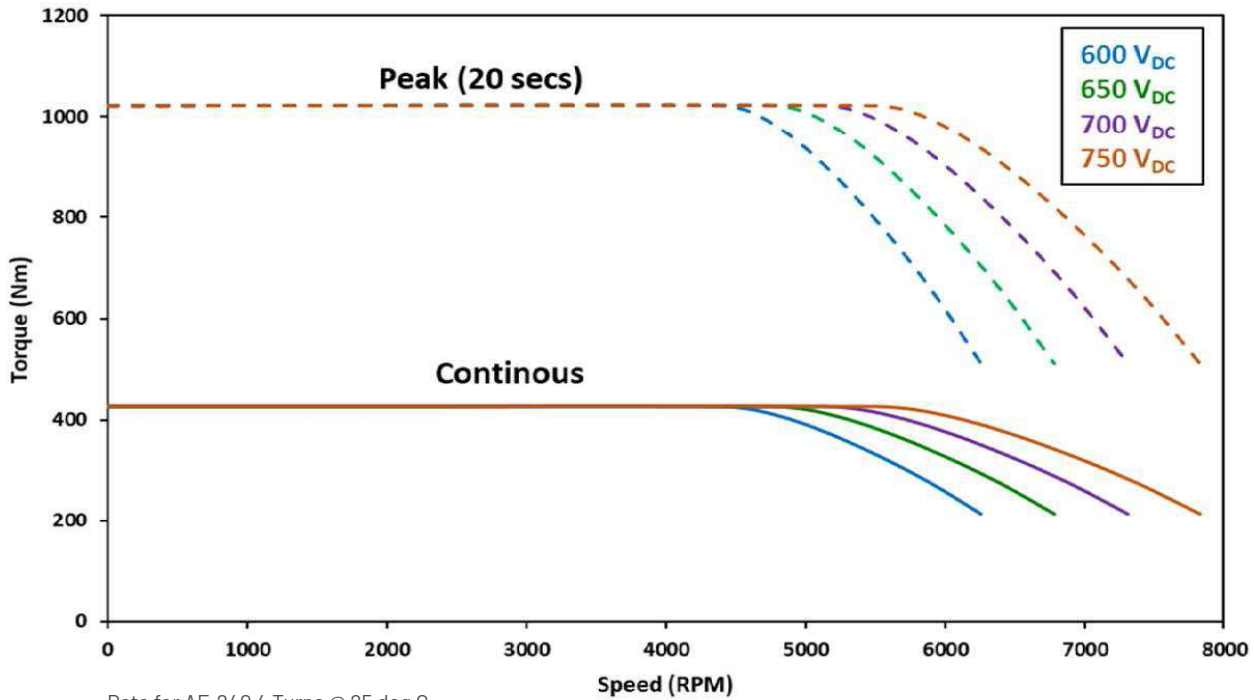


Specifications at 600V_{DC}

Motor Variant	AF125	AF130	AF140	AF230	AF240
Maximum Speed (rpm)	12,000	8,000	5,000	8,000	5,000
Nominal Torque (Nm)	100	145	260	290	520
Peak Torque (20s)(Nm)	220	350	600	700	1,200
Nominal Output Power (kW)	59	64	94	128	188
Peak Output Power (20s)(kW)	100	140	220	280	440
Peak Efficiency (%)	95				
Dimension (LxD)(mm)	110x258	110x300	110x380	212x300	212x380
Weight (Kg)	22	30.5	42.5	57.5	82

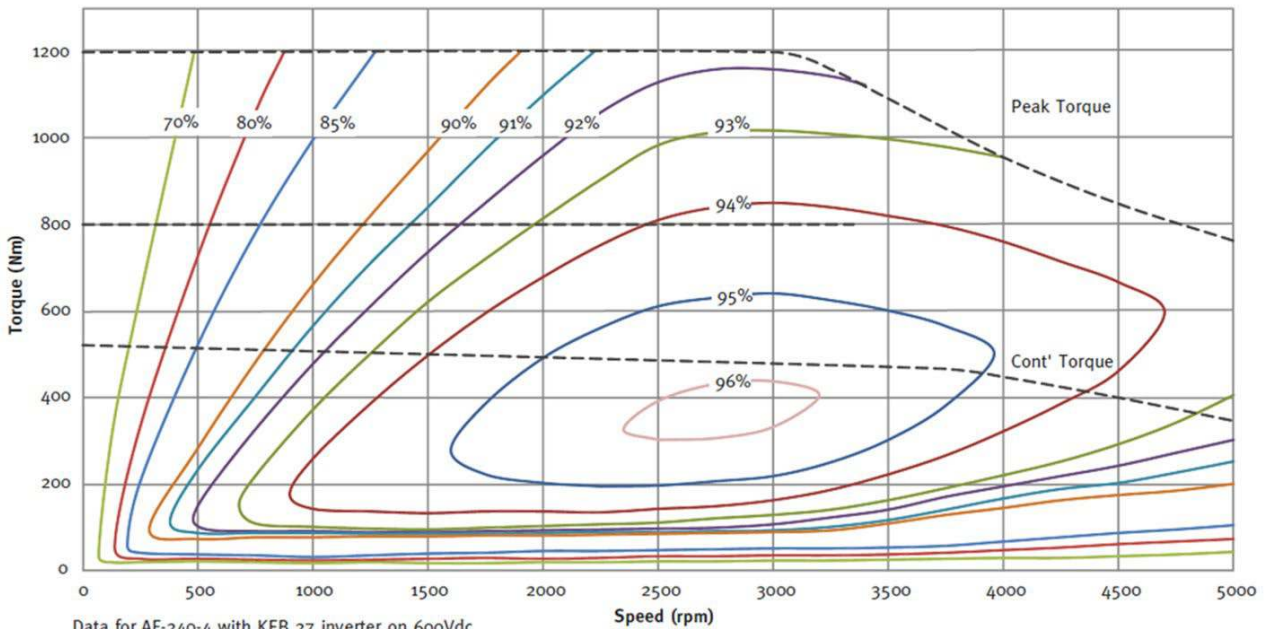
EVO-AF240 @ 600, 650, 700 & 750 V_{DC}

Torque vs Speed vs V_{DC}



Data for AF-240 4 Turns @ 25 deg C
Amb & 60 deg C inlet coolant temp

Motor performance and efficiency



Data for AF-240-4 with KEB 27 inverter on 600Vdc
at 55deg C inlet coolant temperature

TURNTIDE TECHNOLOGY FOR SUSTAINABLE OPERATIONS

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