

CTEM Permanent Magnet Synchronous Motor

The CTEM Permanent Magnet Synchronous Motor (PMSM) is specially designed for electric vehicles. The power density of CTEM Motor exceeds other motors of the same rating. CTEM can be used with Hall sensors or encoder.



Modular Stator

Modular stator assembly improves the motor slot full rate, compresses the motor end cover space, and provides power density ratio.

IPM Rotor

Use the IPM design to increase the usable range of the motor.

Build-in Reducer

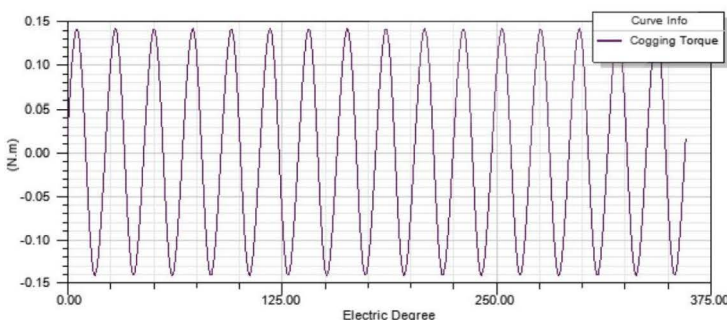
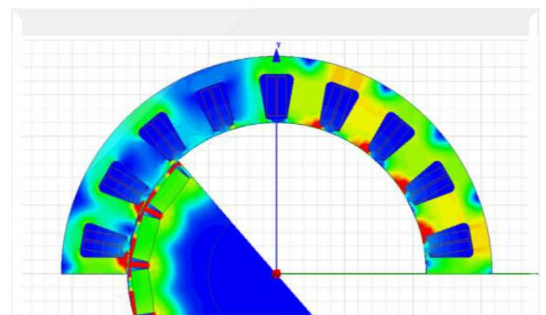
Optimize structure increase strength and reduce weight.

Air cooling design

No additional cooling system.

Magnetic Circuit Optimization Design

The optimized design of the magnetic circuit suppresses the magnetic saturation problem under high current.



Minimal Cogging Torque

Extremely small buck rotation reduces the torque ripple of the motor, allowing the motor to continuously output 10HP horsepower.

Product Number

CTEM I 6K0 - H A N 736N
 ① ② ③ - ④ ⑤ ⑥ ⑦

①	Product Type	
②	Motor Type	S : SPM I : IPM
③	Rated Power	3K0 : 3kW 6K0 : 6kW
④	Position Sensor	H : 120° Hall sensor E : Encoder N : air cooling
⑤	Cooling System	W : water cooling A : forced air cooling
⑦	Reducer Gear Ratio	736N : Single tooth deceleration 1:7.36. 645N : Single tooth deceleration 1:6.45. 540N : Single tooth deceleration 1:5.40. 000N : No reducer. 3GA/2GA : 3/2 gears automatic. 3GM/2GM : 3/2 gears manual.

Specifications

Model	CTEMI3K0-□□□□	CTEMI6K0-□□□□
Ke	0.01179 Wb	0.025 Wb
Rated Power	3 kW	6 kW
Rated Torque	8 Nm	16 Nm
Effectiveness	90%	90%
Max. Power	8 kW	16 kW
Max. Voltage Input	140 VDC	300 VDC
Max. Torque	38.4 Nm	72 Nm
Max. Phase Current	180 A(r.m.s)	
Cogging Torque	0.14 Nm	
User Environment	Temperature	-10°C ~60°C (No freezing)
	Humidity	80% (No frost)

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