

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

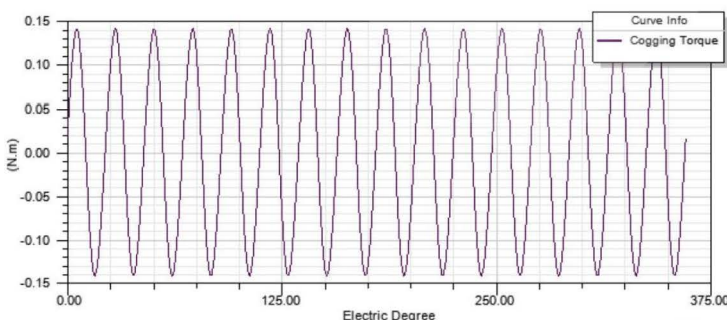
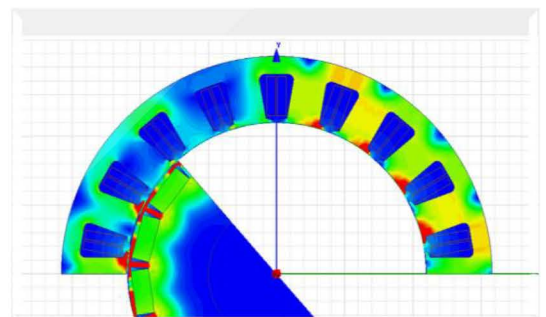
Optimize structure increase strength and reduce weight.

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
3K0
-
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
⑤	Cooling System	N : air cooling 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	CTEMI3KW-□□□□	CTEMI6KW-□□□□
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)

IMPORTANT NOTICE AND DISCLAIMER

CT Green Tech. PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with CT Green Tech. products. You are solely responsible for (1) selecting the appropriate CT Green Tech. products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements. These resources are subject to change without notice. CT Green Tech. grants you permission to use these resources only for the development of an application that uses the CT Green Tech. products described in the resource. Other reproduction and display of these resources are prohibited. No license is granted to any other CT Green Tech. intellectual property right or to any third party intellectual property right. CT Green Tech. disclaims responsibility for, and you will fully indemnify CT Green Tech. and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

CT Green Tech.'s provision of these resources does not expand or otherwise alter CT Green Tech.'s applicable warranties or warranty disclaimers for CT Green Tech. products.

Mailing Address: CT Green Tech., No. 429, Sec. 6, Chengde Rd., Beitou Dist., Taipei City 112, Taiwan (R.O.C.)

Dimensions

Model	Weight
CTEMI3K0-HN736N	12.5 kg

