

slots is proposed to reduce the capacity demand of rotor converter for the first time. The proposed method is achieved by decreasing the air-gap length (AGL) and applying conductive and ...

In this paper, a 16-pole 18-slot single-sided PMLSM is studied. The two-sectional modular structure is used on the primary to suppress the end detent force, as shown in Fig. 1. The secondary structure consists of some ...

Accurate calculation of the flux and the magnetic field distribution of fractional slot concentrated winding permanent magnet synchronous motor (FSCW PMSM) is the basis for motor performance ...

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9-slot PM motor, assuming that in the slot opening regions the results contain normally distributed errors with zero mean and a standard deviation being 5% of the local flux density ampli-

In this paper, the effect of a stator slot on the distribution and the amplitude of the magnetic field at no-load are investigated. Taking a 630 kW HVLSPMSM as a case study, the influence of the stator slot and a MSW on ...

To eliminate high order space harmonics in double-fed asynchronous motor-generator, magnetic slot wedge application is introduced. A field-circuit finite element analysis model is proposed ...

This paper presents a method for reducing the cogging torque and ripple torque of interior permanent magnet synchronous motor (IPMSM) based on the magnetic field harmonic offset method. This method establishes ...

where w_p is the whole pole pitch, and w_m is the pole arc of the radial magnetisation main magnet. For the PM machine, the field vectors B and H are coupled by $B = \mu_0 H$ in the airgap (2) $B = ...$

Both electric fields and magnetic fields store energy. The concept of energy storage in an electric field is fairly intuitive to most EEs. The concept of magnetic field energy, ...

In view of the unstable electromagnetic performance of the air gap magnetic field caused by the torque ripple and harmonic interference of a multi-slot and multi-pole low-speed, high-torque permanent magnet ...

In recent years, a permanent magnet vernier motor (PMVM) based on the "magnetic gear effect" has received

Magnetic field energy storage in motor slots

widespread attention [9 -12]. By introducing a ux modulation pole into the stator ...

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