عنوان مقاله:

An Equivalent Circuit Model for Brushless Doubly Fed Induction Machine Considering Core Loss

محل انتشار:

سومین کنفرانس بین المللی الکترونیک قدرت و سیستمهای درایو (سال: 1390)

تعداد صفحات اصل مقاله: 6

نویسندگان:

M. N. Sharif University of Technology Electrical Enginee

F. Tahami - *Sharif University of Technology, Electrical Engineering Department*

خلاصه مقاله:

Brushless doubly fed induction machines show promising results for wind power applications. Due to their poor rotor magnetic coupling and relatively high value of slip, coreloss is an important factor which affects the steady state and dynamic performance. The core loss in brushless doubly fedinduction machines has not been extensively studied in the literature. In this paper, a steady state equivalent circuit taking core loss into account is introduced. Simple relationships are derived which show that the brushless doubly-fed induction machine is similar to the cascaded doubly-fed induction machine in terms of core loss. The proposed equivalent circuit is simulated to derive the steady state characteristics of the machine.

کلمات کلیدی:

Brushless Doubly Fed Machine; Cascade Doubly Fed Induction Machine; Core loss; Equivalent circuit; Slip

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/213103