

Comparison of Instantaneous Short Circuit versus Step DC Voltage to Determine PMG Inductances

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Abstract : Since efficiency became a challenge to reduce energy consumption of all electrical machines applications, the permanent magnet machine raises up as a better option, because its performance, robustness and simple control. Even though, the electrical machine was developed through analyses of magnetism effect, permanent magnet machines still not well dominated. As permanent magnet machines are becoming popular in most applications, the pressure to standardize this type of electrical machine increases. However, due limited domain, it is still nowadays without any standard to manufacture, test and application. In order to determine an inductance of the machine, a new method is proposed.

Keywords : permanent magnet generators (pmg), synchronous machine parameters, test procedures, inductances

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