

A Study on Analysis of Magnetic Field in Induction Generator for Small Francis Turbine Generator

Authors : Young-Kwan Choi, Han-Sang Jeong, Yeon-Ho Ok, Jae-Ho Choi

Abstract : The purpose of this study is to verify validity of design by testing output of induction generator through finite element analysis before manufacture of induction generator designed. Characteristics in the operating domain of induction generator can be understood through analysis of magnetic field according to load (rotational speed) of induction generator. Characteristics of induction generator such as induced voltage, current, torque, magnetic flux density (magnetic flux saturation), and loss can be predicted by analysis of magnetic field.

Keywords : electromagnetic analysis, induction generator, small hydro power generator, small francis turbine generator

Conference Title : ICEMDS 2015 : International Conference on Electric Machines and Drive Systems

Conference Location : Stockholm, Sweden

Conference Dates : July 13-14, 2015