Abstract

Induction machine is an important class of electrical machines which finds wide applications as a motor in industry and in its single phase form in several domestic applications. More than 85% of industrial motors in use today are in fact induction motors. The minimization of electrical energy consumption through better motor design becomes a major concern. This paper proposes a novel technique to improve the performance of induction motor. By using a modified stator winding arrangement the efficiency has been improved by 7% and tested in laboratory. Experimental results and simulations results have been presented to validate the results.

References

- K. Hasukia, "Efficiency improvement studies of low voltage three phase squirrel-cage induction motors for general purpose", IEEE transactions on power
apparatus and systems, Dec 1983.
- Nyein Nyein Soe, Thet Han Yee, Soe Sandar Aung, "Dynamic modelling and simulation of three phase small power induction motor", World academy of science, Engineering and technology, 42-2008

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