

Power factor performance on 0.35 mm and 0.50 mm thicknesses of steel sheets for 0.5 Hp induction motor using FEM software

Abstract

Decrease the thicknesses of steel sheets will increase the power factor of the 0.5 Hp induction motor. This paper presents the effect of thicknesses in power factor for non-oriented electrical steel sheets. The study was carried out by using Finite Element Method (FEM) software for both thicknesses. Based on the analysis, it shows that the thickness of 0.35 mm has increment of 4% for the power factor compared to 0.50 mm.

Keywords

FEM software; Power factor; Induction motor