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## FEM-BASED ANALYSIS CONCERNING SOME SOLUTIONS ON THE RESTRICTION OF THE SPACE HIGH ORDER HARMONICS OF THE TWO-PHASE INDUCTION MACHINE

BY

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**Abstract**. The purpose of this paper is to present the advantages offered by an original square geometry of the cross section of a two-phase induction motor. The results, which come from a magnetostatic FEM simulation, put in view a complete annihilation of the third order harmonics for a non-saturated operation.

**Keywords**: two-phase induction motor, Space third order harmonic influence, FEM analysis, Optimization of magnetic circuit.