

## **Estimating the Technological Deviation Impact on the Value of the Output Parameter of the Induction Converter**

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**Abstract :** Based on the experimental data, the impact of resistance and reactance of the winding, as well as the magnetic permeability of the magnetic circuit steel material on the value of the electromotive force of the induction converter is investigated. The obtained results allow to estimate the main technological spreads and determine the maximum level of the electromotive force change. By the method of experiment planning, the expression of a polynomial for the electromotive force which can be used to estimate the adequacy of mathematical models to be used at the investigation and design of induction converters is obtained.

**Keywords :** induction converter, electromotive force, expectation, technological spread, deviation, planning an experiment, polynomial, confidence level

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