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MODELING OPERATING MODES OF ONE-PHASE TRANSFORMER WITH THE SUPPLY OF "MATLAB" PROGRAM

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ABSTRACT

The article discusses the modeling of different modes of single-phase transformers using Matlab's Sim Power System package. Time-dependent graphs of currents and voltages are plotted for different modes.

KEYWORDS: *Model, Mousselization, Single-Phase Transformer, Short-Circuit Mode, Salt Operation Mode.*

REFERENCES

1. Dzhendubaev A. MATLAB, Simulink and SimPowerSystems in the electric power industry: a textbook for students, profile "Power supply" / Dzhendubaev A.-Z. R., Aliev I.I. - Cherkessk: BITS SevKavGGTA, 2014. -- 136 p.
2. Nesenjuk T.A. Traction and transformer substations: method. recommendations / T. A. Nesenjuk, Yu. P. Neugodnikov. - Yekaterinburg: UrGUPS, 2015. -- 58 p.
3. Power plants and substations: guidelines for laboratory work in the discipline "Power plants and substations" for students studying in the direction of "Power and electrical engineering" (profile "Power supply") / comp. E. V. Bondarenko. - Ulyanovsk: UISTU, 2014. -- 31 p.

4. Electrotechnical reference book. Volume 2. Under total. ed. professors MPEI V.G. Gerasimova et al. "Electrotechnical reference book: Electrical products and devices" MPEI, 2003, 518 pages.
5. Boltaev O.T., Bedritskiy I.M., Akhmedova F.A. Computer model of a linear magnetic transducer with a movable screen and distributed parameters. Universum: technical sciences: a scientific journal. - No. 10 (79). Part 3. M., Ed. "MCNO", 2020. - p. 66-70