

Bachelor/Master Thesis

Laboratory exercise for the examination of power transformers

Initial situation and motivation

At the Institute of Electrical Systems and Networks two 50 kVA power transformers are available for laboratory exercises and research. Both transformers have been modified so that the switching group can be changed as required.



Fig. 1: modified power transformer at IEAN

Research questions & Task

For the preparation of student laboratory exercises the following measurements are to be prepared, according to current standards, and the underlying theoretical consideration is to be worked out.

- Recording the no-load characteristic
- Record hysteresis characteristic
- Symmetrical load for star, delta and zigzag connection
- Asymmetrical load for star, delta and zigzag connection
- Ability to withstand short-circuit

Organization matters

Start immediately

Language: German or English

Thesis: LaTeX or Word

Contact persons/Supervisor

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