Comparison between FEM Simulation and Experiment of Temperature Rise in Power Transformer Inner Steel Plate

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Abstract : In power transformer, leakage magnetic flux generate temperature rise of inner steel plate. Sometimes, this temperature rise can be serious problem. If temperature of steel plate is over critical point, harmful gas will be generated in the tank. And this gas can be a reason of fire, explosion and life decrease. So, temperature rise forecasting of steel plate is very important at the design stage of power transformer. To improve accuracy of forecasting of temperature rise, comparison between simulation and experiment achieved in this paper.

Keywords : power transformer, steel plate, temperature rise, experiment, simulation

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