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## Study on Electrically Excited Winding Vibration Frequency Response Under Various Clamping Pressures

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Transformer winding vibration frequency response characteristics is the direct reflection of winding mechanical condition. Studying transformer winding vibration frequency response characteristics is very meaningful for winding modal analysis and can be utilized for winding mechanical fault diagnosis. This paper use a single winding to perform frequency response experimentation which mainly consist of harmonic source and control system. The electrical excitation is the constant current which sweeps from 50Hz to 1000Hz. Axial and radial vibration response of different discs are measured respectively. Furthermore, in order to study the influence of various clamping pressures on winding vibration frequency response, a special device is utilized to adjust and measure the clamping pressure on the winding. The result will be illustrated in the full paper.

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