

Evaluation of transformer magnetizing core loss

Loss in transformer core is the electrical power lost in terms of heat within the core of transformer, when core is subjected to AC magnetizing force. It is composed of several types of losses such as Hysteresis loss, eddy current loss within individual laminations and inter-laminar losses that may arise if laminations are not sufficiently insulated from each other. To assess the level of no load loss relative to the occurrence of an inaccurate manufacturing of transformer core, a quantitative measure is often considered. The objective of this research is to study the magnetic behavior of transformer core and compare the performance of building factor is comparable to the calculated values. Open circuit tests were conducted on 1000 kVA transformer with 90°T-joint and 45° mitred corners joint to determine the efficiency of the transformer. The results showed that the building factor is useful index in assessing the impact on the core.