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INFLUENCE OF ASYMMETRY OF PRIMARY WINDING ON LOAD OF CURRENT TRANSFORMER

Ali el-fallah

Department of Electrical Engineering, Faculty of Engineering, Sabratha University, Libya
ali59ly@yahoo.com

ABSTRACT

Asymmetry of winding can be introduced during technology process or may result from electro dynamical force in current transformer during short circuit conditions model of current transformer with coaxial winding and rectangular core have been investigated. Impedance resistance and reactance of windings have been measured at symmetrical and asymmetrical position of primary winding. Electro dynamical force acting on primary winding at a given asymmetry have been investigated. Comparison of the result of calculations and measurements have been presented . Influence of asymmetry of primary winding on inductance of secondary winding and summary burden of current transformer have been estimated.

Keywords: current transformer, coaxial winding, symmetrical and asymmetrical winding