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CONSIDERATIONS ABOUT STATOR WINDING LEAKAGE INDUCTANCES DETERMINATION BY FEA

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Abstract. The paper presents some considerations about stator winding leakage inductances determinations of three-phase AC machines. Leakage inductances are determined by finite elements analysis (FEA) in two modes: with the rotor removed from the interior of the stator and with the rotor present. 2D and 3D analysis have been realized in order to determine the end winding inductance. The results obtained by FEA with the rotor removed method are compared to those obtained by FEA with the rotor present, and with those experimentally determined.

Keywords: leakage inductances, FEA (finite elements analysis), AC machines.