

Title (en)

METHOD FOR MEASURING THE AGEING OF PERMANENT MAGNETS OF A SYNCHRONOUS MACHINE FITTED WITH AN ANGULAR POSITION SENSOR

Title (de)

VERFAHREN ZUR MESSUNG DER ALTERUNG VON DAUERMAGNETEN EINER SYNCHRONMASCHINE MIT EINM WINKELPOSITIONSSENSOR

Title (fr)

PROCÉDÉ DE MESURE DU VIEILLISSEMENT D'AIMANTS PERMANENTS D'UNE MACHINE SYNCHRONE ÉQUIPÉE D'UN CAPTEUR DE POSITION ANGULAIRE

Publication

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Application

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Abstract (en)

[origin: WO2015124876A1] The invention relates to a method for measuring ageing of permanent magnets (4) of a synchronous machine (1) comprising a stator (2) and a rotor (3), said machine (1) being fitted with at least one angular position sensor (1a) of the rotor (3), the rotor (3) comprising the permanent magnets (4) provided to move said rotor around the stator (2), the angular position sensor (1a) comprising at least two fixed magnetic induction measurement sensors (6) extending to an axial end (3a) of the rotor (3), facing and immediately adjacent to the axial edges (4a) of the permanent magnets (4), characterized in that said method consists of: j1) determining, while stopped or during a laden or unladen rotation phase of the synchronous machine (1), the maximum value of the magnetic induction using the magnetic induction measurement sensors (6) and the electronic unit; j2) comparing the measured maximum magnetic induction value with a reference value; and j3) if the maximum magnetic induction value is less than the reference value, presenting a difference determined with respect to said reference value in order to generate warning information S using the electronics unit and, if this is not the case, returning to step j1).

IPC 8 full level

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