

Title (en)

METHOD FOR DETECTING A SHORT CIRCUIT IN A SYNCHRONOUS MACHINE FITTED WITH AN ANGULAR POSITION SENSOR

Title (de)

VERFAHREN ZUR DETEKTION EINES KURZSCHLUSSES IN EINER SYNCHRONEN, MIT EINEM WINKELPOSITIONIERUNGSSENSOR AUSGESTATTETEN MASCHINE

Title (fr)

PROCÉDÉ DE DÉTECTION D'UN COURT-CIRCUIT DANS UNE MACHINE SYNCHRONE ÉQUIPÉE D'UN CAPTEUR DE POSITION ANGULAIRE

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Application

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Priority

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Abstract (en)

[origin: WO2015124855A1] The invention relates to a method for detecting a short circuit between the phases of a polyphase synchronous machine (1) comprising a stator (2) and a rotor (3), said machine being fitted with at least one angular position sensor (1a) of the rotor (3), the rotor (3) comprising means for generating a magnetic induction provided to move said rotor around the stator (2), the angular position sensor (1a) comprising at least two magnetic induction measurement sensors (6), the 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 means for generating a magnetic induction, characterized in that said method consists of: i1) using the values measured and supplied by the induction measurement sensors, i2) calculating the gradient of the curve of the measured values as a function of time, i3) comparing the calculated gradient with a threshold value, Vs, and i4) if the calculated gradient is greater than or equal to the threshold value, Vs, generating a warning signal, S, using an electronic unit and, if this is not the case, returning to step i1).

IPC 8 full level

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Citation (search report)

See references of WO 2015124855A1

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