

Title (en)

PROCESS FOR PRODUCING SIGNALS IDENTIFYING FAULTY LOOPS IN A POLYPHASE ELECTRICAL POWER SUPPLY NETWORK

Title (de)

VERFAHREN ZUM GEWINNEN VON FEHLERBEHAFTETE SCHLEIFEN IN EINEM MEHRPHASIGEN ELEKTRISCHEN ENERGIEVERSORGUNGSNETZ KENNZEICHNENDEN SIGNALEN

Title (fr)

PROCEDE DE PRODUCTION DE SIGNAUX CARACTERISANT DES BOUCLES DEFECTUEUSES DANS UN RESEAU D'ALIMENTATION ELECTRIQUE POLYPHASE

Publication

EP 0864096 A2 19980916 (DE)

Application

EP 96946020 A 19961122

Priority

- DE 9602281 W 19961122
- DE 19545267 A 19951127

Abstract (en)

[origin: DE19545267A1] The invention relates to a process for producing signals identifying faulty loops in a polyphase electrical power supply network using impedance starting, during which process the signals identifying the faulty loops are formed after checking for earth faults by comparing the amounts of the impedance values produced during impedance starting. To eliminate during said process with great reliability all the loops which are not actually faulty in spite of initial starting the invention proposes that actual faulty loops are determined while determining exclusively earth-faultless loops by comparing calculated virtual impedances ($\frac{U}{L_x-L_y}$; $\frac{U}{L_x}$; $\frac{U}{L_x-L_y}$) with impedances ($\frac{Z}{L_x-L_y}$) measured during impedance starting; by determining at least one loop with earth fault, faultless phase-to-ground loops are recognised and eliminated by comparing the amounts of the virtual impedance values ($\frac{Z}{V_{LxE}}$) obtained from the impedance values of the phase-to-ground loops, detected as faulty, with the smallest virtual impedance values ($\frac{Z}{V_{LxE}}$). To use the impedance values of the other loops determined as faulty but not eliminated, examination processes (23, 24, 25) designed in various ways according to the number of simultaneously established phase-to-ground loops are used.

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