Title (en)

BREAKER UNIT FOR FAULT CURRENT, EXCESS CURRENT AND SHORT-CIRCUIT CURRENT PROTECTION

Title (de)

ELEKTRISCHE SCHALTEINRICHTUNG FÜR FEHLERSTROM-, ÜBERSTROM- UND KURZSCHLUSSSTROMSCHUTZ

Title (fr)

DISPOSITIF DE COMMUTATION ELECTRIQUE SERVANT DE PROTECTION CONTRE LES COURANTS DE FUITE, LA SURINTENSITE ET LE COURT-CIRCUIT

Publication

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Application

EP 02807436 A 20020517

Priority

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Abstract (en)

[origin: WO03098651A1] The invention relates to an electric breaker unit comprising at least one contact point in the current path, at least one breaker mechanism for opening the contact point and elements for detecting the fault current and/or the excess current and/or the short-circuit current, said elements comprising two permanent magnets (16, 17), whose like poles lie opposite one another. A core (18), consisting of magnetic material and fixed to one of the permanent magnets, is provided between the opposing like poles of the permanent magnets, one of said poles being fixed and the other being mobile. The permanent magnets are at least partially surrounded by at least one coil, which is traversed by a fault current, excess current or short-circuit current, in such a way that when a current flows in the coil or coils the magnetic field is modified so that there is a relative displacement of the mobile part, said displacement being transmitted to the contact point directly or via the breaker mechanism. A layer of magnetic material that is extremely thin in relation to the longitudinal dimension of the permanent magnets is provided at least between the core (18) of magnetic material and the permanent magnet (16, 17) that is not fixed to the core.

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