

Title (en)

Modular circuit interrupter with magnetic blow-out field and with gas cooling.

Title (de)

Modulschalter mit magnetischem Blasfluss und mit Gaskühlung.

Title (fr)

Interrupteur modulaire à soufflage par champ magnétique et à refroidissement par gaz.

Publication

EP 0079293 A2 19830518 (FR)

Application

EP 82420103 A 19820719

Priority

US 32014081 A 19811110

Abstract (en)

[origin: US4401870A] A gas-cooled magnetic blast circuit breaker made up of a plurality of identical modules. Each module is a flat body made of electrically non-conductive air-permeable material and is formed with an upper and a lower arc breaking chamber, the chambers being separated from one another by a central wall of the body. An electrically conductive stationary contact member is provided in each chamber, each member extending through the body for connection to the power line on opposite faces of the body. There is also provided an electrically conductive dual contact member which is pivotally mounted across the central wall of the body, this dual member having a contact gate at each end, each gate being located in one of the chambers to cooperate with the stationary contact member in that chamber. A pivotable shaft, made of electrically non-conductive material, extends transversely through the body and is connected to the dual contact member to pivot it whereby to move the contact gates simultaneously into and out of electrical junction with the stationary contact members so as to make and break current in the power line. There is provided a coil which is energizable by the current in the power line and which is adapted to create a magnetic field suitable to blow, into the arc chambers, arcs that are formed when the contact gates are moved away from the stationary contact members. The chambers are formed so as to be provided with guideways extending from outside the body to the contact members so that air may be sucked into the chamber by the blown arcs so as to cool the contact members.

Abstract (fr)

Cet interrupteur est constitué d'une pluralité de modules (19) identiques qui comprennent chacun un corps plat (21, 23) fait en un matériau électriquement non conducteur et perméable à l'air, divisé en une chambre d'arc supérieure (25) et une chambre d'arc inférieure (27) séparées l'une de l'autre par une paroi centrale (47). Chaque chambre est pourvue d'un contact électrique fixe (29, 33) qui s'étend à travers le corps du module (19) de façon à ce que ce dernier puisse être monté par deux de ses faces sur une ligne électrique. Un contact électrique double et mobile (31, 35) est monté sur un axe (73) passant à travers la paroi centrale du corps. Ce contact double est pourvu d'une barre de contact (31, 35) à chaque extrémité, chacune de ces barres de contact se trouvant dans l'une des deux chambres (25, 27) du module (19) de façon à coopérer avec le contact fixe de cette même chambre (25, 27).

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IPC 8 full level

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