Title (en)

MINIATURE CIRCUIT BREAKER WITH HIGH RUPTURE CAPACITY

Publication

EP 0053973 B1 19850821 (FR)

Application

EP 81401899 A 19811201

Priority

FR 8026166 A 19801209

Abstract (en)

[origin: EP0053973A1] 1. Miniature circuit breaker with high rupture capacity with a narrow insulating housing (10) comprising : - two extinguishing chambers (34, 36) arranged side by side in the lower part of the housing with deionization plates (38) extending parallely to the bottom (16) of the housing (10), the two arcing chambers being separated by an insulating wall (30) extending in the median line of the housing perpendicularly to said bottom (16), - two pairs of contacts (46, 50; 48, 52) each associated to one of said chambers and located in front of said plates (38), the moving contact (50, 52) moving in a way to draw an initial arc extending parallely to the plates (38) and pivoting by migration on the horns (56, 58) in order to spread out at the entrance perpendicularly to the plates (38), - an input terminal (26) and an output terminal (28) of the circuit breaker arranged on the two narrow lateral faces of the housing, one of the terminals (26) being connected to one (48) of the stationary contacts, - a mechanism (66) to control the opening and the closing of the circuit breaker, - and a magnetic and thermal tripping device, the magnetic tripping device provided with a coil (68) inserted between the arcing chambers (34, 36) and the mechanism (66) and extending parallely to said plates (38), characterized in that it comprises a contact carrier in the form of a fork (54) bridging said wall (30) and carrying at the end of each prong a movable contact (50, 52) to connect electrically these movable contacts (50, 52) and to constitute a contact bridge with two series breaking intervals, said fork (54) being controlled by the mechanism to move simultaneously the movable contacts (50, 52) in open and in closed position, that the two arcing chambers (34, 36), the coil (68) and the mechanism (66) are superposed and fill each the whole width of the housing and that the other terminal (28) is connected to the other stationary contact (46) by means of the said thermal tripping device and the said coil (68).

IPC 1-7

H01H 73/18; H01H 71/10; H01H 1/04

IPC 8 full level

H01H 1/04 (2006.01); **H01H 71/10** (2006.01); **H01H 73/18** (2006.01); H01H 1/025 (2006.01); H01H 9/34 (2006.01); H01H 71/12 (2006.01)

CPC (source: EP)

H01H 1/04 (2013.01); **H01H 1/2066** (2013.01); **H01H 71/1045** (2013.01); **H01H 73/18** (2013.01); H01H 1/025 (2013.01); H01H 9/342 (2013.01); H01H 71/121 (2013.01)

Cited by

EP0418754A3; EP0508846A1; FR2674986A1; EP2618354A1; EP0905735A1; FR2768856A1; EP0649155A1; US8912461B2; EP0619592A1; FR2703821A1; EP0232637A1; FR2592738A1; EP0080924A1; FR2517465A1; EP1178509A3

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