

Title (en)

LOW VOLTAGE ELECTRIC CIRCUIT BREAKER WITH AUXILIARY ACTUATING UNITS

Publication

EP 0008989 B1 19831005 (FR)

Application

EP 79400625 A 19790907

Priority

FR 7826381 A 19780912

Abstract (en)

[origin: EP0008989A1] 1. Low voltage electric circuit breaker having a plurality of juxtaposed poles (R, S, T) and comprising a molded casing (10) constituted by the assemblage of an intermediary carter (14) having open ends, a cover (16) obturating the top end and a bottom plate (12) obturating the bottom end, said carter (14) comprising an intermediary insulating wall (44) extending parallel to said ends and confining a top chamber (46) and a bottom chamber (48) of said casing (10), the latter chamber (48) being longitudinally subdivided by insulating pole (R, S, T) separation barriers extending perpendicularly to the intermediary wall (44), - for each pole a pair of separable contacts (88, 90) contained within an arc extinguishing chamber (100), the latter chamber being contained within said bottom chamber (48), - an arm (76) support bar (56) of the movable contacts (90) of said separable contacts (88, 90), common to all poles (R, S, T), - an operating mechanism (22) of said bar (56), contained within said top chamber (46) above the extinguishing chamber (100) of one (S) of the poles, - for each pole a thermal (94) and/or electromechanical (120, 124) trip device in alignment to the contact pair of the pole, - a trip bar (67) common to all pole trip devices and cooperating with said mechanism (22) to separate said contacts (88, 90) upon occurrence of a fault, characterized by the combination of the following known characteristics : - the intermediary wall (44) extends on the whole surface of the intermediary carter (14) so that the top chamber (46) is electrically insulated from the bottom chamber (48), - the trip devices (94, 120, 124) are contained within the bottom chamber (48) with the contacts (88, 90) and the corresponding extinguishing chambers (100), - auxiliary control blocks, namely an under-voltage relay (50), an indicator device (54) with auxiliary contacts and a remote control device, are contained within the top chamber (46), - these auxiliaries take the places left free near the operating mechanism (22) above the poles (R, T), so as the extinguishing chambers (100) and the corresponding trip devices which are not under the operating mechanism (22).

IPC 1-7

H01H 71/02; **H01H 83/20**; **H01H 71/12**; **H01H 71/50**

IPC 8 full level

H01H 71/02 (2006.01); **H01H 71/12** (2006.01); **H01H 71/50** (2006.01); **H01H 71/52** (2006.01); **H01H 83/20** (2006.01)

CPC (source: EP)

H01H 71/0207 (2013.01); **H01H 71/121** (2013.01); **H01H 71/501** (2013.01); **H01H 71/525** (2013.01); **H01H 83/20** (2013.01); **H01H 2071/502** (2013.01); **H01H 2089/005** (2013.01)

Cited by

US2017186579A1; EP1121697A4; FR2595164A1; CN103443893A; EP0427641A1; FR2654254A1; EP0236202A1; US4768007A; EP0176402A1; FR2569901A1; EP0472477A1; FR2666168A1; EP0097557A1; FR2528230A1; FR2595163A1; EP3188210A1; CN106920718A; US8901446B2; US10424454B2; US10176955B2; EP0408466A3; FR2649826A1; EP3206218A1; WO2012109317A3

Designated contracting state (EPC)

BE CH DE GB IT NL SE

DOCDB simple family (publication)

EP 0008989 A1 19800319; **EP 0008989 B1 19831005**; DE 2966262 D1 19831110; FR 2436491 A1 19800411; FR 2436491 B1 19810213; YU 218979 A 19820630; YU 40377 B 19851231

DOCDB simple family (application)

EP 79400625 A 19790907; DE 2966262 T 19790907; FR 7826381 A 19780912; YU 218979 A 19790910