

Title (en)
Low-voltage multi-pole differential switch.

Title (de)
Mehrpoliger Niederspannungsdifferentialschalter.

Title (fr)
Interrupteur différentiel multipolaire basse tension.

Publication
EP 0033671 A2 19810812 (FR)

Application
EP 81400035 A 19810113

Priority
FR 8002327 A 19800131

Abstract (en)
1. Multi-pole low-voltage differential switch with an insulated moulded housing (12) comprising : - a differential current detector constituted by an annular core transformer (32) totalising the currents of the a. c. network to be protected, - a relay (28) operated by said detector to free the interlock of a control mechanism (26) on appearance of a differential fault current, - a switch shaft (60) in form of a oblong runner operated by said control mechanism (26) and supporting staggered along the shaft (60) contact arms (68) of the movable contacts (78) of the different poles extending transversely to said shaft, this shaft being mounted with longitudinal sliding motion in order to move said movable contacts (78) selectively in the open position and in the closed position in contact with the coupled stationary contacts (80), characterized by the fact that each contact arm (68) is mounted elastically on the shaft (60) in order to execute a limited relative pivoting and translation movement, said arm (68) extending on both sides of the shaft (60) and supporting on one of its ends the movable contact (78) which can cooperate with the coupled stationary contact (80), the opposite end of the arm being connected by a strip (86) with terminals (88) of the apparatus and being capable to move unrestrainedly, a stop (104) limiting indirectionnally the movement of said opposite end into the closing direction of the contacts.

Abstract (fr)
L 'interrupteur différentiel comporte un barreau de commutation (60) en forme de coulisseau portant des bras de contacts mobiles (68). Chaque bras de contact (68) est monté élastiquement dans un logement axial du coulisseau (60) et porte à l'une de ses extrémité le contact mobile coopérant avec un contact fixe (80). L'extrémité opposée du bras (68) est reliée électriquement à une borne (88) de branchement par une tresse (86) et coopère avec une butée avant la venue en position de fermeture des contacts.

IPC 1-7
H01H 83/14; H01H 1/58; H01H 71/04

IPC 8 full level
H01H 1/58 (2006.01); **H01H 83/14** (2006.01)

CPC (source: EP)
H01H 1/58 (2013.01); **H01H 83/144** (2013.01)

Cited by
EP0530392A1; FR2500209A1; FR2581792A1

Designated contracting state (EPC)
BE CH DE GB IT NL SE

DOCDB simple family (publication)
EP 0033671 A2 19810812; **EP 0033671 A3 19810826**; **EP 0033671 B1 19841219**; DE 3167762 D1 19850131; ES 498187 A0 19811216; ES 8201357 A1 19811216; FR 2475291 A1 19810807; FR 2475291 B1 19820903; YU 21381 A 19830630; YU 40245 B 19850831

DOCDB simple family (application)
EP 81400035 A 19810113; DE 3167762 T 19810113; ES 498187 A 19801226; FR 8002327 A 19800131; YU 21381 A 19810127