

Title (en)
Protective circuit breaker with a resilient link.

Title (de)
Schutzschalter mit federnder Lasche.

Title (fr)
Interrupteur de protection à biellette élastique.

Publication
EP 0218497 A1 19870415 (FR)

Application
EP 86401923 A 19860902

Priority
FR 8513942 A 19850920

Abstract (en)
1. Protection switch for an electric installation comprising, in an insulating case (11) : - at least one fixed contact (C2) and a mobile contact (C1) which cooperate and form a current path which can be interrupted in response : - either to the actuation of a magnetic (DM) and/or thermal (DT) automatic tripping member, - or to the actuation of a manual tripping and resetting control member (M), - a lock comprising : - a hook (12) which can be moved by the automatic tripping member (DM, DT), - a tripping lever (18) having at a first end a nose-piece (22) cooperating with the hook (12) and connected to the manual control member (M) so as to pivot, either by bearing on the hook (12) so as to cause voluntary opening of the contacts or on a movable shaft (19) connected to the manual control member (M) for causing automatic tripping ; this tripping lever (18) being connected to a contact piece (32) mounted for pivoting on a pin (30a) belonging to a rigid conducting piece (30) fixed with respect to the case (11) and fast with a terminal (B1) of the switch, by means of a spring (R) forming a resilient transmission link between the lever (18) and the contact piece (32) and contributing to sudden opening of the contact piece (32) characterized in that the resilient link (R) consists of a hairpin spring in the shape of a V, a first leg (28) of which is applied to a second end of the tripping lever (18) and the other leg (29) of which cooperates with two rests situated on each side of the pin (30a), namely an opening rest (36) and a closure rest (31).

Abstract (fr)
L'interrupteur selon l'invention comprend, dans un boîtier, au moins un couple de contacts fixe et mobile (C1, C2) et une serrure comportant un crochet (12) déplaçable par un organe de déclenchement automatique, ainsi qu'un levier de déclenchement (18) muni, à une première extrémité, d'un becquet coopérant avec le crochet (12) et relié à un organe de commande manuelle (M), de manière à pivoter, soit en prenant appui sur le crochet (12) pour effectuer une ouverture volontaire des contacts (C1, C2), soit sur un axe déplaçable relié à l'organe de commande manuelle (M), pour effectuer un déclenchement automatique. Le levier de déclenchement (18) est relié à une pièce de contact (32) séparée au moyen d'un ressort (R) formant une biellette élastique qui contribue à l'ouverture brusque de la pièce de contact (C1). L'invention permet d'obtenir un interrupteur de protection présentant une grande simplicité, un faible encombrement, et, cependant, une grande sensibilité de déclenchement.

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CPC (source: EP)
H01H 71/402 (2013.01); **H01H 71/50** (2013.01)

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