Title (en)

IMPROVED THERMOMAGNETIC ACTUATOR IN A SECURITY ELECTRIC SWITCH

Title (de)

VERBESSERTER THERMOMAGNETISCHER AKTUATOR IN EINEM ELEKTRISCHEN SICHERHEITSSCHALTER

Title (fr)

ACTIONNEUR THERMOMAGNÉTIQUE AMÉLIORÉ DANS UN COMMUTATEUR ÉLECTRIQUE DE SÉCURITÉ

Publication

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Application

EP 18733703 A 20180510

Priority

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Abstract (en)

[origin: WO2018226165A1] The purpose of the invention is to improve reactiveness of a thermomagnetic actuator in a security electric switch, so that the time delay prior to interruption of the electric circuit through the switch due to electric overloading could be essentially reduced. The invention provides that a yoke (6) is along its complete circumference spaced apart from the internal surface of a casing (1) and is surrounded with an thermal insulating ring (10), which is uninterrupted along its complete circumference and is on the one hand rest on the internal surface of said casing (1) and on the other hand on said yoke (6). An anchor (2) is, at least on its side which is faced towards the closed end portion (1") of said casing (1), furnished with a centrally arranged throughout axial passage (2'), and on its opposite side, which is faced towards said yoke (6), with a centrally arranged cavity (2"), wherein said passage (2') within the anchor (2) is adapted to receive a thermal insulating guide (9), which is inserted between the anchor (2) and the casing (1), while said cavity (2") is adapted to receive a portion of said spring (3), which is faced towards the anchor (2), but not also that portion of the spring (3), which is faced towards the yoke (6). Moreover, a thermal insulating bush (11) is inserted between a bimetallic disc (7) and an actuating needle (5).

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