

Title (en)

ADJUSTABLE THERMAL TRIPPING DEVICE FOR MINIATURE CIRCUIT BREAKER

Title (de)

VERSTELLBARER THERMISCHER AUSLÖSUNGSMECHANISMUS FÜR MINIATURSCHUTZSCHALTER

Title (fr)

DISPOSITIF DE DÉCLENCHEMENT THERMIQUE RÉGLABLE POUR DISJONCTEUR MINIATURE

Publication

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Application

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Abstract (en)

The present invention discloses a thermal adjustable tripping device for a miniature circuit breaker, which is mounted in a base (101) of the miniature circuit breaker. The thermal adjustable tripping device comprises: a tripping mechanism (106), a thermal deformation element (107) and an adjusting mechanism (102). The tripping mechanism is provided with an extending tripping rod (161). The thermal deformation element is arranged close to the tripping rod and a gap is reserved between the thermal deformation element and the tripping rod. The adjustment mechanism adjusts a distance of the gap between the tripping rod and the thermal deformation element. A current in a loop accessed by the miniature circuit breaker enables the thermal deformation element to generate heat and deform, and the deformed thermal deformation element moves towards the tripping rod, contacts with the tripping rod and pushes the tripping rod to trigger the tripping mechanism to trip. The adjusting mechanism adjusts the distance between the thermal deformation element and the tripping rod so as to adjust a setting current in the loop. The present invention uses a rigid element to adjust a distance between a thermal deformation element and a tripping rod, which can ensure that the distance between the thermal deformation element and the tripping rod is constant in each operation. The tripping device of the present invention is applicable to an electric motor.

IPC 8 full level

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