Title (en)

Release mechanism for circuit interrupting device

Title (de)

Auslösemechanismus für Schaltungsunterbrechungsvorrichtung

Title (fr)

Mécanisme de déclenchement pour un disjoncteur

Publication

EP 2431992 B1 20130123 (EN)

Application

EP 10009920 A 20100920

Priority

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Abstract (en)

[origin: EP2431992A1] The object of the present invention is a release mechanism (1) for a circuit interrupting device (2) comprising a ferromagnetic main frame (5) through which can flow a current (I) and a ferromagnetic movable element (6) designed to be translated in an opening (9) of the main frame (5) between a first position in which the circuit interrupting device (2) is closed and a second position in which the circuit interrupting device (2) is open. The release mechanism further comprises a spring (18) designed to maintain the movable element (6) in its first position and is designed to use the flux (B) generated inside the main frame (5) by the current (I) flowing through it to displace the movable element (6) between its first and second positions. The release mechanism further comprises at least one electromagnet (19, 20) acting on a ferromagnetic core (23, 24) to displace it between an on and an off position corresponding to the electromagnet (19, 20) being on respectively off. The said core (23, 24) is connected to mechanical means (22, 25, 26, 17) arranged to compress or stretch the spring (18) depending on the position of the core (23), so that the force (F s) on the movable element (6) due to spring (18) is adjusted, respectively increased or decreased, by switching the electromagnet on or off.

IPC 8 full level

H01H 71/74 (2006.01)

CPC (source: EP)

H01H 71/7463 (2013.01)

Cited by

WO2020230684A1; JPWO2020230684A1; KR101693481B1; US10453638B2; JP6109453B1; AU2016281164B2; EP3312865A4; WO2016204104A1

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