

Title (en)

MECHANICAL TRIP DEVICE FOR A LINE SWITCHGEAR

Title (de)

MECHANISCHE AUSLÖSEEINRICHTUNG FÜR EINE LEITUNGS-SCHALTANLAGE

Title (fr)

DISPOSITIF DE DÉCLENCHEMENT MÉCANIQUE POUR APPAREIL ÉLECTRIQUE DE COUPURE DE LIGNE

Publication

EP 2368256 B1 20131002 (FR)

Application

EP 09805720 A 20091217

Priority

- FR 2009052582 W 20091217
- FR 0858779 A 20081218

Abstract (en)

[origin: WO2010076512A1] The invention relates to a mechanical trip device for the switchgear of at least one electric line, comprising: one fixed contact and one mobile contact per line; a control member (16) which can be manually moved; a mechanical lock comprising a pivoting trip unit (12) and a toggle lever transmitting the movement from the control member to the mobile contact(s); a return means with the mobile contact(s) moved counter thereto by the control member (16) in a closed position, and which returns said contact(s) to the open position by the pivotal movement of the trip unit (12). The trip device comprises: a pivoting lever (1) positioned between the trip unit (12) and a rotary transmission bar (2) transmitting the movements of magnetic and thermal subunits in the event of an overcurrent on the line or lines, a torsion spring (3) placed between said lever (1) and the transmission bar (2), the first end (10) of the spring (3) being applied to the lever, the second end (7) pushing the transmission bar (2) into a rearmed position according to which an outgrowth (8) rigidly connected to the transmission bar (2) is positioned so as to bear on the lever (1) adjacent to an opening (9) on the latter, the rotation of the bar (2) in the event of an overcurrent causing said outgrowth (8) to move in front of the opening (9) and the lever (1) to switch under the effect of the spring (3), said switching action causing the release of a tab (11) rigidly connected to the trip unit (12) and inserted in a window of the lever (1) when in the rearmed position, releasing the trip unit (12) which pivots in order to trip the device.

IPC 8 full level

H01H 71/52 (2006.01)

CPC (source: EP)

H01H 71/525 (2013.01); **H01H 1/22** (2013.01); **H01H 71/12** (2013.01); **H01H 71/40** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

FR 2940511 A1 20100625; FR 2940511 B1 20101217; BR PI0918123 A2 20151124; CN 102246255 A 20111116; CN 102246255 B 20140409; EP 2368256 A1 20110928; EP 2368256 B1 20131002; JP 2012513081 A 20120607; JP 5581334 B2 20140827; WO 2010076512 A1 20100708

DOCDB simple family (application)

FR 0858779 A 20081218; BR PI0918123 A 20091217; CN 200980150247 A 20091217; EP 09805720 A 20091217; FR 2009052582 W 20091217; JP 2011541563 A 20091217