

Title (en)
ADJUSTABLE SHORT-CIRCUIT RELEASE

Title (de)
JUSTIERBARER KURZSCHLUSSAUSLÖSER

Title (fr)
DECLENCHEUR A COURT-CIRCUIT REGLABLE

Publication
EP 2044605 A1 20090408 (DE)

Application
EP 07787344 A 20070711

Priority
• EP 2007057070 W 20070711
• DE 102006033717 A 20060720

Abstract (en)
[origin: WO2008009594A1] The invention relates to an overcurrent release with a yoke, with a coil winding, with a pole, with an armature and with a restraining spring for pre-stressing the armature, wherein an air gap exists between the pole and the armature. The invention is based on the object of specifying an overcurrent release with low force tolerances for the restraining spring, whose response value can be adjusted retrospectively and a circuit breaker with such an overcurrent release. This object is achieved in the case of an overcurrent release of the type mentioned at the outset by virtue of the fact that the restraining spring is in the form of a compression spring provided between the pole and the armature and that the overcurrent release is designed such that the compression spring is replaceable. Compression springs can be produced with lower force tolerances than torsion springs, as a result of which, also advantageously within the permissible tolerance in accordance with IEC60947 of $\pm 20\%$, the response current can be reduced to, for example, 13 times the rated current minus 20%. Furthermore, compression springs do not have any friction between the turns and do not have as unfavourable friction as a torsion spring mounting arrangement. In addition, the replaceability of the compression springs makes it possible to shift the response value of the overcurrent release on the finished overcurrent release or finished device retrospectively and easily.

IPC 8 full level
H01H 71/74 (2006.01)

CPC (source: EP KR)
H01H 71/24 (2013.01 - KR); **H01H 71/7409** (2013.01 - EP KR); **H01H 71/7463** (2013.01 - EP KR); **H01H 2219/002** (2013.01 - KR)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
WO 2008009594 A1 20080124; AT E503264 T1 20110415; BR PI0711126 A2 20110830; CN 101490784 A 20090722;
DE 102006033717 A1 20080131; DE 102006033717 B4 20090604; DE 502007006788 D1 20110505; EP 2044605 A1 20090408;
EP 2044605 B1 20110323; KR 100994066 B1 20101111; KR 20080095839 A 20081029

DOCDB simple family (application)
EP 2007057070 W 20070711; AT 07787344 T 20070711; BR PI0711126 A 20070711; CN 200780027229 A 20070711;
DE 102006033717 A 20060720; DE 502007006788 T 20070711; EP 07787344 A 20070711; KR 20087013195 A 20070711