

## Title (en)

CONTACTOR WITH ELECTROMAGNETICALLY CONTROLLED ACTION AND AUTOMATIC OPENING IN CASE OF OVER-VOLTAGE

## Publication

**EP 0114542 B1 19860611 (FR)**

## Application

**EP 83402353 A 19831206**

## Priority

FR 8221317 A 19821220

## Abstract (en)

[origin: EP0114542A1] 1. A contactor apparatus comprising in a case : a) for actuating its power contacts (2a-2c), an electromagnet (1) whose energization circuit has a safety switch (4) able to be opened or closed by a locking lever (55) associated with a transmission member (32) integral with a local control knob (18) having a first stable open position (O) and a second stable closed position (F), this latter being ensured by this locking lever (55) against the action of a first return spring (35) of the transmission member (32). b) and for automatic opening of these power contacts (2a-2c), a resettable quick trip mechanism which comprises : 1) a bolt (82) responsive to the movement of at least one (89) of several resettable slides reacting quickly when overloads of different natures appear in the power circuit, 2) a common resetting and tripping part (56) associated with a second return spring (79) and maintained in the setting position by this bolt (82) or released thereby so as to strike, on the one hand, the locking lever (55) and cooperate with the transmission member (32) so as to give thereto a third stable tripping position (D) placed between the first and second positions and for receiving on the other hand, from this transmission member (32) a manual resetting action which re-establishes setting of the common part and that of the slides when the control knob (18) is placed in a fourth unstable resetting position (R) opposite the second position, apparatus in which the transmission member (32) has between two parallel plates (43, 44) a series of superimposed cam surfaces (45, 46, 47) which are adapted to cooperate with the locking lever (55) and with a common part in the form of a pivoting lever (56) adapted to cooperate with a pivoting bolt (82), this member, this locking lever and this common part having pivoting axes (XX', YY', ZZ') parallel to each other and perpendicular to the plates between which they are placed.

## IPC 1-7

**H01H 71/56**

## IPC 8 full level

**H01H 71/10** (2006.01); **H01H 71/56** (2006.01); **H01H 71/66** (2006.01); **H01H 75/00** (2006.01); **H01H 71/04** (2006.01); **H01H 71/46** (2006.01); **H01H 89/08** (2006.01)

## CPC (source: EP)

**H01H 71/56** (2013.01); **H01H 71/04** (2013.01); **H01H 71/46** (2013.01); **H01H 89/08** (2013.01); **H01H 2071/0278** (2013.01)

## Cited by

EP0571258A1; FR2691576A1; US5339060A

## Designated contracting state (EPC)

CH DE GB IT LI SE

## DOCDB simple family (publication)

**FR 2538160 A1 19840622**; **FR 2538160 B1 19851213**; AU 2236183 A 19840628; AU 565448 B2 19870917; BR 8306971 A 19840724; DE 114542 T1 19841011; DE 3364100 D1 19860717; DK 164342 B 19920609; DK 164342 C 19921102; DK 587783 A 19840621; DK 587783 D0 19831220; EP 0114542 A1 19840801; EP 0114542 B1 19860611; JP H0317338 B2 19910307; JP S59119635 A 19840710

## DOCDB simple family (application)

**FR 8221317 A 19821220**; AU 2236183 A 19831213; BR 8306971 A 19831219; DE 3364100 T 19831206; DE 83402353 T 19831206; DK 587783 A 19831220; EP 83402353 A 19831206; JP 24182283 A 19831220