

MOBILE SPINDLE LOCK MECHANISMABSTRACT

- 5 The invention concerns a lock mechanism (1) for electrical appliance for protecting lines and people of the circuit breaker type comprising at least one mobile contact (4) designed to cooperate with one or more fixed contacts (12), said mechanism (1) being mobile between a locked position for closing and an unlocked position for opening the line(s) controlled by the electrical appliance,
- 10 an operating member (2) of which enabling a change of position of the mechanism (1) to be controlled and corresponding to any unlocking caused by the occurrence on at least one line of electrical conditions incompatible with the maintenance of its closure, said operating member (2) being connected via a link rod (3) to said lock mechanism (1), which comprises:
- 15 - at least one mobile contact (4) supported by a contact holder (17) and pivoting along a first axis between two positions bearing on and away from a fixed contact (12), respectively, a stress coming from one end of the link rod (3) being transmitted on the contact holder (17) for locking of the mechanism (1);
- 20 - a mobile trigger (5) passing on the information provided by a magnetic (M) or thermal (13) measurement system to the lock mechanism (1) in order to unlock it when it is in the closed position of the contacts (4, 12), said trigger (5) comprising a member (9) allowing maintenance of the link rod (3) bearing against the contact holder (17) in the locking
- 25 phase and in the locked position;
- means for returning the contact holder (17) to the open position of each mobile contact (4) away from a fixed contact (12) in case of release of the link rod (3) resulting in the unlocking of the mechanism (1); and

- elastic means for implementation of pressure holding each mobile contact (4) on a fixed contact (12) allowing the absorption of wear of the contacts (4, 12).

Each mobile contact (4) is rigidly linked to the contact holder (17), and the
5 elastic means (6b, 16) for implementing the pressure holding each mobile contact (4) on a fixed contact (12) are connected to the contact holder (17) by a link (7b; 21, 22) ensuring the movement of the first pivot axis in relation to the mobile contact (4) / fixed contact (12) bearing area(s) once said bearing takes place.

10

Abstract figure: figure 4