

Title (en)
DEVICE FOR RETURNING THE CONTACT CARRIER OF AN ELECTROMAGNETIC SWITCHING DEVICE, ESPECIALLY OF A PROTECTIVE CIRCUIT BREAKER

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EP 0143927 B1 19910807 (DE)

Application
EP 84111280 A 19840921

Priority
DE 3335732 A 19831001

Abstract (en)
[origin: EP0143927A2] An electromagnetic switching device has a magnet system with a hinged armature (15) which is connected to the contact carrier (37) via a connecting rod (26). A restoring spring arrangement is furthermore provided which presses the hinged armature (15) and thus the contact carrier back into an original position. In general, the contacts of the switching device are open when the magnet system is energised, and are closed in the unenergised state. The restoring spring arrangement is required to close them again. To simplify the design, the restoring spring arrangement is constructed as a restoring helical compression spring (40) which is supported on the one side on the hinged armature (15) and on the other side on a lever (28) which is mounted in a hinged manner on the housing (11), and which also abuts against the contact carrier (37). The drive train, which consists of the hinged armature (15), the restoring spring (40) and the lever (28), is always located outside the connecting line (T-T), which forms a dead-point line and connects the axis of rotation of the hinged armature (15) and the supporting axle of the lever (28) on the housing, so that a single helical compression spring ensures both the support of the hinged armature and the restoration of the contact carrier.

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