

Title (en)
Electromagnetic relay

Publication
EP 0136592 A1 19850410 (DE)

Application
EP 84110632 A 19840906

Priority
DE 8325986 U 19830909

Abstract (en)

1. Electromagnetic relay having a coil (4) which contains a coil core (5), an angled yoke (6), whose first leg (6a) is coupled with a pole end of the coil core (5) and whose second leg (6b) runs parallel to the coil axis, with a plate-like armature (7), which is mounted in the area of the free end of the second yoke leg (6b) and forms an air gap (8) with the other pole end of the coil core (5), as well as with an angled leaf spring (9) which serves as an armature restoring and contact spring and the first leg of which (9a) is secured to the yoke (6) and runs at least in part parallel to the second yoke leg (6b), and the second leg (9b) of which is essentially at right angles to the first leg (9a) of the leaf spring (9), in such a manner that the mutually abutting areas of the two legs (9a, 9b ; 19a, 19b ; 29a, 29b) of the leaf spring (9 ; 19 ; 29) exhibit at an approximate right angle a distinct knee, and the second leg (9b ; 19b ; 29b) of the leaf spring (9 ; 19 ; 29) lying partially on and being connected to the armature (7), characterized in that the area of the first leg (9a ; 19a ; 29a) of the leaf spring (9 ; 19 ; 29) in the vicinity of the knee is spaced from the rotational axis of the armature (7, 27) so as to increase the resilient length of the second leg (9b ; 19b ; 29b) of the leaf spring (9 ; 19 ; 29) and in that the first leg (9a ; 19a ; 29a) of the leaf spring (9 ; 19 ; 29) exhibits a swivel bearing (6c, 14) on the yoke (6) and/or a reduction in cross-section in such a manner that essentially it may only take up the tensile forces i.e. that it can be swivelled around its securing position on the yoke (6) almost without force.

Abstract (de)

Das Relais besitzt eine als Kontaktfeder und Ankerrückstellfeder dienende Blattfeder (9) welche zwei annähernd rechtwinklig zueinander stehende Schenkel (9a, 9b) aufweist. Der erste Schenkel (9a) ist mit seinem Ende an einem Haltezapfen (6c) des Joches eingehängt, so daß er um diese Einhängestelle frei beweglich ist und praktisch keine Richtkraft auf den Anker ausübt. Die Ankerrückstellkraft wird allein vom zweiten Federschenkel (9b) aufgebracht, der aufgrund des langen Hebelarms eine niedrige Federkennrate besitzt.

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H01H 50/28

IPC 8 full level
H01H 50/28 (2006.01)

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H01H 50/28 (2013.01)

Citation (search report)

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