

Title (en)

Electromagnetic relay and method for its manufacture.

Title (de)

Elektromagnetisches Relais und Verfahren zu dessen Herstellung.

Title (fr)

Relais électromagnétique et méthode pour sa fabrication.

Publication

**EP 0140284 A1 19850508 (DE)**

Application

**EP 84112526 A 19841017**

Priority

- DE 3338208 A 19831020
- DE 8411399 U 19840411

Abstract (en)

1. Electromagnetic relay with, disposed in an axially continuous aperture (3; 33) in a coil body (1; 31), a tongue-shaped armature (6; 36) which has an attachment end (6a) fixed in the region of a first coil body flange (4; 34), while its free end (6b) is, in the region of the second coil body flange (5; 35), switchable between two pole plates (8, 8'; 38, 38'), a flux transfer plate (11; 41) being constructed at the fixing end of the armature (6; 36), the pole plates (8, 8'; 38, 38') resting flat on the end face of the second coil body flange (5; 35) and being maintained at a preset contact gap by abutment faces on the coil body flange, a sealing foil (9, 12; 39, 42) being disposed on the end faces both of the first coil body flange (4; 34) and also of the second coil body flange (5; 35), characterised in that there is, formed on the end face of the first coil body flange (4; 34) and enclosing the coil body aperture, a marginal bead (17; 47) which is discontinued only at two oppositely disposed places by a respective connecting web (21; 51) extending between armature (6; 36) and flux transfer plate (11; 41), the connecting webs (21; 51) finishing flush with the bead surface, forming therewith a plane surface to carry a sealing foil (12; 43), and in that the bearing surfaces for the pole plates (8, 8'; 38, 38) are formed on the second coil body flange (5; 35) by spacing projections (23; 53) which protrude on two opposite sides of the coil body aperture (3; 33) to a height beyond the end face of the coil body flange (5; 35) which is equivalent to the thickness of the pole plates (8, 8'; 38, 38'), and in that the pole plates (8, 8'; 38, 38') are of substantially flat construction and have in each case an inner edge bearing on both spacing projections (23; 53) and an outer edge braced on a retaining projection (24; 54) provided on the rim of the coil body flange (5; 35), in a manner such that the two pole plates (8, 8'; 38, 38') likewise form with the two spacing projections (24; 54) a plane supporting surface for a sealing foil (9; 39) which engages continuously around the coil body aperture (3; 33).

Abstract (de)

Das Relais besitzt einen Spulenkörper (1) mit im Inneren angeordnetem zungenförmigen Anker, der mit einem Ende (6a) an einem ersten Spulenflansch (4) befestigt ist und mit seinem freien Ende (6b) im Bereich eines zweiten Spulenflansches (5) zwischen zwei Polblechen (8) umschaltbar ist. Am Befestigungsende des Ankers (6) weist der Spulenflansch (4) einen Randwulst auf, der zusammen mit Haltestegen (21) des Ankers (6) eine ebene Auflagefläche für eine Abdichtfolie (12) bildet. Am anderen Spulenflansch (5) bilden die beiden Polbleche (8) zusammen mit Abstandsstücken des Spulenkörpers ebenfalls eine ebene Auflagefläche für eine Abdichtfolie (9). Dadurch wird auf einfache Weise eine gute Abdichtung des Relais erreicht und eine gute magnetische Ankopplung ermöglicht.

IPC 1-7

**H01H 49/00**; **H01H 51/22**; **H01H 50/04**

IPC 8 full level

**H01H 49/00** (2006.01); **H01H 50/02** (2006.01); **H01H 50/04** (2006.01); **H01H 51/22** (2006.01)

CPC (source: EP)

**H01H 49/00** (2013.01); **H01H 50/023** (2013.01); **H01H 51/2254** (2013.01); **H01H 2009/0285** (2013.01)

Citation (search report)

- [Y] FR 2386125 A1 19781027 - INT STANDARD ELECTRIC CORP [US]
- [Y] FR 2392486 A1 19781222 - SIEMENS AG [DE]

Cited by

DE3620942A1; GB2167238A; EP0198492A3; EP0334336A1; EP3059754B1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

**EP 0140284 A1 19850508**; **EP 0140284 B1 19880713**; DE 3472732 D1 19880818

DOCDB simple family (application)

**EP 84112526 A 19841017**; DE 3472732 T 19841017