

Title (en)
Electromagnetic safety relay

Title (de)
Elektromagnetisches Sicherheitsrelais

Title (fr)
Relais de sécurité électromagnétique

Publication
EP 0860848 A3 19990317 (EN)

Application
EP 98200107 A 19980115

Priority
IT MI970295 A 19970213

Abstract (en)
[origin: EP0860848A2] An electromagnetic safety relay (90) comprising a coil (10) wound about a core, a metal frame (20), a movable armature (30) secured to the frame (20) and used to operate an assembly of contact carrier strips (50) consisting of fixed strips (5F) and mobile strips (5M), an actuator (40) guiding the movement of the strips (50), and a return spring (80) positioned below the frame (20) such that the system of active forces (given by the movable armature (30)) and of reactive forces (given by the return spring (80)) is asymmetric, ie is applied on the same side of the actuator (40). This constructional arrangement enables the fixed contact carrier strips (5F) to be given sufficient rigidity and enables a single compact and robust actuator model (40) to be used for the various configurations of the electrical contacts (70) of the relay (90). Moreover, differential malfunctions between the two sides of the assembly of electrical contacts (70) are prevented and it becomes possible to determine and indicate anomalies in the case of breakage of the actuator (40) with the relay (90) energized. <IMAGE>

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IPC 8 full level
H01H 50/56 (2006.01); **H01H 50/64** (2006.01); **H01H 3/00** (2006.01)

CPC (source: EP)
H01H 50/56 (2013.01); **H01H 50/642** (2013.01); **H01H 3/001** (2013.01)

Citation (search report)
• [A] FR 2421456 A1 19791026 - RAUSCH & PAUSCH [DE]
• [A] DE 2529205 A1 19770127 - RAUSCH & PAUSCH
• [A] FR 2379904 A1 19780901 - FEME [IT]
• [A] DE 2717293 A1 19781102 - SIEMENS AG

Cited by
CN104037024A; FR2811470A1; FR2811469A1; CN107193270A; WO0024020A1; JP2013218888A

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