

Title (en)

Short circuit device for use in low or medium voltage assemblies for the protection of people and objects

Title (de)

Kurzschließenrichtung für den Einsatz in Nieder- und Mittelspannungsanlagen zum Sach- und Personenschutz

Title (fr)

Dispositif de disjonction à utiliser dans des installations de basse et moyenne tension en vue de la protection de biens et de personnes

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Application

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Abstract (en)

[origin: WO2007014816A1] The invention relates to a short-circuiting device for use in low-voltage and medium-voltage systems for the protection of parts and personnel, comprising a switching element, which can be actuated by the tripping signal of a fault detection device, two mutually opposite contact electrodes having power supply means, wherein contact can be made with said contact electrodes at a circuit having connections at different potentials, furthermore the contact electrodes, under mechanical prestress, carry out a relative movement in relation to one another in the event of a short-circuit assisted by spring force, and a further part short-circuits the contact electrodes in a relative movement with respect to said contact electrodes, a sacrificial element as the spacer between the contact electrodes and having an electrical connection between the sacrificial element and the switching element, on the one hand, and one of the contact electrodes, on the other hand, in order to bring about thermal destruction of the sacrificial element in a targeted manner owing to current flow. In a first embodiment of the invention, the sacrificial element is a thin-walled hollow cylinder consisting of a high-melting metallic material. In a second embodiment of the invention, the sacrificial element is a wire or rod consisting of a conductive material having a low melting integral, wherein the sacrificial element is under mechanical prestress under tension in contrast to the first embodiment.

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