

Title (en)

High-voltage isolating switch, in particular a pantograph isolating switch able to make or break currents.

Title (de)

Hochspannungstrennschalter, insbesondere Einsäulen-Trennschalter, zum Schalten kommutierender Ströme.

Title (fr)

Sectionneur haute tension, en particulier sectionneur monocolonne, capable de commuter des courants.

Publication

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Application

EP 84109850 A 19840818

Priority

DE 3331024 A 19830827

Abstract (en)

1. High-voltage isolating switch with a) movable main contact members (3a, 3b) arranged at the ends of a scissors (2) movable in vertical direction, b) a main contact member firmly mounted as countercontact member (4) at the conductor cable (5) of the high-voltage line, c) a preliminary contact system, which is arranged at the countercontact member (4) and which during switching-on closes before the main contact members (3a, 3b, 4) and during switching-off opens after the main contact members (3a, 3b, 4), d) an actuating equipment for the preliminary contact system with two contact collectors (6a, 6b), which are constructed as levers (11, 11') which are crossed in the region of their fastening points (10) at the countercontact (4) and pivotable one towards the other in the manner of pliers against the force of a splaying spring (7) and the ends of which remote from the movable main contact members (3a, 3b) are associated with the one contact members (13, 16) of the preliminary contact system, while the other contact members (14, 15) of the preliminary contact system are arranged by way of a common contact carrier (30) in such a manner between the crossed levers (11, 11') at the countercontact member (4), that they are made contact with by the contact members (13, 16) associated with the crossed levers (11, 11'), when the switching-on of the main contact members (2) has the effect that the contact collectors (6a, 6b) and thereby the crossed levers (11, 11') pivot one towards the other, and with e) a division of the preliminary contact system into a first contact equipment (15, 16) and a second contact equipment (13, 14) connected in parallel with the first, wherein the first contact equipment (15, 16) opens shortly before the second contact equipment (13, 14) during the switching-off movement of the isolating switch and closes shortly before second contact equipment (13, 14) during the switching-on movement and wherein precautions are taken, which have the effect that the contact member (14), which is arranged at the countercontact member (4), of the second contact equipment (13, 14) is released by the contact member (13) associated with the crossed levers (11, 11') during a predetermined contact stroke only after the charging of an energy store (19) and snaps back into the switched-off setting.

Abstract (de)

Die Anmeldung befaßt sich mit einem Hochspannungstrennschalter mit an den Enden der Scherenarme (2) angeordneten beweglichen Hauptkontaktstücken (3a, 3b), die mit einem an der Hochspannungsleitung (5) befestigten Gegenkontaktstück (4) zusammenwirken. Dem Gegenkontaktstück (4) sind Vorkontaktstücke (6a, 6b) zugeordnet, die beim Einschalten vor und beim Ausschalten nach den Hauptkontaktstücken (3a, 3b, 4) schliessen bzw. öffnen. Um nun mit Sicherheit Beschädigungen an den Hauptkontakten beim Schalten kommutierender Ströme zu vermeiden, sind diesen zwei Kontakteinrichtungen (13, 14, 15, 16) parallelgeschaltet, von denen die erste Kontakteinrichtung (15, 16) bei der Ein- und Ausschaltung kurz vor der zweiten Kontakteinrichtung (13, 14) schließt bzw. öffnet und die zweite Kontakteinrichtung (13, 14) bei der Endabschaltung unter Aufladung eines Energiespeichers (19) nach einem vorbestimmten Hub ihr festes Kontaktstück (14) sprunghaft in die Ausschaltstellung zurückführt.

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