

Title (en)

DEVICE AND METHOD FOR SWITCHING ELECTRICAL LOAD CIRCUITS

Title (de)

VORRICHTUNG UND VERFAHREN ZUM SCHALTEN ELEKTRISCHER LASTKREISE

Title (fr)

DISPOSITIF ET PROCÉDÉ DE COMMUTATION DE CIRCUITS DE CHARGE ÉLECTRIQUES

Publication

EP 2795652 A1 20141029 (DE)

Application

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Abstract (en)

[origin: WO2013091746A1] The invention relates to a device and to a method for switching electrical load circuits (2), comprising an electromagnetic contactor (1) having a magnetic drive that is formed from a magnet yoke (1.1) by a magnet coil (1.2) and a magnet armature (1.3) to which a contact bridge (1.4) is coupled by means of a contact retainer (1.5) as a movable contactor contact, wherein in the switched-on state the contactor (1) generates a magnetic retaining force (FH) for contacting the contact bridge (1.4) having fixed contacts (A, B), wherein the retaining force (FH) results from a magnetic field generated by the magnet coil (1.2) and the retaining force (FH) is greater than an armature opening force (FR). According to the invention, an overload contact (M) is integrated in an exciter current circuit (5) of the magnet coil (1.2) in such a way that, if the exciter current circuit (5) closed and a movement of the contact bridge (1.4) against the magnetic retaining force (FH) occurs, the magnet coil (1.2) can be short-circuited by closing the overload contact (M).

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