Title (en)

ELECTROMAGNETIC DRIVE FOR SWITCHING DEVICES

Title (de

ELEKTROMAGNETISCHER ANTRIEB FÜR SCHALTGERÄTE

Title (fr)

ENTRAINEMENT ELECTROMAGNETIQUE POUR DES COMMUTATEURS

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Application

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Abstract (en)

[origin: WO2004070760A1] The invention relates to an electromagnetic drive (1) for a switching device, especially a medium-voltage switching device, comprising a drive unit (2) consisting of a magnet body (5), an armature (8) which is at least partially moveably arranged therein, at least one drive magnet (5) producing a permanent magnetic drive field and at least one conductor (10) extending at least partially inside said magnetic drive field. A locking unit (3) is provided in order lock the armature (8) in at least one end position. In order to provide an electromagnetic drive which can be fixed in an end position in a simple manner, ensuring simple control thereof, the locking unit (3) comprises at least one soft magnetic moving part (15) which is firmly connected to the armature (8) and which bridges an air gap (18) for a permanent magnetic locking field in the end position of the armature (8), whereby the magnetic locking field is produced independently from the magnetic driving field by at least one locking magnet (16) which is associated with a pull-off coil (17) through which current can flow independently of the conductor in order to pull the armature out of its end position.

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