

Title (en)

AUTOMATIC DISCONNECTION MECHANISM FOR SWITCHES

Title (de)

AUTOMATISCHER TRENNMECHANISMUS FÜR SCHALTER

Title (fr)

MÉCANISME DE DÉCONNEXION AUTOMATIQUE POUR COMMUTATEURS

Publication

**EP 3889982 A1 20211006 (EN)**

Application

**EP 20217721 A 20201229**

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Abstract (en)

The invention discloses an automatic disconnection mechanism for switches, comprising a housing and a mechanism main shaft that penetrates the housing and is integrated with a switch knob, wherein the front end surface of the housing is provided with a first hole that is matched with the mechanism main shaft, and the rear end surface of the housing is provided with a second hole that is matched with the mechanism main shaft; the inside of the housing is provided with a shaft pin, a rotating shaft sleeve, a spring, a locking mechanism, a locking mechanism reset spring, and a trigger mechanism. The invention enables that when the circuit system of the inverter encounters special working conditions such as overload and short circuit, the purpose of remotely disconnecting the circuit of the inverter system can be realized without manual operation; the switch with an automatic disconnection mechanism will not be affected by the automatic disconnection mechanism during related electrical life, mechanical life and other tests; the invention adopts a spring to provide the rotation torque of the rotating shaft sleeve, and the mechanism main shaft spring inside the switch controls the rotation torque of the switch; when the switch is disconnected due to abnormal conditions, it needs more torque to re-screw it to the working position to realize the distinction between normal and abnormal switch disconnection.

IPC 8 full level

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Citation (search report)

- [X] CN 110942946 A 20200331 - GREEN CENTURY TECH CO LTD
- [A] CN 104916504 A 20150916 - GUIZHOU CHANGZHENG SWITCH MFG CO LTD
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Designated contracting state (EPC)

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