

Title (en)
ELECTRONIC CIRCUIT BREAKER

Title (de)
ELEKTRONISCHER SCHUTZSCHALTER

Title (fr)
COUPE-CIRCUIT ELECTRONIQUE

Publication
EP 1618637 A1 20060125 (EN)

Application
EP 04727828 A 20040416

Priority
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Abstract (en)
[origin: WO2004095667A1] There is provided a circuit breaker comprising a first switch circuit having first and second terminals. The first switch circuit comprises a first controllable signal current switch for switching between a closed, current conducting state and an open, non-conducting state in response to a first control signal to thereby allow or prevent conduction of current through the first signal current switch between a first terminal and a second terminal of the first signal current switch, and the first switch circuit further comprises a first controllable test current switch for switching between a closed, current conducting state and an open, non-conducting state in response to a first test control signal to thereby allow or prevent conduction of current through the first test current switch between a first terminal and a second terminal of the first test current switch. The first switch circuit also comprises a first test current source for providing a first test current flow through the first test current switch, and a first current sensor for measuring a current flow through the first signal current switch. Here, the first terminals of the first signal current switch and the first test current switch are electrically conductively connected to each other and to the first terminal of the first switch circuit, and the second terminals of the first signal current switch and the first test current switch are electrically conductively connected to each other and to the second terminal of the first switch circuit, whereby a first test current loop including the first signal current switch, the first current sensor, the first test current switch and the first test current source is formed. The circuit breaker may further comprise a second switch circuit having first and second terminals with the second terminal of the first switch being electrically conductively connected to the first terminal of the second switch circuit. Here the second switch circuit is preferably constructed to perform in the same way as the first switch circuit, and the second switch circuit may comprise a second controllable signal current switch, a second controllable test current switch, a second controllable test current switch, and a second current sensor.

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Citation (search report)
See references of WO 2004095667A1

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