

Title (en)
CIRCUIT BREAKER DEVICE AND METHOD

Title (de)
SCHUTZSCHALTGERÄT UND VERFAHREN

Title (fr)
PROCÉDÉ ET DISPOSITIF DISJONCTEUR

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Application
EP 21843953 A 20211221

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Abstract (en)
[origin: WO2022136421A1] The invention relates to a circuit breaker device for a low-voltage electric circuit, said circuit breaker device comprising a mechanical break contact unit (MK) which is connected in series to an electronic interrupting unit (EU). The mechanical break contact unit (MK) can be switched by breaking contacts to prevent current from flowing or by closing the contacts to allow current to flow in the low-voltage circuit. The electronic interrupting unit (EU) can be switched using semiconductor-based switching elements into a high-impedance state of the switching elements in order to prevent current from flowing or into a low-impedance state of the switching elements in order to allow current to flow in the low-voltage circuit. The amplitude of the current in the low-voltage circuit is ascertained such that instantaneous current values are provided. If the instantaneous current value is exceeded when compared with at least one current threshold value, prevention of current flowing in the low-voltage circuit is initiated. The at least one current threshold value is adapted according to the amplitude of the current in the low-voltage circuit.

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