Title (en)
CIRCUIT BREAKER AND METHOD

Title (de)
SCHUTZSCHALTGERÄT UND VERFAHREN

Title (fr)
DISJONCTEUR ET PROCÉDÉ

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Abstract (en)
[origin: WO2023052105A1] The invention relates to a circuit breaker for protecting an electric low-voltage circuit, comprising: - a housing with at least one grid-side connection and a load-side connection, and - a mechanical separating contact unit which is connected to an electronic interruption unit in series, wherein - the mechanical separating contact unit is paired with the load-side connection, and the electronic interruption unit is paired with the grid-side connection, - the level of the current in the low-voltage circuit, in particular between the grid-side phase conductor connection and the load-side phase conductor connection, is ascertained, - a process for preventing a current flow in the low-voltage circuit is initiated if current thresholds and/or current/time thresholds are exceeded, - a measurement impedance is provided between two conductors of the low-voltage circuit, said measurement impedance being connected to the connection between the mechanical separating contact unit and the electronic interruption unit (EU), and - while the contacts of the mechanical separating contact unit are open and the electronic interruption unit is switched to a high-ohmic state, the electronic interruption unit is switched to a low-ohmic state for a first duration in order to check the functionality of the circuit breaker.

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