

Title (en)  
CIRCUIT BREAKER DEVICE

Title (de)  
SCHUTZSCHALTGERÄT

Title (fr)  
DISJONCTEUR

Publication  
**EP 4374403 A1 20240529 (DE)**

Application  
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Abstract (en)  
[origin: WO2023051962A1] The invention relates to a circuit breaker for protecting an electric low-voltage circuit, comprising: - a housing with grid-side connections and at least one 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 connections, - 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, and - a series circuit consisting of a measuring impedance and a switch is provided in the circuit breaker between conductors of the low-voltage circuit such that when the switch is closed and the electronic interruption unit is switched to a low-ohmic state, a measuring current flows through the electronic interruption unit via the grid-side connections.

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