

Title (en)
CIRCUIT BREAKER DEVICE AND METHOD

Title (de)
SCHUTZSCHALTGERÄT UND VERFAHREN

Title (fr)
DISPOSITIF ET PROCÉDÉ DE DISJONCTEUR

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Application
EP 22783469 A 20220912

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Abstract (en)
[origin: WO2023052117A1] The invention relates to a circuit breaker device for protecting an electric low-voltage circuit, said circuit breaker device comprising: - a housing having at least one grid-side connection and one load-side connection, - a mechanical separating contact unit which is connected to an electronic interruption unit in series, the mechanical separating contact unit being associated with the load-side connection and the electronic interruption unit being associated with the grid-side connection, - wherein the mechanical separating contact unit can be switched by opening contacts in order to prevent a current flow or closing the contacts for a current flow in the low-voltage circuit, - wherein, as a result of semiconductor-based switch elements, the electronic interruption unit can be switched to a high-ohmic state of the switch elements in order to prevent a current flow or to a low-ohmic state of the switch elements for a current flow in the low-voltage circuit, - wherein the level of the current in the low-voltage circuit is ascertained, - wherein a process for preventing a current flow of the low-voltage circuit is initiated if current thresholds and/or current/time thresholds are exceeded, - wherein the level of the voltage across the electronic interruption unit is ascertained for a conductor.

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