

Title (en)

ELECTRONIC CUT-OFF PROTECTION DEVICE

Title (de)

ELEKTRONISCHE ABSCHALTSCHUTZVORRICHTUNG

Title (fr)

APPAREILLAGE DE PROTECTION À COUPURE ELECTRONIQUE

Publication

EP 4248533 A1 20230927 (FR)

Application

EP 21815995 A 20211118

Priority

- FR 2011837 A 20201118
- EP 2021082113 W 20211118

Abstract (en)

[origin: WO2022106526A1] The invention relates to an electronic cut-off protection device comprising: - a phase power line (L) and a neutral power line (N), - a current sensor (1), - an electronic protection trigger device (2) electrically connected to the current sensor (1) and able and designed to emit a first protection trigger control signal (D1) representing the occurrence of an overload fault, the electronic protection trigger device (2) having a response time of between 10 milliseconds and 1 second, - an electronic cut-off unit (3) comprising at least one electronic cut-off component arranged on the phase power line (L), characterised in that the electronic cut-off device comprises: - an analogue protection trigger device (4) which is configured to receive a signal representing the voltage at the terminals (30, 31) of the electronic cut-off unit (3), and which is connected to the electronic cut-off unit (3) and arranged to compare the signal representing the voltage at the terminals (30, 31) of the electronic cut-off unit (3) with a predetermined threshold value and, if the threshold value is exceeded, emit a second protection trigger control signal (D2) representing the occurrence of an EMC shockwave fault or a short-circuit fault, the analogue protection trigger device (4) having a response time of between 1 microsecond and 10 milliseconds, - in that the electronic cut-off unit (3) is able and designed to be tripped by the first protection trigger control signal (D1) and/or by the second protection trigger control signal (D2) so as to open the at least one electronic cut-off component.

IPC 8 full level

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CPC (source: EP US)

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