

Title (en)

FAULT CURRENT PROTECTION DEVICE FOR MONITORING AN ELECTRIC LOAD FOR A VEHICLE, AND METHOD FOR CARRYING OUT A SELF-TEST OF A FAULT CURRENT SENSOR

Title (de)

FEHLERSTROM-SCHUTZEINRICHTUNG ZUM ÜBERWACHEN EINES ELEKTRISCHEN VERBRAUCHERS FÜR EIN FAHRZEUG UND VERFAHREN ZUM DURCHFÜHREN EINES SELBSTTESTS EINES FEHLERSTROMSENSORS

Title (fr)

DISPOSITIF DE PROTECTION CONTRE LES COURANTS RÉSIDUELS POUR SURVEILLER UN CONSOMMATEUR ÉLECTRIQUE D'UN VEHICULE ET PROCÉDÉ DE TEST AUTOMATIQUE D'UN CAPTEUR DE COURANT RÉSIDUEL

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Application

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Priority

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Abstract (en)

[origin: WO2017060035A1] The invention relates to a fault current sensor (330) for a fault current protection device (310) for monitoring an electric load (340) for a vehicle (300). The fault current sensor (330) has an electric circuit (334) for detecting a test signal in an electric forward conductor (362, 364), which conducts from a controller (320) for controlling the electric load (340) to the electric load (340). The test signal represents a request to carry out a self-test of the fault current sensor (330). The fault current sensor (330) also has a fault current generating device (332) for generating a test fault current in an electric return conductor (372, 374, 276), which conducts away from the electric load (340), in response to the detected test signal. The fault current sensor (330) further has a measuring device for measuring a differential current between a first electric current in the electric forward conductor (362, 364) and a second electric current in the electric return conductor (372, 374, 376), and the fault current sensor (330) also has a reporting device for reporting at least one test fault current to the controller (320) via the forward conductor (362, 364) on the basis of a comparison between the measured differential current and a threshold.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2017060035A1

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