

Title (en)

POWER SUPPLY REGULATION IN LAUNDRY TREATMENT MACHINES OR DISHWASHERS

Title (de)

STROMVERSORGUNGSREGULIERUNG IN WÄSCHEBEHANDLUNGSMASCHINEN ODER GESCHIRRSPÜLERN

Title (fr)

RÉGULATION D'ALIMENTATION EN COURANT DANS DES MACHINES DE TRAITEMENT DU LINGE OU DES LAVE-VAISSELLE

Publication

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Application

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Abstract (en)

[origin: WO2016206723A1] A laundry treatment machine (100; 400) or a dishwasher is provided, comprising: - a washing and/or drying assembly configured to carry out washing and/or drying cycles; - an electronic unit (190) configured to drive the washing and/or drying assembly to carry out the washing and/or drying cycles, wherein: - the washing and/or drying assembly comprises a device (170; 177; 450) adapted to be operated by, or comprising, an electric motor; - the electronic unit (190) comprises a power supply apparatus (200) for supplying electric power to the electric motor, the power supply apparatus (200) comprising: - a TRIAC (205) comprising a first anode terminal (M1) coupled with a first terminal (TN) of an AC electric power supply and a second anode terminal (M2) coupled with a first terminal of the electric motor, the electric motor comprising a second terminal coupled with a second terminal (TL) of the AC electric power supply for receiving a supply voltage; - a controller (215) configured to generate a driving signal, and - a triggering circuit (208) for activating the TRIAC (205) by providing triggering pulse signals to a third, gate terminal (G) of the TRIAC (205) based on the driving signal received from the controller (215); - the electronic unit (190) further comprises: - a sensing unit (260) configured to sense the voltage at the second terminal (TL) of the AC electric power supply and to provide a corresponding sensed supply voltage to the controller (215), - a feedback circuit branch (230) connected between the gate terminal (G) of the TRIAC (205) and an input terminal of the controller (215) for providing a corresponding sensed gate voltage to the controller (215), wherein the controller (215) is further configured to: set the driving signal for activating the TRIAC (205) with a firing angle based on the sensed supply voltage, based on the sensed gate voltage and based on an electric motor target voltage in such a way to supply the electric motor with a corresponding operating voltage, such operating voltage being lower than or substantially equal to said supply voltage.

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