

Title (en)

DEVICE AND METHOD FOR ENERGY MANAGEMENT IN AN ELECTRICAL POINTS HEATING SYSTEM

Title (de)

VERFAHREN UND EINRICHTUNG ZUM ENERGIEMANAGEMENT EINER ELEKTRISCHEN WEICHENHEIZUNGSANLAGE

Title (fr)

PROCÉDÉ ET DISPOSITIF DE GESTION D'ÉNERGIE D'UN SYSTÈME ÉLECTRIQUE DE RÉCHAUFFAGE D'AIGUILLAGES

Publication

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Application

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Abstract (en)

[origin: WO2018050141A1] The present invention relates to a method for managing energy in an electrical points heating system, in which successive cycle times (Zt) are cyclically formed during heating operation, at least one power ratio (L) corresponding to the number of heating outgoing circuits (6) which are switched on and switched off is formed for each cycle time (Zt), the heating outgoing circuits (6) are activated in a revolving successive method of operation, as a result of which at least one active power ratio (La) is executed, in which an adaptation to at least one set of points (12) is carried out on the basis of the temporal profile of the rail temperature (X) and/or the monitoring of the control error xwn, the theoretical heating time for reaching the predefinable desired rail temperature (Xs) of the points (12) is calculated in the case of a weather-related heating requirement (Hz) for at least one set of points (12), wherein the active power ratio (La) is increased if the parameterizable heating time (tauf) is exceeded, wherein the particular rail temperature (X) of at least one set of points (12) is compared with the predefinable desired rail temperature (Xs) after and/or before each cycle time (Zt), wherein the assignment of the heating outgoing circuits (6) which are switched on and switched off is changed during evaluation of this comparison by switching off heating outgoing circuits (6) with excess heating in favour of heating outgoing circuits (6) with a heating deficit during the particular cycle time (Zt). The present invention also relates to a device for managing energy in an electrical points heating system.

IPC 8 full level

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