

Title (en)

METHOD AND DEVICE FOR THE ELECTRONIC REGULATION OF A REFRIGERATING INSTALLATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ELEKTRONISCHEN REGELUNG FÜR KÄLTEANLAGE

Title (fr)

PROCÉDÉ ET DISPOSITIF DE RÉGULATION ÉLECTRONIQUE POUR DES INSTALLATIONS FRIGORIFIQUES

Publication

**EP 2212633 A2 20100804 (DE)**

Application

**EP 08844554 A 20081031**

Priority

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Abstract (en)

[origin: WO2009056335A2] The invention relates to an electronic regulating system suitable for various refrigerating installations having a high energy-saving capacity, high efficiency and low emissions, and a compact size, said regulating system enabling the operating parameters to be visualised. The coolant flow rate in the plate-type exchanger/evaporator (5) is determined; a temperature difference is determined on the basis of the coolant inlet sensor (7) and the nominal value of the coolant; the required cooling capacity of the compressor (1) is continuously calculated from the flow rate, the temperature difference and the specific heat capacity of the coolant; the rotational speed of the compressor (1) is regulated according to the value of the cooling capacity; the refrigerating capacity of the compressor is calculated from the pressure difference between the high-pressure side and the low-pressure side (evaporation pressure) and the volumetric displacement of the compressor (1); the variation in the cooling capacity value of the compressor (1) creates pressure differences in the plate-type exchanger/evaporator (5); the evaporation temperature is measured and the overheating in the plate-type exchanger/evaporator (5) is determined on the basis thereof by means of the overheating temperature sensor (8); and the pressure differences in the plate-type exchanger/evaporator (5) are regulated via the electronic control valve (4) by means of an overheating regulating device for the plate-type exchanger/evaporator (5). The electronic regulating system is suitable for almost all refrigerating installations.

IPC 8 full level

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See references of WO 2009056335A2

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