Title (en)

METHOD AND SYSTEM FOR CONTROLLING A PLURALITY OF REFRIGERATING MACHINES

Title (de)

VERFAHREN UND SYSTEM ZUM STEUERN EINER VIELZAHL VON KÄLTEMASCHINEN

Title (fr)

PROCÉDÉ ET SYSTÈME POUR COMMANDER UNE PLURALITÉ DE MACHINES FRIGORIFIQUES

Publication

EP 2253897 A1 20101124 (EN)

Application

EP 10162899 A 20100515

Priority

- IT BO20090313 A 20090515
- IT BO20100225 A 20100413

Abstract (en)

A control system (11) for controlling a plurality of refrigerating machines (2) of an air-conditioning plant (1) having fan coil units (3) connected to the refrigerating machines (2) via an hydronic circuit (4) within which a coolant flows, the hydronic circuit (4) having a bypass duct (9) connecting a delivery duct (5) with a return duct (6), the control system (11) having: temperature sensors (12-14) to measure the temperature (TDLV) of the fluid in the delivery duct (5) upstream of the bypass duct (9), the temperature (TRET) of the fluid in the return duct (6) and the temperature (TLIN) of the fluid in the delivery duct (5) downstream of the bypass duct (9); a supervision unit (15) configured to provide an estimate of the thermal load (PLE) of the service circuit (4) as a function of the measured temperatures (TDLV, TRET, TLIN) and to determine operating states (ST i) and part load ratios (PLR i) to set for the refrigerating machines (2) such as to enable them to provide an overall cooling capacity that satisfies the estimated thermal load (PLE) with the minimum consumption of electric power.

IPC 8 full level

F25B 49/00 (2006.01); **F24F 11/00** (2006.01); **F25D 17/02** (2006.01)

CPC (source: EP US)

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Citation (search report)

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DOCDB simple family (publication)

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