

Title (en)

Method for estimating the thermal load of a circuit for a service fluid at outlet from a refrigerating machine

Title (de)

Verfahren zur Schätzung der Wärmebelastung einer Leitung für eine Betriebsflüssigkeit am Auslass einer Kühlmaschine

Title (fr)

Procédé d'estimation de la charge thermique d'un circuit pour un fluide de service à la sortie d'une machine de refroidissement

Publication

EP 2000754 B1 20151111 (EN)

Application

EP 08157531 A 20080604

Priority

IT BO20070399 A 20070604

Abstract (en)

[origin: EP2000754A2] In a refrigerating machine (3) for an air-conditioning system (1), which is provided with one or more fan coils (2) and with a hydronic circuit (15) having a delivery branch (16) for circulation of a service fluid (5) from the refrigerating machine (3) to the fan coils (2) and a return branch (17) for return of the service fluid (5) at inlet to the refrigerating machine (3), via a pair of temperature sensors (21, 22), a delivery temperature (TDLV) of the service fluid (5) at outlet from the refrigerating machine (3) and a return temperature (TRET) of the service fluid (5) at inlet to the refrigerating machine (3) are measured, and the thermal load (FL) of the hydronic circuit (15) is estimated (106, 107, 109, 111) by processing, via a Kalman filter, the measurements of the delivery temperature (TDLV) and return temperature (TRET).

IPC 8 full level

F25B 25/00 (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)

F25B 25/005 (2013.01); **F25B 49/02** (2013.01); **F25B 2600/0251** (2013.01); **F25B 2700/21172** (2013.01); **F25B 2700/21173** (2013.01)

Cited by

CN118089209A; EP3647681A1; US2015369641A1; US10309808B2; CN114971029A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2000754 A2 20081210; **EP 2000754 A3 20130327**; **EP 2000754 B1 20151111**; ES 2560514 T3 20160219; IT BO20070399 A1 20081205

DOCDB simple family (application)

EP 08157531 A 20080604; ES 08157531 T 20080604; IT BO20070399 A 20070604