

Title (en)

METHOD FOR DETERMINING THE LEVEL OF REFRIGERANT CHARGE IN A COOLING CIRCUIT FOR AN AIR-CONDITIONING SYSTEM, MODULE FOR DETECTING LEAKS, AND ASSOCIATED COMPUTER PROGRAM

Title (de)

VERFAHREN ZUR BESTIMMUNG DES KÜHLMITTELFÜLLSTANDS IN EINEM KÜHLKREISLAUF EINER KLIMAAANLAGE, MODUL ZUR ERKENNUNG VON LECKS UND ZUGEHÖRIGES COMPUTERPROGRAMM

Title (fr)

METHODE DE DETERMINATION DU NIVEAU DE CHARGE EN FLUIDE REFRIGERANT DANS UN CIRCUIT DE REFROIDISSEMENT POUR UN SYSTEME DE CLIMATISATION, MODULE DE DÉTECTION DE FUITE, ET PROGRAMME D'ORDINATEUR ASSOCIÉ

Publication

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Application

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Abstract (en)

[origin: WO2020141279A1] The invention relates to a method for determining the level of refrigerant charge in a cooling circuit (1) for an on-board air-conditioning system, in which method the total quantity of refrigerant in gaseous and liquid form contained in the various components (2, 3, 4, 5 and 10) of the air-conditioning system is calculated only on the basis of data internal to the cooling circuit. This method is implemented by a module for detecting leaks in an on-board air-conditioning system cooling circuit comprising sensors (9, 11, 12, 13 and 14) for measuring physical characteristics of the refrigerant in various parts of the circuit (1), and a controller (8) able to calculate the level of refrigerant charge contained in the various components (2, 3, 4, 5 and 10) of the air-conditioning system on the basis of data corresponding to the geometric and technical parameters of the various components of the cooling circuit, data regarding the type of refrigerant used and data regarding the measured physical characteristics of the refrigerant.

IPC 8 full level

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Cited by

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