Title (en)

Method of protecting a refrigeration plant against deposits of additives in the refrigerant circuit.

Title (de)

Verfahren zum Schützen einer Kälteanlage vor dem Niederschlag von Zusatzstoffen in dem Kältemittelkreislauf.

Title (fr)

Procédé de protection d'une installation frigorifique contre les dépÔts d'additifs dans le circuit du fluide caloporteur.

Publication

EP 0227504 A1 19870701 (FR)

Application

EP 86402443 A 19861031

Priority

FR 8516355 A 19851105

Abstract (en)

1. A method for monitoring and protecting a refrigeration plant, in particular against deposits of additives present in the refrigerant fluid, of the type formed by a heat-insulating chamber equipped with an access door and refrigerated by the evaporator of a single or double circuit for the circulation of refrigerant fluid(s), the refrigeration plant comprising a sensor of the temperature (theta 2) of the heat-insulating chamber, a sensor (45) of the opening of the access door, these sensors being connected to a unit (40) for processing the data supplied by the said sensors, the said unit being in its turn connected to means for alarm and protection (48, 49, 50), the method being characterised in that : - the temperature (theta 1) of the refrigerant circuit is sensed at regular intervals and memorised ; - this information is compared in the course of time in order to calculate the direction of drift of the temperature ; - the alarm and protection means (48, 49, 50) are actuated when the temperature drift (theta 1) of the refrigerant circuit is positive and when the temperature (theta 2) of the heat-insulating chamber is outside a prescribed range.

Abstract (fr)

Le domaine de l'invention est celui des installations frigorifiques, notamment à très basse température. Le problème posé consiste à détecter de la manière la plus précoce possible, les pannes susceptibles de se produire dans ce type d'installation, notamment en cas de figement de l'huile des compresseurs, ou de tout autre anomalie de l'installation. Cet objectif est atteint au moyen d'un système de capteurs de température ($\vartheta 1$ $\vartheta 2$), et de contacts (45) connectés à une unité de traitement commandant des moyens d'alarme et/ou de protection (48,49,50). L'invention trouve une application préférentielle pour les installations frigorifiques à circuits en cascades ou à cycles à démixion et peuvent être avantageusement associés à un dispositif de régulation de la température de l'installation.

IPC 1-7

F25B 49/00; F25B 7/00

IPC 8 full level

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CPC (source: EP)

F25B 7/00 (2013.01); **F25B 49/005** (2013.01)

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