

Title (en)

A METHOD FOR GENERATING EARLY TEMPERATURE WARNING IN A VAPOUR COMPRESSION SYSTEM

Title (de)

VERFAHREN ZUR ERZEUGUNG EINER FRÜHEN TEMPERATURWARNUNG IN EINEM DAMPFKOMPRESSSIONSSYSTEM

Title (fr)

PROCÉDÉ DE GÉNÉRATION D'AVERTISSEMENT DE TEMPÉRATURE PRÉCOCE DANS UN SYSTÈME DE COMPRESSION DE VAPEUR

Publication

EP 4227603 A1 20230816 (EN)

Application

EP 22156342 A 20220211

Priority

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Abstract (en)

A method for operating a vapour compression system (1) is disclosed. A cut-in temperature, a high temperature alarm limit and a high temperature alarm delay time are set. A maximum acceptable relative decay value is derived, based on the high temperature alarm limit and the high temperature alarm delay time. The vapour compression system (1) is operated while monitoring a temperature inside a refrigerated volume and continuously deriving a weighted mean temperature prevailing inside the refrigerated volume, during a moving time window of a predefined length. In the case that the weighted mean temperature inside the refrigerated volume exceeds the cut-in temperature, a timer is started, and a delay time is derived, based on the weighted mean temperature and the maximum acceptable relative decay value. A warning is generated when the timer reaches the derived delay time.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [A] US 2009093917 A1 20090409 - SMITH SETH [US]
- [A] US 2007157640 A1 20070712 - BOLGER MARY K [US], et al
- [A] EP 3015803 A1 20160504 - DANFOSS AS [DK]

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EP4311699A1

Designated contracting state (EPC)

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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