

Title (en)

REFRIGERANT VAPOUR QUALITY MEASUREMENT FOR OPTIMIZED EVAPORATOR CONTROL AND LIQUID DISTRIBUTION

Title (de)

KÄLTEMITTELDAMPFQUALITÄTSMESSUNG ZUR OPTIMIERTEN VERDAMPFERSTEUERUNG UND FLÜSSIGKEITSVERTEILUNG

Title (fr)

MESURE DE LA QUALITÉ DE VAPEUR DE FLUIDE FRIGORIGÈNE POUR COMMANDE D'ÉVAPORATEUR OPTIMISÉE ET DISTRIBUTION DE LIQUIDE

Publication

**EP 3821185 A4 20220406 (EN)**

Application

**EP 19833246 A 20190708**

Priority

- DK PA201870481 A 20180711
- DK 2019050223 W 20190708

Abstract (en)

[origin: DK201970446A1] The present invention relates to an evaporator control system adapted for control of one or more evaporators of a cooling or heat-pump system. The control system is adapted to perform control of refrigerant liquid flow into evaporators based on input from one or more vapour gas quality sensors placed in the evaporator outlet or in the suction pipe, which vapour gas quality sensor measures the content of liquid refrigerant in the suction gas, which system controls the inlet of refrigerant to the evaporator based on the vapour gas quality measured in the suction pipe or at the evaporator outlet. Hereby we can achieve that the quality of the suction gas is detected and as such it is possible to distinguish between dry and wet suction gas. By too wet suction gas there will always be a risk that liquid refrigerant is entering the compressor, which can destroy the compressor. In a situation where the suction gas is totally dry, the cooling system has performed a superheating of the suction gas which then reduces the effectiveness of the evaporator.

IPC 8 full level

**F25B 49/02** (2006.01); **F25B 9/00** (2006.01); **F25B 40/00** (2006.01); **F25B 41/00** (2021.01)

CPC (source: DK EP)

**F25B 5/02** (2013.01 - EP); **F25B 21/02** (2013.01 - DK); **F25B 41/30** (2021.01 - DK); **F25B 45/00** (2013.01 - DK); **F25B 49/005** (2013.01 - EP); **F25B 49/02** (2013.01 - EP); **F25B 2400/23** (2013.01 - EP); **F25B 2500/28** (2013.01 - EP); **F25B 2600/2513** (2013.01 - EP); **F25B 2700/1353** (2013.01 - EP)

Citation (search report)

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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

DOCDB simple family (publication)

DK 201970446 A1 20200213; EP 3821185 A1 20210519; EP 3821185 A4 20220406

DOCDB simple family (application)

DK PA201970446 A 20190708; EP 19833246 A 20190708