

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

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Application

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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

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