

Title (en)

VOLUME RATIO FOR A R718* COMPRESSOR

Title (de)

VOLUMENVERHÄLTNIS BEI EINEM R718*-VERDICHTER

Title (fr)

RAPPORT VOLUMIQUE POUR COMPRESSEUR R718*

Publication

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Application

EP 21701305 A 20210120

Priority

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Abstract (en)

[origin: WO2021148475A1] The invention relates to the compression of steam in the form of R718 with or without the addition of additives in the form of an aqueous solution in rotational displacement machines, in particular for refrigeration, air-conditioning, and heat pump technology. The aim of the invention is to prevent overcompression or undercompression, which impairs efficiency, as much as possible during operation by adapting the effective internal volume ratio, the so-called iV value, in the displacement machine as simply as possible. According to the invention, this is achieved in that for a rotor profile length LR, the compressor housing (1) has planar, i.e. flat, iV discs (3j) over a length LiV starting from the outlet side (1.2), having the index j for $1 \leq j \leq n$, where n is the number of said iV discs (3j), wherein $n \geq 1$, with a width bj for each iV disc (3j) and comprising planar surfaces PF preferably perpendicular to the neutral axis AN, each said iV disc (3j) being moved in a controlled manner by a respective distance si, where $0 < si \leq sj$, individually via respective movement controllers (5j) for each iV disc (3j) for the respective operating condition.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2021148475A1

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