

Title (en)
AXIAL PISTON MACHINE

Title (de)
AXIALE KOLBENMASCHINE

Title (fr)
MACHINE A PISTONS AXIAUX

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Abstract (en)
[origin: US2002038600A1] The invention relates to an axial piston motor (1), especially a compressor for the air conditioning system of a motor vehicle, comprising a housing (2) and a compressor unit (6). Said compressor unit is driven by a drive shaft (8), is arranged in the housing (2), and is provided for sucking and compressing a cooling medium. The compressor unit (6) comprises pistons (15) which move in a reciprocating motion in a cylinder block (18) and comprises a drive disc (11) which rotates with the drive shaft (8) and which drives the pistons (15). The aim of the invention is to obtain a delivery rate which is independent of rotational speed. To this end, the invention provides that the mass of the drive disc (11) is calculated such that the centrifugal forces generated when the drive disc (11) is rotating are large enough to counteract the pivoting movement of the drive disc (11) while actively regulating the same, and to influence the piston stroke and thus the delivery rate, especially to reduce or to limit the same.

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