

Title (en)

AXIAL PISTON COMPRESSOR, IN PARTICULAR CO2 COMPRESSOR FOR VEHICLE AIR-CONDITIONING SYSTEMS

Title (de)

AXIALKOLBENVERDICHTER, INSBESONDERE CO2 VERDICHTER FÜR KRAFTFAHRZEUG-KLIMAAANLAGEN

Title (fr)

COMPRESSEUR A PISTON AXIAL, NOTAMMENT COMPRESSEUR CO2 POUR SYSTEMES DE CLIMATISATION DE VEHICULES

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Application

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Abstract (en)

[origin: WO2005021967A1] The invention relates to an axial piston compressor, in particular CO2 compressor for vehicle air-conditioning systems comprising a captive C-washer, in particular a swivel ring (107) which is rotationally driven by a drive shaft (104) and adjustably inclined thereto. Said swivel ring is connected to a pivotable axially arranged and movable along the drive shaft (104) hinge bearing and applies pressure to a supporting element (109) which is pivotally arranged with the drive shaft (104) at a certain distance therefrom. Each piston (118) is provided with a hinge assembly (121, 122) to which the swivel ring (107) is slidingly connected. The axial support of the pistons (118) or a gas force strut is produced by means of a supporting arch (110) which is actively connected to the swivel ring (107), oppositely arranged with respect to the supporting element (109) and acts outside of the assembly (121, 122) disposed between the piston (118) and the swivel ring (107), a supporting surface between the supporting arch (110) and the supporting element (109) being embodied in the form of a bearing arc-shaped surface (123).

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