

Title (en)

DEVICE FOR CONSERVING POWER IN A PISTON COMPRESSOR

Title (de)

EINRICHTUNG ZUR LEISTUNGSEINSPARUNG BEI EINEM KOLBENVERDICHTER

Title (fr)

DISPOSITIF DESTINÉ À L'ÉCONOMIE DE PUISSANCE DANS UN COMPRESSEUR À PISTON

Publication

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Application

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Abstract (en)

[origin: WO2014166615A1] The invention relates to a device for conserving power in a piston compressor, in particular for generating compressed air in a motor vehicle, having a piston (100) delimiting a compression chamber (500) for generating compressed air, which, originating from the ambient environment, arrives in the compression chamber (500) for compression by way of at least one suction connection (1) formed on a cylinder head cover (21) and an intake valve array arranged on a valve plate (2). For the purpose of conserving power, a pressure-dependently acting idling device is provided for the intake valve array having a dedicated suction lamella (4), which can be rotated by actuating means between a working position overlapping at least one suction opening (3) and an idling position unblocking, at least in part, the at least one suction opening (3). The invention is characterized in that the actuating means actuate the suction lamella (4) in a coordinated manner such that in the idling position, the section lamella (4) unblocks the at least one suction opening (3) in the valve plate (2), at least partially, while simultaneously blocking adjacent pressure valve cross-sections (5), at least partially, and locking the suction connection (1) at the cylinder head cover (21) by means of a slider (7) in order to form an increased harmful space in the area of the cylinder head (600).

IPC 8 full level

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