

Title (en)

COOLANT COMPRESSOR WITH LINEAR DRIVE

Title (de)

KÄLTEMITTELVERDICHTER MIT LINEARANTRIEB

Title (fr)

COMPRESSEUR FRIGORIFIQUE À ENTRAÎNEMENT LINÉAIRE

Publication

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Application

EP 10807312 A 20101214

Priority

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Abstract (en)

[origin: WO2011079330A1] The invention relates to a coolant compressor with a hermetically sealed compressor housing, in the interior of which lies a piston cylinder unit (21) that compresses a coolant. The cylinder housing (1) of said piston cylinder unit is closed at the front end thereof by means of a cylinder head (4), said piston cylinder unit (21) having at least one piston (3). A linear drive (6) is provided, comprising at least one oscillating body (7) which is surrounded by an excitation winding (8) and which is connected to the piston (3) in order to move same along a longitudinal axis (9) of the piston in an oscillating manner. According to the invention, the piston cylinder unit (21) is equipped with at least one permanent magnet arrangement, each permanent magnet arrangement comprising at least one first permanent magnet (11) that lies on the piston (3) and at least one second permanent magnet (12) that lies on the cylinder housing (1). Both the first permanent magnet (11) and the second permanent magnet (12) face each other and are oriented in the same magnetic pole direction in order to generate a repelling effect between both permanent magnets (11, 12) to limit the path of the piston in the region of the top dead center and/or in the region of the bottom dead center.

IPC 8 full level

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