

Title (en)
CONTROL VALVE FOR VARIABLE DISPLACEMENT COMPRESSOR

Title (de)
REGELVENTIL FÜR EINEN VERDICHTER MIT VARIABLER VERDRÄNGUNG

Title (fr)
SOUPAPE DE CONTRÔLE POUR COMPRESSEUR DE DÉPLACEMENT VARIABLE

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Application
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Abstract (en)
[origin: EP2963294A1] A control valve (1) according to one embodiment includes a discharge chamber communication port (10), a crankcase communication port (12) and a suction chamber communication port (14) formed in this order from one end side of a body (5), and a solenoid (3) provided on the other side thereof. A valve element (24) autonomously operates so that a differential pressure (Pd - Ps) between a discharge pressure (Pd) of a discharge chamber (114) and a suction pressure (Ps) of a suction chamber (110) is kept at a preset differential pressure according to a value of current supplied to the solenoid (3). A valve seat (22) has a surface perpendicular to an axis line of the valve hole (18). The valve element (24) is a flat valve having a flat surface that touches and leaves the valve seat (22) and that is perpendicular to an axis line thereof. When a valve section is opened from a valve closed state while the solenoid (3) is energized, a force caused by a crank pressure (Pc) acting on the valve element (24) is larger than that when the valve section is closed.

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