

Title (en)  
CONTROL VALVE FOR VARIABLE DISPLACEMENT COMPRESSOR

Title (de)  
REGELVENTIL FÜR EINEN VERDICHTER MIT VARIABLER VERDRÄNGUNG

Title (fr)  
SOUPAPE DE COMMANDE POUR COMPRESSEUR À DÉPLACEMENT VARIABLE

Publication  
**EP 3239520 B1 20181212 (EN)**

Application  
**EP 17167043 A 20170419**

Priority  
JP 2016084535 A 20160420

Abstract (en)  
[origin: EP3239520A1] A control valve (1) includes a solenoid (4) mounted on a body (5), and a pressure sensor (8) to detect a predetermined refrigerant pressure to be referred to for power supply control of the solenoid (4). The solenoid (4) includes a solenoid body integrally mounted on the body (5) in an axial direction, an electromagnetic coil (54) held by the solenoid body and having a working space on an inner side thereof, a core (46) fixed to the solenoid body coaxially with the electromagnetic coil (54), a plunger (50) supported in the working space such that the plunger (50) is displaceable in the axial direction, and a power supply line connected to the electromagnetic coil (54) and drawn out from a side of the solenoid body opposite to the body (5). The pressure sensor (8) includes a pressure sensing part that senses the refrigerant pressure and is displaced by the sensed refrigerant pressure, and an output line to output a detection signal depending on a displacement of the pressure sensing part. The pressure sensor (8) is positioned on a side of the electromagnetic coil (54) opposite to the body (5).

IPC 8 full level  
**F04B 27/18** (2006.01)

CPC (source: EP KR)  
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**F04B 2027/1813** (2013.01 - EP); **F04B 2027/1827** (2013.01 - EP); **F04B 2027/1831** (2013.01 - EP); **F04B 2027/1854** (2013.01 - EP);  
**F04B 2205/02** (2013.01 - EP)

Cited by  
CN112982202A; WO2023183587A1

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