

Title (en)

CONTROL DEVICE FOR VARIABLE CAPACITY COMPRESSOR

Title (de)

STEUERVORRICHTUNG FÜR VERDICHTER MIT VARIABLER LEISTUNG

Title (fr)

DISPOSITIF DE COMMANDE DESTINE A UN COMPRESSEUR A DEBIT VARIABLE

Publication

EP 1586772 B1 20081001 (EN)

Application

EP 03774013 A 20031113

Priority

- JP 0314428 W 20031113
- JP 2002380395 A 20021227

Abstract (en)

[origin: EP1586772A1] A control device for a variable-capacity compressor, the discharge capacity of which decreases as the pressure in a crankcase 24 rises and increases as the pressure in the crankcase 24 becomes lower, adopts a structure that includes a supply passage 40 that allows a discharge chamber 27 and the crankcase 24 to communicate with each other and a bleed passage 41 that allows the crankcase 24 and an intake chamber 26 to communicate with each other so as to adjust the pressure in the crankcase 24 via the supply passage 40 and the bleed passage 41. The structure further includes a differential pressure regulating valve 44 that allows the crankcase 24 and the intake chamber 26 to communicate with each other when the difference between the pressure in the discharge chamber 27 and the pressure in another area (the intake chamber 26 or the crankcase 24) becomes equal to or smaller than a predetermined value. The structure, which satisfies the need for power efficiency through higher efficiency achieved in the compressor, can be adopted in a clutchless variable-capacity compressor. The structure also assures a desirable startup response in the compressor. <IMAGE>

IPC 8 full level

F04B 27/18 (2006.01)

CPC (source: EP)

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Cited by

EP2113662A1; EP3748159A4; US11644022B2; US8882474B2; US11629866B2; US8292596B2

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