

Title (en)
HEAT PUMP APPARATUS

Title (de)
WÄRMEPUMPENVORRICHTUNG

Title (fr)
APPAREIL DE POMPE A CHALEUR

Publication
EP 3217118 B1 20221005 (EN)

Application
EP 16186105 A 20160829

Priority
JP 2016042968 A 20160307

Abstract (en)
[origin: EP3217118A1] Provided is a heat pump apparatus which can reduce the discharge temperature of a compressor and improve the reliability of the compressor, even at the time of heating operation under a high heating load, or at the time of cooling operation under a condition that outdoor air temperature is high. A control section 29 has a first refrigeration circuit discharge temperature suppression mode which reduces the degree of opening of second diaphragm means 18 so that the pressure of a second refrigerant in an evaporator 4 is not more than a predetermined value. Therefore, the high pressure-side pressure of the second refrigerant in the evaporator 4 can be reduced, and the amount of heat exchange between a first refrigerant and the second refrigerant in the evaporator 4 can be reduced. Thereby, the degree of superheat of the first refrigerant at the outlet of the evaporator 4 can be reduced, and the discharge temperature of a compressor 1 can be reduced.

IPC 8 full level
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