

Title (en)
REFRIGERATION CYCLE DEVICE

Title (de)
KÄLTEKREISLAUFVORRICHTUNG

Title (fr)
DISPOSITIF À CYCLE DE RÉFRIGÉRATION

Publication
EP 4246057 A1 20230920 (EN)

Application
EP 20961605 A 20201113

Priority
JP 2020042432 W 20201113

Abstract (en)
To provide a refrigeration cycle device that has a refrigerant flow path with a structure to form a counter flow of air and refrigerant not only during cooling, but also during heating, and that allows low-pressure two-phase refrigerant to flow through a liquid pipe and can thereby reduce the amount of refrigerant needed. The refrigeration cycle device includes: an outdoor unit 1 including a compressor 5, a four-way valve 6, an outdoor heat exchanger 7, and an outdoor expansion valve 9, the four-way valve 6 being configured to switch between cooling operation and heating operation; an indoor unit 2 including an indoor heat exchanger 12 and an indoor expansion valve 14; and a gas pipe 3 and a liquid pipe 4 configured to connect the outdoor unit 1 and the indoor unit 2; and at least either one of a first bridge circuit 10 having a configuration including a plurality of flow path opening-closing units 11 to allow the refrigerant to flow through the outdoor heat exchanger 7 in the same direction both during the cooling operation and during the heating operation, and a second bridge circuit 15 having a configuration including a plurality of flow path opening-closing units 16 to allow the refrigerant to flow through the indoor heat exchanger 12 in the same direction both during the cooling operation and during the heating operation.

IPC 8 full level
F25B 13/00 (2006.01)

CPC (source: EP US)
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