

Title (en)

REFRIGERATION CYCLE DEVICE AND REFRIGERATION CYCLE CONTROL METHOD

Title (de)

KÄLTEKREISLAUFVORRICHTUNG UND KÄLTEKREISLAUFSTEUERVERFAHREN

Title (fr)

DISPOSITIF À CYCLE DE RÉFRIGÉRATION ET PROCÉDÉ DE COMMANDE D'UN CYCLE DE RÉFRIGÉRATION

Publication

**EP 2634508 A1 20130904 (EN)**

Application

**EP 11835883 A 20110308**

Priority

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- JP 2011055374 W 20110308

Abstract (en)

An excessive increase in high pressure during a high-temperature-water supply is suppressed and a predetermined hot-water-supply capacity within a usage range of a compressor is ensured in a refrigeration cycle apparatus that can perform the hot-water-supply operation of an integrated air-conditioning and hot-water-supply system. An integrated air-conditioning and hot-water-supply system 100 includes a compressor 1, a plate-type water heat exchanger 16, a hot-water-supply pressure-reducing mechanism 19, and an outdoor heat exchanger 3. Moreover, the integrated air-conditioning and hot-water-supply system 100 includes a high-pressure sensor 201 that detects a high pressure in the compressor 1, and a controller 110 that calculates a condensing temperature of the plate-type water heat exchanger 16 based on the high pressure detected by the high-pressure sensor 201. When the calculated condensing temperature is higher than or equal to a preset target condensing-temperature value, the controller 110 performs condensing-temperature control for controlling the operating frequency of the compressor 1 based on a difference between the calculated condensing temperature and the target condensing-temperature value, and performs opening-degree control for controlling the opening degree of the hot-water-supply pressure-reducing mechanism 19 concurrently with the condensing-temperature control based on a difference between a current opening degree of the hot-water-supply pressure-reducing mechanism 19 and a preset target opening-degree value.

IPC 8 full level

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CPC (source: EP US)

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**F25B 2500/07** (2013.01 - EP US); **F25B 2600/19** (2013.01 - EP); **F25B 2700/1931** (2013.01 - EP US)

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