CLAIMS

1. A container refrigeration device comprising: a refrigerant circuit (20) including a compressor (30), a condenser (31), an expansion mechanism (32), and an evaporator (33) sequentially connected together; and a reheat heat exchanger (83) configure to allow part of a refrigerant discharged from the compressor (30) to directly flow into the reheat heat exchanger (83), the device configured to cool air sucked from an inside of a container (C) by causing the sucked air to exchange heat with the refrigerant flowing through the evaporator (33), wherein

the device is further configured to perform, ~~in accordance with a dehumidification load,~~

first dehumidification control under which the air having passed through the evaporator (33) is heated by exchanging heat with the refrigerant in the reheat heat exchanger (83), and blown into the inside of the container (C), ~~and~~

second dehumidification control under which a pressure of the refrigerant discharged from the compressor (30) and flowing into the reheat heat exchanger (83) is caused to be higher than a pressure of the refrigerant discharged from the compressor (30) under the first dehumidification control, and a flow rate of the refrigerant discharged from the compressor (30) is regulated such that a temperature inside the container (C) is within a predetermined temperature range~~.~~, and

third dehumidification control under which a superheat degree α of the refrigerant in the evaporator (33) is caused to be higher than a predetermined superheat degree, and the flow rate of the refrigerant discharged from the compressor (30) is regulated such that the temperature inside the container (C) is within the predetermined temperature range, and

during the third dehumidification control, the superheat degree α is increased in a

stepwise manner such that the temperature inside the container (C) approaches a target temperature.

~~2. The container refrigeration device of claim 1, wherein~~

~~the device is configured~~

~~to further perform third dehumidification control under which a superheat degree α of the refrigerant in the evaporator (33) is caused to be higher than a predetermined superheat degree, and the flow rate of the refrigerant discharged from the compressor (30) is regulated such that the temperature inside the container (C) is within the predetermined temperature range, and~~

~~to perform the first dehumidification control, the second dehumidification control, and the third dehumidification control in accordance with the dehumidification load.~~

~~3~~2. The container refrigeration device of claim 1~~ or 2~~, wherein

a revolution speed N of the compressor (30) is variable, and

the flow rate of the refrigerant discharged from the compressor (30) is regulated by regulating the revolution speed N of the compressor (30).

~~4~~3. The container refrigeration device of claim 1~~ or 2~~, wherein

the refrigerant circuit (20) is connected to a flow regulating valve (92) configured to regulate a flow rate of the refrigerant being sucked into the compressor (30), and

the flow rate of the refrigerant discharged from the compressor (30) is regulated by opening or closing the flow regulating valve (92).