

Title (en)

AIR CONDITIONER AND METHOD FOR DETERMINING THE AMOUNT OF REFRIGERANT THEREIN

Title (de)

KLIMAANLAGE UND VERFAHREN ZUR BESTIMMUNG DER DARIN ENTHALTENEN KÄLTEMITTELMENGE

Title (fr)

CLIMATISEUR ET PROCÉDÉ POUR DÉTERMINER LA QUANTITÉ D AGENT FRIGORIGÈNE DANS CELUI-CI

Publication

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Application

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Abstract (en)

It is a problem of the present invention to provide an air conditioning apparatus that reduces refrigerant quantity adequacy determination errors while realizing high-pressure protection, high-low differential pressure securement, and production cost control. An air conditioning apparatus (1) refrigerant quantity determination method of the present invention is a refrigerant quantity determination method of determining, in an air conditioning apparatus having a refrigerant circuit (10) that includes a heat source unit (2) having a compressor (21), a heat source-side heat exchanger (23), and cooling heat source adjusting means (27), a utilization unit (4) having a utilization-side heat exchanger (41), an expansion mechanism (33), and a liquid refrigerant connection pipe (6) and a gas refrigerant connection pipe (7), with the refrigerant circuit being capable of performing at least cooling operation, the adequacy of the quantity of refrigerant in the refrigerant circuit, the refrigerant quantity determination method comprising performing, as a refrigerant quantity adequacy determination, a determination of the adequacy of the quantity of the refrigerant with which the inside of the refrigerant circuit is charged on the basis of a first degree of supercooling corrected value derived by correcting a degree of supercooling or an operating state quantity by at least one of outside air temperature, condensation temperature, and a value obtained by numericizing cooling action.

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