

Title (en)

EXPANSION VALVE CONTROL DEVICE, HEAT SOURCE MACHINE, AND EXPANSION VALVE CONTROL METHOD

Title (de)

EXPANSIONSVENTIL-STEUERVORRICHTUNG, WÄRMEQUELLENMASCHINE UND EXPANSIONSVENTIL-STEUERVERFAHREN

Title (fr)

DISPOSITIF DE COMMANDE DE DÉTENDEUR, MACHINE DE SOURCE DE CHALEUR, ET PROCÉDÉ DE COMMANDE DE DÉTENDEUR

Publication

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Application

**EP 12764195 A 20120315**

Priority

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Abstract (en)

The purpose of the invention is to set the opening degree of an expansion valve to an appropriate opening degree, irrespective of a load on a heat source machine and external conditions. An expansion valve control device (40) controls the opening degree of an expansion valve (18) of a turbo refrigerating machine comprising: a compressor for compressing a refrigerant; a condenser for condensing the compressed refrigerant with cooling water; an evaporator for evaporating the condensed refrigerant and performing heat-exchange between the refrigerant and cold water; and an expansion valve for expanding the refrigerant in the liquid phase stored in the condenser. The expansion valve control device (40) calculates an opening degree of the expansion valve (18) on the basis of the difference between a target overheating degree and a measured overheating degree of the refrigerant taken into the turbo compressor, calculates an opening degree of the expansion valve (18) on the basis of a planned CV value, which is an estimated value of the flow rate of the refrigerant caused to pass through the expansion valve (18), and calculates an expansion valve opening degree command value from the two calculated opening degrees of the expansion valve (18).

IPC 8 full level

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