

Title (en)
COOLING AND HEATING SWITCHING DEVICE FOR VARIABLE REFRIGERANT FLOW SYSTEM CAPABLE OF HEAT RECOVERY, VARIABLE REFRIGERANT FLOW SYSTEM, AND CONTROL METHOD

Title (de)
KÜHL- UND HEIZUMSCHALTVORRICHTUNG FÜR VARIABLES KÄLTEMITTELSTROMSYSTEM MIT WÄRMERÜCKGEWINNUNG, VARIABLES KÄLTEMITTELSTROMSYSTEM UND STEUERVERFAHREN

Title (fr)
DISPOSITIF DE COMMUTATION DE REFROIDISSEMENT ET DE CHAUFFAGE POUR SYSTÈME D'ÉCOULEMENT DE RÉFRIGÉRANT VARIABLE CAPABLE DE RÉCUPÉRATION DE CHALEUR, SYSTÈME D'ÉCOULEMENT DE RÉFRIGÉRANT VARIABLE ET PROCÉDÉ DE COMMANDE

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Application
EP 19861762 A 20190621

Priority
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Abstract (en)
A cooling and heating switching device for a variable refrigerant flow system capable of heat recovery, a variable refrigerant flow system, and a control method. Ends of multiple high-pressure branch pipes of the cooling and heating switching device are respectively connected to ends of multiple low-pressure branch pipes, so as to form multiple connection nodes. The multiple connection nodes are respectively connected to gas pipes of multiple indoor units. Further ends of the multiple high-pressure branch pipes are connected to a high-pressure gas pipe (3). Further ends of the multiple low-pressure branch pipes are connected to a low-pressure gas pipe (2). Ends of multiple branch liquid pipes are respectively connected to ends of multiple liquid sub-pipes, so as to form multiple connection nodes. The multiple connection nodes are respectively connected to liquid pipes of the multiple indoor units. Further ends of the multiple branch liquid pipes are connected to a main liquid pipe (1). Further ends of the multiple liquid sub-pipes are connected to a main pipe inlet of a subcooler (4). A throttling structure is provided on a connection pipe between a cooling branch pipe inlet (C) and a main pipe outlet (B). The cooling branch pipe outlet (B) is connected to the low-pressure gas pipe (2), thereby solving the issue of loud noise caused by a flowing refrigerant in an indoor unit of a variable refrigerant flow capable of heat recovery, and achieving a compact structure and low costs.

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