

Title (en)

HEAT PUMP SYSTEM AND CONTROL METHOD THEREOF

Title (de)

WÄRMEPUMPENSYSTEM UND STEUERUNGSVERFAHREN DAFÜR

Title (fr)

SYSTÈME DE POMPE À CHALEUR ET SON PROCÉDÉ DE COMMANDE

Publication

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Application

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Priority

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Abstract (en)

The present invention provides a heat pump system (100) and a control method thereof. The heat pump system (100) comprises: a compressor (110); an indoor heat exchanger (120); an outdoor heat exchanger (130) configured as an interlaced heat exchanger having at least two refrigerant flow paths (130a, 130b); a plurality of throttling elements (141, 142, 143); and a first type four-way valve (151) and a second type four-way valve (152); wherein, in a local defrosting mode, refrigerant flows sequentially from the exhaust port (110b) of the compressor (110) through at least one of the at least two refrigerant flow paths (130a, 130b) of the outdoor heat exchanger (130), the throttling element (141, 142), at least another of the at least two refrigerant flow paths (130a, 130b) of the outdoor heat exchanger (130) and the suction port (110a) of the compressor (110). According to the heat pump system (100) and the control method thereof of the present invention, pointing defrosting operations can be performed on some heat exchangers with more severe frosting in outdoor units, which improves the indoor heating comfort during defrosting.

IPC 8 full level

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