

Title (en)
HEAT PUMP SYSTEM

Title (de)
WÄRMEPUMPENSYSTEM

Title (fr)
SYSTÈME DE POMPE À CHALEUR

Publication
EP 2320163 A2 20110511 (EN)

Application
EP 09810158 A 20090820

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Abstract (en)
A heat pump system includes a base refrigeration circuit, a heat accumulator, an auxiliary heat exchanger and an outdoor heat exchanger defrosting and cooling means. In the base refrigeration circuit, a compressor, a four-way valve, an indoor heat exchanger, a cooling expansion valve, a heating expansion valve, an outdoor heat exchanger and the four-way valve are connected in a sequence by a refrigerant conduit. The four-way valve and the compressor are connected by a refrigerant suction conduit. The heat accumulator includes a bypass refrigerant conduit connected to the refrigerant conduit between the cooling and heating expansion valves. The heat accumulator has a heating heat exchanger and is injected with a heat medium. The auxiliary heat exchanger is installed in the outdoor heat exchanger and connected to the heat accumulator by a heat medium supply conduit and a heat medium return conduit. The defrosting and cooling means includes a heat exchanger and a costless heat reservoir.

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