

Title (en)
COOLING DEVICE WITH A SUCTION TUBE HEAT EXCHANGER AND METHOD FOR OPERATING A COOLING DEVICE WITH A SUCTION TUBE HEAT EXCHANGER

Title (de)
KÄLTEGERÄT MIT EINEM SAUGROHR-WÄRMETAUSCHER UND VERFAHREN ZUM BETRIEB EINES KÄLTEGERÄTS MIT EINEM SAUGROHR-WÄRMETAUSCHER

Title (fr)
DISPOSITIF DE REFROIDISSEMENT DOTÉ D'UN ÉCHANGEUR DE CHALEUR À TUBE D'ASPIRATION ET PROCÉDÉ D'ACTIONNEMENT D'UN DISPOSITIF DE REFROIDISSEMENT DOTÉ D'UN ÉCHANGEUR DE CHALEUR À TUBE D'ASPIRATION

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Application
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Abstract (en)
[origin: WO2021259630A1] The invention relates to a cooling device (10) with a coolant circuit (20, 80, 90) comprising a compressor (22), a first evaporator assembly (26) having at least one first evaporator (28) and having a high-pressure tube (48) connected upstream of the first evaporator assembly (26), a second evaporator assembly (32) connected in parallel with the first evaporator assembly (26) and having at least one second evaporator (34), a low-pressure tube (49, 49') connected downstream of the first evaporator assembly (26) and the second evaporator assembly (32), and a suction tube heat exchanger (50, 50') in which a high-pressure tube section (52, 52') of the high-pressure tube (48) and a low-pressure tube section (54, 54') of the low-pressure tube (49, 49') are heat-conductingly coupled. The suction tube heat exchanger (50, 50') has three temperature sensors in three positions from a group of positions (60, 60'; 62, 62'; 56, 56'; 58, 58') at the inlet and outlet of the low-pressure tube section (54, 54'), and at the inlet and outlet of the high-pressure tube section (52, 52'). The cooling device and the associated method allow for a ratio of the mass flow of coolant to the first evaporator assembly relative to the total mass flow of the coolant to be determined.

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