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CONDENSER

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Abstract (en)

[origin: WO2014044522A1] The invention relates to a condenser (1, 20, 40, 60) in stacked-plate design, wherein a heat exchanger block (7, 22, 42, 62) is formed by a plurality of plate elements, which form channels adjacent to each other between the plate elements when the plate elements are stacked on top of each other, wherein a first number of the channels is associated with a first flow channel and a second number of the channels is associated with a second flow channel, and a refrigerant can flow through the first flow channel and a coolant can flow through the second flow channel, wherein the first flow channel has a first region for desuperheating and condensing (34, 54, 81) the vaporous refrigerant and a second region for subcooling (35, 55, 82) the condensed refrigerant, wherein at least one section of the first flow channel is in thermal contact with at least one section of the second flow channel, and the first region has a first fluid supply line (23, 43, 63) and a first fluid discharge line (24, 44, 64) and the second region has a second fluid supply line (25, 45, 65) and a second fluid discharge line (26, 46, 66), wherein the condenser (1, 20, 40, 60) has a receiver (2, 21, 41, 61) for storing the refrigerant, and a refrigerant transfer from the first region to the second region leads through the receiver (2, 21, 41, 61), wherein the receiver (2, 21, 41, 61) is in fluid communication with the first region by means of the first fluid discharge line (24, 44, 64), which also forms the fluid inlet of the receiver (2, 21, 41, 61), and is in fluid communication with the second region by means of the second fluid supply line (25, 45, 65), which also forms the fluid outlet of the receiver (2, 21, 41, 61), wherein the receiver (2, 21, 41, 61) is arranged on an outer surface of the condenser (1, 20, 40, 60).

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