

Title (en)
FIN-PLATE HEAT EXCHANGER

Title (de)
RIPPENPLATTENWÄRMETAUSCHER

Title (fr)
ÉCHANGEUR THERMIQUE À AILETTE

Publication
EP 3598054 B1 20230920 (EN)

Application
EP 18275099 A 20180719

Priority
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Abstract (en)
[origin: EP3598054A1] A fin-plate heat exchanger is arranged to allow heat to be exchanged between a first fluid and a second fluid. The fin-plate heat exchanger (1) comprises: a core (100) with first flow paths (200) for the first fluid and second flow paths (300) for the second fluid; a plurality of separating plates (101); a plurality of fin components (103); a plurality of first enclosure bars (203, 204, 206); and a plurality of second enclosure bars (305, 306). The heat exchanger (1) further comprises a manifold (400) arranged in fluid communication with each of the first flow paths (200) of the core (100). The manifold (400) and the core (100) are formed as one integral piece, said integral piece comprising a stack of laminate members (101, 201, 301, 501, 502) and said fin components (103). The plurality of laminate members (101, 201, 301, 501, 502) comprise: first fluid enclosure structures (201) each including a first manifold section (202) and said first enclosure bars (203, 204, 206); second fluid enclosure structures (301) each including at least one second enclosure bar (305, 306), at least some of the of the second fluid enclosure structures (301) comprising a second manifold section (302). The plurality of laminate members (101, 201, 301, 501, 502) also comprise the plurality of separating plates (101), with each separating plate (101) comprising a third manifold section (102), and each separating plate (101) separating each first enclosure structure (201) from adjacent second enclosure structures (301). The first, second and third manifold sections (202, 302, 102) are shaped to form the manifold (400) when the plurality of laminate members (101, 201, 301, 501, 502) are stacked.

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