

Title (en)

MIXER AND ASSEMBLY FOR AIR-CONDITIONING A RAIL VEHICLE

Title (de)

MISCHER SOWIE ANORDNUNG ZUR KLIMATISIERUNG EINES SCHIENENFAHRZEUGS

Title (fr)

MÉLANGEUR ET SYSTÈME DE CLIMATISATION D'UN VÉHICULE FERROVIAIRE

Publication

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Application

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Abstract (en)

[origin: WO2019174848A1] The invention relates to a mixer, which forms the core part of an air-conditioning assembly of a rail vehicle, and to the corresponding air-conditioning assembly. The mixer (M11) has two inlets (E11, E12), an outlet (A11), and a central region (B11) which is arranged between the two inlets (E11, E12) and the outlet (A11). The first inlet (E11) is connected to a fresh air supply, and the second inlet (E12) is connected to a circulating air supply such that fresh air (FL) and circulating air (UL) reach the central region (B11). The circulating air (UL) is mixed with the fresh air (FL) in the central region (B11), and supply air (ZL) is thus obtained. The central region (B11) of the mixer (M11) is connected to the fresh air inlet (E11) via an opening (OF11) such that the opening (OF11) forms a transition region (UB11) between the fresh air inlet (E11) and the central region (B11). The transition region (UB11) contains a profiled section (PR11) with a wing-shaped cross-section which is designed and arranged in the transition region (UB11) such that the supplied fresh air (FL) generates negative pressure along the transition region (UB11), and the circulating air (UL) is suctioned into the central region (B11) of the mixer (M11) in a reinforced manner via the negative pressure.

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