Title (en)

VENTILATION DEVICE FOR A VENTILATION, HEATING AND/OR AIR-CONDITIONING SYSTEM

Title (de)

BELÜFTUNGSVORRICHTUNG FÜR EINE BELÜFTUNGS-, HEIZUNGS- UND/ODER KLIMAANLAGE

Title (fr)

DISPOSITIF DE VENTILATION D'UN SYSTEME DE VENTILATION, DE CHAUFFAGE ET/OU D'AIR CONDITIONNÉ

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Application

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Abstract (en)

[origin: WO2023006764A1] The present invention relates primarily to a ventilation device (1) for a ventilation, heating and/or air-conditioning system of a vehicle, comprising at least one housing (6) which comprises at least one wall (8) which contributes to defining an internal volume (10) in which at least one radial impeller (2) and a guide member (4) are received. The radial impeller (2) is configured to be rotated about an axis of rotation (R), the radial impeller (2) comprising a plurality of blades (22), each being at least defined by a first axial end (24) and by a second axial end (26), and the guide member (4) comprises a plurality of vanes (36) at least defined by a leading edge (38) and by a trailing edge (40). The radial impeller (2) and the guide member (4) are configured to force the circulation of a flow of air through the housing (6) along the axis of rotation (R) between an air inlet (14) and an air outlet (12) of the ventilation device (1). The device is characterised in that a height (H1) of the guide member (4) measured in a direction parallel to the axis of rotation (R) between a first plane (A1) passing through the leading edge (38) of the plurality of vanes (36) and a second plane (A2) passing through the trailing edge (40) of the plurality of vanes (36) is at least 50% of a dimension (H2) measured between a third plane (A3) which is perpendicular to the axis of rotation (R) and passes through at least one end of the plurality of blades (22), which end is closest to the guide member (4), and a fourth plane (A4) perpendicular to the axis of rotation (R) and passes through at least one end of the plurality of blades (22), which end is closest to the guide member (4), and a fourth plane (A4) perpendicular to the axis of rotation (R) and passes through at least one end of the plurality of blades (22), which end is closest to the guide member (4), and a fourth plane (A4) perpendicular to the axis of rotation (R) and in which the air outlet (12) lies.

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