

Title (en)
PUMP GROUP

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PUMPENGRUPPE

Title (fr)
GROUPE DE POMPES

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Abstract (en)
[origin: WO2022090829A1] The invention is a pump group (1) fluidically connectable to a cooling system for an operating group, such as, for example, an internal combustion engine, an electric motor or a battery group of a vehicle. The pump group (1) comprises an impeller (2) and a shaft (3) on which the impeller (2) is integrally mounted. The pump group (1) has at least one drive of the electric type, in fact comprising an electric motor (4) comprising a rotor (41) integrally mounted on the shaft (3) and a stator (42). Furthermore, the pump group (1) comprises a pump body (6) comprising: - a first casing (61) which houses the impeller (2) in an impeller chamber (610); - a second casing (62) in which the electric motor (4) is housed in a motor chamber (620), wherein the second casing (62) comprises an intermediate tubular wall (625) positioned between the rotor (41) and the stator (42) so that a rotor chamber (621) and a stator chamber (622) are defined in the motor chamber (620), mutually tightly separated; Specifically, the first casing (61) and the second casing (62) are separated by a first separation wall (624) comprising an impeller surface (628) facing into the impeller chamber (610) and a motor surface (629) facing into the motor chamber (620). Even more specifically, the pump group (1) comprises a thermally conductive resin that at least partially covers the motor surface (629), to cool the stator chamber (622) by conduction.

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