

Title (en)

ELECTRICAL MACHINE, PREFERABLY AN ALTERNATOR FOR MOTOR VEHICLES

Title (de)

ELEKTRISCHE MASCHINE, VORZUGSWEISE DREHSTROMGENERATOR FÜR KRAFTFAHRZEUGE

Title (fr)

MACHINE ELECTRIQUE, DE PREFERENCE, ALTERNATEUR TRIPHASE DE VEHICULES AUTOMOBILES

Publication

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Application

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Abstract (en)

[origin: WO03041243A1] The invention relates to an electrical machine, preferably an alternator (10) for motor vehicles, comprising a rectifier assembly (11a) that is fixed to an end shield (23) of the machine. Said rectifier assembly is cooled by a fan (27) that operates in the end shield (23), the diodes being positioned on a negative connecting plate (15) and a positive connecting plate (17) of the rectifier assembly (11). The aim of the invention is to evacuate the dissipated heat from the rectifier assembly (11a) in an advantageous manner. To achieve this, the rectifier assembly is located in an opening in the front face (32) of the end shield (23) and is connected in an electrically and thermally conductive manner by one of its two connecting plates (15 and 17) to a cooling body (33), which is connected to the exterior of the end shield (23) and covers the opening (32). The cooling air that is thus taken in by the fan (27) first flows from the exterior across the cooling body (33) in a radial manner towards the interior, entering the machine in the vicinity of the shaft through orifices (30) in the end shield (23) and from here, having reached the fan (27), subsequently flows past the other connecting plate (15 and 17) in a radial manner towards the exterior.

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