

Title (en)

ELECTRIC MOTOR COMPRISING A WIRING UNIT AND A STATOR, AND A METHOD FOR PRODUCING SUCH AN ELECTRIC MOTOR

Title (de)

ELEKTROMOTOR MIT EINER VERSCHALTUNGSEINHEIT UND EINEM STATOR SOWIE VERFAHREN ZUR HERSTELLUNG EINES SOLCHEN ELEKTROMOTORS

Title (fr)

MOTEUR ÉLECTRIQUE COMPRENANT UNE UNITÉ DE CÂBLAGE ET UN STATOR, ET PROCÉDÉ DE FABRICATION DUDIT MOTEUR ÉLECTRIQUE

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Application

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Abstract (en)

[origin: WO2022069069A1] The invention relates to an electric motor comprising a stator and a wiring unit, and a method for producing the electric motor. By means of the wiring unit, it is possible to interconnect, in particular in star connection, individual phases of a multi-phase electrical winding of the stator, and to connect the individual phases to phase connections in order to supply power. The wiring unit has a support ring surrounding a ring axis, in particular concentrically, and has a plurality of, in particular exactly four or at least four, mutually spaced metal conductor elements which are, in particular in portions, substantially in a circular arc shape. The support ring encloses the conductor elements at least partially, in particular encloses at least portions of the conductor element cross-section completely and in an integrally bonded manner. Each conductor element has at least one contacting portion for electrically contacting a portion of the electrical winding. Each conductor element, in particular relative to the ring axis, covers a circumferential angular range, the circumferential angular range covered by each conductor element overlapping with at least one circumferential angular range covered by another conductor element, in particular with the covered circumferential angular ranges of all the other conductor elements, and in a direction parallel to the ring axis, i.e. in the axial direction, each conductor element overlapping at most with one further conductor element, in particular in terms of circumferential angle and/or radial portion.

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