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## (54) PHASE RING SUPPORT STRUCTURE AND ROTATING ELECTRIC MACHINE

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### (57) ABSTRACT

A metal support structural body is provided on the radially outer side of a phase ring for connecting a rotating electric machine armature winding at a stator end. An insulator ensuring an insulation distance to the ground is interposed between the phase ring and the metal support structural body. Thus, long-term reliability improves as compared to a conventional insulation-to-ground structure. Since the insulation distance to the ground is ensured by the insulator, the phase ring and the metal support structural body are configured with an insulation thickness smaller than needed for insulation to the ground, thereby improving cooling performance for the phase ring and the metal support structural body. Occurrence of induced current in the metal support structural body is suppressed, thus allowing application of a simple fastening structure such as metal bolts to a stator frame.

