

ABSTRACT

[ABSTRACT]

[PROBLEM] The present invention is made to solve the above-described problem, and makes it an object to provide a permanent magnet reluctance type rotating electric machine which can improve magnet torque and reluctance torque, and can realize high speed and miniaturization.

[SOLVING MEANS] A permanent magnet reluctance type rotating electric machine including a stator 1 having an armature winding 3 in a stator core 7, and a rotor 5 which is located at an inner circumferential side of the stator 1, and is provided with permanent magnets 4 (4a, 4b, 4c) in a rotor core 8, wherein the permanent magnets 4 (4a, 4b, 4c) are arranged in a multilayer, and are arranged at positions so that end portions of the respective permanent magnets 4 (4a, 4b, 4c) do not almost overlap with each other.