CLAIMS:

1. A drive assembly with a motor controller at a rear end in an axial direction of the drive assembly, comprising a housing, the motor controller, a bearing, a rotor, and a stator, wherein

the housing is cylindrical, and is provided therein with a chamber along the axial direction; an inner wall of the housing is provided with a partition wall along a radial direction of the housing, the partition wall divides the chamber into a motor mounting chamber and a controller mounting chamber; the bearing is provided on the partition wall; the rotor is provided in the motor mounting chamber, and is connected with the bearing; the stator is provided in the motor mounting chamber, and is located outside the rotor; and the motor controller is provided in the controller mounting chamber;

the drive assembly further comprises three single-phase terminals, which pass through the partition wall and are connected between the motor controller and the stator;

projection planes of the three single-phase terminals perpendicular to the axial direction are located between a projection plane of the bearing perpendicular to the axial direction and a projection plane of the stator perpendicular to the axial direction; and

the drive assembly comprises a three-phase terminal block; the three-phase terminal block comprises a terminal block body and the three single-phase terminals; the terminal block body is cylindrical; the three single-phase terminals each are arranged along an axial direction of the terminal block body, and are arranged at an outer circumference of the terminal block body; the single-phase terminals each are provided with a first terminal portion and a second terminal portion, which are respectively located on two ends of the terminal block body along an axial direction thereof; and the first terminal portions are connected with the stator, and the second terminal portions are connected with the motor controller.

2. The drive assembly according to claim 1, wherein

the partition wall is provided with a mounting hole and a mounting ring wall extending toward the motor mounting chamber at an outer circumference of the mounting hole; the bearing is provided inside the mounting ring wall; and the three single-phase terminals are located at an outer circumference of the mounting ring wall.

3. The drive assembly according to claim 2, wherein

the three single-phase terminals are located at an outer circumferential wall of the mounting ring wall; and the outer circumferential wall of the mounting ring wall is provided with a first collision avoidance groove at each of the three single-phase terminals.

4. The drive assembly according to claim 1, wherein

the partition wall is provided with three connecting holes and three inserting holes that penetrate through the partition wall; the three connecting holes and the three fixing holes are distributed alternately and evenly at intervals along an outer circumference of the bearing; and one single-phase terminal passes through one connecting hole.

5. The drive assembly according to claim 4, wherein

a first end wall of the partition wall facing the motor mounting chamber is provided with second collision avoidance grooves, which extends from the respective connecting hole to the stator.

6. The drive assembly according to claim 2, wherein

the drive assembly further comprises a chamber cover, which covers the mounting hole.

7. The drive assembly according to claim 6, wherein

fixing holes are provided on a second end wall of the partition wall facing the controller mounting chamber, and the chamber cover is located at a second end wall side, and is connected with the fixing holes.

8. The drive assembly according to claim 1, wherein

an outer wall of the housing is provided with a liquid cooling channel; the liquid cooling channel comprises a motor cooling groove and a controller cooling groove that communicate with each other; and the motor cooling groove is located on an outer wall of the motor mounting chamber, and the controller cooling groove is located on an outer wall of the controller mounting chamber; and

the motor controller comprises a circuit board assembly and multiple power transistors; the multiple power transistors are provided at an outer circumference of the circuit board assembly, and are electrically connected with the circuit board assembly; and packages of the multiple power transistors are connected with an inner wall of the controller mounting chamber.

9. A vehicle, comprising the drive assembly according to any one of claims 1 to 8.