

Development of AC Servo Motors "P6" and "P8"

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1. Introduction

In recent years, remarkable progress has been made in making AC servo motors smaller and lighter. This progress is due largely to improvements in the performance of the magnets that generate the magnetic field, advances in the design technology of magnetic circuitry and improved production engineering. As the motors are made smaller and lighter, the equipment in which motors are installed can be designed more flexibly, thus helping to make the equipment smaller and to expand the range of applications of the equipment. We have developed the "P" series AC servo motor in response to the need for a compact, light-weight servo motor. We report in this paper on the models "P6" and "P8" AC servo motors, which we have recently developed as mid-capacity (0.5 kW to 11 kW) AC servo motors for general-purpose use in a wide range of applications such as industrial robots and general industrial applications.

2. Features and Specifications of "P6" and "P8"

3. Miniaturization Technology of Motors

- 3.1 Stator Structure
- 3.2 Rotor Structure
- 3.3 Frame Shape
- 3.4 Waterproofing

4. Conclusion

