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## Motion-Sensorless FEM-Informed

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### Abstract

This paper proposes a speed observer for BLDC-PM motor sensorless control based on the line linkage occurs right position and speed to-line PM flux with the fundamental control, is used, allows low-speed

parameter identification. Digital simulations and experimental results are shown, demonstrating the reliability of the FEM-assisted position and speed observer for BLDC-PM motor sensorless control operation.

### Keywords

**Author Keywords:** Brushless dc (BLDC) motor; observers; sensorless control; starting method; variable-speed drives

**KeyWords Plus:** BRUSHLESS DC MOTORS; STARTING METHOD; BACK EMF; DRIVES

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