

عنوان مقاله:

Position Sensor Error Analysis for PMA-SynR Motor Drive system

محل انتشار:

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خلاصه مقاله:

synchronous reluctance motors are among the most popular electric motors today, due to their relatively good features, but the important thing to consider about these motors is to calculate and estimate their rotor position, and failure to do so may cause damage in their control system. Therefore, many methods such as sensorless, hall-effect, GMR, encoder, etc. were used to compute and estimate the rotor position, each of which has its own advantages and disadvantages. Besides, in many articles, the effect of positional error and the effect of this error on the control system and the method of dealing with this chronic problem are not analytically stated, and only this phenomenon has been studied in operation. Whereas, in this paper, firstly, a variety of conventional methods available for estimating and calculation the rotor position of synchronous reluctance motors briefly is introduced, and then investigated the effect of the error on the control system and at the end, the results of simulation and mathematical analyzes the impact of this .error on the control system is presented

کلمات کلیدی:

synchronous reluctance motors, rotor position error, analytical analysis

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