

214. SPEED CONTROL OF FOUR QUADRANT OPERATION OF BLDC MOTOR USING CONTROLLERS

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The main motive of this paper is to maintain a good power factor and to regulate the constant speed control. In order to improve the power factor (PF), controllers like PI, PID and Fuzzy are used. Cuk DC-DC converter maintains the DC link voltage to a set reference value. Switch of the Cuk converter is to be operated at high switching frequency for effective control. The performance of the proposed system is simulated in MATLAB/Simulink is developed to validate the performance over a wide range of speed control with good power factor.

Index Terms- PF, CUK Converter, PI, PID, FUZZY.

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