Elevator Drives
Present Trends and Perspectives

Branko Blanuša, Bojan Knežević, Bojan Erceg, Đorđe Lekić, Predrag Mršić
University of Banja Luka, Banja Luka, Bosnia and Herzegovina
branko.blanusa@etf.unibl.org

Abstract— In this paper some of the problems related to electrical drives in modern elevators are presented. These are the modeling of jerk and the definition of the motion trajectory, power savings, efficiency optimization and possibilities for energy storage in generator mode, and application of suitable converters and control techniques for the implementation in elevator drives. Suggested solutions are tested through computer simulations and experimentally on the prototype of elevator drive.

Keywords— electric elevator; jerk control; motion trajectory, efficiency optimization; energy storage; elevator drive converter

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