Performance of A Programmable Logic Controller Based Electrical Machine Trainer Kit

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ABSTRACT

Abstract. The objectives of this study were: (1) to develop Programmable Logic Controller (PLC) Based Electrical Machine Trainer Kit; and (2) to examine the performance of the developed trainer kit to be applied in the Electrical Engineering Practicesin the Department of Electrical Engineering Education at Faculty of Engineering, UniversitasNegeri Yogyakarta. The method used in this study was research and development by referring to the ADDIE model from Branch. The results of the study showed: (1) the size of the developed PLC-based Electrical Machine trainer kit for the bottom side and the back side were 44.1 cm x 100 cm and 92.7 cm x 100 cm respectively. It had a front tilt angle of 80 °, a panel board made of acrylic, a body made of aluminum plate, and an installed PLC with the brand name of Zelio SR2.201FU; and (2) the PLC-based Electrical Machine trainer kit shows satisfactory performance, indicated by all of job descriptions can function properly as planned.

Kata Kunci: trainer kit, electrical machine, and PLC.