

State of Libya - Ministry of Education

Al Asmarya Islamic University

Faculty of Engineering

Control of a Four-Level Electric Elevator Using PLC

This graduation project is submitted to Al Asmarya Islamic University in partial fulfillment of requirements of the award of bachelor's degree in Electrical and Computer Engineering Control Engineering

Preparation:

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CS Scanned with CamScanner

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Abstract:

In this project, design and implementation of electric elevator machine. This project has been selected to learn more about electromechanical machines and industrial automation which are very important as they facilitate daily and industrial operations with minimal effort and time. The system chosen is the electric elevator machine that consists of an overall structure which is made in-house using the available industrial equipment. It contains the programmed logic controller type Step7-300, which is the brain of the system, as well as some other electrical parts such as sensors and electric motors that have been programmed by industrial automation. The system contains two basic stages, which is to request the car from outside the elevator and from the required floor number from inside the elevator car. Sensors are used to send a signal to the programmed logic controller to stop the car in the required place, while the main motor is responsible for moving the car, as for the sub-motor, it is responsible for opening and closing the elevator doors.