FINAL YEAR PROJECT REPORT DIPLOMA IN ELECTRICAL ENGINEERING (INSTRUMENTATION)

SCHOOL OF ENGINEERING MARA INSTITUTE OF TECHNOLOGY SHAH ALAM, SELANGOR

CONVEYOR BELT CONTROL BY PROGRAMMABLE LOGIC CONTROLLER

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ABSTRACT

This project is about the application of Programmable Logic Controller (PLC) in controlling the sequence of a conveyor system. In order to design a good system, a study of the characteristic of the PLC and the equipments used is required. The ladder diagram and ladder logic have been developed. The ladder logic then was installed into the PLC to control the sequence of the conveyor system model.

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Introduction

The main objective of this project is to study in more detail about programmable Logic Controller (PLC). The areas of study are the hardware parts of PLC, the programming of PLC, the Ladder diagram and Ladder Logic of the process and interfacing PLC to the hardware.

The conveyor system operates in a sequencing manner. Operations follows the pre-set sequence which has been developed in order to carry out a certain process. A typical conveyor system had been chosen because the function of the instruments used in the conveyor controller are the same as in the PLC. FLC provides the timer, contactor, relay and others. The difference is that the conveyor controller uses the electromechanical connection but the PLC used the software programme.

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