PROJECT REPORT

"DESIGN OF A CONTROL SCHEME USING A PROGRAMMABLE CONTROLLER"

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PREFACE

TITLE: "DESIGN OF A CONTROL SCHEME USING A PROGRAMMABLE CONTROLLER "

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This report is about Programmable Controllers in general and a control scheme is investigated as one of their applications.

It examines the history, the nature, characteristics and capabilities of the Programmable Logic Controllers (PLCs). A detailled description of the above is made, having as a reference the PLCs, SLC 500 by Allen – Bradley and the PLC of the H.T.I., TSX 47 by Telemechanique.

It also deals with the programming capabilities of the Ladder Diagram programming language. In addition, it covers an application program for a particular control scheme.

The main purpose of this report is to provide a basic, clear, and outlined idea on PLCs and their applications. Moreover it intends to get the reader familiar with such applications by dealing with a certain design of a control scheme with a detailed explanation of the program and an overall costing of the system.

The unique feature of this report is that it does not depend on the reader's background knowledge on PLCs; emphasis is given to the simplicity of the language used. I tried to write generic and short topics with simple and clear statements.

I sincerely hope, that it will be both interesting to read and useful.

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