

HIGHER TECHNICAL INSTITUTE

**ELECTRICAL ENGINEERING
DEPARTMENT**

DIPLOMA PROJECT

**CONTROL OF CENTRAL HEATING CONTROLL
SCHEME WITH SMS
USING
PROGRAMMABLE LOGIC CONTROLLER**

E.1399

**BY
ALEXANDROU MICHALAKIS**

JUNE 2008

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PROGRAMMABLE LOGIC CONTROLLER**

**BY
ALEXANDROU MICHALAKIS**

**In partial fulfillment of the requirements for the award
of the diploma of the Technician Engineer in Electrical
Engineering Department of the
Higher Technical Institute
Nicosia – Cyprus**

Project supervisor: Mr. J. Demetriou

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SUMMARY

This project investigates and discusses mainly the Programmable Logic Controllers (PLC), and how can used the Ladder programming language for develop the program for the control of central heating with SMS using Programmable Logic Controllers (PLC).

The application program is based on the UNITRONIC M90-19-B1A controller. References are taken from a variety of books on Programmable Logic Controllers, Internet and other manual and data sheets.

Introduction

This project intends to discuss mainly the Programmable Logic Controller, explain the internal and external operation and show their applications in the modern industry. The PLC is a need for our industry, because of the many advantages that provides. The PLC gives the power and flexibility for a complete control solution with its advanced programming tools and expanded product capabilities.

This project shows, how can control a central heating controller scheme with SMS using the Programmable Logic Controllers, providing the ladder program. It gives all the steps followed, for the preparation of the program, as usually done by the technician in industry.

It also discusses the characteristics and capabilities of programmable logic controller in general. For the project it uses pictures and diagrams where possible, for better view by the reader and it is divided into six chapters. The languages and the technical clauses are very simple for understand.

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