

HIGHER TECHNICAL INSTITUTE

NICOSIA - CYPRUS

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DESIGN OF THE ELECTRICAL
SERVICES OF A FACTORY

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E.993

JUNE 1995

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**DESIGN
OF THE ELECTRICAL SERVICES
OF A FACTORY**

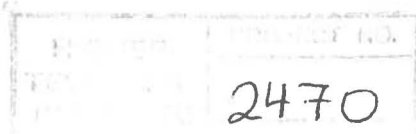
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in partial fulfilment of the requirements
for the diploma**

**TECHNICIAN ENGINEER
IN
ELECTRICAL ENGINEERING**

**Project supervisor:
Mr E. Michael
Lectures of the Electrical
Engineering Requirement H.T.I**

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ABSTRACT

This project deals with the design of the electrical installation of a factory.

The main objectives are:

1. To design the complete electrical services for a specified factory which will include the following.
 - (a) Fire and Burglar Alarm systems
 - (b) Telephone installation and internal communication
 - (c) Power Factor correction
2. To study the illumination engineering work involved
3. To provide the necessary diagrams schedule of material and costing including labour

Terms conditions and Assumption

1. Supply voltage: 415 V rms 50Hz, TT earthing system.
2. The efficiency and power factor of high power circuits where not gives and considered to be 0.8.
3. The cables used are:
 - (a) Single core PVC insulated cables non - armoured.
 - (b) Multi - core armoured PVC - insulated cables.
5. The external earth fault loop impedance is equal to 0.5Ω.