

FACTORY ELECTRICAL SUPPLY FRAMEWORK

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ABSTRACT

Fundamentally, the issue dealt with in this paper is the effective electrical connection that is necessary for the utilization of electricity. Utilization could range from a simple domestic installation (example: a house) to highly complex ones such as in the case of a power supply station. The principles in any case are basically the same i.e. to provide for continuous flow of electricity to all required apparatus while ensuring that neither the users nor the apparatus itself is affected adversely. In the early days of electrical installations, fires used to be so common that the earliest association of experts in the power supply industry were mostly involved with the methods and means whereby maximum safety could be assured to both human and machine while ensuring that the supply remained active for the longest period of time. The rarity of such fire-accidents today is testimony to the effectiveness of modern electrical supply protection schemes and devices.

It is on the study of these devices and to take on a practical case for the application of knowledge gained from the research thereof that this project mostly concerns itself with. A theoretical study of the characteristics of safety devices used in present-day installations and to analyze the process of designing an electrical framework is the essence of this paper. It must be emphasized that ignorance of even the most basic elements of the industry, more than any other factor, was the cause for undertaking a research before practically designing right at the start.

To summarize, what will be seen in the following paper are the results of the research work conducted, analysis of the designing process and a practical case where a design is actuated for a real-life factory.