

Power and Electrical Distribution's System Analyzer Platform

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ABSTRACT

Abstract

This project is to design a platform using Microsoft Excel. A Microsoft Excel Macro is used to perform calculation of power and voltage regulation for a building and for cable size selected.

This software is to ease engineers analyzing the healthiness of an electrical distribution system. Users are able to customize the parameter using graphical user interface (GUI) to obtain the final result.

This report study the cable size rating based on reference from IEE 16th Edition Wiring Regulation and understand how the types of installation affect the cable temperature and losses of electrical system. It enables us to select appropriate cable size and circuit breaker to the desired design current of a power distribution system.

Malaysia Standard, TNB ESAH v3 is used as a basis to explain the difference between a single phase and three phase voltage regulation.