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VISVESVARAYA TECHNOLOGICAL UNIVERSITY,BELAGAVI-590 018

A MICRO PROJECT REPORT ON

"Overvoltage And Undervoltage Protection System"

Submitted By,

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CERTIFICATE

This is to certify that the Micro-Project entitled **"Overvoltage And Undervoltage Protection System"** has been Successfully Completed by

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The bonafide students of **Department of Basic Sciences, Alva's Institute of Engineering and Technology,** affiliated to VISVESVARAYA **TECHNOLOGICAL UNIVERSITY, BELAGAVI,** during the academic year 2020–2021. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report. The report has been approved as it satisfies the academic requirements in respect of Micro-Project work prescribed for Bachelor of Engineering.

Mr. Sandeep Kumar
Mini Project Guide

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ABSTRACT

The goal of this project is to create a system that monitors voltage and provides a low and high voltage tripping mechanism based on breakpoints to protect the load. The AC mains supply fluctuates in a variety of industrial and home systems. There's a danger that electrical gadgets that are sensitive to these changes will be harmed. As a result, a tripping system is required to prevent any damage to these loads. Our system is made up of a tripping mechanism that monitors the input voltage and trips when it reaches certain thresholds. We're using a quad comparator IC with two additional comparators as window comparators. As soon as the input voltage falls outside the window range, the system generates an error. This trigger then activates a relay, which turns off the load to prevent it from being damaged. A lamp is used as a load in this demonstration. In addition, the system is set up with an alarm that sounds when tripping occurs.