

PVG's College of Engineering & Technology and GKPIOM, Pune

Department of E&TC Mini Project Competition 2023

CIRCUIT SHIELD

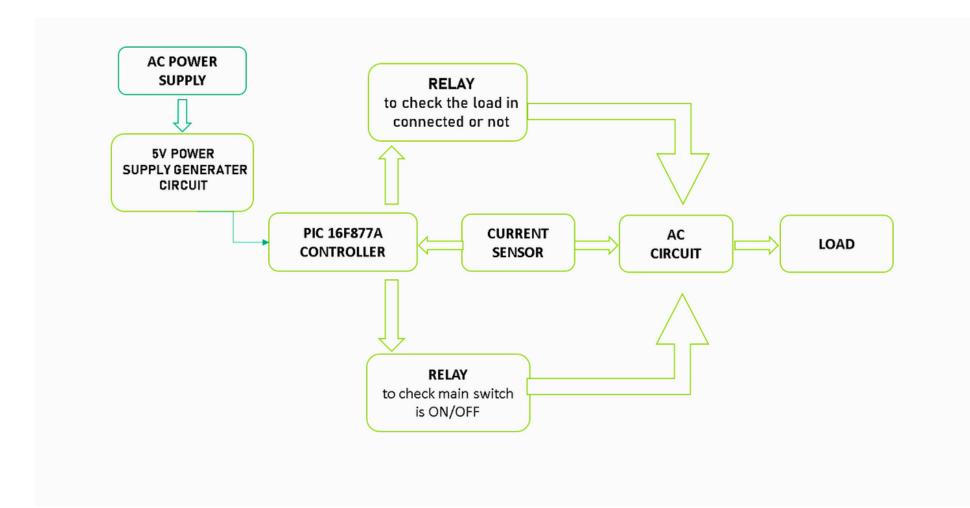
Aim: To design a damage control and safety measurement live wire circuit using automatic switch

Objective:

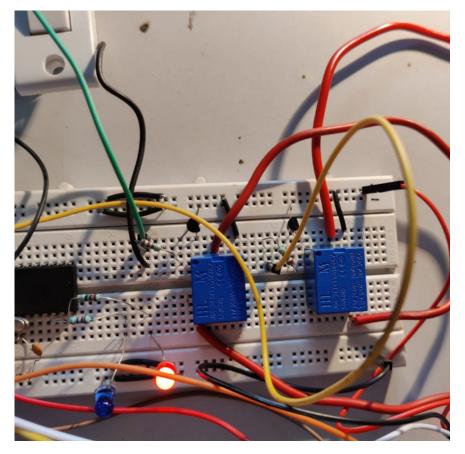
- 1] To focused on household loads and their handling.
- 2] To give the **safety** measure for **human being**.
- 3] To detect **faulty load**.
- 4] To avoid shock from moisture around the switch area.

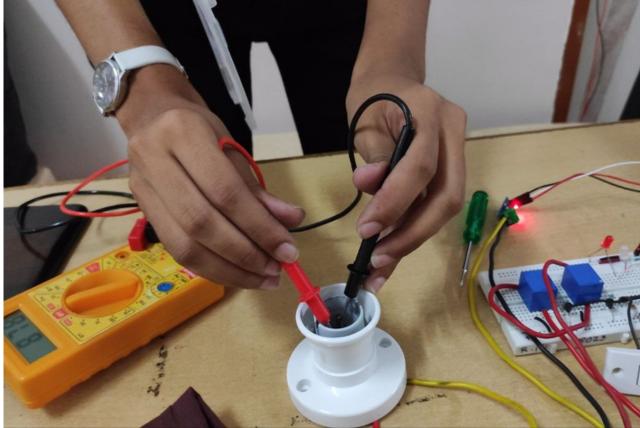
Methodology:-

uThe **automatic switch** will be designed to detect the absence of a load in the circuit and instantly reduce the voltage at the terminals, thereby reducing the risk of injury or damage.



Results:





Application:

1)In households, the module can be used in appliances such as electric bulbs, irons, and extension boards, improving their safety and reliability.

3) The module can also be used to diagnose problems in systems that are not functioning properly, such as street lamp posts.

Conclusion:

- •This project aims to address a crucial issue of electrical safety by cutting down the high voltage at the terminals when the load is not connected.
- •The proposed solution is an automatic switch as a relay placed in the circuit, has the ability to make working with household AC power supplies safer.

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