Electrical Consumer Panel with Automated Leakage Current Detector System

ABSTRACT

In this research work, automated leakage current detector for electrical consumer panel is carried out. Residual Current Device (RCD) is protection equipment that install in the panel for every building where power supply is required. RCD detects leakage current by monitoring the current in both phase and neutral. Mechanical switch has been developed to trip RCD when there are any differences in between these two current. As RCD tripped, power supply cutoff immediately, the developed automated system can detect the Miniature Circuit Breaker (MCB) consists of leakage current. The system will generate instructions to user to open the particular MCB(s) which consist of leakage current and close the RCD to gain back power supply