

Earth Voltage Monitoring and Alert System for Indian ATM System

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Abstract:

The environment changes like increase in moisture level, humidity, fall in temperature and everyday changes in the voltage levels leads to the generation of fault current. This high value of fault current has to be monitored continuously. The need for a monitoring and alert system is to protect the electronic device. A proper grounding for equipment is must if not it leads to the induction of fault current. This fault current has a larger probability in providing a proper zero resistance path this leakage current. also provides safety to both humans as well as machines. This device is specifically designed for ATM system across the country, is capable of measuring the earth-neutral voltage up to 10 volts. When there occurs any isolation in the voltage levels due to the above mentioned changes, this microcontroller based alert system sends information to the authorised person through SMS and E- MAIL.As this device is not connected with the main system any surges in the ATM will not affect this device and has the ability to disconnect the device from fault in emergency cases.

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