

ISOLATION PANEL

(LEAKAGE CURRENT PROTECTION)

WHAT IS ELECTRICAL HAZARDS

The major electrical accidents are due to faulty equipment and wiring. Electrical accidents fall into these categories:

- Fires
- Burns
- Shock

Electrical shock is produced by current, not voltage. It is not the amount of voltage a person is exposed to, but rather the amount of current transmitted through the person's body that determines the intensity of a shock. The human body acts as a large resistor to current flow. The threshold of perception for an average adult is 1 milliamper (mA). This amount of current will produce a slight tingling feeling through the fingertips. Between 10 and 20 mA, the person experiences muscle contractions and finds it more difficult to release his or her hand from an electrode. An externally applied current of 50 mA causes pain, possibly fainting and exhaustion.

LEAKAGE CURRENT

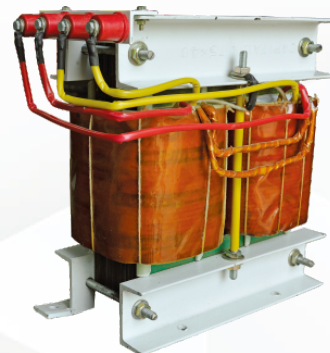
Electric equipment operating in the patient vicinity, even though operating perfectly, may still be hazardous to the patient. This is because every piece of electrical equipment produces a leakage current.

There are no perfect electrical systems or infallible equipment to eliminate hospital electrical accidents.

However careful planning on the part of the consulting engineer, architect, contractor and hospital personnel can reduce electrical hazards to nearly zero

DAMAGES DUE TO ELECTRICAL LEAKAGES

- HEART FAILURE
- SKIN TISSUES RUPTURING/BURNING
- HARMING MASTER CELLS
- HARMING BONE MARROW SYSTEM
- BURNING DUE TO COTERIE
- MEDICAL EQUIPMENT DAMAGING
- ELECTROCUTION



ISOLATION TRANSFORMER



TECHNICAL SPECIFICATION :

| MODEL | EPIP1010 | EPIP1020 | EPIP1030 |
|----------------------------|--|--|----------|
| Make | E-POWER | E-POWER | |
| Capacity | 10/20/30 KVA | 10/20/30 KVA | |
| Input Voltage | 230 Volts (Phase to Neutral) | 400 Volts (Phase to Phase) | |
| Output Voltage | 230 Volts (Phase to Neutral) | 400 Volts (Phase to Phase) | |
| Ratio | 1:1 | 1:1 | |
| Frequency | 50 Hz | 50Hz | |
| Wave Form Distortion | Nil | Nil | |
| Response Time | Instantaneous (mili sec) | Instantaneous (mili sec) | |
| Type | Indoor Type | Indoor Type | |
| Flash Strength | 2.5 KV | 2.5 KV | |
| Inter winding Capacitive | 0.05 PF | 0.05 PF | |
| Insulation | Greater than 500 M Ohms | Greater than 500 M Ohms | |
| Leakage Current | Less Than 20 μ A | Less Than 20 μ A | |
| CMNRR | 100 db or more | 100 db or more | |
| Duty Cycle | 100% Continuous 24 Hrs. | 100% Continuous 24 Hrs. | |
| Applicable Standard | IS 2026 | IS 2026 | |
| Operating Temp. | 0°C - 45°C Above Ambient. | 0°C - 45°C Above Ambient. | |
| Stamping Used (CORE) | Imported Low Losses CRGO Laminations - M4 Grade. | Imported Low Losses CRGO Laminations - M4 Grade. | |
| Earth Leakage Displaying | 0-30 mA Index | 0-30 mA Index | |
| Mounting | Floor/Wall Mounting | | |
| Interface | Wi-Fi/RS232-485 Connectivity | Wi-Fi/RS232-485 Connectivity | |
| Indicator | Power-On, MCB Trip, MCB On | Power-on, MCB Trip, MCB on | |
| Temperature | 50 ⁰ Tested on Room Temperature | 50 ⁰ Tested on Room Temperature | |
| Earth Fault Indicator | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| Earthing Controller | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| Surge Suppress | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| Output connecting MCCB/MCB | Provided as per requirement | Provided as per requirement | |

*Specifications are subject to change without prior notice.

