

## EARTH LEAKAGE RELAYS

Earth leakage occurs due to reasons like normal wear and tear of equipment or moisture around terminals which can result in partial breakdown of insulation between supply and earth. Earth Leakage currents are dangerous; it can lead to cable heat generation and insulation failure.

### 1. What is the difference between Earth leakage Relay and Earth Fault Relay?

Earth fault is the current flowing to earth due to insulation fault and earth leakage current is the current flowing from live parts of the installation to earth in the absence of an insulation fault. (IEC60947-2, Annex-B)

Thus, for an earth leakage relay the sensitivity is much higher and is used where human touch is possible. Earth Fault Relay is generally used to protect the installation by checking for insulation failures which ultimately lead to fires.

### 2. Use of Test and Reset Button?

Test Button: This button can be used to test faults.

Reset Button: Reset button is used for manually resetting the ELR to normal condition after the fault is cleared. In this case, the person can go clear the fault manually after checking the cause.

### 3. What is online monitoring of fault current?

Online Monitoring means continuous monitoring of fault current; the fault current is not monitored only in particular intervals.

### 4. Which CBCTs can be used with which relays?

Along with VIPS 98P any of the below models can be used with any of the below models:

- VIPS CBCT 35
- VIPS CBCT 70
- VIPS CBCT 120
- VIPS CBCT 210

All these CBCTs are ABS moulded.