Sensorform EFI-CFZ-50 is one of a family of Earth Fault Indicator products that are designed to assist in the rapid locating and isolating of faults on Medium Voltage networks (1-38kV) in single-sided feed or open ring main systems. When an asymmetrical current greater than 50A in a 3-phase cable is detected an earth fault is indicated by means of a mechanical flag indicator. The CFZ-50 is powered from load current flowing in one of the phases of the MV cable using a split core current transformer mounted on the screened part of the cable.

For Earth Fault Detection, a current sensor is fixed around the three phases of the cable system being monitored and will detect a current imbalance due to an earth fault. An earth fault trip is indicated by a mechanical flag on the unit, together with a second LED based Remote Indicator (optional). An auxiliary relay contact is also provided as an optional extra for signalling an alarm to other systems. In an open ring network the path of the fault current from the feeding point to the fault location is marked by the triggered EFI’s. The defective conductor segment is located between the last EFI that has been triggered and the first EFI which is still inactive.

**FEATURES**

- Powered from CT attached to one of the Phases
- Mechanical Flag primary indicator
- Automatic reset when phase current is restored
- Manual reset by front panel button or remote input (optional)
- CT100 Current Sensor (standard)
- CT150 Current Sensor (optional)
- CT300 Current Sensor (optional)
- LED based Remote Indicator (optional)
- Aux Relay contact for remote alarm generation (optional)

**SPECIFICATIONS**

**General**
- Power Source: CT on Current Carrying Phase
- Network Voltage Range: 1-38kV
- CT Power Supply range: 10A to 600A phase current
- Trip Current: 50A ±10%
- Primary Indication: Mechanical Flag (RED)
- Min. Fault Duration: 2.5 cycles (50ms @ 50Hz / 40ms @ 60Hz)

**Manual Reset:**
- Push button on front panel or Remote Reset Input (optional)

**Automatic Reset Period:**
- 10 Seconds after network re-energisation

**Self-Test:**
- Manual Push Button

**Operating Temp. Range:**
- -20 °C to +70 °C

**Operating Humidity Range:**
- 0-100% RH

**Dimensions:**
- 115mm x 65mm x 40mm

**Degree of Protection:**
- IP65

**Mass:**
- 250g

**Current Sensor Diameter:**
- Standard CT100: 100mm
- Optional CT150: 150mm
- Optional CT300: 300mm

**Remote Indicator (optional)**
- Indication Method: Flashing LED @ 1 Hz
- Flashing Duration: 10 hours nominal
- Dimensions: M12 Hex Bolt 50mm long

**Auxiliary Relay (optional)**
- Type: Latching, N/O on reset
- Rating: 220VDC, 250VAC, 2A, 60W
- Lead type: 2-core 0.5mm² double-insulated

**Warranty Period:**
- 2 Years

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