



suparule



Sensorform EFI-CFZ-50

Earth Fault Indicator, CT powered, with Mechanical Flag

- Powered from CT attached to one of the Phases
- Mechanical Flag primary indicator
- Automatic reset of fault state when power restored
- Manual reset by Test/Reset button on front panel
- LED based Remote Indicator (optional)
- Aux Relay contact for remote alarm generation (optional)

DESCRIPTION

Sensorform EFI-CFZ-50 is one of a family of Earth Fault Indicator products that are designed to assist in the rapid location and isolation of faults on Medium voltage networks (1-36kV) 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 HV 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 mains power is restored
- Manual reset by Test/Reset button on the front panel
- CT100 Current Sensor (standard)
- CT150 Current Sensor (optional)
- CT300 Current Sensor (optional)
- LED based Remote Indicator (optional)

Distributor:

SPECIFICATIONS

General

Power Source:	CT on Current Carrying Phase
Network Volt. Range:	1-36kV
Impulse Voltage Withstand:	10kV, 1.2/50µS waveform
CT Power Supply charging time:	30 min at 50A phase current
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
Automatic Reset Period:	10 Seconds after mains restore
Manual Trip Test:	Manual Push Button
Operating Temp Range:	-40° C to +80° 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, 0.5mm ² double Insulated
Warranty Period	2 Years

Suparule Systems Ltd.,
Suparule House,
Lonsdale Road,
National Technology Park,
Limerick, Ireland.

Ph.: +353 (0) 61 201030
Fax.: +353 (0) 61 330812
Email: info@suparule.com
Web: www.suparule.com