Littelfuse Startco Protection Relays

Technical Note - Resistance Grounding



RG-05: SE-330 NEUTRAL-GROUNDING-RESISTOR MONITOR GUIDEFORM SPECIFICATION

Grounding-resistor monitoring shall be provided by a Littelfuse Startco SE-330 Neutral-Grounding-Resistor Monitor. The microprocessor-based flash-upgradable NGR monitor features are:

IEEE Device Numbers:

50/51G, 50/51N, 59N, 86

Protective Functions:

- Grounding-resistor failure continuously monitors for NGR failure
- Ground fault

Inputs:

- Current transformer (CT) 1-A and 5-A-secondary, and sensitive (EFCT series)
- ER-series sensing resistor
- Remote reset
- Pulse enable

Outputs:

- Contacts
 - Form A trip (fail-safe or non-fail-safe) or pulsing operation
 - Form C ground-fault trip (latching or non-latching)
 - Form C resistor-fault trip (latching or non-latching)
 - Form A unit-healthy indication
- 4-20 mA Analog indicates earth-leakage current

Communications:

- RS-232 and fibre-optic local communications
- Optional network communications

Indication:

- Green power-on LED
- Red ground-fault-trip LED
- Red resistor-fault-trip LED
- Yellow trip-relay-state LED
- Green calibrated LED
- Red diagnostic LED

Settings:

- Ground-fault-trip levels: 2 to 100% of CT rating
- Ground-fault-trip time: 0.1 to 10.0 s
- Neutral-voltage-trip level: 20 to 10,000 Vac
- Pulse period: 1.0 to 3.0 sHarmonic filter: 50 or 60 Hz

Mounting Options:

- Surface
- Panel