



PITE 3830 Ground-Fault Locator

PITE 3830 has two functions: insulation testing and ground fault location. It pinpoints faulty grounding where electrical cables have breakage and lost to ground. It gives excellent solutions for troubleshooting and preventative maintenance.

Compact and rugged design makes the PITE 3830 easy to use in small places and harsh environment. It is widely used in locomotive, telecom, power utilities, and so on.

Why PITE 3830?

Cost can be tremendous upon bad insulation or grounding in the power system. It may even cause power break-off which is costly to repair. Fast localization and elimination of insulation faults will be significant for electricians and technicians. It is also required by DIN VDE 0100-410 (VDE 0100-410):

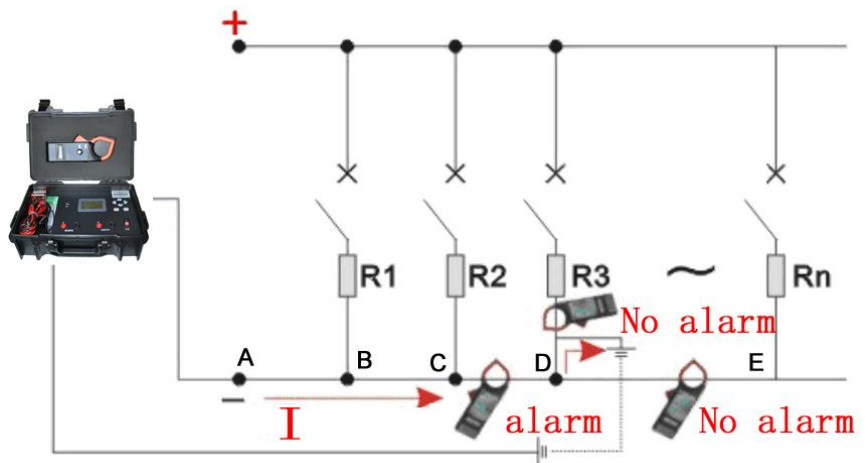
2007-06 chapter 411.6.3.1 and IEC 60364-4-41 chapter 413.1.5.4.

PITE 3830 is developed to fast detect, track and locate virtual grounding faults on DC systems. This spares you from hours of unnecessary troubleshooting and helps to increase the reliability of your electrical equipment. It is widely used in locomotive, telecom, power utilities, etc



Methods

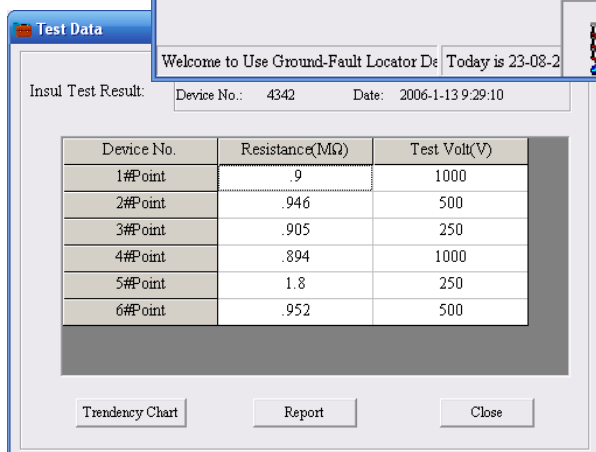
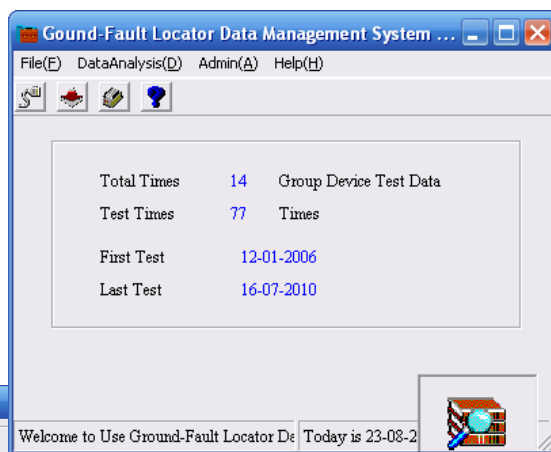
In the breakage of busbar, there is loose of electricity to the ground and thus generate a faulty “grounding”. When testing leads of PITE 3830 are connected to the ground and busbar, there will be a return circuit. Signal generator (main unit) will send a low-frequency voltage signal of 0.1Hz~1000Hz between the testing target and grounding malfunctioned circuit. The breaking point will generate leaking current. As the grounding receiver (signal receiver) moves in the circuit, different points in the circuit will have different reaction in the indication of sound warning. Based on the sound volume in the signal receiver, it will pinpoint the cable fault.



This is the flowchart for ground-fault location in DC system. It indicates the cable connection and simple way to pinpoint faulty “Grounding”.

Features

- Two function in one: Insulation tester and ground fault locator
- Test and record insulation status of facilities
- No disconnection of the electrical installation, ground fault location is carried out during operation.
- Fast locations for ground fault even when cables are buried unearth.
- Signal-generator with adjustable frequency and voltage, convenient for testing.
- Reflects aging status of facilities for further reparation.
- Powerful management software on PC for trouble analyzing.
- Reduced maintenance and repair costs.



PITE DataView

Testing data of insulation could be recorded and printed as a report with PITE DataView software

Parameter

| | | | |
|-------------------|---|---------------|-----------|
| Measuring range | V testing: 0.00-1000V Insulation resistance: 20kΩ-500MΩ (250V) 50kΩ-1000MΩ (500V) 100 kΩ-2000MΩ (1000V) | | |
| Min resolution | Voltage: 0.1V Insulation R: 0.01 MΩ | | |
| Accuracy | Voltage: 1%rdg±8dgt Insulation R: 0.5 MΩ-100 MΩ 5%rdg±6dgt > 100 MΩ: 10%rdg±6dgt | | |
| Output signal | voltage: 0-1000V±10% Frequency: 1-1000Hz | | |
| Power consumption | ≥4 hours(continuous operation) | | |
| Memory | 32kx8bit Non Volatile SRAM | | |
| Displaying screen | 128x64 pixels LCD | | |
| Communication | USB interface | Battery | Li-ion |
| Dimension | 490*370*250mm | Weight | 7KG |
| Humidity | 80%R.H | Temperature | -5°C-40°C |
| Receiver | | | |
| Testing accuracy | ≤0.25MΩ | Power voltage | DC 8.4V |
| Sensor aperture | 59mm | Jaw opening | 66mm |

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