PITE 3830 Ground Fault Locator

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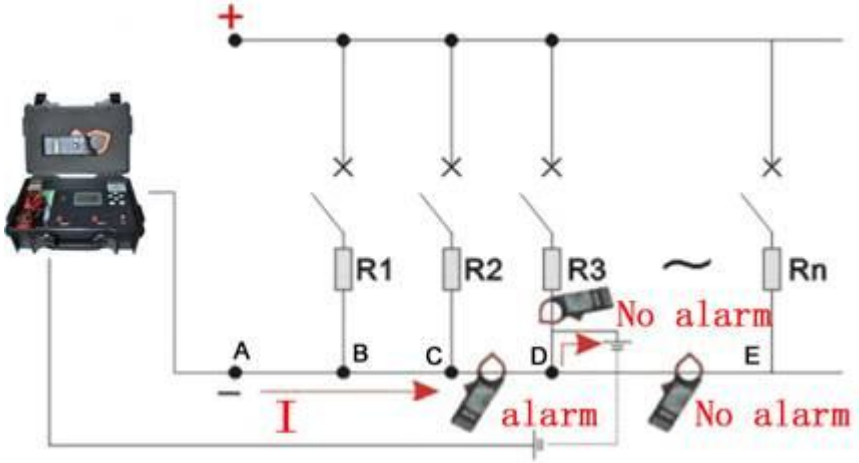
PITE 3830 has two functions: insulation testing and ground fault location. It pinpoints faulty grounding where electrical cables have breakage and lost to ground. It gives excellent solutions for troubleshooting and preventative maintenance...

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

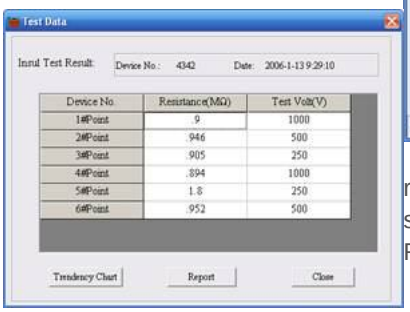
There is loose of electricity to the ground in the breakage of busbar and thus generate a faulty "grounding". When testing leads of PITE 3830 are connected to the ground and busbar, there will be a return circuit. Signal generator (main unit) will send a low-frequency voltage signal of 0.1Hz ~ 1000Hz 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. It will pinpoint the cable fault basing on the sound volume in the signal receiver.



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	32k×8bit Non Volatile SRAM		
Displaying screen	128×64 pixels LCD		
Communication	USB interface	Battery	Li-ion
Dimension	490*370*250mm	Weight	7KG
Humidity	80%R.H	Temperature	-5□-40□
Receiver			
Testing accuracy	≤0.25MΩ	Power voltage	DC 8.4V
Sensor aperture	59mm	Jaw opening	66mm

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