K-3836 Ground Fault Locator

- Fast location for ground fault in different DC systems
- Strong anti-interference when system is working online
- Innovative dual-range current detector with direction sensitivity
- Multi-way for location: Current direction, signal strength & phase angle

Why K-3836?

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. Therefore, fast localization and elimination of grounding 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. K-3836 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

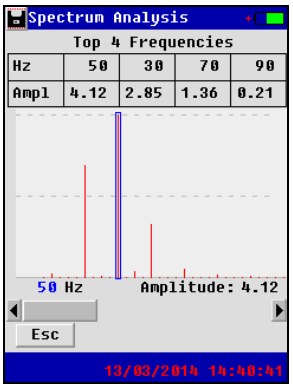
Functional signal receiver

Feature

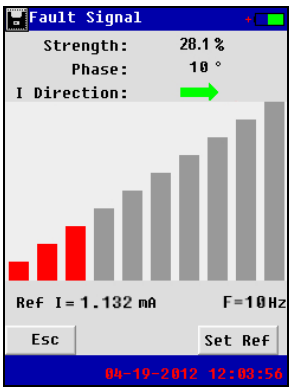
- Patented technology, pinpoint current leakage fault with grounding resistance lower than 400kΩ
- Innovative dual-clamp for signal receiver, each clamp has two sizes of opening jaw for different conductors
- One pair of clamp working together, effective cancel capacitive interference when DC system is online
- Precise current direction (positive or reversed) indicating for leaking current help fast locate the faulty grounding
- 10Hz output frequency on signal receiver effectively avoids interference from DC system itself
- Signal receiver can set reference in different points for signal comparison, very fast for fault orientation
- Digital signal processing technology for detecting grounding resistance and capacitive resistance
- With built-in band pass filter to bypass different interference signals in the ambient environment.
- No disconnection of the electrical installation, ground fault location is carried out during operation
- Frequency spectrum analysis can test ambient frequencies, which helps analyze the surrounding environment.
- Signal generator with adjustable output voltage (24V~1000V) for different DC systems
- Multi-ways to indicate ground fault: sensitive current direction, phase angle, comparison of signal strength.

Dual-clamp with 2 conductor sizes

Functional Display



Frequency analysis



Multi-ways to find ground fault

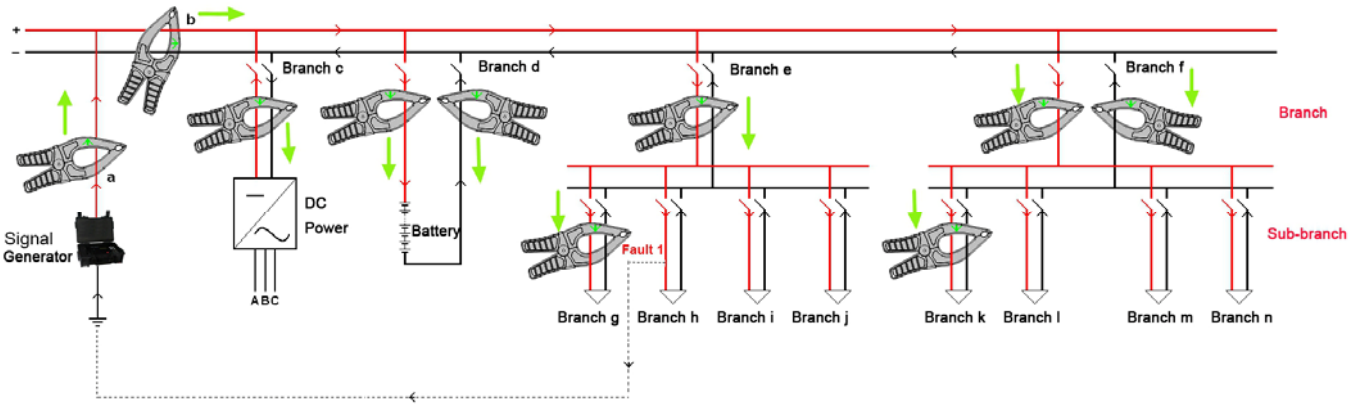
Technical Specification

Ground fault location	Output voltage: 24V, 48V, 110V, 220V, 500V and 1000V Output frequency: 10Hz Output current limitation: 5mA & no limit (max: 25mA) Fault location sensitivity: ≤ 400Ω Current detect sensitivity of AC/DC circuit: ≥ 0.5mA Current sensor: φ8 and φ30, two clamps with dual-range φ8: 8mm(diameter), 58mm(jaw opening),12mm (width) φ30: 30mm(diameter), 58mm(jaw opening), 66mm (width)
Power supply	Signal generator: 3500mAh/16.8V rechargeable Li-ion battery Input: AC220V/110V, output: DC16.8V/2A Signal receiver: 2400mAh/8.4V rechargeable Li-ion battery Charger input AC220V/110V, output:DC8.4V300mA
Power consumption	≥4 hours
Memory	16MB
Display	Signal generator: 320x240 pixel 3.5″ LCD screen Signal receiver: 240×320 pixel 3.5″ LCD touch screen
Working temperature	-10℃～55 ℃
Dimension	L420*W340*H14mm
Weight	7.0 kg

How does it work?

K-3836 uses comprehensive ways to pinpoint the faults with the following working rules:

1) Signal generator has two testing leads connected with DC system. And it injects a low-frequency current signal with direction to the DC system. This signal will flow from testing lead to circuit, outflow from the faulty grounding point and finally flow back to the signal generator. This makes a return circuit that will be useful for signal tracing in the next step.
2) Signal receiver will trace this current signal with the help of current direction judgment. Direction of current signal always goes to the faulty point. With one clamp on two busbars or two clamps respectively on two busbars, it could work effectively with strong anti-interference when system is online.
3) Strength and phase angle of current signal will have big changes before and after the grounding fault. They also help pinpoint the fault.



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