

FST-JD200 Portable Direct Ground Fault Finder

[Product Description]

The product has range-measuring capacity and anti-interference capacity. It uses the advanced computation method and fuzzy control theory to express the insulation level of the tested circuit branch in the forms of insulation index and wave form. It fully reflects the superiority of artificial intelligence. As for the determination of the ground point, it is even more accurate than other similar devices. It can indicate the relative ground point to the direction of the testing point so as to rapidly and accurately realize ground loop testing. Besides, the users can customize an equipment with a proper insulation alarm threshold value within the insulation alarm threshold value limit according to their own system requirement. The users only need to correspond the clamp meter gear with the measuring range on the tester so as to accomplish the direct ground testing or insulation level analysis.



FST-JD200 not only can provide a solution on accurately testing the faults of the indirect-grounding of the direct current system, non-metal grounding, loop grounding, simultaneous grounding of the anode and cathode, balanced grounding of the anode and cathode and multi-point grounding; it also can accurately display the system voltage, voltage to ground and grounding resistance value. It truly eradicates the fear of trouble in the rear for the operating and testing personnel.

The device is primarily based on the system safety. It carries out the test by the reliable method of low frequency signal according to the highest requirements of the industry standard. It can also carry out a lot of on-site practical applications while not affecting the system.

The composition of the instrument:

The instrument consists of a signal generator, the fault detector and signal collector (clamp table) of three parts. Signal generator is connected to a dc system for the positive and negative bus and ground. After the dc system grounding fault, it will automatically create a small low frequency signal. Fault detector and clamp table is separated from the signal generator, fault detector and clamp table is linked by using the cables, signal collection and analysis to branch leakage current for judging the insulation situation of the branch.



[Main Features of the Device]

1. The high-precision sampling clamp meter
The device uses a high resolution (0.1mA) signal sampling direct current clamp meter that can achieve multi-point grounding and high resistance ground point positioning.
2. The directional presentation of the ground point
The device can present the direction of the ground point and can manage the compound circuit branch or the positioning of the ground point in the loop circuit at fast speed and high efficiency.
3. The function of displaying the insulation index
The insulation index is introduced for analyzing the insulation level of the circuit branch to be tested; it reflects the insulation level of the tested circuit branch by the digital forms of 0-100, wherein a greater numerical value means a lower insulation level; and the index combines with the high-precision clamp meter and makes it much easier to carry out the test of multi-point grounding and high resistance grounding.
4. The function of displaying the waveform
The waveform display is the waveform of the signal generator searched out by the tester in the testing process; it plays a very important role in the searching and grounding process. Properly using the waveform display in the tester can substantially increase the testing range, testing accuracy and determination accuracy of the equipment.
5. Easy to operate, convenient to use and fast
Using the clamp meter to clamp the circuit branch and pressing the operation button can complete the testing of a circuit branch within 3-6s.
6. The signal generator and the tester are not subject to the distance limit.
The access point of the signal generator might be in a long distance from the search point, but the tester is not subject to the distance limit and it can search at any point in the same system.
7. Safe to operate and reliable
The signal generator needs to be connected into the direct current system and this ensures the safety of the equipment. According to the on-site practical situation of the direct current system, the signal generator can intellectually generate 1.0—5.0mA signal current with the maximum power lower than 0.2W; it is applicable to various direct current systems and hence ensures the safe and reliable operation of the direct current system.

[Main Technical Indexes of the Device]

1. The range of the testable grounding resistance:
When the system voltage is 220V: 0 -500K Ω ; When the system voltage is 110V: 0 -250K Ω
When the system voltage is 48V: 0 -50K Ω ; When the system voltage is 24V: 0 -10K Ω

2. The detection signal $\leq 0.2W$ (the output power of the signal generator)
3. The ground impedance distribution capacitance value:
The ground capacitance single circuit branch $\leq 8\mu F$, the total system ground capacitance $\leq 100\mu F$.
4. The applicable direct current system voltage:
220V $\pm 10\%$, 110V $\pm 10\%$, 48V $\pm 10\%$, 24V $\pm 10\%$, or other voltage ranges suggested by the user.
5. The environment temperature: -35 $^{\circ}C \sim +55^{\circ}C$.
6. The relative humidity: $\leq 95\%$
7. Total mass: 2.8kg ;
8. The outline dimension (packing chest): 460x240x120 (mm)
9. It is only for reference. The actual accessories and quantity are according to demand.

No.	Name	Qty
1	Signal generator	1set
2	Signal detector	1 set
3	Clamp meter	1pc
4	Charger	1 pc
5	Battery	1 pc
6	Three-core cable	1 wire
7	User Manual	1 copy
8	Qualified Certificate of products	1 pc
9	Warranty Card	1 pc
10	Packing list	1 pc