

Low Voltage Cable Fault Location System T8

Introduction

Although the voltage of LV cable and distribution cable is relatively low, because the cable wire is too much and on site test environment is not very good, the fault location is more difficult than fault of HV cable. Ordinary HV generator outputs over-high voltage, generally it exceeds the withstand voltage of LV cable. So it may cause new fault to the cable. This Cable Fault Location System effectively breaks through this problem. Its maximum output voltage is 15kv. Single pulse energy of the built-in large capacity capacitor can easily reach 500J, protection of low voltage cable and make discharge sound loudly enough.



LP8/10

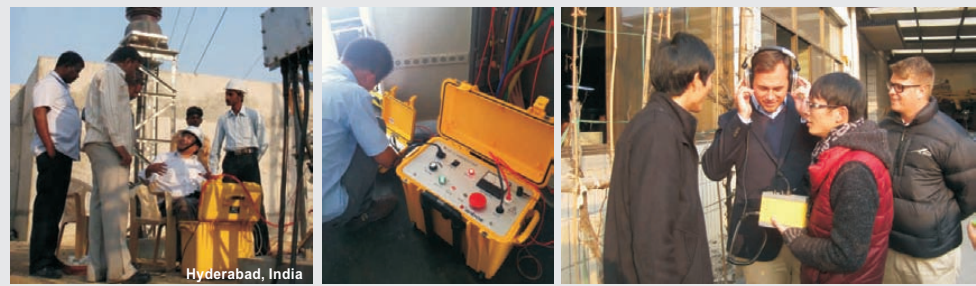
WL20

PP10

Features

- ✦ Super high quality trolley case made in the US, light weight only 25kg, portable.
- ✦ High level of integration, easy wiring and easy operation. Also can be used in DC voltage withstand test for LV cable.
- ✦ Built-in 10uF large capacitance, single pulse energy can easily reach 500J.
- ✦ Strong ability to burn through makes a short period of time burning through cable fault point.
- ✦ There are many location method with WL20 Cable fault pre-locator
- ✦ Low voltage impulse method: Applicable for fault distance measurement for low resistance fault, short circuit fault, and open circuit fault. And apply to cable length, intermediate joints, T-joints, cable termination joints, and can be applied to correct the wave velocity.
- ✦ Pulse current method: Applicable for distance measurement for high resistance fault, and flashover fault. Collecting signal from testing earth-wire through current coupler, it makes the user far away from high voltage, ensuring safety and reliability.
- ✦ Second-impulse method: Applicable for distance measurement for high resistance fault, and flashover fault. Waveform is simple and easy for analysis and high locating precision. (This needs a second impulse coupler)
- ✦ Using high voltage pulse with stable frequency, working with the pin-pointer PP10, to finish a general high resistance, flashover fault point to precisely locate the cable (path). Use the time difference of sound & magnetic method to pin-point the fault.
- ✦ Applicable for LV cable, main insulation layer lower resistance earthing, low resistance short circuit, high resistance earthing, high resistance short circuit, high resistance leakage, high resistance flash over, and Intermittency.
- ✦ It can be equipped with portable power to solve the problem of no 220V power on site.

On-site application



Hyderabad, India

Technical data

Fault location power LP8/10



Technical data:

Pulse and DC output voltage	0-15kV continuously adjustable
Max burning through power	300W
Discharge capacitance	10 μ f
Single discharge energy	500J
Max. resolution	0.4m
Power supply	220V mains supply or equipped with portable power
Size	420×420×80(mm)
Weight	25kg

Cable fault pre-locator (TDR) WL20



Technical data:

Low voltage impulse launching voltage	30V
Sampling frequency	200MHz
Max ranging scope	100km
Dead zone	2m
Max resolution	0.4m
Power	Polymer Li-ion battery pack, for Min 5 hours continuous usage.
Size	274×218×81(mm)
Weight	3.5kg

Cable fault pin-pointer PP10



Technical data:

Precision of sound & magnetic synchronization method	10% of cable depth
Precision of electromagnetic method	10% of cable depth
Precision of path location precision	10% of cable depth
Precision of Step voltage method	10 cm
Power	7.2V/4.4hA Li-battery. 10h usage after fully charged

T8 Low Voltage Cable Fault Location System

Introduction

Although low voltage cable and distribution cable have relatively low voltage, the fault's location is more difficult than HV cable because of the larger quantity lines and bad environment. Because of common HV surge generator's high output is over the max withstand voltage of LV cable, which is very easy to cause new faults. T8 overcomes this problem effectively. The max output is 15kV, but max impulse energy up to 500J, which can protect the LV cable and make the recharge sound loud enough.



Features

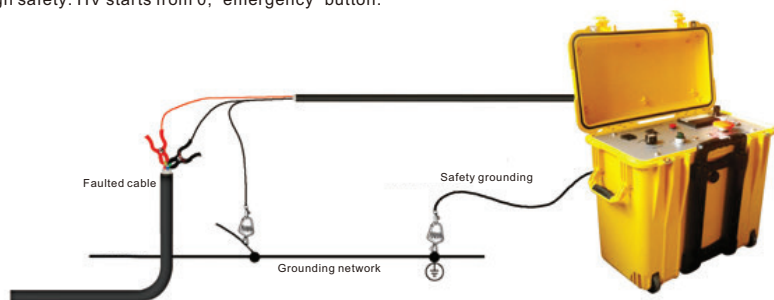
Appearance: elegant, lightness, portable

- ◆ Elegant: trolley case imported from US PALICAN.
- ◆ Lightness: not over 25kg.
- ◆ Portable: trolley case, integrated design.



Humanized design

- ◆ Big capacity: 10μF super big capacitance, recharge energy up to 500J.
- ◆ Multifunction: DC withstand voltage test, once impulse, period impulse.
- ◆ High safety: HV starts from 0, "emergency" button.



Wiring diagram for fault between cable phases

Pre-location test method

- ◆ LV impulse method: applicable to locate low resistance fault, open circuit fault, total length and intermediate joint.
- ◆ Impulse current method: current coupler gathers signal from ground line, safe and reliable; applicable to locate high resistance and flashover fault.
- ◆ Second-impulse method: high accuracy, simple waveform, easy analysis, applicable to locate high resistance and flashover fault.

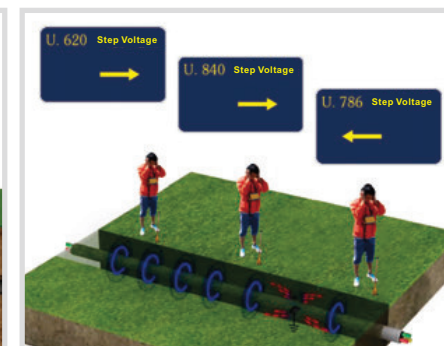


Accuracy pinpoint technology

- ◆ Intelligent time-different technology: show the time difference between fault and test place in number, faster and more accurate.
- ◆ Step voltage location technology: auxiliary to locate metal dead grounding fault and sheath- broken fault.



Intelligent time-different: the smaller number, the closer to the fault



Step voltage method: auxiliary to pinpoint the fault