

PCFL-12/600

Portable Cable Fault Location Trolley



- » Cable insulation testing with DC voltage up to 12 kV.
- » Suitable for 380 V...10 kV rated power cables with PILC, XLPE, PVC, rubber and etc. insulation.
- » Reflectometer by Linux with 17" TFT display and touch screen control.
- » Various pre-location methods: TDR, MIM and ICE.
- » Acoustic pin-pointing method.
- » Surge generator up to 576 J.
- » Integrated 8 μ F capacitor.
- » Advanced safety systems.
- » Easy to handle system.

DESCRIPTION

The PCFL-12/600 is designed for high-voltage direct current insulation testing of power cables, insulation breakdown on damaged cable sections using direct current, pre-locating of cable faults with an aid of the integrated reflectometer using a TDR (Time Domain Reflection), MIM (Multi Impulse Method) and ICE (Impulse Current Method) methods and pinpointing cable faults with an acoustic method.

Reflectometer has 200 MHz sampling rate, supports both touchscreen & one button operation. The display is 17-inch sunny screen. The control knob operation is reduced to the important and essential steps and runs fully automatically. The new hardware with improved sampling frequency, pulse width, impulse altitude ensures 60 km maximum range, highest resolution, accuracy. Three stages HV Impulse Generator with maximum 576 J provides necessary power for accurately acoustic-magnetic pinpointing.

KiloVolt represents a Portable Cable Fault Location Trolley with voltage and power ratings to meet your testing requirements. Our systems function in compliance with recognized national and international industry testing standards. PCFL-12/600 Portable Cable Fault Location Trolley available from KiloVolt are designed for safety and ease of operation, and readily adapt to development, maintenance or production testing.

TECHNICAL SPECIFICATIONS

Reflectometer

Pre-location methods	TDR, MIM, ICE
Fault detection range	5 m...60 km, $v/2 = 80 \text{ m}/\mu\text{s}$
Resolution	0.4 m @ $v/2 = 80 \text{ m}/\mu\text{s}$
Accuracy	$\pm (0.5 \% \times L + 1 \text{ m})$
Propagation velocity (v/2)	10...149.9 m/ μs
Sampling rate	200 MHz
Gain	-20...+40 dB
Pulse width / Amplitude	100 ns...10 μs / 120 V
Compensation	120 Ohm
Display	Touchscreen LCD, 17" color TFT XGA, sunny 1024x768
Operation system	Linux
Data storage	32 Gb
Connection interface	USB, BNC
Operation	touchscreen and control knob
Rechargeable Battery	12 V DC

HV Impulse Generator

Output DC voltage	0...12 kV
Surge energy	576 J @ 12 kV
Surge rate	3..8 s, single shot
Integrated capacitor	8 μF

GCU-3 Safety monitoring modular

Step voltage monitoring	Monitoring earth to metal chassis
Earth loop resistance monitoring	Monitoring system earth to substation earth, auxiliary earth to substation earth
Emergency off monitoring	Monitoring the status of Emergency off button
Discharge monitoring	For safe discharging, controlled forced discharge
Safety key-switch monitoring	Monitoring Key-switch, only with key
Temperature monitoring	Overheat measurement
Fault diagnosis	Fault code by self-check

General

Power supply	230 V AC $\pm 15 \%$, 50/60 Hz, 1.2 kVA
Protection class	IP54
Dimensions	700x600x1000 mm
Weight	31 kg