Application

VLF-60 Cable Insulation Tester made by KEP is a very low frequency high potential tester that ensures efficient testing and fault location on medium voltage cables.

Very low frequency (VLF) testing involves applying frequency in the range of 0.01 to 0.1 Hz to the cable under test, which is non-destructive to insulation of proper quality, but is enough to detect cable faults. Compared to DC cable testing, which can be damaging to good insulation, VLF testing does not have such a detrimental effect on the cable being tested.

Technical specifications

Parameter	Value
Output Voltage	
Sinusoidal	0 – 62 kV peak / 0 – 44 kV RMS
DC	± 0 – 60 kV
Squarewave	0 – 60 kV
Accuracy	± 1 %
Resolution	0.1 kV
Output Curent	
Sinusoidal (RMS)	26 mA
DC / Squarewave	40 mA
Accuracy	± 1 %
Resolution	1 µA
Output Frequency	0.01 – 0.1Hz in steps of 0.01 Hz (default 0.1 Hz) – auto frequency selection
Output Load	1 µF @ 0.1 Hz @ 44 kV RMS 5.0 µF @ 0.01 @ 44 kV RMS 10.0 µF max capacitance (at lower frequency and Voltage)
Output Modes	
VLF AC Sinewave	✓
VLF AC Squarewave	✓
DC (positive or negative polarity)	✓
Vacuum Bottle Test Mode (DC)	✓
Cable Jacket / Sheath Testing	✓
Sheath Fault Location	✓
Breakdown Mode	
Fault Condition Mode	✓
Fault Trip Mode	✓
Metering	
Voltage and Current	True RMS and / or peak
Capacitance	0.1 nF to 20 µF Range
Resistance	0.1 MΩ to 20 GΩ
Waveform	Real time oscilloscope display of actual output voltage waveform
Safety	50 / 60 Hz – 12 kV Feedback Protection / Dual Discharge Device (internal)
Duty Cycle	Continuous
Computer Interfaces	USB, RS-485
Display	Color touchscreen TFT 5.7 " (115 × 86 mm)
Input Voltage	(110 to 240) V AC ±10 %, 50 / 60 Hz
Consumption Power	1.2 kVA
Dimensions (H × W × D)	530 × 580 × 410 mm
Weight	60 kg