

SURETECH™ HiPot-30



The SURETECH HiPot 30 tester provides an economical solution to Low frequency AC and DC testing of cables, terminations, motors, generators and other electrical apparatus. Self contained in a rugged enclosure. The HiPot-30 tester features accurate kV readings as well as load current via a 2 line x 16 character LCD display. A computer can also be connected for more advanced work via RS232. Accurate voltage and current measurements are assured since voltage readings are taken directly at the output by means of a separate voltage sensor, and current measurements are taken in the return leg. Safe discharging of both the test object and the high voltage transformer occur whenever the high voltage is turned off. Low frequency testing uses 0.1Hz Sine wave generation, and true RMS and instantaneous voltage measurements are available. Output frequency can be varied to half frequency and double frequency (0.05Hz and 0.2Hz) to measure load capacitance contribution to readings.

Applications requiring DC & LF-AC testing

- MV cables
- Transformers
- electrical switchgear
- motors
- generators
- other electrical apparatus

Benefits

- Ideal for field testing – lightweight, compact, and rugged
- Easy operation
- Accurate leakage current measurement
- Overload protection tripping

General Features

- Rugged and portable
- Voltage multiplier rectifier circuit uses Cockroft Walton configuration
- Zero start interlock
- Internal discharge on HV OFF
- Meter accuracy $\pm 1\%$ full scale
- 5mA current rating
- External interlock provisions
- Auto range voltmeter
- Auto range current meter
- Instantaneous overload trip
- Surge-limiting resistors in HV output
- LCD Display readout (4 line x 16 character)
- RS232 output to computer
- Data flash memory for test logging

- Small, light, universal high voltage test instrument
- Automatic or manual cable test sequences. User can program to comply with user requirements
- True symmetrical sinusoidal, load independent, output waveform across the full load range
- Real-time display of actual output waveform
- Large output load capability (up to 5 μ F)
- Automatic and integrated load capacitance measurement with optimum frequency selection
- Storage of test results on Data Flash memory for later retrieval or download to a PC/Laptop
- Short circuit protected

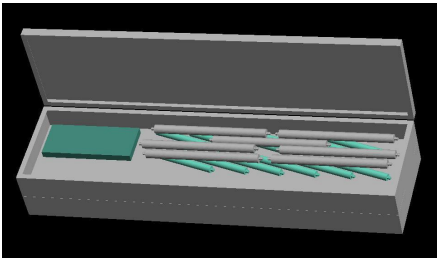
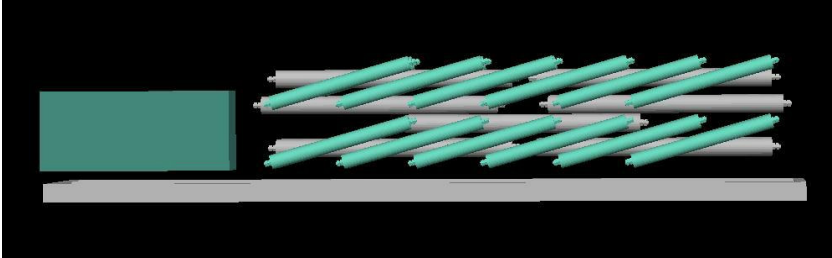
PC Software controllability

- PC Computer software is available to control HiPot test system
- RS232 interface
- GUI interface to set up test program
- Program Pos / Neg times
- Excel compatible output format

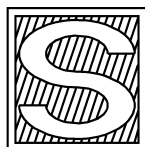
Specifications

PARAMETER	HiPot 30D	HiPot 30DL
Output Voltage	0 – 30kV dc +ve or -ve	0 – 30kV dc +ve or -ve 0 – 30 kV pk @ 0.1Hz
Output Current	5 mA max	5 mA max
HV out timer	HV output timer settable in steps of 1 second	HV output timer settable in steps of 1 second
HV gen technology	Voltage multiplier rectifier	Voltage multiplier rectifier
Mass	20 kg	25 kg
Accuracy	\pm 1% full scale accuracy	\pm 1% full scale accuracy
Ripple	Less than 2%	Less than 2%
Input Voltage	230V AC	230V AC
Dimensions	1080 x 280 x 180 mm	1080 x 280 x 180 mm
Computer interface	RS232 output to computer, results directly importable into Excel spreadsheet	RS232 interfaces to Graphical User Interface on PC to enable point and click interface to program HiPot30DL
Cables supplied	Input power cable, return cable, HV output (unscreened)	Input power cable, return cable, HV output (unscreened)

Internal arrangement

	
<p>Internal layout shows HV transformer on left with one layer of Cockroft Walton voltage multiplier</p>	<p>Side view of internal rectifiers and capacitors of Cockroft Walton multipliers, with insulation mounts and wiring removed</p>

NB: we reserve the right to change these specifications at any time



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