

MODEL CAL-100

Dynamic Spark Test Calibrator

- >> Measures sensitivity of AC, DC, High Frequency and Impulse spark tester.
- >> Tests completed in seconds.
- >> Performs tests required by NEMA, BSI and UTE.
- >> Optional electrostatic voltmeter calibrates voltages to 30KV

Checking your spark tester's performance is no longer just a matter of voltage calibration. Numerous standards, including NEMA, BSI, and UTE list precise tests for measuring such elements as fault detection sensitivity, operating load, and output current.

In response to these requirements, Clinton has developed the Model CAL-100 Dynamic Spark Test Calibrator. This versatile system can be used to calibrate and test virtually every type of spark tester in use.

Each test is simple to perform. For example, to carry out a sensitivity test, you would:

- >> Consult the specification for the required current, dwell time, and gap spacing, etc.
- >> Connect the spark tester to the CAL-100 patch panel to replicate the specified current using a capacitive or resistive load.
- >> Insert a stylus representing the required dwell time and adjust gap spacing with the built-in micrometer.
- >> Set the dials and switch the CAL-100 on.

Within seconds, the test is done and you know if your spark tester has passed. The optional electrostatic voltmeter not only calibrates AC, DC and high frequency spark testers; positive and negative peak voltages of impulse spark testers may be measured using the peak rectifier.



Clinton
INSTRUMENT COMPANY

MODEL CAL-100

SPECIFICATIONS

CAL-100

Maximum Input Test Voltage:

D.C. 20KV D.C.
 A.C. 15KV A.C.
 Impulse..... 20KV Peak Impulse.

Maximum Input Frequency 5kHz.

Maximum Input Current 199 milliamperes.

Capacitive Loads..... 10 pF. to 700 pF. in 10 pF. increments.

Resistive Loads..... 10K, 2.5 Meg and 8.3 Meg.

Gap Spacing Adjustable in hundredths of millimeters.

Spark Gap

Rotational Speeds..... 1 or 10 revolutions per second.

Dwell Times 50 microseconds to 25 milliseconds.

Dimensions 19.0"W x 13.0"D x 10.0"H (483 mm W x 330 mm D x 254 mm H).

Weight 34 lbs. (15.5 kg.)

Power Requirements 120 or 240VAC 2 amps (selectable).

ESH-26 Electrostatic Voltmeter (optional, purchased separately)

Maximum Input Test Voltage:

D.C. 30KV D.C.
 A.C. 30KV A.C.
 Impulse..... 30KV Peak Impulse.

Test Voltage Ranges..... 1-5KV, 1-10KV, 1-20KV, and 1-30KV, accuracy 1% of full scale used.

Maximum Input Current 200 Milliamperes.

Capacitance 8 to 10 pF. for each voltage setting.

Maximum Input Frequency 600 kHz. at 5KV rms.

300 kHz. at 10KV rms.

240 kHz. at 15KV rms.

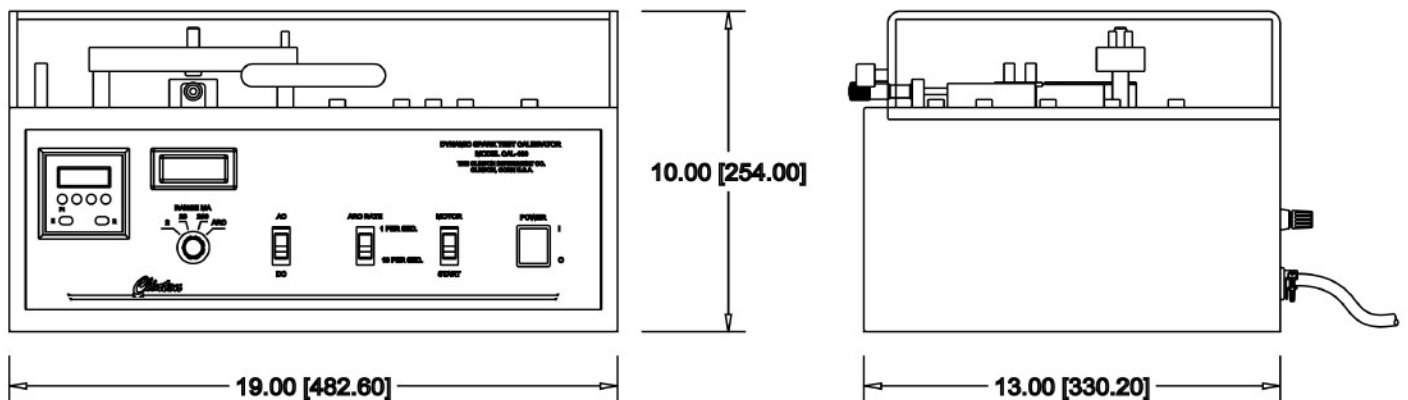
180 kHz. at 20KV rms.

Insulation Resistance 3.6×10^4 ohms.

Dimensions..... 10.5"W x 18.0"D x 8.5"H (267 mm W x 457 mm D x 216 mm H.)

Weight 22 lbs. (10.0 kg.).

MODEL CAL-100 DIMENSIONS



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Specifications subject to change without notice. 07/04 EN