INSTRUCTION MANUAL

FOR

RIDDLE STABILIZED DIELECTRIC TEST SET

CATALOG NO. 222060

HIGH VOLTAGE EQUIPMENT

PLEASE READ CAREFULLY
BEFORE OPERATING

Safety is the responsibility of the user

APARATO DE VOLTAJE ALTO

SIRVANSE LEER ESTE LIBRO CONCUIDADO
ANTES DE OPERARLO

La seguridad es el cargo del operador

JAMES G. BIDDLE COMPANY
Plymouth Meeting, Pa. 19462
FIGURE 1:

Control unit in carrying case

ACCESSORIES

Control Unit
High Voltage Unit
Interconnecting Cables

Output Cable, Option Cat. No. 222060-60
Discharge Stick, Option Cat. No. 22260-62
SECTION C

SPECIFICATIONS

Maximum Output Voltage: 60 kV dc.
Maximum Output Current: 5 mA, continuous.
Output Polarity: Negative with respect to ground.
Supply Voltage: 110-130 volts, 50/60 Hz, single phase, grounded.
Max. Supply Current (normal operation): 9 amperes.
Ripple, full load (resistive): 2%
Time to charge capacitive specimen to 98%: 42 seconds/0.1 microfarad.
Time to discharge to 2% (through internal resistance): 1.3 minutes/0.1 microfarad
Regulation: Less than 1% for all loads up to 3 mA.
Less than 3% for all loads up to 5 mA.
Voltmeter: 4 1/2" taut band, 2 ranges: 0-12 & 0-60 kV.
Current Meter: 4 1/2" taut band, 5 ranges: 0-5/50/500 µa, 5/50 mA.
Meter Accuracy: ±3% of full scale.
Overload Protection: Magnetic circuit breaker in input line.
Separate fuses for auxiliary power supply and fan.
Crowbar circuit on the main rectifier supply tripped by line voltage in excess of 130 V or by specimen short-circuit.
Voltmeter and Current Meter internally protected.
High voltage ballast resistor to limit ground-loop currents so that control unit remains essentially at ground potential in the event of specimen failure.
Control Circuit: Pushbutton start and stop sequence, zero start interlock.
Input line ground indicated by pilot lamp.
Rate of rise automatically limited and independent of control knob manipulation.
Jack provided for external current meter.

Overall Size and Weight:

Control Unit:
11 x 12 x 8 1/2 inches (28.0 x 30.5 x 21.6 cm); 24.5 lbs. (11.1 kg).

HV Unit:
12 1/2 x 5 1/2 x 16 inches (31.8 x 14.0 x 40.5 cm); 22 lbs. (10 kg).