

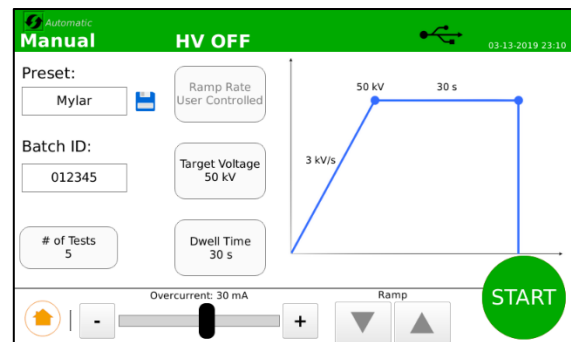
AC/DC D149-DI

AC/DC Dielectric Breakdown Tester

The D149-DI Series of AC Dielectric Breakdown Testers represents a new level of sophistication, flexibility and accuracy in breakdown voltage testing. Each unit is equipped with a new standard embedded firmware controller that is internally programmed to perform the ASTM D149 short-time test, step-by-step test and slow rate-of-rise test as well as the tests procedures in the IEC60243-1 and IEC60243-2. This unit can also be easily programmed to perform variations of these test sequences. The voltmeter circuit continually samples each waveform to determine the breakdown voltage with the highest accuracy. The operator can control all test parameters as required. When testing is complete, all breakdown information for that series of test samples are automatically recorded. Standard units are available in 30kV, 50kV, 75kV and 100kV AC/DC for a wide variety of applications.



100kV unit (pictured above)
Example of oil bath & test cell (pictured below)



FEATURES

- ✓ 7" touchscreen controller
- ✓ Breakdown voltage detection within 10 μ s
- ✓ **USB 2.0** for data download
- ✓ Internally programmed to perform all **ASTM D149, IEC 60243-1,-2** type tests
- ✓ **Adjustable test parameters** (voltage, ramp rate, max leakage current, etc.)
- ✓ **Built in safety cage** with interlock door
- ✓ **Adjustable overcurrent sensitivity**
- ✓ Optional **test fixtures** and **oil baths**
- ✓ **User Friendly** and intuitive controls
- ✓ **External Ground Stick**
- ✓ **HIPODirect Mobile App Compatible: View, Share and Upload** test reports to online cloud and update firmware all through WIFI Direct

BENEFITS

- ✓ **SIL3 compatible**
- ✓ **Complete** test solution.
- ✓ **All metering** performed by fast sensing circuitry.
- ✓ **Tests performed** with automated sequences.
- ✓ **Software** designed to calculate all test result data and save in csv format for report.

APPLICATIONS

- ✓ Polymeric molding and embedding compounds
- ✓ Ceramics, Porcelain, and Mica
- ✓ Sleeving, Tubes, Sheets, and Rods
- ✓ Varnishes, Coatings, and Insulating fluids.
- ✓ Filling Compounds
- ✓ Adhesives

TECHNICAL SPECIFICATIONS

Model #		730/830-2D149-DI	750/850-2D149-DI	775/875-5D149-DI	7100/8100-5D149-DI
System Output	Voltage AC	0.15kV – 30kV	0.25kV – 50kV	0.375kV – 75kV	0.5kV – 100kV
	Current AC	66mA	40mA	66mA	50mA
	Voltage DC	0.15kV – 30kV	0.25kV – 50kV	0.375kV – 75kV	0.5kV – 100kV
	Current DC	5mA	5mA	5mA	5mA
Voltage Measurement Accuracy	±1.5% of reading, ±0.2% of scale**				
Dimensions (net)*	26" W x 36" D x 70" H			69" W x 39" D x 75" H	
Weight (net)	405lbs/147.42kg			1850lbs/839.15kg	
Test Chamber Dimensions	24" W x 34" D x 24" H			44" W x 33" D x 34" H	
Input Frequency	50/60Hz				
Input Voltage	90 – 264VAC			200 – 264VAC	
Duty Cycle	Continuous Breakdown Testing / 2kVA 15 min on 45 min off 8 times per day			Continuous Breakdown Testing / 5kVA 1 hr on 1 hr off 8 times per day	
ECCN: 3A992.A			HTS US: 9030.39.0100		

* Magnetic lamp adds 10" to height of the system once installed

** 75kV/100kV units have dual scale, 0-10kV, 10-100kV

SYSTEM CONTROLS



OPTIONAL EQUIPMENT & ACCESSORIES

Part Number	Description			Max Test Voltage
TF-.25-#	Electrode, 0.25 inch diameter/6.35mm			# In the part number, designate '50' for 30kV or 50kV max voltage or '75' for 75kV or 100kV max voltage.
TF-.50-#	Electrode, 0.5 inch diameter/12.7mm			
TF-1-#	Electrode, 1 inch diameter/25.4mm			
TF-2-#	Electrode, 2 inch diameter/50.8mm			
TF-4.5-#	Electrode, 4.5 inch diameter/114.3mm			
TF-4.25-#-A	Flat plates, 4.25 inch/107.95mm length, 0.5inch/12.7mm thick, 0.25 inch/6.35mm wide, square edges, 0.125 inch/3.175mm rounded ends			
TF-3-#	Opposing Cylinders (0.12 inch rounded edges)	Upper Cylinder	Diameter: 1 in/25.4mm Thickness: 1 in/25.4mm	
		Lower Cylinder	Diameter: 3 in/76.2mm Thickness: .6in/15.2mm	
OB-#	Lucite Oil bath			
TL-D149-50	High Voltage & Ground Test Leads. Used to connect terminations to alternative fixtures.			N/A