

D149-DI

AC Dielectric Breakdown Tester

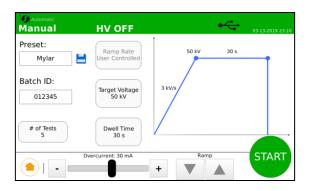
The D149-DI Series of AC Dielectric Breakdown Testers represents a new level of sophistication, flexibility and accuracy in breakdown voltage testing. Each unit is equipped with a new standard embedded firmware controller that is internally programmed to perform the ASTM D149 short-time test, step-by-step test and slow rate-of-rise test. 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 for a wide variety of applications. Contact the factory for DC or partial discharge testing requirements, and to inquire about modernization of existing systems.



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







FEATURES

- ☑ Breakdown voltage detection within 10µs
- ☑ USB 2.0 for data download
- ☑ Internally programmed to perform all D149 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

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.
- **☑** Rackmount controller

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 #		730-2D149-DI	750-2D149-DI	775-5D149-DI	7100-5D149-DI	
System Output	Voltage	0.15kV – 30kV	0.25kV – 50kV	0.375kV – 75kV	0.5kV – 100kV	
	Current	66mA	40mA	66mA	50mA	
Voltage Measurement Accuracy		±1.5% of reading, ±0.2% of full scale				
Dimensions (net)*		25" x 27" x 68" H		69" x 39" x 75" H		
Weight (net)		325lbs/147.42kg		1850lbs/839.15kg		
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

SYSTEM CONTROLS



OPTIONAL EQUIPMENT & ACCESSORIES

Part Number	Description	Max Test Voltage		
TF25-#	Electrode, 0.25 inch diameter/			
TF50-#	Electrode, 0.5 inch diameter/1	# In the part number, designate '50' for 30kV or 50kV max voltage or '75' for		
TF-1-#	Electrode, 1 inch diameter/25.			
TF-2-#	Electrode, 2 inch diameter/50.			
TF-4.5-#	Electrode, 4.5 inch diameter/1			
TF-4.25-#-A	Flat plates, 4.25 inch/107.95m inch/6.35mm wide, square edg			
TF-3-#	Opposing Cylinders (0.12 inch rounded edges)	Upper Cylinder	Diameter: 1 in/25.4mm Thickness: 1 in/25.4mm	75kV or 100kV max voltage.
		Lower Cylinder	Diameter: 3 in/76.2mm Thickness:.6in/15.2mm	
OB-#	Lucite Oil bath			
TL-D149-50	High Voltage & Ground Test L alternative fixtures.	N/A		
HHD13-280	Resistive ground stick, 120 kV			