



HVNI[®]

HIGH VOLTAGE, INC.
OIL DIELECTRIC TEST SETS
DTS SERIES PRODUCT CATALOG

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OIL DIELECTRIC TEST SETS FOR FIELD, SHOP, AND FACTORY USE

The DTS D Series are 0-60 kVac and 0-100 kVac CE Marked liquid dielectric test sets. They are typically used for testing the breakdown voltage level of insulating oils, hydraulic oils, and other dielectric fluids per the most common world standards including ASTM D877, ASTM D1816, and IEC 156. There are three user-selectable automatic voltage rates-of-rise. When the sample breaks down, the voltage level is displayed on the memory volt meter until the next test is run. Its durable aluminum construction, small footprint, removable oil drip tray, and rugged design make our DTS series ideal for field, factory, or laboratory use.



DTS-60D



DTS-100D

The DTS A Series are 0-60 kVac and 0-100 kVac fully automatic liquid dielectric test sets, typically used for testing the breakdown voltage level of insulating oils, hydraulic oils, and other dielectric fluids. The most common world standards including ASTM D877, ASTM D1816, and IEC 156 are preprogrammed into the controls for easy operation. Just hit the start button and the test is performed. Custom test sequences may also be programmed. Test results are stored internally and can be downloaded to a computer via RS232 or printed using the onboard thermal printer. Convenience features like a removable oil drip tray, removable test cell storage tray and rugged design make our DTS series ideal for field, factory, or laboratory use.



DTS-60A



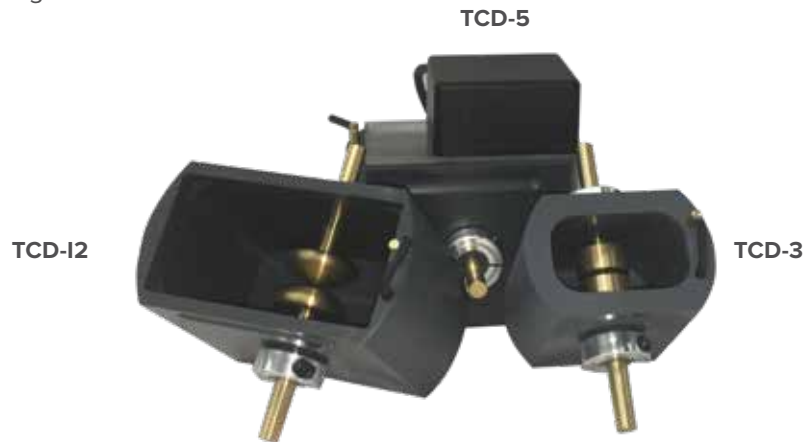
DTS-100A

Test Cells/Oil Vessels

High Voltage, Inc. offers 60kV and 100kV test cells capable of testing to ASTM D877 and D1816 and IEC 156 standards as well as many local standards such as UTE C27-221/74, CEI 10-1/73, VDE 370, IRAM 2341/72, RVHP 1985, and PN-77/ED4408.

60kV Test Cells

- **TCD-3** For ASTM D877, flat disc electrodes, 150mL sample size, 0.100-inch gap adjustment gauge
- **TCD-5** For ASTM D1816, spherical electrodes, 625mL sample size, 0.100, 0.080, and 0.040-inch gap adjustment gauges, includes motorized stirring assembly
- **TCD-I2** For IEC 156, spherical electrodes, 625mL sample size, 0.100, 0.080, and 0.040-inch gap adjustment gauges



100kV Test Cells

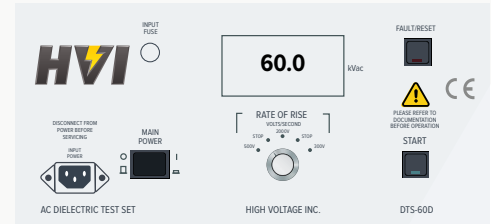
- **TCD-N3** For ASTM D877, flat disc electrodes, 625mL sample size, 0.100-inch gap adjustment gauge
- **TCD-N5** For ASTM D1816, spherical electrodes, 625mL sample size, 0.100, 0.080, and 0.040-inch gap adjustment gauges, includes motorized stirring assembly
- **TCD-I2** For IEC 156, spherical electrodes, 625mL sample size, 0.100, 0.080, and 0.040-inch gap adjustment gauges



Controls and Configuration

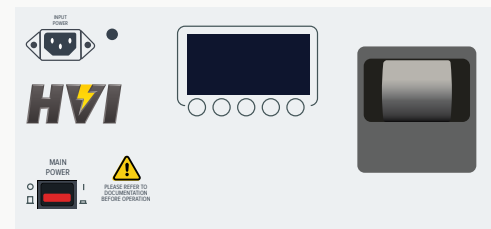
DTS-60D and DTS-100D

- Three motorized rates of rise: 500V/2000V/3000V per second
- Arc detection with automatic shutdown and failure indicator
- Failure indication with memory volt meter
- Window panel for test observation
- Convenient removable tray for test cell storage
- Convenient removable drip tray in bottom of test chamber
- Accessory outlet located within test chamber
- One-piece portable design
- Zero Start safety and test chamber interlock provision



DTS-60A and DTS-100A

- Clear and easy to use controls
- 128 x 64 dot matrix crystal display
- “12 preprogrammed standard test sequences;
 - ASTM D1816/12, ASTM D877/13, IEC 156/95, IEC 156/63, ASTM D1816/84, ASTM D877/87, UTE C27-221/74, CEI 10-1/73, VDE 370, IRAM 2341/72, RVHP 1985, and PN-77/ED4408
- Internal memory holds last 50 tests w/ RS232 interface
- User definable test sequences
- Ambient temperature sensor
- English, German, Spanish, French, Greek
- Thermal printer included



Optional Accessories



Reusable Shipping Container

Reusable hard shipping cases designed for safe transportation of your DTS Series Oil/Liquid Dielectric Test Set.

- DTS-60D / DTS60A | part #32-0393
- DTS-100D / DTS100A | part #32-0391

DTS Series Specifications



DTS-60D



DTS-100D

DTS-60D

DTS-100D

Input:	120 V, 60 Hz, 7 A (DTS-60D) 230 V, 50/60hz, 3 A (DTS-60DF)	120 V, 60 Hz, 7 A (DTS-100D) 230 V, 50/60hz, 3 A (DTS-100DF)
Output:	0-60 kVac, 800 VA resistive load	0-100 kVac, 800 VA resistive load
Meter Accuracy:	+/- 2% of full scale	+/- 2% of full scale
Optional Test Cells: <i>(Sold Separately)</i>	TCD-3 for ASTM D877, TCD-5 for ASTM D1816, TCD-I2 for IEC 156	TCD-N3 for ASTM D877, TCD-N5 for ASTM D1816, TCD-NI2 for IEC 156
Operating Temperature:	14° to 104° F, -10° to 40° C	14° to 104° F, -10° to 40° C
Size & Weight:	14.75 x 14 x 11.5 in., 60lb 375 x 356 x 291 mm, 27kG	18.5 x 16.5 x 16.5 in., 100lb 470 x 419 x 419 mm, 45kG
Output Termination:	Dual capacitively graded bushings in test chamber	Dual capacitively graded bushings in test chamber



DTS-60A



DTS-100A

DTS-60A

DTS-100A

Input:	120 V, 60 Hz, 7 A (DTS-60A) 230 V, 50/60hz, 3 A (DTS-60AF)	120 V, 60 Hz, 7 A (DTS-100A) 230 V, 50/60hz, 3 A (DTS-100AF)
Output:	0-60 kVac, 800 VA resistive load	0-100 kVac, 800 VA resistive load
Optional Test Cells: <i>(Sold Separately)</i>	TCD-3 for ASTM D877, TCD-5 for ASTM D1816, TCD-I2 for IEC 156	TCD-N3 for ASTM D877, TCD-N5 for ASTM D1816, TCD-NI2 for IEC 156
Controls	12 pre-programmed test sequences / User programmable test routines. 128 x 64 dot matrix crystal display / Intuitive, easy to use controls in English, German, Spanish, French, Greek / Thermal printer	10 pre-programmed test sequences / User programmable test routines. 128 x 64 dot matrix crystal display / Intuitive, easy to use controls in English, German, Spanish, French, Greek / Thermal printer
Size & Weight:	14.75 x 14 x 11.5 in., 60lb 375 x 356 x 291 mm, 27kG	18.5 x 16.5 x 16.5 in., 100lb 470 x 419 x 419 mm, 45kG
Output Termination:	Dual capacitively graded bushings in test chamber	Dual capacitively graded bushings in test chamber



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© **COPYRIGHT 2021 - HIGH VOLTAGE, INC.** – Manufacturers of high voltage test equipment. Products include portable VLF AC .1Hz to .01Hz. Very Low Frequency, sinewave output hipots up to 200 kV; Tan delta and PD diagnostic measurement bridges for cable diagnostics, portable switchgear and bottle testers up to 100 kV AC ; Portable DC Hipots/Megohmmeters to 300 kV DC ; Oil Test sets at 60 kV or 100 kV; Aerial lift and bucket truck testers to 300 kV AC; High Power AC Dielectric test sets up to 300 kV AC @ 40 KVA; OHM Check concentric neutral tester; Controlled energy cable fault locators, Radar and Tracing devices; 150 kV and 300 kV HV voltage dividers.

DTS-BR-V6-03/2021-TC