

Baker Instrument  
Company

# Digital Winding Tester

*D 12000 and D 6000*

*Test and Print on the Spot, or Store and Analyze Later*



The "D" Series Testers combine the simplicity of analog testing with the printing and storage capabilities of digital technology.

The Digital Winding Tester from Baker Instrument Company is the newest example of innovative thinking in electrical insulation testing. With the "D" Series, high-precision testing and data collection can be accomplished in the shop or the field. The test results can then be printed immediately or stored for later use. Either way, you won't need a computer - you only need the Digital Winding Tester. This state-of-the-art tester demonstrates our ongoing commitment at Baker, to our customers, who have been putting Baker to the test for nearly four decades.



## Surge and Hipot in one Tester

With a Digital Winding Tester from Baker, you can perform surge and hipot tests, as well as digitize and store test data for future use.

Surge testing detects faults in both inter-turn winding and phase-to-phase insulation systems. Using advanced analog-to-digital conversion hardware, the "D" series captures the surge test waveform, remembers it, displays it indefinitely, and prints it to the included ink jet printer. This surge waveform storage capability can be applied to other motors besides simple induction motors. The "D" Series can be used to test all the rotating fields of a synchronous motor by storing the waveform from a surge test on one coil, and comparing that waveform to a waveform from every other coil. The Digital Winding Tester can also be used on DC armatures or fields. The resulting waveform can then be compared to all other bar-to-bar or span tests to detect a winding fault.

DC hipot testing detects faults in groundwall/earth insulation, and also provides insulation resistance and polarization index measurement.

Test results from up to 10 motors in the field can be stored, retrieved, printed, and uploaded to a desktop program for file management and analysis. Each of these 10 motor records has its own memory location. Each location can store up to three surge wave patterns plus DC hipot test voltage and current. The Digital Winding Tester can operate on its own in the field, and then transfer the test data to a computer running Baker's Motor Test Acquisition (MTA) software for further analysis. MTA for Windows provides database capabilities, waveform comparison, report generation, printouts, and other functions that turn test data into usable information. All options are easily accessed with on-screen prompts.

### Call Baker Today

At Baker, we never stop looking for ways to improve your competitive edge with innovative test solutions.

### Features:

- Storage of test data for up to 10 motors
  - 3 Surge Wave Patterns with Amplitude and Timebase
  - Surge Test Peak Voltage Amplitude
  - DC Hipot Voltage
  - DC Hipot Leakage Current
  - Insulation Resistance
- Baker's QRR reliability high voltage design
- Zero start interlock for tester High Voltage Output
- Bright, sharp, digital 5-inch display
- **Leads Energized** safety warning indicator
- Hipot Over-Current safety warning indicator
- Input Source **Open Ground** operator safety disable and warning indicator
- Test leads insulated to 45 KV rating
- Test Lead Select Switch with All Leads Grounded operator safety position
- Parallel printer and PC interface

### Options:

- FS-12 Footswitch for Push to Test allows hands-free operation
- RAS-12 Roll Around Stand for convenient height of operation and movement
- PP-30D 30KV Surge/DC Hipot Power Pack
- Windows 95, 98, & NT Compatible Motor Test Management Analysis Software
- Compatible ink jet printer

### Specifications:\*

Surge Test	12KV	6KV
Maximum Output Voltage	12000 volts	6000 volts
Maximum Output Current	800 amps	380 amps
Maximum Pulse Energy	2.88 joules	0.72 joules

#### DC High Potential Test:

Maximum Output Voltage	12000 volts	6000 volts
Maximum Output Current	1000 $\mu$ Amps	1000 $\mu$ Amps
Overcurrent Trip	10/100/1000 $\mu$ Amps	
Current Resolution	1/10/100 $\mu$ Amps per division	

#### Physical Characteristics

Weight (kilograms/pounds)	22.7/50	21.5/46
Dimensions	19x8x23 in. (WxHxD)	
Power Input	120 VAC/60 Hz or 220 VAC/50 Hz	

\*Data Subject to change without notice. Printed in USA 10/99.

*Whether you're trouble shooting, manufacturing, or rebuilding, Baker's digital tester consistently detects faulty windings that other testers miss.*



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