



Advanced Test Equipment Rentals
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D12R/D6R/D3R Digital Winding Tester

"The "D" Series Testers simplifies the on-going need for motor insulation testing."



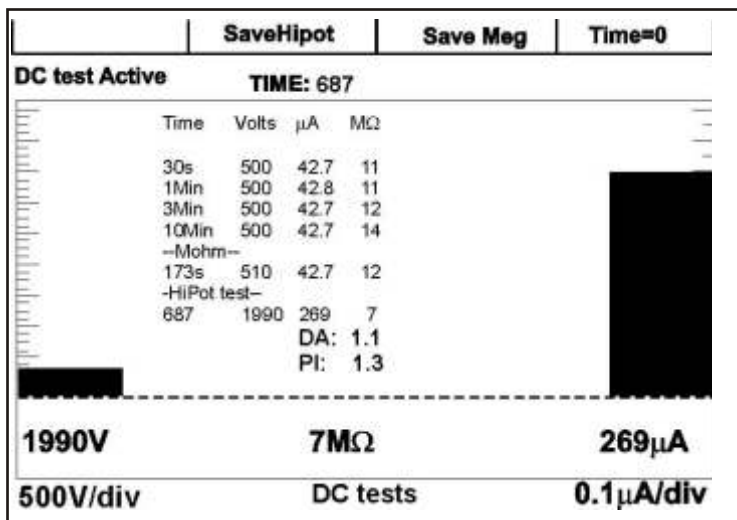
The D12R/D6R/D3R is the newest digital tester offered by Baker Instrument Company, an SKF Group Company. This instrument is designed to maximize testing capabilities in a lightweight, sturdy format. Additional testing capabilities have been added to the tester, to make it a more comprehensive tool for predictive maintenance. As with the other Digital testers, the new D12R/D6R/D3R's high precision testing capabilities allows data collection in the shop or the field. The results can then be printed immediately or stored for later use. This tester demonstrates our continual commitment to motor integrity and Insulation testing.



Resistance, HiPot and Surge in one Tester

With the D12R/D6R/D3R Digital Winding Tester from Baker Instrument Company, an SKF Group Company, you can perform Resistance, HiPot and Surge tests, as well as digitize and store data for future use.

The Resistance Test verifies the existence of dead shorts within the turn-to-turn coils, shows any imbalances between phases due to turn count differences, along with locating poor wire connections or contacts.



DC HiPot testing detects faults in groundwall/earth insulation, and also provides a complete Polarization Index test. The groundwall/earth insulation system consists of the wires insulation, slot liner insulation, wedges, varnish, and sometimes phase paper.

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 and fields. The resulting waveform can then be compared to all other bar-to-bar or span tests to detect a winding fault.

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 screenshot shows the MTA software interface with a table of test results and a detailed motor configuration form.

Time	Test ID	Temp	Re...	Mohm	PI	HiPot	Sur
03/19/02 10:42:34	480V with PI	PASS	PASS	PASS	PASS	PASS	PASS

Motor ID: CirFan34-23
Plant: North Plate
Unit: Unit 23
Model: S-2000
Manufacturer: Reliance Electric
SN: P56H130TV-2W
Volts Rating: 208-230/460
Volts Oper: 480 Volt
Aspct Rating: 2.9-2.6/1.3
Aspct Oper: 0
NEMA Design: Amb T: 40
NEMA nom alt: 0
Manuf's Type: Manual Dr Code
Description: Short description of the Motor can be entered here.

HP/KW: 0.75
Inrat: F
RPM: 1725
Frame: EC56
LR (A): 0
SF: 1.15
Hz: 50
LR Code: 1

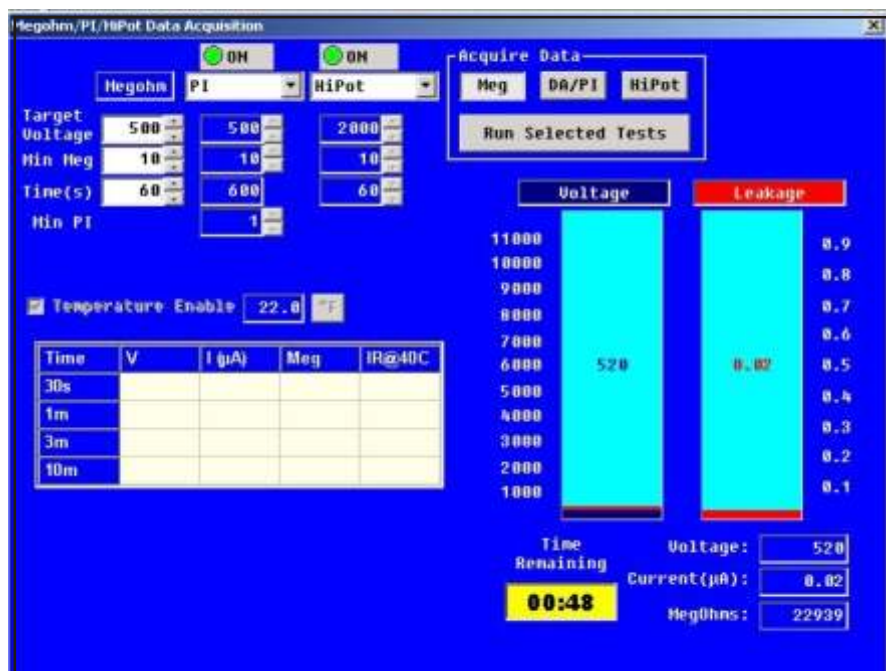
Winding Config: Wye Delta

Buttons: Nameplate, Application, Results Summary, Surge, PI, Step/Ramp Voltage

The Digital Winding Tester can operate on its own in the field, and then transfer the test data to a computer running Baker Instrument Company, an SKF Group Company's Motor Test Acquisition (MTA for Windows) software for further analysis. MTA for Windows provides database capabilities, waveform comparison, report generation, printouts, and other functions that turns test data into usable information. All options are easily accessed with on-screen prompts.

Call us today. We never stop looking for ways to improve your competitive edge with testing solutions.

- FS-12 Footswitch for Push to Test hands free operation
- PP-30D 30kV Surge/DC HiPot Power Pack
- Motor Test Management Analysis Software (MTA for Windows) supports Windows 98 Second addition, NT-SP6, 2000, & XP
- Compatible Ink Jet printer



Features

- Storage of test data for up to 10 motors
 - 3 Surge Wave Pattern with Amplitude and Time base
 - Surge Test Peak Voltage Amplitude
 - DC HiPot Voltage, Leakage Current
 - Insulation Resistance
- Baker's QRR reliability High Voltage Design
- Zero Start Interlock for Tester High Voltage Output
- Bright, Sharp 5-inch digital display
- Leads Energized safety warning indicator
- HiPot Over-Current safety warning indicator
- Input Source Open Ground operator safety disable and warning indicator.
- Test Lead insulated to 45 kV rating
- Dedicated Test Leads for Resistance Testing
- Test Lead Select Switch with All Leads Grounded operator safety position
- Parallel Printer and PC interface

Data		Tests		Trending					
Time	Test ID	Temp	Re...	Mohm	PI	Hipot	Srg		
03/19/02 10:42:34	480V with PI	PASS	PASS	PASS	PASS	PASS	PASS		

Time: 03/19/02 10:42:34

Test ID: 480V with PI

By: jar

For: Testing Purposes

MCC: 238-SE

Arm #: 266-L

Test No: 9

Add

Save

Del

Memo: This is a memo. I need one to test the reports with.

Plant: North Platte

Unit: Unit 23

Use: Circulating Fan

% Load:

V/H: Vert

Starter:

/24hr:

Repair #: 887-5

Date

Rewind:

Install: 7/8/34

Basic: 9/21/38

Volts 1: 480

Amps 1: 2.3

Volts 2: 480

Amps 2: 2.3

Volts 3: 475

Amps 3: 2.4

Tester Type: D12R

Customer's Tester ID: D12R

Tester SN: 102

PP30 SN: No_PP_SN

Cal Date: 09/18/2003

Next Cal Date: 09/18/2004

Nameplate	Application	Results Summary	Surge	PI	Step/Ramp-Voltage
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Surge Test	12kV	6 kV	3kV
Max Output Voltage	12000V	6000V	3000V
Max Output Current	400A	350A	190A
Max Pulse Energy (joules)	2.88	0.72	0.18
Discharge Capacitance	.04 μ f (all)		
DC HiPot Potential Test			
Max Output Voltage	12000V	6000V	3000V
Maximum Output Current	1000 μ A	1000 μ A	1000 μ A
Maximum Overcurrent Trip	1/10/100/1000 μ A (all)		
Typical Overcurrent Trip	.85/8.5/85/850 μ A (all)		
Current Resolution	0.1/1/10/100 μ A per div. (all)		
Resistance Test	.0008 ohms - 216 ohms		
Physical Characteristics			
Weight (pounds)	40 lbs		
Dimensions	19 x 8 x 23 in (WxHxD)		
Power Input	85-264 VAC 50/60 Hz		

**Data Subject to change without notice. Printed in USA 06/07*



Whether you're troubleshooting, manufacturing, or rebuilding, Baker Instrument Company, an SKF Group Company's Digital Tester consistently detects faulty windings that other testers miss.



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