



Model 4320

# 4000 SERIES

## 4-IN-1 ELECTRICAL SAFETY TESTERS



See how simple using our tester can be!



VERSATILE 4-IN-1 FUNCTIONALITY

SIMPLE MENU NAVIGATION

MEETS 200 mA SHORT CIRCUIT REQUIREMENTS\*  
\*4520 ONLY

6 PROGRAMMABLE MEMORIES WITH 6 TEST STEPS EACH

AUTOMATE WITH PLC CONTROL OR OPTIONAL RS-232 INTERFACE

REMOTE SAFETY INTERLOCK

The **4000 Series** provides advanced 4-in-1 test capability in a convenient one-box solution. Our most popular multi-function tester, the **4000 Series** performs AC Hipot, DC Hipot, Insulation Resistance and Ground Bond tests while taking up minimal production line space. The **4000 Series** includes the simplest menu navigation in the industry, reducing set-up time and increasing production line throughput for any application. With multiple memories and an optional RS-232 interface, you can quickly perform tests on a variety of DUT's from the front panel or with a PLC remote. Choose from two models.



AC Hipot



DC Hipot



Insulation Resistance



Ground Bond

Model	AC Hipot	DC Hipot	Insulation Resistance	Ground Bond
4320	•	•	•	•
4520	<b>500VA</b>	•	•	•

## RELEVANT APPLICATIONS

APPLIANCE

INDUSTRIAL EQUIPMENT

INFORMATION TECHNOLOGY

CONTRACT MANUFACTURING

## SUPPLIED ACCESSORIES

- 102-050-913 High Voltage Retractable Probe 6 ft. (1.8m)
- 102-055-913 High Voltage Lead 6 ft. (1.8m)
- 125-013-001 Input Power Cable USA
- 99-10164-01 Input Power Cable USA
- 99-10008-01 30 Amp High Current Lead 6 ft. (1.8m)
- 99-10009-01 30 Amp High Current Return Lead 6 ft. (1.8m)
- 99-10040-01 Interlock Connector
- 99-10106-01 Fuse 4320
- 99-10656-01 Fuse 4520

## OPTIONS

Description	4320	4520
Rear Outputs	•	•
RS-232 Interface	•	•

## SERIES FEATURES



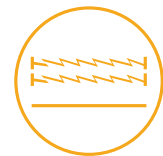
Test Setup Memories



Frequency Selection



Ramp



Dwell



Low Current Sense



Safety Agency Listed



PLC Remote



RS-232 (optional)



# 4000 SERIES SPECIFICATIONS

INPUT		
<b>Voltage</b>	4320	115/230 VAC $\pm$ 10%, user selection
	4520	115/230V Auto Range, $\pm$ 15% variation
<b>Frequency</b>	50/60 Hz $\pm$ 5%	
<b>Fuse</b>	4320	6.3 A 250 V slow blow
	4520	15 A slow blow 250 VAC

DIELECTRIC WITHSTAND TEST MODE		
<b>Output Rating</b>	4320	5 kV @ 20 mAAC 6 kV @ 5 mADC
	4520	5 kV @ 100 mAAC 6 kV @ 10 mADC
<b>Voltage Setting/ Display</b>	Range: Resolution: Accuracy:	0 - 5.00 kVAC 0 - 6.00 kVDC 0.01 kV $\pm$ (2% of setting + 5 V) $\pm$ (2% of reading + 10 V)
<b>Current Display</b>	4320	Range: 0 - 20.00 mAAC, 0 - 5.00 mADC Resolution: 0.01 mA Accuracy: $\pm$ (2% of reading + 0.02 mA)
	4520	Range: 0 - 99.99 mAAC, 0 - 10.00 mADC Resolution: 0.01 mA Accuracy: $\pm$ (2% of reading + 0.06 mA)
<b>HI-Limit LO-Limit</b>	4320 AC	Range: 0 - 20.00 mA Resolution: 0.01 mA Accuracy: $\pm$ (2% of setting + 0.02 mA)
	4320 DC	Range: 0 - 5.00 mA Resolution: 0.01 mA Accuracy: $\pm$ (2% of setting + 0.02 mA)
	4520 AC	Range: 0 - 99.99 mAAC Resolution: 0.01 mA Accuracy: $\pm$ (2% of reading + 0.06 mA)
	4520 DC	Range: 0 - 10.00 mADC Resolution: 0.01 mA Accuracy: $\pm$ (2% of reading + 0.06 mA)
<b>Failure Detector</b>	Audible and Visual	
<b>DC Output Ripple</b>	4320	< 5% Ripple RMS at 6 kVDC @ 5 mA, resistive load
	4520	$\leq$ 5% Ripple RMS at 6 kVDC @ 10 mA, resistive load
<b>Discharge Time</b>	$\leq$ 200 ms	
<b>Max. Capacitive Load in DC Mode</b>	1.00 $\mu$ F < 1 kV	0.08 $\mu$ F < 4 kV
	0.75 $\mu$ F < 2 kV	0.04 $\mu$ F < 5 kV
	0.50 $\mu$ F < 3 kV	0.01 $\mu$ F < 6 kV
<b>AC Wave Form</b>	Sine Wave, Crest Factor = 1.3 - 1.5	
<b>AC Output Frequency</b>	Range:	50/60 Hz, user selection
<b>Output Regulation</b>	$\pm$ (1% of setting + 5 V) from no load to full load	
<b>Dwell Timer</b>	Range:	0, 0.2 - 999.9 sec, (0 = continuous)
	Resolution:	0.1 sec increments
	Accuracy:	$\pm$ (0.1% + 0.05 sec)
<b>Ramp Timer</b>	Range:	0.1 - 999.9 sec
	Resolution:	0.1 sec increments
	Accuracy:	$\pm$ (0.1% + 0.05 sec)

INSULATION RESISTANCE TEST MODE					
<b>Output Voltage</b>	Range:	100 - 1000 VDC			
	Resolution:	1 V			
	Accuracy:	$\pm$ (2% of reading + 5 V)			
<b>Voltage Display</b>	Range:	0 - 1000 V			
	Resolution:	1 V			
	Accuracy:	$\pm$ (2% of reading + 5 V)			
<b>Resistance Display</b>	Range:	1 - 1000 M $\Omega$ (4 digit, auto ranging)			
	Resolution:		500 VDC	1000 VDC	
			M $\Omega$	M $\Omega$	M $\Omega$
			0.01	1.00 - 40.00	1.00 - 80.00
		0.1	35.0 - 999.9	75.0 - 999.9	
<b>Hi-Limit</b>	Range:	0, 1 - 1000 M $\Omega$ (0 = off)			
<b>LO-Limit</b>	Range:	0, 0.5 - 999.9 sec, (0 = continuous)			
<b>Delay Timer</b>	Resolution:	0.1 sec			
	Accuracy:	$\pm$ (0.1% of 0.05 sec)			

GROUND BOND TEST MODE			
<b>Output Voltage</b>	Range:	6 VAC fixed	
<b>Output Frequency</b>	Range:	50/60 Hz, user selectable	
<b>Output Current</b>	Range:	3.0 - 30.0 AAC	
	Resolution:	0.1 A	
	Accuracy:	$\pm$ (2% of setting + 0.02 A)	
<b>Current Display</b>	Range:	0 - 30.0 A	
	Resolution:	0.1 A	
	Accuracy:	$\pm$ (3% of reading + 0.01 A)	
<b>HI-Limit LO-Limit</b>	Range:	0 - 510 m $\Omega$ for 3.0 - 10.0 A	
		0 - 200 m $\Omega$ for 10.1 - 25.0 A	
		0 - 150 m $\Omega$ for 25.1 - 30.0 A	
	Resolution:	1 m $\Omega$	
	Accuracy:	$\pm$ (2% of setting + 2 m $\Omega$ )	
<b>Dwell Timer</b>	Range:	0, 0.5 - 999.9 sec, (0 = continuous)	
	Resolution:	0.1 sec	
	Accuracy:	$\pm$ (0.1% + 0.05 sec)	
<b>Milliohm Offset</b>	Max. Offset Capability:	0 - 100 m $\Omega$	
	Resolution:	1 m $\Omega$	
	Accuracy:	$\pm$ (2% of setting + 2 m $\Omega$ )	

GENERAL SPECIFICATIONS		
<b>Memories</b>	Allows storage of up to 6 different test programs and 6 steps per memory and a single step mode	
<b>Remote I/O</b>	Input:	Test, Reset, Interlock & recall memory 1-6
	Output:	Pass, Fail, Test-In-Process
<b>Interface</b>	Optional RS-232 interface	
<b>Security</b>	Lockout capability to avoid unauthorized access to test set-up programs	
<b>Calibration</b>	Software & adjustments made through front panel	
<b>Mechanical</b>	Bench or rack mount with tilt up front feet	
<b>Dimensions (W x H x D)</b>	4320	11" x 3.5" x 17" (280 x 89 x 430 mm)
	4520	16.9" x 5.2" x 15.7" (430 x 133 x 400 mm)
<b>Weight</b>	4320	33 lbs. (15 kg)
	4520	54 lbs. (24.5 kg)

Specifications subject to change without notice.