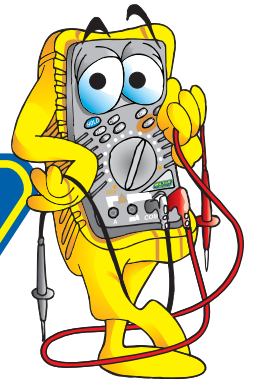


# Digital Insulation Testers



## Technical Data



### K3005 • K3007

The K3005 and K3007 have three test voltage ranges: 250V, 500V and 1000V and are equipped with a unique bargraph display that illustrates to the user that the insulation under test meets the minimum voltage required by the regulations. An advanced feature included in both models is Auto Null mode, this unique function subtracts the test lead resistance during continuity tests, ensuring repeatable accuracy. Another great feature is the EL Backlight on the display which enables readings to be taken in dimly lit areas.

#### K3005



#### K3007

#### Features Include:

- Three test ranges 250V-500V-1000V
- Auto null function
- Automatic discharge after test
- Main bargraph indication of insulation resistance, sub bargraph indicates output voltage
- Displays the value of external AC voltage along with flashing symbol and buzzer
- Lock down Test Button for continuous use
- 1mA output current on insulation test
- 200mA short circuit on continuity range
- EL Backlight for dimly lit areas
- Trac-Lok mode to extend battery life by up to 400% (**K3007 only**)
- Intrinsically safe version available on request (**K3007 only**)

#### General Specifications

Applicable Standards	: IEC61010-1	Overvoltage CAT. III 300V
	: IEC61010-2-31	Pollution Degree 2
	: IEC61557-1/2/4	Safety requirements for hand-held probe assemblies
	: IEC61326-1	Measuring equipment for low voltage distribution systems
	: IEC60529 (IP54)	EMC
		Dust and drip proof
Operating System	: Dual Integration	
Display	: Liquid crystal display (maximum count: 1999), Unit, Mark	
	: Bar graph 30 points max. (20 points on $\Omega$ range)	
Over range Indication	: "OL" is shown on the display	
Sample Rate	: Approx: 0.5 ~ 2.5 times per second	
Operating Temperature and Humidity	: 0 ~ +40°C, relative humidity up to 85%	
Storage Temperature and Humidity	: -20 ~ 60°C, relative humidity up to 75%	
Insulation Resistance	: More than 50M $\Omega$ at 1000V DC between electrical circuit and housing case	
Withstand Voltage	: 3700V AC for one minute between electrical circuit and housing case	
<b>Overload Protection</b>		
Insulation Resistance Ranges	: 1000V Range	1200V (DC+AC p-p) for 10 seconds
	: 500V Range	600V (DC+AC p-p) for 10 seconds
	: 250V Range	300V (DC+AC p-p) for 10 seconds
Continuity Ranges	: 20/200/200 $\Omega$ Range	280V (DC+AC p-p) for 10 seconds (Protection by fusing)
Dimensions	185(L) X 167(W) X 89 (D) mm approx.	



<b>Weight</b>	900g approx. (including battery)
<b>Power Source</b>	8 x R6P, 1.5V AA or equivalent
<b>Auto power-off</b>	Automatically turns off approx. 10minutes after the last switch operation
	Consumption current: approx. 75 $\mu$ A
<b>Accessories</b>	Test probe MODEL 7122 x1 set
	Strap belt x1
	Test probe pouch x1
	Batteries R6P x8
	Instruction manual. x1
	Spare fuse F600V/500mA x1

Measuring Range and Accuracy (at 23  $\pm$ 5°C, relative humidity 45 - 75%)

Measurement	Nominal Output Voltage	250V	500V	1000V	K3005	K3007
<b>Insulation Resistance Range</b>	Measuring Ranges	0 ~ 19.99M $\Omega$	0 ~ 19.99M $\Omega$	0 ~ 19.99M $\Omega$	*	*
		0 ~ 199.9M $\Omega$	0 ~ 199.9M $\Omega$	0 ~ 199.9M $\Omega$	*	*
		0 ~ 1999M $\Omega$	0 ~ 1999M $\Omega$	0 ~ 1999M $\Omega$	*	*
	Open-Circuit Voltage	250V DC +20%, -0%	500V DC +20%, -0%	1000V DC +20%, -0%	*	*
	Nominal Current	1mA DC min. at 0.25 M $\Omega$	1mA DC min. at 0.5 M $\Omega$	1mA DC min. at 1 M $\Omega$	*	*
	Short-Circuit Current	1.5mA approx.			*	*
	Accuracy	20M $\Omega$	$\pm$ 1.5% rdg $\pm$ 5dgt			*
200M $\Omega$		*				*
2000M $\Omega$		0 ~ 1G $\Omega$ 1G ~ 2G $\Omega$	$\pm$ 10% rdg $\pm$ 3dgt	$\pm$ 3% rdg $\pm$ 3dgt	*	*
<b>Measurement</b>	<b>Ranges</b>	<b>20<math>\Omega</math></b>	<b>200<math>\Omega</math></b>	<b>2000<math>\Omega</math></b>	<b>K3005</b>	<b>K3007</b>
<b>Continuity Ranges</b>	Measuring Ranges	0 ~ 19.99M $\Omega$	0 ~ 199.9M $\Omega$	0 ~ 1999M $\Omega$	*	*
	Open-Circuit Voltage	7 ~ 12V approx.			*	*
	Measuring Current at 0.2 $\Omega$ ~ 2 $\Omega$	200mA min.			*	*
	Accuracy	$\pm$ 1.5% rdg $\pm$ 5dgt	$\pm$ 1.5% rdg $\pm$ 3dgt		*	*
Measurement	Function	Range	Measuring ranges to keep operating error	Maximum percentage operating error	K3005	K3007
<b>Insulation Resistance Range</b>	1000V	20M $\Omega$	0.50 ~ 19.99M $\Omega$	$\pm$ 30%	*	*
		200M $\Omega$	1.0 ~ 199.9M $\Omega$		*	*
		2000M $\Omega$	10 ~ 1000M $\Omega$		*	*
	500V	20M $\Omega$	0.50 ~ 19.99M $\Omega$		*	*
		200M $\Omega$	1.0 ~ 199.9M $\Omega$		*	*
		2000M $\Omega$	10 ~ 100M $\Omega$		*	*
	250V	20M $\Omega$	0.50 ~ 19.99M $\Omega$		*	*
		200M $\Omega$	1.0 ~ 199.9M $\Omega$		*	*
		2000M $\Omega$	10 ~ 100M $\Omega$		*	*
<b>Continuity Test</b>	$\Omega$	20 $\Omega$	0.20 ~ 19.99 $\Omega$	*	*	
		200 $\Omega$	1.0 ~ 199.9 $\Omega$	*	*	
		2000 $\Omega$	10 ~ 1999 $\Omega$	*	*	

## Ordering Information

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