# **High Voltage Digital Insulation Tester**



### **Technical Data**



### K3125

The K3125 is microprocessor controlled and is capable of performing tests from 500V up to 5000V, and will automatically discharge the circuit after the test has been completed. The meter is a battery powered instrument and operates on a simple and clear basis. The K3125 has the capabilities of being a diagnostic tool and is intended for testing insulation on Rotating Machines, Transformers, Cables, High Voltage Generators, Electrical Circuits and Surge Arresters. These readings are displayed on the large LCD display with a bargraph together with the actual output voltage thus making it easy for the user to read the results. Once the meter test is completed it will automatically discharge the apparatus under test and indicate the discharge voltage on the display while the meter is still on.

### **Features Include:**

- Measures DC Voltage in 500V, 1000V, 2500V and 5000V
- Large LCD Display with bargraph and backlight
- Polarization index measurement (PI)
- Indication of output voltage and discharge voltage
- Insulation resistance up to  $1000G\Omega$
- Withstand Voltage test up to 5320V
- Auto discharge function and voltage output warning
- Measuring time up to 10 Hours
- Live circuit warning symbols plus audible warning
- 2 Built-In Timers
- Auto power off and battery check

### **General Specifications**

Operating System

: Dual Integration

Display

Liquid crystal display (Max. 999counts) (1000counts only at  $1T\Omega$  is displayed) AC.V range: Max 630points Bar graph/Max 36points

Battery mark display (in 4 levels) **Low Battery Warning** Over Range Indication

"OL" mark appears on insulation resistance range.

"Hi" mark appears on voltage range.

Voltage Warning Mark

Voltage warning mark lights up during measurements. It flashes when a voltage of 30V or higher exists on the circuit.

Range shifts to upper range: 1000 counts

**Auto-Ranging** Range shifts to lower range: 80 counts

(only on the insulation resistance range)

Sample Rate approx. 0.5 ~ 5times/sec

**Auto Power Off** Power off function operates automatically after a switch remains for

2000m or less above sea level

10min. (current consumption: approx. 1µA)

Operable Altitude Temperature and **Humidity Range** 

23°C±5°C/ relative humidity 85% or less (no condensation)

(guaranteed accuracy) **Operating Temperature and** 

0 ~ 40°C/ relative humidity 85% or less (no condensation)

**Humidity Range** 

Storage Temperature and Humidity

-20°C ~ +60°C/ relative humidity 75% or less (no condensation)

Overload Protection

Insulation resistance range: AC1200V/10sec

Voltage range: AC720V/10sec

Withstand Voltage Insulation Resistance AC8320V(50/60Hz)/5sec. (between electrical circuit and enclosure) 1000MΩ or more/DC1000V (between electrical circuit and enclosure)

**Dimensions** 205(L) X 152(W) X 94(D) mm approx. approx. 1.8kg (including battery) Weight DC12V: Alkaline battery size C (LR14) X8pcs or equivalent) Power source

**Current Consumption** approx. 1A (max)







### Measuring Range and Accuracy (Temperature, humidity: 23 $\pm$ 5°C, relative humidity 45 ~ 75%)

Measurement	Rated Voltage	500V	1000V	2500V	5000V	5000V	
Insulation Resistance Tester	Measuring	0.0 ~ 99.9MΩ	0.0 ~ 99.9MΩ	0.0 ~ 99.9MΩ	0.0 ~ 99.9MΩ	0.0 ~ 99.9ΜΩ	
	Range	100 ~ 999MΩ	100 ~ 999MΩ	100 ~ 999MΩ	100 ~ 999ΜΩ	100 ~ 999ΜΩ	
			1.00 ~ 9.99GΩ 1.00 ~ 9.99GΩ 1.00 ~ 9.		1.00 ~ 9.99GΩ		
				10.0 ~ 99.9GΩ	10.0 ~ 99.9GΩ	10.0 ~ 99.9GΩ	
					100 ~ 1000GΩ		
	Open Circuit Voltage	DC500V +30%0%	DC1000V +20%0%	DC2500V +20%0%	DC5000V +20%0%		
	Rated Current	1mA or more. 1.2mA or less (at 0.5MΩ load)	1mA or more. 1.2mA or less (at 1MΩ load)	1mA or more. 1.2mA or less (at 2.5MΩ load)	1mA or more. 1.2mA or less (at 5MΩ load)	1.2mA or less	
	Short Circuit Current	Approx. 1.3mA					
	Accuracy		±5%±3dgt		100GΩ or more. ±20%rdg		
Measurement			DC Voltage		AC Voltage	AC Voltage	
Voltmeter	Measuring Range		±30 ~ 600V		30 ~ 600V (50/60	30 ~ 600V (50/60Hz)	
	Resolution		1V				
	Accuracy		±2%rdg±3dgt				
Range		500V	1000V	2500V	5000V	AC.V	
Output at short circuit		220mA				110mA	
When rated current is outputted		650mA/0.5MΩ	700mA/1MΩ	800mA/2.5MΩ	1000mA/5MΩ	* at voltage measuremen	
Output at open circuit		40mA	50mA	80mA	120mA		
On standby		25mA				110mA	
When backlight is on		Increased by 35mA					

## **Ordering Information**

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