High Voltage Digital Insulation Tester







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 | | | | |
| Low Battery Warning | : | Battery mark display (in 4 levels) | | | | |
| Over Range Indication | : | "OL" mark appears on insulation resistance range. | | | | |
| 5 | | "Hi" mark appears on voltage range. | | | | |
| Voltage Warning Mark | | Voltage warning mark lights up during measurements. It flashes | | | | |
| 5 5 | | when a voltage of 30V or higher exists on the circuit. | | | | |
| Auto-Ranging | : | Range shifts to upper range: 1000 counts | | | | |
| | | 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 | | | | |
| | | 10min. (current consumption: approx. 1µA) | | | | |
| Operable Altitude | : | 2000m or less above sea level | | | | |
| Temperature and | | | | | | |
| Humidity Range | : | 23°C±5°C/ relative humidity 85% or less (no condensation) | | | | |
| (guaranteed accuracy) | | | | | | |
| Operating Temperature and | | | | | | |
| Humidity Range | : | 0 ~ 40°C/ relative humidity 85% or less (no condensation) | | | | |
| Storage Temperature | | | | | | |
| and Humidity | : | -20°C ~ +60°C/ relative humidity 75% or less (no condensation) | | | | |
| Overload Protection | 1 | Insulation resistance range: AC1200V/10sec | | | | |
| | | Voltage range: AC720V/10sec | | | | |
| Withstand Voltage | : | AC8320V(50/60Hz)/5sec. (between electrical circuit and enclosure) | | | | |
| Insulation Resistance | : | 1000MΩ or more/DC1000V (between electrical circuit and enclosure) | | | | |
| Dimensions | : | 205(L) X 152(W) X 94(D) mm approx. | | | | |
| Weight | | approx, 1.8kg (including battery) | | | | |



Г Weight Power source Current Consumption

- approx. 1.8kg (including battery)
 - DC12V: Alkaline battery size C (LR14) X8pcs or equivalent)
- Ξ. approx. 1A (max)

Measuring Range and Accuracy (Temperature, humidity: 23 ± 5°C, relative humidity 45 ~ 75%)

| Measurement | Rated Voltage | Rated Voltage 500V | | 1000V 2500V | | 5000V | |
|------------------------------------|--------------------------|--|--|--|--|-----------------------------|--|
| Insulation Resistance Tester | Measuring Range | 0.0 ~ 99.9MΩ | 0.0 ~ 99.9MΩ | 0.0 ~ 99.9MΩ | 0.0 ~ 99.9MΩ | 0.0 ~ 99.9ΜΩ | |
| | | 100 ~ 999MΩ | 100 ~ 999MΩ | 100 ~ 999MΩ | 100 ~ 999MΩ | 100 ~ 999MΩ | |
| | | | 1.00 ~ 9.99GΩ | 1.00 ~ 9.99GΩ | 1.00 ~ 9.99GΩ | | |
| | | | | 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) | | |
| | Short Circuit Current | | | | | | |
| | Accuracy | | ±5%±3dgt | | $100G\Omega$ 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 | | | 110mA | | | | |
| When rated current is outputted | | 650mA/0.5MΩ | 700mA/1MΩ | 800mA/2.5MΩ | 1000mA/5MΩ | * at voltage measurement | |
| Output at open circuit | | 40mA | 50mA | 80mA | 120mA | | |
| On standby | | | 110mA | | | | |
| When backlight is on | | Increased by 35mA | | | | | |

Ordering Information

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