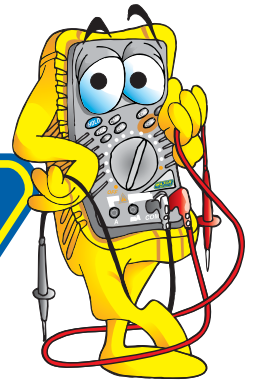


12kV Digital High Voltage Insulation Tester



Technical Data

K3128

The K3128 is a Digital High Voltage Insulation Tester with 6 ranges, 500, 1000, 2500, 5000, 10000 and 12000V with a fine adjustment setting (5V to 100V steps) with an insulation resistance up to 35TΩ. The microprocessor controlled K3128 is ideal for analyzing the insulation characteristics of cables, transformers, motors, generators, high pressure switches, insulators and large wiring installations. It is housed in robust IP64 (lid closed) case, ideal for extend=save field usage, powered by rechargeable batteries and an AC input which can be operated while under charge. After a completion of an insulation test, the K3128 automatic discharge and display the test voltage. Data storage of test is available in 3 types of data: logging Data (REC File), Measured Data (Save File), and Print Screen (BMP File), this captures and saves the screen images.



Features Include:

- Insulation Resistance (IR) & Leak Current with a wide range of measurement from 500V-1000V-2500V-5000V-10000V-12000V
- Variable test voltage of 5V to 100V steps
- Voltage & elapsed time are displayed
- Polarization Index (PI)
- Dielectric Absorbtion Ratio (DAR)
- Step Voltage (SV)
- Dielectric Discharge Index (DD)
- Capacitance measurement
- Auto discharge function and voltage output warning function
- Internal Memory– max 40,000 data
- Built-in Print Screen Function enables to record display screen, records 32 screens max
- Insulation resistance up to 35TΩ
- Downloading to PC – using the USB cord and the PC software included as standard accessories, the memory data or the measuring data can be transmitted to a PC at real time
- Mains and battery powered – internal battery can be charged during normal operation
- Robust design for field use with weatherproof protection in IP64 Casing with lid closed
- Large backlit LCD graphic display with bargraph

General Specifications

Applicable Standards	:	IEC61010-1	CATIV 600V Pollution Degree 2
	:	IEC61010-031	For hand-held probe assemblies
	:	IEC61326	EMC Standard for electrical equipment for measurement control and laboratory use
	:	IEC60529	IP64 (with the bottom case closed)
Operating System	:	Dual Integration	
	Display	:	320 X 240 dots, 5.7-inch
:		Monochrome display	
Low Battery Warning	:	Battery mark display (in 4 levels)	
	Response Time	:	approx. 30 sec in a range of ±5% of accuracy
:		approx. 60 sec in a range of ±20% of accuracy	
:		(response time becomes slower when output voltage becomes lower)	
Auto Power Off	:	Power-off function operates when 10 min pass without any key operation	

...to be continued p2/

General Specifications

Altitude	:	2000m or less
Temperature and Humidity Range (guaranteed accuracy)	:	23°C ±5°C/ relative humidity 85% or less (no condensation)
Operating Temperature and Humidity Range	:	-10°C ~ 50°C/ relative humidity 85% or less (when operating with an external power supply, no condensation) 0°C ~ 40°C/ relative humidity 85% or less (when operating with battery, no condensation)
Storage Temperature and Humidity Range	:	-20°C ~ 60°C/ relative humidity 75% or less (no condensation)
Overload Protection	:	AC720V/10 sec.
Withstand Voltage	:	AC8770V: between line terminal and enclosure / 5 sec (50/60Hz) AC6880V: between the measuring terminal and enclosure / 5 sec (50/60Hz) AC6880V: between the power connector and enclosure / 5 sec (50/60Hz)
Insulation Resistance	:	1000MΩ or more/DC1000V (between electrical circuit and enclosure)
Dimension	:	330 (L) X 410(W) X 180(D) mm (instrument and hard case)
Weight	:	approx. 9kg (including battery) (instrument and hard case)
Power Source	:	Rechargeable lead storage battery (PXL - 12050:12V 5Ah), AC power supply (100V ~ 240V 50/60Hz)
Measurement Time	:	approx. 4 hours (continuous use) Applying a load of 100MΩ at the insulation resistance 12000V range
Accessories	:	Line probe (MODEL7226) Line probe with alligator clip (MODEL7227) Earth cord (MODEL7224) Guard cord (MODEL7225) Communication adaptor (MODEL8212 USB) PC software Straight type metal parts (MODEL8029) Power cord (MODEL7170) Instruction manual

Insulation Resistance Tester

Rated Voltage	500V	1000V
Max Value	500GΩ	
Accuracy	0 ~ 50GΩ ±5%±3dgt	* Accuracy is not guaranteed with setting of 250V or less.
	50G ~ 500GΩ ±20%	0 ~ 100GΩ ±5%±3dgt 100G ~ 1TΩ ±20%
Short-Circuit Current	Max 5.0mA	
Rated Measurement Current	1mA or more, 1.2mA or less under a load of 0.5MΩ * Should be 500V or more	1mA or more, 1.2mA or less under a load of 1MΩ
Rated Voltage	2500V	5000V
Max Value	2.5TΩ	
Accuracy	0 ~ 250GΩ ±5%±3dgt	0 ~ 500GΩ ±5%±3dgt
	250G ~ 2.5TΩ ±20%	500G ~ 5TΩ ±20%
Short-Circuit Current	Max 5.0mA	
Rated Measurement Current	1mA or more, 1.2mA or less under a load of 2.5MΩ	1mA or more, 1.2mA or less under a load of 5MΩ
Rated Voltage	1000V	12000V
Max Value	35TΩ	
Accuracy	0 ~ 1TΩ ±5%±3dgt	0 ~ 1TΩ ±5%±3dgt
	1T ~ 10TΩ ±20%	1T ~ 10TΩ ±20%
	10T ~ 35T Values are displayed but accuracy isn't guaranteed	10T ~ 35T Values are displayed but accuracy isn't guaranteed
Short-Circuit Current	Max 5.0mA	
Rated Measurement Current	0.15mA or more, 0.25mA or less under a load of 10MΩ	0.15mA or more, 0.25mA or less under a load of 12MΩ

Output Voltage

Rated Voltage	500V	1000V
Monitor Accuracy	±10%±20V	±10%±20V
Output Accuracy	0 ~ +20%	0 ~ +10%
Selectable Range	50 ~ 600V (in steps of 5V)	610 ~ 1200V (in steps of 10V)
Rated Voltage	2500V	5000V
Monitor Accuracy	±10%±20V	±10%±20V
Output Accuracy	0 ~ +10%	0 ~ +10%
Selectable Range	1225 ~ 3000V (in steps of 25V)	3050 ~ 6000V (in steps of 50V)
Rated Voltage	10000V	12000V
	±10%±20V	±10%±20V
	-5 ~ +5%	-5 ~ +5%
	6100 ~ 10000V (in steps of 100V)	10100 ~ 12000V (in steps of 100V)

Voltmeter

Range	Voltage Test	
Measuring Range	DC Voltage	AC Voltage
	±30 ~ ±600V	30 ~ 600V (50/60Hz)
Accuracy	±2%rdg ±3dgt	

Frequency

Range	Voltage Test	
Measuring Range	45.0 ~ 65.0Hz	
Accuracy	± 0.2Hz	

Ammeter

Measuring Range	0.0nA ~ 2.40mA (determined by resistance and voltage values)	Depending on the effective range of insulation resistances
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Capacity Meter

Range	500V ~ 5000V Range	10000V ~ 12000V Range
Accuracy	5.0nF ~ 50.0µF	5.0nF ~ 1.0µF
	±5%rdg ±5dgt	

Calculated Value

Measurement Mode	PI	DAR	DD
Display Range	0.00 ~ 999	0.00 ~ 999	0.00 ~ 999
Accuracy	±2dgt	±2dgt	±2dgt

Current Consumption

Range	500V	1000V
Short-Circuiting the Output	2650mA	2300mA
Short-Circuiting the Output of rated current	1350mA/0.5MΩ	1500mA/1MΩ
Opening the Output	210mA	220mA
Range	2500V	5000V
Short-Circuiting the Output	1700mA	1600mA
Short-Circuiting the Output of rated current	1650mA/2.5MΩ	2000mA/5MΩ
Opening the Output	280mA	380mA
Range	10000V	12000V
Short-Circuiting the Output	1550mA	1550mA
Short-Circuiting the Output of rated current	500mA/10MΩ	540mA/12MΩ
Opening the Output	570mA	650mA

Range	Voltage Test
Measuring Voltages	210mA

Range	All Ranges
On Stand-by	210mA
Backlight is On	Increased by 80mA

Ordering Information

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