Analogue Insulation Tester



Technical Data



K3131

The new K3131 is Major Tech's premier analogue Insulation and Continuity tester, designed to meet international standards of performance and safety. This model is a high powered, high quality instrument used by professionals to obtain accurate values of insulation and continuity resistance in accordance with SABS 0142 requirements. The K3131 offers three insulation test ranges: 250V, 500V and 1000V and two continuity ranges, and is equipped with a clear, easy to read illuminated scale.

Features Include:

- Three test ranges 250V-500V-1000V
- · Auto discharge after test
- Housed in IP54 Casing
- Live circuit warning
- Lock down Test Button for continuous use
- 1mA output current on insulation test
- · 200mA short circuit on continuity range
- · Backlight facility for dimly lit areas
- · Intrinsically safe version available on request

General Specifications

Typical number of measurements

Insulation Resistance

Ranges : 1000V/400MΩ Range Approx. 500 times min.

500V/200MΩ Range Approx. 1300 times min. 250V/100MΩ Range Approx. 1800 times min.

Continuity Test

Pollution Degree 2

IEC61010-2-31 Safety requirements for hand-held probe

assemblies

IEC61557-1/2/4 Measuring equipment for low voltage

distribution systems

IEC61326 EMC

IEC60529 (IP54) Dust and drip proof

Operating Temperature and Humidity

Storage Temperature

: 0 - 40°C, relative humidity up to 85%

: -20°C - 60°C, relative humidity up to 85%

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

Overload protection

Insulation Resistance

Power Source

Ranges : 1000V Range 1200V (DC+AC p-p) for 10 seconds

 $\begin{array}{lll} 500V & \text{Range} & 600V (\text{DC+AC p-p}) \text{ for } 10 \text{ seconds} \\ 250V & \text{Range} & 300V (\text{DC+AC p-p}) \text{ for } 10 \text{ seconds} \\ x \ \Omega \ / \ x \ 10 \ \Omega \text{ Range} & 280V (\text{DC+AC p-p}) \text{ for } 10 \text{ seconds} \\ \end{array}$

6X1.5V battery type SUM-3, R-6, AA or equivalent)

Continuity Ranges: $x \Omega / x 10 \Omega$ Range280V (DODimensions: 185(L) X 167(W) X 89(D) mm approx.Weight860g approx.(including battery)

SERIES





Accessories Test probe MODEL 7122

Test probe MODEL 7122 x1 set
Strap belt x1
Test probe pouch x1
R6P AA batteries x6
Spare fuse F500mA/600V x1
Instruction manual. x1

Measurement	Nominal Output Voltage	250V	500V		1000V	
Insulation Resistance Range	Measuring Ranges	0-100ΜΩ	0-200ΜΩ		0-400ΜΩ	
	Open-Circuit Voltage	250V DC + 20% max.	500V DC + 20% max.		1000V DC + 20% max.	
	Short Circuit Current	1,3mA approx.				
	Nominal Current	1mA DC min. at 0.25 MΩ	1mA DC min. at 0.5 MΩ		1mA DC min. at 1 MΩ	
	Accuracy	\pm 5% of indicated value at $0.1 M\Omega$ - $10 M\Omega$	\pm 5% of indicated value at 0.2M Ω - 20M Ω		\pm 5% of indicated value at 0.4MΩ - 40MΩ	
		± 0.7% at scale length at ranges other than above ranges				
Measurement	Ranges	ХΩ		Χ 10Ω		
Continuity Test	Measuring Ranges	0 -2 Ω		0 -20 Ω		
	Open-Circuit Voltage	4 - 9V DC				
	Measuring Current	200mA DC min.				
	Accuracy	±3% of scale length				
	Zero Adjustment Range	0.2 Ω min				
Measurement	Ranges	Measuring ranges to operating error	keep	Maximum percentage operating error		
Insulation Resistance Ranges	250V/100ΜΩ	0.1ΜΩ - 10ΜΩ				
	500V/200MΩ	0.2ΜΩ - 20ΜΩ				
	1000V/400ΜΩ	0.4ΜΩ - 40ΜΩ	± 30%			
Continuity Test	ХΩ	0.2Ω - 2Ω				
	Χ 10 Ω	2Ω - 20Ω				

Ordering Information

HEAD OFFICE

Cnr Rover and Jaguar Roads, Rustivia Ext 3, Elandsfontein

P.O. Box 888, Isando 1600, South Africa
Telephone: +27 11 822 1551
Sales Fax: +27 11 822 2806
Admin Fax: +27 11 822 1411
e-mail: sales@major-tech.com
National Tel: 08 61 MAJORT / 08 61 62 5678

BRANCHES - CAPE TOWN

109 Kyalami Drive, Killarney Gardens P.O. Box 60122, Tabelview 7439 Telephone: +27 21 556 3091 Sales Fax: +27 21 556 3093

BRANCHES - DURBAN

6A Pastel Park, Wareing Road, Pinetown P.O. Box 15550, Ashwood 3605
Telephone: +27 31 701 5830
Sales Fax: +27 31 701 6986

BRANCHES - PORT ELIZABETH

175 Kempston Road, Sidwell P.O. Box 22499, Port Elizabeth 6000 Telephone: +27 41 453 3818 Sales Fax: +27 86 633 9809

