Adjustable high voltage digital megohm meter



GM-5KV GM-10KV GM-15KV GM-20KV

Introduction

For safety, before use the instrument must be well earthed. That's because the measured target connects to high voltage power, and exists power frequency leakage.

Once high voltage has started, do not use manual discharge method to check the instrument. After test, please wait the instrument completes automatic discharge and automatically returns to zero, then manual discharge can be operated. That is because electrical pulse caused by short-circuit discharge will damage the insulation life of the measured object; if the pulse fleeing into the instrument, will also damage the integrated circuit inside the instrument.

The instrument is designed for HV substations and power plants to test the characteristic of large HV transformer, electric machines and appliances, remote power cable or buried cable and other electrical insulation resistance in strong interference environment. It also can be widely used for testing characteristics of insulation resistance in other area.



Features

- With strong anti-electric field interference ability up to 2mA (50Hz), it is suitable for 500kV substation without dismantling wire to test insulation resistance of 500kV large-scale transformer.
- > The short-circuit current of test power> 5mA, maximum up to 15mA. Be suitable for testing high capacity and high inductance.
- \triangleright Wide resistance range from 0.5MΩ ~ 1999MΩ. With high-resolution, having accurate readings.
- Wide voltage range: 0.5kV, 1kV, 2.5kV, 5kV, 10kV, 20 kV, you can smoothly adjust voltage from 0V to the desired value.
- With timekeeping function, remind users to record, and analyze absorptance and polarization index of measured target.

Parameters

Product specification:

Model	Measurement voltage	Voltage	Short circuit
		accuracy	current

GM-5kV	0.1、0.25、0.5、1、2.5、5kV	± (5%+10V)	10mA
GM-10kV	0.25、0.5、1、2.5、5、10kV	± (5%+10V)	10mA
GM-15kV	0.5、1、2.5、5、10、15kV	± (5%+10V)	10mA
GM-20kV	0.5、1、2.5、5、10、20kV	± (5%+10V)	10mA

Rang and accuracy:

Range	Active range of resistance	Accuracy
	measurement	
20ΜΩ	$0.01{\sim}19.99{ m M}\Omega$	±(5%+3d)
200ΜΩ	$5.0{\sim}199.9{ m M}\Omega$	±(5%+3d)
2GΩ	0.05∼1.999GΩ	±(5%+3d)
20GΩ	0.5∼19.99GΩ	±(5%+3d)
200GΩ	5.0∼199.9GΩ	±(10%+3d)
2000GΩ	50∼1999GΩ	±(20%+10d)

 $M\Omega$ range calibrated voltage 0.5kV, $G\Omega$ range calibrated voltage 2.5kV

Test voltage range to ensure accuracy of resistance measurement: 20% above Voltage range nominal value

When the voltage over 8kV, in order to accurately measure resistance above $20G\Omega$, High voltage electrode conductors exposed to air should be shielded to avoid the impact of air ionization

 $2000G\Omega$ range as reference, used in dry environment with relative humidity less than 70%.

Technology parameters

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Test voltage grade	0.5kV、1kV、2.5kV、5kV、10kV、20kV	
Accuracy of test voltage	±(5%+10V)	
short-circuit current	Typical value 10mA	
Resistance to electric field interference	2mA(50/60Hz)	
Alarm function	The stopwatch shows a maximum value of 19min59seconds, 20 min in a cycle, Beep for 15 seconds, 60 seconds per minute, short sound alarm, resistance reading keep3 seconds, When the measured resistance is lower than the lower limit of the range, continuous sound alarm will be used when the reading is invalid	
Display	Digital LCD meters , Display test voltage, resistance and time respectively	
Power supply	Internal 1.2V/2000mAh ni-mh rechargeable battery 10pcs, DC12V supply power. AC (50/60Hz)220V connect the entrance to charge or float the battery	

Serve condition	Temperature: - 20°C∼ +	Relative humidity: $20\%{\sim}90\%$
Dimension (L×W×H)	315×240×180mm ³	
Weight	5.5kg	

Accessory

Serial Number	Name	Amount
1	Mainframe	one
2	High voltage cable	one
3	Connection line	two
4	Reference resistor	two
5	AC 220V Power line	one
6	Specification	one
7	Inspection Report	one
8	Certification	one



