

# I Type10/350 Impulse Current Test System LCG A series

## Datasheet



### In Compliance with

- > IEC 61643-1
- > UL 1449
- > YD-T 5098
- > GB/T 11032
- > GB 18802.1
- > YD-T 1235.2
- > TB/T 3074

### Introduction

Impulse current test system LCG A series is mainly used to simulate high current generated by lightning to check the impact on power supply system and electric appliance. It can conduct impulse current tests with high integration, intelligent control and easy operation. There are multiple grades for output by different main circuit unit. With setting parameters on setting page, it can conduct the test automatically with one button.

### Features

- > Human computer interface of colorful touch screen, easy to operate
- > PLC control system, stable and reliable operation
- > Different control modes: manual, automatic or programmable, as per different needs
- > Multiple grades of output ranges, test current down to 1kA
- > Charging mode of continuous current, effectively save energy
- > Abnormal protection by audible and visual alarm
- > Automatic measure and analyze parameters of different waveforms

### Application Areas

- > Communication
- > Information technology
- > Telecom
- > Military
- > Medical
- > Aviation
- > Radio and TV
- > New energy power
- > Railway

Technical Parameters	
Item	10/350 $\mu$ s current wave
Output peak	10 kA, 15 kA, 25 kA, 35 kA, 50 kA, 100 kA
T1 front time	10 $\mu$ s ( < 50 $\mu$ s )
T2 wave tail time	350 $\mu$ s $\pm$ 10%
Reversed overshoot	none
Front oscillatory	< 5%
Voltage polarity	+/-, (automatic switch)
Waveform switch	Automatic switch
Charging time	10 s ~ 999 s
Charging voltage instability	Less than 1%
External sync input	50 Hz
Trigger mode	Automatic or manual, single trigger available
Trigger malfunction rate	Less than 1%
Trigger range	100% rated charging voltage
Phase test range	0 ~ 360°
Operating load test	internal , 0 ~ 500 V , 5 A continuous supply
Display screen	10 inch TFT color touch screen
Measurement display resolution	Better than 3%
DUT	MOV, TVS, GDT, SPD, mains surge protection device
DUT residual voltage	< 5 kV
Current measurement (optional)	Internal test box, Rogowski coil measurement, panel BNC output
Voltage measurement (optional)	Internal test box, pure-resistance voltage divider, panel BNC output
Oscilloscope	MDO3012, optional
Insulation strength	$\leq$ 500 V RMS ( common port COMMON to ground reference PE )

General Parameters	
Power supply	AC 220 V $\pm$ 10% , 50/60 Hz , 10 A
Temperature	-10-+40 $^{\circ}$ C
Humidity	35%-85%RH ( no condensation )
Ground resistance	No more than 0.5 $\Omega$
Structure	Open style, control and base separated
Size of test room	Depends on model ( base ) +3 M*5 M ( control )
Control table	1.8 M ( width ) * 1.1 M ( height ) * 1 M ( depth )
No conductive dust, no fire or explosion danger, no corrosive metal and insulation air. Wave form of mains voltage is sine wave. The THD is < 5%.	

Technical parameters of standard model						
Model	LCG 10A	LCG 15A	LCG 25A	LCG 35A	LCG 50A	LCG 100A
Current Peak	0.5~10 kA	1~15 kA	1~25 kA	1~35 kA	1~50 kA	1~100 kA
Stored Energy	36 kJ	56kJ	100 kJ	150 kJ	200 kJ	400 kJ
Charging Voltage	10 kV	14 kV	14 kV	14 kV	14 kV	14 kV
Supply Mains	AC 220 V 32 A	AC 220 V 50 A	AC 220 V 50 A	AC 220 V 100 A	AC 220 V 100 A	AC 220 V 200 A
Installation	frame	frame	frame	frame	frame	Split frame

Other Test Waveform and Output Capacity					
No.	Waveform	Type	Max. Output Peak	Charging Voltage	Equivalent Output Impedance
D	10/1000	Current wave	30kA	15kV	0.5Ω
E	100/1000	Current wave	30kA	15kV	0.5Ω
P	Other waveform can be customized				

\*Internal one waveform for each equipment. Other waveform can be customized.

Optional Accessories			
Name	Model and description	Installation (connection) mode	Reference picture
Oscilloscope	MDO3012	External	
Current Probe	TR1330, 100 kA	Internal	
Attenuator	A10, 10:1, 50 Ω	External	
Voltage Probe	P6015 A, 40 kV Peak	External	
Differential Probe	VCF 80, test up to 8 kV	External	
PC Control Software	MCS3000, programmable test from PC port, support Win xp, Win7	RS232	
Operating Load Mains	CDN 1500, 1500 A continuous current	External	



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