

Automatic HV Lightning Impulse Voltage Generator Test System Device

Quality / Accuracy / Reliability



Introduction:

DYHG series HV Impulse Voltage Generator can produce a wide range of voltage and energy to carry out various forms of impulse voltage test of full wave of lightning impulse voltage, chopped wave of lightning impulse voltage, operating shock wave and steep wave for power transformers, cables, insulators, surge arrester and other high voltage electric equipments.

There are whole sets of experimental instruments for impulse voltage (current) generators whose capacity vary from 100kv to 4800kv. We can also supply several whole sets of waveform impulse voltage (current) generator. They mainly consist of generator self, sheet cutting, voltage divider, four –modules console, and digital recording system of waveforms.

Features:

- Complete equipment and wide voltage ranged from **100KV ~ 4800KV** levels in the whole set of device.
- Small electric inductance of the impulse voltage generator and a band-stop filtering is adopted so as to generate a standard impulse wave even under a large capacity load.
- Large voltage utilization coefficient, convenient wave adjustment, good synchronizing and reliable operation.
- An automatic constant-current charging control technology is adopted, which is high automation and strong anti-interference ability.
- Computer controlled to measure and analyze system.

Main Technical Parameters:

1. Impulse voltage grade: 100kv-4800kv
2. Standard lightning wave: $1.2 \pm 30\% / 50 \pm 20\% \mu s$
3. Peak oscillation: $< 5\%$
4. Standard switching wave: $250 \pm 20\% / 2500 \pm 60\% \mu s$
5. Virtual front time of oscillating lightning wave: $\leq 15 \mu s$
6. Virtual front time of oscillating switching wave and virtual front time of oscillating switching impulse wave: $15 \mu s - 1 ms$
7. The minimum output voltage: $\geq 10\% U_n$
8. Charging voltage instability: $< \pm 1\%$
9. Synchronizing range: $\geq 20\%$
10. Synchronous discharge error rate: $< 2\%$
11. Ignition range: $10\% \sim 100\%$
12. Working time: $\geq 70\% U_n$ Discontinuous work (charge-discharge 300s/time)
 $< 70\% U_n$ Continuous work (charge-discharge 120s/time)
13. Generator efficiency: lightning wave (no load): $\geq 90\%$
14. Time to chopping: $2 \sim 5 \mu s$



Automatic HV Lightning Impulse Voltage Generator Test System Device

Technical Specification:

Rated Voltage (KV)	Impulse Capacitance (μF)	Stage Capacitance (μF)	Impulse Energy (kJ)	Stage Voltage (KV)	Stage Number	Length (mm)	Width (mm)	Hood (mm)	Height (mm)	Weight (kg)						
±1600	0.0625	0.5	80	±200	9	4300	2600	3200	7150	7353						
	0.09375	0.75	120					3200	7150	7353						
	0.125	1	160					3200	7150	8873						
±1800	0.0556	0.5	90		9			4300	2600	3200	7800	7838				
	0.0833	0.75	135							3200	7800	8018				
	0.1111	1	180							3200	7800	9548				
±2200	0.0456	0.5	110		11					4300	2600	3200	9150	8810		
	0.0682	0.75	165									3200	9150	9030		
	0.09091	1	220									3200	9150	10900		
±2400	0.0417	0.5	120		12							4300	2600	3600	9700	9294
	0.0625	0.75	180											3600	9700	9534
	0.0833	1	240											3600	9700	11574
±2800	0.0357	0.5	140		14	5000	3000							3600	11000	10266
	0.0536	0.75	210											3600	11000	10546
	0.0174	1	280											3600	11000	12925
±3000	0.0333	0.5	150		15			5000	3000					3800	11900	10750
	0.05	0.75	225											3800	11900	11050
	0.067	1	300											3800	11900	13600
±3200	0.03125	0.5	160		16	5300	3450			4200	12400			13760		
	0.04687	0.75	240							4200	12400			14720		
	0.0625	1	320							4200	12400			15680		
±3600	0.0278	0.5	180		18			5300	3450	4200	13700	15480				
	0.04167	0.75	270							4200	13700	16560				
	0.0556	1	360							4200	13700	17640				
±4000	0.025	0.5	200		20	5800	4040			4900	15000	17200				
	0.0375	0.75	300							4900	15000	18400				
	0.05	1	400							4900	15000	19600				
±4200	0.0238	0.5	210		21			5800	4040	4900	15670	18060				
	0.0375	0.75	315							4900	15670	19320				
	0.0476	1	420							4900	15670	20580				
±4800	0.0208	0.5	240		24					5800	4040	5200	17620	21840		
	0.03125	0.75	360									5200	17620	22020		
	0.0417	1	480									5200	17620	23500		

Product Specifications are subject to change without notice

Manufactured By:

NEUTRONICS MANUFACTURING COMPANY

12-A, Joy Compound, Opp. New Jalaram Electric & Hardware, Marol Maroshi Road, Andheri East, Mumbai - 400059, India

Tel.: +91-22-29250745/29201296; Mob.: +91-9819450890/9819070556

Email : sales@neutronics.co.in / bhavin_nmc@yahoo.com Website : www.neutronics.co.in / www.neutronics.in

Marketed By: