



GDCY-100kV/5kJ Impulse Current Test System



Product Description

This impulse test system is used for carrying out standard lightning impulse voltage full wave and operation wave tests on HV apparatus such as power cables, power capacitors, clearance, bushings, switch-gear, power transformers and CT/PT at 10kV or below.

Features

Main Parameters for System

- Nominal voltage: $\pm 100\text{kV}$
- Rated level voltage: $\pm 100\text{kV}$
- Rated energy: 5kJ
- Impulse capacitance: $1\mu\text{F}$
- Number of Levels: 1
- Rated level capacitance: $3\mu\text{F}$ (each impulse capacitor $1\mu\text{F}$ at 100kV , total 1piece)
- Impulse voltage waveform: generated when load capacitance is $300\text{-}3000\text{pF}$.
- $T_1=1.2\mu\text{s}\pm 30\%$, $T_2=50\mu\text{s}\pm 20\%$, standard lightning impulse voltage full waveform of peak voltage deviation $\leq 3\%$;
- Standard operation waveform $250\pm 20\%/2500\pm 60\%$. These 2 Impulse voltage waveform parameters and error are accorded with national requirements of GB311.1 and IEC60060 standard.
- Voltage utilization factor: Standard lightning impulse voltage waveform $\geq 90\%$ when load capacitance is below 1000pF , standard operation impulse voltage waveform $\geq 80\%$ when load capacitance is below 2000pF .
- Standard operation impulse voltage waveform $\geq 70\%$.
- Locking range: level voltage is within the range of 20% - 100% rated voltage, positive and negative
- locking range no less than 25% .
- Out-of-control rate of synchronous discharge: $< 5\%$
- Min.output voltage: $\geq \pm 20\%$ of rated voltage.
- Instability of discharge voltage: $< \pm 1.0\%$
- Continuous time: Above $2/3$ of rated voltage, continuous working when charge and discharge once every 120s . Below $2/3$ of rated voltage, continuous working when charge and discharge once every 60s .

System Composition

N o.	Name	Description	Qty
1	Impulse Voltage Generator	100kV/5kJ	1set
2	DC Charging Device	Bilateral asymmetric, constant charging	1set
3	Weak Damped Capacitive Divider	DF-100/500pF	1set
4	Manual Control Unit	ATC2000	1set
5	Earth Stick	2M, including flat type copper wire 5M	1set