



TIANJIN GREWIN TECHNOLOGY CO.,LTD.

Web:www.grewin-tech.com;WhatsApp: +86 13072088960

E-mail: salesmanager@grewin-tech.com

HVSG-605-12

High Voltage Surge Generator



Impulse voltage: 0-14kV (optional)

High voltage partial pressure: 2.5 class

Built-in capacitor: 12 μ F

Discharge power: 0-1000J

Output voltage polarity: negative polarity

Impact power: 400W

Over temperature protection: 85 $^{\circ}$ C

Working power supply: AC 220V \pm 10% / 50Hz \pm 2Hz(60Hz)

Ambient temperature: -20 \sim +50 $^{\circ}$ C

Description

The HVSG-605-12 **High voltage pulse generator** is a tie-rod portable integrated device, which is mainly used for shock discharge during low-voltage cable fault testing. The pulse generator adopts humanized design operation mode, high-precision dedicated high-voltage electronic components and high-frequency high-voltage technology, which is easy to operate, light in weight and easy to carry.

It integrates the energy storage capacitor, DC high voltage source, and discharge ball gap. The operation of this equipment is safe and reliable, with automatic protection functions of over-current, overvoltage and overheating, it can truly achieve the effect of not being damaged by impact, and it can also work normally with high voltage to ground.

The HVSG-605-12 **high voltage pulse generator** is equipped with a time relay, and the discharge time interval can be arbitrarily set within 0-100 seconds. When working, the high-voltage pulse output is uniform and controllable, high-voltage side voltage measurement, make the result real-time and accurate. Unique

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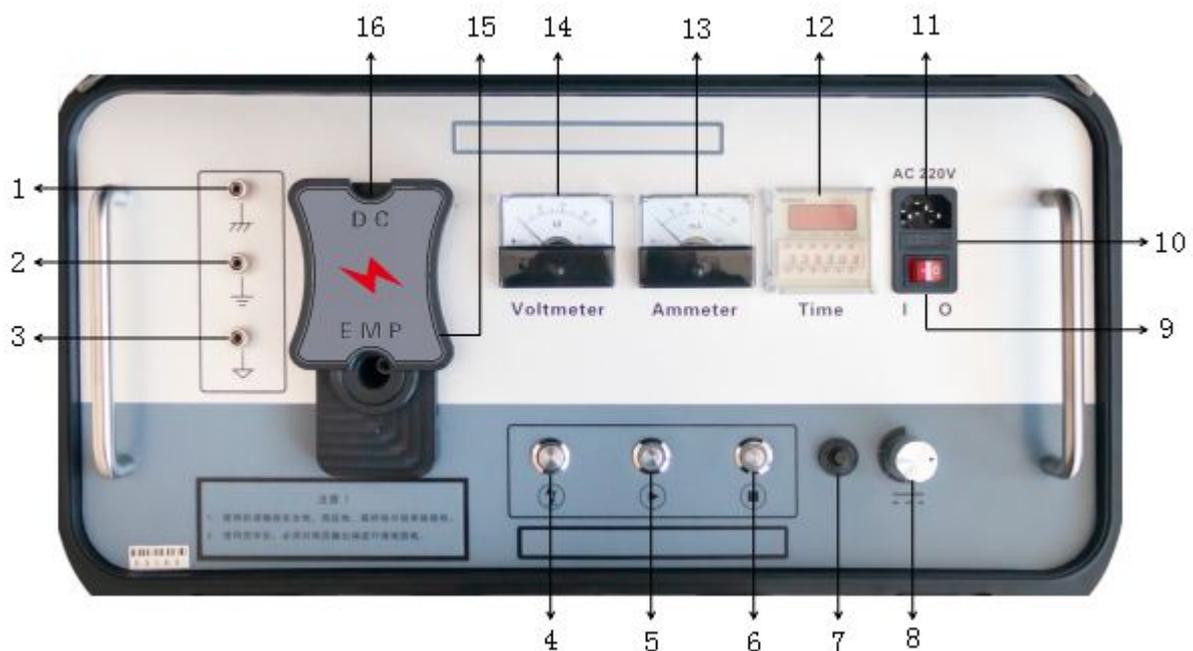
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high-voltage measurement design, in the stop state, the voltmeter can indicate the capacitor voltage in real time. The user can observe the residual voltage while discharging, until the voltage value returns to zero, and finally make the discharge more thorough.



Panel introduction



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Panel function description

- 1. Safety ground:** The ground of the instrument shell must be reliably connected to the ground in order to prevent the instrument shell from being electrified or electric shock to personnel.
- 2. High-voltage ground:** Also known as high-voltage tail, it must be grounded reliably to prevent high-voltage leakage and discharge. Poor contact may cause failure to boost the voltage, high voltage breakdown of the internal components of the instrument, and safety accidents caused by leakage or discharge inside the instrument.
- 3. Sampling ground:** The negative terminal of the pulse energy storage capacitor has a high voltage and must be grounded reliably. It is used for sampling when the waveform is sampled under the high-voltage flashover state of the cable fault tester. (Without High voltage surge generator high-voltage flashover sampling, reliable grounding is still required).
- 4. Discharge button:** Press this button to make contact with the ball gap, and discharge manually. (The duration of each key press cannot exceed 1s).
- 5. High voltage start button:** When the start button light is on, it means that the voltage output is in the zero position. When the light is on, the start button is valid. If the start button light is not on after turning on the power switch, turn the voltage adjustment knob counterclockwise until the light is on. When the button light is on, press this button to start the device and generate high voltage output.
- 6. High-voltage stop button:** When the test is completed or an abnormality occurs, press this button to cut off the high-voltage output, the high-voltage light goes out, and the internal discharge ball stops working. When the stop key is on, it means there is high voltage output, and when it is off, it means there is no high voltage output.
- 7. Over-current protection switch:** When pressed, it means that the over-current protection function has started; when it is popped up, it means that the instrument has triggered the over-current protection.
- 8. Voltage adjustment:** After turning on the device, you must first turn the knob counterclockwise to the end, press the start button, and then adjust clockwise to increase the output high voltage from small to large, and adjust counterclockwise to reduce the output high voltage from large to small.
- 9. Power switch:** "I gear" turns on the AC 220V power supply switch, and "0 gear" turns off the system power.
- 10. The fuse holder:** the place where the fuse of the AC 220V power supply system is installed.
- 11. Power socket:** the working power supply of the instrument, AC 220V connection port.
- 12. Time setting:** Set the discharge time interval.
- 13. Ammeter:** indication of the current on the high voltage side.
- 14. Voltmeter:** high voltage output voltage indicating kV meter.

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15. High-voltage output (EMP): When impacting discharge, connect the high-voltage output line.

16. High voltage output (DC): When DC withstand voltage, connect the high voltage output line

Technical parameters

Impact high voltage	0~14kV
High voltage partial pressure	2.5 level
Built-in capacitor	12 μ F
Discharge power	0-1000J
Output voltage polarity	negative polarity
Impact power	400W
Over temperature protection	85 $^{\circ}$ C
Over current protection	8mA (more than 3 seconds)
Volume(mm)	540L \times 300W \times 450H
Weight	not more than 25kg
Power supply	AC220V \pm 15%, 50Hz \pm 2Hz(60Hz)
Ambient temperature	-20~+60 $^{\circ}$ C

Notes on Relays



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Example

Adjust the time setting, the left half time is the ball suction time setting, the right half is the disconnection time setting, usually we set the time to **0 1 0.1S 0 6 S** , which means that the two balls collide and discharge once in 6S time, and disconnect in 0.1S time ,As shown below:



Packing List

Instrument composition list and diagram					
Name	Qty.	Picture	Name	Qty.	Picture
Host	1		power cable	1	
HV output line	1		ground wire	1	
Fuse	1		discharge rod	1	

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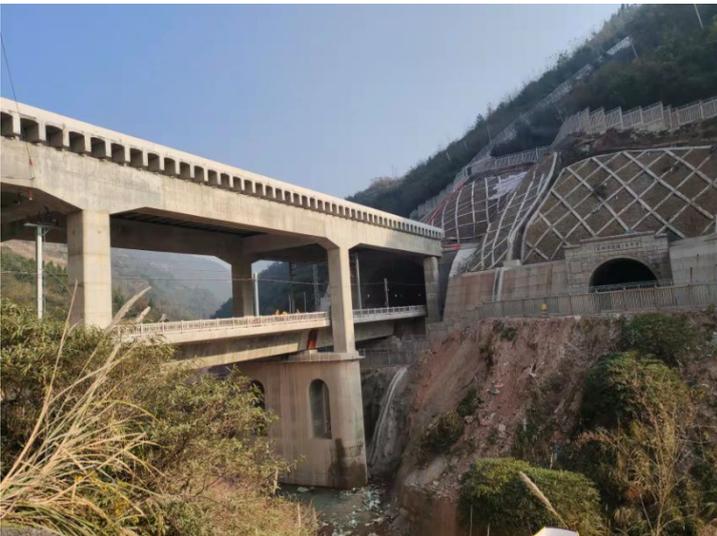
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Onsite case



TEC
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