

Lightning Surge Simulator

CWS 2000(JEC210)



■ JEC 210/212

— Features

- > 1.2/50 μ s (6 Ω , 106 Ω) voltage wave and 8/20 μ s (5 Ω) current wave
- > Built-in voltage and current peak output measurement function
- > Built-in single-phase fully automatic coupling/decoupling network
- > RS232 communication interface for remote control

— Introduction

The CWS 2000 (JEC210) lightning surge simulator is designed according to JEC-210/212 as an integrated lightning surge immunity test system.

The CWS 2000 (JEC210) can output 1.2/50 μ s (6 Ω , 106 Ω) voltage waveforms and 8/20 μ s (5 Ω) current waveforms. The Max. test voltage can reach 20 kV, and the Max. test current can reach 4 kA. The built-in single-phase coupling/decoupling network allows the test voltage to be applied to AC 220 V, 20 A equipment under test (EUT).

— Application Areas



Technical Parameters

Voltage Wave Module (1.2/50 μ s)	
Output Voltage	0.5 kV ~ 20 kV $\pm$ 10%
Output Voltage Wave	1.2 /50 μ s $\pm$ 30%
Output Impedance	6 Ω , 106 Ω
Load Impedance	50 Ω
Current Wave Module (8/20 μ s)	
Charging Voltage	0.5 kV ~ 20 kV
Output Current Wave	8/20 μ s $\pm$ 20%
Output Impedance	5 Ω
Output Short-circuit Current	0.1 kA ~ 4 kA
Load Impedance	3,000 Ω
Built-in Single-phase Coupling/Decoupling Network	
Output Voltage	0.5 kV ~ 20 kV $\pm$ 10%
Output Current	0.83 kA ~ 3.3 kA $\pm$ 10%
Coupling Capacitor	9 μ F, 18 μ F
Coupling Resistor	No coupling resistor, decided by source impedance
Sync	0° ~ 360°, 1° step setting or random mode
Test Path Switching Mode	Voltage wave module (1.2/50 μ s): Automatic Current wave module (8/20 μ s): Manual
Load Capacity	AC 220 V 20 A

General Parameters

Display Screen	5.7-inch TFT touchscreen
Working Power	AC 110 V/220 V, $\pm$ 10%, 50 Hz /60 Hz
Fuse	6 A
Ma. Power Consumption	600 W
Test Interval	5 s ~ 99 s (the minimum time depends on the test voltage)
Voltage/Current Peak Detection	LCD display
Counter	1 ~ 999
Trigger Mode	Automatic, manual, external trigger
Test Mode	Test parameters sequence setting
Communication Mode	Ethernet, LAN
External Control Mode	25-pin parallel cable
Fault Detection	LCD display in front panel and stop work when failure occurs
Working Status Indication	LED indication and LCDdisplay on the front panel
Grounding Method	Flat grounding wire
Dimension	19-inch/35 U
Weight	Approx. 222 kg
Ambient Temperature	15°C ~ 35°C
Relative Humidity	45% ~ 75%
Atmospheric Pressure	86 kPa ~ 106 kPa

Standard Accessories

Three-core Power Cord, User Manual, Test Cables, Grounding Wire, Fuse, Coaxial Cable

Optional Accessories

1	PC Control Software	Mode: Corelab > Support Windows 7/8/10 /11 > Easy operation, intuitive interface, standard test libraries > Supports parameter sequence, test sequences, easy for operation > Supports customer information configuration and automatic test report printing.	
2	High-Voltage Differential Probe	Model: VCF 80	
3	Wide-band Current Monitor	Model: CM 0220M	
4	Isolation Transformer	Model: DG-2.2 kVA	

SUZHOU 3CTEST ELECTRONIC CO., LTD.

Address: No. 99 E'meishan Road, SND, Suzhou, Jiangsu Province, China

E-mail: globalsales@3ctest.cn

Service: service@3ctest.cn

Tel: +86 - 512 - 68077192

Web: www.3ctest.com



3CTEST is always striving for product innovation and quality improvement. Product appearance and technical specifications are subject to change without further notice.