

Fully automatic multi-function lightning surge test bench SG 5020H



As per

- > IEC61000-4-5
- > IEC 61643-1
- > GB/T17626.5
- > GB/T16927.1
- > ITU K.21
- > ITU K.44

Summary

SG5020H series fully automatic lightning surge test bench is based on 3ctest third generation intelligent test generator with the technology of programmable control and computer technology, its system composition is simplified greatly and reliability is improved. This enhances the security of the system in high voltage and current tests to avoid the equipment may suffer from the harm during high voltage discharge transient process. With unique color touch screen operation interface and convenient and simple operation, simple test requirement setting is just performed on the parameter setting pages, kinds of tests can be completed automatically. It has the advantages of high system integration, intelligent control, easy and simple operation, saving test time, etc.

Feature

- > Color touch screen 10inch LCD
- > PLC control and fully automatic control system
- > Multiple automatic fault judgment, sound and light alarm
- > Double discharge switch and wide range of output, min. up to 500V
- > RS232 communication interface for remote control
- > Can be optional for MDO3012 oscilloscope to calculate waveform parameters automatically for measurement analysis system,
- > Can be optional for single phase CDN
- > 19 inch standard cabinet

Application

- | | |
|--------------------|--------------------------|
| > Communication | > Information technology |
| > Telecom | > Military |
| > Medical | > Aviation |
| > TV and Broadcast | > New energy power |
| > Railway | > Electrical Vehicle |

Combination waveform parameters	
Open-circuit Voltage	
Peak voltage	500V ~20kV ($\pm 10\%$)
Front time	1.2μs($\pm 30\%$)
Duration	50μs($\pm 20\%$)
Short circuit Current	
Peak current	250A-10kA($\pm 10\%$)
Rise time	8μs ($\pm 20\%$)
Duration	20μs($\pm 20\%$)
Virtual impedance	2Ω±0.25Ω
Output polarity	Positive or negative
Network(internal /external)	External
Voltage waveform parameter	
Output voltage	500V ~20kV ($\pm 10\%$)
Output impedance	500Ω±10%
Output polarity	Positive or negative
Output voltage waveform	1.2μs±30%, 50μs±20%
Communication waveform parameter	
Output voltage	500V~10kV ±10%
Output polarity	Positive or negative
Output voltage waveform	10/700 ($\pm 20\%$) μs
Output current waveform	5/320 ($\pm 20\%$) μs
Output impedance	15Ω、40Ω (25+15Ω)
Output short circuit current	15~250A ($\pm 10\%$)
Network(external)	Optional for two-way four-wire, four-way eight-wire CDN

General parameters	
Working power supply	AC 110V/220V ($\pm 10\%$), 50/60Hz(AC 220V in China)
Environment temperature	15°C-35°C
Relative humidity	45%-75%
Air pressure range	86kPa-106kPa
Grounding resistor	Less than 0.5Ω
Dimensions	19 inch/35U (600×800×1850mm)
Weight	Approx.300kg
Waveform distortion rate <5% if without conductive dust, without fire, without explosion danger, without corroding metal and insulation gas for sine power supply waveform	
Options	
Oscilloscope	MDO 3012
Current probe	HILOK TR1025 10kA
Voltage probe	Tek P 6015A
Peak acquisition	Touch screen displays output (built-in)
Test case	PA 350
Control software	MCS 3000 for remote control under windows xp, windows7
Measurement software	TEST 3000, optical fiber communication
CDN	SGN 3820T20 three phase CDN

Note: because of the influence by the stray capacitance of measurement unit and signal transmission, when used in the range of below 5% of full scale, there may be a few oscillation and interference at the beginning of waveform or at the peak value position, but does not affect the normal use.



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