

Impulse Current Simulator

S16C2000N



- YD/T 944
- IEC 61643-11
- GB/T 18802.11

Features

- > 5.7-inch color touch screen front panel operation
- > Max. test current 20 kA
- > Built-in three-phase coupling/decoupling network
- > Support text sequence function for easy operation
- > LAN communication interface for remote control

Introduction

The S16C2000N Impulse Current Simulator is designed in compliance with YD-T 944-2007, GB/T 18802.11-2020 and IEC 61643-11:2011. It can simulate an 8/20 μ s impulse current waveform with a Max. impulse current of 20 kA.

The built-in three-phase CDN enables various tests through simple parameter configuration. With high system integration, automated operation, easy handling, and reliable performance, the system is ideal for current impulse withstand testing of electrical equipment in new energy, energy storage, EV, and reliability testing applications.

Application Areas



Technical Parameters

Test Current Range	1 kA ~ 20 kA, $\pm 10\%$,
Charging Voltage	≤ 16 kV
Current Waveform	Front time: $8 \mu\text{s} \pm 10\%$ Time to half value: $20 \mu\text{s} \pm 10\%$ Front time definition: 1.25^* (10% ~ 90%) Time to half value definition: 1.18^* (50% ~ 50%)
Output Polarity	Positive, negative, alternative
Source Output Impedance	$\leq 0.8 \Omega$
Pulse Period	14 s ~ 200 s (The minimum time depends on the test current)
Counter	1 ~ 999
Trigger Mode	Manual, auto, external trigger
EUT Load Capacity	Three-phase five-wire AC 690 V (line voltage) / 100 A (Compatible with the full current range) DC 1,500 V / 100 A (Compatible with the full current range)
EUT Power Switching Mode	Automatic switching
EUT Coupling Path	Any combination of L1, L2, L3, N, and PE paths
Coupling Method	GDT spark gap coupling
Decoupling Method	LC decoupling, decoupling inductor < 0.5 mH

General Parameters

Display Screen	5.7" TFT touch screen
Working Power	AC 220 V, $\pm 10\%$, 50/60 Hz
Fuse	10 A
Max. Power Consumption	1,500 W
External Control Mode	25-pin parallel cable
External Trigger Input	BNC, 5 V TTL
Operation Control Input	BNC, 5 V TTL
Grounding Method	Flat grounding wire
Communication Mode	Ethernet LAN
Dimension	35 U rack, 600 (W) *1,850 (H) *800 (D) mm
Weight	Approx. 390 kg
Atmospheric Pressure	86 kPa ~ 106 kPa
Ambient Temperature	15°C ~ 35°C
Relative Humidity	45% ~ 75%

Standard Accessories

Power Cord, User Manual, Test Cables, Flat Grounding Wire, Fuse

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



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