

Impulse Current Simulator

S20C series

Datasheet



In Compliance with

- > IEC 61643-11
- > GB/T 18802.11

Introduction

The impulse current simulator S20C series is designed as per IEC 61643-11 and GB/T 18802.11, which is capable of generating 8/20 μ s short-circuit current waveform with maximum voltage 20 kV and current 100 kA and features with easy-to-operate and highly reliability. Equipped with coupling/decoupling network and ten-way distribution networks SPN 10, up to ten EUTs can be tested under active or passive mode. Together with MAS 3000, the waveform data can be measured and analyzed professionally.

Features

- > 5.7" Color touch screen;
- > Max. test current 100 kA;
- > Equipped with MAS 3000, waveform measurement and analysis can be realized;
- > Ten-way distribution networks are available for customization;
- > Support customization for specific requirement;

Application Areas

- > Component

Technical Parameters-S20C4000	
Test Current	1 kA ~ 40 kA, $\pm 10\%$
Charging Voltage	0.5 kV ~ 20 kV
Current Waveform	Rise time (1.25* Tr): 8 μ s, $\pm 10\%$ Duration (1.18*Tw): 20 μ s, $\pm 10\%$
Polarity	Positive/ negative/ alternative
Source Impedance	0.5 Ω
Repetition (time for single pulse)	5 s ~ 1000 s (The minimum time is subjected to test voltage)
Counter	1~10000
Phase Sync.	0° ~ 360° (45 Hz ~ 65 Hz)
Pulse Current Monitor	External, optional
Trigger Mode	Manual, Auto, External Trigger
Dimension	19" / 35U
Weight	Approx. 150 kg

Technical Parameters-S20C10000	
Test Current	5 kA ~ 100 kA, $\pm 10\%$
Charging Voltage	1 kV ~ 20 kV
Current Waveform	Rise time (1.25* Tr): 8 μ s, $\pm 10\%$ Duration (1.18*Tw): 20 μ s, $\pm 10\%$
Polarity	Positive/ negative/ alternative
Source Impedance	0.19 Ω
Repetition (time for single pulse)	5 s ~ 1000 s (The minimum time is subjected to test voltage)
Counter	1~10000
Phase Sync.	0° ~ 360° (45 Hz ~ 65 Hz)
Pulse Current Monitor	External, optional
Trigger Mode	Manual, Auto, External Trigger
Dimension	19" / 35U
Weight	Approx. 300 kg

Technical Parameters-S20C7000	
Test Current	5 kA ~ 70 kA, $\pm 10\%$
Charging Voltage	1450 V ~ 20 kV
Current Waveform	Rise time (1.25* Tr): 8 μ s, $\pm 10\%$ Duration (1.18*Tw): 20 μ s, $\pm 10\%$
Polarity	Positive/ negative/ alternative
Source Impedance	0.285 Ω
Repetition (time for single pulse)	5 s ~ 1000 s (The minimum time is subjected to test voltage)
Counter	1~10000
Phase Sync.	0° ~ 360° (45 Hz ~ 65 Hz)
Pulse Current Monitor	External, optional
Trigger Mode	Manual, Auto, External Trigger
Dimension	19" / 35U
Weight	Approx. 250 kg

General Parameters	
Display Screen	5.7" TFT touch screen
Working Power	AC 110 V/220 V ($\pm 10\%$) , 50 Hz /60 Hz (220 V in mainland China)
Fuse	6 A
Max. Power	500 W
Communication Mode	Ethernet LAN、RJ45
External Control Mode	25-pin parallel port cable
External Trigger Input	BNC, 5 V TTL, the node is open, oscilloscope can trigger the product when internal circuit is closed.
Running Control Input	BNC, 5 V TTL
Failure Detection	The failure information will be displayed on LCD in front panel when failure occurs and interrupt the working of instrument.
Working Status Indication	LED indication and LCD display on front panel
Earthing Mode	Flat earth line
Monitor Output Mode	Standard 1 m coaxial cable
Ambient Temperature	15 °C ~ 35 °C
Relative Humidity	45% ~ 75%
Atmospheric Pressure	86 kPa ~ 106 kPa

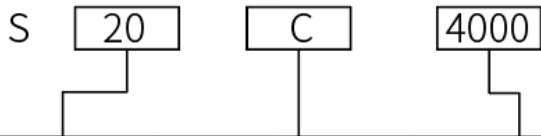
Accessories

User Manual, Test line, Ground line, 3-core power line, fuses (spare parts), Coaxial cable

Options

Ten-way distribution networks	SPN 10
Coupling/decoupling networks	CPN 4516S (customized for other load capacity)
Isolation transformer	DG-4.4 KVA
Wide-band Current Monitor	CM 0220M
Measurement	MAS 3000
Control Software	Corelab

Naming Rule



Max. Voltage	Waveform Code	Max. Current
06: 600V	A: 10/350 us	05: 50A
6: 6kV	C: 8/20 us	10: 100A
8: 8kV	D: 10/1000 us	60: 600A
10: 10kV	CT: Combination Type	100: 1000A
15: 15kV		150: 1500A
20: 20kV		600: 6000A
		1000: 10kA
		10000: 100kA

*Offer customized product according to customer's requirement.



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