

Impulse Current Simulator

S6C series

Datasheet



In Compliance with

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

Introduction

The impulse current simulator S6C 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 6 kV and current 40 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 and features with easy-to-operate and highly reliability 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 40 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-S6C350	
Test Current	0.1 kA ~ 3.5 kA, $\pm 10\%$
Charging Voltage	170 V ~ 6 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	1.7 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	BNC output, 100 A: 1 V
Trigger Mode	Manual, Auto, External Trigger
Dimension	19" / 6U
Weight	Approx. 20 kg

Technical Parameters-S6C1000	
Test Current	0.1 kA ~ 10 kA, $\pm 10\%$
Charging Voltage	52 V ~ 6 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	0.52 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	BNC output, 100 A: 1 V
Trigger Mode	Manual, Auto, External Trigger
Dimension	19" / 6U
Weight	Approx. 30 kg

Technical Parameters-S6C700	
Test Current	0.1 kA ~ 7.0 kA, $\pm 10\%$
Charging Voltage	86 V ~ 6 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	0.86 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	BNC output, 100 A: 1 V
Trigger Mode	Manual, Auto, External Trigger
Dimension	19" / 6U
Weight	Approx. 25 kg

Technical Parameters-S6C2000	
Test Current	0.2 kA ~ 20 kA, $\pm 10\%$
Charging Voltage	52 V ~ 6 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	0.26 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" / 6U
Weight	Approx. 50 kg

Technical Parameters-S6C4000	
Test Current	0.4 kA ~ 40 kA, ±10%
Charging Voltage	52 V ~ 6 kV
Current Waveform	Rise time (1.25* Tr): 8 μs, ±10% Duration (1.18*Tw): 20 μs, ±10%
Polarity	Positive/ negative/ alternative
Source Impedance	0.13 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" / 6U*2
Weight	Approx. 100 kg

General Parameters	
Display Screen	5.7" TFT touch screen
Working Power	AC 110 V/220 V (±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

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

*Offer customized product according to customer's requirement.



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