CDN for EFT/Burst and Surge Immunity Tests SEPN 4516S

Datasheet

In compliance with

> IEC/EN 61000-4-4

> IEC/EN 61000-4-5

> IEC 61000-6-1

> IEC 61000-6-2

> GB/T 17626.4

> GB/T 17626.5

Introduction

The SEPN 4516S single-phase automatic coupling/decoupling network for EFT/Burst and surge immunity tests is designed according to test requirements of IEC/EN 61000-4-4 and IEC/EN 61000-4-5, features stable performance and convenient operation. The device is used together with CCS series, CWS series and EFT series of 3ctest. It can couple surge and EFT/Burst wave pulses onto single-phase mains supply system with voltage AC 450 V/DC 600 V and current 16 A can also be customized according to actual EUT load.

Features

> EUT DC load capacity DC 600 V 16 A;

> EUT AC load capacity AC 450 V 16 A;

> EUT power supply automatic switching;

> Over-current protection;

> Test sequencing for testing voltage, polarity, phase sync. angle etc., realizing fully automatic networks switching;

> Phase angle superimposition for arbitrary lines;

Application Areas

> Communication

> IT

> Telecom

> Military

> Medical

> Avionics

> Broadcast

> New Energy Electrical Power

> Railway

Technical Parameters – EFT/Burst

Single-phase Fully Automatic CDNs	Comply with IEC/EN 61000-4-4 EFT/Burst immunity test. Maximum voltage up to 4.2 kV. Note: the actual output pulse voltage of CDNs is decided by the setting value of pulse generators.
Phase Synchronization	Any combination of L, N, PE with any phases and angles
Coupling Route	Any combination of L, N, PE
Coupling Switching Mode	Automatic switching, test sequencing
Coupling Capacitor	33 nF
Coupling Attenuation	<2 dB
Residual Pulse Voltage of EUT Injection Port	Not exceeding 10% of testing impulse voltage

Technical Parameters - Surge

Single-phase Fully Automatic CDNs	Comply with IEC/ EN 61000-4-5 surge combination wave tests. Maximum voltage up to 6.0 kV (1.2/50 μs) and maximum current up to 3.0 kA (8/20 μs). Note: the actual output pulse voltage of CDNs is decided by the setting value of pulse generators.
Phase Synchronization	Any combination of L, N, PE with any phases and angles
Coupling Route	Any combination of L, N, PE
Coupling Switching Mode	Automatic switching, test sequencing
Coupling Capacitor	9 μF, 18 μF
Coupling Resistor	10 Ω, 0 Ω IEC standard mode or customized mode can be selected for coupling resistor.
Coupling Attenuation	<2 dB
Residual Pulse Voltage of EUT Injection Port	Not exceeding 15% of testing impulse voltage or two times of peak rated voltage of CDNs.

General Parameters

EUT Load Capacity	Max. AC 450 V 16 A Max. DC 600 V 16 A
EUT Power Switching Mode	Automatic switching
Working Power Source	AC 110 V/220 V±10%，50 Hz /60 Hz, ±5% (AC 220 V 50 Hz in mainland China)
Fuse	6 A
Max. Power Consumption	200 W
Auxiliary Interface	D-sub 25p
Working Status Indication	LED indication on front panel
Grounded Mode	Flat grounded wire
Dimension	19"/6U
Weight	Approx. 50 kg
Ambient Temperature	15 ℃~35 ℃
Relative Humidity	45% ~ 75%
Atmospheric Pressure	86 kPa ~ 106 kPa

Accessories

User Manual, Power Supply Line, Testing Line, Grounded Line, Fuse (spare part), Coaxial Line, CN 25 line

Optional Generators & Calibration Tools	
EFT 500x	EFT/Burst generator, as per IEC 61000-4-4, max. burst output voltage 4.8 kV
EFT 600x	EFT/Burst generator, as per IEC 61000-4-4, max. burst output voltage 6.0 kV
EFT 500x	EFT/Burst generator, as per IEC 61000-4-4, max. burst output voltage 7.0 kV
CWS 600x	Surge generator; as per IEC 61000-4-5; max. pulse output voltage 6.0 kV (1.2/50 µs), output current 3.0 kA (8/20 µs)
CWS 800x	Surge generator; as per IEC 61000-4-5; max. pulse output voltage 8.0 kV (1.2/50 µs), output current 4.0 kA (8/20 µs)
CWS 1000x	Surge generator; as per IEC 61000-4-5; max. pulse output voltage 10.0 kV (1.2/50 µs), output current 5.0 kA (8/20 µs)
CCS 600x	Surge and EFT/Burst generator; As per IEC 61000-4-4, max burst output voltage is 4.8 kV As per IEC 61000-4-5, max. pulse output voltage 6.0 kV (1.2/50 µs), output current 3.0 kA (8/20 µs)
CCS 1000x	Surge and EFT/Burst generator; As per IEC 61000-4-4, max burst output voltage is 4.8 kV As per IEC 61000-4-5, max. pulse output voltage 10.0 kV (1.2/50 µs), output current 5.0 kA (8/20 µs)
VCF-80	HV differential probe, for calibration of Surge generator (open-circuit voltage waveform); test voltage max 8 kV, attenuation: 1000:1;
TR 5025	HV current transducer, for calibration of Surge generator (short-circuit current waveform); Test current max 20 kA, attenuation 100:1;
Calibration Kit for EFT/Burst Generators	TFB 50: input impedance 50 Ω, output impedance 50 Ω, attenuation 55 dB; TFB 1000: input impedance 1000 Ω, output impedance 50 Ω, attenuation 60 dB; Supplied with network adaptors and tool box.

SUZHOU 3CTEST ELECTRONIC CO., LTD.

Add.: No. 99 E'meishan Road, SND, Suzhou, Jiangsu Province, China
Tel: +86 (0)512 6807 7192 Fax: +86-512-68079795
Sales Email: globalsales@3ctest.cn Service Email: service@3ctest.cn
www.3c-test.com

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

© 3ctest