

## CDN for EFT/Burst and Surge Immunity Tests SEPN 3816TM

### 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 3816TM three-phase manual coupling/decoupling networks are designed to be used together with CCS series, CWS series and EFT series of 3ctest to couple EFT/Burst and surge wave pulses onto mains supply system with voltage AC 380 V and current 16 A (3-phase-five-line) according to the requirement of IEC/EN 61000-4-4 and IEC/EN 61000-4-5 . Other voltage level and current level is available on customer request.

#### Features

- > EUT load capacity AC 380 V 16 A;
- > Over-current protection;

#### Application Areas

- > Communication
- > Telecom
- > Medical
- > Broadcast
- > Railway
- > IT
- > Military
- > Avionics
- > New Energy Electrical Power

Technical Parameters – EFT/Burst	
Three-phase Manual CDNs	Comply with IEC/EN 61000-4-4 EFT/Burst immunity test. Maximum test voltage up to 4.2 kV. Note: the actual output pulse voltage of CDNs is subject to the setting value of generator.
Coupling Route	Manually switch, L1, L2, L3, N, PE random combination route
Coupling Capacitor	Manually switch, 33 nF
Coupling Attenuation	<2 dB
Residual Pulse Voltage of EUT Injection Port	Not exceeding 10% of testing impulse voltage

Technical Parameters - Surge	
Three-phase Manual CDNs	Comply with IEC/EN 61000-4-5 surge combination wave tests. Maximum voltage up to 6.0 kV (1.2/50 $\mu$ s) and maximum current up to 3.0 kA (8/20 $\mu$ s). Note: the actual output pulse voltage of CDNs is decided by the setting value of pulse generators.
Coupling Route	Manually switch, L1, L2, L3, N, PE arbitrary combination route
Coupling Capacitor	Manually switch, 9 $\mu$ F, 18 $\mu$ F
Coupling Resistor	Manually switch, 10 $\Omega$ , 0 $\Omega$
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 380 V 16 A, 50 Hz/ 60 Hz, 3-phase-5-line
Working Power Source	AC 110 V/220 V $\pm$ 10%, 50 Hz /60 Hz $\pm$ 5% (AC 220 V 50 Hz in mainland China)
Dimension	19"/6U
Weight	Approx. 30 kg
Ambient Temperature	15 $^{\circ}$ C ~ 35 $^{\circ}$ C
Relative Humidity	45% ~ 75%
Atmospheric Pressure	86 kPa ~ 106 kPa

Accessories	
1. User Manual	2. Power Supply Line
3. Testing Line	4. Grounded Line
5. Coaxial Line	6. Short-circuit Plug

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 $\mu$ s), output current 3.0 kA (8/20 $\mu$ s)
CWS 800x	Surge generator; as per IEC 61000-4-5; max. pulse output voltage 8.0 kV (1.2/50 $\mu$ s), output current 4.0 kA (8/20 $\mu$ s)
CWS 1000x	Surge generator; as per IEC 61000-4-5; max. pulse output voltage 10.0 kV (1.2/50 $\mu$ s), output current 5.0 kA (8/20 $\mu$ s)
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 $\mu$ s), output current 3.0 kA (8/20 $\mu$ s)
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 $\mu$ s), output current 5.0 kA (8/20 $\mu$ s)
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 $\Omega$ , output impedance 50 $\Omega$ , attenuation 55 dB; TFB 1000: input impedance 1000 $\Omega$ , output impedance 50 $\Omega$ , attenuation 60 dB; Supplied with network adaptors and tool box.



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