



Compact Coupling/Decoupling Network **SEPN 4832T(F5032)**

- IEC/EN 61000-4-4
- IEC/EN 61000-4-5
- IEC/EN 61000-4-12
- IEC/EN 61000-6-1
- IEC/EN 61000-6-2
- GB/T 17626.4
- GB/T 17626.5
- GB/T 17626.12

Features

- > EUT DC load capacity 500 V DC, 32 A
- > EUT AC load capacity 480 V AC, 32 A, three-phase five-wire
- > Current range 0 A ~ 32 A
- > Scheduled setting of test parameters, including test voltage, polarity, and phase synchronization angle, enabling fully automatic network switching
- > Phase angle superposition of any lines
- > Coupling path indication (LED indicators)
- > Selectable coupling resistor according to IEC standard or user-defined modes

Introduction

The SEPN 4832T (F5032) Compact Coupling/Decoupling Network complies with IEC 61000-4-4, IEC 61000-4-5 and IEC 61000-4-12, featuring fully automatic three-phase coupling/decoupling function and supports both AC and DC power supply testing.

The SEPN 4832T (F5032) is compatible with CCS, CWS, EFT and RWS series, with a maximum EUT load capacity of 4800 V AC, 32 A (three-phase, five-wire) and 500 V DC, 32 A. Other voltage and current ratings are available upon request.

Application Areas



Technical Parameters

Network Type	Fully automatic three-phase CDN
EUT Load Capacity	Max DC 500 V, 32 A Max AC 480 V, 32 A, 50/60 Hz three-phase five-wire
Current Range	0 A ~ 32 A
Coupling Path	Automatic switching of any coupling path combination among L1, L2, L3, N, and PE
Phase Synchronization	Phase angle superposition between any lines of L1, L2, L3, N, and PE
EUT Power Switching Mode	Automatic network switching
IEC/EN 61000-4-4 EFT/Burst Tests Technical Parameters	
Coupling Waveform	5/50 ns
Test Voltage at Network Port	0.25 kV ~ 5.5 kV $\pm$ 10%
50 Ω Calibration Waveform	Rise time t_r : 5.5 ns $\pm$ 1.5 ns Pulse width t_w : 45 ns $\pm$ 15 ns
Pulse Frequency	0.1 kHz ~ 1,000 kHz
Burst Duration	0.075 ms ~ 750 ms
Test Mode	Selectable test scheduling mode
Polarity	Positive, negative, alternative
Coupling Capacitor	33 nF
IEC/EN 61000-4-5 Surge Tests Technical Parameters	
Coupling Waveform	1.2/50 μ s, 8/20 μ s combination wave
Test Voltage at Network Port	0.25 kV ~ 6 kV $\pm$ 10%
Test Current at Network Port	0.125 kA ~ 3 kA $\pm$ 10%
Surge Input Port	4 mm banana plug
Coupling Capacitor	9 μ F, 18 μ F
Coupling Resistor	10 Ω / 0 Ω
Open-circuit Voltage Waveform (line-to-line $\leq$ 16 A)*	Front time: 1.2 μ s $\pm$ 30% Continuous time: 50 μ s $\pm$ 20%
Short-circuit Current Waveform (line-to-line)	Front time: 8 μ s $\pm$ 20% Continuous time: 20 μ s $\pm$ 20%
Coupling Attenuation	<2 dB (automatic generator compensation)
Residual Pulse Voltage at EUT Injection Port	$\leq$ 15% of the applied test pulse voltage or $\leq$ 2 times the peak voltage rating of the CDN
*Note: The duration depends on the EUT current and pulse coupling path. Refer to the relevant standard for details.	
IEC/EN 61000-4-12 Ring Wave Tests Technical Parameters	
Open-circuit Output Voltage (Pk ₁)	0.25 kV ~ 6 kV $\pm$ 10%
Open-circuit Voltage Oscillation Frequency (1/T)	100 kHz $\pm$ 10%
Open-circuit Voltage Rise Time (T ₁ , 10% ~ 90%)	0.5 μ s $\pm$ 30% @ Pk ₁
Open-circuit Voltage Decaying Ratio	0.4 $\leq$ Pk ₂ / Pk ₁ $\leq$ 1.1 0.4 $\leq$ Pk ₃ / Pk ₂ $\leq$ 0.8 0.4 $\leq$ Pk ₄ / Pk ₃ $\leq$ 0.8
Short-circuit Current Rise Time (T ₁ , 10% ~ 90%)	0.2 μ s ~ 1 μ s @ Pk ₁
Short-circuit Current (Pk ₁) @ Open-circuit Voltage (Pk ₁) at 6,000 V	500 A $\pm$ 10% @ 12 Ω 200 A $\pm$ 10% @ 30 Ω
Output Impedance	12 Ω , 30 Ω

General Parameters

EUT Power Input/Output Ports	4 mm banana plug
Working Power	AC 100 V ~ 240 V, 50 Hz /60 Hz
Fuse	6 A
Max. Power Consumption	100 W
Auxilliary Interface	D-sub 25pin
Working Status Indication	Front panel LED indication
Grounding Method	Flat grounding wire
Dimension	4U rack, 445 (W)*193 (H)*672 (D) mm
Weight	Approx. 42 kg
Ambient Temperature	15 °C ~ 35 °C
Relative Humidity	45% ~ 75%
Atmospheric Pressure	86 kPa ~ 106 kPa

Standard Accessories

Three-core Power Cord, Fuse, Test Cable, RF Cable, Grounding Wire, CN25 Cable, User Manual

Optional Generator

1	EFT/Burst Generator	Model: EFT Series Generator Standard: IEC 61000-4-4	
2	Combination Lightning Surge Simulator	Model: CWS Series Generator Standard: IEC 61000-4-5 Output waveform: 1.2/50 μ s, 8/20 μ s	
3	Compact Combination Simulator	Model: CCS Series Generator Standard: IEC 61000-4-4/-5/-12 Output waveform: 1.2/50 μ s, 8/20 μ s	
4	Ring Wave Simulator	Model: RWS Series Generator Standard: IEC 61000-4-12	

Optional Accessories

1	High-Voltage Differential Probe	Model: VCF-80 Max. test voltage: 8 kV Attenuation: 1,000:1 For open circuit voltage waveform calibration of CWS	
2	Broadband Current Monitor Probe	Model: CM 0220M Max. peak current: 20 kA Sensitivity: 0.01 V/A	
3	EFT/Burst Calibration Kit	Model: EFT-CA-KIT (SHV) Including: Attenuator TFB 500(SHV): 50 Ω load, 500:1 Attenuator: TFB 1000(SHV): 1000 Ω load, 1000:1 HV-RF connector: SHV-BNC-JJ BNC to banana plug: BNC(K)-2BP(J)	
4	Immunity Test Software	Model: CoreLab > Support windows 7/8/10/11 > Support Ethernet interface > Supports automated test sequences, intuitive operation, and test report printing	

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