

# HV High-Power Coupling/Decoupling Network **SEPN 6932T**



- 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

## Features

- > EUT DC load capacity 1,000 V DC, 32 A
- > EUT AC load capacity 690 V AC, 32 A, three-phase five-wire
- > Automatic EUT power switching
- > Support overcurrent monitoring and protection
- > Scheduled setting of test parameters, including test voltage, polarity, and phase synchronization angle, enabling fully automatic network switching
- > Phase angle superposition of any combination of lines

## Introduction

The SEPN 6932T HV High-Power Coupling/Decoupling Network provides fully automated three-phase coupling and decoupling functions. It is designed for use with CCS, CWS, and EFT series generators.

The EUT supports maximum load capabilities of DC 1,000 V/32 A and AC 690 V/32 A (three-phase five-wire). Other EUT voltage and current ratings can be customized according to customer requirements.

## Application Areas



## Technical Parameters

| IEC/EN 61000-4-4 EFT/Burst Tests Technical Parameters |                                                                                                                                                                                                                   |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Automatic Three-Phase CDN                             | EFT/Burst testing, Max. test voltage 5.5 kV<br>Note: The actual pulse voltage output of the CDN depends on the setting of the surge generator.                                                                    |
| Phase Synchronization                                 | Phase angle superposition between any lines of L1, L2, L3, N, and PE                                                                                                                                              |
| Coupling Path                                         | Supports any paths of L1, L2, L3, N, and PE                                                                                                                                                                       |
| Coupling Switching Mode                               | Automatic switching, scheduling function                                                                                                                                                                          |
| Coupling Capacitor                                    | 33 nF                                                                                                                                                                                                             |
| Coupling Attenuation                                  | < 2 dB                                                                                                                                                                                                            |
| Residual Pulse Voltage at EUT Injection Port          | < 10% of the applied test pulse voltage                                                                                                                                                                           |
| IEC/EN 61000-4-5 Surge Tests Technical Parameters     |                                                                                                                                                                                                                   |
| Automatic Three-Phase CDN                             | Combination wave lightning surge test: Max. 10.0 kV (1.2/50 $\mu$ s) voltage and 5.0 kA (8/20 $\mu$ s) current<br>Note: The actual pulse voltage output of the CDN depends on the setting of the surge generator. |
| Phase Synchronization                                 | Phase angle superimposition for any line-to-line or line-to-ground combinations (L1, L2, L3, N, and PE)                                                                                                           |
| Coupling Path                                         | Supports any combination of L1, L2, L3, N, and PE paths                                                                                                                                                           |
| Coupling Switching Mode                               | Automatic switching, scheduling function                                                                                                                                                                          |
| Coupling Capacitor                                    | 9 $\mu$ F, 18 $\mu$ F                                                                                                                                                                                             |
| Coupling Resistor                                     | 10 $\Omega$ / 0 $\Omega$<br>IEC standard mode or customized mode selectable                                                                                                                                       |
| Coupling Attenuation                                  | < 2 dB                                                                                                                                                                                                            |
| 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                                                                                                                 |

## General Parameters

|                           |                                                                                                                |
|---------------------------|----------------------------------------------------------------------------------------------------------------|
| EUT Load Capacity         | Max AC 690 V 32 A, 50 Hz /60 Hz, three-phase five-wire<br>Max DC 1,000 V 32 A                                  |
| EUT Power Switching Mode  | Automatic switching                                                                                            |
| Current Monitor           | Front-panel coaxial terminal output: 100 A: 1 V                                                                |
| Overcurrent Monitor       | 1.5 $\times$ rated current, ms-level continuous operation<br>LCD overcurrent alarm with EUT circuit disconnect |
| Working Power             | AC 110 V / 220 V $\pm$ 10%, 50 Hz /60 Hz $\pm$ 5%                                                              |
| Fuse                      | 10 A                                                                                                           |
| Max. Power Consumption    | 200 W                                                                                                          |
| Auxilliary Interface      | D-sub 25pin                                                                                                    |
| Working Status Indication | Front panel LED indication                                                                                     |
| Grounding Method          | Flat grounding wire                                                                                            |
| Dimension                 | 19-inch/22U rack                                                                                               |
| Weight                    | Approx. 200 kg                                                                                                 |
| Ambient Temperature       | 15 $^{\circ}$ C ~ 35 $^{\circ}$ C                                                                              |
| Relative Humidity         | 45% ~ 75%                                                                                                      |
| Atmospheric Pressure      | 86 kPa ~ 106 kPa                                                                                               |

### Standard Accessories

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

### Optional Generator

|   |                                       |                                                                                                           |                                                                                     |
|---|---------------------------------------|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1 | EFT/Burst Generator                   | Model: EFT 500x/600x/700x<br>Standard: IEC 61000-4-4                                                      |  |
| 2 | Combination Lightning Surge Simulator | Model: CWS 600x/800x/1000x<br>Standard: IEC 61000-4-5<br>Output waveform:<br>1.2/50 $\mu$ s, 8/20 $\mu$ s |  |
| 3 | Compact Combination Simulator         | Model: CCS 600x/1000x<br>Standard: IEC 61000-4-4/-5<br>Output waveform:<br>1.2/50 $\mu$ s, 8/20 $\mu$ s   |  |

### Optional Accessories

|   |                                 |                                                                                                                                                                                                                                 |                                                                                       |
|---|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1 | High-Voltage Differential Probe | Model: VCF-80<br>Max. test voltage: 8 kV<br>Attenuation: 1,000:1<br>For open circuit voltage waveform calibration of CWS                                                                                                        |   |
| 2 | High-voltage current sensor     | Model: TR5025<br>Max. test current: 20 kA<br>Attenuation: 100:1<br>For short circuit current waveform calibration of CWS                                                                                                        |                                                                                       |
| 3 | EFT/Burst Calibration Kit       | Model: EFT-CA-KIT (SHV)<br>Including:<br>Attenuator TFB 500(SHV):<br>50 $\Omega$ load, 500:1<br>Attenuator: TFB 1000(SHV):<br>1000 $\Omega$ load, 1000:1<br>HV-RF connector: SHV-BNC-JJ<br>BNC to banana plug:<br>BNC(K)-2BP(J) |  |

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