

# Ring Wave Coupling/Decoupling Network **RWPN 6916TUL**



- IEC/EN 61000-4-12
- UL 60730-1
- GB/T 17626.12

## Features

- > EUT AC load capacity AC 690 V 16 A, three-phase five-wire
- > EUT power supply automatic switching
- > Test parameters such as test voltage, polarity and phase synchronization angle can be scheduled for fully automatic network switching
- > Arbitrary phase angle superposition on any line

## Introduction

The RWPN 6916TUL ring wave coupling/decoupling network provides complies with IEC/EN 61000-4-12 and UL 60730-1. It is fully automatic three-phase coupling/decoupling function and is designed for use with the RWS 600 series simulator.

The RWPN 6916TUL supports EUT with a Max. load capacity of AC 690 V 16 A three-phase five-wire system. Other EUT voltage and current ratings can be customized according to customer requirements.

## Application Areas



## Technical Parameters

|                                    |                                                                                                                                                                                                                             |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Three-Phase Automatic CDN          | Complies with EN/IEC 61000-4-12, GB/T 17626.12 and UL 60730-1<br>Ring wave test with test voltage up to 6.0 kV<br>Note: The actual pulse voltage output of the CDN depends on the setting value of the pulse generator.     |
| Phase Synchronization              | Arbitrary phase angle superposition between any line-to-line or line-to-ground combinations of L1, L2, L3, N and PE                                                                                                         |
| Coupling Path                      | Any combination of L1, L2, L3, N and PE coupling paths                                                                                                                                                                      |
| Coupling Switching Mode            | Automatic switching with test sequence scheduling function                                                                                                                                                                  |
| Coupling Capacitor                 | 3 $\mu$ F                                                                                                                                                                                                                   |
| Coupling Resistor                  | 5 $\Omega$ , 12 $\Omega$ , 27.5 $\Omega$ , 30 $\Omega$<br>The coupling resistance can be selected according to IEC standard values or customized values. The impedance depends on the internal resistance of the generator. |
| Coupling Attenuation               | < 2 dB                                                                                                                                                                                                                      |
| Residual Voltage of EUT Input Port | <15% of the applied test pulse voltage or twice the rated peak voltage of the CDN                                                                                                                                           |

## General Parameters

|                                   |                                                     |
|-----------------------------------|-----------------------------------------------------|
| EUT Load Capacity                 | Max. AC 690 V 16 A, 50/60 Hz, three-phase five-wire |
| EUT Power Supply Switching Method | Automatic switching                                 |
| Working Power                     | AC 110 V/220 V $\pm$ 10%, 50/60 Hz $\pm$ 5%         |
| Fuse                              | 6 A                                                 |
| Max. Power Consumption            | 200 W                                               |
| Auxiliary Connector               | D-sub 25p                                           |
| Working Status Indication         | LED indication on the front panel                   |
| Grounding Method                  | Flat grounding wire                                 |
| Dimension                         | 6U rack: 620 (L) * 450 (W) * 280 (H) mm             |
| Weight                            | Approx. 30 kg                                       |
| Ambient Temperature               | 15°C ~ 35°C                                         |
| Relative Humidity                 | 45% ~ 75%                                           |
| Atmospheric Pressure              | 86 kPa ~ 106 kPa                                    |

## Standard Accessories

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

## Optional Accessories

|   |                                       |                                                                                                                                                                                                                                                                                                     |                                                                                       |
|---|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1 | Combination Lightning Surge Simulator | Model: CWS 600 Series<br>Standard compliance: IEC 61000-4-5<br>Max. output pulse voltage: 6.0 kV(1.2/50 $\mu$ s), 3.0 kA(8/20 $\mu$ s)                                                                                                                                                              |    |
| 2 | Combination Lightning Surge Simulator | Model: CWS 800 Series<br>Standard compliance: IEC 61000-4-5<br>Max. output pulse voltage: 8.0 kV(1.2/50 $\mu$ s), 4.0 kA(8/20 $\mu$ s)                                                                                                                                                              |    |
| 3 | Compact Combination Simulator         | Model: CCS 600 Series<br>Standard compliance: IEC 61000-4-5<br>Max. output pulse voltage: 6.0 kV(1.2/50 $\mu$ s), 3.0 kA(8/20 $\mu$ s)<br><br>Standard compliance: IEC 61000-4-4<br>Max. output pulse voltage: 4.8 kV                                                                               |    |
| 4 | High-Voltage Differential Probe       | Model: VCF-80<br>Max. test voltage: 8 kV<br>Attenuation ratio: 1,000:1<br>Complies with the open-circuit voltage waveform calibration requirements for combination lightning surge simulators.                                                                                                      |    |
| 5 | High-Voltage Current Sensor           | Model: TR5025<br>Max. test current: 20 kA<br>Attenuation ratio: 100:1<br>Complies with the short-circuit voltage waveform calibration requirements for combination lightning surge simulators.                                                                                                      |                                                                                       |
| 6 | EFT/Burst Simulator                   | Model: EFT 500x<br>Standard compliance: IEC 61000-4-4<br>Max. output pulse voltage: 4.8 kV                                                                                                                                                                                                          |  |
| 7 | EFT/B Calibration Kit                 | Model: TFB 500<br>Output/Input impedance: 50 $\Omega$ / 50 $\Omega$<br>Attenuation: 55 dB<br><br>Model: TFB 1000<br>Output/Input impedance: 1,000 $\Omega$ / 50 $\Omega$<br>Attenuation: 60 dB<br>(Incl. TFB 50 / TFB 1000, network port adapters and a carrying case. calibration for EFT/B tests. |  |

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