

High Voltage SPN Series Coupling / Decoupling Networks for Lightning Surge Testing

Datasheet



In compliance with

- > IEC 61000-4-5
- > IEC 61643-1
- > GB/T3483
- > GB/T 17626.5
- > GB/T 16927.1
- > ITU -T K21

Introduction

SPN Series coupling/decoupling networks for lightning surge testing include single-phase and three-phase power cable coupling/decoupling networks, and is designed to meet the requirement of GB/T 17626.5 and IEC 61000-4-5, with maximum bearing surge voltage up to 30 kV.

These networks are applied to surge testing platform under 30 kV, such as CWS 2000 and CWS 3000 etc. The voltage level and current level for decoupling network can be customized.

Features

- > Networks as per GB/T 3483 can be customized.
- > Maximum coupling impulse voltage up to 30 kV.
- > Maximum coupling impulse current up to 30 kA.
- > Meet the requirement of GB/T 17626.5 and IEC 61000-4-5.
- > Capacitive coupling mode: Combination wave 30 kV / 15 kA
- > Built-in clearance coupling mode can be used in coupling of various surge current wave.

Application Areas

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

Technical Parameters		
Model No.	SPN 3820T20	SPN 3820T30
Testing Standard	GB/T 17626.5, IEC 61000-4-5	GB/T 17626.5, IEC 61000-4-5
EUT Capacity	AC three-phase-5-wire 380 V(L1, L2, L3、N、PE)access ; DC-1 220 V (L1, N) access Current 20 A, 30 A, 50 A and 100 A are optional	AC three-phase-5-wire 380 V(L1, L2, L3、N、PE) access; DC 200 V (L1, N) access Current 20 A, 30 A, 50 A and 100 A are optional
Capacitive Coupling		
Testing Waveform	Combination Wave (1.2/50 µs & 8/20 µs)	Combination Wave (1.2/50 µs & 8/20 µs)
Surge Voltage Injection	0.5 kV -20 kV	0.5 kV -30 kV
Coupling Surge Current	0.25 kA -10 kA	0.25 kA -15 kA
Coupling Capacitance	Common-mode: 9 µF (+10 Ω) Differential-mode: 18 µF	Common-mode: 9 µF (+10 Ω) Differential-mode: 18 µF
Clearance Coupling		
Testing Waveform	8/20 µs、10/350 µs、10/1000 µs etc	
Surge Voltage Injection	2 kV -20 kV	2 kV -30 kV
Coupling Surge Current	2 kA -20 kA	2 kA -30 kA
Coupling Capacitance	Gas Discharge Tube (100 kA)	
Decoupling Inductance	1.5 mH (optional 20mH can meet the requirement of GB/T 3483)	
Mains Switching Mode	AUTO/MANUAL	
Coupling Superposition Mode	AUTO/MANUAL	

General Parameters	
Working Mains	AC 110 V/220 V(±10%), 50 Hz /60 Hz (AC 220 V in Mainland China)
Ambient Temperature	15°C - 35 °C
Relative Humidity	45%-75%
Atmospheric Pressure	86 kPa-106 kPa
Cabinet Dimension	19 Inches / 22 U(600 mm x800 mm x1250 mm) / 35 U(600 mm x800 mm x1820 mm)
Weight	Approx. 150 kg



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