

Coupling/Decoupling Network for Unshielded Symmetric High-speed Communication Line CDN 405T8A1(10 kV)

Datasheet



In Compliance with

- > IEC 61000-4-5:2017
- > EN 61000-4-5:2005
- > GB/T 17626.5

Introduction

CDN 405T8A1(10 kV) is designed for surge test on high-speed communication line up to 1,000 MBit/s in accordance with figure 10 specified in IEC/EN 61000-4-5: 2014. It uses high conductive magnetic material as decoupling device, decoupling performance and transfer rate is stable.

Features

- > Using high conductive magnetic material as decoupling device;
- > Test output to 4-path 8-line communication line;
- > Transmission rate 10 MB/100 MB/1000 MB;
- > Capable of superposing surge simultaneously;
- > Powerful withstand surge impulse capacity, withstand voltage is up to 10 kV;
- > Replaceable current-limiting resistor;

Application Areas

- | | |
|-----------------|--------------|
| > Communication | > IT |
| > Telecom | > Military |
| > Medical | > Avionics |
| > Broadcast | > New energy |
| > Railway | |

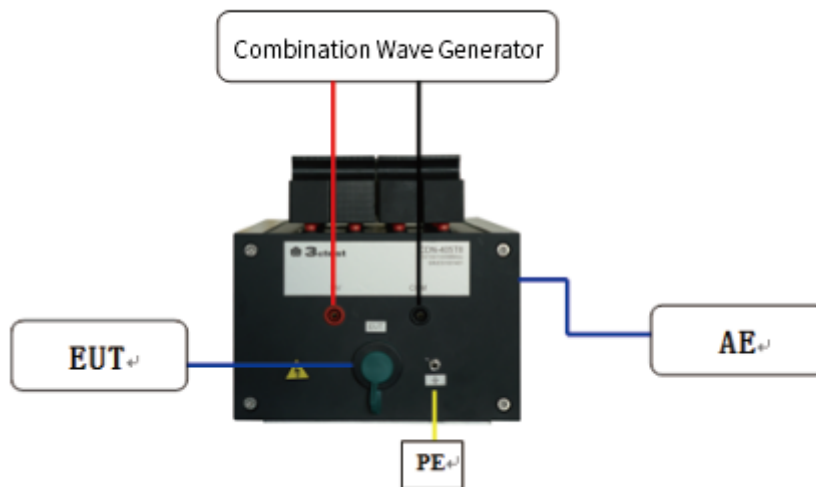
Technical Parameters	
Model No.	CDN 405T8A1(10 kV)
Standard	IEC 61000-4-5: 2017 IEC 61000-4-5: 2005
Coupling Voltage Waveform	1.2/50 μ s, 10/700 μ s
Coupled Current Waveform	8/20 μ s, 5/320 μ s
Pulse Voltage	10 kV
Coupling Mode	Common mode (line to ground)
Coupling Device	90 V gas discharging tube (GDT)
Output Impedance	Current-limiting resistance can be replaced according to test requirements
Communication Port	RJ45 female connector (to connect telecommunication cable)
Pin Assignment	Pair 1: pins 1 / 2 Pair 2: pins 3 / 6 Pair 3: pins 4 / 5 Pair 4: pins 7 / 8
Data Transmission Rate	10 MBit/s, 100 MBit/s, 1,000 MBit/s
Working Voltage	DC: 3-12 V
Working Current	Max. 1 A
Residual Voltage	<15% (coupling surge voltage)

General Parameters	
Weight	Approx. 60 kg
Dimension	615 mm(L) \times 330 mm(W) \times 315 mm(H)
Enclosure Material	Aluminum Alloy
Ambient Temperature	15 $^{\circ}$ C ~ 35 $^{\circ}$ C operating environment
Relative Humidity	45% ~ 75%
Package Case	Carton

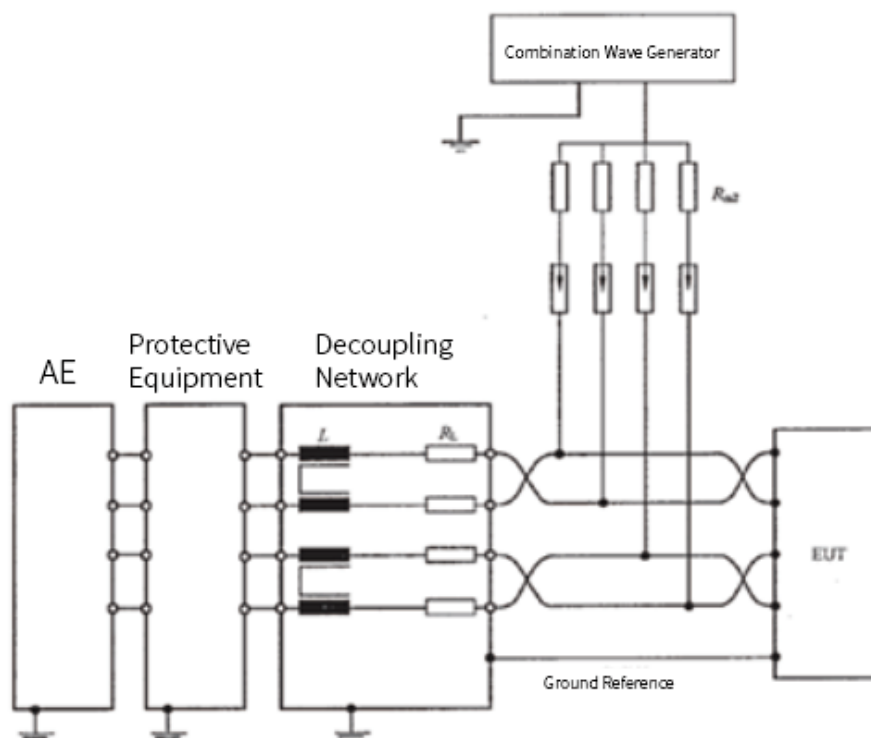
Standard Accessories		
HV Cable	1 m HV silicon cable with banana plug	2
Ground Cable	0.3 m yellow green cable	1
Short Connector	U type	8
Internet Cable	1 m cat 6 internet cable	2
Document	Factory test report	1
	User manual	1

Optional accessories	
NR80	80 ohm \times 2 (for 2 lines, 1.2/50 μ s,8/20 μ s)
NR160	160 ohm \times 4 (for 4 lines, 1.2/50 μ s,8/20 μ s)
NR320	320 ohm \times 8 (for 8 lines, 1.2/50 μ s,8/20 μ s)
NR50	50 ohm \times 2 (for 2 lines,10/700 μ s,5/320 μ s)
NR100	100 ohm \times 4 (for 4 lines,10/700 μ s,5/320 μ s)
NR200	200 ohm \times 8 (for 8 lines,10/700 μ s,5/320 μ s)
NR25	25 ohm \times 8 (for 8 lines,10/700 μ s,5/320 μ s)

Equipment Connection Diagram:



Design Schematic Circuit (as per IEC 61000-4-5:2017 Figure 10):





SUZHOU 3CTEST ELECTRONIC CO., LTD.

Add.: No. 99 E'meishan Road, SND, Suzhou, Jiangsu Province, China

Tel: +86 (0)512 6807 7192 Fax: +86-512-68079795

Sales Email: globalsales@3ctest.cn Service Email: service@3ctest.cn

www.3c-test.com