

Coupling/Decoupling Network for Unshielded Asymmetric Communication Line of Damped Oscillatory Wave

CDN 418AFL8



In Compliance with

- > IEC 61000-4-18
- > EN 61000-4-18
- > GB/T 17626.18

Introduction

The CDN 418AFL8 unshielded asymmetric coupling/decoupling network is designed for damped oscillatory wave test on low speed communication line (up to 5MBit/s Ethernet speed). There is no need to extra protect AE because of high decoupling capacity of CDN 418AFL8 to make sure test repeatability. Max. residual voltage on AE port is only 90V when the surge voltage is 2kV. It fully meets the requirements of IEC/EN 61000 – 4-18. It also boasts stable decoupling capacity and transmission rate, easy to operate and compact size.

Features

- > Test output to 4-path 8-line communication line;
- > Max. withstanding voltage up to 6 kV (customized);
- > Compatible with the output port of other company's generators for communication test;
- > The coupling module can be replaced according to the test needs

Application Areas

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

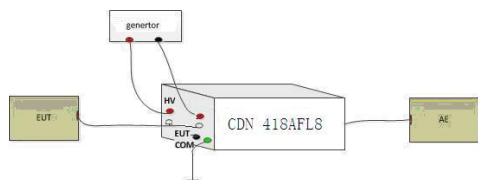
Technical parameters	
Standard	IEC/EN 61000 -4 -18
Coupling Waveform	Damped oscillation wave 100KHz/1MHz
Pulse Voltage	4 kV (6 kV can be customized)
Coupling Mode	Line to line/Line to ground
Coupling Components	External replaceable module (GDT/ Capacitor /TVS)
Communication Frequency	<5 MHz
Communication Port	4mm Banana Head (EUT)/RJ45 Female Connector (AE)
Pin Assignment	Pair 1: pins 1/2
	Pair 2: pins 3/4
	Pair 3: pins 5/6
	Pair 4: pins 7/8
Transmission Rate	Up to 5 MBit/s
Working Voltage	Max. 12 V DC
Working Current	Max. 4 A
Decoupling Inductance	20 mH
Residual Voltage	90 V

General Parameters	
Weight	Approx. 10 kg
Dimension	360 mm (L)× 220 mm (W)× 135 (H) mm
Enclosure Material	Aluminum
Ambient Temperature	15 °C ~ 35 °C (operating condition)
Relative Humidity	45% ~ 75% (operating condition)
Package Case	Carton

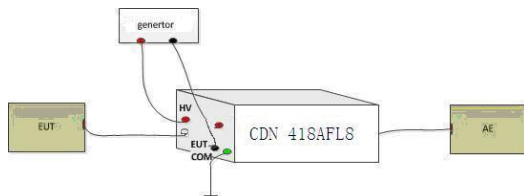
Accessories		
HV Cable	1 m HV silicon cable with banana plug	1
Ground cable	0.5 m yellow green cable	1
Short -Circuit Cable	black	1
SCD 90	Coupling module (built-in)	2
Internet cable	1 m	2
Documents	Factory test report	1
	User manual	1

Options	
SZC 33	Coupled module 33 nF
SZG 90	Coupled module 90V GDT
SZT 30	Coupled module 30V TVS

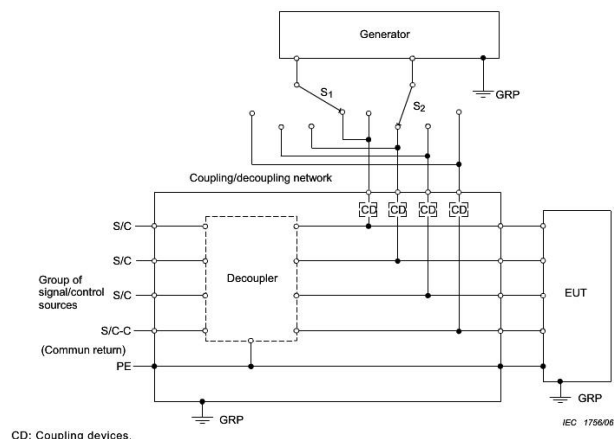
Test Connection Illustration 1 (line-to-line) :



Test Connection Illustration 2 (line-to-PE) :



Design Schematic Circuit:



As per IEC 61000-4-18: 2006 Figure 12a



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