

# CDN for Unshielded Unsymmetric Communication Line

## CDN 405AF8(2A)

### Datasheet



#### In Compliance with

- > EN/IEC 61000-4-5
- > ITU-T K.20
- > ITU-T K.21
- > ITU-T K.45

#### Introduction

The CDN 405AF8 is designed according to figure 9 of IEC/EN 61000-4-5:2017, it's used for test unshielded unsymmetric communication line with transmission rate up to 100 Kbit/s. The coupling device and decoupling device used are optional for different test requirement. Max. surge test is 6 kV.

#### Features

- > Used for 1/2/3/4/8 unshielded lines;
- > For waveform 1.2/50  $\mu$ s, 8/20  $\mu$ s;
- > Coupling mode: line to line and line to earth
- > Transmission rate 100 Kbit/s;
- > Max. working current 2 A;
- > AE/ EUT port: 4 mm banana plug;

#### Application Areas

- > Communication
- > Telecom
- > Medical
- > Broadcasting
- > Railway
- > IT
- > Military
- > Avionics
- > New energy electrical power/ automotive

| Technical parameters    |  |
|-------------------------|--|
| Coupling Waveform       | 1.2/50 $\mu$ s, 8/20 $\mu$ s   |
| Pulse Voltage           | 6 kV   |
| Coupling Mode           | 1/2/3/4/8 unshielded line<br>Line to line and line to earth          |
| Coupling Device         | Optional GDT90, TVS76, C05<br>Optional GDT90, TVS76,<br>TVS200, C250 |
| Output Impedance        | 40 $\Omega \pm 5\%$  |
| Communication Interface | 4 mm banana plug   |
| Transmission Rate       | 100 Kbit/s   |
| Working Voltage         | Depend on<br>coupling/decoupling device                              |
| Working Current         | Max. 2 A   |
| Decoupling Inductance   | 20 mH  |

| General Parameters    |   |
|-----------------------|---|
| Weight                | Approx. 22 kg                                   |
| Dimension             | 475 mm(L) $\times$ 235 mm(W) $\times$ 195 mm(H) |
| Shell Material        | Aluminum  |
| Operating Temperature | 15 $^{\circ}$ C - 35 $^{\circ}$ C               |
| Operating Humidity    | 45% - 75%                                       |
| Package               | Carton  |

### Design Schematic Diagram:

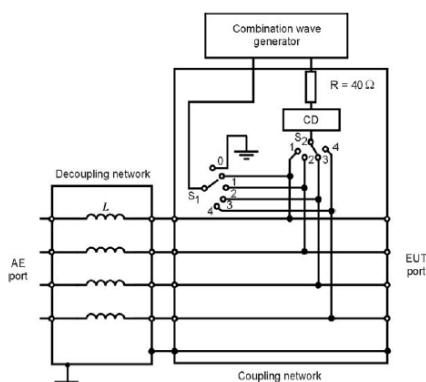


Figure 9 of IEC 61000-4-5: 2017

| Standard Accessories                                    |
|---|
| Test line, Current-limiting resistor NR 40, User manual |

| Options           |                                |
|-------------------|--------------------------------|
| Coupling device   | CD-GDT90 (90V DC)              |
| Coupling device   | CD-TVS76 (76V DC)              |
| Coupling device   | CD-C05 (0.5 $\mu$ F capacitor) |
| Decoupling device | DP-GDT90 (90V DC)              |
| Decoupling device | DP-TVS76 (76V DC)              |
| Decoupling device | DP-TVS200 (200V DC)            |
| Decoupling device | DP-C250 (250V AC capacitor)    |

### Note:

- It's necessary to choose one coupling device and two decoupling devices when purchasing the CDN 405AF8.
- The residual voltage of CDN 405AF8 is related to the type of decoupling device.

### Picture of options (examples)



Coupling device CD-GDT90



Decoupling device DP-GDT90



## **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](mailto:globalsales@3ctest.cn)      Service Email: [service@3ctest.cn](mailto:service@3ctest.cn)

[www.3c-test.com](http://www.3c-test.com)