

Coupling/Decoupling Networks for Surge Testing on Unshielded Symmetrical High-Speed Communication Lines CDN 405T8-C

Datasheet



In Compliance with

- > IEC 61000-4-5
- > FN 61000-4-5
- > GB/T 17626.5

Introduction

The CDN 405T8-C is designed to conduct surge test on unshielded symmetric high-speed communication lines for data transmission rate up to 1,000 MBit/s. It fully meets the requirement of IEC/EN 61000-4-5: 2017 (figure 11). High conductive magnetic material is used as decoupling component, which makes decoupling capacity and transmission rate stable.

Characteristics

- > High conductive magnetic material is used as decoupling component;
- > Capable of testing output to 4-path 8-line simultaneously;
- > Data transmission rate 10 MB / 100 MB / 1000 MB;
- > Capable of Superposing surge waveforms simultaneously;
- > Powerful surge resistance, standard withstand voltage up to 6 kV, 10 kV is customized;

Application Areas

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

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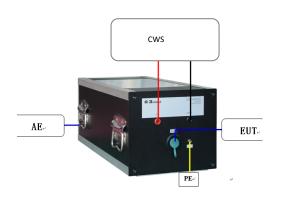


| Technical Parameters | | | | |
|--------------------------|---|--|--|--|
| Model No. | CDN 405T8-C | | | |
| Standard | IEC/EN 61000-4-5 | | | |
| Coupling Waveform | 1.2/50 μs、8/20 μs | | | |
| Impulse Voltage | 6 kV (10 kV on request) | | | |
| Coupling Mode | 8 lines (4 pairs) unshielded symmetrical Common mode (L-PE) | | | |
| Coupling Component | Capacitor | | | |
| Output | Built-in resistance160 Ω*4 | | | |
| Impedance | 8 lines equivalent resistance 40 Ω | | | |
| Decoupling Inductance | 20 mH | | | |
| Residual Voltage | <2% (Coupling surge voltage) | | | |
| Communication Port | Female RJ45 Connector, connecting Telecom cables | | | |
| 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 | 10MBit/s、100MBit/s、1,000MBit/s | | | |
| Operating Voltage | Max. 100 V DC | | | |
| Operating Current | Max. 1 A | | | |

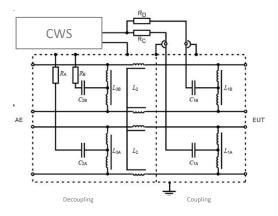
| General Parameters | | |
|--------------------|-------------------------------|--|
| Weight | Approx. 30 kg | |
| Dimension | 475 mm(L)×235 mm(W)×195 mm(H) | |
| Enclosure | Aluminum | |
| Material | Aluminum | |
| Ambient | 15°C - 35°C | |
| Temperature | 13 0 - 33 0 | |
| Relative | 45% - 75% | |
| Humidity | 45/0 - 15/0 | |
| Package Case | Suitcase | |

| Standard Accessories | | | |
|----------------------|---|-------|--|
| HV Cables | 1 m HV silicone line, equipped with banana plug | 2 pcs | |
| Grounded Cables | 2m yellowish green | 1 pc | |
| Internet Cable | 1m Class B Internet cables | 2 pcs | |
| Document | Factory Inspection Report | 1 set | |
| | Operating Instruction | 1 set | |

Test Connection Illustration:



Test Connection Schematic Circuit:



As per IEC 61000-4-5: 2017 Figure 11

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