

Coupling / Decoupling Networks

- **Wide range available**
- **High performance to 230MHz**
- **Special models available**

IEC 61000-4-6 specifies the design and performance of a range of coupling/decoupling networks (CDNs). Each CDN is specific to the type of cable and the intended signal carried on the cable. Schaffner offers an extensive range of CDNs which fully comply with the requirements of the standard and provide a simple and reliable method of injecting RF energy into the equipment under test (EUT). Whilst the published standard only specifies the performance of CDN from 150kHz to 80MHz, Schaffner CDNs are specially designed to give the same performance to the higher frequency of 230MHz. This higher frequency is required by some product specific standards.



CDN Classifications

M Type

Used for unscreened AC or DC power supply applications. Maximum voltage is AC 250 volts rms and DC 400 volts.

- M1 for use on single conductor lines or only for earth lines (does not include capacitor)
- M2 for use with 2 line systems with no protective earth lead
- M3 for normal 3 wire supply systems (line, neutral and protective earth)
- M4 for 3 phase systems (3 line plus protective earth)
- M5 for 3 phase systems (3 line plus neutral and protective earth)

S Type

Used for all screened and coaxial cables.

- S1 have BNC connections and can be supplied for 50, 75, or 93Ω applications. Connectors are BNC female I/P and O/P
- S2 2 line uses a 3 pin professional audio socket
- S4 4 line uses a 5 pin DIN audio socket
- S9 9 line uses a 9 pin D type connector
- S15 15 line uses a 15 pin D type connector
- S25 25 line uses a 25 pin D type connector
- S36 36 line. Centronics connector. Connections sockets (AE and EUT).

AF Type

Used for all unscreened, unbalanced lines, carrying low current. Available as AF2 (2 line), AF3 (3 line), AF4 (4 line) and AF8 (8 line), each CDN is designed for use up to 160 Volts rms AC or 250 Volts DC up to a current of 0.25 amps per line.

AF CDNs are supplied with various sockets including 4mm safety sockets, professional audio and 25 pin D type, depending on application.

T Type

Used for unscreened, balanced lines and can be used at voltages up to 125 Volts rms AC or 180 volts DC with currents up to 0.2A. The T type CDN can be supplied in T2, T4 format as standard for transmission bandwidths <10MHz or with RJ11 or RJ45 connectors for bandwidths up to 80MHz. Designed with high line balance the CDNs fulfil the requirements for fast ISDN, DSL and 10/100 base-T data transfer.

USB

Specially designed to test the universal serial bus, now common on most PCs, this CDN is fitted with a USB plug (input and output) and can be used for up to 30 volts AC at currents of up to 1 amp.

- USB(c) To test central devices
- USB(p) To test peripheral devices

ST Type

For testing screened, balanced lines for telecommunication ports on ITE equipment.

CDN Models and Calibration Components

CDN kits for unscreened lines consisting of

- CDN
- Calibration Adapters for Input (AE) and Output (EUT)
- Common Mode Adapters for Input (AE) and Output (EUT)
- Suite case

CDN kit Part No	CDN Type	Connectors		Order No
		Input (AE)	Output (EUT)	
CDN M116S	M1 1A	4mm socket	4mm socket	244111
CDN M125S	M1 25A	4mm sockets	4mm sockets	244105
CDN M216S	M2 16A	4mm sockets	4mm sockets	244112
CDN M210BS	M2 10A	IEC 320 10A	Euro socket	244113
CDN M225S	M2 25A	4mm sockets	4mm sockets	244106
CDN M263S	M2 63A	6 / 4mm sockets (High-current sockets)	6 / 4mm sockets (High-current sockets)	244107
CDN M316S	M3 16A	4mm sockets	4mm sockets	244114
CDN M316BS	M3 16A	IEC 320 16A	4mm sockets	244115
CDN M310BS	M3 10A	IEC 320 10A	Schuko socket	244116
CDN M325S	M3 25A	CEE plug	4mm sockets	244108
CDN M363S	M3 63A	6 / 4mm sockets (High-current sockets)	6 / 4mm sockets (High-current sockets)	244109
CDN M016S	M2/M3	16A 4mm sockets	4mm sockets	244117
CDN M416S	M4 16A	4mm sockets	4mm sockets	244118
CDN M425S	M4 25A	4mm sockets	4mm sockets	244135
CDN M463S	M4 63A	6 / 4mm sockets (High-current sockets)	6 / 4mm sockets (High-current sockets)	244136
CDN M516S	M5 16A	CEE plug	4mm sockets	244119
CDN M525S	M5 25A	CEE plug	4mm sockets	244137
CDN M563AS	M5 63A	CEE plug	6 / 4mm sockets (High-current sockets)	244138
CDN T002S	T2	4mm sockets	4mm sockets	244131
CDN T004S	T4	4mm sockets	4mm sockets	244132
CDN T246S	T2	25 pin "D" type with adapter set RJ45	25 pin "D" type with adapter set RJ45	244133
CDN T4S	T4	25 pin "D" type with adapter sets RJ11 / 45	25 pin "D" type with adapter sets RJ11 / 45	244134
CDN A200S	AF2	Professional audio socket	Professional audio socket	244120
CDN A201S	AF2	4mm sockets	4mm sockets	244121
CDN A301S	AF3	4mm sockets	4mm sockets	244122
CDN A401S	AF4	4mm sockets	4mm sockets	244123
CDN A800S	AF8	25 pin "D" type	25 pin "D" type	244124
CDN A900S	AF9	25 pin "D" type	25 pin "D" type	244125
CDN A150S	AF15	25 pin "D" type	25 pin "D" type	244126
CDN A250S	AF25	25 pin "D" type	25 pin "D" type	244127

CDN kits for unscreened lines consisting of

- CDN
- Calibration Adapters for Output (EUT) *1)
- Common Mode Adapters for Output (EUT) *1)
- Suite case

Screened				
CDN S501S	S1 50Ω	50Ω BNC	50Ω BNC	244141
CDN S751S	S1 75Ω	75Ω BNC	75Ω BNC	244142
CDN S931S	S1 93Ω	75Ω BNC	75Ω BNC	244143
CDN S200S	S2	Professional audio socket	Professional audio socket	244144
CDN S400S	S4	5 pin DIN	5 pin DIN	244145
CDN S900S	S9	9 pin "D" type	9 pin "D" type	244146
CDN S150S	S15	15 pin "D" type	15 pin "D" type	244147
CDN S250S	S25	25 pin "D" type	25 pin "D" type	244148
CDN S360S	S36	Centronics	Centronics	244149
CDN USB/cS	USB/c	USB ("A" type)	USB ("B" type)	244150
CDN USB/pS	USB/p	USB ("B" type)	USB ("A" type)	244151
CDN ST08S	Screened Telecom	9 pin "D" type *2)	9 pin "D" type *2)	244152