

CNV 504N/508N SERIES

COUPLING/DECOUPLING NETWORKS FOR UNSHIELDED UNSYMMETRICAL INTERCONNECTION LINES



FOR TESTS ACCORDING TO ...

- > EN 50121
- > EN 61000-4-12
- > EN 61000-4-5
- > IEC 61000-4-12
- > IEC 61000-4-5
- > IEC 61326

CNV 504N/508N - COUPLING/DECOUPLING NETWORKS FOR SIGNAL/DATA LINES

Surge pulses or Ringwave pulses are applied to unshielded unsymmetrical interconnection lines (signal/data lines) by means of standalone coupling/decoupling networks. For such testing EM TEST offers a range of CNVs for either 4 or 8 signal/data lines.

According to IEC/EN 61000-4-5 resp. IEC/EN 61000-4-12 the pulses are coupled via different coupling elements such as capacitors or gas arrestors depending on the characteristics of the line signals.

EM TEST also offers special coupling/decoupling networks for railway test applications.

HIGHLIGHTS

- > **Coupling/decoupling networks according to IEC/EN 61000-4-5 and IEC/EN 61000-4-12**
- > **Coupling via gas arrestor or 0.5 μ F capacitor for Surge (3.3 μ F capacitor for Ringwave)**
- > **20mH decoupling inductor per line**
- > **Differential mode or Common mode coupling selectable**

APPLICATION AREAS

-  INDUSTRY
-  MEDICAL
-  RESIDENTIAL

TECHNICAL DETAILS

CNV 504N-SERIES FOR 4 UNSHIELDED UNSYMMETRICAL INTERCONNECTION LINES

CNV 504N MODELS FOR 4KV, LINE VOLTAGE MAX. 50V	
CNV 504N1	4kV coupling/decoupling network max. line current 1A
CNV 504N1.1	4kV coupling/decoupling network max. line current 4A
General data	Coupling/decoupling networks for Surge and Ringwave with 40ohm via 0.5µF capacitor (as per Fig. 11, IEC 61000-4-5) and arrester (as per Fig. 12); with 3.3µF capacitor for Ringwave (as per Fig. 9, IEC 61000-4-12)

CNV 504N MODELS FOR 4KV, LINE VOLTAGE MAX. 250V	
CNV 504N1.2	4kV coupling/decoupling network max. line current 1A
CNV 504N1.3	4kV coupling/decoupling network max. line current 4A
General Data	Coupling/decoupling networks for Surge and Ringwave with 40ohm via 0.5µF capacitor (as per Fig. 11, IEC 61000-4-5); with 3.3µF capacitor for Ringwave (as per Fig. 9, IEC 61000-4-12)

CNV 504N MODELS FOR 7KV, LINE VOLTAGE MAX. 50V	
CNV 504N2	7kV coupling/decoupling network max. line current 1A
CNV 504N2.1	7kV coupling/decoupling network max. line current 4A
General data	Coupling/decoupling networks for Surge and Ringwave with 40ohm via 0.5µF capacitor (as per Fig. 11, IEC 61000-4-5) and arrester (as per Fig. 12); with 3.3µF capacitor for Ringwave (as per Fig. 9, IEC 61000-4-12)

CNV 504N-SERIES FOR 4 UNSHIELDED UNSYMMETRICAL INTERCONNECTION LINES

CNV 504N MODELS FOR 7KV, LINE VOLTAGE MAX. 250V	
CNV 504N2.2	7kV coupling/decoupling network max. line current 1A
CNV 504N2.3	7kV coupling/decoupling network max. line current 4A
General data	Coupling/decoupling networks for Surge and Ringwave with 40ohm via 0.5µF capacitor (as per Fig. 11, IEC 61000-4-5); with 3.3µF capacitor for Ringwave (as per Fig. 9, IEC 61000-4-12)

CNV 504N MODELS FOR 10KV, LINE VOLTAGE MAX. 50V	
CNV 504N3	10kV coupling/decoupling network max. line current 1A
CNV 504N3.1	10kV coupling/decoupling network max. line current 4A
General data	Coupling/decoupling networks for Surge only with 40ohm via 0.5µF capacitor (as per Fig. 11, IEC 61000-4-5) and arrester (as per Fig. 12)

CNV 504N MODELS FOR 10KV, LINE VOLTAGE MAX. 250V	
CNV 504N3.2	10kV coupling/decoupling network max. line current 1A
CNV 504N3.3	10kV coupling/decoupling network max. line current 4A
General data	Coupling/decoupling networks for Surge only with 40ohm via 0.5µF capacitor (as per Fig. 11, IEC 61000-4-5)

TECHNICAL DETAILS

CNV 508N-SERIES FOR 8 UNSHIELDED UNSYMMETRICAL INTERCONNECTION LINES

CNV 508N MODELS FOR 4KV, LINE VOLTAGE MAX. 50V	
CNV 508N1	4kV coupling/decoupling network max. line current 1A
CNV 508N1.1	4kV coupling/decoupling network max. line current 4A
General data	Coupling/decoupling networks for Surge and Ringwave with 40ohm via 0.5µF capacitor (as per Fig. 11, IEC 61000-4-5) and arrester (as per Fig. 12); with 3.3µF capacitor for Ringwave (as per Fig. 9, IEC 61000-4-12)

CNV 508N MODELS FOR 4KV, LINE VOLTAGE MAX. 250V	
CNV 508N1.2	4kV coupling/decoupling network max. line current 1A
CNV 508N1.3	4kV coupling/decoupling network max. line current 4A
General data	Coupling/decoupling networks for Surge and Ringwave with 40ohm via 0.5µF capacitor (as per Fig. 11, IEC 61000-4-5); with 3.3µF capacitor for Ringwave (as per Fig. 9, IEC 61000-4-12)

CNV 508N MODELS FOR 7KV, LINE VOLTAGE MAX. 50V	
CNV 508N2	7kV coupling/decoupling network max. line current 1A
CNV 508N2.1	7kV coupling/decoupling network max. line current 4A
General data	Coupling/decoupling networks for Surge and Ringwave with 40ohm via 0.5µF capacitor (as per Fig. 11, IEC 61000-4-5) and arrester (as per Fig. 12); with 3.3µF capacitor for Ringwave (as per Fig. 9, IEC 61000-4-12)

CNV 508N-SERIES FOR 8 UNSHIELDED UNSYMMETRICAL INTERCONNECTION LINES

CNV 508N MODELS FOR 7KV, LINE VOLTAGE MAX. 250V	
CNV 508N2.2	7kV coupling/decoupling network max. line current 1A
CNV 508N2.3	7kV coupling/decoupling network max. line current 4A
General data	Coupling/decoupling networks for Surge and Ringwave with 40ohm via 0.5µF capacitor (as per Fig. 11, IEC 61000-4-5); with 3.3µF capacitor for Ringwave (as per Fig. 9, IEC 61000-4-12)

CNV 508N MODELS FOR 10KV, LINE VOLTAGE MAX. 50V	
CNV 508N3	10kV coupling/decoupling network max. line current 1A
CNV 508N3.1	10kV coupling/decoupling network max. line current 4A
General data	Coupling/decoupling networks for Surge only with 40ohm via 0.5µF capacitor (as per Fig. 11, IEC 61000-4-5) and arrester (as per Fig. 12);

CNV 508N MODELS FOR 10KV, LINE VOLTAGE MAX. 250V	
CNV 508N3.2	10kV coupling/decoupling network max. line current 1A
CNV 508N3.3	10kV coupling/decoupling network max. line current 4A
General data	Coupling/decoupling networks for Surge only with 40ohm via 0.5µF capacitor (as per Fig. 11, IEC 61000-4-5)

TECHNICAL DETAILS

CNV 504N-SERIES FOR RAILWAY APPLICATIONS

CNV 504N7 MODELS

General Data	Coupling/decoupling networks for AC/DC power ports as well as for 4 signal/data lines and I/O ports, as per EN 50121-3-3, EN 50121-4 and EN 50121-5 and IEC 61000-4-5.
CNV 504N7.2	<p>4kV CDN for 4 signal/data lines and I/O ports, 250Vdc/1A and DC power ports, 250V (coupling only)*) and AC power ports, 250V (coupling only)*)</p> <p>Coupling modes: 0.5uF/40ohm for signal/data lines, I/O ports and auxiliary AC power ports; 0.5uF/40ohm for DC power ports; 9uF/10ohm for AC/DC power ports (L/N-PE) and 18uF for AC/DC power ports (L/N)</p>
CNV 504N7.3	<p>4kV CDN for 4 signal/data lines and I/O ports, 250Vdc/4A and DC power ports, 250V (coupling only)*) and AC power ports, 250V (coupling only)*)</p> <p>Coupling modes: 0.5uF/40ohm for signal/data lines, I/O ports and auxiliary AC power ports; 0.5uF/40ohm for DC power ports; 9uF/10ohm for AC/DC power ports (L/N-PE) and 18uF for AC/DC power ports (L/N)</p>
	<p>*) The max. current through the CNV 504N7.x for AC or DC power port testing is limited to 32A due to the connectors used. The maximum testing current is limited by the decoupling used.</p>

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Information about scope of delivery, visual design and technical data correspond with the state of development at time of release. Technical data subject to change without further notice.