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VCS 500N4

COMBINATION WAVE SIMULATOR (UP TO 4.4KV)

FOR TESTS ACCORDING TO ...

› EN 300329
› EN 300340
› EN 300342-1
› EN 300386-2
› EN 300386 V1.3.2
› EN 301489-1
› EN 301489-17
› EN 301489-24
› EN 301489-7
› EN 55024
› IEC 61000-4-5
› IEC 61000-4-9
› IEC 61326
› IEC 61850-3
› ITU-T K.20
› ITU-T K.21
› ITU-T K.41
› ITU-T K.45

COMBINATION WAVE SIMULATOR

Surge pulses occur due to direct or indirect lightning strokes to an external (outdoor) circuit. This leads to currents or electromagnetic fields causing high voltage or current transients. Another source for surge pulses are switching transients originating from switching disturbances and systems faults.
Due to the characteristic of the phenomenon nearly every electrical and electronical device may suffer from such lightning events which justifies the necessity of surge tests being widely performed. Surge voltage can reach several thousands of volts and surge current is seen to reach several thousands of amps.

HIGHLIGHTS

› SURGE VOLTAGE UP TO 4.4KV
› SURGE CURRENT UP TO 2.2KA
› VOLTAGE/CURRENT MONITORS
› BUILT-IN 1PH OR 3PH CDN
› INTERLOCK
› WARNING LAMP CONTROL
› MANUAL OPERATION

APPLICATION AREAS

INDUSTRY
TELECOM
COMPONENTS
RESIDENTIAL
MEDICAL
BROADCAST

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TECHNICAL DETAILS

COMBINATION WAVE 1.2/50US - 8/20US	
Voltage (o.c.)	160V - 4,400V ± 10%
Pulse front time	1.2us ± 30%
Pulse time to half value	50us ± 20%
Current (s.c.)	max. 2,200A ± 10%
Pulse front time	8us ± 20%
Pulse time to half value	20us ± 20%
Polarity	Positive/negative/alternating
Event counter	1 - 30,000 or endless

TRIGGER	
Trigger of events	Automatic, manual, external
CRO trigger	5V trigger signal for oscilloscope
Synchronization	0° - 360°, resolution 1°
Repetition rate	1s - 999s, depending on the voltage

OUTPUT	
Direct	Via HV-connector; Zi = 2ohm To connect an external surge coupler
CDN 1-N4	Internal single phase coupler
Coupling mode	Line to line with 2ohm impedance Line(s) to PE with 12ohm impedance
DUT supply	AC: 250V/16A; 50/60Hz DC: 250V/10A

MEASUREMENTS	
CRO Û monitor	10Vp / 4,400V
CRO Î monitor	10Vp / 2,200A
Peak voltage	4,400V in the LCD display
Peak current	2,200A in the LCD display

TEST ROUTINES	
Quick Start	Immediate start; easy-to-use and fast
User Test routines	Change polarity after n pulses Change voltage after n pulses Change phase angle after n pulses
Standard Test routines	As per IEC 61000-4-5 As per EN 61000-6-1, -6-2 Manual Standard Test routine
Service	Service, Setup, Self test

INTERFACE	
Serial interface	USB
Parallel interface	IEEE 488, addresses 1 - 30

SAFETY	
Safety circuit	Control input (24Vdc)
Warning lamp	Floating output contact

GENERAL DATA	
Dimensions, weight	19"/3HU, approx. 20kg
Supply voltage	115/230V +10/-15%
Fuses	2x2A (230V) or 2x4A (115V)

COUPLING/DECOUPLING NETWORKS FOR POWER LINES	
CNI 503A	3phase coupler for EFT and Surge; 3x440V/16A
CNI 503A2	3phase coupler for EFT and Surge; 3x440V/32A
CNI 503A3	3phase coupler for EFT and Surge; 3x440V/63A
CNI 503A4	3phase coupler for EFT and Surge; 3x440V/100A
CNV 503	3phase coupler for Surge only; 3x440V/16A
CNV 503S1	3phase coupler for Surge only; 3x440V/32A
CNV 503S2	3phase coupler for Surge only; 3x440V/63A
CNV 503S3	3phase coupler for Surge only; 3x440V/100A

COUPLING/DECOUPLING NETWORKS FOR SIGNAL/TELECOM LINES	
CNV 504N	For 4 signal/data lines as per figures 11 & 12, IEC 61000-4-5
CNV 504S1	For 4 telecom lines as per fig. 14, IEC 61000-4-5
CNV 508N	For 8 signal/data lines as per figures 11 & 12, IEC 61000-4-5
CNV 508S1	For 8 telecom lines as per fig. 14, IEC 61000-4-5

PULSED MAGNETIC FIELD AS PER IEC 61000-4-9	
Antenna	MS 100 for up to 5,000A/m

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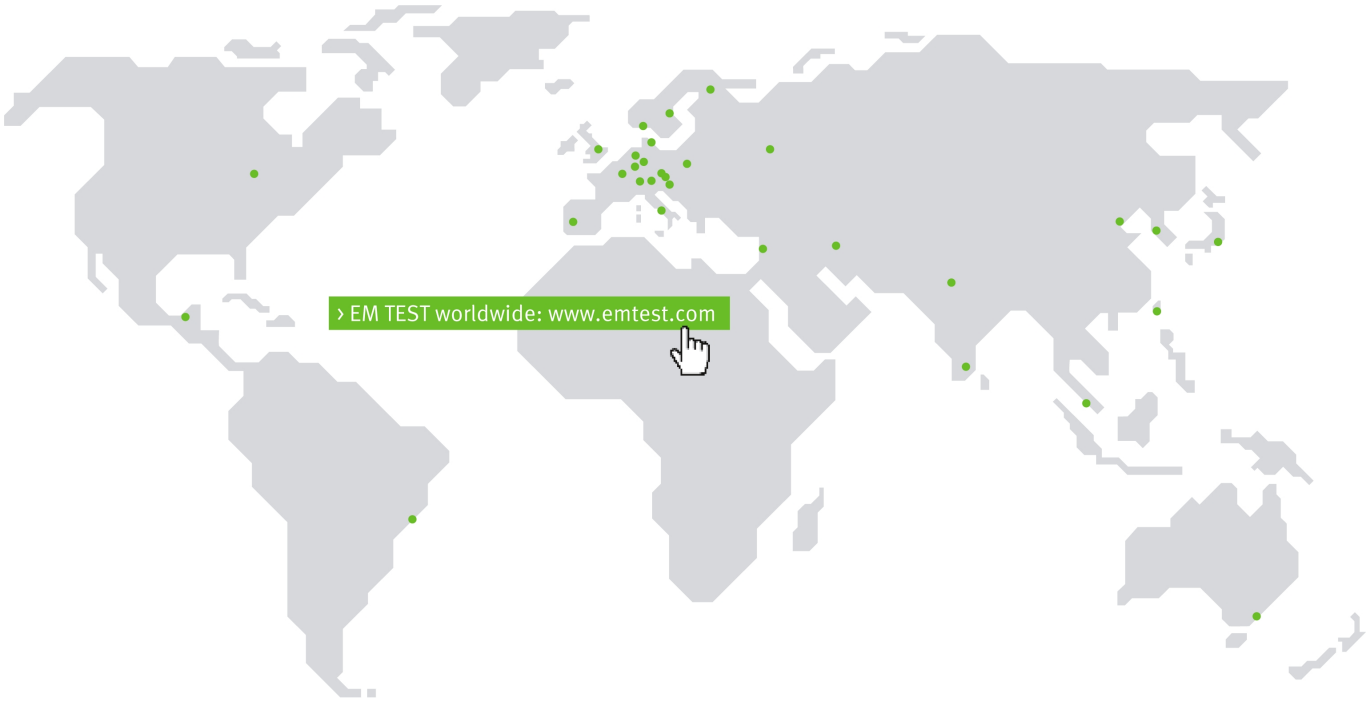
COMPETENCE WHEREEVER YOU ARE



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