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## UCS 500M/6B Ultra Compact Simulator for IEC and **ANSI/IEEE Specifications**



The UCS500M/6B ultra compact simulator tests to ANSI/IEEE C62.41, IEC 610004-4, -5, -8, -9, -11, -12 & -29 specifications for burst, surge, voltage dips, power frequency, magnetic fields, power fail simulation, and ringwave. Design of this simulator exceeds all current standard parameters and it has the capability to support future modifications. A built-in CDN accommodates EUT supply and includes output for external networks. Can be operated from the front panel or remotely, via standard windows-based software.

Burst Module, EFT/6 Electrical Fast Transient Simulator		
Test Level Output	ıt	
	1000-4-4 and EN 61000-6-1, -6-2	
Test voltage	$200V - 5,500V \pm 10\%$	
Wave shape	$5/50$ ns $\pm 30\%$ into $50\Omega$	
	$5ns \pm 30\%$ , $50ns -15/+100ns$ into	
	$1,000\Omega$	
Source impedance	$Zq = 50\Omega$	
Polarity	Positive/negative	
Trigger Circuit		
Trigger of bursts	Automatic, manual, external	
Synchronization	$0^{\circ}$ - 360°, resolution 1°	
Burst duration	td = 0.1ms - 999.9ms	
Burst repetition ra		
Spike frequency	f = 0.1 kHz - 1,000 kHz	
Test duration	T = 0.01 min - 99.59 min or endless	
Outputs		
Direct	Via 50Ω-coaxial connector	
Coupling mode	L, N, PE; all combinations	
EUT supply	AC: 250V/16A; 16-500Hz	
(TDO)	DC: 250V/10A	
CRO trigger	5V trigger signal for oscilloscope	
Test Dautines		
Test Routines Quick Start	On-line adjustable parameters, easy to	
Quick Start	use	
Standard Test Rou		
Standard Test Rot	acc. to EN 61000-6-1, -6-2	
	Manual Standard Test Ro utine	
User Test Routine		
- Coor rest resulting	Random burst release	
	Change voltage after T by $\Delta T$	
	Frequency sweep within one single	
	burst	
	Frequency sweep with constant	
	number of pulses	
	Frequency sweep with constant	
	burst durat ion	
	Change polarity after T	
Options		
HFK	Capacitive coupling clamp acc. to IEC 61000-4-4	
KW50	100:1 divider, 50Ω	
KW 1000	1000:1 divider; 1000Ω	
A6dB	$6$ dB attenuator, $50\Omega$	
TTP	Immunity test probes (electrical field generation)	
ITP/H	Immunity test probes (magnetic field generation)	
CAEFT Cal Kit	Calibration adapter, KW50 and KW1000	
	for EFT pulse verification	

Surge Module, VCS/6 Combination Wave Simulator			
Test Level Output	intor		
acc. to EN/IEC 61000-4-5	5 and EN 61000-6-1: -6-2		
Voltage (open circuit)	$250V - 6,600V \pm 10\%$		
Pulse front time	$1.2 \mu s \pm 30\%$		
Pulse time to half value	$50\mu s \pm 20\%$		
Current (short -circuit)	max. $3,300A \pm 10\%$		
Pulse front time	$8 \mu s \pm 20\%$		
Pulse time to half value	$20\mu s \pm 20\%$		
Polarity	Positive/negative/alternating		
Event counter select	1 - 30,000 or endless		
Pulse counter	1 - 1.000.000		
Trigger Circuit	,		
Release of pulses	Automatic, manual, external		
Synchronization	$0^{\circ}$ - 360°, resolution 1°		
Pulse repetition rate	max. 0.5Hz (2s - 100s)		
Outputs			
Direct	Via HV-coaxial connector, $Zi = 2\Omega$		
Coupling mode	· · · · · · · · · · · · · · · · · · ·		
IEC 61000-4-5	Line to line with $2\Omega$		
	Line(s) to ground (PE) with $12\Omega$		
ANSI C62-41	Line(s) to ground (PE) and line to line with		
11.01.002.11	$\frac{1}{2}\Omega$		
UL	Line(s) to ground (PE) and line to line with		
	12Ω		
EUT supply	AC: 250V/16A; 50/60Hz		
	DC: 250V/10A		
CRO trigger	5V trigger signal for oscilloscope		
Measurements			
CRO Û-monitor	10Vp at 6,600V		
CRO Î-monitor	10Vp at 3,300A		
Peak voltage	6,600V in the LCD display		
Peak current	3,300A in the LCD display		
Test Routines			
Quick Start	On-line adjustable parameters, easy to use		
Standard Test Routines	Acc. to IEC 61000-4-5, level 1 - 4		
	Acc. to EN 61000-6-1, -6-2		
	Manual Standard Test Routine		
User Test Routines	Change polarity after n pulses		
	Change coupling after n pulses		
	Change voltage after n pulses by $\Delta V$		
	Change phase angle after n pulses by $\Delta A$		
Pulsed Magnetic Field	Acc. to IEC 61000-4-9		
	Test levels 100, 300 and 1,000A/m		
	Test level adjustable under in Quick Start		
Options (Delta delta della del			
	CNV504/8 Coupling networks for signal/data lines acc. to IEC 61000-4-5		

REV061203

Power Fail Module, PFS/6 Power Fail Simulator, Dips & Interruptions, Voltage variations	
Voltage Dips & Interru	ptions and Variations
acc. to EN/IEC 61000-4	-11 and EN 61000-6-1, -6-2
Channel PF1 and PF2	AC voltage: max. 250V
	AC current: max. 16A
Frequency	50 / 60Hz
	DC voltage: max. 250V
	DC current: max. 10A
Inrush current	> 500A

Electronic overload protection. Both channels are protected against short-circuit conditions.

Trigger Circuit	
Trigger of events	Automatic, manual, external
Synchronization	0° - 360°, resolution 1° (16 - 500Hz)
Repetition rate	10ms – 99s
Event duration	100µs – 9,900ms

Outputs		
EUT terminals	1	L, N and PE
CRO trigger	i	5V trigger signal for oscilloscope

Measurements	
EUT voltage	In the LCD display
EUT current	In the LCD display
MON V	Measurement of the EUT voltage;
	built-in 100:1 divider
MON I	Measurement of the EUT current;
	10mV/A; max. 1,000A

Test Routines	
Quick Start	On-line adjustable parameters, easy to
	use
Standard Test Routines	acc. to EN/IEC 61000-4-11, AC
	supplies
	acc. to EN/IEC 61000-4-29, DC
	supplies
	acc. to EN 61000-6-1, -6-2
	Manual Standard Test Routine
User Test Routines	Voltage variation, external variac
	control
	Change phase angle after n events by
	ΔΑ
	Change event duration after n events by
	ΔΤ
	Inverse mode
50/60Hz magnetic field	acc. to EN/IEC 61000-4-8
	Test levels 1, 3, 10 and 30A/m with
	external current transformer MC2630
	Test levels 100, 300 and 1,000A/m with
	external current transformer MC26100
Options	
V4070 Tapped auto	otransformer
V4070 S2 Tapped auto	tranformer with automatic change 40-70%
tap	-

tap	
MV2616	Motorised variac (0 – 250V, 16A)
MS100	Magnetic field coil, 1m x 1m
MC2630	Current transformer for magnetic fields up to 30A/m
MC26100	Current transformer for magnetic fields up to
1,000A/m	

Test Level Outputacc. to ANSI/IEEE C62.41 and EN/IEC 61000-4-12Test voltage $250V - 6,000V \pm 10\%$ Voltage wave shape (open ci rcuit)Rise time (first peak) $0.5\mu \pm 30\%$ Oscillatory frequency $100kHz \pm 20\%$ DecayingPeak 2 to peak 1 = 40 - 110%Peak 3 to peak 2 = 40 - 80%Peak 4 to peak 3 = 40 - 80%Current wave shape (short circuit)Rise time $\leq 1.0\mu$ sOscillatory frequency $100kHz \pm 20\%$ Source impedances $12\Omega, 30\Omega$ and $200\Omega$ Short circuit peak currentacc. to selected source impedancePolarityPositive/negativeOutputsDirectVia HV-coaxial connectorCoupling modeL, N, PE; line to line and line to groundEUT supplyAC: 250V/16A; 50/60HzDC: 250V/10ACRO triggerCRO trigger5V trigger signal for oscilloscopeTest routinesQuick StartOn-line adjustable parameters, easy to useStandard Test Routinesacc. to IEC 61000-4-12User Test RoutinesChange voltage after n pulses by $\Delta V$	Ringwave Module, RWG/6 Ringwave Simulator			
Test voltage $250V - 6,000V \pm 10\%$ Voltage wave shape (open ci rcuit)Rise time (first peak) $0.5\mu \pm 30\%$ Oscillatory frequency $100kHz \pm 20\%$ DecayingPeak 2 to peak 1 = 40 - 110\%Peak 3 to peak 2 = 40 - 80\%Peak 4 to peak 3 = 40 - 80\%Current wave shape (short circuit)Rise time $\leq 1.0\mu$ sOscillatory frequency $100kHz \pm 20\%$ Source impedances $12\Omega$ , $30\Omega$ and $200\Omega$ Short circuit peak currentacc. to selected source impedancePolarityPositive/negative <b>Trigger Circuit</b> Release of pulsesAutomatic, manual, externalSynchronization $0^{\circ} - 360^{\circ}$ , resolution $1^{\circ}$ OutputsDirectVia HV-coaxial connectorCoupling modeL, N, PE; line to line and line to groundEUT supplyAC: $250V/16A$ ; $50/60Hz$ Direct $50V$ rigger signal for oscilloscope <b>Test routines</b> Quick StartQuick StartOn-line adjustable parameters, easy to useStandard Test Routinesacc. to IEC 61000-4-12	Test Level Output			
Voltage wave shape (open ci rcuit)Rise time (first peak) $0.5\mu \pm 30\%$ Oscillatory frequency $100kHz \pm 20\%$ DecayingPeak 2 to peak 1 = 40 - 110%Peak 3 to peak 2 = 40 - 80%Peak 4 to peak 3 = 40 - 80%Current wave shape (short circuit)Rise time $\leq 1.0\mu$ sOscillatory frequency $100kHz \pm 20\%$ Source impedances $12\Omega$ , $30\Omega$ and $200\Omega$ Short circuit peak currentacc. to selected source impedancePolarityPositive/negativeTrigger CircuitRelease of pulsesAutomatic, manual, externalSynchronization $0^\circ - 360^\circ$ , resolution $1^\circ$ OutputsDirectVia HV-coaxial connectorCoupling modeL, N, PE; line to line and line to groundEUT supplyAC: $250V/16A$ ; $50/60Hz$ DC: $250V/10A$ CRO triggerCRO trigger $5V$ trigger signal for oscilloscopeTest routinesQuick StartQuick StartOn-line adjustable parameters, easy to useStandard Test Routinesacc. to ANSI/IEEE C62.41	acc. to ANSI/IEEE C62.4			
Rise time (first peak) $0.5\mu \pm 30\%$ Oscillatory frequency $100kHz \pm 20\%$ DecayingPeak 2 to peak 1 = 40 - 110\%Peak 3 to peak 2 = 40 - 80\%Peak 4 to peak 3 = 40 - 80\%Current wave shape (short circuit)Rise time $\leq 1.0\mu$ sOscillatory frequency $100kHz \pm 20\%$ Source impedances $12\Omega$ , $30\Omega$ and $200\Omega$ Short circuit peak currentacc. to selected source impedancePolarityPositive/negativeTrigger CircuitRelease of pulsesAutomatic, manual, externalSynchronization0° - 360°, resolution 1°OutputsDirectVia HV-coaxial connectorCoupling modeL, N, PE; line to line and line to groundEUT supplyAC: 250V/16A; 50/60HzDC: 250V/10ACRO triggerCRO trigger5V trigger signal for oscilloscopeTest routinesQuick StartQuick StartOn-line adjustable parameters, easy to useStandard Test Routinesacc. to ANSI/IEEE C62.41				
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DecayingPeak 2 to peak 1 = 40 - 110%DecayingPeak 3 to peak 2 = 40 - 80%Peak 4 to peak 3 = 40 - 80%Current wave shape (short circuit)Rise time $\leq 1.0\mu$ sOscillatory frequency100kHz ± 20%Source impedances12 $\Omega$ , 30 $\Omega$ and 200 $\Omega$ Short circuit peak currentacc. to selected source impedancePolarityPositive/negativeTrigger CircuitRelease of pulsesAutomatic, manual, externalSynchronization0° - 360°, resolution 1°OutputsDirectVia HV-coaxial connectorCoupling modeL, N, PE; line to line and line to groundEUT supplyAC: 250V/16A; 50/60HzDC: 250V/10ACRO triggerCRO trigger5V trigger signal for oscilloscopeTest routinesQuick StartQuick StartOn-line adjustable parameters, easy to useStandard Test Routinesacc. to ANSI/IEEE C62.41	Rise time (first peak)	$0.5 \mu s \pm 30\%$		
Peak 3 to peak $2 = 40 - 80\%$ Peak 4 to peak $3 = 40 - 80\%$ Current wave shape (short circuit)Rise time $\leq 1.0\mu$ sOscillatory frequency100kHz $\pm 20\%$ Source impedances12 $\Omega$ , $30\Omega$ and $200\Omega$ Short circuit peak currentacc. to selected source impedancePolarityPositive/negativeTrigger CircuitRelease of pulsesAutomatic, manual, externalSynchronization $0^{\circ} - 360^{\circ}$ , resolution $1^{\circ}$ OutputsDirectVia HV-coaxial connectorCoupling modeL, N, PE; line to line and line to groundEUT supplyAC: 250V/16A; 50/60HzDC: 250V/10ACRO triggerCRO trigger5V trigger signal for oscilloscopeTest routinesQuick StartQuick StartOn-line adjustable parameters, easy to useStandard Test Routinesacc. to ANSI/IEEE C62.41	Oscillatory frequency	100kHz ±20%		
Peak 4 to peak $3 = 40 - 80\%$ Current wave shape (short circuit)Rise time $\leq 1.0\mu$ sOscillatory frequency $100 \text{ KHz} \pm 20\%$ Source impedances $12\Omega, 30\Omega$ and $200\Omega$ Short circuit peak currentacc. to selected source impedancePolarityPositive/negativeTrigger CircuitRelease of pulsesAutomatic, manual, externalSynchronization $0^{\circ} - 360^{\circ}$ , resolution $1^{\circ}$ OutputsDirectVia HV-coaxial connectorCoupling modeL, N, PE; line to line and line to groundEUT supplyAC: $250V/16A; 50/60\text{ Hz}$ DC: $250V/10A$ CRO triggerCRO trigger $5V$ trigger signal for oscilloscopeTest routinesQuick StartOn-line adjustable parameters, easy to useStandard Test Routinesacc. to ANSI/IEEE C62.41	Decaying	Peak 2 to peak $1 = 40 - 110\%$		
Current wave shape (short circuit)Rise time $\leq 1.0 \mu s$ Oscillatory frequency $100 \text{ KHz} \pm 20\%$ Source impedances $12\Omega, 30\Omega$ and $200\Omega$ Short circuit peak currentacc. to selected source impedancePolarityPositive/negativeTrigger CircuitRelease of pulsesAutomatic, manual, externalSynchronization $0^{\circ} - 360^{\circ}$ , resolution $1^{\circ}$ OutputsDirectVia HV-coaxial connectorCoupling modeL, N, PE; line to line and line to groundEUT supplyAC: $250V/16A; 50/60Hz$ DC: $250V/10A$ CRO triggerCRO trigger $5V$ trigger signal for oscilloscopeTest routinesQuick StartOn-line adjustable parameters, easy to useStandard Test Routinesacc. to ANSI/IEEE C62.41		Peak 3 to peak $2 = 40 - 80\%$		
Rise time≤ 1.0µsOscillatory frequency100kHz ± 20%Source impedances12Ω, 30Ω and 200ΩShort circuit peak currentacc. to selected source impedancePolarityPositive/negativeTrigger CircuitRelease of pulsesAutomatic, manual, externalSynchronization0° - 360°, resolution 1°OutputsDirectVia HV-coaxial connectorCoupling modeL, N, PE; line to line and line to groundEUT supplyAC: 250V/16A; 50/60HzDC: 250V/10ACRO triggerSV trigger signal for oscilloscopeTest routinesQuick StartQuick StartOn-line adjustable parameters, easy to useStandard Test Routinesacc. to ANSI/IEEE C62.41		Peak 4 to peak $3 = 40 - 80\%$		
Oscillatory frequency $100kHz \pm 20\%$ Source impedances $12\Omega$ , $30\Omega$ and $200\Omega$ Short circuit peak current       acc. to selected source impedance         Polarity       Positive/negative         Trigger Circuit         Release of pulses       Automatic, manual, external         Synchronization $0^{\circ} - 360^{\circ}$ , resolution $1^{\circ}$ Outputs         Direct       Via HV-coaxial connector         Coupling mode       L, N, PE; line to line and line to ground         EUT supply       AC: 250V/16A; 50/60Hz         DC: 250V/10A       CRO trigger         CRO trigger       5V trigger signal for oscilloscope         Test routines       Quick Start         Quick Start       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41	Current wave shape (sho	rt circuit)		
Source impedances $12\Omega$ , $30\Omega$ and $200\Omega$ Short circuit peak current       acc. to selected source impedance         Polarity       Positive/negative         Trigger Circuit       Release of pulses         Release of pulses       Automatic, manual, external         Synchronization       0° - 360°, resolution 1°         Outputs       Direct         Via HV-coaxial connector         Coupling mode       L, N, PE; line to line and line to ground         EUT supply       AC: 250V/16A; 50/60Hz         DC: 250V/10A       CRO trigger         SV trigger signal for oscilloscope         Test routines       Quick Start         Quick Start       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41	Rise time	≤ 1.0µs		
Short circuit peak current       acc. to selected source impedance         Polarity       Positive/negative         Trigger Circuit       Release of pulses         Release of pulses       Automatic, manual, external         Synchronization       0° - 360°, resolution 1°         Outputs       Direct         Direct       Via HV-coaxial connector         Coupling mode       L, N, PE; line to line and line to ground         EUT supply       AC: 250V/16A; 50/60Hz         DC: 250V/10A       CRO trigger         SV trigger signal for oscilloscope         Test routines       Quick Start         Quick Start       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41	Oscillatory frequency	100kHz ±20%		
Polarity       Positive/negative         Trigger Circuit         Release of pulses       Automatic, manual, external         Synchronization       0° - 360°, resolution 1°         Outputs       Direct         Direct       Via HV-coaxial connector         Coupling mode       L, N, PE; line to line and line to ground         EUT supply       AC: 250V/16A; 50/60Hz         DC: 250V/10A       DC: 250V/10A         CRO trigger       5V trigger signal for oscilloscope         Test routines       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41	Source impedances	$12\Omega$ , $30\Omega$ and $200\Omega$		
Trigger Circuit         Release of pulses       Automatic, manual, external         Synchronization       0° - 360°, resolution 1°         Outputs       Direct       Via HV-coaxial connector         Coupling mode       L, N, PE; line to line and line to ground         EUT supply       AC: 250V/16A; 50/60Hz         DC: 250V/10A       DC: 250V/10A         CRO trigger       5V trigger signal for oscilloscope         Test routines       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41	Short circuit peak current	acc. to selected source impedance		
Release of pulses       Automatic, manual, external         Synchronization       0° - 360°, resolution 1°         Outputs       Direct       Via HV-coaxial connector         Coupling mode       L, N, PE; line to line and line to ground         EUT supply       AC: 250V/16A; 50/60Hz         DC: 250V/10A       DC: 250V/10A         CRO trigger       5V trigger signal for oscilloscope         Test routines       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41         acc. to IEC 61000-4-12	Polarity	Positive/negative		
Release of pulses       Automatic, manual, external         Synchronization       0° - 360°, resolution 1°         Outputs       Direct       Via HV-coaxial connector         Coupling mode       L, N, PE; line to line and line to ground         EUT supply       AC: 250V/16A; 50/60Hz         DC: 250V/10A       DC: 250V/10A         CRO trigger       5V trigger signal for oscilloscope         Test routines       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41         acc. to IEC 61000-4-12				
Synchronization       0° - 360°, resolution 1°         Outputs	Trigger Circuit			
Outputs         Direct       Via HV-coaxial connector         Coupling mode       L, N, PE; line to line and line to ground         EUT supply       AC: 250V/16A; 50/60Hz         DC: 250V/10A         CRO trigger       5V trigger signal for oscilloscope         Test routines         Quick Start       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41	Release of pulses			
Direct       Via HV-coaxial connector         Coupling mode       L, N, PE; line to line and line to ground         EUT supply       AC: 250V/16A; 50/60Hz         DC: 250V/10A         CRO trigger       5V trigger signal for oscilloscope         Test routines         Quick Start       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41         acc. to IEC 61000-4-12	Synchronization	$0^{\circ}$ - 360°, resolution 1°		
Direct       Via HV-coaxial connector         Coupling mode       L, N, PE; line to line and line to ground         EUT supply       AC: 250V/16A; 50/60Hz         DC: 250V/10A       DC: 250V/10A         CRO trigger       5V trigger signal for oscilloscope         Test routines         Quick Start       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41         acc. to IEC 61000-4-12				
Direct       Via HV-coaxial connector         Coupling mode       L, N, PE; line to line and line to ground         EUT supply       AC: 250V/16A; 50/60Hz         DC: 250V/10A       DC: 250V/10A         CRO trigger       5V trigger signal for oscilloscope         Test routines         Quick Start       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41         acc. to IEC 61000-4-12	Outputs			
EUT supply       AC: 250V/16A; 50/60Hz         DC: 250V/10A         CRO trigger       5V trigger signal for oscilloscope         Test routines         Quick Start       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41         acc. to IEC 61000-4-12	Direct			
DC: 250V/10A         CRO trigger       5V trigger signal for oscilloscope         Test routines         Quick Start       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41         acc. to IEC 61000-4-12				
CRO trigger       5V trigger signal for oscilloscope         Test routines       On-line adjustable parameters, easy to use         Quick Start       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41         acc. to IEC 61000-4-12	EUT supply	AC: 250V/16A; 50/60Hz		
Test routines       On-line adjustable parameters, easy to use         Quick Start       On-line adjustable parameters, easy to use         Standard Test Routines       acc. to ANSI/IEEE C62.41         acc. to IEC 61000-4-12	i	DC: 250V/10A		
Quick Start         On-line adjustable parameters, easy to use           Standard Test Routines         acc. to ANSI/IEEE C62.41           acc. to IEC 61000-4-12	CRO trigger	5V trigger signal for oscilloscope		
Quick Start         On-line adjustable parameters, easy to use           Standard Test Routines         acc. to ANSI/IEEE C62.41           acc. to IEC 61000-4-12				
Standard Test Routines acc. to ANSI/IEEE C62.41 acc. to IEC 61000-4-12				
acc. to IEC 61000-4-12				
	Standard Test Routines			
User Test Routines Change voltage after n pulses by $\Delta V$				
	User Test Routines			
Change phase angle after n pulses by $\Delta A$				
Change voltage after T by $\Delta T$	!	Change voltage after T by $\Delta T$		

Interfaces       Serial RS232 interface with baud rate of 1,200 - 19,200 baud         Parallel interface       IEEE bus parallel interface, selectable device addresses 1 - 30         Analog output       Analogue control output with 0 - 10VDC to control an external transformer         CN interface       CNI interface with 15pin SubD to control an external coupling network         Fail inputs       EUT monitoring via Fail1 and Fail2 input (one each)         Dimensions       Housing         Housing       19°, 6HU, L = 532mm         Weight       approx. 25kg         Mains       Supply voltage         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       Safety         Safety circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       plug depends on the country of use         POWer cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         IEUT adapter       socket depends on the country of use         ISMIEC software       Remote Control plus complete report software         Options       CNI50 3 3-phase	Comonal Data			
Serial interface       Serial RS232 interface with baud rate of 1,200 - 19,200 baud         Parallel interface       IEEE bus parallel interface, selectable device addresses 1 - 30         Analog output       Analogue control output with 0 - 10VDC to control an external transformer         CN interface       CNI interface with 15pin SubD to control an external coupling network         Fail inputs       EUT monitoring via Fail1 and Fail2 input (one each)         Dimensions       Housing         Housing       19°, 6HU, L = 532mm         Weight       approx. 25kg         Mains       Supply voltage         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       plug depends on the country of use         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         IDT adapter       socket depends on the country of use         IDST adapter       socket depends on the country of use         IDT adapter       socket de	General Data			
1,200 - 19,200 baud         Parallel interface         IEEE bus parallel interface, selectable device addresses 1 - 30         Analog output       Analogue control output with 0 - 10VDC to control an external transformer         CN interface       CNI interface with 15pin SubD to control an external coupling network         Fail inputs       EUT monitoring via Fail1 and Fail2 input (one each)         Dimensions       Housing         Housing       19", 6HU, L = 532mm         Weight       approx. 25kg         Mains       Supply voltage         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       Safety         Safety circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord         Power cord       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Calibration certificate         ISMIEC software       Remote Control plus complete report software         Options       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5		Samial DS222 interface with hand rate of		
Parallel interface       IEEE bus parallel interface, selectable device addresses 1 - 30         Analog output       Analogue control output with 0 - 10VDC to control an external transformer         CN interface       CNI interface with 15pin SubD to control an external coupling network         Fail inputs       EUT monitoring via Fail1 and Fail2 input (one each)         Dimensions       EUT monitoring via Fail1 and Fail2 input (one each)         Mains       19°, 6HU, L = 532mm         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 25kg         Mains       50 / 60Hz         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       Safety standard         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max, 6A)         Accessories Included       plug depends on the country of use         EUT supply cable       plug depends on the country of use         IEUT supply cable       plug depends on the country of use         IEUT supply cable       plug depends on the country of use         IEUT supply cable       plug depends on the country of use         IEUT supply cable       plug depends on the country of use         <	Serial interface			
device addresses 1 - 30         Analog output       Analogue control output with 0 - 10VDC to control an external transformer         CN interface       CNI interface with 15pin SubD to control an external coupling network         Fail inputs       EUT monitoring via Fail1 and Fail2 input (one each)         Dimensions       EUT monitoring via Fail1 and Fail2 input (one each)         Mains       supply voltage         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 25kg         Mains       safety         Safety       Safety         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       plug depends on the country of use         POWer cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Calibration certificate         ISMIEC software       Remote Control plus complete report software         Options       CNI503         CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit	Dorollal interface			
Analog output       Analogue control output with 0 - 10VDC to control an external transformer         CN interface       CNI interface with 15pin SubD to control an external coupling network         Fail inputs       EUT monitoring via Fail1 and Fail2 input (one each)         Dimensions       EUT monitoring via Fail1 and Fail2 input (one each)         Mains       approx. 25kg         Mains       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       Safety         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       power cord         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         ISMIEC software       Remote Control plus complete report software         Options       CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit       EUT ada -4-5	Parallel Interface			
to control an external transformer         CN interface         CNI interface with 15pin SubD to control an external coupling network         Fail inputs       EUT monitoring via Fail1 and Fail2 input (one each)         Dimensions         Housing       19", 6HU, L = 532mm         Weight       approx. 25kg         Mains         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       Safety         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Calibration certificate         ISMIEC software       Remote Control plus complete report software         Options       CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit       4-5	A			
CN interface       CNI interface with 15pin SubD to control an external coupling network         Fail inputs       EUT monitoring via Fail1 and Fail2 input (one each) <b>Dimensions</b> 19", 6HU, L = 532mm         Weight       approx. 25kg <b>Mains</b> 115 / 230VAC +10% / -15%         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT <b>Safety</b> Safety standard         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A) <b>Accessories Included</b> plug depends on the country of use         PUT adapter       socket depends on the country of use         Instruction manual       Calibration certificate         ISMIEC software       Remote Control plus complete report software <b>Options</b> CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit       EUT monitoring kit	Analog output			
an external coupling network         Fail inputs         EUT monitoring via Fail1 and Fail2 input (one each)         Dimensions         Housing       19", 6HU, L = 532mm         Weight       approx. 25kg         Mains         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       Safety         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Calibration certificate         ISMIEC software       Remote Control plus complete report software         Options       CNI503 3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit	CN interface			
Fail inputs       EUT monitoring via Fail1 and Fail2 input (one each)         Dimensions       19", 6HU, L = 532mm         Housing       19", 6HU, L = 532mm         Weight       approx. 25kg         Mains       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       Safety         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Calibration certificate         ISMIEC software       Remote Control plus complete report software         Options       CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit       EUT monitoring kit	CN Interface			
Image: Construction of the control of	Fail inputs			
Dimensions         Housing       19", 6HU, L = 532mm         Weight       approx. 25kg         Mains       supply voltage         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       Safety standard         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Calibration certificate         ISMIEC software       Remote Control plus complete report software         Options       CNI503         CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit	Tan inputs			
Housing       19", 6HU, L = 532mm         Weight       approx. 25kg         Mains       Supply voltage         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       Safety         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Instruction manual         Calibration certificate       Remote Control plus complete report software         Options       CNI503         CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit		(one each)		
Housing       19", 6HU, L = 532mm         Weight       approx. 25kg         Mains       Supply voltage         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       Safety         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Instruction manual         Calibration certificate       Remote Control plus complete report software         Options       CNI503         CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit	Dimensions			
Weight       approx. 25kg         Mains       Supply voltage         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       Safety         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Instruction manual         Calibration certificate       Remote Control plus complete report software         Options       CNI503         CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit		19". 6HU, L = 532mm		
Mains         Supply voltage       115 / 230VAC +10% / -15%         Power consumption       approx. 75W         Frequency       50 / 60Hz         Fuses       2 x 1AT         Safety       Safety         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Instruction manual         Calibration certificate       Remote Control plus complete report software         Options       CNI503 3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit	0			
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Fuses       2 x 1AT         Safety       Safety standard         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Instruction certificate         ISMIEC software       Remote Control plus complete report software         Options       CNI503         CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit		approx. 75W		
Safety         Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Instruction certificate         ISMIEC software       Remote Control plus complete report software         Options       CNI503         CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit	Frequency	50 / 60Hz		
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Safety standard       EN/IEC 61010         Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Instruction certificate         ISMIEC software       Remote Control plus complete report software         Options       CNI503         CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit				
Security circuit       Control input (24VDC)         Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord       plug depends on the country of use         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Instruction certificate         ISMIEC software       Remote Control plus complete report software         Options       CNI503         CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit	Safety			
Warning lamp       Floating contact (max. 230V/max. 6A)         Accessories Included       Power cord       plug depends on the country of use         Power cord       plug depends on the country of use         EUT supply cable       plug depends on the country of use         EUT adapter       socket depends on the country of use         Instruction manual       Instruction certificate         ISMIEC software       Remote Control plus complete report software         Options       CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit				
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Calibration certificate       Remote Control plus complete report software         ISMIEC software       Remote Control plus complete report software         Options       CNI503 3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit		socket depends on the country of use		
ISMIEC software     Remote Control plus complete report software       Options     CNI503     3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5       PÜW     EUT monitoring kit		l		
Software         Options         CNI503       3-phase coupling/decoupling network acc. to EN/IEC 61000-4-4 and -4-5         PÜW       EUT monitoring kit	Calibration certificate			
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