

UCS 500N5P

POWER FAIL SIMULATOR FOR DIPS AND SHORT INTERRUPTIONS AS PER IEC/EN 61000-4-11 AND -29



FOR TESTS ACCORDING TO ...

- › EN 61000-4-11
- › EN 61000-4-29
- › EN 61000-4-8
- › EN 61000-6-1
- › EN 61000-6-2
- › IEC 61000-4-11
- › IEC 61000-4-29
- › IEC 61000-4-8

UCS 500N5P - STANDALONE SINGLE PHASE POWER FAIL SIMULATOR

The UCS 500N5P is the new dedicated single-phase PowerFail simulator based on the successful UCS 500N series of ultra-compact simulators. Offering all the benefits of the well-known UCS 500N5 it is designed as a PowerFail simulator only. This makes it the full performing PowerFail simulator as per IEC 61000-4-11 and IEC 61000-4-29 with the best benefit-to-cost ratio yet upgradeable to include other test abilities such as EFT/Burst and Combination Wave Surge. By means of external accessories the UCS 500N5P can also be used to generate power-frequency magnetic fields up to 1,000A/m.

HIGHLIGHTS

- › Fully compliant to IEC 61000-4-11 Ed.2 as well as IEC 61000-4-29
- › Voltage/current up to 300V/32A AC/DC
- › Switching time between 1us and 5us
- › Inrush current › 500A
- › Monitor outputs for voltage and current
- › Fail inputs
- › External variac control 0-10Vdc

APPLICATION AREAS

- | | |
|---|--|
|  INDUSTRY |  BROADCAST |
|  MEDICAL |  RENEWABLE ENERGY |
|  RESIDENTIAL | |
|  TELECOM | |
|  COMPONENTS | |

TECHNICAL DETAILS

POWER FAIL SIMULATOR

UCS 500N5P	
	As per EN/IEC 61000-4-11, IEC/EN 61000-4-29 and EN 61000-6-1, -6-2
Channel PF1/PF2	AC voltage: max. 300V AC current: max. 32A DC voltage: max. 300V DC current: max. 32A
Frequency	AC: 16Hz - 500Hz and DC
Switching time	1us to 5us into a 100ohm resistive load
Inrush current	> 500A
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 - 9,999s
Event duration	20us - 9,999s

OUTPUTS

DUT terminals	L, N and PE
CRO trigger	5V trigger signal for oscilloscope

MEASUREMENTS

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

POWER FAIL SIMULATOR

TEST ROUTINES	
Quick Start	On-line adjustable parameters, easy-to-use
Standard Test routines	As per EN/IEC 61000-4-11 for AC supplies As per EN/IEC 61000-4-29 for DC supplies As per EN 61000-6-1, -6-2 Manual Standard Test routine
User Test routines	Voltage variation, control of an external variac Change phase angle after n events Change event duration after n events Inverse mode
50/60Hz magnetic field	As per 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

TECHNICAL DETAILS

GENERAL DATA

INTERFACES

Serial interface	USB
Parallel interface	IEEE 488, addresses 1 - 30
Analog output	0 - 10VDC to control an external transformer
Fail inputs	DUT monitoring via Fail1 and Fail2 input (one each)

DIMENSIONS

Dimensions	19", 3HU
Weight	approx. 15kg

MAINS

Supply voltage	115V/230VAC +10%/-15%
Power	approx. 75W
Frequency	50/60Hz
Fuses	2xT2AT (230V) or 2xT4AT (115V)

SAFETY

Safety standard	EN/IEC 61010
Security circuit	Control input (24VDC)
Warning lamp	Floating contact (max. 230V/6A)

ACCESSORIES INCLUDED

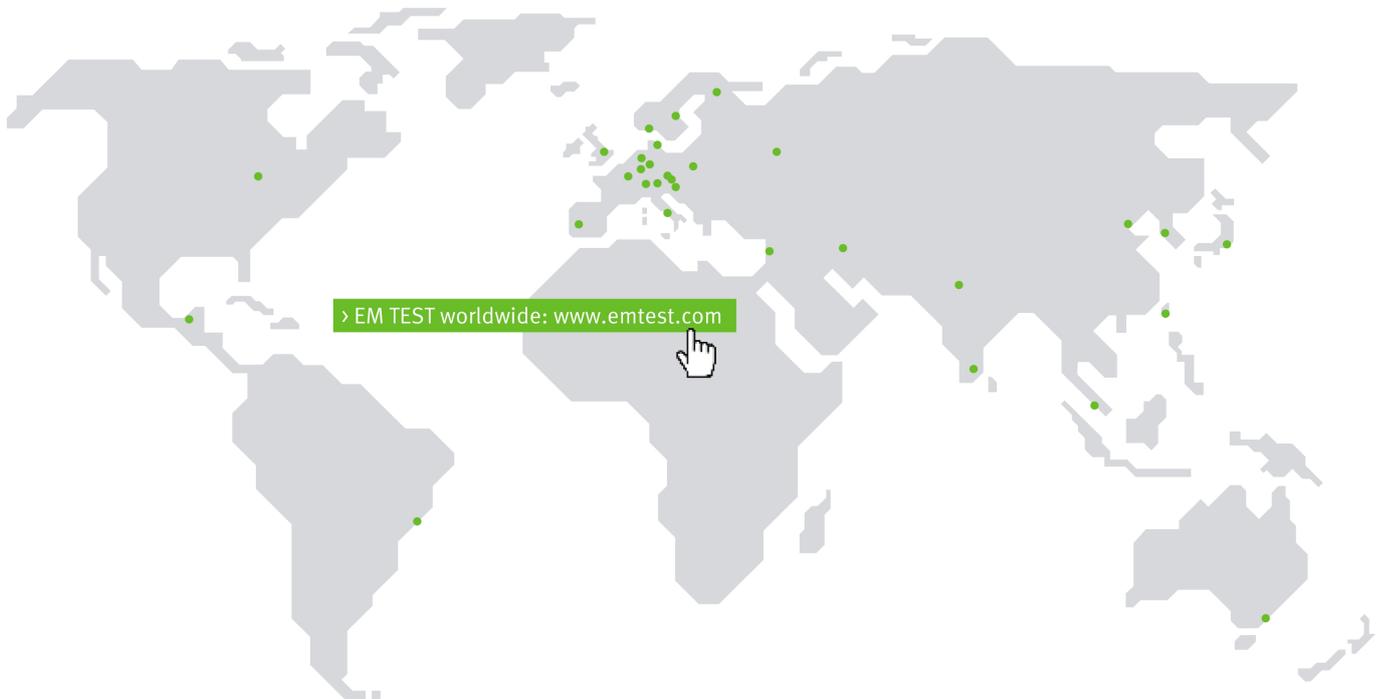
Mains supply	Plug depends on the country of use
DUT supply	Plug depends on the country of use
DUT adapter	Socket depends on the country of use
	Operation manual, Calibration certificate, iec.control remote control software

OPTIONS

OPTIONAL ACCESSORIES/EQUIPMENT

V4780	Tapped autotransformer as per IEC 61000-4-11 Ed.2
V4780 S2	Tapped autotransformer as per IEC 61000-4-11 Ed.2 with automatic change of tap
MV2616	Motorised variac (0 - 250V, 16A)
MS100N	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
CA PFS	Calibration box for inrush current verification as per IEC 61000-4-11
iec.control 1	Remote control and documentation software, including standard test routines and reporting capabilities.

COMPETENCE WHEREVER YOU ARE



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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.