

# CWG 1500

## Surge Generator



- Voltage pulse 1,2 / 50µs
- Current pulse 8 / 20 µs
- Amplitude 0,2 - 4,4 kV  
0,1 – 2,2 kA

The test generator CWG 1500 simulates high-energy interference pulses and is suitable for performing EMC tests on systems in accordance with the standards IEC / EN 61000-4-5, 2014 and VDE 0847 4-5.

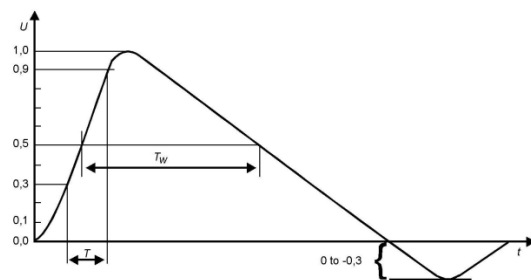
The CWG 1500 is a combined surge current / surge voltage generator that generates a standard open circuit surge voltage of 1.2 / 50 µs and a standard short-circuit surge current of 8/20 µs. The values for current and voltage are shown on the display, for evaluations with an oscilloscope BNC outputs for current and voltage are available on the rear.

With the built-in single-phase coupling network, the interference pulses of the hybrid generator can be coupled to the supply lines of the devices to be tested. The coupling takes place by means of discrete coupling capacitors. According to IEC 61000-4-5, 18 µF capacitors (balanced coupling) or 9 µF / 10 Ω (unbalanced coupling) are installed with sufficient dielectric strength. External coupling networks can also be operated via the HV socket or used for component testing.

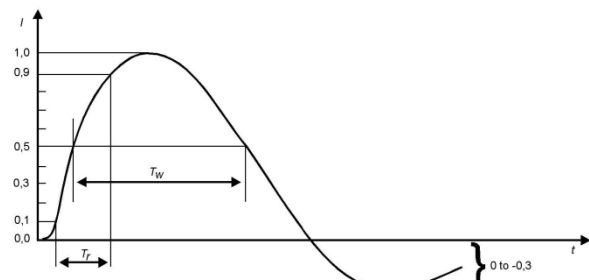
All parameters can be set easily and clearly. With the memory key up to 32 settings can be activated directly. By means of a serial interface, control by computer is also possible.

### Definition of the parameter – IEC 61000-4-5

	Front time $T_f$ µs	Duration $T_d$ µs
Open-circuit voltage	$T_f = 1,67 \times T = 1,2 \pm 30 \%$	$T_d = T_w = 50 \pm 20 \%$
Short-circuit current	$T_f = 1,25 \times T_f = 8 \pm 20 \%$	$T_d = 1,18 \times T_w = 20 \pm 20 \%$



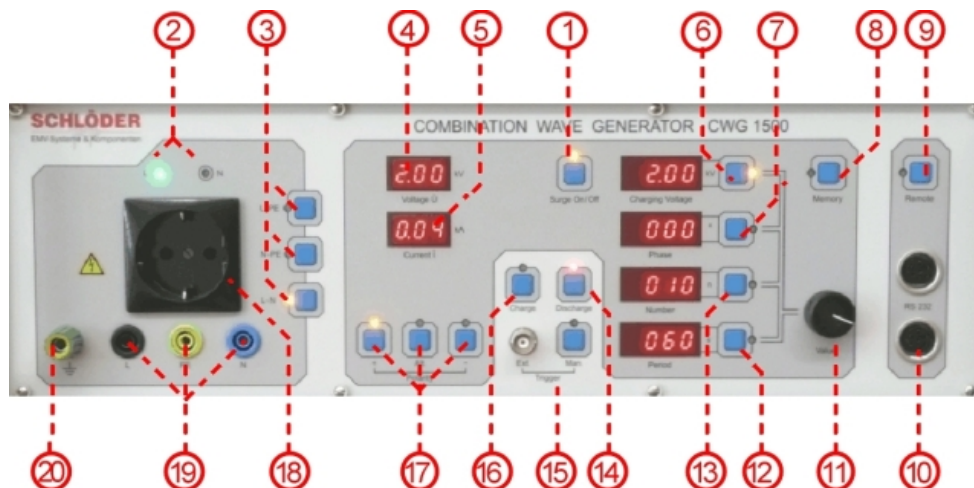
Open-circuit voltage



Short-circuit current

technical data may be changed without notice

261811



## Technical data

### Generator

[6]	Charge voltage	0,2 - 4,4 kV
[4]	Display	Surge voltage Pulse shape 1,2 / 50 $\mu$ s (IEC 61000-4-5)
[5]	Display	Surge current Pulse shape 8 / 20 $\mu$ s (IEC 61000-4-5)
[17]	Polarity	positive, negative, alternating
•	Stored energy	100 Ws max.
•	Charge time	$\leq$ 10 sec
•	HV output	Ground free and ground referred
•	Common functions	[11] Adjustment via potentiometer for: <ul style="list-style-type: none"> <li>• [6] Idle voltage</li> <li>• [7] Phase angle</li> <li>• [13] Number of pulses</li> <li>• [12] Periods</li> </ul>
[15]	Triggering	Manual or extern
[7]	Phase angle for	$\varphi = 0 - 359^\circ$ , step $1^\circ$ net sync. triggering
[13]	Amount of pulses	1 - 999
[12]	Repetition periods	10 - 990 sec
[14]	Discharge	Discharge of the storage capacitor
[16]	Charge	Charge of the storage capacitor
[8]	Memory function	Select test level 1-4; Max. 32 memory set up's possible

### Rear site

### Dimension

### Weight

### Electronic input

HV-output to connect the 3-phase coupling network

19" – housing, 3 HE

app. 18 kg

100-240 V / 47-63 Hz / 100VA

## Coupling network

### Nominal voltage

230 V / 50/60 Hz or 270 V DC

### Nominal current

16 A AC or DC

### [3] Balanced coupling

L – N : 18  $\mu$ F

### Unbalanced coupling

L - PE, N – PE : 9  $\mu$ F + 10  $\Omega$

### [18] EUT connection

Protection earth outlet

### [19] EUT connection

Additional lab- terminals

### [20] Ground connection

Ground jack at front and rear panel

### [2] Phase indicator

Lamp red / green

## Options

• CWG 520 (4x16A)	3-phase coupling network
• CWG 523 (4x32A)	3-phase coupling network
• CWG 524 (4x60A)	3-phase coupling network
• CWG 1525 (1A)	CDN for 2 balanced lines
• CWG 1526-4 (4A)	CDN 4A, 2 unbalanced data lines
• CWG 1526-10 (10A)	CDN 10A, 2 unbalanced data lines
• CWG 1528 6A)	CDN, 6A, 4 unbalanced data lines, with RS 232 interface
• CWG 550	18 $\mu$ F capacitor in a housing
• CWG 553	0,5 $\mu$ F+ 40 $\Omega$ in a housing
• CWG 554	9 $\mu$ F+ 10 $\Omega$ in a housing
• EMC-SOFT	Control software