

# CAR - Transient Emission 14

**EMC-Test Equipment  
for electrical installation  
of vehicles Acc. to:  
ISO 7637-2: 2011  
CISPR 25  
CISPR 16-1-2**

**Triggerable load switch  
50 / 100 / 200A, 800V**

**Shunt resistors  
integrated, switchable  
10Ω / 20Ω / 40Ω**



The CAR- Transient Emission 14 is used to check the transient transition behavior when switching loads on the vehicle electrical system.

It consists of two triggerable circuit breakers (electronically or mechanically), an artificial network, a control unit for operating the device, and optionally an external power supply.

The CAR-Transient Emission 14 can perform the "Transient Emission Test" for "slow pulses" and "fast pulses" according to ISO 7637-2.

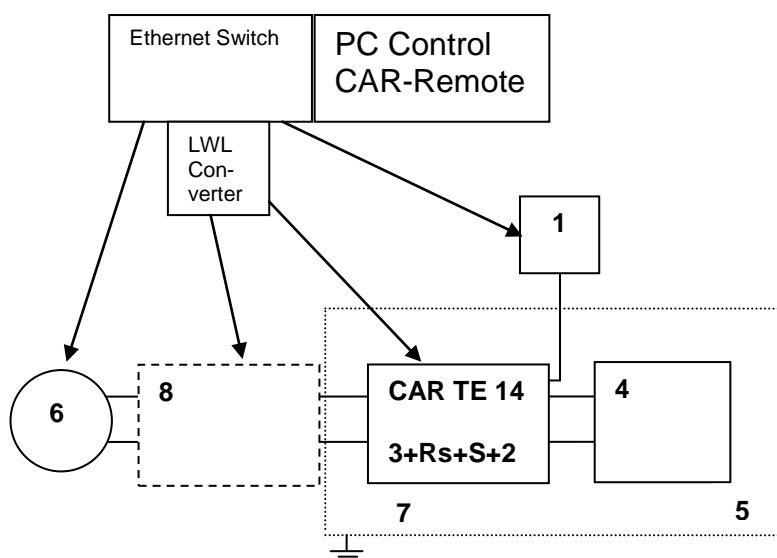
It features a microprocessor controlled user interface and a display unit. The user can define his own test sequence.

The test parameters are set and displayed via a 5" touch screen display and can be recorded during the test on a USB stick.

The device can be operated individually or in conjunction with the CAR TEST SYSTEM and can be controlled by the PC Remote software.

It is characterized by its compact design and a easy operation.

## Prinzipschaltung KFZ CAR- Transient Emission 14



### Key

- 1 Oscilloscope
- 2 voltage probe
- 3 artificial network
- 4 DUT
- 5 ground plane
- 6 power supply
- 7 ground connection <100mm
- 8 CAR SYS 14
- Rs shunt resistance
- S switch electronic or mechanic

<b>Technical specifications</b>	<b>CAR-Transient-Emission 14</b>
<b>Mainframe</b>	
Microprocessor controlled touch panel	5", 800X480, 24 bit
Optical Ethernet Interface for remote control of the generator	optional
Interface for saving reports	USB
External trigger input /output	10 V at 1 k $\Omega$
Connector for external safety interlock loop	24 V =
External red and green warning lamps acc. to VDE 0104	230 V, 60W
Mains power	230 V, 50/60 Hz
Dimensions desk top case, W * H * D	450*320*180 mm <sup>3</sup>
Weight	35kg
<b>Transient Emission Test, Power Switch Transients, acc. to ISO 7637-2</b>	
Max. operating voltage	70V
High short circuit current capability	900A
Voltage drop over switch at 25A	< 2.0V
Switching time electr. switch	< 300ns
Transient over voltage protection	> 500V
Nominal voltage	0 - 100%
Minimal turn off time; mechanical / electronically switch; toff	0.5 / 0.01 s
Minimal Period; mechanical / electronically switch; Period	1 / 0.1 s
Number of tests	1 - 1000; infinity
Mechanical switch, switch time	200 ms
<b>Artificial network</b>	
Series inductance	5 $\mu$ H, 100 A
Load impedance	0.1 $\mu$ F + 50 $\Omega$
Load resistor Rs, switchable	10 / 20 / 40 $\Omega$
Connectors for external load resistor, 2.0 $\Omega$	build in
Artificial network	on / off
<b>Power supply switch</b>	
Max. output current	50/100/200 A
Max. reverse voltage	800 V
Trigger input, connectable to external modules	Built-in
<b>Measurement probes, Transient immunity test</b>	
Impulse voltage divider	100:1, 10 MHz, 1kV-peak
<b>Option switchable to CISPR 25</b>	
	1 $\mu$ F
<b>Option switchable to CISPR 16-1-2</b>	
	2 $\mu$ F + 1 $\Omega$
<b>Option PC Software Car-Remote ( mandatory with PS)</b>	
to control the CAR - TESTER 14 over Ethernet LWL	
to control the PS xx-xx	
to control the PG 2804	
to control the CAR-Transient Emission 14	