



MAIN FEATURES

- **BS 200N100.1 - Electronic switch, 60V DC/100A:**
- - Volt.Drop <1.2V@100A, <0.2V@25A
- - Peak voltage max. 1,300V
- - Reverse-polarity/short-circuit protected
- **BSM 200N40 - Mechanical switch, 12/24V DC/40A**
- **AN 200N100 - ISO 7637-2, CISPR 25, CISPR 16-1-2**
- - Frequency range 100 kHz - 125 MHz
- - 1,000V DC, 250V AC (up to 1kHz)

Transient Emission Set

Introduction

The EM Test emission test set is an easy to use, compact test setup. The small size of the equipment allows short connections to meet the specified distances specified by ISO 7637-2.

The measurement of automotive transient emissions as per ISO 7637-2 requires an electronic switch, a mechanical switch and an artificial network.

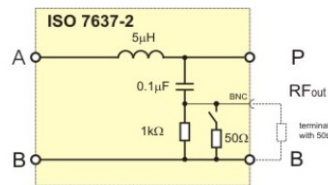
The artificial network represents the typical impedance of the wiring harness in a car. The AN 200N100 is designed to meet the requirements according to ISO 7637-2, CISPR 25 / ISO 11452-4 and CISPR 16-1-2.

The electronic switch BS 200N100.1 and the mechanical switch BSM 200N40 are to interrupt the supply voltage to the DUT. The BS 200N100.1 performs a repeatable testing with a transition time of 300 ns, used for most applications, both fast and slow.

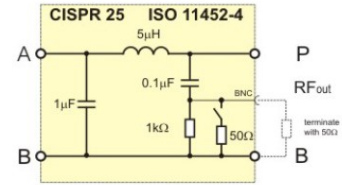
Specification AN 200N100

Frequency range	0.1 ... 125 MHz
Operating voltage	max. 1'000 VDC / 250 VAC up to 1 kHz
Operating current	max. 100 A DC / AC continuous
Inrush current	max. 400 A @ 200 ms
Impedance	5 µH / 50 Ω (see more details below)
Inductance	5 µH +/-10% air-core coil
Coupling capacitor	0.1 µF
Insertion loss	< 3dB (DUT to receiver output)
Power connectors	High current connectors up to 100 A, 4 mm safety lab connectors up to 32 A
RF OUT	Yes, BNC
Dimension	318 x 126 x 122 mm (L x W x H) (without ground connection sockets)
Weight	approx. 2.8 kg

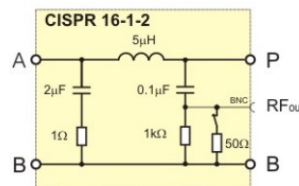
ISO 7637-2



ISO 11452-4 / CISPR 25



CISPR 16-1-2



Specification Emission Switches

	BS 200N100.1 - electronic switch	BSM 200N40 - mechanical switch (relay)
Operation voltage	max. 60 VDC	12 V / 24 V (max. 27 VDC), Pmax. 540 W
Operation current	max. 100 A continuous	max. 40 A DC continuous @ 13.5 V (ohmic load) max. 20 A DC continuous @ 27 V (ohmic load)
Inrush current	max. 400 A @ 200 ms	N/A
Peak voltage	max. 1'300 V	N/A
Voltage drop	< 0.2 V @ 25 A < 1.2 V @ 100 A	typical < 200 mV @ 20 A typical < 500 mV @ 40 A
Relay	N/A	- silver contacts - typical > 200'000 switching cycles ** - accustic signal EOL reached
Overvoltage protection	Yes, varistors	N/A
Overload protection	Yes - Overcurrent protection (120A) - Short-circuit protection - Over temperature protection	N/A
Inverse polarity protection	Yes, accustic signal	N/A
Transition time	300 ns +/- 20 % test load 50 µH / 0.6 Ω	N/A
Switch time duration (OFF)	10 ms ... 500 ms continuously (set by potentiometer)	> 50 ms ... 500 ms continuously (set by potentiometer)
Switch time repetition	1 s ... 10 s (set by potentiometer)	
Manual trigger (IN)	on single event	
Automatic trigger	approx. 0.1 ... 1 Hz repetition, cont. set by potentiometer	
CRO trigger (OUT)	Yes, for triggering a scope	
Voltage monitor	BNC, differential divider 1:200 +/-5% bandwidth 10 MHz	
Main connectors (power INPUT / OUTPUT)	6 mm high current 100 A 4 mm safety lab connectors, max. 32 A	
Dimension	90 (113*) x 125 x 120 mm (L x W x H) * incl flaps for ground connection	
Weight	1.3 kg	0.8 kg
Ext. power supply (supply built-in electronics)	Yes, 24 VDC with wide range power input 90 ... 264 VAC	

CA BS 200N	Calibration load 50 µH / 0.6 Ω
RS-BOX	Shunt resistors to simulate other resistances in the car (10, 20, 40, 120 Ω)
CA AN 200N100 KIT	Adapter set for verification of the impedance curve of the AN 200N100