

# Specification



## VDS 200B

### Voltage Drop Simulator

**Testing of electronic modules in 12V/24V or 42V supply systems. The VDS 200B is a low frequency amplifier. It simulates the battery power supply of a vehicle and complex power supply distortions in the power range up to 12,000W. A lot of different waveforms are integrated as standard such as pulse 2b and pulse 4 required in ISO 7637.**

**Controlled by the AutoWave generator the VDS 200B series can be used for the generation of most complex manufacturer and user specific waveforms.**

**The VDS 200B can be used as an individual instrument or in combination with all other generators of the series 200.**

- ISO 7637
- ISO 16750-2
- SAE J1113
- Manufacturer specification as GM, Ford, Chrysler, Mercedes BMW, VW, PSA, Renault, Fiat, etc.

# VDS 200B

## VDS 200B model configuration

VDS 200B0	Voltage Drop Simulator	60V/ 10A
VDS 200B	Voltage Drop Simulator	60V/ 15A
VDS 200B1	Voltage Drop Simulator	60V/ 30A
VDS 200B2	Voltage Drop Simulator	60V/ 50A
VDS 200B3	Voltage Drop Simulator	60V/ 100A
VDS 200B4	Voltage Drop Simulator	60V/ 150A
VDS 200B5	Voltage Drop Simulator	60V/ 200A

## Common technical data

Source impedance	$Z_i = < 10m\Omega$
Voltage deviation	< 1V at any load (including inrush current) recovering 63% of its maximum excursion within 100us
Ripple voltage	$U_r < 0.2V_{p-p}$ , frequency min. 400Hz
Bandwidth	Vpp max 16V up to 25kHz Vpp max 6V up to 50kHz

## Technical data VDS 200B0

Output voltage	0V – 60V
Output current continuous	0A – 10A
Output current peak	15A

## Technical data VDS 200B

Output voltage	0V – 60V
Output current continuous	0A – 15A
Output current peak	15A

## Technical data VDS 200B1

Output voltage	0V – 60V
Output current continuous	0A – 30A
Output current peak	70A for max 500ms

## Technical data VDS 200B2

Output voltage	0V – 60V
Output current continuous	0A – 50A
Output current peak	100A for max 500ms

## Technical data VDS 200B3

Output voltage	0V – 60V
Output current continuous	0A – 100A
Output current peak	150A for max 500ms

## Technical data VDS 200B4

Output voltage	0V – 60V
Output current continuous	0A – 150
Output current peak	150A

## Technical data VDS 200B5

Output voltage	0V – 60V
Output current continuous	0A – 200A
Output current peak	200A

## Trigger

Automatic	Automatic release of the events
Manual	Manual release of a single pulse
External	External release of a single pulse

## Output

DUT Supply +/-	Safety laboratory and high current plugs
Aux IN +/-	To connect an external dc supply for dips
Analog control input	0-10V / 10k $\Omega$ / 0-50kHz
External trigger	5-15V TTL; BNC connector
CRO Trigger	5V TTL-signal for oscilloscope

## Test Routines for arbitrary waves

DC source	Max. 60V; current depending on VDS 200B model
Functions	1. Sine Wave 2. Jump Start 3. Extern 4. GM 9105P Pulse 4 5. Drop and Jump pulse
Standard Test Routines	1. ISO 7637 2. ISO 16750-2 3. Jaso Test 1
Service	Service, Setup, Self test

## Interface

Serial interface	RS 232, baud rate 1200 - 19200
Parallel interface	IEEE 488, address 1 - 30
Remote control	To connect external signal generators 0-10V / 10k $\Omega$ / 0-50kHz

## General data

Dimensions, weight	19" / 6HU, app. 49kg for VDS 200B0/B
	19" / 9HU, app. 76kg for VDS 200B1
	19" / 12HU, app. 114kg for VDS 200B2
	19" / 16HU, app. 170kg for VDS 200B3
	19" / 25HU, app. 400kg for VDS 200B4
	19" / 34HU, app. 450kg for VDS 200B5
Supply voltage	VDS 200B0 115/230V +10/-15%
	VDS 200B 115/230V +10/-15%
	VDS 200B1 230V +10/-15%
	VDS 200B1 208V (US version)
	VDS 200B2 3x440V
	VDS 200B2 3x208V (US version)
Fuses	VDS 200B3/B4/B5 3x440V
	VDS 200B3/B4/B5 3x480V (US version)
Fuses	Depending on VDS 200B model

## Options

AutoWave	Arbitrary generator for more complex test requirements
CNA 200B2	Central coupling matrix, 60V/50A
CNA 200B3	Central coupling matrix, 60V/100A
CNA 200B4	Central coupling matrix, 60V/150A
CNA 200B5	Central coupling matrix, 60V/200A
ISMISO	Software to control the test, including standard library, test report facility and data conversion generator

Technical data subject to change without notice