

VDS 200N

VOLTAGE DROP SIMULATOR



FOR TESTS ACCORDING TO ...

- › Audi (für Referenzfahrzeuge)
- › BMW - (für Airbag-Steuerungen)
- › BMW 600 13.0 (Part 1)
- › BMW 600 13.0 (Part 2)
- › BMW GS 95002 (1999)
- › BMW GS 95002 (2001)
- › BMW GS 95003-2
- › Case New Holland ENS0310
- › Chrysler CS-11809 (2009)
- › Chrysler PF-9326
- › Cummins 14269 (982022-026)
- › DaimlerChrysler DC-10615
- › DaimlerChrysler DC-10842
- › DaimlerChrysler PF-10541
- › DIN 72300-2
- › EN 300329
- › EN 300340
- › EN 300342-1
- › EN 301489-1
- › EN 301489-17
- › EN 301489-24
- › ...





VDS 200N - BATTERY SUPPLY SIMULATOR AND DC VOLTAGE SOURCE

The VDS 200N series is used to simulate the various battery supply waveforms recommended by international standards and by car manufacturer requirements. Especially the manufacturer requirements are an important area covered by the VDS 200N series as there is a large variety of requirements. Secondly, the VDS 200N series serve as powerful DC voltage supplies for the DUT during the tests with automotive transients. The VDS 200N series covers all three supply voltage categories. Their current capability ranges up to 200A depending on the model and your application.

HIGHLIGHTS

- › Voltage up to 60V
- › Current up to 200A (peak up to 1,000A)
- › Bipolar-amplifier models available
- › Low output impedance
- › Powerful DC voltage source
- › Pulses 4 and 2b (ISO 7637-2:2004)
- › Pre-programmed test routines to simulate various supply waveforms

APPLICATION AREAS

-  AUTOMOTIVE
-  TELECOM
-  MILITARY
-  AIRCRAFT

TECHNICAL DETAILS

OVERVIEW VDS 200N MODELS

VDS 200N10	Voltage Drop Simulator, 60V/10A
VDS 200N15	Voltage Drop Simulator, 60V/15A
VDS 200N30	Voltage Drop Simulator, 60V/30A
VDS 200N30.1	Bipolar Voltage Drop Simulator, 60V/30A and 30V/50A
VDS 200N50	Voltage Drop Simulator, 60V/50A
VDS 200N50.1	Bipolar Voltage Drop Simulator, 60V/50A and 30V/85A
VDS 200N100	Voltage Drop Simulator, 60V/100A
VDS 200N150	Voltage Drop Simulator, 60V/150A
VDS 200N200	Voltage Drop Simulator, 60V/200A

COMMON TECHNICAL DATA

Source impedance	$Z_i = <10\text{mohm}$
Voltage deviation	<1V with resistive load (including inrush current) recovering 63% of its maximum excursion within 100us
Ripple voltage	$U_r <0.2V_{p-p}$, frequency min. 400Hz
Sinusoidal signal capability vs. Frequency *)	V _{pp} max. 16V up to 25kHz V _{pp} max. 10V up to 30kHz V _{pp} max. 6V up to 50kHz
*)	V _{pp} max. 3V up to 100kHz via Analog In, controlled by AutoWave/AMP 200N only
	VDS 200N30.1 and VDS 200N50.1: V _{pp} max. 65V resp. 35V up to 50kHz with respect to the selected voltage range
	V _{pp} max. 3V up to 100kHz via Analog In, controlled by AutoWave/AMP 200N only
Fuses	Depending on VDS 200N model

TECHNICAL DATA VDS 200N10

Output voltage	0V - 60V
Output current	0A - 10A, continuous
Peak current	15A
Frequency range	DC to 100kHz *)
Supply Voltage	115/230V
Dimensions	19"/6HU
Weight	app. 49kg

TECHNICAL DATA VDS 200N15

Output voltage	0V - 60V
Output current	0A - 15A, continuous
Peak current	15A
Frequency range	DC to 100kHz *)
Supply voltage	115/230V
Dimensions	19"/6HU
Weight	app. 49kg

TECHNICAL DATA VDS 200N30

Output voltage	0V - 60V
Output current	0A - 30A, continuous
Peak current	70A for max. 500ms
Frequency range	DC to 100kHz *)
Supply voltage	230V (US-type 208V)
Dimensions	19"/9HU
Weight	app. 69kg

TECHNICAL DATA VDS 200N30.1

Output Range I	
Output voltage	-5V - +30V
Output current	50A continuous
Peak current	150A for max. 200ms
Output range II	
Output voltage	-5V - +60V
Output current	30A continuous
Peak current	90A for max. 200ms
Reverse power	1,200Watt continuous, up to nominal current
Frequency range	DC to 100kHz *)
Supply voltage	3x400V (US-type 3x208V)
Dimensions	19"/12HU
Weight	app. 65kg

TECHNICAL DETAILS

TECHNICAL DATA VDS 200N50

Output voltage	0V - 60V
Output current	0A - 50A, continuous
Peak current	100A for max. 500ms
Frequency range	DC to 100kHz *)
Supply voltage	3x400V (US-type 3x208V)
Dimensions	19"/12HU
Weight	app. 114kg

TECHNICAL DATA VDS 200N50.1

Output range I	
Output voltage	-5V - +30V
Output current	85A continuous
Peak current	220A for max. 200ms
Output range II	
Output voltage	-5V - +60V
Output current	50A continuous
Peak current	150A for max. 200ms
Reverse power	2,400Watt continuous, up to nominal current
Frequency range	DC to 100kHz *)
Supply voltage	3x400V (US-type 3x480V)
Dimensions	19"/16HU
Weight	app. 120kg

TECHNICAL DATA VDS 200N100

Output voltage	0V - 60V
Output current	0A - 100A, continuous
Peak current	150A for max. 500ms
Frequency range	DC to 100kHz *)
Supply voltage	3x400V (US-type 3x480V)
Dimensions	19"/16HU
Weight	app. 150kg

TECHNICAL DATA VDS 200N150

Output voltage	0V - 60V
Output current	0A - 150A, continuous
Peak current	150A
Frequency	DC to 100kHz *)
Supply voltage	3x400V (US-type 3x480V)
Dimensions	19"/34HU
Weight	app. 400kg

TECHNICAL DATA VDS 200N200

Output voltage	0V - 60V
Output current	0A - 200A, continuous
Peak current	200A
Frequency range	DC to 100kHz *)
Supply voltage	3x400V (US-type 3x480V)
Dimensions	19"/34HU
Weight	app. 450kg

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 or high current connectors
Analog input	0-10VDC / 10kohm / 0-50kHz
Ext. 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 200N model
Functions	Sine Wave Sweep Sine Wave (Cranking) Clipped Load Dump Jump Start Extern GM 9105P Pulse 4 Drop and Jump pulse
Standard Test routines	ISO 7637, Pulses 2b and 4 ISO 16750-2 Jaso Test 1
Service	Service, Setup, Self test

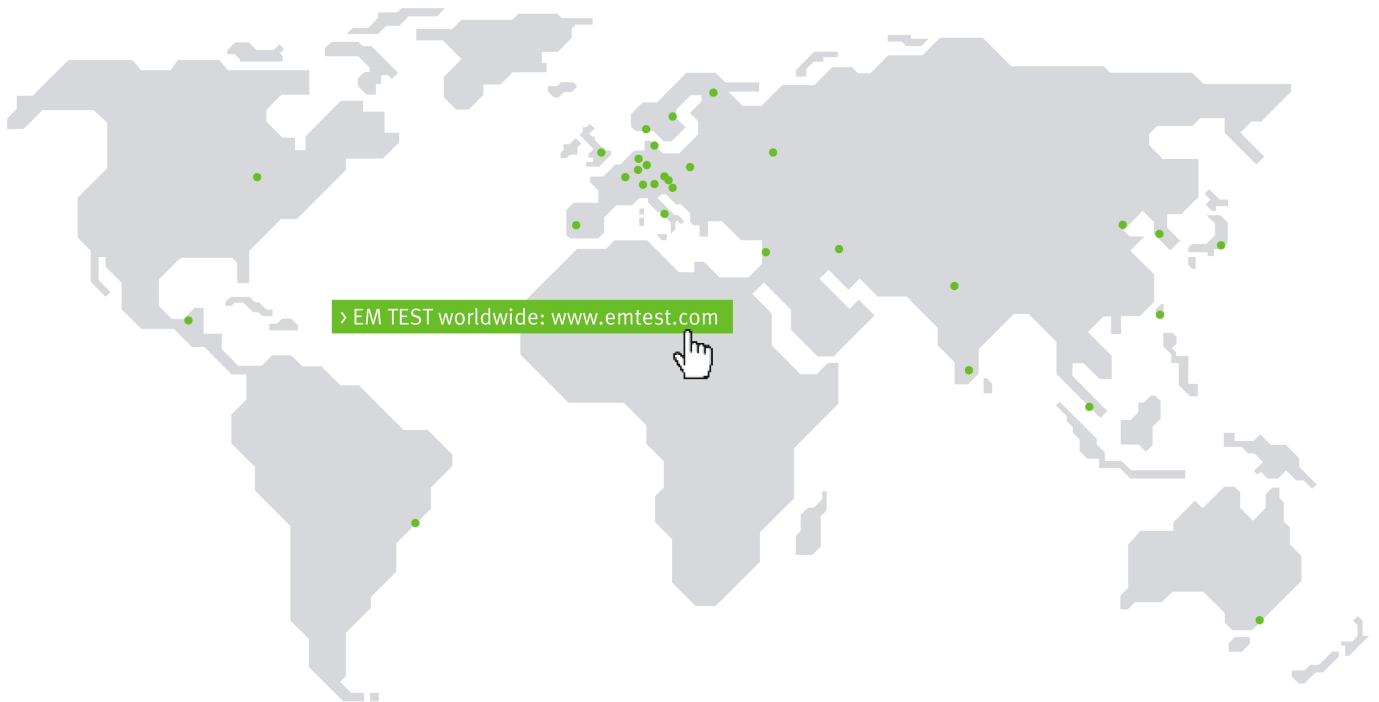
TECHNICAL DETAILS**INTERFACE**

Serial interfa x e	USB
Parallel interface	IEEE 488, addresses 1 - 30
Remote control	To connect an external signal generator 0-10V / 10kohm / 0-50kHz

OPTIONS

AutoWave	Arbitrary generator for more complex test requirements
iso.control	Software to control the test, including standard library, test report facility and data conversion generator

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.