

VDS 200N

VOLTAGE DROP SIMULATOR



FOR TESTS ACCORDING TO ...

- › GMW 3097 (2006)
- › GMW 3100
- › GMW 3100 (2001)
- › GMW 3172
- › GOST 28751-90
- › Honda 3982Z-SDA-0030
- › Hyundai ES 39110-00
- › Hyundai ES 96100-02
- › ISO 16750-2:2006
- › ISO 7637-1:1990
- › ISO 7637-2:1990
- › ISO 7637-2:2004
- › IVECO 16-2103
- › JASO D001-94
- › Kia/Hyundai ES 95400-10
- › Mack Trucks 606GS15
- › MAN 3285
- › Mazda MES PW 67600
- › Mercedes MBN 10284-2:2002
- › Mercedes AV EMV
- › Mercedes-Benz A 211 000 42 99
- › Mercedes MBN 22100-2
- › Mitsubishi ES-X82010
- › Nissan 28401 NDS 02
- › ...

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

TECHNICAL DETAILS

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 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	V _{pp} max. 16V (up to 25kHz) V _{pp} max. 10V (25kHz to 30kHz) V _{pp} max. 6V (30kHz to 50kHz) VDS 200N30.1 and VDS 200N50.1 V _{pp} max. 20V (DC to 50kHz)

TECHNICAL DATA VDS 200N10

Output voltage	0V - 60V
Output current	0A - 10A, continuous
Peak current	15A
Frequency range	DC to 50kHz

TECHNICAL DATA VDS 200N15

Output voltage	0V - 60V
Output current	0A - 15A, continuous
Peak current	15A
Frequency range	DC to 50kHz

TECHNICAL DATA VDS 200N30

Output voltage	0V - 60V
Output current	0A - 30A, continuous
Peak current	70A for max. 500ms
Frequency range	DC to 50kHz

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 50kHz

TECHNICAL DATA VDS 200N50

Output voltage	0V - 60V
Output current	0A - 50A, continuous
Peak current	100A for max. 500ms
Frequency range	DC to 50kHz

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 50kHz

TECHNICAL DATA VDS 200N100

Output voltage	0V - 60V
Output current	0A - 100A, continuous
Peak current	150A for max. 500ms
Frequency range	DC to 50kHz

TECHNICAL DETAILS

TECHNICAL DATA VDS 200N150

Output voltage	0V - 60V
Output current	0A - 150A, continuous
Peak current	150A
Frequency	DC to 50kHz

TECHNICAL DATA VDS 20N200

Output voltage	0V - 60V
Output current	0A - 200A, continuous
Peak current	200A
Frequency range	DC to 50kHz

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
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

INTERFACE

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

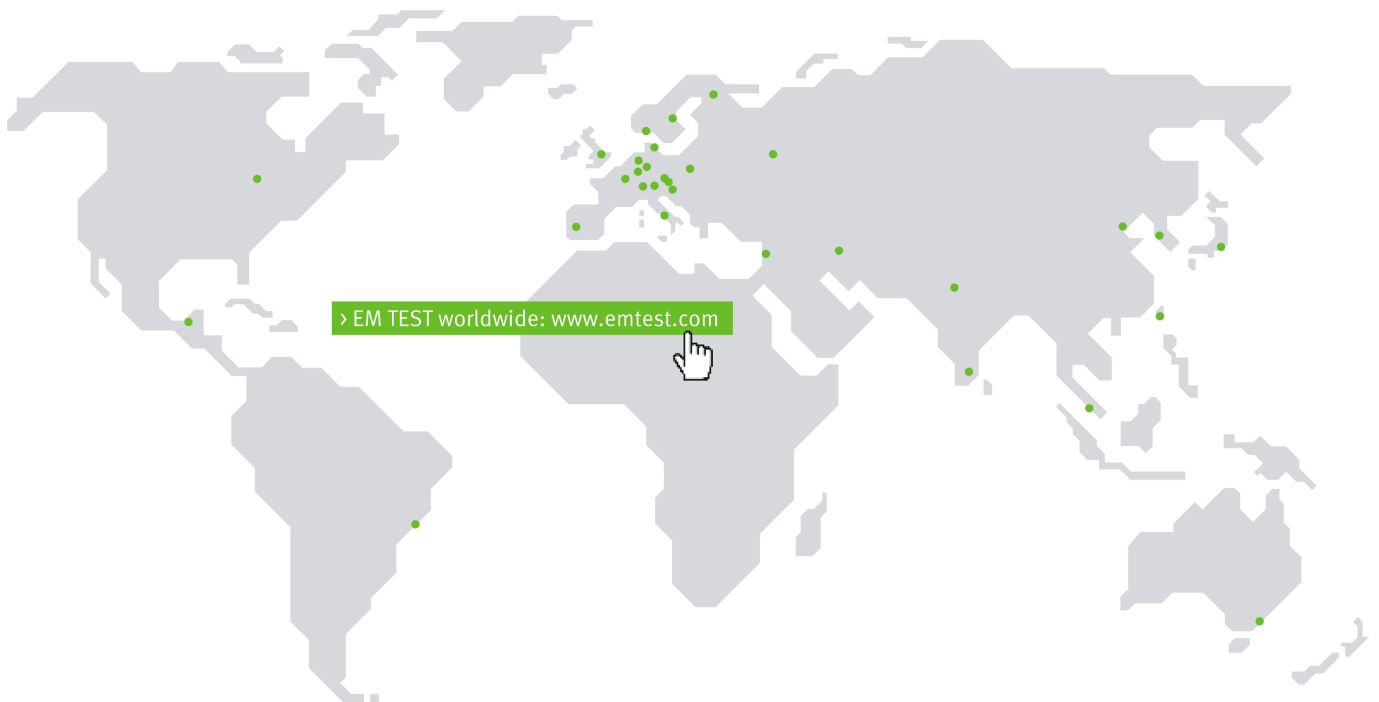
GENERAL DATA

Dimensions, weight	VDS 200N10: 19"/6HU, approx. 49kg VDS 200N15: 19"/6HU, approx. 49kg VDS 200N30: 19"/9HU, approx. 76kg VDS 200N30.1: 19"/12HU, approx. 65kg VDS 200N50: 19"/12HU, approx. 114kg VDS 200N50.1: 19"/16HU, approx. 120kg VDS 200N100: 19"/16HU, approx. 170kg VDS 200N150: 19"/25HU, approx. 400kg VDS 200N200: 19"/34HU, approx. 450kg
Supply voltage	VDS 200N10: 115/230V VDS 200N15: 115/230V VDS 200N30: 230V VDS 200N30: 208V (US type) VDS 200N30.1: 3x440V VDS 200N30.1: 3x208V (US type) VDS 200N50: 3x440V VDS 200N50: 3x208V (US type) VDS 200N50.1: 3x440V VDS 200N50.1: 3x480V (US type) VDS 200N100: 3x440V VDS 200N100: 3x480V (US type) VDS 200N150: 3x440V VDS 200N150: 3x480V (US type) VDS 200N200: 3x440V VDS 200N200: 3x480V (US type)
Fuses	Depending on VDS 200N model

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 WHEREEVER 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.