

VSS 500N6.4

VOLTAGE SURGE GENERATOR



FOR TESTS ACCORDING TO ...

- › ANSI/IEEE C37.90
- › EN 60255-27
- › EN 60255-5
- › IEC 60255-27
- › IEC 60255-5
- › IEC 60747-5
- › IEC 61180-1
- › IEC 62052-11

VOLTAGE SURGE SIMULATION

The surge simulator type VSS 500N6 generates high voltage transients as required by IEC 60255-27 with a source impedance of 500ohm for transient overvoltage tests on "Protection Relays". The output voltage ranges up to 6.6kV, covering for tests levels 1 to 5.

The no-load waveshape corresponds to IEC-61180-1. For this kind of testing the IEC 60255-27 standard requires a fixed energy of 0.5 J at the 1000 V and 5000 V test levels.

HIGHLIGHTS

- › Surge pulse 1.2/50 us up to 6.6 kV
- › 5 different test levels, (1 & 5 kV; IEC 60255-27)
- › Source impedance 500ohm
- › Constant Energy of 0.5J at each test level
- › Peak voltage/current measurement
- › Spark-over detection
- › Interlock
- › Warning lamp control

APPLICATION AREAS

-  COMPONENTS
-  INDUSTRY
-  RESIDENTIAL

TECHNICAL DETAILS

MODEL OVERVIEW

MODELS VSS 500N6

VSS 500N6.4	0.55kV, 1.0kV, 3.0kV, 5.0kV, 6.6kV
-------------	------------------------------------

TECHNICAL DETAILS

VOLTAGE SURGE SIMULATOR, PULSE 1.2/50 US

Voltage (o.c.)	250 V - 6,600 V ±10 %
Pulse front time	1.2 us ± 30 %
Pulse time to half value	50 us ± 20 %
Source impedance	500 Ohm
Energy	0.5 J ± 0.05 J at each test level
Pulse forming	As per IEC 60255-27 (previous -5)
Polarity	Positive, negative or alternating
Event counter	1 - 30,000 or endless

TRIGGER

Trigger of events	Automatic, manual, external
CRO trigger	5V trigger signal for oscilloscope
Synchronization	0° - 360°, resolution 1°
Repetition rate	6 s - 999 s, depending on the voltage

TEST LEVELS

VSS 500N6.4	0.55kV, 1.0kV, 3.0kV, 5.0kV, 6.6kV
-------------	------------------------------------

OUTPUT

Direct	Via HV connector; Zi = 500 Ohm To connect external test boxes or devices
--------	---

MEASUREMENTS

Peak voltage	6,600 V in the LCD display
Peak current	13 A in the LCD display

TECHNICAL DETAILS

TEST ROUTINES

Quick Start	Immediate start; easy-to-use and fast
User Test routines	Change Polarity after n pulses Change voltage after n pulses Change phase angle after n pulses
Standard Test routines	As per IEC 60255-27, Level 1 - 5
Service	Service, set-up, self test

INTERFACE

Serial interface	USB
Parallel interface	IEEE 488, addresses 1 - 30

SAFETY

Safety circuit	Control input (24 Vdc)
Warning lamp	Floating output contact

GENERAL DATA

Dimensions, weight	19"/3HU, 16.1 kg
Supply voltage	115/230 V +10/-15 %
Fuses	2 x 2 AT (230V) or 2 x 4 AT (115V)

ENVIRONMENT

Temperature	10 °C to 35 °C
Humidity	30 % to 75 %, non condensing
Atmospheric pressure	86 kPa (860 mbar) to 106 kPa (1,060 mbar)

OPTIONS

OPTIONS

HV Contacts	Pair of gun-type HV contacts for safe application of the HV pulses to the EUT
iec.control	Remote control and documentation software, including standard test routines and reporting capabilities.

COMPETENCE WHEREVER YOU ARE



CONTACT EM TEST DIRECTLY

Switzerland

AMETEK CTS GmbH › Sternenhofstraße 15 › 4153 Reinach › Switzerland
Phone +41 (0)61 204 41 11 › Fax +41 (0)61 204 41 00
Internet: www.ametek-cts.com › E-mail: sales.conducted.cts@ametek.com

Germany

AMETEK CTS Europe GmbH › Customer Care Center EMEA › Lünener Straße 211
› 59174 Kamen › Germany
Phone +49 (0) 2307 26070-0 › Fax +49 (0) 2307 17050
Internet: www.ametek-cts.com › E-mail: info.cts.de@ametek.com

Poland

AMETEK CTS Europe GmbH › Biuro w Polsce › ul. Twarda 44 › 00-831 Warsaw › Poland
Phone +48 (0) 518 643 12
Internet: www.ametek-cts.com › E-mail: Infopolska.cts@ametek.com

USA / Canada

AMETEK CTS US › 52 Mayfield Ave › Edison › NJ 08837 › USA
Phone +1 732 417 0501
Internet: www.ametek-cts.com › E-mail: usasales.cts@ametek.com

P.R. China

E & S Test Technology Limited › Rm 913, Leftbank ›
No. 68 Bei Si Huan Xi Lu › Haidian District › Beijing 100080 › P.R. China
Phone +86 (0)10 82 67 60 27 › Fax +86 (0)10 82 67 62 38
Internet: www.emtest.com › E-mail: info@emtest.com.cn

Republic of Korea

EM TEST Korea Limited › #405 › WooYeon Plaza › #986-8 › YoungDeok-dong ›
Giheung-gu › Yongin-si › Gyeonggi-do › Korea
Phone +82 (31) 216 8616 › Fax +82 (31) 216 8616
Internet: www.emtest.co.kr › E-mail: sales@emtest.co.kr

Singapore

AMETEK Singapore Pte. Ltd › No. 43 Changi South Avenue 2 › 04-01 Singapore
48164
Internet: www.ametek-cts.com › E-mail: singaporesales.cts@ametek.com

Great Britain

AMETEK GB › 5 Ashville Way › Molly Millars Lane › Wokingham › Berkshire
RG41 2 PL › Great Britain
Phone +44 845 074 0660
Internet: www.ametek-cts.com

Information about scope of delivery, visual design and technical data correspond with the state of development at time of release. Subject to change without further notice.