

VSS 500N15.1

VOLTAGE SURGE SIMULATOR WITH 0.5J CONSTANT ENERGY



FOR TESTS ACCORDING TO ...

- > EN 60255-5
- > IEC 60255-5
- > IEC 61180-1
- > IEC 62052-11

VOLTAGE SURGE SIMULATION

The surge simulator type VSS 500N15.1 generates high voltage transients as required by IEC 60255-5 with a source impedance of 500ohm for transient overvoltage tests on "Protection Relays". The output voltage ranges up to 15kV, divided into two voltage ranges (up to 6.6kV and up to 15kV).

The no-load waveshape corresponds to IEC-61180-1. For this kind of testing the IEC 60255-5 standard requires a fixed energy of 0.5J at each test level.

HIGHLIGHTS

- > **Test pulse 1.2/50us up to 15kV as per EN/IEC 60255-5**
- > **7 different test levels**
- > **Source impedance 500 ohm**
- > **Constant energy of 0.5J at each test level**
- > **Peak voltage measurement**
- > **Peak current measurement**
- > **Interlock**

APPLICATION AREAS

-  COMPONENTS
-  INDUSTRY
-  RESIDENTIAL

TECHNICAL DETAILS
**VOLTAGE SURGE SIMULATOR, PULSE
1.2/50US AS PER EN/IEC 60255-5**
TECHNICAL DATA

Voltage (o.c.)	250V - 15,000V ± 10%
Front time	1.2us ± 30%
Time to half value	50us ± 20%
Source impedance	500ohm
Energy	0.5J ± 0.05J at each test level
Test level	0.55kV, 0.9kV, 3.00kV, 5.0kV, 6.6kV, 9.3kV and 14kV
Pulse forming	As per IEC 60255-5
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
Synchronisation	0° - 360°, resolution 1°
Repetition rate	1s - 999s, depending on the voltage

OUTPUT

Direct	Via HV connector; Zi = 500ohm To connect external test boxes or devices
Output 1	500V - 6,600V
Output 2	6,600 - 15,000V

MEASUREMENTS

Peak voltage	15,000V in the LCD display
Peak current	30.0A in the LCD display

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 60255-5
Service	Service, setup, self test

INTERFACE

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

SAFETY

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

GENERAL DATA

Dimensions, weight	19"/6HU, approx. 25kg
Supply voltage	115/230V +10/-15%
Fuses	2xT2AT (230V) or 2xT4AT (115V)

OPTIONS

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

COMPETENCE WHEREVER YOU ARE



CONTACT EM TEST DIRECTLY

Switzerland

EM TEST (Switzerland) GmbH › Sternenhofstraße 15 › 4153 Reinach › Switzerland
Phone +41 (0)61/7179191 › Fax +41 (0)61/7179199
Internet: www.emtest.ch › E-mail: sales.emtest@ametek.com

Germany

EM TEST GmbH › Lünener Straße 211 › 59174 Kamen › Deutschland
Phone +49 (0)2307/26070-0 › Fax +49 (0)2307/17050
Internet: www.emtest.com › E-mail: info.emtest@ametek.de

France

EM TEST FRANCE › Le Trident - Parc des Collines › Immeuble B1 - Etage 3 › 36, rue Paul Cézanne › 68200 Mulhouse › France
Phone +33 (0)389 31 23 50 › Fax +33 (0)389 31 23 55
Internet: www.emtest.fr › E-mail: info@emtest.fr

Poland

EM TEST Polska › ul. Ogrodowa 31/35, 00-893 Warszawa › Polska
Phone +48 (0)518 64 35 12
Internet: www.emtest.com/pl › E-mail: info_polska.emtest@ametek.de

USA / Canada

EM TEST USA › 9250 Brown Deer Road › San Diego › CA 92121
Phone +1 (858) 699 1685 › Fax +1 (858) 458 0267
Internet: www.emtest.com › E-mail: sales.emtest@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

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.