



SECUTEST S2 | N+w

Safe systematic testing

- for portable electrical equipment
- for arc welding equipment
- after repairs
- for periodic testing
- suitable for testing by trained persons

Testing of Protective Measures

SECUTEST S2 | N+W



Automated, Systematic Testing ...

Acquiring equipment data ...

... with the SECUTEST SI+ module

... with the barcode/Rfid scanner

Automatic test sequence and data storage

Transmission, display and management of

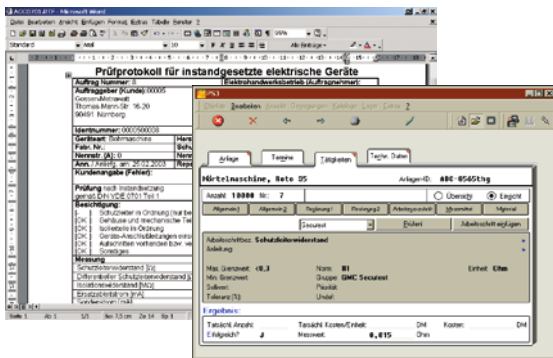
test results, as well as equipment management and

maintenance management with the following software programs:

- ETC
- optionally with:
- PC.doc-WORD/EXCEL
- PC.doc-ACCESS
- patManager

... made easy with our test instruments!

Accessories



Laws and Regulations Made Easy


It is the responsibility of the electrical technician to test the electrical safety of equipment and devices.

Compliance with laws and standards must be substantiated.

SECUTEST test instruments provide the user with support in adhering to regulations which are essential for measuring procedures, e.g.:

Occupational safety legislation, workshop directive, product liability law

Standards:

- The SECUTEST test instruments provide automatic test sequences in accordance with
 - Draft IEC 62638 / DIN VDE 0701-702:
Repair, modification and testing of electrical equipment, periodic testing of electrical equipment
 - IEC 60974-4/VDE 0544-4:
Repair and testing of arc welding equipment
- The SECUTEST test instruments are manufactured in accordance with
 - IEC 61010 / VDE 0411:
Safety requirements for electrical equipment for measurement, control and laboratory use
 - DIN VDE 0404:
Devices for technical safety testing of electrical equipment
- The SECUTEST test instruments have the  approval mark



The Gossen Metrawatt portfolio includes a variety of accessories for the SECUTEST range. For more detailed information, request our catalogue or visit us on the Internet at www.gossenmetrawatt.com

The experts are astonished ...

at the standard features supplied by the market leader:

- Measuring methods for leakage current:
 - Equivalent leakage current measurement method
 - Direct measurement
 - Differential current measurement method
- 10 A ac test current for protective conductor testing
- ± 200 mA test current for protective conductor tests, also for the reliable detection of corrosion defects.
- Automatic recognition of safety class and determination of the optimum test sequence for SC I, II and III devices
- Check list for visual inspection included
- Additional test sequences for extension cables, devices which can only be tested in service (during operation), devices which can be tested in idle state (disconnected from the mains)
- Allowances for intrinsic error for test evaluation
- Editable report templates in the test instrument
- Comprehensive accessories for testing 3-phase current devices (including differential current measurement)
- Safety for the test technician thanks to
 - disconnection from mains power if residual current > 15 mA
 - Comprehensive checks to detect mains connection errors
 - Short circuit check, power-on check, insulation check at device under test
 - Connection monitoring of test sockets, probe jack and probe socket
- automatic signalling of measuring points R-PE
- direct issue of measured values via RS232 interface (direct print-out, storage of up to 1000 tests in Secustore)

In-House Training Department

We offer seminars including practical experience covering „Measurements for Testing Safety Measures at Portable Electrical Devices and for Arc Welding Equipment.“

Complete Measuring System

In combination with the SECUTEST SI+ module, the SECUTEST S2 | N+W represents a complete measuring system for testing the safety of both electrical equipment in accordance with Draft IEC 62638 / DIN VDE 0701-0702 and arc welding equipment per IEC 60974-4 / VDE 0544-4.

Adaptable to Rules and Limit Values

Limit values saved in accordance with valid DIN VDE standards can be changed at any time in order to accommodate stricter regulations. Updating can be performed via the RS232 interface if the limit values set forth in the regulations are changed.

Reports with the SI+ Model and a PC

All test results can be transmitted via RS232 interface to the SI+ module or Secustore where they are stored, and from which they can be printed out via ETC.

Function Test with Power Analysis

A function test executed after safety testing allows for a complete analysis of the characteristic values of the device under test. Apart from differential current, the instrument displays operating voltage, load current, active and apparent power, power factor as well as electrical energy.

With the SECUTEST principle

**select standard –
start test sequence –
read off results**

the user is guided through the standards in a time-saving manner.

The integrated short-form operating instructions with connection diagrams and help texts make operation easier for trained persons as well.



Competence

Gossen Metrawatt actively participates in the establishment of national and international standards, e.g. draft IEC 62638 / VDE 0701-0702, IEC 62353 / VDE 0751, IEC 61010 / VDE 0411, IEC 61557 / VDE 0413 and is certified per DIN EN ISO 9001:2000.

Our calibration laboratory is accredited in accordance with DIN EN ISO / IEC 17025.

We offer a complete range of expertise in the field of metrology: from repairs and seminars with practical experience right on up to DKD calibration certificates. Our spectrum of offerings is rounded out with free test equipment management. As a full service calibration laboratory, we can CALIBRATE instruments FROM OTHER MANUFACTURERS AS WELL.

Measured Quantities

Device protective conductor resistance R_{PE}

Insulation resistance R_{ISO}

Equivalent leakage current I_{EL} or I_{EDL}

Leakage current from welding circuit

Touch current I_T or I_{HL}

Primary leakage current

Differential current ΔI between L and N

Mains voltage U_{L-N}

Load current I_L

Active power P

Apparent power S

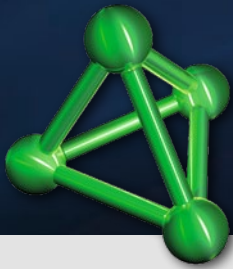
Power factor PF with sinusoidal waveshape: $\cos\varphi$

Open-circuit voltage U_0
Voltage measurement

Resistance

Current via current/voltage clamp transformer WZ12C

Temperature with Pt100 sensor



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