# SECUTEST®0701/0702SII
# SECUTEST®0700/0701S DC
# DIN VDE 0701 and 0702 Testers

SECUTEST®0701/0702SII and SECUTEST®0700/0701S DC

• Electrical safety testing for electrical equipment in accordance with DIN VDE 0701 Part 1 and Part 260

• Testing of data processing systems and office machines in accordance with DIN VDE 0701 Part 240

• Fulfils DIN VDE 0404 requirements

• Differential current: 10 µA resolution

• Periodic testing in accordance with DIN VDE 0702

Special Functions, SECUTEST®0700/0701S DC

• High-voltage testing per DIN VDE 0701 Part 260

• Test voltage: 500 V to 5 kV DC

• Uniform charging of insulation under test with direct voltage over the entire duration of the test

• Discharge device

• Can also be used for type testing and routine tests

SECUTEST®0701/0702SII
applied for

Industrie
Forum
Design
Hannover

## Features

### Devices under test can be connected:
– via the test socket
– with connector jacks and cable set (optional)
  *For Permanently Installed DUTs*
– via adapter (optional) *with extension cables*

### Automatic Recognition of:
– mains connection errors
– protection classes (I or II)

### Menu-Driven Test Sequences:
– fully automatic, or
– manual

### Convenient Data Storage and Report Generating Facilities

### Alphanumeric Data Entry (optional)

### Data Interface for PC and Printer

### Compact Design, Lightweight

## Applications

### Electrical Safety Testing
for Electrical Equipment in Accordance with DIN VDE 0701/0702

The SECUTEST®0701/0702SII and SECUTEST®0700/0701S DC test instruments have been designed for quick and safe testing of repaired or modified electrical devices in accordance with DIN VDE 0701, as well as for periodic testing in accordance with DIN VDE 0702 (SECUTEST®0701/0702SII only).

The following measurements are performed in accordance with the regulations:

• Protective conductor resistance

• Insulation resistance

• Equivalent leakage current

• Contact and housing leakage current (testing for the absence of voltage at exposed, conductive components of data processing systems and office machines).

• Protective conductor current / differential current

• Voltage testing in accordance with VDE 0701 Part 260 with direct current, also suitable for tools with electronic components (SECUTEST®0700/0701S DC only)

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## Report Functions

All of the values required for approval reports or device documentation for electrical equipment can be measured with the SECUTEST®0701/0702SII and SECUTEST®0700/0701S DC test instruments.

The optional SECUTEST®PSI printer module with integrated memory, data interface and keypad can be installed into the lid of the test instrument, and expands its range of applications.

All acquired measurement data can be documented and archived by means of measurement and test reports which are printed out directly at the SECUTEST®PSI module or at a PC, and which can be stored at a PC for later use.

## Functions Test with Power Analysis
**(suitable for high-power devices under test as well (16 A))**

The DUT can be subjected to a functions test with line voltage via the integrated test socket.

The functions test can be performed immediately after testing in accordance with DIN VDE 0701 and 0702 (optional) has been successfully completed. The following values are either measured or automatically calculated:

- Line voltage
- Differential current
- Power consumption
- Active and apparent power
- Power factor
- Electrical energy
- On-time

## Multimeter Functions

Extensive multimeter functions, including temperature measurement, supplement measuring facilities in a logical fashion. The following measurements can be performed:

- Direct and alternating voltage*
- Resistance*
- Phase sequence
- Current and protective conductor resistance with clip-on meter (option)
- Temperature* with Pt100 or Pt1000 (option)

\* This function is only available with the SECUTEST®0701/0702SII.

## High-Voltage Testing per DIN VDE 0701 Part 260 (optional SECUTEST®0700/0701S DC)

### Safe and Convenient Testing

The mains plug of the device under test (protection class I and II devices) is simply plugged into the test socket at the test instrument. The test instrument monitors the mains connection. It indicates incorrect or possibly dangerous connections, and blocks measurement if a potential hazard is detected.

Use of the test instrument for high-voltage testing is no problem, because DIN VDE 0104 does not apply. The high-voltage test is performed with direct voltage. In order to comply with alternating voltage requirements, testing is carried out with 1.5-fold direct voltage. This factor is taken into consideration by the test sequence.

### Technical Data

Electrical Safety      Class I per IEC 61010-1/EN 61010-1/ VDE 0411-1

| | Nominal Range of Use / Measuring Range | Increment / Resolution | Measurement Error | Intrinsic Error | Overload Capacity | |
|---|---|---|---|---|---|---|
| | | | | | Value | Time |
| Test Voltage Transducer | 0.50 … 0.99 kV<br>1.0 … 3.5 kV | 10 V<br>100 V | ±5% rdg. + 5d | +2.5% rdg. + 5d | none | none |
| Measure | 0.50 … 3.50 kV | 10 V | ±5% rdg. + 5d | ±2.5% rdg. + 5d | none | none |

### Transducer

DC Test Factor         equivalent test voltage
$U_{AC} \cdot 1.5 = U_{DC}$ (test voltage)

Short-Circuit
Current $I_K$          ≤ 3.5 mA

Peak Short-Circuit
Current $\hat{I}_K$    ≥ 5 A @ 5 kV DC

Energy (5 kV)          350 mJ

## Features

### Display

the LCD display field consists of a dot matrix at which menus, possible configurations, measurement values, comments and error messages, as well as schematic diagrams are displayed.

### Automatic Classification and Test Sequences

The test instrument recognizes the DUT's protection class and is capable of performing complex measurements in a fully automated fashion.

### Differential Current Measurement

Measurement of differential current complies with DIN VDE 0702 regulations for periodic testing.

### RS232 Interface for the Connection of Printer and PC

Data transmission is accomplished by means of the RS232 interface, as well as power supply to the PSI module which is available as an accessory.
Other devices can be connected to the interface as well with an interface cable, for example a PC or a printer.

### Help Key

Information and schematic diagrams related to the currently selected display can be queried with this key. The queried information is displayed at the LCD display field.

### Function Selector Switch

The function selector switch allows for the selection of test sequences or measuring functions. The direct correlation of switch positions to test regulations assures easy operation of the SECUTEST®0700/0701S DC.

### Mains Plug Pole Reversal

Manual mains plug pole reversal is unnecessary. Poles are automatically revered by the instrument as required during the test sequence.

### Test Instrument Safety Features

The test instrument monitors the mains connection. It indicates incorrect or possibly dangerous connections, and blocks measurement if a potential hazard is detected.

### Expandable

The test instrument can be expanded into a unique data logger with memory, printer and alphanumeric keypad for data entry with the optional PSI module.
The necessary reports can be prepared, and data can be analyzed and managed with user friendly software for WINDOWS.

## Applicable Regulations and Standards

| IEC 61010-1 DIN EN 61 010-1/ VDE 0411-1 | Safety requirements for electrical equipment for measurement, control and laboratory use |
|---|---|
| DIN VDE 0404 Part 1/ 7.88 | Devices for technical safety testing of electrical equipment – General requirements |
| DIN VDE 0404 Part 2/ 7.88 | Devices for periodic testing |
| DIN EN 60 529/ VDE 0470 Part 1 | Test instruments and test procedures – Protection provided by enclosures (IP code) |
| VDI/VDE 3540 | Reliability of measuring, control and regulating devices – Climatic categories for devices and accessories |
| DIN EN 50081 Part 1 | EMC: Generic standard for interference emission |
| DIN EN 50082 Part 1 | EMC: Generic standard for interference immunity |
| DIN 43 751 Part 1, 2 | Digital measuring instruments |

### Regulations and Standards for Use of the SECUTEST®0701/0702SII and SECUTEST®0700/0701S DC Test Instruments

| DIN VDE 0701 Part 1/ 5.93 | Repair, modification and testing of electrical devices – General requirements |
|---|---|
| DIN VDE 0701 Part 200/ 6.88 * | Mains powered electronic devices and accessories for household use and similar, general applications |
| DIN VDE 0701 Part 240/ 4.86 * | Safety requirements for data processing systems and office machines |
| DIN VDE 0702 | Periodic testing for electrical devices |

* In combination with DIN VDE 0701 T1/1986

### Additional Regulations and Standards for Use of the SECUTEST®0700/0701S DC Test Instrument

| DIN VDE 0701 Part 260* | Hand-held electrical tools |
|---|---|
| EN 50106 VDE 0700 Part 500 | Regulations for routine testing of devices where EN 60335-1 and EN 60967 apply |

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## Characteristic Values

| Func-tions | Measured Quantity | Measuring Range / Nominal Range of Use | Reso-lution | Nominal Voltage $U_N$ | Open-Circuit Voltage $U_0$ | Nomi-nal Current $I_N$ | Short-Circuit Current $I_K$ | Internal Resis-tance $R_I$ | Refer-ence Resis-tance $R_{REF}$ | Measurement Error | Intrinsic Error | Overload Capacity Value | Overload Capacity Dura-tion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Testing per DIN VDE 0701 / 0702 | Device Protective Conductor Resistance $R_{SL}$ | DC: 0.000…3.100 Ω | 1 mΩ | — | 4.5 … 9 V | — | >200 mA | — | — | ±(5% rdg.+10 d) $R_X$ > 10 mΩ | ±(2.5 % rdg.+5 d) > 10 d | 253 V | cont. |
| | | DC: 2.01…31.00 Ω | 10 mΩ | | | | | | | | | | |
| | | Part 260 AC: 0.000…2.100 Ω | 1 mΩ | — | < 6 V AC | — | > 10 A / > 5 s | — | — | | | no protection [1] | |
| | Insulation Resistance $R_{ISO}$ | 0.050 … 1.500 MΩ | 1 kΩ | 50 … 500 V DC | 1.0 • $U_N$ … 1.5 • $U_N$ | > 1mA | < 10 mA | — | — | ±(5% rdg.+10 d) | ±(2.5 % rdg.+5 d) > 10 d | 253 V | cont. |
| | | 1.01 … 11.00 MΩ | 10 kΩ | | | | | | | | | | |
| | | 10.1 … 310.0 MΩ | 100 kΩ | | | | | | | ±(10% rdg.+10 d) | ±(10 % rdg.+10d) | | |
| | Eq. Leak. Current $I_{EA}$ or. $I_{EGA}$ | 0.00 … 21.00 mA | 10 µA | — | 230 V ~ – 20/ +10 % | — | < 3.5 mA | > 72 kΩ | 2 kΩ | ±(5% rdg.+10 d) | ±(2.5 % rdg.+5 d) > 10 d | 253 V | cont. |
| | | 20.1 … 120.0 mA | 100 µA | | | | | | | | | | |
| | Contact or Hous-ing Leak. Current $I_{Probe}$ or $I_{GA}$ | 0 … 3.500 mA | 1 µA | — | — | — | — | 2 kΩ | — | ±(5% rdg.+10 d) | ±(2.5 % rdg.+5 d) > 10 d | 253 V | cont. [2] |
| | Diff. Current ∆I between L and N per VDE 0702 | 0.00 … 31.00 mA ~ | 10 µA | — | — | — | — | — | — | ±(10% rdg.+10 d) > 10 d | ±(5 % rdg.+5 d) > 10 d | [3] | [3] |
| Functions Test | Line Voltage $U_{L–N}$ | 207.0 … 253.0 V ~ | 0.1 V | — | — | — | — | — | — | — | ±(2.5 % rdg.+5 d) | 253 V | cont. |
| | Load Current $I_V$ | 0 … 16.00 A $_{RMS}$ | 10 mA | — | — | — | — | — | — | — | ±(2.5 % rdg.+5 d) | 20 A | 10 min. |
| | Active Power P | 0 … 3700 W [4] | 1 W | — | — | — | — | — | — | — | ±(5 % rdg.+10 d) > 20 d | 253 V | cont. |
| | | | | | | | | | | | | 20 A | 10 min. |
| | Apparent Power S | 0 … 4000 W | 1 VA | | | | | | | calculated value $U_{L–N}$ • $I_V$ | | | |
| | Power Factor LF with Sine Wave: cosφ | 0.00 … 1.00 | 0.01 | | | | | | | calculated value P / S, display > 10 W | | | |
| | Diff. Current ∆I between L and N per VDE 0702 | 0.00 … 31.00 mA ~ | 10 µA | — | — | — | — | — | — | ±(10% rdg.+10 d) > 10 d | ±(5 % rdg.+5 d) | [3] | [3] |
| $U_{AC/DC}$ [5] | Voltage | 0 … 253.0 V ⎓ , ~ and ⏦ | 0.1 V | — | — | — | — | — | — | — | ±(2.5 % rdg.+5 d) > 10 d | 253 V | cont. |
| | Extra-Low Voltage SK III | | | | | | | | | ±(5% rdg.+10 d) | | | |
| $U_{Probe}$ | Sensor Voltage (phase search) | 0 … 253.0 V ⎓ , ~ and ⏦ | 0.1 V | — | — | — | — | — | — | — | ±(2.5 % rdg.+5 d) > 10 d | 253 V | cont. |
| R [5] | Resistance | 0 … 150.0 kΩ | 100 Ω | — | < 20 V – | | 1.1 mA | — | — | — | ±(1 % rdg.+3 d) | 253 V | cont. |
| $I_{Clip}$ | Current via Clip-On Meter / Z3510 Voltage Transformer | 0.000 … 10.00 A ~ (0 mV … 10 V) | 1 mA (1 mV) | — | — | — | — | 1.5 MΩ | — | — | ±(3 % rdg.+10 d) > 10 d without clip | 253 V | cont. |
| | | 0 … 100 A ~ (0 … 100 mV) | 1 A (1 mV) | | | | | 1.5 MΩ | | | | 253 V | cont. |
| Temp. [5] | Temperature with Pt100 Sensor | – 200 … – 50 °C | 1 °C | — | < 20 V – | | 1.1 mA | — | — | — | ±(2 % rdg.+1 °C) | 10 V | cont. |
| | | – 50.1 … + 300.0 °C | 0.1 °C | | | | | | | | ±(1 % rdg.+1 °C) | 10 V | cont. |
| | | +300 … +850 °C | 1 °C | | | | | | | | ±(2 % rdg.+1 °C) | 10 V | cont. |

[1] Test duration max. 30 s, protection against overheating: measurement cannot be restarted for at least 1 min.

[2] All leakage currents except for earth leakage current

[3] As of 25 mA: shut-off within 200 ms by means of differential current measurement

[4] The measured value P and the calculated value S are compared, the smaller of the two values is displayed.

[5] This function is only available with the SECUTEST®0701/0702SII.

Key: rdg. = reading, d= digit

## Testing for Correct Mains Connection

The test instrument automatically recognizes incorrect mains connections, if the conditions shown in the following table have been fulfilled. The type of error is indicated and all measurements are blocked if a potential hazard is detected.

| Type of Mains Connection Error | Message | Condition | Measurements |
|---|---|---|---|
| Contact voltage present at protective conductor PE | text appears at LCD | press ↵ key $U \geq 40$ V | blocked |
| PE and phase conductor L reversed and/or neutral conductor N interrupted | ⚠ lamp lights up | voltage to PE > 100 V | blocked |
| Contact voltage at protective conductor PE to neutral conductor N or phase conductor L | text appears at LCD | $U \geq 25$ V | blocked, can however be released |
| Line voltage too low | ⚠ lamp lights up | $U_{L-N} < 180$ V | possible |

### Reference Ranges

| | |
|---|---|
| Line Voltage | 230 V ±0.2% |
| Line Frequency | 50 Hz ±0.1% |
| Waveshape | sinusoidal (deviation between effective and rectified values < 0.5%) |
| Ambient Temperature | +23 °C ±2 K |
| Relative Humidity | 45% … 55% |
| Load Resistors | linear |

### Nominal Ranges of Use

| | |
|---|---|
| Line Voltage | 207 V ... 253 V |
| Line Frequency | 45 Hz ... 65 Hz |
| Line Voltage Waveshape | sinusoidal |
| Temperature | 0 °C ... + 50 °C |

### Ambient Conditions

| | |
|---|---|
| Storage Temperature | – 20 °C ... + 60 °C |
| Operating Temp. | – 10 °C ... + 50 °C |
| Accuracy Range | 0 °C ... + 50 °C |
| Relative Humidity | max. 75%, no condensation allowed |
| Climatic Category | 2z/0/50/–20/75% (in compliance with VDI/VDE 3540) |
| Elevation | max. 2000 m |

## Power Supply

| | |
|---|---|
| Line Voltage | 207 V ... 253 V |
| Line Frequency | 45 Hz ... 65 Hz |
| Power Consumption | SECUTEST®0701/0702SII:    prox. 15 VA SECUTEST®0700/0701S DC: prox. 30 VA |
| for 10 A Test | SECUTEST®0700/0701S DC: short-term additional 70 VA |
| for Functions Test | max. 3600 VA continuous, power is only conducted through the test instrument, switching capacity ≤ 16 A |

### RS232 Interface

| | |
|---|---|
| Type | RS 232C, serial, per DIN 19241 |
| Configuration | 9600, N, 8, 1 |
| Connector | 9-pole D-SUB socket |

### Electrical Safety

| | |
|---|---|
| Protection Class | SECUTEST®0701/0702SII:    II SECUTEST®0700/0701S DC:   I per IEC 61010-1/EN 61010-1/ VDE 0411-1 |
| Line Voltage | 230 V |
| Test Voltage | 3.7 kV 50 Hz |
| Overvoltage Category | II |
| Contamination Factor | 2 |
| Safety Shut-Down | when differential current at DUT exceeds 25 mA, break time < 200 ms sensor current > 10 mA, < 1 ms |
| Make Test | 230 V, 50 Hz, 3.5 mA |
| Short-Circuit Test | 2 V, 300 Hz, < 500 mA |

### Electromagnetic Compatibility

| | |
|---|---|
| Interference Emission | EN 50081-1 |
| Interference Immunity | EN 50082-1 |

### Mechanical Design

| | |
|---|---|
| Display | multiple display with dot matrix 128 x 128 dots (SECUTEST®0700/0701S DC: display illuminated from rear) |
| Protection | housing:    IP 40 terminals:   IP 20 per DIN VDE 0470 Part 1/EN 60529 |
| Dimensions | SECUTEST®0701/0702SII: LxWxH: 292 mm x 138 mm x 243 mm SECUTEST®0700/0701S DC: LxWxH: 292 mm x 138 mm x 300 mm |
| Weight | SECUTEST®0701/0702SII: approx. 4.5 kg SECUTEST®0700/0701S DC: approx. 5.24 kg |

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Examples of Menu-Driven User Interface:

*Visual Inspection*

```
Visual Inspection
DIN VDE 0701 Part 1

Protec. Conductor    OK
Ins. Components      OK
Housing              OK
Power Cable          OK
Serial Plate         OK
Other                OK

➤Next Test Step


Are all parts OK ?
```

*Selection Menu*

```
To Socket:    SK I


Class      SK I



ID-No.
➤ Start Testing
Setup...

▲▼ Select
↵  Change
```

*Protective Conductor Testing*

```
To Socket:    SK I
Prot. Conduc. Resistance

RPE > 31.00 Ω

+ 200 mA Test Current

Move Power Cable

▲ Test Current: 10 A AC
▼ reverse polarity
↵ MENUE    ⓪ zero point
```

*Insulation Resistance Measurement*

```
To Socket:    SK I
Insulation Resistance

RISO   63.8 MΩ
UISO   527 V



▼ change voltage
↵ return to MENU
```

Online Help:

*Menu Driven Help Function*

```
To Socket:    CL I


┌─────────────────┐
│ Please connect the │
│ PROBE to the DUT   │
│ protective conductor │
└─────────────────┘


↵  Next Test Step
```

*Querying of Schematic Diagrams*

```
SK II to test socket



▼ continue   ▲ return
ⓘ Exit Help
```

Generating Reports with Test Results:

*Test Results with Limit Values*

```
To Socket:    CL I
Test Results

        MEAS. VALUES │ LIMIT VALUES

RSL    0.127 Ω       │ <0.300 Ω
RISO   10.6 9 MΩ     │ >0.500 MΩ
UISO    527 V        │  500 V



Passed!
↵ End test
```

*High-Voltage Test Results*

```
High voltage test

To Socket
UHV DC      1.56 kV

appropriate AC Voltage
UHV AC      1.01 kV

Test time: 059    s
```

## Standard Equipment

1  SECUTEST®0701/0702SII or
   SECUTEST®0700/0701S DC test instrument
   with automatic test sequencing and data interface
1  Cable with test probe
1  Plug-on alligator clip for test probes
3  Plug-on quick clamps
1  Test report
1  Operating instructions

## Accessories and Options

### SE-L.med * Foreign Language Floppy Disc

User interface languages which are not included as standard features can be subsequently uploaded from a floppy disc.
One language can be stored to the instrument (G, GB, F, I or TZ).

### SK5 * Remote Control

The remote control expansion module includes a 5 meter long cable with test probe and a floppy disc with software upgrade.

The protective conductor measurement function is expanded to include "automatic recognition of change of measuring point". The test instrument recognizes whether or not the probe is in contact with the protective conductor during protective conductor testing and indicates one or the other condition by means of different acoustic signals.
This function is helpful when several protective conductor connections need to be tested.

### Database (DBmed * software upgrade)

Test sequences can be configured on-site for the selected function switch position and performed in accordance with applicable requirements. The configurations for the various test sequences are stored at the test instrument, and can be used repeatedly. The measurement values resulting from the test sequences are also stored to memory at the test instrument, and can be printed out with the help of report templates stored at the instrument.

### * Software Installation Requirements

Hardware
IBM-AT PC or compatible types 80486 CPU or higher with at least 4 MB RAM,
VGA monitor, hard disc with at least 3 MB available memory,
3½" floppy disc drive (1.44 MB), serial port for connection of the test instrument

Software
Operating system: PC/MS-DOS version 6.0 or higher
MICROSOFT WINDOWS version 3.1 or higher

## SECUTEST®PSI

Measurement values from the test instrument can be stored to this module, supplemented with comments by means of the alphanumeric keypad and printed out. The module makes use of the LCD display at the test instrument. A statistical evaluation of the test results – percentage of successfully completed functions tests – is also possible.

The PSI module is installed into the lid of the test instrument in a space saving fashion.



*For more information please request our data sheet for the SECUTEST®PSI.*

## SE-Q.base

SE-Q.base MS Windows software is used for the entry, documentation and management of test data.

SE-Q.base supports equipment management systems, aids in the monitoring of devices and systems and supports the observance of regulations such as VBG4, DIN VDE 0701/0702/0105. An integrated list generator is included as a standard feature.



## PC.base-m for SECUTEST®0701/0702SII

Windows software for the preparation of reports with measurement data for systems and equipment.
Features:

*   Integrated forms generator
*   Customer management
*   Pre-configured according to customer requirements

## PC.doc-win

PC.doc-win report generating and database software is based on MICROSOFT® WINWORD and ACCESS, and can be used together with the SECUTEST®0701/0702SII and SECUTEST®0700/0701S DC test instruments. Measurement results, as well as supplementary data entered at the PSI module, are compiled into reports in accordance with DIN VDE 0701, or device lists in accordance with DIN VDE 0702 with the help of WINWORD. A complete device and equipment management system can be established with ACCESS, and master data and test data can be documented and managed as well.

*   Standard forms and device lists
*   Downloading of data from PC.doc
*   Automatic initialization of WINWORD and ACCESS

*   Easy generation of customer-specific documents
*   Automatic generation of periodic testing schedules
*   Conversion of PC.doc Data files (predecessor software for DOS)

## SECU-cal 10* Calibration Adapter

The calibration adapter is used for the testing of measuring accuracy of test instruments in accordance with DIN VDE 0701/0702. As a rule, these instruments must be tested on a yearly basis according to the requirements set forth in accident prevention legislation VBG 4, and after certification in accordance with ISO 9000.



All limit values for the required tests in accordance with DIN VDE must be tested, such as protective conductor resistance, insulation resistance, equivalent leakage current, differential and/or contact current, as well as housing leakage current.

* Not for 10 A (25 A) protective conductor testing

## F701 Carrying Bag for the SECUTEST®0701/0702SII
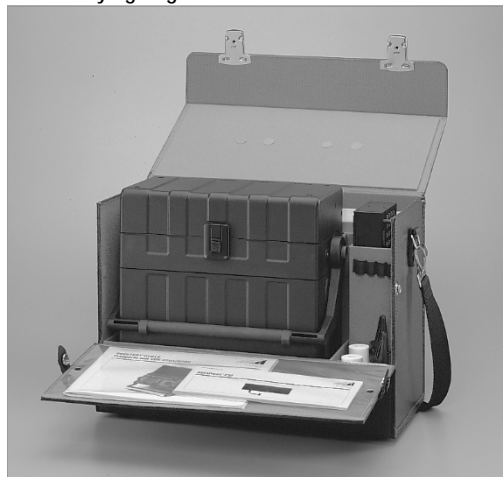


## K701 Carrying Case for the SECUTEST®0701/0702SII

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# SECUTEST®0700/0701S DC
# DIN VDE 0701 and 0702 Testers

## Order Information

| Designation | Type | ID Number |
|---|---|---|
| **Basic Instrument / Options** | | |
| SECUTEST®0701/0702SII test instrument, basic version user interface languages G, GB and F, with earthing contact plug and socket, incl. cable with test probe, alligator clip, 3 plug-on quick clamps, operating instructions and test report | SECUTEST®0701/0702SII | M701A |
| Same as SECUTEST®0701/0702SII test instrument with plug and socket for France and languages F, CZ and D G | SECUTEST®0701/0702SII-F | M701C |
| Same as SECUTEST®0701/0702SII test instrument with plug and socket for Switzerland and languages G, F and I | SECUTEST®0701/0702SII-CH | M701D |
| SECUTEST®0700/0701S DC test instrument, German language user interface, with earthing contact plug and socket, including cable with test probe, alligator clip, 3 plug-on quick clamps, operating instructions and test report | SECUTEST®0700/0701S DC | M701V |
| Same as SECUTEST®0700/0701S DC test instrument with plug and socket for France and French language user interface | SECUTEST®0700/0701S DC-F | M701W |
| Foreign language floppy disc [1] | SE-L.med | Z713B |
| Integrated database for max. 99 device specific test sequences / reports by means of software upgrade [1] [2] | DB-med | Z853H |
| **Accessories** | | |
| Remote control for SECUTEST®0700/0701S DC, 5 meter cable [1] [3] | SK5 | Z745K |
| Sensor cable, 2 m | SK2 | Z745D |
| PSI module with languages G, GB, F, NL, I, E and CZ including 2 rolls recording chart, 1 printer ribbon cartridge, batteries and operating instructions | SECUTEST®PSI [D] | GTM 5016 000 R0001 |
| Pack of 10 recording chart rolls for PSI module (1 roll approx. 6.7 meters) | PS-10P | GTZ 3229 000 R0001 |
| Pack of 10 printer ribbon cartridges for PSI module | Z3210 | GTZ 3210 000 R0001 |
| Printer adapter for direct connection of external printers | DA-II | Z745F |
| Barcode scanner | B3261 | GTZ 3261 000 R0001 |
| Barcode and label printer including software | Z721B | Z721B |
| Label set for Z721B printer | Z722B | Z722B |
| Windows software Test, device and repairs management for plant equipment [1] [2] | SE-Q.base | GTZ 3254 000 R0001 |
| Windows software, same as SE-Q.base [1] | SE-Q.base-med | Z710D |
| Windows software for remote control with predefined, customer test sequences [2] | SE-Q.remote | Z710L |

| Designation | Type | ID Number |
|---|---|---|
| Windows software with same functions as SE-Q.base-med and SE-Q.remote as network version [1] [2] | SE-Q.base-med+remote+net | Z710K |
| Windows report and list generating software. Downloading of data from test instrument and PSI module [1] | PC.doc-win | Z710F |
| Pt100 temperature sensor, −40 to +500 °C for surface and immersion measurements for SECUTEST®0701/0702SII | Z3409 | GTZ 3409 000 R0001 |
| Pt100 oven sensor, −50 to +550 °C for SECUTEST®0701/0702SII | TF550 | GTZ 3408 000 R0001 |
| Switchable clip-on current transformer: 1 mA … 15 A and 1 A … 150 A, Frequency range <u>45...65</u> …500 Hz, Ratio: 1 mV/mA and 1 mV/A, Jaw opening: max. 15 mm cable diameter | WZ12C [D] | Z219C |
| Calibration adapter for test instruments in accordance with DIN VDE 0701/0702 [4] | SECU-cal 10 | Z715A |
| Adapter for the testing of single phase extension cables including earthing contact and appliance socket inserts [3] | EL1 | Z723 |
| Plug insert for EL1 in Switzerland per SEV | PRO-CH | GTZ 3225 000 R0001 |
| Plug insert for EL1 in GB per BS | PRO-GB | GTZ 3226 000 R0001 |
| Plug insert for EL1 for GB measurement | PRO-GB/ring | GTZ 3226 000 R0002 |
| Plug insert for EL1 in Italy per IMQ | PRO-I | GTZ 3227 000 R0001 |
| Plug insert for EL1 in Denmark | PRO-DK | GTZ 3219 000 R0001 |
| Plug insert for EL1 in South Africa | PRO-RSA | Z501A |
| Plug insert for EL1 with 3 connector cables for any desired national regulations | PRO-UNI | GTZ 3214 000 R0003 |
| Plug insert for EL1 with 10 meter cable for PE measurements and the like | PRO-RLO | GTZ 3214 000 R0002 |
| Test instrument for 3-phase load components and extension cables | AT3 | Z745 |
| Test adapter for the connection of 63 A load components and cables to the AT3 | AT3-63 | Z745C |
| 3-phase adapter for 3 x CEE | CEE-Adapter | Z745A |
| Cable set [3] | KS13 | GTY 3624 065 P01 |
| Cable set [3] | KS17-2 | GTY 3520 034 P01 |
| Carrying bag, SECUTEST®0701/0702SII | F701 | GTZ 3315 000 R0001 |
| Carry case for SECUTEST®0701/0702SII | K701 | GTZ 3316 000 R0001 |
| Carrying bag for SECUTEST®0700/0701S DC and accessories | F702 | Z700C |
| Brush probe | Z745G | Z745G |

[1] Includes 3½" floppy disc and Z3241 interface cable for RS232.
[2] Values for high-voltage tests in acc. with Part 260 are not taken into consideration.
[3] Not to be used for high-voltage tests in accordance with Part 260.
[4] Cannot be used for HV testing per part 260 or PE testing, 10 A.
[D] Data sheet available.

*Please refer to our Measuring Instruments and Testers catalog for additional information.*