



**Testing system for testing electrical safety in accordance with
IEC 60601 / IEC 62353 / IEC 61010 / VDE 0701-0702
MPG / MPBetreibV / BetrSichV / DGUV Vorschrift 3**

- menu guided cursor operation or PC-operation
- PS/2 connector for an external keyboard or barcode scanner
- internal memory for 125 measurements or USER - devices
- automatic or multimeter measurement
- 25 A PE measure according to IEC 60601
- user specific language setting

Technical Data

| | |
|-----------------------------|--|
| Line voltage: | 230 V / 115 V ac, $\pm 10\%$, 50/60 Hz |
| Output power: | maximal 3,5 kW |
| Protection class: | 1 |
| Overvoltage category | II |
| Environmental temperature: | + 5 - + 40 °C |
| Storage temperature: | - 10 - + 50 °C |
| Measurement range | |
| Voltages measurement: | 0 - 300 V ac (Entrance resistance: 10 MOhm) |
| Discrimination: | 0,3 V |
| Earth conductor resistance: | 0,00 - 40 Ohm (test voltage 6 V ac, max. 25 A) |
| Discrimination: | 10 m Ohm |
| Insulation resistance: | 0,2 - 100 MOhm (test voltage 500 V dc, max. 3,5 mA) |
| Discrimination: | 0,1 - 2 MOhm |
| Leakage current: | 0 - 10 mA or 0 - 20 mA |
| Resistance: | 1000 Ohm $\pm 1\%$ or 2000 Ohm $\pm 1\%$ |
| Discrimination: | 1 μ A or 0,2 μ A |
| Difference current: | 10 μ A - 20000 μ A |
| Discrimination: | 1 μ A or 0,2 μ A |
| Output power: | 1 - 3,5 kW |
| Discrimination: | 1 W |
| Current: | 0 - 16 A |
| Discrimination: | 10 mA |

| | | |
|--------------------------------|----------------|--|
| Intrinsic uncertainty | | |
| Measurement | range | error |
| Voltage: | 0 - 300 V ac | $\pm 0,3$ V or $\pm 1\%$ of measurement value |
| Earth conductor resistance: | 0,00 - 4,9 Ohm | $\pm 0,03$ Ohm or $\pm 5\%$ of measurement value |
| | 5 - 40 Ohm | |

| | | |
|------------------------|---------------------|--|
| Insulation resistance: | 0,2 - 4,9 MOhm | $\pm 0,2$ MOhm or $\pm 5\%$ of measurement value |
| | 5 - 100 MOhm | |
| Leakage current: | 0 - 99 μ A | ± 2 μ A or $\pm 1\%$ of measurement value |
| | 100 - 20000 μ A | |
| Difference current: | 10 - 20000 μ A | ± 2 μ A or $\pm 1\%$ of measurement value |
| Output power: | 1 - 3,5 kW | ± 2 W or $\pm 5\%$ of measurement value |
| Current: | 0 - 16 A | ± 50 mA or $\pm 2,5\%$ of measurement value |

The specified intrinsic uncertainties relate to the respective measuring circuit. The operating uncertainty at the test object connections is $\pm 5\%$. The displayed value is normalized according to the documentation / standard requirement, if required.

| | |
|-------------------------|--|
| Interface: | 1 x Centronics for printer 1 x RS-232 for PC-connection 1 x RS-232 for further test appliances 1 x PS2 for PC keyboard |
| Test object connection: | 1 x VDE test socket 12 x safety sockets (4mm) for applied part 1 x safety socket (4mm) for test probe 1 x safety socket (4mm) for test PE |
| Display: | 4 x 20 char fluorescence-Display |
| Keyboard: | 4 bottoms PC keyboard (Option) |
| Accessories: | 1 x measurement line with test probe, 1 m length 1 x test adapter PA-X for self-diagnosis test 1 x RS-232 Interface cable 1 x power cord 16 A |
| Mechanical data: | portable metal case IP20 |
| Dimensions: | 235 x 130 x 310 mm (W x H x D) |
| Weight: | approx. 7 kg |
| Selectable languages: | german, english, polish, spanish portuguese, turkish |

The test appliance GM-300 is a measurement system for testing the electrical safety of medical technical and other technical appliances.

The measurements and tests correspond to the IEC 60601, IEC 62353 (VDE 0751), IEC 61010 and VDE 0701-0702.

It is also possible to test the electrical safety of typewriters, electronic tools, laboratory equipment, refrigerators, and the like, all in compliance with VDE 0701-0702.

The GM-300 can be used as stand-alone or PC-controlled testing system.

As needed, your test appliance can operate in a single step modus or can test all steps automatically.

To control the GM-300, a 100% compatible IBM computer with industrial standards is needed. The communication between the PC and the GM-300 follows through the serial interface (RS-232).

The operation of the Safety Tester is very easy. At the front, there is a cursor-controlled menu, where you can choose several different types of operation.

(Technical modifications and errors reserved. 12/2020)