



**The GS Testing Module for testing electrical safety in accordance with
IEC 62353 / IEC 61010 and VDE 0701-0702
MPG / MPBetreibV / BetrSichV / DGUV Vorschrift 3**

- for checking the electrical safety in accordance to the MPG
- for checking the electrical safety on general electrical devices
- single measurement and automatic operation
- direct and differential current measurement

Technical Data

| | | | | |
|-----------------------------|--|-----------------------------|---|----------------------|
| Line voltage: | 85 – 253 V ac, 50 / 60 Hz | Earth conductor resistance: | 0,00 – 4,9 Ohm | ± 0,03 Ohm or |
| Output power: | maximal 3,5 kW | | 5 - 40 Ohm | ± 5 % |
| Protection class: | 1 | | | of measurement value |
| Measurement range | | Insulation resistance: | 0,2 – 4,9 MOhm or | ± 0,2 MOhm or |
| Voltages measurement: | 0 - 300 V ac (Entrance resistance: 10 MOhm) | | 5 - 100 MOhm | ± 5 % |
| Discrimination: | 0,3 V | Leakage current: | 0 - 99 µA | ± 2 µA or |
| Earth conductor resistance: | 0,00 - 40 Ohm (test voltage 6 V ac, max. 5 A) | | 100 - 20000 µA | ± 1 % |
| Discrimination: | 10 m Ohm | Difference current: | 10 - 20000 µA | ± 1 % |
| Insulation resistance: | 0,2 - 100 MOhm (test voltage 500 V dc, max. 3,5 mA) | | | of measurement value |
| Discrimination: | 0,1 – 2 MOhm | Output power: | 1 – 3,5 kW | ± 2 W or |
| Leakage current: | 0 - 10 mA or 0 – 20 mA | | | ± 5 % |
| Resistance: | 1000 Ohm ± 1 % or 2000 Ohm ± 1 % | Current: | 0 – 16 A | of measurement value |
| Discrimination: | 1 µA or 0,2 µA | | | ± 50 mA or |
| Difference current: | 10 µA - 20000 µA | Test object connection: | 1 x ea. VDE test socket | ± 2,5 % |
| Discrimination: | 1 µA or 0,2 µA | | 12 x safety sockets (4mm) for applied part | of measurement value |
| Output power: | 1 – 3,5 kW | | 1 x safety socket (4mm) for test probe | |
| Discrimination: | 1 W | Accessories: | 1 x safety socket (4mm) for test PE | |
| Current: | 0 – 16 A | | 1 x ea. cable with test probe | |
| Discrimination: | 10 mA | | 1 x ea. Test adapter PA-X for self-diagnosis test | |
| Measurement range | range | | portable metal case | |
| Voltage: | 0 - 300 V ac | Mechanical data: | 128 x 142 x 240 mm (W x H x D) | |
| | | Dimensions: | approx. 3,4 kg | |
| | error | Weight: | | |
| | ± 0,3 V or | | | |
| | 1 % of measurement value | | | |

The GS testing module SAFE is a measuring device for checking the electrical safety of technical medical devices and other consumers in domestic and industrial environments.

The GS testing module SAFE tests in accordance with the standards IEC 62353, VDE 0701-0702 and IEC 61010.

The GS-X basic unit V4 or V5 and a PC are required for testing with this plug-in module. A measurement can be taken using the PC software. The measured values can then be automatically determined, evaluated and stored.

Within the turn-on procedure the SAFE module automatically tests the main power supply and optically signals the result with a flashing LED.

| | |
|---------------------------|---------------------------|
| 1 x red – 115 V TN-system | 2 x red – 230 V TN-system |
| 3 x red – 115 V IT-system | 4 x red – 230 V IT-system |

Connection elements:

All connection sockets are found on the front plate of the module, where they are easily accessible. Next to the test plug for the test object there are three groups of connection sockets for the patient connections. Each group can be individually tested with different tolerance values.

(The specified measuring accuracy refers to the measuring element. Technical modifications and errors reserved. 07/2017)