SAFE-Module **SAFE**



GS Test Module for testing electrical safety in accordance with
IEC 62353 / IEC 61010 / EN 50678 / EN 50699
MPBetreibV / BetrSichV / DGUV Vorschrift 3

- ☑ for checking the electrical safety
- ☑ for checking the electrical safety on general electrical devices
- ☑ single measurement and automatic operation
- ☑ direct and differential current measurement

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TÜVRheinland ZERTIFIZIERT
Management System ISO 9001:2015
www.tuv.com ID 0910095181

Technical Data

Line voltage:	85 – 253 V ac, 50 / 60 Hz
Output power:	maximal 3,5 kW
Protection class:	1
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. 5 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 ± 1 % or 2000 Ohm ± 1 %
Discrimination:	1 µA or 0,2 µA
Differential current:	10 µA - 20000 µA
Discrimination:	1 µA or 0,2 µA
Output power:	1 – 3,5 kW
Discrimination:	1 W
Current:	0 – 16 A
Discrimination:	10 mA

Intrinsic uncertainty	Range	Error
Voltage:	0 - 300 V ac	± 0,3 V or 1 % of measurement value
Earth conductor resistance:	0,00 – 4,9 Ohm	± 0,03 Ohm or
	5 - 40 Ohm	± 5 % of measurement value
Insulation resistance:	0,2 – 4,9 MOhm or 5 - 100 MOhm	± 0,2 MOhm or ± 5 % of measurement value
Leakage current:	0 - 99 µA 100 - 20000 µA	± 2 µA or ± 1 % of measurement value
Differential current:	10 - 20000 µA	± 2 µA or ± 1 % of measurement value
Output power:	1 – 3,5 kW	± 2 W or ± 5 % of measurement value
Current:	0 – 16 A	± 50 mA or ± 2,5 % of measurement value

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

Test object connection:	1 x outlet CEE 7/4 12 x safety sockets (4mm) for applied part 1 x safety socket (4mm) for test probe 1 x safety socket (4mm) for test PE
Accessories:	1 x measurement line with test probe 1 x Test adapter PA-X for self-diagnosis test
Mechanical data:	portable metal case
Dimensions:	142 x 130 x 253 mm (W x H x D)
Weight:	approx. 3,0 kg

The GS test 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, EN 50678, EN 50699 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 signalizes 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 tested individually with different tolerance values.

(Technical modifications and errors reserved. 10/2026)

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