Safety Tester **GM-710**



Measurement and test device for testing electrical safety in accordance with EN 50678 / EN 50699 / BetrSichV / DGUV Vorschrift 3



- ☑ PC operation
- ☑ automatic or multimeter-operating
- ☑ robust light metal casing
- ☑ max. 25 A / 5 A earth conductor measurement
- ☑ great use combined with a Laptop,
  great use during transport / in transit to stay mobile

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

Technical Data

Line voltage:	230 V / 115 V ac, ± 10 %, 50 / 60 Hz
Output power:	maximum 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 (input resistance: 10 MOhm)
Discrimination:	0,3 V
Earth conductor resistance:	0,00 - 40 Ohm (test voltage 6 V ac, max. 25 A / 5 A)
Discrimination:	10 mOhm
Insulation resistance:	0,2 - 100 MOhm (test voltage 500 V dc, max. 3,5 mA)
Descrimination:	0,1 – 2 MOhm
Leakage current:	0 - 10 mA / 0 – 20 mA
Resistance:	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

Measurement	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	± 0,2 MOhm or
	5 - 100 MOhm	± 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.

Interface:	1 x USB for PC connection 1 x RS-232 for PC connection 1 x RS-232 for more testing devices
Test object connections:	1 x outlet CEE 7/4 1 x safety socket 4mm for test probe 1 x safety socket 4 mm for PE 1 x installable rubber connector C14 for measurement of resistance of protective earth conductor
Attachments:	1 x measurement line with test probe, 1 m length 1 x test adapter PA-X for self-diagnosis test 1 x USB cable 1 x power cord 16 A
Mechanical data:	Light metal casing IP20 343 x 88 x 280 mm (W x H x D), ca. 5 kg

GM-710 is a measurement and test device for testing the electrical safety of electrical devices. The measurements and tests correspond to the conditions of EN 50678 and EN 50699.

To control the GM-710, a 100% compatible IBM computer with industrial standards is needed. The communication between PC and GM-710 takes place by USB / serial interface (RS-232). The activation occurs by having ACTIMED installed, the PC-Software which is needed.

With GM-710 the following tests are realized:

- line voltage measurement
- output current measurement
- output power measurement
- leakage current measurement
- equivalent leakage current
- earth conductor resistance measurement
- isolation resistance measurement
- differential current measurement

With the GM-710 it is possible to perform single measurements, as well as automated measurements.

For the test object, all plug-in points can easily be found on the front board of the device.

(Technical modifications and errors reserved. 10/2026)

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