

## Testing system for testing electrical safety in accordance to 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



## **Technical Data**

Line voltage: 230 V / 115 V ac, ± 10 %, 50 / 60 Hz

Output power: maximum 3.5 kW

Protection class: Overvoltage category:

+ 5 - + 40 °C Environmental temperature: Storage temperature: - 10 - + 50 °C Measurement range:

0 - 300 V ac Voltages measurement:

(input resistance: 10 MOhm)

Discrimination: Earth conductor resistance: 0,00 - 40 Ohm

(test voltage 6 V ac, max. 25 A / 5 A)

Discrimination: 10 mOhm 0,2 - 100 MOhm Insulation resistance:

(test voltage 500 V dc, max. 3,5 mA) 0,1 – 2 MOhm

Descrimination: Leakage current: 0 - 10 mA / 0 - 20 mAResistance: 2000 Ohm ± 1 %

Discrimination:  $1 \mu A$  or  $0,2 \mu A$ Differential current: 10 μΑ - 20000 μΑ Discrimination:  $1 \mu A$  or  $0,2 \mu A$ Output power: 1 - 3,5 kW1 W Discrimination: 0 - 16 A Current: Discrimination: 10 mA

Measurement accuracy

Measurement range

0 - 300 V ac Voltage: ± 0,3 V or

± 1 % v. measurement value

error

Earth conductor 0,00 - 4,9 Ohm ± 0,03 Ohm or resistance:

5 - 40 Ohm

measurement value Insulation resistance: 0.2 - 4.9 MOhm + 0.2 MOhm or

5 - 100 MOhm ± 5 % v. measurement value

0 - 99 uA ± 2 uA or Leakage current:

> 100 - 20000 μA ± 1 % v. measurement

value ± 2 µA or

10 - 20000 μΑ ± 1 % v. measurement

value ± 2 W or

1 - 3.5 kW± 5 % v. measurement

value

Current: 0 - 16 A± 50 mA or

± 2.5 % v. 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.

Differential current:

Output power:

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 protected ground VDE socket

1 x safety socket 4mm for test probe 1 x safety socket 4 mm for PF 1 x installable rubber connector C14 for measurement of resistance of protective earth

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

290 x 340 x 87 mm (T x B x H), 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 well measurements. as 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. 12/2020)





