

# ISO-Kalibrator 1

## Calibration Tester for Insulation Meters and Low-ohmic Measuring Instruments

3-349-598-03  
1/6.10

Adapter for the fast and rational testing of the accuracy of measuring instruments for insulation resistances and low-ohmic resistances.

- Testing range: 100 k $\Omega$  ... 100 M $\Omega$



### Application

Using the tester ISO-Kalibrator 1, you can quickly and rationally test measuring instruments for insulation resistances and low-ohmic resistances for their functionality and accuracy, and thus ensure their proper function.

This way, you can assure that the measured values determined with such resistance measuring instruments and confirmed by you, actually correspond to the true resistance value, taking into account the tolerances of such measuring instruments.

### Applicable Regulations and Standards

<b>IEC 61010-1/EN 61010-1/ VDE 0411-1</b>	Safety requirements for electrical equipment for measurement, control and laboratory use – General requirements
<b>EN 60529 VDE 0470 part 1</b>	Test instruments and test procedures Protection provided by enclosures (IP code)
<b>DIN EN 61326-1 VDE 0843-20-1</b>	Electrical equipment for measurement, control and laboratory use – EMC requirements – part 1: General requirements

### Usable with the following instruments:

Name	Description
<b>METRISO 5024</b>	Analog insulation tester / low-ohmic measuring instrument / voltmeter with beeper
<b>PROFITEST MASTER</b>	Series of test instruments for VDE 0100 / IEC 60364.6
<b>PROFITEST 2</b>	Universal tester for protective measures for DIN VDE 0100 (EN 61557), part 1-7

All insulation testers have a measuring voltage range up to 1,000 V.

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### Characteristic Values

#### Measuring Resistors for Testing Insulation Meters

Resistance Value	Tolerance / TC	Dielectric Strength max.	Current Load Capacity max.
100 kΩ	0.5 % / 50 ppm	250 V	2.5 mA
250 kΩ	0.5 % / 50 ppm	500 V	2.0 mA
500 kΩ	0.5 % / 50 ppm	1000 V	2.0 mA
1 MΩ	0.5 % / 50 ppm	1200 V	1.2 mA
2 MΩ	0.5 % / 50 ppm	1200 V	0.6 mA
5 MΩ	0.5 % / 50 ppm	1200 V	0.24 mA
10 MΩ	0.5 % / 50 ppm	1200 V	0.12 mA
20 MΩ	1.0 % / 50 ppm	1200 V	0.06 mA
50 MΩ	1.0 % / 50 ppm	1200 V	0.02 mA
100 MΩ	1.0 % / 50 ppm	1200 V	0.01 mA

#### Measuring Resistors for Testing Measuring Instruments for Low-ohmic Resistances

Resistance Value	Tolerance / TC	Current Load Capacity Continuous	Current Load Capacity Temporary *
1Ω **	1.0 % / 50 ppm	1.5 A	2.0 A, 2 min
0.05Ω **	2.5 % / 100 ppm	10.0 A	15.0 A, 15 s

\* Between the load phases, wait 5 minutes for cooling

\*\* See inscription on case / entry in protocol for exact value.

The tolerance data refer to the inscription on the case / entry in the protocol.

### Ambient Conditions

Storage temperature	-25 °C ... +75 °C
Service temperature	-10 °C ... +50 °C
Relative humidity	max. 75%, no condensation allowed
Elevation	up to 2,000 m

### Mechanical Design

Protection Housing: IP 50  
Jacks: IP 20

Extract from table on the meaning of IP codes

IP XY (1 <sup>st</sup> digit X)	Protection against foreign object entry	IP XY (2 <sup>nd</sup> digit Y)	Protection against the penetration of water
2	≥ 12.5 mm Ø	0	not protected
5	dust protected	0	not protected

Dimensions 122 mm x 60 mm x 53 mm  
Weight 0.13 kg

### Standard Equipment

- 1 ISO-Kalibrator
- 1 Operating instructions

### Order Information

Description	Type	Article Number
Calibration adapter for insulation meters and resistance measuring instruments	ISO-Kalibrator 1	M662A

For additional information on accessories, please refer to

- the Measuring Instruments and Testers catalog
- our website [www.gossenmetrawatt.com](http://www.gossenmetrawatt.com)