



Functions

Insulation resistance RISO

Operating range of use @ EN 61557-2: $0,100 \text{ M}\Omega \div \text{Rmax}^*$

| Measuring range | Resolution | Reference error | Operating error |
|--|-------------------------|--|--|
| $0,100 \text{ M}\Omega \div 9,999 \text{ M}\Omega$ | $0,001 \text{ M}\Omega$ | $\pm(2 \% \text{ of } R + 10 \text{ D})$ | $\pm(3 \% \text{ of } R + 20 \text{ D})$ |
| $10,00 \text{ M}\Omega \div 99,99 \text{ M}\Omega$ | $0,01 \text{ M}\Omega$ | $\pm(2 \% \text{ of } R + 10 \text{ D})$ | $\pm(3 \% \text{ of } R + 20 \text{ D})$ |
| $100,0 \text{ M}\Omega \div 999,9 \text{ M}\Omega$ | $0,1 \text{ M}\Omega$ | $\pm(2 \% \text{ of } R + 10 \text{ D})$ | $\pm(3 \% \text{ of } R + 20 \text{ D})$ |
| $1,000 \text{ G}\Omega \div \text{Rmax}^*$ | $0,001 \text{ G}\Omega$ | $\pm(4 \% \text{ of } R + 15 \text{ D})$ | $\pm(5 \% \text{ of } R + 25 \text{ D})$ |

* Value of Rmax depends on the nominal test voltage:

Nominal test voltage $50 \text{ V} \div 99 \text{ V}$ $\text{Rmax} = 1,999 \text{ G}\Omega$

Nominal test voltage $100 \text{ V} \div 249 \text{ V}$ $\text{Rmax} = 3,999 \text{ G}\Omega$

Nominal test voltage $250 \div 1000 \text{ V}$ $\text{Rmax} = 9,999 \text{ G}\Omega$

Nominal test voltage U_n :

$50 \text{ V} \div 1000 \text{ V}$, step 1 V

Open-circuit voltage:

(-0% / + 10%) of the U_n

Nominal test current:

$\geq 1 \text{ mA}$ ($U_{\text{test}} > U_n$)

Short-circuit current:

< 3 mA

Automatic discharge of tested object:

yes

Number of measurements

about 250 (with new alkaline cells)

Varistor surge protection devices USPD

| Measuring range (V) | Resolution (V) | Reference error | Operating error |
|---------------------|----------------|---|---|
| $40 \div 1050$ | 1 | $\pm(2 \% \text{ of } R + 2 \text{ D})$ | $\pm(3 \% \text{ of } R + 3 \text{ D})$ |

Measuring principle: Increasing DC voltage and simultaneously measures the current through the SPD.

DC and AC voltage (frequency range 45 ÷ 65 Hz)

| Measuring range (V) | Resolution (V) | Reference error | Operating error |
|---------------------|----------------|-------------------|-------------------|
| 0 ÷ 600 | 1 | ±(2 % of R + 2 D) | ±(3 % of R + 3 D) |

Notes to the parameters stated in this chapter:

- a) Measured AC values are TRMS.
- b) R... Reading, D... Digit.

General data

| | |
|---|---|
| Power supply | 4x AAA alkaline battery 1,5 V or NiMH accumulator 1,2 V |
| Over voltage class | CAT III / 300V or CAT II / 600 V |
| Pollution degree | 2 |
| Protective class | II (double insulation) |
| Degree of protection | IP 43 |
| Dimensions | about 260x70x40 mm |
| Weight including batteries and movable test tip | about 0,36 kg |
| Reference conditions | ambient temperature (23 ± 2) °C relative humidity 40 ÷ 60 % (noncondensing) mains voltage 230 V ± 2 % / 50 Hz ± 1 % instrument's position arbitrary |
| Operating conditions | ambient temperature 0 ÷ 40 °C relative humidity max. 85 % (noncondensing) mains voltage 190 ÷ 260 V / 45 ÷ 65 Hz instrument's position arbitrary |
| Storage conditions | ambient temperature -10 ÷ +70 °C relative humidity max. 90 % (-10 ÷ 40) °C (noncondensing) max. 80 % (40 ÷ 70) °C instrument's position arbitrary |



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