

Characteristic Values

Measurement of Insulation Resistance

Nominal Range per EN 61557-2: 0.100 M Ω – R_{max}*

Range	Resolution	Intrinsic Uncertainty	Measuring Uncertainty
0.100 to 9.999 M Ω	0.001 M Ω	(2% rdg. + 10 d)	(3 % rdg. + 20 d)
10.00 to 99.99 M Ω	0.01 M Ω	(2% rdg. + 10 d)	(3 % rdg. + 20 d)
100.0 to 999.9 M Ω	0.1 M Ω	(2% rdg. + 10 d)	(3 % rdg. + 20 d)
1.000 G Ω ... R _{max} *	0.001 G Ω	(4 % rdg. + 15 d)	(5 % rdg. + 25 d)

* The R_{max} value depends on the selected test voltage:

Nominal voltage of 50 to 99 V	R _{max} = 1.999 G Ω
Nominal voltage of 100 to 249 V	R _{max} = 3.999 G Ω
Nominal voltage of 250 to 1000 V	R _{max} = 9.999 G Ω

Nominal measuring voltage	50 to 1000 V adjustable in steps of 1 V
Measuring voltage	-0%/+10% of nominal voltage
Nominal measuring current	≥ 1 mA (where $U_{mes} > U_{nom}$)
Short-circuit current	< 3 mA
Automatic discharging of the DUT	Yes
Number of measurements	approx. 250 (with new alkaline batteries)