

Technical Data

Function (per EN 61557)	GE OHM   5
Measuring voltage	40 V
Measuring frequency	125/150 Hz
Rs	Max. 50 kΩ
Rh	Max. 50 kΩ
3-pole measurement	
Measuring range	0.11 Ω to 19.99 kΩ
Resolution	0.01 Ω to 10 Ω
Measuring error	± (2% rdg. + 3d)
4-pole measurement	
Measuring range	0.11 Ω to 19.99 kΩ
Resolution	0.01 Ω to 10 Ω
Measuring Error	± (2% rdg. + 3d)
3-pole selective measurement with current clamp transformer	
Measuring range	0.11 Ω to 1.99 kΩ
Resolution	0.01 Ω to 10 Ω
Measuring error	± (2% rdg. + 3d)
4-pole selective measurement with current clamp transformer	
Measuring range	0.00 Ω to 1.99 kΩ
Resolution	0.01 Ω to 10 Ω
Measuring error	± (2% rdg. + 3d)
2-clip measuring method	
Measuring range	0.0 Ω to 100 Ω
Resolution	0.1 Ω to 1 Ω
Measuring error	±(10% rdg. + 2d)

Key: d = digit(s), rdg. = reading (measured value)

Earth Resistance, 3/4-Pole Method

Measuring range RE (0.11 to 19.99 kΩ)

Display range (Ω)	Resolution (Ω)	Measuring error
0.00 to 19.99	0.01	(2% rdg. + 3 digits)
20.0 to 199.9	0.1	
200 to 999	1	
1.000 k to 1.999 k	1	
2.00 k to 19.99 k	10	(5% rdg.)

Additional error caused by the spike at Rc max. or Rp max.	±(3% rdg. + 10 digits)
Rc max. <sup>1)</sup>	The smaller value of (4 kΩ +100-RE) or 50 kΩ
Rp max. <sup>1)</sup>	The smaller value of (4 kΩ +100-RE) or 50 kΩ
Additional error caused by 3 V interference voltage (50 Hz)	(5% rdg. + 10 digits)
Test voltage at the test sockets	40 V AC
Type of test voltage	Sine
Test voltage frequency	125 (countries with 50 Hz) / 150 (countries with 60 Hz)
Short-circuit test current	< 20 mA
Automatic resistance test at current and potential spikes	Yes
Automatic interference voltage test	Yes

<sup>1)</sup> RC = RH (Hilfsender); RP = RS (Sonde)

Earth Resistance with current clamp transformer and 4-Pole Test Method

The technical data are the same as for the 4-pole method except for display range and measuring range (see deviating values below).

Measuring Ranges RE (0.11 to 1.99 kΩ)

Display Range (Ω)	Resolution (Ω)	Measuring Error
0.00 to 19.99	0.01	(2% rdg. + 3 digits)
20.0 to 199.9	0.1	
200 to 999	1	
1.00 k to 1.99 k	10	

Additional Specifications

Additional error for interference voltage, indicated by displaying the interference voltage warning symbol (valid for maximum ratio $R_{earth\_total} / RS = 1/2$ )	(10% rdg. + 10 digits)
Symbol for current noise	As of approx. 2.1 A
Additional resistance ratio error	$RS / R_{earth\_total} \cdot 1\%$
Display in case of too little current at the clip	Less than 0.5 mA
Automatic interference voltage test	Yes
Observe additional error caused by the clip.	

Earth Resistance with 2 current clamp transformer

Display Range (Ω)	Resolution (Ω)	Measuring Error
0. 0 to 19.9	0.1	(2% rdg. + 10 digits)
20 . to 100	1	(20% rdg.)

\* Distance between current clamp transformer > 30 cm

Additional error at most insignificant interference voltage with warning symbol	(10% rdg. + 10 digits)
The symbol appears as of	$I_{Rausch} / I_{Signal} > 100$
Additional error caused by use of current clamp transformers must be taken into consideration.	

Soil Resistivity

All of the technical data for the 4-pole method apply here too, except for display range (see deviations listed below).

Display Range (Ωm)	Resolution (Ωm)	Measuring Error	
0.00 to 19.99	0.01	See measuring error for RE measurement $\rho = 2\pi a \cdot RE$	
20.0 to 199.9	0.1		
200 to 1999	1		
2.00 K to 19.99 k	10		
20.0 k to 199.9 k	0.1 k	(5% rdg.)	
200 k to 999 k (at 8 m)	1 k		
200 k to 1999 k (at 8 m)			

Distance between the spikes is 1 to 30 m or 3 to 90 feet