

### 1.1 Earth bond (200 mA)

Range	Resolution	Accuracy
0.00 $\Omega$ ÷ 19.99 $\Omega$	0.01 $\Omega$	±(5 % of reading + 3 digits)
20.0 $\Omega$ ÷ 199.9 $\Omega$	0.1 $\Omega$	
200 $\Omega$ ÷ 1999 $\Omega$	1 $\Omega$	Indication only

Test currents	200 mA into 2.00 $\Omega$
Open circuit voltage	<9 V AC
Pass levels	0.10 $\Omega$ ÷ 1.00 $\Omega$
Test duration	2 s, 5 s, 10 s, 30 s, 60 s, 120 s, ∞
Test method	2-wire measurement

### 1.2 Insulation resistance (250 V DC, 500 V DC)

Range	Resolution	Accuracy
0.00 M $\Omega$ ÷ 19.99 M $\Omega$	0.01 M $\Omega$	±(5 % of reading + 3 digits)
20.0 M $\Omega$ ÷ 199.9 M $\Omega$	0.1 M $\Omega$	

Nominal voltages	250 V DC, 500 V DC (-0 %, +10 %)
Measuring current	min. 1 mA at 250 k $\Omega$ (250 V), 500 k $\Omega$ (500 V)
Short circuit current	max. 2.0 mA
Pass levels	0.01 M $\Omega$ , 0.10 M $\Omega$ , 0.25 M $\Omega$ , 0.30 M $\Omega$ , 0.50 M $\Omega$ , 1 M $\Omega$ , 2 M $\Omega$ , 4 M $\Omega$ , 7 M $\Omega$ , 10 M $\Omega$ , — M $\Omega$
Test duration	2 s, 3 s, 5 s, 10 s, 30 s, 60 s, 120 s, ∞

### 1.3 Substitute leakage current

Range	Resolution	Accuracy
0.00 $\mu$ A ÷ 9.99 mA	0.01 mA	±(5 % of reading + 3 digits)
10.0 $\mu$ A ÷ 20.0 mA	0.1 mA	

Open circuit voltage	<50 V AC at rated mains voltage
Short circuit current	<2,5 mA
Pass levels:	
Substitute leakage	0.25mA, 0.50mA, 0.75mA, 1.00mA, 1.50mA, 2.00mA, 2.25mA, 2.50mA, 3.50mA, 4.00mA, 4.50mA, 5.00 mA, 5.50 mA, 6.00 mA, 7.00 mA, 8.00mA, 9.00mA, 10.0 mA, 15.0 mA, — mA
Substitute leakage-S	0.25 mA, 0.50 mA, 0.75 mA, 1.00 mA, 1.50 mA, 2.00 mA, — mA
Test duration	2 s, 3 s, 5 s, 10 s, 30 s, 60 s, 120 s, ∞
Displayed current	calculated to appliance nominal mains supply voltage (115 or 230 V) x 1.06.

### 1.4 Polarity test

Test voltage	<50 V AC
Detects	PASS, L OPEN, N OPEN, PE OPEN, L-N CROSS, MULTIPLE FAULT.

### 1.5 Voltage measurement

Range	Resolution	Accuracy
0 ÷ 300 V	1 V	±(2 % of reading + 2 digits)

Result type	True r.m.s. (trms)
Nominal frequency range	0 Hz, 50 Hz ÷ 60 Hz
Frequency accuracy	Indication only

### 1.6 Checkbox specification

Function	Reference value	Accuracy
Earth bond	0.50 $\Omega$	±1 % of value
Earth bond	2.00 $\Omega$	±1 % of value
Substitute leakage current	5.90 mA	±1 % of value
Substitute leakage current	0.50 mA	±1 % of value
Insulation resistance	1.20 M $\Omega$	±1 % of value
Insulation resistance	10.00 M $\Omega$	±1 % of value

### 1.7 General data

Power supply voltage	9 VDC (6 x 1.5 V battery or accu, size AA)
Operation	typical 8 h
Working temperature range	0 °C ÷ 40 °C
Maximum relative humidity	95 % RH (0 °C ÷ 40 °C), non-condensing
Display	128 x 64 dots matrix display with backlight
Memory	1500 memory locations
Communication ports:	RS232 (PS/2 connector, female), USB (type B connector, female)
Overvoltage category	300 V CAT II
Protection classification	double insulation
Protection degree case	IP 40
Protection degree test connectors	IP 20
Dimensions (w x h x d)	14 cm x 8 cm x 23 cm
Weight	0.86 kg