

Voltmeter PCE-LCT 3



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Multimeter for determining the leakage current / Temperature measurement with thermocouple / Inductive current measurement up to 150 A AC / Current probe opening 30 mm / Many measuring functions

The multimeter is the ideal measuring instrument to measure leakage currents. This is made possible by the extensive measuring range of the multimeter. Also, current measurements up to 150 A AC can be made with the multimeter. To test supply lines with a current of up to 150 A, the multimeter for the corresponding cable cross-section can be opened up to 30 mm.

In addition to the current measurement, the multimeter can also measure voltages up to 600V directly. Because of the current and voltage measurement, the multimeter is the perfect measuring instrument to carry out measurements and analyzes on, for example, three-phase networks. For example, the continuity test can be used to find a wrong wiring in sub-distribution boxes.

- ▶ 30 mm current clamp opening
- ▶ Temperature measurement with thermocouple type K
- ▶ Current measurement up to 150 A AC
- ▶ Covers a wide range of measurements
- ▶ Voltage measurement up to 600V AC / DC RMS
- ▶ Transport bag for mobile use

Specifications

AC current measurement

measuring range	Resolution	Accuracy	Accuracy
4-mA	0.001-mA		$\pm (2\% + 10 \text{ digits}) \pm (3\% + 5 \text{ digits})$
40-mA	0.01-mA		$\pm (2\% + 10 \text{ digits}) \pm (3\% + 5 \text{ digits})$
400-mA	0.1-mA		$\pm (2\% + 5 \text{ digits}) \pm (3\% + 3 \text{ digits})$
4 A	0.001 A		$\pm (2\% + 5 \text{ digits}) \pm (3\% + 3 \text{ digits})$
40 A	0.01A		$\pm (2\% + 10 \text{ digits}) \pm (3\% + 5 \text{ digits})$
150 A	0.1 A		$\pm (2\% + 10 \text{ digits}) \pm (3\% + 5 \text{ digits})$

Frequency range: 40 Hz ... 1 kHz (sine wave)

Maximum input current: 150 A AC

DC voltage

measuring range	Resolution	Accuracy
4V	0.001V	$\pm (0.5\% + 4 \text{ digits})$
40V	0.01V	
400V	0.1V	
600V	1V	

Input impedance: 10 M Ω

Maximum input voltage: 600V AC / DC RMS

AC voltage

measuring range	Resolution	Accuracy
4V	0.001V	$\pm (1\% + 3 \text{ digits})$
40V	0.01V	
400V	0.1V	
600V	1V	

Input impedance: 10 M Ω

maximum input voltage: 600V AC / DC RMS

Frequency range: 40 Hz ... 1 kHz (sine wave)

Resistance

measuring range	Resolution	Accuracy
400 Ω	0.1 Ω	$\pm (0.8\% + 3 \text{ digits})$
4 k Ω	0.001 k Ω	
40 k Ω	0.01 k Ω	
400 k Ω	0.1 k Ω	
4 M Ω	0.001 M Ω	
40 M Ω	0.01 M Ω	$\pm (1\% + 3 \text{ digits})$

Measuring voltage in open circuit: approx. 0.4V

Overvoltage protection: 600V AC / DC RMS

More information

Manual



More product info



Similar products



Subject to change

Continuity test

measuring range	Resolution	Accuracy
Beep at < 40 Ω	0,1Ω	-

Overvoltage protection: 600V AC / DC RMS

Temperature

measuring range	Resolution	Accuracy
-20 ... 0°C	1°C	± (3% + 5 digits)
-4 ... 32°F	1°F	
-0 ... 400°C	1°C	± (1.5% + 5 digits)
32 ... 757°F	1°F	
400 ... 1000°C	1°C	± (3% + 5 digits)
752 ... 1832°F	1°F	

Overvoltage protection: 600V AC / DC RMS

The temperature accuracies do not include the accuracies of the temperature sensors

Capacity

measuring range	Resolution	Accuracy
40.00 n	0.01 nF	± (3% + 8 digits)
400.0 nF	0.1 nF	
4,000 μF	0.001 μF	
40.00 μF	0.01 μF	
400.0 μF	0.1 μF	
4,000mF	0.001 μF	
40.00 mF	0.01 μF	

Overvoltage protection: 600V AC / DC RMS

Diode test

measuring range	Resolution	Accuracy
3.2V	0.001V	-

Overvoltage protection: 600V AC / DC RMS

Test voltage: 3.2V

Forward current: 1-mA

The accuracies refer to the following ambient conditions: 23 ± 5°C / 9°F and < 75% RH

General specifications

Maximum current clamp opening	30 mm
Automatic shutdown	After 30 minutes, can be deactivated
Power supply	2 x 1.5V AAA battery
Measuring rate	3 measurements per second

Subject to change

Display with overvoltage	"OIL"
Maximum display	4000
Display	LCD display
Maximum working height	2,000 m / 13,123 ft
Temperature coefficient	0.1 x accuracy x °C, °F*
Operating conditions	18 ... 28°C / 64 ... 82°F
Store control admixtures	-10 ... 50°C / 14 ... 122°F
Dimensions	213 x 62 x 38 mm / 8.4 x 2.4 x 1.5 in
Weight	About 238 g / < 1 lb with batteries

*The temperature is the difference between the temperature of the operating conditions and the current ambient temperature.

Example:

Is the current ambient temperature greater than the temperature of the operating conditions

$$(50^{\circ}\text{C} / 122^{\circ}\text{F} \text{ (current ambient temperature)}) - (40^{\circ}\text{C} / 104^{\circ}\text{F} \text{ (operating temperature)}) = 10^{\circ}\text{C} / 50^{\circ}\text{F}$$

Is the current ambient temperature less than the temperature of the operating conditions

$$(0^{\circ}\text{C} / 32^{\circ}\text{F} \text{ (operating temperature)}) - (-5^{\circ}\text{C} / 23^{\circ}\text{F} \text{ (current ambient temperature)}) = 5^{\circ}\text{C} / 41^{\circ}\text{F}$$