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Digital Clamp PCE-HVAC 6-ICA

PCE-HVAC 6-ICA Clamp meter incl. ISO Calibration Certificate
Up to 1000 A AC / DC / Non-contact voltage detection / Voltage measurement up to 600V.
Temperature measurement via thermocouple / Robust rubberized housing

The clamp meter PCE-HVAC 6 was specially developed for the tradesman in the field of heating, ventilation and air conditioning technology. This clamp meteris ideal for many inspection and maintenance jobs in this area. This clamp meter combines many gauges in one. It is possible with this meter to measure currents up to 1000 A in the DC and AC range via the clamp. Furthermore, voltages up to 600V AC / DC can be determined exactly. For quick and easy testing of electrical conductors, the clamp meter is equipped with non-contact voltage detection.

The PCE-HVAC 6 clamp meter can also measure resistors and capacitors. The diode test and continuity test complete the series of electrical measuring functions of the clamp meter. As a special feature, the PCE-HVAC 6 clamp meter has 2 measuring inputs for Type-K thermocouples. With the help of these thermocouples, for example, the flow and return temperature of heating systems can be measured.

The clamp meter was developed for the everyday life of a service worker. The sturdy plastic housing withstands shocks easily. A circumferential rubber coating on the housing of the PCE-HVAC 6 helps ensure that the clamp meter is secure in the hand, even when the technician wears gloves. The display is equipped with an LED backlight, which facilitates reading in dark environments. As a further highlight, the clamp meter on the pliers tip has a measuring point illumination.

- Current measurement up to 1000 A
 - Cover of the measuring sockets
- Voltage measurement up to 600V
- Temperature measurement via 2 thermocouples
 - Display & measuring point illumination
 - Non-contact voltage detection
 - Incl. ISO Calibration Certificate

Specifications:

Current measurement DC A		
Measuring range	Resolution	Accuracy (of measured value)
500 μΑ	0.01 µA	± (1% + 6 digits)
5000 μA	0.1 µA	± (1% + 6 digits)
50 A	0.01A	± (2.5% + 5 digits)
1000 A	0.1 A	± (2.5% + 30 digits)
Current measurement AC A		

Measuring range	Resolution	Accuracy (of measured value)
500 μΑ	0.01 µA	± (1.5% + 30 digits)
5000 μΑ	0.1 μΑ	± (1.5% + 30 digits)
50 A	0.01A	± (2.5% + 30 digits)
1000 A	0.1 A	± (2.8% + 30 digits)

Note: For AC A measurements, the specification of accuracy refers to the range of 5% to 100% of the measuring range

Resistance measurement

Measuring range	Resolution	Accuracy (of measured value)
500 Ω	0.01	± (1% + 9 digits)
5 kΩ	0.0001	± (1% + 5 digits)
50 kΩ	0.001	± (1% + 5 digits)
500 kΩ	0.01	± (1% + 5 digits)
5 ΜΩ	0.0001	± (3% + 10 digits)
50 ΜΩ	0.001	± (3.5% + 10 digits)

Voltage measurement DC V

Measuring range	Resolution	Accuracy (of measured value)
500 mV	0.01 mV	± (0.1 % + 8 Digit)
5 V	0.0001 V	± (0.1 % + 4 Digit)
50 V	0.001 V	± (0.1 % + 4 Digit)
500 V	0.01 V	± (0.1 % + 4 Digit)
600 V	0.1 V	± (0.5 % + 4 Digit)

Voltage measurement AC V (50 Hz ... 100 Hz)

Measuring range	Resolution	Accuracy (of measured value)
500 mV	0.01 mV	± (0.8 % + 9 Digit) (at 50 Hz / 60 Hz)
5 V	0.0001 V	± (1 % + 30 Digit)
50 V	0.001 V	± (1 % + 30 Digit)
500 V	0.01 V	± (1 % + 30 Digit)
600 V	0.1 V	± (1 % + 30 Digit)

Note: For AC V measurements, the specification of accuracy refers to the range of 5% to 100% of the measuring range

Capacitance measurement

Measuring range	Resolution	Accuracy (of measured value)
500 nF	0.01	± (3.5% + 40 digits)
5000 nF	0.1	± (3.5% + 10 digits)
50 μF	0.001	± (3.5% + 10 digits)
500 μF	0.01	± (3.5% + 10 digits)
5mF	0.0001	± (5% + 10 digits)

Frequency measurement

Measuring range	Resolution	Accuracy (of measured value)
50 Hz	0.001	± (0.3% + 2 digits)
500 Hz	0.01	± (0.3% + 2 digits)
5 kHz	0.0001	± (0.3% + 2 digits)
50 khz	0.001	± (0.3% + 2 digits)
500 kHz	0.01	± (0.3% + 2 digits)
5 Mhz	0.0001	± (0.3% + 2 digits)
10 MHz	0.001	± (0.3% + 2 digits)

Duty cycle

Measuring range	Resolution	Accuracy (of measured value)
5% 95%	0.1	± (1% + 2 digits)

Pulse width: $100 \ \mu s \dots 100 \ ms$ Frequency: $10 \ Hz \dots 10 \ kHz$

Temperature

Measuring range	Resolution	Accuracy (of measured value)
-100 1000°C / -148 1832°F	0.1	± (1% + 2.5°C / 3.5°F)

General technical data

Conductor diameter	Max. 48 mm / 1.9 in
Display	Two lines 50,000 digits
Continuity test	50 ohms / < 50 mA
Diode test	0.3 mA / 2.8 V DC
Battery indicator	Battery icon when battery low
Overrange	OL, if measuring range exceeded
Sample rate	2 Hz

Peak detection Thermocouple Fuse AC bandwidth (AC A / AC V) AC measurement Operating conditions

Storage conditions Power supply Automatic shutdown Dimensions (W x H x D) Weight Safety

Delivery scope:

1 x Clamp meter PCE-HVAC 61 x Transport bag2 x Test leads1 x Battery 9V block battery1 x ISO Calibration Certificate

> 1 ms Type K 500-mA ceramic quick-acting 50 Hz ... 400 Hz True RMS 5 ... 40°C / 41 ... 104°F, max. 80% RH at 31°C / 87.8°F -20 ... 60°C / -4 ... 140°F, max. 80% RH 9V block battery After about 30 minutes 230 x 76 x 40 mm / 9 x 3 x 1.6 in 315 g / < 1 lbIEC 1010-1 (2001): EN 61010-1 (2001) CAT III 600V CAT II 1000V Degree of pollution 2