

Professional AC/DC Clamp Meter

Technical Data



K2003A

The K2003A is designed for superior performance, value and has been redesigned to meet the IEC 61010 Safety Regulations. The new custom designed LCD has a maximum of 4000 counts, and has microprocessor controlled annunciators and the decimal point. The K2003A is an average sensing clamp meter ideally suited for load monitoring and trouble shooting on electrical systems containing linear loads. The CAT IV 600V safety standard ensures the meter can be used in industrial environments.

Features Include:

- Max Hold
- Ø55mm Cable allow for easy access
- Current measurement from 0.1 Amp to 2000 Amps
- Measures ACV to 750V and DCV to 1000V
- Resistance to 4000Ω
- 4000 Count LCD display
- Frequency response from 30Hz to 1kHz on ACV and ACA
- Microprocessor DCA zero adjustment
- CAT IV 600V Safety standard ensures meter can be used in industrial environments
- Terminal cover avoids use of incorrect terminal for voltage
- Provides Recorder Output for long hour monitoring
- Continuity Buzzer
- Auto Power Off

General Specifications

| | |
|--|---|
| Operating System | : Dual Integration |
| Display | : Liquid crystal display with maximum counts of 4000 |
| Low Battery Warning | : "BATT" symbol is displayed on the digital display |
| Overrang Indication | : "OL" is displayed where input exceeds the upper limit of a range |
| Response Time | : Approx. 2 seconds |
| Sample rate | : Approx. 2.5 times per second |
| Temperature and Humidity for Guaranteed Accuracy | : 23°C ±5, relative humidity up to 85% without condensation |
| Operating Temperature and Humidity | : 0 to 40°C, relative humidity up to 85% without condensation |
| Storing Temperature and Humidity | : -20 to 60°C, relative humidity up to 90% without condensation |
| Power source | : Two R6P (DC1.5V) batteries or equivalent |
| Current Consumption | : Approx. 9mA max |
| Sleep Function | : Automatically switches to the Sleep mode in about 10 minutes after the last switch or button operation (current consumption in the sleep mode: about 20 µA) |
| Overload Protection | : AC/DC current ranges 2400A AC/DC for 10sec AC/DC current ranges 1200A AC/DC for 10sec Resistance ranges 600V AC/DC for 10sec |



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General Specifications

| | |
|------------------------------|--|
| Withstand Voltage | : 5500V AC for 1 minute (between electrical circuit and housing cases or, metal parts of jaws) |
| Insulation Resistance | : 10M Ω or greater at 1000V |
| Conductor Size | : Approx. 55mm diameter max |
| Dimensions | : 250 (L) X 105 (W) X 49 (D) mm |
| Weight | : Approx. 530g |
| Accessories | : Test leads.....1set R6P batteries.....2 Carrying case K-9094.....1 Output plug K-8201.....1 Instruction manual.....1 |
| Accessories | : Multi-Tran K-8008 Recorder Output Lead |

Measuring Ranges and Accuracy (at 23 °C \pm 5 °C , humidity 45 ~ 85%RH)

| Measurement | Range | Measuring Range | Accuracy |
|--|----------------|---------------------|--|
| DC Current | 400A | 0 to \pm 400.0A | \pm 1.5% of rdg \pm 2 dgt |
| | 2000A | 0 to \pm 2000A | |
| AC Current | 400A | 0 to 400.0A | \pm 1.5% of rdg \pm 2 dgt (50/60Hz) |
| | 2000A | 0 to 1700A | \pm 3.0% of rdg \pm 4 dgt (40~1kHz) |
| | | 1701 to 2000A | \pm 3.0% of rdg \pm 2 dgt (50/60Hz) |
| DC Voltage (Input impedance: 2MΩ) | 400V | 0 to \pm 400.0 V | \pm 1.0% of rdg \pm 2 dgt |
| | 1000V | 0 to \pm 1000V | |
| AC Voltage | 400V | 0 to 400.0V | \pm 1.5% of rdg \pm 2 dgt (50/60Hz) |
| | 750V | 0 to 750V | \pm 1.5% of rdg \pm 4 dgt (40 ~ 1kHz) |
| Resistance (Auto ranging) | 400 Ω / | 0 to 400.0 Ω | \pm 1.5% of rdg \pm 2 dgt |
| | 4000 Ω | | |
| Resistance (Fixed) | 400 Ω | 0 ~ 400.0 Ω | \pm 1.5% of rdg \pm 2 dgt (Buzzer beeps at 50 \pm 35 Ω of less) |

| Output (output impedance: about 10k Ω) | | | | |
|--|------------------|--------------------|---------------------------------------|---------------------------------------|
| Accuracy | | DC Output Voltages | Input Currents | Accuracy |
| DC | 400A | 0 to 400.0mV | 0 to 400A | \pm 1.5% of rdg \pm 3mV |
| | 2000A | 0 to 200.0mV | 0 to 2000A | \pm 1.5% of rdg \pm 3mV |
| AC | 400A | 0 to 400.0mV | 0 to 400A | \pm 1.5% of rdg \pm 3mV (50/60Hz) |
| | | | | \pm 1.5% of rdg \pm 3mV (40~1kHz) |
| | 2000A | 0 to 170.0mV | 0 to 1700A | \pm 1.5% of rdg \pm 3mV (50/60Hz) |
| | | | | \pm 3.0% of rdg \pm 3mV (40~1kHz) |
| | 170.1 to 200.0mV | 1701 to 2000A | \pm 3.0% of rdg \pm 3mV (50/60Hz) | |