## **AMPROBE®**



## No hassle warranty

No waiting.

No shipping charges.



(note: \$500 MSLP limit)

authorized to replace it, on the spot.



**Data Sheet** 

# **ACD-23SW**Swivel Clamp Meter

New patented rotating head clamp design allows easy viewing of measurements in tight or inconvenient to reach places. Simply rotate the body of the meter to get an unobstructed view of the LCD display. Rich set of features and CAT III 600V safety reading for use in electrical and HVAC applications.

- TRMS Measurement
- 180 degree rotating head for the perfect display viewing
- Advanced VoltTect non-contact voltage detection
- Slim jaw design with one hand operation
- Measures AC Current up to 400 ACA, AC/DC, Voltage up to 600V, Resistance and Capacitance
- **■** Temperature measurement
- Audible continuity
- Auto and manual ranging respectively for quick checks and precise measurements
- Auto power off
- Data hold
- Accommodates conductors up to 1.18" (30mm) in diameter
- Safety CAT III 600 V
- Test leads, battery (installed), Users Manual, Carrying Case and type-K thermocouple are included with the product





### **ACD-23SW Swivel Clamp Meter**

### **Data Sheet**

### **General Specifications**

Display	3¾ digit liquid crystal display (LCD) with a maximum reading of 3999.
Polarity	Automatic, positive implied, negative polarity indication.
Overrange	(OL) or (-OL) is displayed.
Zero	Automatic.
Low battery indication	The "" is displayed when the battery voltage drops below the operating level.
Auto power off	Approx. 10 minutes.
Measurement rate	2 times per second, nominal.
Operating Environment	0°C to 50°C / 32°F to 122°F at <70% relative humidity.
Storage Ttemperature	-20°C to 60° / -4°F to 140°F, 0 to 80% R.H. with battery removed from meter.
Accuracy	Stated accuracy at 74°F ±8°F, <75% relative humidity.
Temperature Coefficient	0.1 × (specified accuracy) per °F, (32°F to 66°F, 82°F to 122°F).
Altitude	6561.7 Feet (2000m).
Jaw opening capability	30mm (1.18 in) conductor.
Power	1.5 volt battery x2, R03/SIZE AAA.
Isolated battery compartment.	
Battery life	150 hours typical with carbon-zinc. 300 hours typical with alkaline.
Dimensions	306 × 135 × 30mm (12 × 5.3 × 1.2 in).
Weight	Approx. 157g (1.26lb) including battery.
Safety	Designed to meet IEC 61010-1 (EN61010-1) and IEC 61010-2-032 (EN61010-2-032), CATIII 600V class II and pollution degree 2 indoor use comply with CE , UL

### **Electrical Specifications**

#### **DC Volts**

Ranges	400mV, 4V, 40V, 400V, 600V
Resolution	0.1mV
Accuracy	±(0.5% rdg + 2 dgts)
Input Impedance	400mV:>100MΩ; 4V:10MΩ;40V~600V:9.1MΩ
Overload Protection	600V DC or AC rms to measure millivolts, use "RANGE " button to manually select 400mV range.
AC Volts (50Hz - 500Hz)	
Ranges	4V, 40V, 400V, 600V
Resolution	1mV
Accuracy	±(1.2% rdg + 5 dgts)
	±(2% rdg + 5 dgts) on 600V range
Input Impedance	4V:10ΜΩ;40V~600V:9.1ΜΩ
Overload Protection	600V DC or AC rms
AC Current (50Hz - 60Hz)	
Ranges	40A , 400A
Resolution	0.01A
Accuracy	±(2.0% rdg + 10 dgts) 50 ~ 60Hz

**Overload Protection** 

400A AC



#### **ACD-23SW Swivel Clamp Meter**

**Data Sheet** 

Ranges	400Ω, 4kΩ, 40kΩ, 400kΩ, 4ΜΩ, 40ΜΩ
Resolution	0.1Ω
Accuracy	$\pm (1.0\% \text{ rdg} + 5 \text{ dgts})$ on $400\Omega$ to $400 \text{k}\Omega$ ranges
	$\pm$ (1.5% rdg + 5 dgts) on 4M $\Omega$ range
	$\pm (3.0\% \text{ rdg} + 5 \text{ dgts}) \text{ on } 40\text{M}\Omega \text{ range}$
Open Circuit Volts	-0.45V DC typical, (-1.2Vdc on $400\Omega$ range)
Overload Protection	600V DC or AC rms
Capacitance	
Ranges	4uF , 40uF , 400uF , 4mF
Resolution	1nF
Accuracy	±(3.0% rdg + 15 dgts)
Minimum Input Range	>100nF
Overload Protection	600V DC or AC rms when the capacitor to be tested is connected, if "dsc" symbol is indicated on LCD it means there is voltage existing in the tested capacitor and needs to be discharged before testing.
Temperature	
Range	-30°F ~ 400°F, -35°C ~ 400°C
Resolution	0.1°F, 0.1°C
Accuracy	±(1% + 2°F) 32°F ~ 400°F ±(1% + 1°C) 0°C ~ 200°C
	$\pm (2\% + 6^{\circ}F) - 30^{\circ}F \sim 32^{\circ}F \pm (2\% + 3^{\circ}C) - 35^{\circ}C \sim 0^{\circ}C$
Sensor Type	K-type themocouple
Overload Protection	60V DC or 30V AC rms
Continuity	
Range	$400\Omega$
Resolution	1Ω
Audible Indication:	Less than 25 $\Omega$
Response Time	500ms
Overload Protection	500V DC or AC rms
Non-Contact Voltage Indicator	Senses voltage 70V to 600VAC (50Hz $\sim$ 60Hz), beeper chirps and big bright red LED comes on, works when meter dial is on any range.
Auxiliary Features	
Hold	Freeze the latest reading on the display.
Range	Excute manual range mode.
Disable Auto Power Off	Set the DMM to off position, press (RANGE) button, and hold the (RANGE) button while turning the rotary knob to the desired range position. Release the button when LCD displays normally. Note "APO" annunciator is missing from the LCD. The Auto Power Off mode is activated with an "APO"



#### **ACD-23SW Swivel Clamp Meter**

**Data Sheet** 

**Included Accessories** 

One pair test leads 1.5V battery x2 (installed) Carrying case TPK01 thermocouple Users Manual



©2010 Amprobe Test Tools. All rights reserved. 08/2010 ACD-23SW\_DS Rev A