

Operating Instructions

CA-250 ACA/DCA Clamp Adapter

Please read carefully: Misuse and/or abuse of these instruments may cause injury and/or equipment damage. Please follow these instructions faithfully and adhere to all standard industry safety rules.

ONE YEAR LIMITED WARRANTY

A.W. Sperry Instruments, Inc., warrants that this AWS instrument has been carefully tested, inspected, and warranted for one (1) year from the date of purchase by the original end user purchaser provided the completed warranty card is returned within ten (10) days after purchase and the instrument has not been misused, damaged due to negligence, neglect or unauthorized repair, abused or used contrary to the operating instructions. Instruments and proof of purchase in the form of a legible copy or original of the sales receipt clearly identifying the distributor, model number and date of purchase must be returned to A.W. Sperry Instruments Inc., Attention: Customer Service Center, 245 Marcus Boulevard, Hauppauge, New York 11788, postage prepaid for examination and verification of manufacturing defect under warranty. A.W. Sperry Instruments Inc., shall be the sole judge of such defect. The liability of A.W. Sperry Instruments Inc., shall be limited to the repair or replacement at its sole option of any defective product.

THIS WARRANTY AND THE OBLIGATIONS AND LIABILITIES OF SELLER THEREUNDER ARE EXCLUSIVE AND IN LIEU OF AND BUYER HEREBY WAIVES ALL OTHER REMEDIES, EXPRESS WARRANTIES, GUARANTEES OR LIABILITIES, OF AND FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OR WHETHER OR NOT OCCASIONED BY SELLER'S NEGLIGENCE. THIS WARRANTY SHALL NOT BE EXTENDED, ALTERED OR VARIED EXCEPT BY A WRITTEN INSTRUMENT SIGNED BY SELLER AND BUYER. SOME STATES ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIED LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

WARRANTY REGISTRATION

To validate warranty, please complete the warranty registration card enclosed with your instrument and return to A.W. Sperry Instruments Inc., 245 Marcus Blvd., Hauppauge, N.Y. 11788 within 10 days of purchase. No postage required.

DESCRIPTION

A.W. Sperry Clamp Adapter Model CA-250 is designed to measure AC & DC currents in conductors by simply clamping the jaw around the current carrying conductor. The jaws open allowing for measurements without interrupting service. This AC/DC current is termed the input to the Jaw Adapter. The adapter then puts out a voltage which varies proportionately with the input AC/DC current. This output signal must be connected to another meter to get an indication of the AC or DC current being measured. All AWS Clamp Adapters are designed to be used with AWS multimeters to read the output of the Clamp Adapters. They can also be used with other than AWS multimeters if the specifications of the multimeter match the output specifications of the Clamp Adapter. These Clamp Adapters are sometimes termed "Current Transducers" in the Electrical and Engineering fields.

FEATURES

- Limited One Year Warranty
- Reads both ACA & DCA up to 2000 A
- Fully insulated Jaws
- Safety Shock resistant plastic housing
- Light-weight rugged safe & dependable

RANGES

MODEL	INPUT	OUTPUT	USE WITH AWS
CA-250	0-200/2000ACA 0-200/2000DCA	2V FS at 1M Ω	All AWS DMM's and EZ Meters except Pocket-Pro® and Electro-Probe® Series

Note: Instrument designed for current readings on circuits having a maximum potential difference of 600VAC between any two conductors and/or ground.

SPECIFICATIONS

Accuracy:	$\pm 2\%$ + 2mV (1 - 1200A) $\pm 2.5\%$ (1201 - 1500A) $\pm 3\%$ (1501 - 2000A)
Frequency:	DC, 50-400Hz
Duty Cycle:	Continuous
Jaw Opening:	2 5/8"
Max. Conductor:	2 1/8"
Operating Temperature:	0°C to 50°C(32°F to 122°F) at Less than 90% RH
Battery:	006P DC 9V Transistor battery AWS part # B-4
Power Consumption:	Approx. 15mA
Output:	ACA - 1 ACmV per 1 ACA DCA - 1 DCmV per 1 DCA
Dimensions:	7 3/4"h x 2 1/2"w x 1 1/2"d
Weight:	18oz.

PACKAGING

Model CA-250 comes packed complete with one (1) B-4 Battery, Form#232 operating instructions and warranty card.

OPERATION

1. Remove the AWS Jaw Adaptor from its unit box. Each Jaw Adaptor is a self-contained unit which requires no additional accessories. Included in the unit box is the battery, warranty card and operating instructions.
2. Visually inspect the Jaw Adaptor for any sign of damage. Open and close the jaws a few times to check for smooth trouble-free operation.
3. Remove screw in battery compartment and slide cover off. Insert 9 volt transistor type battery AWS part# B-4. Replace cover and screw.

Using a Digital Multimeter, set the Function switch of multimeter to "AC 200mV" or "AC 2V" range for measuring AC current. Set the Function switch of multimeter to "DC 200mV" or "DC 2V" range for measuring DC current.

4. AC current measurement

- a. Determine the highest anticipated ampere(2000ACA or 200ACA) on the range scale.
- b. Insert the red output plug of the CA-250 into the "V" terminal of the digital multimeter. Insert the black output plug of the CA-250 to the "Com" terminal of the digital multimeter. Set the Multimeter to "AC 200mV" or "AC 2V" range.
- c. Press the trigger to open the transformer jaws and clamp one conductor only, then read the display values from Multimeter directly (Display: 1 ACmV per 1 ACA). For example 50ACmV = 50ACA

5. DC current measurement

- a. Determine the highest anticipated ampere(2000DCA or 200DCA) on the range scale.
- b. Insert the red output plug of the CA-250 into the "V" terminal of the digital multimeter. Insert the black output plug of the CA-250 to the "Com" terminal of the digital multimeter. Set the Multimeter to "DC 200mV" or "DC 2V" range.
- c. Press the trigger to open the transformer jaws and clamp one conductor only, then read the display values from Multimeter directly (Display: 1 DCmV per 1 DCA). For example 150DCmV = 150DCA